

Exploring the Link Between Social Responsibility and Charitable Donations of Private Enterprises: Insights for Team Dynamics and Community Engagement in Sports

Shenan Hu¹

Abstract

Over the past 30 years, private enterprises in China have emerged as key drivers of the nation's economic development. However, challenges remain in effectively fulfilling their social responsibilities. Charitable donations serve as one of the most tangible indicators of social responsibility. Consequently, the relationship between private enterprises' social responsibility and their financial performance has been a central topic in corporate management for over two decades. This study employs cosine similarity (CS) and minimum spanning tree (MST) methods to model the relationship between charitable donations, providing a framework to indirectly explore the connection between corporate social responsibility and charitable contributions in pursuit of the common prosperity goal. Experimental results demonstrate that this approach significantly outperforms traditional single-similarity modeling techniques, offering robust generalization capabilities. From a sports perspective, these findings provide insights into fostering community engagement and ethical practices among sports organizations. By emphasizing social responsibility through initiatives such as charitable donations, sports entities can enhance their societal impact, promote teamwork values, and contribute to the broader goal of common prosperity while building stronger ties with their communities.

Keywords: Common Prosperity, Private Enterprise, Social Responsibility, Charitable Donations.

1. Introduction

Private enterprises have made great contributions to my country's economic and social development and are an important part of my country's market economy, but they also face many bottlenecks and practical challenges in the process of development, especially in the process of operation and management. These short-term behaviors lacking social responsibility have become a serious obstacle to the healthy development of private enterprises (Noe & Forgione, 2014). A large number of problems such as management system, food safety, social donation, coal mine safety, and environmental pollution have aroused widespread attention (Guo et al., 2020; Liang & Renneboog, 2017). These negative problems all affect the health and sustainable development of private enterprises. The discussion on corporate social responsibility has not only attracted the attention of relevant experts and the general public, but also aroused the thinking of the business community and more and more business operators. It is important to measure the correlation between private corporate social responsibility and corporate financial performance. Also, it is a key issue to change the status quo of social responsibility of private enterprises (Baker & Dawson, 2020; Kuo et al., 2021).

Therefore, the relationship between the social responsibility of private enterprises and the financial performance of enterprises has become a hot research topic (Luo et al., 2015). The concept of "private" in private enterprise refers to "private operation" (Liu &

Lee, 2019), namely, unofficial organization and operation activities. The wave of privatization of state-owned enterprises occurred in Germany and other countries (Jabeen et al., 2021; Nanayakkara & Sangarandeniya, 2021). Precisely because in most countries, the private economy covers most of the entire national economy, while private ownership is a common phenomenon, so the economy they study refers to the private economy. In our country, the concept of "private" came into being in the process of continuous reform and development of China's economic system. The private enterprises denote all enterprises except state-owned enterprises that are private enterprises, including urban and rural collectives (Feicht et al., 2016; Li et al., 2021). Based on this, the author believes that: the social responsibility of private enterprises means that private enterprises (Almunia et al., 2020; Lee et al., 2014) should also undertake corresponding social responsibilities to stakeholders (investors, employees, consumers, government, public utilities) when achieving profit maximization, including compliance with commercial Morality, protection of the legitimate rights and interests of workers, production safety, paying taxes according to regulations, donating to charitable causes, etc. The contributions of this paper can be summarized as follows. Firstly, we propose cosine similarity (CS) and minimum spanning tree (MST) models for private enterprises. Secondly, we qualitatively and quantitatively demonstrate the effectiveness of our

¹ Ningbo University of Finance & Economics, Ningbo Zhejiang 315000, China
Corresponding Author's Email: sadrw3e4r@163.com

proposed cosine similarity. Thirdly, we point out the way of coordinated progress for the economic development of private enterprises and charitable donations.

2. Related Works

2.1 Establishment of the Social Responsibility

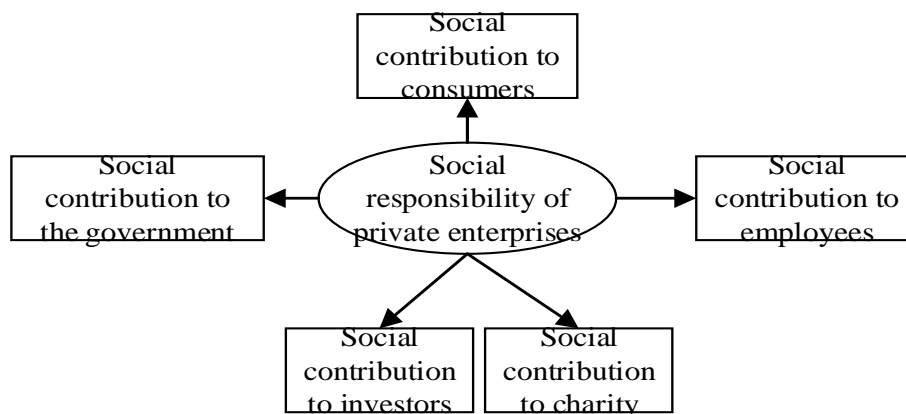


Figure 1: Social Responsibility Index System of Private Enterprises

2.2 Establishment of Enterprise Financial Performance Indicator System

In our study, we asset turnover rate, main business profit rate, and net profit growth rate as financial indicators to measure the operating ability, profitability, and growth ability of private enterprises. Besides, we measure the financial performance of enterprises in different aspects, which are used as explained variables like the social contribution rate to the government, the social contribution rate to employees, the social contribution rate to investors, the social contribution rate to philanthropy, the social contribution rate to consumers. The social contribution rates (i.e. GOVCR, EMPCR, NVCR, CHACR, CUSCR) are used as an explanatory variables (Jung et al., 2017; Xu et al., 2022) without considering the impact of different scales of private enterprises on their data collection. On this basis, we select the total assets as a control variable in this paper.

2.3 Construct the Complex Financial Network for Private Enterprises

In recent years, a large number of achievements have emerged in the systematic research and risk management of financial markets using complex network methods as tools. However, most of the existing studies utilize the market as the standard for the selection of empirical objects. Besides, they mainly focus on the foreign exchange market, currency market and securities market. While the role of private enterprises in the financial market is less involved. One of the disadvantages is that most domestic fund companies are not listed. Therefore, they cannot be incorporated into complex networks and they cannot give full play to the advantages of complex network methods in analyzing the complexity of financial

Index System of Private Enterprises

The social responsibility index system of private enterprises established in this paper is mainly based on the stakeholder theory. As shown in Figure 1, explanatory variables are set from the five aspects according to the classification of stakeholders in the previous article.

markets. (Kennedy, 2022; Yeasmin & Koivurova, 2021). At the same time, it is challenging to use the time series of charitable donation prices of private enterprises to calculate the correlation between them cannot truly reflect their business relationship and describe the true propagation path of financial risks (Arya & Mittendorf, 2015; Haruvy & Leszczyc, 2021). To tackle the issue, we preserve the integrity of the complex system of the charity market to the greatest extent, and accurately describe the real relationship between private enterprises and companies. On this basis, this paper proposes to take the portfolio of assets held by fund companies as a sample, and use the investment portfolio between fund companies. Cosine similarity is used to calculate the correlation between fund companies, and to explore the complex relationship between Chinese fund companies from the perspective of institutional asset positions (Savary & Goldsmith, 2020). Actually, cosine similarity is a clustering algorithm, which has been widely used in text space indexing, semantic similarity calculation (Saxton et al., 2014; Yen & Zampelli, 2014). Cosine similarity is also increasingly used in the field of financial research, such as predicting stock price trends based on the improved time similarity measure of cosine similarity (Long & Yang, 2016). While the MST methods are the most widely used among the methods for constructing complex networks in financial markets (Denis et al., 2020). Commonly used algorithms include Kruskal's algorithm and Prim's algorithm. The basic idea is to include $N(N - 1)/2$ Filter out $N - 1$ connected edges from the network of connected edges, where N is the number of nodes in the network. Besides, we aim to get a network with the smallest total distance. The MST method can effectively filter the noise in the network

and retain the most effective information in the network. Therefore, this paper adopts the MST method to construct a complex network of fund companies (Elfenbein & McManus, 2010).

3. Methods

3.1 Cosine Similarity

The cosine of the angle between two n dimensional sample points $X(X_{11}, X_{12}, X_{1n})$ and $Y(y_{21}, y_{22}, y_{2n})$ is defined as:

$$\cos(\theta) = \frac{\sum_{i=1}^n (x_i \times y_i)}{\sqrt{\sum_{i=1}^n (x_i)^2} \times \sqrt{\sum_{i=1}^n (y_i)^2}} \quad (1)$$

The cosine value is in the range of $[-1,1]$. In the empirical study of this paper, X and Y represent

different fund companies, $X(X_{11}, X_{12}, X_{1n})$ and $Y(y_{21}, y_{22}, y_{2n})$ represent X and Y respectively. The types of assets invested and their weighting in philanthropy. When the two investment portfolios are completely opposite, that is, under the condition of short selling mechanism, X and Y hold the same combination and weight, one of them is buying and the other is shorting. In this case, the similarity between X and Y is - 1; When the portfolios of X and Y are completely different, the similarity between X and Y is 0; when the portfolios and weights of X and Y are exactly the same, the similarity between X and Y is 1. In our study, Figure 2 illustrates the financial market response mechanism communicated by the central bank, while Figure 3 shows the monetary policy implementation report and the tone of each part.

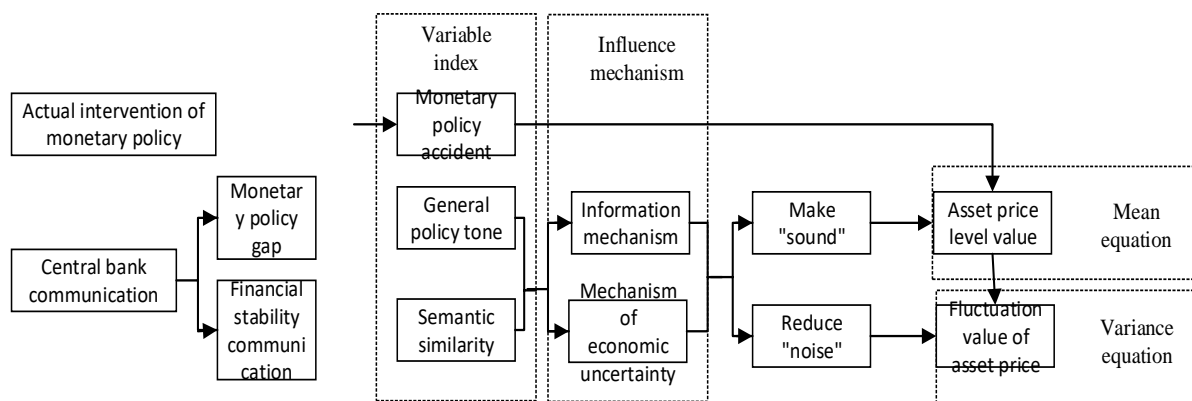


Figure 2: Financial Market Response Mechanism Communicated by the Central Bank

3.2 Semantic Similarity

(2015) The semantic similarity of text is calculated using the cosine similarity method, which is based on a term-document matrix, where the rows of the matrix represent documents, the columns represent words, and the elements represent the frequency of words in each document. Any two documents d_1 and d_2 (any two rows) can be calculated according to formula (2) to calculate the cosine similarity:

$$\text{Similarity}_{d_1, d_2} = \frac{\sum_{w=1}^W f_{w, d_1} f_{w, d_2}}{(\sqrt{f_{w, d_1}^2})(\sqrt{f_{w, d_2}^2})} \quad (2)$$

Among them, W is the total number of words in the corpus, f_w, d_1 and f_w, d_2 represent the frequency of each word in documents d_1 and d_2 , respectively. When d_1 and d_2 use the same vocabulary and the same frequency, the cosine similarity value is 1. When d_1 and d_2 use completely different vocabulary, the two documents are orthogonal, that is, the cosine similarity value is 0. In practice, the market usually compares the latest released monetary policy implementation report with the previous one and finds out the possible changes in the policy wind direction of the monetary authorities through item-by-item comparisons. Therefore, the similarity calculated in the empirical process of this paper is the similarity of two adjacent monetary policy implementation reports. In different studies, the semantic similarity of central bank policy

announcements all shows a certain degree of temporal consistency. (2015) research shows that the average cosine similarity of the Fed Open Market Committee (FOMC) policy statement corpus is 0.65. However, the (2020) study found that the similarity of the Bank of Canada's policy statement was 0.25 on average, which changed greatly over time, and the overall fluctuation range was between 0.13 and 0.53. (2019) showed that the overall level of cosine similarity announced by the Monetary Policy Committee of the Central Bank of Thailand from 2010 to 2018 was between 0.5 and 0.9. Referring to the literature practice, this paper measures the semantic similarity of the Monetary Policy Implementation Report of the People's Bank of China from 2010 to 2019. Overall, the report has a high semantic similarity, with fluctuations ranging from 0.88 to 0.94. In terms of parts, the fluctuation range (average) of the similarity of each part is 0.78-0.93 (0.86) for the domestic economy, 0.78-0.90 (0.85) for the financial market, and 0.59 for the money and credit. -0.95 (0.83), economic outlook 0.72-0.91 (0.81), monetary policy 0.60-0.82 (0.72) and the global economy are all 0.56-0.56. 90 (0.72). Referring to (2020), on the trading days without the "Monetary Policy Implementation Report", this paper sets the semantic similarity to 1. The semantic similarity index can measure the central bank's financial stability communication behavior. The higher the semantic

similarity, the clearer the central bank's communication content. It will help the market understand policy intentions, reduce "noise" and

maintain financial stability. Therefore, this indicator has no effect on the asset price level value, and has a restraining effect on the expected volatility value.

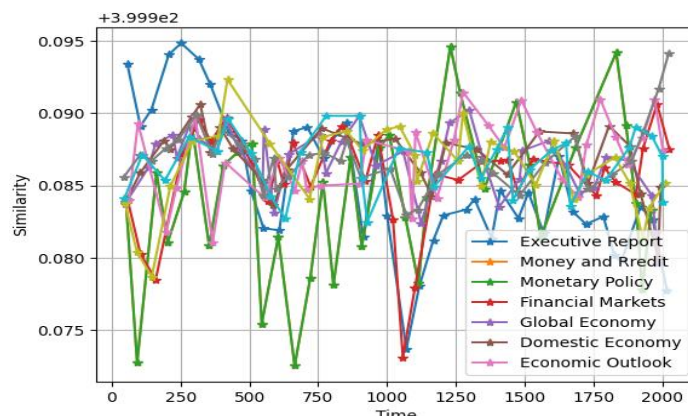


Figure 3: Monetary Policy Implementation Report and the Tone of Each Part

3.3 Minimum Spanning Tree (MST)

In graph theory, an undirected graph that is connected and has no loops is called a tree. The minimum spanning tree is the tree with the smallest sum of edge weights in the graph. Building a financial market network through the MST method requires the following steps:

(1) Calculate the correlation coefficient p_{ij} between nodes, and obtain a correlation coefficient matrix C of $N \times N$ (N represents the number of nodes).

(2) Calculate the distance between nodes:

$$d_{ij} = \sqrt{2(1 - \rho_{ij})} \tag{3}$$

The corresponding distance matrix D can be obtained. Through the corresponding algorithm, the MST of the financial market is obtained. All MSTs constructed in this paper are generated by the Kruskal algorithm.

3.4 Power-Law Distribution

The degree distribution of a network node represents the probability $p(k)$ of randomly drawing a node of degree k from the network. A power-law distribution can be represented by the following formula:

$$p(k) \propto k^{-a} \tag{4}$$

When the power exponent is in the value range of $2 < a < 3$, the degree of most nodes is very low, and only a few nodes are of high degree. Only in rare cases will all k obey a power-law distribution, usually only if k is greater than some minimum k_{min} . Under some specific conditions, it is more effective to use the cumulative distribution form of the power-law distribution to perform statistics on the data. This cumulative distribution can be expressed as:

$$P(K \geq k) = \left(\frac{k}{k_{min}}\right)^{-a+1}, k \geq k_{min} \tag{5}$$

where $P(K \geq k)$ is the probability that the degree of a node is greater than k , and a is the power exponent of

the power-law distribution.

The probability p -value of the sample following a power-law distribution can be calculated by K-S statistics. A P value close to 1 indicates that the sample has a high probability of obeying power-law distribution; on the contrary, P value close to 0 indicates that the sample has a low probability of obeying a power-law distribution.

3.5 Data Sources and Processing

Private companies and the charities they manage will regularly publish quarterly and annual reports in accordance with regulatory requirements. Compared with the quarterly report, the annual report discloses more comprehensive data. Therefore, to maximize the construction of a complete complex network of the charity market, this paper selects the data of all charitable donations and bond varieties held by the asset portfolio in the 2018 annual report data of Chinese private enterprise companies as a sample. As of 2018, there were a total of 142 private enterprises in the charity market. Since some companies were newly added that year, or had not yet carried out charity management work, there was no data to provide. Therefore, this part of the sample was excluded, and 123 private enterprises were finally retained. All data are from the Wind database.

4. Experiments

4.1 Cosine Similarity Calculation

Since China's public charities generally do not use short-selling methods to obtain investment income, the cosine similarity between the 123 charitable companies included in this research sample is not less than 0, and the statistical results are shown in Table 1.

Table 1

Statistical Results of Cosine Similarity of Assets Held by Fund Companies

Maximum	Minimum Value	Mean Value	Skewness	Kurtosis
---------	---------------	------------	----------	----------

All Shares	0.69	0	0.08	1.41	5.18
Debt Department	0.91	0	0.21	0.67	3.28
Ticket	0.57	0	0.05	1.85	7.23

From the results in Table 1, it can be observed that the cosine similarity distribution of the portfolio held by private enterprises does not obey the normal distribution. Among them, the average cosine similarity of the stock portfolio is 0.2185, the maximum value is 0.8953; the average cosine similarity of the bond portfolio is 0.0632, the maximum value is 0.5617; the average cosine similarity of all investment portfolios is 0.0912, the maximum value is 0.6772. Through the comparison, it can be found that the investment of private enterprises in charitable donations is relatively similar, and the investment styles are more similar. For bond investment, the similarity between different private enterprises is relatively low, and the investment difference is larger. The statistical results of the similarity of all investment portfolios of private enterprises are more similar to the statistical results of bond portfolios, indicating that bond investment plays a greater role in charitable asset allocation than charitable donations. It can also be seen from the distribution of cosine similarity (as shown in Figure 1) that the cosine similarity of holding all assets between private enterprises is more similar to the similarity of holding bonds. The cosine similarity value in these two cases is mainly distributed in the interval of 0~0.3. The

cosine similarity of portfolios holding charitable donations has a distribution maximum around 0.24. The cosine similarity distribution of charitable donation portfolio and bond portfolio has obvious differences. The cosine similarity of charitable donation portfolio is mostly distributed between 0.1 and 0.4.

The overall cosine similarity of bond portfolio is relatively low, and with the increase of similarity the distribution gradually decreases. This is mainly because the investment risk of bonds is lower than that of stocks, and the profit method is mainly due to interest. Private enterprises have enough investment options to achieve expected returns. The number of institutions is not as large as that of charitable donations, so the investment of private enterprises in bonds is relatively decentralized. The price difference of charitable donations is the main profit-making method of charitable donations investment, and the shareholding of private enterprises is generally concentrated in companies with large market value, strong revenue capacity and good growth potential, resulting in relatively concentrated investment in the charitable donation market. Figure 4 shows the cosine similarity distribution of assets held by fund companies.

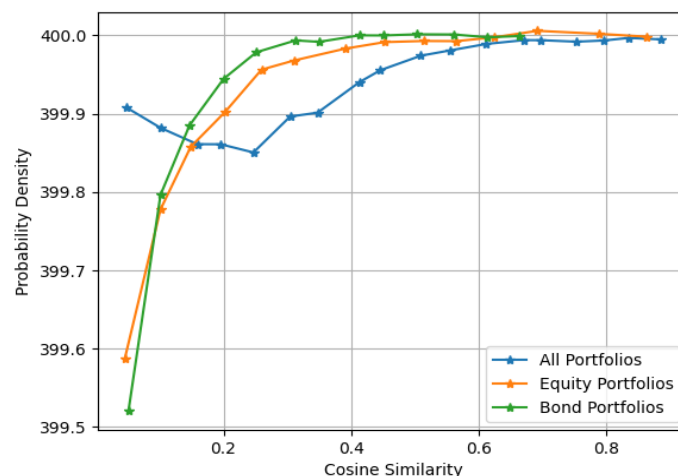


Figure 4: Cosine Similarity Distribution of Assets Held by Fund Companies

4.2 Degree Distribution of MST Network Nodes in Private Enterprises

To investigate the node degree distribution of the charity MST network, this paper calculates according to formula (4), and the results are shown in Figure 5, Figure 6 and Figure 7. The p-values of the K-S statistics of the charitable MST network for all combinations, charitable donations and bond combinations are 0.88, 0.92 and 0.10, respectively, indicating that the node degrees of all accepting MST networks obey the assumption of power-law distribution, and the power exponents are 3.03, 2.87 and 3.03, respectively. 2.84. The above results show that the distribution of node

degrees in the charity MST network is very uneven, a few companies have very large node degrees and have a strong influence on the market, while most companies have relatively small node degrees and only a small number of adjacent nodes. The MST network power index of all asset portfolios of private enterprises is the largest, because the network contains the most abundant statistical information, and the correlation information between investment portfolios is fully exploited.

The node degree of private enterprises obeys the power law distribution, which indicates that the investment portfolios of many charitable companies have a high degree of similarity, and their investment

styles have a strong "homogenization" feature. On the one hand, because China's fund market is relatively immature, the private enterprises' business development is relatively late, and the business coverage is relatively narrow. They pay more attention to hot industries and hot sectors, and they have insufficiently tapped those companies with long-term growth potential and have not yet formed a sufficiently differentiated product system. On the other hand,

although China has cultivated many outstanding enterprises in the past 40 years of economic reform and opening up, compared with the huge supply side of the capital market, the investment scope of charitable companies is still limited. Due to the pursuit of profit by capital, investment projects with low risk and high returns are sought after by funds from all parties, thus increasing the business correlation between private enterprises.

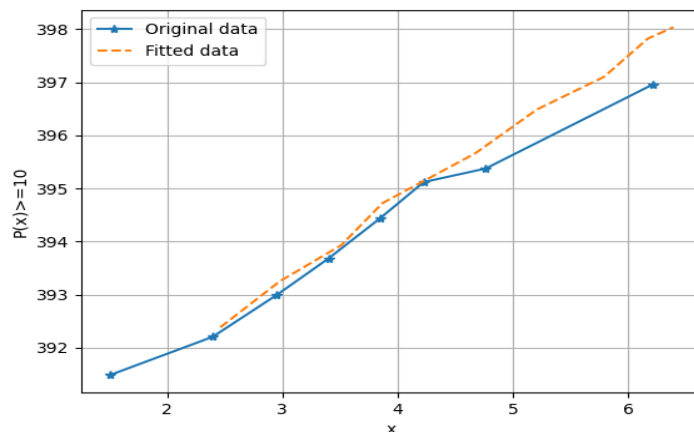


Figure 5: node degree distribution of MST network of all asset portfolios of the fund

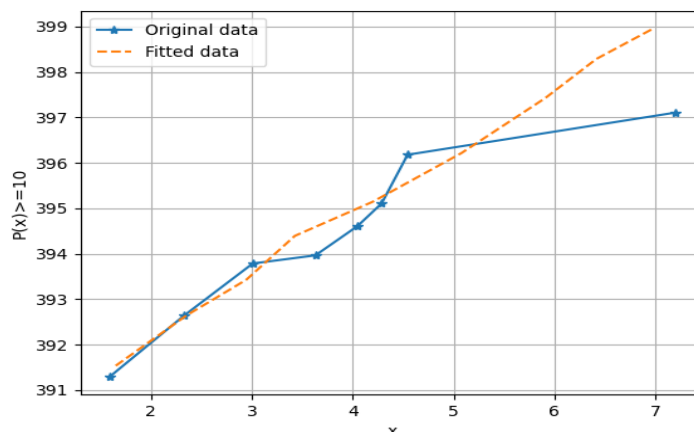


Figure 6: node degree distribution of MST network of fund stock portfolio

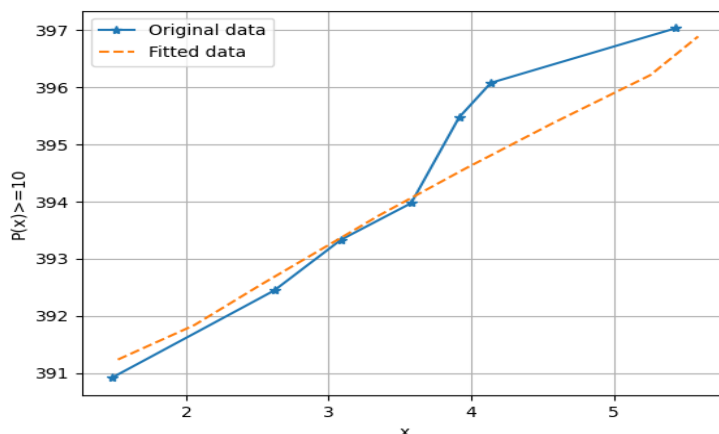


Figure 7: node degree distribution of MST network of fund bond portfolio

5. Conclusion

Firstly, we propose cosine similarity (CS) and minimum spanning tree (MST) models for private enterprises.

Secondly, we qualitatively and quantitatively demonstrate the effectiveness of our proposed cosine similarity. Thirdly, we point out the way of coordinated progress for the economic development of private

enterprises and charitable donations. In this work, we regard philanthropy as a complex system and build the relationship between Chinese private enterprises from the perspective of complex networks. In our study, we propose cosine similarity (CS) and minimum spanning tree (MST) models for private enterprises. Then, then the structural

characteristics of the complex network of charity are further discussed. Furthermore, we point out the way of coordinated progress for the economic development of private enterprises and charitable donations. It shows that a large number of private enterprises are centered on the most influential fund companies and form a central group.

Reference

- Almunia, M., Guceri, I., Lockwood, B., & Scharf, K. (2020). More giving or more givers? The effects of tax incentives on charitable donations in the UK. *Journal of Public Economics*, 183, 104114. <https://doi.org/10.1016/j.jpubeco.2019.104114>
- Arya, A., & Mittendorf, B. (2015). Supply chain consequences of subsidies for corporate social responsibility. *Production and Operations Management*, 24(8), 1346-1357. <https://doi.org/10.1111/poms.12326>
- Baker, P. L., & Dawson, C. (2020). The corporation tax elasticity of charitable donations. *Journal of Economic Behavior & Organization*, 178, 1-14. <https://doi.org/10.1016/j.jebo.2020.07.008>
- Denis, E., Pecheux, C., & Warlop, L. (2020). When public recognition inhibits prosocial behavior: The case of charitable giving. *Nonprofit and Voluntary Sector Quarterly*, 49(5), 951-968. <https://doi.org/10.1177/0899764020911203>
- Elfenbein, D. W., & McManus, B. (2010). A greater price for a greater good? Evidence that consumers pay more for charity-linked products. *American Economic Journal: Economic Policy*, 2(2), 28-60. <https://doi.org/10.1257/pol.2.2.28>
- Feicht, R., Grimm, V., & Seebauer, M. (2016). An experimental study of corporate social responsibility through charitable giving in Bertrand markets. *Journal of Economic Behavior & Organization*, 124, 88-101. <https://doi.org/10.1016/j.jebo.2015.11.005>
- Guo, F., Yang, W., Gan, S., & Liu, X. (2020). Charitable donation, managerial power, and sustainable development of enterprises—based on data analysis of Chinese listed companies. In *Journal of Physics: Conference Series* (Vol. 1629, pp. 012086). IOP Publishing. <https://doi.org/10.1088/1742-6596/1629/1/012086>
- Haruvy, E., & Leszczyc, P. P. (2021). A study of incentives in charitable fundraising. *European Journal of Marketing*, 56(1), 283-317. <https://doi.org/10.1108/EJM-05-2020-0371>
- Jabeen, Z., Shah, N., Ahmer, Z., Khan, S., Khan, A. H., & Khan, M. (2021). Effect of health education on awareness and practices of breast self-examination among females attending a charitable hospital at North Karachi. *JPMA*, 71(9), 2156-2162. <https://doi.org/10.47391/JPMA.04-564>
- Jung, M. H., Nelson, L. D., Gneezy, U., & Gneezy, A. (2017). Signaling virtue: Charitable behavior under consumer elective pricing. *Marketing Science*, 36(2), 187-194. <https://doi.org/10.1287/mksc.2016.1018>
- Kennedy, J. P. (2022). Small and medium-sized enterprises (SMEs) and the impacts of private policing within an urban area. *International Journal of Comparative and Applied Criminal Justice*, 46(1), 49-66. <https://doi.org/10.1080/01924036.2020.1751221>
- Kuo, Y.-F., Lin, Y.-M., & Chien, H.-F. (2021). Corporate social responsibility, enterprise risk management, and real earnings management: Evidence from managerial confidence. *Finance Research Letters*, 41, 101805. <https://doi.org/10.1016/j.frl.2020.101805>
- Lee, S., Winterich, K. P., & Ross Jr, W. T. (2014). I'm moral, but I won't help you: The distinct roles of empathy and justice in donations. *Journal of Consumer Research*, 41(3), 678-696. <https://doi.org/10.1086/677226>
- Li, M., Li, J., Tan, M., & Zhong, Y. (2021). Exposure to money modulates the processing of charitable donation: An event-related potentials study. *Neuroscience Letters*, 765, 136277. <https://doi.org/10.1016/j.neulet.2021.136277>
- Liang, H., & Renneboog, L. (2017). Corporate donations and shareholder value. *Oxford Review of Economic Policy*, 33(2), 278-316. <https://doi.org/10.1093/oxrep/grx024>
- Liu, H., & Lee, H.-A. (2019). The effect of corporate social responsibility on earnings management and tax avoidance in Chinese listed companies. *International Journal of Accounting & Information Management*, 27(4), 632-652. <https://doi.org/10.1108/IJAIM-08-2018-0095>
- Long, C., & Yang, J. (2016). What explains Chinese private entrepreneurs' charitable behaviors?—A story of dynamic reciprocal relationship between firms and the government. *China Economic Review*, 40, 1-16. <https://doi.org/10.1016/j.chieco.2016.05.001>
- Luo, J.-h., Liu, H., & Cui, V. (2015). Does Internationalization Inspire or Discourage Home Charitable Donations? Evidence from China. In *Academy of Management Proceedings* (Vol. 2015, pp. 13849). Academy of Management Briarcliff Manor, NY 10510. <https://doi.org/10.5465/ambpp.2015.13849abstract>
- Nanayakkara, H., & Sangarandeniya, Y. (2021). Employee engagement through corporate social responsibility: a

- study of executive and managerial level employees of XYZ company in private healthcare services sector. *Open Journal of Business and Management*, 10(1), 1-16. <https://doi.org/10.4236/ojbm.2022.101001>
- Noe, K., & Forgiione, D. A. (2014). Charitable contributions and quality in the us hospice care setting. *Journal of Public Budgeting, Accounting & Financial Management*, 26(4), 539-556. <https://doi.org/10.1108/JPBAFM-26-04-2014-B001>
- Savary, J., & Goldsmith, K. (2020). Unobserved altruism: How self-signaling motivations and social benefits shape willingness to donate. *Journal of Experimental Psychology: Applied*, 26(3), 538. <https://doi.org/10.1037/xap0000261>
- Saxton, G. D., Neely, D. G., & Guo, C. (2014). Web disclosure and the market for charitable contributions. *Journal of Accounting and Public Policy*, 33(2), 127-144. <https://doi.org/10.1016/j.jaccpubpol.2013.12.003>
- Xu, Y., Tao, Y., Zhang, C., Xie, M., Li, W., & Tai, J. (2022). Review of digital economy research in China: a framework analysis based on bibliometrics. *Computational Intelligence and Neuroscience*, 2022. <https://doi.org/10.1155/2022/2427034>
- Yeasmin, N., & Koivurova, T. (2021). Social Enterprises of Immigrants: A Panacea for the Finnish Labour Market? *South Asian Journal of Business and Management Cases*, 10(2), 180-195. <https://doi.org/10.1177/22779779211014656>
- Yen, S. T., & Zampelli, E. M. (2014). What drives charitable donations of time and money? The roles of political ideology, religiosity, and involvement. *Journal of Behavioral and Experimental Economics*, 50, 58-67. <https://doi.org/10.1016/j.socec.2014.01.002>