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Time-Banking Service Contracts as Two Mandate Contracts: An Argument for Recharacterization

Hanjin Li

School of Law, Shanghai University of Political Science and Law, Shanghai, China
Email: lhj2405@126.com

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Abstract

Determining the legal nature of mutual-aid elderly-care services provided through time banking is a logical prerequisite. It underpins the choice of applicable law and the appropriate dispute resolution path. Three leading theories have been advanced in the current scholarship: labor contract theory, third-party beneficiary mandate contract theory, and long-term voluntary service relationship theory. Each captures certain aspects of time banking operations, but none adequately accounts for the full set of institutional features, such as public-interest orientation, deferred payment, tripartite subject structure, and identity transformation. The institutional structure and operational mechanisms reveal two distinct types of services in time banking, namely voluntary services and mutual-aid services. The service contracts should be constructed as two separate mandate contracts, one between the service provider and the time bank organization, and another between the service recipient and the time bank organization. Whether each contract is compensated or uncompensated depends on the type of service involved. The two contracts are linked through the time credit account system, yet their respective legal relationships remain independent. This framework reconciles the public-interest purpose with the reasonable expectation of consideration. It provides a theoretical foundation for standardizing time-banking service contracts and resolving disputes.

Keywords

Time Banking, Mutual-Aid Elderly-Care, Service Contracts, Mandate Contracts

1. Introduction

By the end of 2025, China's population aged 60 and above had reached 320 million, accounting for 23 percent of the total population. This figure signals the country's entry into a moderately aging society (Lu, 2026). Population aging is a fundamental national condition for China, both now and for the foreseeable future. Its severity stems from both the sheer size of the elderly population and its interaction with structural factors, such as negative population growth, declining fertility, and increasing old-age dependency. These factors make the response task exceptionally formidable. In this context, time banking offers an innovative mutual-aid model for elderly care. It provides a new institutional avenue for easing supply-side pressures and stimulating community-level endogenous dynamics. Originally conceived by the American scholar Edgar Cahn in the 1980s, the model advocated using service time as a special currency for exchanging services, with the aim of rebuilding community bonds. Time credits earned by participants for services rendered are held in their time bank accounts. They can later be withdrawn and exchanged for services of equal duration when needed. After time banking was introduced into China's elderly-care sector, its core mechanism, using time as a measure of service exchange, was retained. Yet the primary focus shifted from high unemployment to population aging (Chen & Shi, 2015). The first pilot was launched in Shanghai in 1998. Early initiatives were later interrupted, but a policy-driven revival has occurred in recent years. In 2019, the Ministry of Civil Affairs incorporated time banking into the national reform pilot program for home- and community-based elderly-care services. Since then, time banking has entered a period of rapid development, and time bank projects are now fully operational in many localities. Having evolved from local experimentation to national policy inclusion, time banking is now regarded as an important avenue for fostering innovation in elderly care. A review of the literature shows that existing studies on time banking are predominantly sociological, economic, and demographic. They extensively discuss institutional origins, operational mechanisms, sustainability challenges, and practical pathways. By contrast, systematic legal scholarship on the subject is conspicuously absent. This gap is not merely theoretical. It also poses a fundamental obstacle to the long-term viability of time banking.

Despite years of experimentation, time banking in China has consistently fallen short of sustainable operation. The fundamental reason lies in the lack of specialized national policy guidance and norms, with the legal system being the key factor (Chen, 2019). No dedicated legislation currently exists for time banking. Consequently, there is as yet no theoretical consensus on its legal status, functional responsibilities, organizational structure, management system, or the rights and obligations of participants. The transfer and inheritance of time credits also remain unaddressed. Related research is similarly scarce. The core issue is that the legal relationships among the various participants remain unclear. Local practices reveal that the terms of time-banking service contracts are generally underdeveloped. They typically provide only broad provisions on service duration and redemption rules. Core issues such as risk allocation, quality standards, liability for damages, and dispute resolution mechanisms are left without explicit stipulation. This gives rise to a series of interconnected difficulties. The duties of time bank organizations remain ill-defined. Service providers lack a clear legal basis for rights protection. Uncertainty about future redemption inevitably undermines public trust, and various risks remain poorly addressed for lack of institutional constraints. Clarifying the legal relationships among all participants is the logical first step toward breaking the current impasse. Drawing on the institutional structure and operational mechanisms of time banking, this article offers a doctrinal analysis of the legal nature of time-banking service contracts for mutual-aid elderly care. This in turn provides a basis for defining the rights and obligations of each party.

2. Time Banking: Institutional Structure and Its Bearing on Contractual Characterization

The legal characterization of time-banking service contracts hinges on an understanding of their institutional structure. This encompasses their origins, operational mechanisms, and the legal features arising from them. Only on that basis can the legal nature of those contracts be properly determined.

2.1. Time Banking: Institutional Origins and Evolution in China

The institutional prototype of time banks was first established in 1973, when Teruko Mizushima founded the Volunteer Labor Bank in Osaka, Japan. The systematic articulation of its core concept is attributed to Edgar Cahn, an American scholar. In 1980, against the backdrop of substantial cuts to US government social welfare spending, Cahn advanced the "time dollar" idea. Individuals accumulate time credits by providing services to others. They may exchange them, when needed, for services of equal duration. Regardless of the type of service rendered, each person's time is valued equally. On this basis, Cahn constructed the "core economy" system, distinct from the market economy, encompassing unpaid labor fields such as childcare, elderly care, and community safety. Cahn actively promoted legislative safeguards, culminating in the US Federal Volunteer Service Promotion Act of 1987. That Act furnished a legal foundation for the use of labor credits in intergenerational reciprocity and peer mutual-aid in elderly care. Thereafter, time banks spread to over 30 countries worldwide, with distinctive models emerging. In the United States, time banks are run by non-profit organizations under relatively comprehensive legal protections, with more than 500 established. In the United Kingdom, day-to-day management is handled by non-governmental organizations. Time credits are now exchangeable nationwide. Services have been extended to people with social difficulties and even to prison systems. Japan adopts a model that combines government leadership with market competition. Time credits can be transferred across regions. The Act on Promotion of Specified Nonprofit Activities of 1998 formally recognized the legality of paid voluntary services. These practices suggest that sound legal regimes and uniform operating rules are common features of mature time-banking models.

The practice of time banking in China began in the late 1990s. In 1998, the Jinyang Neighborhood Committee in Hongkou District, Shanghai, took the lead in launching an exploratory "time-savings" elderly-care services project, followed by cities including Beijing, Guangzhou, and Nanjing. In their early stages, these initiatives were mostly voluntarily organized by communities. Due to inadequate management and resource scarcity, most proved unsustainable. A significant portion of time savings became unredeemable due to resident relocation, staff turnover, and loss of records. Over the following decade or so, time banking entered a period of quiescence. In 2019, the General Office of the State Council issued the Opinions on Promoting the Development of Elderly Care Services. For the first time, this document advocated at the national level the active exploration of practices such as time banking[1]. In the same year, the Ministry of Civil Affairs incorporated time banking into the national reform pilot program for home- and community-based elderly-care services. Since then, many localities have introduced implementation plans, facilitating the transition from scattered pilots to greater institutionalization. In 2024, a joint document titled Opinions on Deepening the Reform and Development of Elderly Care Services was issued by the Central Committee of the Communist Party of China and the State Council. It clearly states that a time-savings management system for voluntary elderly-care services should be explored and established[2]. In 2026, the Ministry of Civil Affairs published the Opinions on Promoting the Development of Mutual-Aid Elderly Care Services. The document further called for establishing a management system for mutual-aid service time, or credits, and promoting cross-regional exchange and interoperability (Ministry of Civil Affairs, 2026). At present, time banks in China have taken three main forms, namely government-led, social organization-led, and enterprise-led. The government-led model predominates (Chen, 2021).

The development of time banking in China and abroad provides several institutional facts that form the basis for the legal analysis that follows. First, the public welfare nature of time banking is salient. Regardless of the organizational form they take, time banks are not operated for profit. Their purpose is to mobilize social forces to participate in the public-interest provision of elderly-care services. The service activities of participants are not commercial acts in pursuit of immediate consideration. Second, standardized operation requires national institutional support. Mature time-banking models abroad are generally underpinned by national legislation and uniform norms. In contrast, local practices in China have long remained in a spontaneous state governed by local customary rules (Qi & Gao, 2018). Core matters such as service measurement standards, redemption rules, and quality management lack uniform provisions. These urgently call for a unified institutional norms at the national level. Third, the operation of time banking involves three parties, namely the time bank organization, the service

[1]https://www.gov.cn/zhengce/content/2019-04/16/content_5383270.htm
[2]https://www.gov.cn/zhengce/202501/content_6996775.htm

provider, and the service recipient. The provision of services and their redemption are separated in time and space. The deferred payment structure, mediated by time credits, renders the legal relationships more complex than those of an ordinary bilateral contract. These institutional facts indicate that legal characterization requires comprehensive consideration of multiple factors. It is therefore necessary to start from the specific operational mechanisms, examine the structure of the legal relationships, and define the legal nature of the service contracts.

2.2. Time Banking: Institutional Elements and Operational Mechanisms

The operation of time banking involves three main parties. The organizer sits at the center, bearing overall responsibility for management and coordination. The providers are predominantly younger healthy older adults, but they also include university students, young volunteers, and other social forces. The participants' identities are not confined to the elderly population. The recipients are those elderly who are of advanced age or have disabilities and require care. The roles of provider and recipient are not fixed. When a provider later ages and needs care, that person becomes a recipient. This conversion takes place only between providers and recipients. The organizer retains its managerial status throughout. Viewed across the full operational cycle, at the initial stage, elderly recipients receive services without paying consideration in advance. Providers accumulate time credits through service provision. When they become elderly and convert to recipients, they exchange previously accumulated time credits for services provided by new joiners. An intergenerational relay of labor-based benefits is thereby formed.

The specific operational process can be divided into two stages. The first covers the provision and recording of services. Providers browse service needs through the organizer's online platform. After assessing their own capacity, they select care recipients. The organizer then coordinates the arrangement, and the service is delivered. Upon completion, the service volume is converted into time credits by administrative staff based on quantity, quality, and recipient feedback, and deposited into the provider's system account. In this stage, the subject matter of performance is the labor rendered by the provider, who thereby obtains a credential for future exchange. The second stage covers the storage and redemption of services. Once recorded and stored as time credits in the time bank, the service time may later be redeemed by the provider for services of equal duration. The organizer is obliged to match the provider with a new service provider, who delivers the required services. The corresponding amount of time credits is then deducted from the provider's account. This stage embodies deferred payment. The labor previously contributed and the services later received are separated in time and space, thus forming an exchange relationship that is not settled on the spot.

The operational mechanism described above reveals the distinctive contractual structure of time-banking service contracts. Such contracts are not concluded directly between provider and recipient. Rather, they are entered into separately by the provider and the recipient with the time bank organization. In practice, contracting is usually effected either by accepting service terms online or by signing a written agreement offline. The Nansha Time-Banking Platform in Guangzhou, a representative example, adopts a membership system. Individuals or groups must register with authentic information and follow the prescribed procedures before they can access services, such as service exchange and time-credit deposits or withdrawals. During the registration process, a user is required to click "Agree" to the Time-Banking Service Agreement before the registration can proceed. The provider and the recipient are typically subject to the same standard-form service contract, rather than entering into two separate contracts with differing contents. Two service contracts are thereby created that share a common textual foundation but are legally independent of each other. From the perspective of legal characterization, the former pertains to the provision of labor and the accumulation of time credits, while the latter relates to the matching of service demands and the disbursement of time credits. The two sets of contracts differ substantially both in the content of their obligations and in the direction of their performance. Nevertheless, a connection exists between the two sets of contracts. The provider's direct object of performance is the recipient rather than the organizer, and the recipient enjoys the services without paying consideration directly to the provider. This cross-performance renders the two sets of contracts structurally interrelated. Together they constitute a comprehensive service contract system for time banking.

2.3. The Impact of Institutional Features on Contractual Characterization

The foregoing discussion reveals several institutional features that bear upon the legal characterization of the service contracts in varying ways.

The mutual-aid orientation creates a persistent tension with the dual nature of voluntariness and reciprocity. Time banking is essentially a mutual-aid elderly-care arrangement, but its core principle is reciprocal service-for-service. This sets it apart from both purely gratuitous traditional voluntary services and civil-law labor transactions involving immediate monetary consideration. Consequently, time-banking service contracts cannot be readily subsumed under the category of voluntary service relationships, which are premised on gratuitousness. Nor can civil contract rules based on equivalent exchange be applied mechanically.

Uncertainty about counter-performance is another distinctive feature, arising directly from the deferred payment mechanism. In a general bilateral contract, reciprocal performance obligations are fixed and matched at the time of formation. In time banking, however, while the provider's current labor contribution is certain, whether and how the organizer will perform its matching obligation in the future depends on whether the provider later requests redemption and on the availability of service supply at that time. The counter-performance is thus attended by a high level of uncertainty.

The tripartite structure further separates the contracting parties from the actual recipients of performance. Two contractual relationships are established, namely one between provider and organizer, and another between recipient and organizer. In the former, the provider's service is rendered to the recipient, yet the contractual counterparty is the organizer. The contracting party and the actual beneficiary are thereby separated. In the latter, although the recipient is a party to the contract, the service is in fact provided by the provider rather than the organizer. The party and the actual performer are similarly separated.

Freedom of contract, moreover, is constrained by the public welfare nature of time banking. Regardless of organizational form, a time bank is not operated for profit. This entails that party autonomy is subject to certain limitations. Service pricing may not be left to market forces. Redemption rules may not be altered arbitrarily. The organizer may not cease operations at will. Otherwise, the public welfare foundation would be undermined.

These four features reveal, from different angles, the complexity of characterizing time-banking service contracts. The most heated debate centers on the first. Do the services constitute gratuitous voluntary services or remunerated exchange? Scholars who take the negative view argue that although elderly-care services provided through time banking are voluntary public-interest services, they are not "gratuitous" and therefore do not fall within the category of voluntary services (Gui, 2019). The introduction of a compensatory incentive mechanism is seen as the primary distinction between time banking and traditional voluntary services (Xia, 2012). The core judgment is that, because the exchange is compensatory, time-banking services cannot easily be subsumed under voluntary services. Scholars who adopt the affirmative view, by contrast, maintain that the essential nature of voluntary services remains unchanged (Xu, 2015). The amount paid to exchange time-banking savings for services is far below market price, and such exchanges do not constitute market transactions. In substance, they still fall within the spirit of volunteerism (Jing & Zhao, 2015). In practice, time banks often operate both gratuitous and low-compensation voluntary services simultaneously. In the latter, the compensation received falls below market value and does not amount to equivalent exchange. The core features of voluntariness and non-profitability are still retained. Service providers may also choose to donate their time credits to the platform for allocation to those in need. In that case, the service is gratuitous in its outcome (Wei & Wei, 2024).

Both views have their own justification and reflect the complexity of service acts in time banking. The two sides remain irreconcilable ultimately because time banking, in practice, accommodates two qualitatively distinct types of services at once. One is traditional voluntary service, in which the provider seeks no return and donates the time credits. The other is remunerated mutual-aid service, in which the provider aims to seeks future services in return and provides services below market rate. Some scholars refer to the former as pure voluntary service and classify the latter as mutual-aid voluntary service (Liu & Du, 2022). Theoretical inquiry should not be isolated from practical operations. The central issue is not whether time banking should be characterized as voluntary services or exchange transactions. It is rather what type of contract should govern the tripartite relationships involved. Instead of continuing the abstract debate, it is more appropriate to return to the operational mechanisms. In light of institutional features such as public welfare purpose, deferred payment, uncertainty of counter-performance, and tripartite structure, the specific legal nature of time-banking service contracts can then be determined. Several representative views have been advanced on this issue. They include the labor contract theory, third-party beneficiary mandate contract theory, and long-term voluntary service relationship theory.

3. Time-Banking Service Contracts: Nature Controversies and Doctrinal Analysis

The complexity of these institutional features is reflected in the three theories just outlined. Each is rooted in a different feature and employs its own set of contractual doctrines. Each offers explanatory value, but none is without its limits.

3.1. Labor Contract Theory: A Critique

The labor contract theory maintains that the relationship between participants in time-banking mutual-aid elderly care exhibits both equality and subordination. Its effective operation depends on mandatory legal rules. Party autonomy and default rules under civil law are inadequate. Accordingly, time-banking service contracts should be characterized as labor contract relationships that possess both public and private law attributes (Wang, 2020).

The theory rests on three main arguments. First, a relationship of subordination exists between the parties. The service provider is subject to the direction and management of the time bank organization. The provider delivers elderly-care services in accordance with the organizer's arrangements and receives time-based remuneration in return. This relationship is said to embody precisely the subordination typical of the employer-employee relationship in labor law. Moreover, the provider is not free to choose the contracting counterparty as in ordinary civil contracts. There is no room for negotiation on equal terms. This is consistent with the absence of contractual freedom characteristic of labor contracts. Second, the content of the contract is specifically determined. In labor contracts, the terms concerning duration, work content, and remuneration are prescribed by mandatory legal provisions and are not open to arbitrary negotiation. Similarly, the core content of time-banking service contracts, namely the form of labor and the remuneration, is specifically determined. Little room for free negotiation is left. This makes the contract closer to a labor contract than to a civil law contract. Third, the stable functioning of time banking demands mandatory rules to protect the labor rights of service providers. The higher regulatory intensity of labor contracts is well suited to this need. Therefore, bringing time-banking contracts under labor law would help establish a sustainable institutional foundation. Yet the theory faces insurmountable obstacles in accommodating the institutional features of time banking. The theory's biggest problem is its handling of subordination. Under labor law, two dimensions of subordination exist: organizational and economic. Organizationally, the organizer's management of the provider is limited to necessary supervision of service quality. The provider freely decides whether and when to accept service assignments. This non-compulsory mode differs fundamentally from the employee's obligation to comply with directives and attendance management. The requisite level of control and direction is not present. Economically, given that time banking is oriented towards mutual-aid, the provider does not rely on time credits as a primary source of livelihood. This differs markedly from the employee's economic dependence on wages. Economic subordination is equally difficult to establish. Both dimensions depart from accepted criteria in labor law. This deviation is not a matter of degree but a structural misalignment. The basis for characterizing the relationship as a labor contract is thereby undermined.

A further difficulty concerns the tripartite structure and identity transformation. Neither can be accommodated by the bipartite model of labor contracts. A labor contract is bilateral. Three parties are involved in time banking, and the identities of provider and recipient shift over time. The same person successively occupies both positions. This situation cannot be reasonably explained within the bilateral structure of labor contracts. Time-banking relationships differ formally from ordinary labor contract relationships in wages, working hours, insurance benefits, and similar respects (Wang & Zheng, 2020). Although these may be reconciled through legal adjustments, the very need for such adjustments indicates that direct characterization as labor relations is theoretically incompatible.

A third obstacle lies in the nature of time credits themselves, which do not qualify as labor remuneration under labor law. The core characteristic of a labor contract is the payment of monetary remuneration by the employer to the employee. Remuneration under labor law must be paid in legal tender. Time credits, by contrast, are credit vouchers used to measure service value. Their function is limited to redeeming services of equal duration within the time banking system. They cannot be exchanged for legal tender, nor can they be linked to the real economy. A deeper issue is that time credits are measured by service duration rather than by the market value of labor. This is fundamentally at odds with the principle of equal pay for equal work under labor law. Accordingly, time credits differ in nature from labor remuneration. The core element required for a labor relationship is absent.

Finally, the need for mandatory rules cannot justify the characterization of time-banking contracts as labor contracts. The theory maintains that because time banking requires mandatory rules, time-banking contracts should be classified as labor contracts. This inference is not logically sustainable. Numerous mandatory rules are found in civil contracts as well, such as the regulation of standard terms and the obligation to contract. The presence of such mandatory rules does not depend on characterizing a contract as a labor contract. To equate the need for regulatory safeguards with labor contract characterization conflates two distinct issues, namely institutional supply and legal classification.

3.2. Third-Party Beneficiary Mandate Contract Theory: A Critique

The third-party beneficiary mandate contract theory maintains that the mutual-aid elderly-care contract in time banking is a third-party beneficiary mandate contract. In this construction, the time bank organization is the mandator, the younger older adult is the mandatary, and the older adult in need is the third-party beneficiary who receives the service. Performance takes the form of the mandatary rendering services to a third party in accordance with the mandator's instructions (Liu, 2023).

The basis for this argument can be understood as follows. First, the contract embodies the essence of a mandate contract. When an older adult in need submits a redemption request, the organizer mandates a younger older adult to provide assistance. The service act is regarded as the mandatary's handling of affairs. The organizer is the mandator, not the employer in a labor or service contract. Second, the deferred payment structure presupposes a high degree of trust among participants. This is precisely the core element on which a mandate contract rests. It is not the relationship of subordination found in labor contracts. Third, the low degree of subordination does not exceed what a mandate contract can accommodate. Training, supervision, and management provided by the organizer are intended to ensure proper discharge of the mandated task. Such management is inherent in the mandatary's obligation to act in accordance with the mandator's instructions. Fourth, the contract is a third-party beneficiary mandate contract. The provider performs directly to the recipient, stepping outside privity of contract. The recipient is not a party to the contract but receives the service as a third-party beneficiary.

Within the mandate contract, the organizer is positioned as mandator, the provider as mandatary, and the recipient as third-party beneficiary. The legal relationships among the three parties are handled uniformly. The performance-to-a-third-party construction explains why service is provided to the recipient rather than to the contractual counterparty, the organizer. It also accounts for the departure from privity. The contract is further characterized as a continuing contract, which acknowledges the long-term and dynamic nature of time-banking relationships. Nevertheless, several aspects remain open to question.

The theory's starting point involves circular reasoning. It relies on the idea of "performance to a third party." Under a mandate contract, the mandatary is not required to render performance to the mandator personally. It is common for the mandatary to provide services to a third party in accordance with the mandator's instructions. For example, when A mandates B to care for C's children, the services provided by B to C's children are merely the performance of B's mandate obligation. There is no need to characterize this as a "contract for performance to a third party." In the time banking model, the organizer mandates the provider to provide services to the recipient. This is equally a normal mode of operation of a mandate contract. Singling out a routine practice as exceptional not only weakens the theoretical significance of "performance to a third party" but also creates an unnecessary conceptual hierarchy.

The theory's gratuitousness argument fails as well, because the contract is remunerated. The theory claims the contract is gratuitous because its purpose is to serve the public interest. Yet whether a contract is remunerated or gratuitous depends on whether consideration exists, not on its purpose. The provider renders labor, and the organizer is obliged to issue time credits and match future services. A relationship of consideration is thus formed. Although time credits are not money, they serve as records of service value. The logic of consideration is embodied in their issuance and deduction. When a provider later becomes a recipient, services are exchanged on the basis of previously accumulated time credits. They are not obtained gratuitously. Denying the remunerated nature on the ground of public-interest purpose conflates two distinct issues, namely the purpose and the nature of the contract.

Nor does the theory's "group of contracts" framework add much. The theory maintains that independent mandate contracts are formed between the organizer and each younger older adult. Each contract involves performance to a third party, namely the older adult in need. These contracts all involve performance to a third party and are therefore collectively termed a "group of contracts with third-party beneficiary effects". Such effects, however, are merely a factual description of the operational process. They do not constitute a legal characterization with independent normative significance. Since the legal effects of each contract arise between its own parties, the label itself does not produce additional normative consequences.

3.3. Long-Term Voluntary Service Relationship Theory: A Critique

This theory maintains that the relationship between the time bank organization and the service provider is not one of labor or employment. It should be classified as a voluntary service legal relationship, and more specifically, a long-term voluntary service relationship. The term "long-term" refers to stability and enduring continuity, in contrast to ad hoc voluntary service activities (Li & Zong, 2024).

This theory's argument is developed along three main lines. First, time credits do not constitute material remuneration. They can only be exchanged for services of equal duration. Services are not differentiated according to unit labor value or labor intensity. Time credits are therefore regarded as incentive measures within voluntary service rather than material remuneration. The characteristic of gratuitousness is thus satisfied. Second, whether and how the provider renders services is a matter for the provider's own decision. No compulsory direction can be imposed by the organizer. The characteristic of voluntariness is thereby satisfied. Third, as expressed in the Opinions of the General Office of the CPC Central

Committee on Strengthening the Work Concerning Party Building among Retired Cadres in the New Era, which refer to exploring time banking and other mutual-aid elderly-care volunteering practices, time banking is understood as a combination of voluntary service and mutual-aid elderly care. It is also seen as a product of integrating public-interest purposes and exchange mechanisms.

This theory places time banking under the Voluntary Service Ordinance of China. It emphasizes that time credits are not measured by market value, that service providers are not subject to compulsory requirements, and that the organization is operated for public benefit. These features help to safeguard the public-interest nature of time-banking organizations. Yet several problems arise from this view.

The theory's claim of gratuitousness is weak. It claims that time credits do not constitute material remuneration. Under the Voluntary Service Ordinance of China, however, gratuitousness is defined as the prohibition on charging or covertly charging remuneration from the service recipient. In time banking, although the provider does not directly receive money from the recipient, the provider's labor is exchanged for time credits. These are redeemable for future services. This structure of exchanging labor for future returns differs fundamentally from gratuitousness. Gratuitousness implies that no return is anticipated. What the provider anticipates is a future return in the form of services. To interpret time credits as incentive measures is to overlook their substantive character as consideration.

"Voluntary service relationship" is not a clearly defined legal concept. Although the Voluntary Service Ordinance provides for the rights and obligations of volunteers and the management duties of voluntary service organizations, the legal nature of the relationship between the two is not specified. This remains a subject of controversy. To characterize time-banking service contracts as a voluntary service legal relationship is to employ an indeterminate concept in defining another indeterminate relationship. This is methodologically untenable.

The theory also overlooks the self-interested side of service providers. A considerable number of participants are not driven purely by altruistic motives. They intend to reserve service resources for their own elderly care needs. To classify such conduct, which combines altruistic and self-interested elements, entirely as voluntary services is at odds with general public understanding.

Although each of the three theories reveals a particular aspect of time-banking service contracts, none provides an overall characterization scheme that is both theoretically coherent and practically feasible. The reason lies in a common methodological limitation. The following section addresses this issue systematically and presents the characterization scheme proposed in this article.

4. Time-Banking Service Contracts: Recharacterization through Methodological Reflection

4.1. Existing Theories: Methodological Reflections

Each of the theories discussed above each suffers from internal difficulties to varying degrees. These difficulties are not accidental but point to common methodological limitations.

These theories fail to distinguish between two independent contractual relationships within time banking. In practice, time banking contains two sets of contractual relationships. One is between the provider and the organizer. The other is between the recipient and the organizer. These differ in party structure, content of obligations, and mode of performance. By incorporating both into a single contractual construct, the existing theories effectively reduce a compound social relationship to a single contractual relationship. The complexity of its legal structure is thereby obscured. In most theories, the analytical focus is placed on the provider organizer relationship. The recipient-organizer relationship is either treated cursorily or regarded as ancillary or derivative. This is inconsistent with the actual structure of time banking.

They also treat legal relationships statically, which leaves identity transformation insufficiently explained. The same participant successively occupies the position of provider and then recipient at different stages. This transformation is an integral part of time banking's operational mechanism. Although identity transformation is acknowledged by the labor contract theory and the long-term voluntary service relationship theory, it is treated as an extension of the same legal relationship. The independent analysis of the recipient-organizer relationship is replaced by an analysis centered on the provider side. The third-party beneficiary mandate contract theory explains identity transformation through a "group of contracts" framework. Yet how the contracts within this group are legally connected remains to be clarified.

Moreover, they conflate normative objectives with analytical premises. The labor contract theory maintains that time banking should be classified as labor contracts because mandatory protection is needed. The third-party beneficiary mandate contract theory introduces the notion of third-party effects because the tripartite structure requires explanation. The long-term voluntary service relationship theory maintains that time banking should be classified as voluntary services because its public-interest nature should be preserved. All three exhibit a tendency to equate what ought to be with what is. Normative needs, however, do not determine legal characterization. Whether a contract requires special protection is distinct from which contractual category it belongs to. A purpose-driven approach is likely to lead away from objective analysis and to be constrained by a priori value preferences.

4.2. Mandate Contract Framework: Construction and Theoretical Foundations

These methodological limitations indicate that the legal characterization of time-banking service contracts should grounded in their operational mechanisms. Once the two contractual relationships are distinguished, the legal relationships should be constructed separately for each.

4.2.1. Time Banking: Voluntary versus Mutual-Aid Services

Time banking in China is characterized by mutual aid rather than mere voluntarism. It is therefore inappropriate to characterize it one-sidedly as either voluntary service or market exchange (Liu, 2020). In practice, time banking accommodates both gratuitous voluntary services and remunerated mutual-aid services. The tension between public-interest purposes and market-based incentives is not to be resolved by an either-or choice. It requires an organic integration of public-interest logic and market logic (Wei & Wei, 2023). The hybrid service model does not replace public-interest objectives with market mechanisms. Rather, the two operational mechanisms complement each other. This helps meet diverse participation demands and mobilize volunteer groups with different motivational backgrounds. The innovative feature lies in the use of time as a new medium of exchange. Reciprocity is thereby introduced into public service participation. The problem of participation fatigue is thereby addressed (Lu, 2021).

Mutual aid itself carries multiple meanings. Service providers may act out of purely altruistic motives. They may also harbor self-interested considerations of reserving service resources for their own elderly care. The institutional design accommodates both. This is precisely where its innovation lies. Characterizing time banking solely as voluntary services would fail to explain providers' reasonable expectation of future returns in exchange for their labor. Characterizing it solely as market exchanges would neglect its public-interest nature. Through instruments such as time credits, mutual-aid behavior is monetized (He & Liu, 2023). This practice does not undermine the public-interest purpose. Rather, it simultaneously incentivizes mutual-aid and voluntary service, promoting their mutual support. This is precisely what distinguishes time banking from traditional voluntary services and from purely market transactions.

On this basis, a suitable characterization tool should be sought while the dual nature of time banking is acknowledged. The mandate contract satisfies this requirement. Its institutional structure is inclusive. It may be either remunerated or gratuitous, and it does not require a subordinate relationship between the parties. The mandatary's handling of affairs in accordance with the mandator's instructions is sufficient to cover the service in time banking. This institutional flexibility aligns well with the complex features of time banking, such as the coexistence of voluntary and mutual-aid services, identity transformation, and the uncertainty of counter-performance.

4.2.2. Two Mandate Contracts: Relational Architecture

For service relationships in time banking to be brought under the legal framework of mandate contracts, the criteria for identifying such contracts must first be established. The mandate contract is a typical service-providing contract. It is defined in Article 919 of the Civil Code. Under that definition, the mandator and the mandatary agree that the mandatary shall handle the mandator's affairs. Mandate contracts are distinguished from other service contracts, such as employment contracts and work contracts, by the fact that the mandatary handles the mandator t own affairs, rather than merely supplying labor or delivering a work product. On this basis, whether a given service act constitutes a mandate contract should be determined by whether it involves handling the mandator's own affairs on their behalf.

By this standard, although three parties are involved in time-banking, the rights and obligations among them are not a single whole. Instead, the relationship is made up of two independent sets of mandate contracts. The two contracts differ in party composition, obligation content, and performance methods. Only by characterizing the two separately can their legal nature be accurately reflected.

The first set is the mandate contract between the service provider and the time bank organization. The organizer is the mandator. The provider is the mandatary entrusted to deliver elderly-care services to the recipient. Once the service is completed in accordance with the organizer's instructions, the mandated task is accomplished, and the effects are attributed to the organizer. This is because the organization itself bears the responsibility of providing elderly-care services. The provider, following the organization's instructions, delivers services to the recipient. In substance, this is done on behalf of the organization to fulfil its service obligations. Such conduct involves handling the organization's affairs, and therefore meets the essential requirements of a mandate contract. The organizer is accordingly obliged to issue time credits to the provider's account. Whether the contract is remunerated or gratuitous depends on the service type. Where the provider participates in gratuitous voluntary services and donates the time credits, the contract is gratuitous. Where the provider participates for the purpose of accumulating time credits for future use, the contract is remunerated.

The second set is the mandate contract between the service recipient and the time bank organization. The recipient is the mandator. The organizer is the mandatary entrusted to match and arrange a provider. Whether the contract is compensated depends on whether the recipient holds time credits. For recipients who have not yet accumulated time credits, such as those among the first cohort to receive services or those receiving services under policy arrangements, services are received without compensation. The contract is a gratuitous mandate. For recipients who were formerly providers, the deduction of time credits from their accounts serves as consideration. The contract is a remunerated mandate.

Time credits serve as the payment vehicle in the two sets of contracts described above. They are debt amounts recorded by the mandator in the account system, calculated in terms of service hours. In legal terms, they are contractual claims held by the mandatary against the mandator, the content of which is the right to request that the mandator arrange an equivalent amount of service when conditions for redemption are met. Time credits do not possess the liquidity or legal tender status of currency, nor can they be exchanged for cash. Their transfer is limited to policy-permitted methods, and they are not freely negotiable property instruments. When redemption conditions are met, the mandator is obliged to arrange an equivalent amount of service in remunerated scenarios, whereas in gratuitous scenarios no such obligation arises, and time credits serve only as a record of participation.

The independence of the two sets of contracts carries significant theoretical implications. When a participant registers as a provider at a younger age, the first mandate contract is established with the organizer. In this contract, the participant is the mandatary, and the recipient is a third party. When that participant later needs care, a separate application is submitted. The second mandate contract is then formed with the organizer. In this contract, the participant is the mandator, and the new provider is a third party. Identity transformation is not a change of role within the same contract. It is achieved by entering into a new independent contractual relationship. This construction can be smoothly explained without resorting to concepts such as third-party effects or performance to a third party. Time credits serve as a link between the two contracts. On the provider's side, they are the consideration for the mandated obligation and the credential for redemption. On the recipient's side, they are the means of counter-performance. Yet time credits themselves do not circulate between the two contracts. Both the provider and the recipient settle with the organizer as their counterparty. The two contracts are linked through the same account system, yet their respective legal relationships remain independent.

4.2.3. The Mandate Contract: Institutional Flexibility and Compatibility

The difficulty with the labor contract theory lies in the insufficiency of subordination in time banking. This difficulty is precisely resolved by the mandate contract, which does not require subordination. The mandate contract is founded on a relationship of trust. The necessary supervision and management exercised by the organizer, including quality supervision, skills training, and service matching, fall within the normal scope of the mandatary's performance in accordance with the mandator's instructions. The organizer records the time credits of both parties and facilitates service transactions. It acts as an intermediary and manager (Tao & Zhang, 2022). These functions can be properly explained under the mandate contract. They should not be treated as subordination under labor law.

The public-interest nature and self-interested motivation are compatible. Under a mandate contract, the mandatary is not required to act exclusively for the mandator's benefit. The fact that the mandatary also pursues its own interests in handling the mandated affairs does not alter the nature of the contract. In time banking, the provider accumulates time credits for future needs. This motive is legitimate and does not conflict with the obligation to carry out the mandator's instructions. As some scholars have pointed out, the essence of time banking is an intergenerational exchange of labor. This practice both promotes dedication and emphasizes return. It is not a purely public-interest activity (Mu, 1999). A system sustained solely by moral imperatives is difficult to maintain over the long term. Time banking requires institutional arrangements that enable participants to be both self-interested and altruistic (Li et al., 2022). Compensatory incentive provide lasting motivation. They also help ensure that mutual-aid elderly-care behavior remains regular and continuous. The public-interest purpose and reasonable consideration are not incompatible. Together, they constitute the institutional foundation for sustainable operation.

The qualification scheme for mandate contracts applies only when the organizer assumes the duty to provide elderly-care services to the recipient in its own name. The organizer may be a government body, a social organization, or a business. In principle, the scheme applies under all three models. The organizer manages memberships, issues time credits, and arranges service matches in its own name. It enters into separate mandate contracts with the provider and the recipient. But in the business-led model, a different situation arises. If the enterprise only provides an online platform for providers and recipients to contract directly, and takes on neither service delivery nor time-credit redemption, the scheme proposed here does not apply. In that case, the provider and the recipient may directly entered into a labor or service contract directly.

The nature of the contract depends on whether the organizer owes the recipient the service obligation in its own name. That is the precondition for the two mandate contracts to exist. The content of the mandate contract between the recipient and the organizer hinges on whether the redemption obligation falls on the organizer. The degree of control exercised over the provider matters as well. If that control involves attendance management, wage payment, shift scheduling, or other signs of labor subordination, the contract should be treated as an employment contract.

4.3. Two Mandate Contracts: Institutional Elaboration

4.3.1. Two Mandate Contracts: Allocation of Rights and Obligations

In the mandate contract between the service provider and the time bank organization, the provider's primary obligation is to deliver elderly-care services to the designated recipient in accordance with the organizer's instructions. The provider must exercise reasonable care during service to ensure the safety of the recipient's person and property. The provider must also submit to the organizer's supervision and evaluation of service quality. Ancillary obligations include truthfully providing relevant personal information, such as health status and service skills, completing necessary training arranged by the organizer, and accurately recording service content and duration after completion. The organizer's primary obligation is to issue the corresponding amount of time credits to the provider's account upon service completion. In gratuitous voluntary services, where time credits are donated, the organizer is not obliged to provide future redemption. In remunerated mutual-aid services, the organizer bears the responsibility for guaranteeing redemption. As summarized by some scholars, the credit system allocates credits to the provider's account and deducts them from the recipient's account upon completion. A cycle of depositing and redeeming time credits is thereby formed (Li et al., 2020).

In the mandate contract between the service recipient and the time bank organization, the organizer's primary obligation is to match a suitable provider according to the recipient's service needs. The organizer must also exercise necessary supervision and respond to redemption requests in a timely manner. It must complete matching within a reasonable period and notify the recipient. The recipient's primary obligation depends on whether the contract is remunerated. In a gratuitous mandate, no counter-performance is required. In a remunerated mandate, the deduction of time credits serves as consideration. The recipient must also truthfully disclose relevant personal information, such as health status and service needs. The recipient must respect the provider's personal dignity while receiving services and not make demands beyond the agreed scope.

Given the long-term and continuing nature of time-banking services, the contract should be concluded in writing. Core terms such as rights and obligations, service content, quality standards, and liability for breach should be clearly specified. In practice, however, the widespread replacement of formal contracts with platform user agreements has led to ambiguous stipulations. The Nansha Time-Banking service agreement mentioned earlier illustrates this problem. The agreement grants the operation and management center the final power of interpretation and the unilateral right to amend the agreement by posting changes on the website, and the force majeure exemption clause is also drawn too broadly. In addition, the agreement lacks clear provisions on the center's supervisory obligations and evaluation mechanisms. It also fails to specify the service provider's duty of care and conditions for exemption, as well as the recipient's obligations (Terms of Service of Time Banking, n.d.). No unified standards have yet been established for service content, quality, and duration. Standardization is therefore needed. A dual mechanism combining recipient evaluation and organizer inspection should be established for quality supervision. Evaluation results should serve as the basis for issuing time credits and matching services.

4.3.2. Two Mandate Contracts: Functional Significance

The scheme provides theoretical guidance for standardizing time-banking service contracts. Rudimentary contractual terms and ambiguous rights and obligations stem largely from the unclear legal nature of these contracts. Based on actual operational models, local authorities may develop model contracts for the service provider mandate and the service recipient mandate. Performance obligations and liability for breach should be clearly specified therein.

The scheme also helps clarify the legal status of each party and safeguard their rights. Positioning the provider as mandatary clarifies the duty of care and conditions for exemption from liability. Positioning the organizer as both mandator and mandatary delineates more clearly the boundary of its responsibilities in the two contractual relationships. In the event of personal injury or property damage during service, liability rests on the contract characterization proposed here. Labor law and other contract rules are set aside. But mandate rules only address internal allocation of responsibilities between the parties. They cannot be used as the sole ground for liability. Damage suffered by the recipient should be remedied under the tort liability part of the Civil Code. A provider who causes personal or property damage to the recipient through fault bears tort liability on the basis of fault. An organizer who, as the operator of elderly-care service activities, fails to fulfil its duty of safety assurance bears tort liability by reference to Article 1198 of the Civil Code. In addition, the recipient may also bring a claim for breach of contract against the organizer under their mandate contract. Where claims for breach and tort overlap, the recipient may choose one basis on which to proceed under Article 186 of the Civil Code. In gratuitous voluntary service scenarios, the provisions on personal accident insurance in the Voluntary Service Ordinance should also be taken into account (Civil Code, 2020; Voluntary Service Ordinance, 2017).

Finally, the scheme provides a clear path for the application of law in dispute resolution. Remunerated mandate contracts are governed by the provisions on mandate contracts in the Contract Book of the Civil Code and the general provisions thereof. Disputes arising therefrom may be resolved through civil litigation. Gratuitous mandate contracts are governed by the same provisions, but the required standard of care is lower. This helps to protect the enthusiasm of gratuitous service providers. Clarifying the legal nature of time-banking service contracts is the prerequisite for resolving disputes and safeguarding the rights and interests of all parties.

5. Conclusion

As an innovative model of mutual-aid elderly care, time banking requires a clear definition of its legal relationships if it is to develop sustainably. This article takes the legal characterization of time-banking service contracts as its core issue. It examines the institutional structure and operational mechanisms, and critically analyzes three leading theories, namely the labor contract theory, the third-party beneficiary mandate contract theory, and the long-term voluntary service relationship theory. A characterization scheme is proposed on this basis. Time banking accommodates two qualitatively distinct types of services, namely voluntary service and mutual-aid service. Correspondingly, the service contracts should be constructed as two sets of mandate contracts. The first is a mandate contract between the service provider and the time bank organization, in which the organization is the mandator and the provider is the mandatary. The second is a mandate contract between the service recipient and the time bank organization, in which the recipient is the mandator and the organization is the mandatary. Whether each contract is remunerated or gratuitous depends on the type of service. They are linked through the time-credit account system, yet their respective legal relationships remain independent. The mandate contract does not require subordination and may be either remunerated or gratuitous. It aligns well with the institutional features of time banking, such as its public-interest nature, identity transformation, and uncertainty of consideration. It also provides a clear path for standardizing time-banking service contracts and resolving disputes. This article has focused primarily on theoretical characterization. Further research is needed on the design of contractual terms in practice and on the allocation of legal risks among the parties. Issues concerning cross-regional exchange, the transfer and inheritance of time credits, and the legal relationships involved also merit future attention.

Declaration of Generative AI and AI-Assisted Technologies in Manuscript Preparation

During manuscript preparation, the authors used Claude (Anthropics) solely for limited language editing of selected sentences in order to revise in order to improve clarity. No AI tool was used to generate research content, analyze data, interpret results, or prepare references, the ideas, argument, and intellectual contribution of the paper are entirely original. All AI-assisted suggestions were reviewed, revised where necessary, and approved by the authors, who take full responsibility for the final manuscript.

Conflicts of Interest

The author declares no conflicts of interest regarding the publication of this paper.

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