

## Sharing Economic Partnership on Online Transportation

**Dodi Dermawan**

Raja Ali Haji Maritime University, Indonesia

[dodydermawan@gmail.com](mailto:dodydermawan@gmail.com)

### Abstract

*The model sharing economy concept in online using transactions through the coordination of applications that are connected to the internet. This study aimed to explain the influence factors of asymmetric information and transaction costs on the partnership relation in the online mode of transportation in Indonesia. This study analysis to explore the phenomena that occur in online drivers. The results showed a significant positive effect of the asymmetric information factor on the transaction cost factor. Then the transaction cost variable does not significantly affect the partnership relationship factor. At the same time, the information asymmetry factor significantly affects the partnership relationship. Asymmetric information is related to transaction, incentive, and sanction information. The implication of the asymmetry that occurs to the driver causes the driver to lose bargaining power as a partner. Although drivers have experienced increased income, their job security is very unstable. The role of government is needed to oversee and provide regulations to reduce asymmetric information and balance the bargaining power of drivers and the sustainability of their jobs.*

---

#### Article Info

- **Received** : 29<sup>th</sup> August, 2022
- **Revised** : 20<sup>th</sup> October, 2022
- **Published** : 31<sup>th</sup> October, 2022
- **Pages** : 282-294
- **DOI** : 10.33019/ijbe.v6i3.562
- **JEL** : P34, R41
- **Keywords** : *Asymmetric Information, Transaction Cost, Sharing Economy*

### 1. Introduction

Sharing economy is a term defined as a digital platform that connects customers with services or commodities through mobile apps or websites. The sharing economy is a term defined as a digital platform that connects customers with services or commodities through mobile apps or websites (Cockayne, 2016).



Economy sharing is a consumptive behavioral pattern in re-accessing and reusing products to take benefits to form potential production capacity (Kathan *et al.*, 2016). The sharing economy is a web-based market where individuals use various forms of compensation for transaction, redistribution, and access to resources mediated by digital platforms operated by an organization (Mair & Reischauer, 2017).

Information technology-based platforms like online-based transportation contribute to changes in work relationship patterns, where information technology becomes the main factor. According to Wright *et al.* (2017) worked with online transportation platforms such as Uber and Airbnb, generally not seeing their workers as employees but partners. Mas and Pallais (2017) found that many online drivers in the US joined Uber since it provides work time flexibility and higher income. Likewise, Hall and Krueger (2018) found that most drivers who decided to join Uber were attracted by the flexibility and income addition. The fact that hourly income is not much different from the other job who facilitates a part-time system or another.

However, those platforms do not always keep their promises of ideal economic sharing. Researchers criticized unequal contributions for all involved stakeholders. Munoz and Cohen (2017) found that not all elements in the sharing economy are really in the practices of economic sharing, few a small number of them are ideal. Cockayne (2016) found that there is a relation between ambivalence and ambiguity in the economic and social characteristics of application company platforms. Sprague (2015) argued that independent workers in the platforms are not really independent but highly dependent on the platforms and vice versa. Nastiti (2017) who studied online drivers in Indonesia, found that drivers partnership is an exploitative relationship. By incorporating technology and rhetoric, online transportation companies are able to dictate their desire and at the same time create illusive equal relationship. The motivation to participate in peer-to-peer is related to economic interest for self-interest and altruistic motives; environmental problems do not seem to be important (Barnes & Mattsson, 2016; Wilhelms *et al.*, 2017). The sharing platform considers the incentives of the parties involved in each transaction (Richter, 2019). The size of the platform is largely determined by the extent of the network that connects the market with d levels of asset heterogeneity (Akbar & Tracogna, 2018). The platform also generates negative externalities, where the basis for imposing unregulated taxes and unclear rules for professional and unprofessional workers on the threshold of income they receive (Hruška *et al.*, 2018).

The various literature above shows that the sharing economy phenomenon is still far from ideal in providing beneficial benefits to related parties. This study gives a different color to previous studies. Using indicators from recent studies in establishing information asymmetry factors, transaction cost factors, and online transportation partnership relationship factors. Using a quantitative approach to see the effect of the relationship between these three factors. This study aims to describe the imbalance of the online transportation partnership relationship, influenced by the asymmetric information factor and the transaction cost factor in Malang, Indonesia. Information asymmetry and transaction costs are exogenous latent



variables which are independent variables that affect the partnership relationship. Meanwhile, the partnership relationship variable in the sharing economy is endogenous or dependent. The contribution of this research provides recommendations for the government in making rules and balancing online transportation partnership relationships.

## 2. Literature Review

The meaning of sharing economy has different views among experts. Eckhardt and Bardhi (2016) describe a sharing economy as an economy that provides temporary access to consumption resources at cost or free without transfer of ownership. Frenken and Schor (2017) define the sharing economy as a consumer who provides every temporary access to underutilized physical assets for money. Stephany (2015) stated that the sharing economy is value in taking underutilized assets and making them accessible online to communities leading to a reduced need for ownership of those assets. Acquier *et al.* (2017) tried to map the sharing economy in three organization cores developed from various literature. The three-point in the sharing economy are (1) economic access, (2) economic platform, and (3) community-based economy. Belk (2014) distinguishes true economic sharing from false economic sharing. Sharing is an alternative to private ownership in gift-giving on market exchanges. Fake sharing is a phenomenon where the exchange of commodities and the potential exploitation of the co-creator to the consumer by presenting themselves in the guise of sharing or a business relationship disguised as communal sharing.

The online driver is a partner for application companies (Wright *et al.*, 2017; Hall & Krueger, 2018). The partnership is an association of two people or more (co-owners) who are running a business for profit (Spencer, 1977). The partnership dimensions interpreted as communication information sharing and information flow quality among partners cooperation, goodwill to ensure sustainable relationship, imbalances between powers and interdependencies, partner's ability to influence other partners to do something not usually done conflicts and entire levels of variance between partners (Boeck & Wamba, 2008).

Online transportation partnerships run into imbalance due to asymmetrical information (Rosenblat & Stark, 2016). Information asymmetry assumed that one party in a transaction has relevant information but not with other parties (Akerlof, 1970). It occurs when the knowledge of one of the contracting parties is lower form the others and that the real intention of one party differs from the other parties (Dehlen *et al.*, 2014). The asymmetric information perspective is imperfect information due to the high cost of information procurement (Stiglitz, 2000). Asymmetric information is determined by two components: (1) the extent of the general foundation of information between members is built, and (2) the coordination or communication between team members (Keane & Stavrunova, 2016). Asymmetric information scenario grouped into two (Akerlof *et al.*, 2001), adverse selection and moral hazard. While the former deals with a situation where on the one side the market does not know the type or the quality of goods (people) or other parties. The second is an action incidentally taken by agents to hold the agreed endeavors (Dutta *et al.*, 1994; Frenzen *et al.*, 2010).



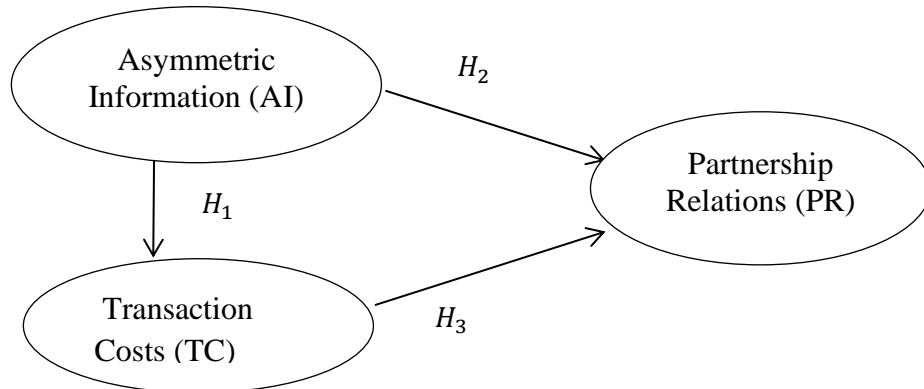
Rosenblat and Stark (2016) found that application companies in the US increase significant indirect control over online transportation drivers in their works. It happens because of the limited information produced by the application companies makes the driver do not have any bargaining point. The fact it is the companies that have overwhelming control over them and their job. Nastiti (2017) found that application providers control rules with various rules of the game. The platform company is only responsible for moderating supply and demand. Ironically the platform company determine production prices unilaterally. Then the driver's performance is also rated by customers who act as if the manager gives ratings to the drivers who provide services (Stark & Levy, 2018).

The asymmetric information presence affects market efficiency, where one party keeps striving to reduce the information gap by paying transaction costs (Pratt & Zeckhauser, 1985). Transaction costs also called exchange fees where the value of these fees depends on the specialization and frequency of conducting transactions, negotiation skills, local knowledge, networks, self-confidence, social capital, and political connections (Benham & Benham 2001). Transaction cost developed into three broader categories (Mburu, 2002); they are information-seeking costs, negotiation (bargaining) cost, and monitoring cost. If the transaction cost appears due to transfer of ownership, or in general, is called ownership rights, then the cost expanded by including the cost for protection of property rights. When such a condition takes place, transaction costs as fees appear in institutional arrangement creation and implementation. According to (Williamson, 2010), there are three characteristics of transactions that affect the amount of transaction cost; they are uncertainties, asset specificities, and time-frequency.

Akbar and Tracogna (2018) conclude that economic partner relationship is highly influenced by the transaction costs factors. First, the transaction frequency refers to the transaction amount during a certain period between the same parties. Second, partner uncertainty is related to the range of transaction time. Third, asset specification caused dependent between contracting parties and create a bilateral monopoly or unbalanced relationship. Based on the finding the third hypothesis of this research is online transportation partnership is affected by transaction costs. Henten and Windekilde (2016), creating a market sharing economy due to the reduction in transaction costs facilitated by Internet-based platforms. This platform provides convenience to a drastic reduction in transaction costs between users and providers who are creating new markets, where previously may have been very limited. On the other hand in the case of bicycle rental uses the concept of sharing economy in China founded that bicycle rental to maximize utilization is unused and causes enormous waste of resources because most of the bicycles discarded (Liu *et al.*, 2020).



Based on the hypotheses above, information asymmetry and transaction costs are exogenous latent variables, while sharing economy partnership is the endogenous variable, as seen on the following conceptual framework.



Source: Author

**Figure 1. Conceptual framework**

The conceptual framework is the development of the studies of Pratt and Zeckhauser (1985), in that asymmetric information do influence transaction cost (H1), Rosenblat and Stark (2016), in that asymmetric information influences partnership relations (H2), and Akbar and Tracogna (2018), in that transaction cost influence partnership relations (H3). The manifest of the variables presented in the following Table 1.

**Table 1. Variable and Indicator**

No.	Variable	Indicator	Source
1	Asymmetric Information (X1)	1. Transaction Information 2. Tariff Information 3. Performance Information 4. Information Disclosure 5. Decision Making	Rosenblat & Stark (2016), Nastiti (2017), and Dunk (1993)
2	Transaction Cost (X2)	1. Information Seeking Cost 2. Negotiation Cost 3. Monitoring Cost 4. Transaction Uncertainty Attributes	Mburu (2002)  Beckman (2000)
3	Partnership Relations (Y)	1. Communication and Information Sharing 2. Imbalances and Interdependencies 3. Work Time Flexibility 4. Autonomy at Work	Boeck & Wamba (2008)  Berger <i>et al.</i> (2019)

Source: Author



### 3. Research Methods

This study was conducted in Malang, a city in East Java, since it represents the high development of the sharing economy in online-based transportation. The population was unknown due to application companies, such as Grab and Gojek, to treat information about the number of their drivers and riders as classified. According to Wibisono (2003), if the population number is unknown, the number of random samples is between 96.04-97, rounded to 100. This research used cluster incidental sampling, the reason is the large population so that the population is selected based on groups. The samples obtained anytime and anywhere as long as meet the requirements of samples. The population is divided into two, based on the application companies; they are Gojek's motorcycle riders and Grab's car drivers.

The data used are primary, obtained by asking predetermined questions to respondents visited directly. A statistic inferential analysis was conducted to assess the relations between the research variables. This method is used because of its suitability with this research, which is exploratory a phenomenon that occurs in online transportation partnerships. A multivariate exploratory analysis was to identify any data pattern in the case of the unavailability or scarcity of theories about the relationships among the variables (Hair *et al.*, 2013).

### 4. Results

#### Validation and Reliability of Constructs

The output of the outer loading assessment of this research has met the rule-of-thumb criteria, where the values of all indicators are higher than 0.7, so the AVE test and discriminant validity test can proceed (Hair *et al.*, 2013). The Average Variance Extracted (AVE) score prescribed by the rule-of-thumb criteria is 0.5 for all variables (Vinzi *et al.*, 2010), while the score of discriminant validity or cross-loading must be greater than 0.7 for each variable (Hair *et al.*, 2013). Concerning reliability, the Cronbach's alpha value must be greater than 0.7 (Cronbach, 1951; Nunnally, 1975), and the composite reliability must be greater than 0.6 (Hair *et al.*, 2013). The scores above are presented in the following Table 2.

**Table 2. Validity and Reliability Test**

Variable	AVE	Cross Loading	Cronbach's Alpha	Composite Reliability
Asymmetric Information	0.53	0.73	0.78	0.85
Transaction Costs	0.54	0.73	0.72	0.82
Partnership Relations	0.55	0.74	0.73	0.83

Source: Author

Referring to the table 2, the AVE scores of all variables exceed 0.5, which 0.53 for asymmetric information, 0.54 for transaction costs, and 0.55 for partnership relations, showing that the scores have met the rule of thumb or the criteria in the reflective outer model. They describe sufficient convergent validity, which means that one latent variable can explain more than half of the indicator variants on average.



The cross-loading values of all variables are higher than 0.7, which 0.73 for asymmetric information, 0.73 for transaction cost, and 0.74 for partnership relations, which means that a set of combined indicators is not unidimensional and that the construct has a sufficient discriminant.

The research reliability was measured using Cronbach's alpha and composite reliability. Based on table 2, Cronbach's alpha values for all variables are higher than 0.6, which 0.78 for asymmetric information, 0.72 for transaction costs, and 0.73 for partnership relations. Furthermore, the composite reliability scores are 0.86 for asymmetric information, 0.82 for transaction costs, and 0.29 for partnership relations.

### Path Analysis Results

The hypothesis testing was conducted by considering the bootstrapping results in the path coefficient, which is comparing t-statistics with t-table (1.96). If the t-statistic is higher than the t-table, the hypothesis is accepted. The analysis results at 5% alpha presented in the following Table 3.

**Table 3. Path Analysis**

Path	Original sample	T statistic	P-Values
Transaction Costs (TC) → Partnership Relations (PR)	0.13	1.17	0.24
Asymmetric information (AI) → Transaction Costs (TC)	0.40	5.51	0.00
Asymmetric information (AI) → Partnership Relations (PR)	0.47	6.72	0.00

Source: Author

Based on the Table 3, there are two out of three paths that support the hypothesis. The first is asymmetric information on transactions costs (AI → TC) with the t-statistic of 5.51 and P-value of 0.00. According to the rule of thumb, a hypothesis accepted if the t-statistic is higher than 1.64 or 1.96 and the probability value is lower than 0.05 or 5%. The second is asymmetric information on partnership relations (AI → PR) with the t-statistic of 6.72 and P-value of 0.00. According to the rule of thumb, a hypothesis accepted if the t-statistic is higher than 1.64 for two-tailed or 1.96 for one-tailed and the probability value is lower than 0.05 or 5%. The third hypothesis, i.e. concerning relations between transaction costs and partnership relations (TC → PR), is rejected since the t-statistic is 6.72 and the P-value is 0.24. According to the rule of thumb, a hypothesis rejected if the t-statistic is lower than 1.64 for two-tailed or 1.96 for one-tailed and the probability value is higher than 0.05 or 5%. In regards to original sample, or the beta ( $\beta$ ), the value of transaction costs-partnership relations path is positive at 0.1, the value of asymmetric information-transaction cost path is positive at 0.40, and the value of asymmetric information-partnership relations is positive at 0.47.

Based on the tables and explanations above, the results of the hypothesis testing are as follows. For H1, asymmetric information influences transaction costs, H0 is accepted, which means that the influence of asymmetric information on transaction costs exists with the significance of 1 percent. The relation is positive, implying that the more the asymmetric information, the higher the transaction costs. For H2, asymmetric information influences partnership relations, H0 is accepted, which



means that the effect is significant. The relation is also positive, indicating that the more the asymmetric information, the higher the negative perception towards the partnership relations. Partnership relations in the questionnaires were asked using negative questions. For H3, the effect of transaction costs on partnership relations, H0 is rejected, which means that the influence of transaction costs on partnership relations is insignificant.

### **The Effect of Asymmetric Information on Transaction Costs**

The positive and significant effect of asymmetric information on transaction costs signals that more information asymmetry increases transaction cost that must be paid by certain parties, in this case, driver/rider partners. Transaction costs that arise are caused by the asymmetric information that occurs (Pratt & Zeckhauser, 1985). The asymmetry between companies and partners is due to a lack of information about the former party. The companies have developed applications using an algorithm aimed at providing ease and control for themselves (Rosenblat & Stark, 2016). The partners less have knowledge related to the applications. Therefore, they got difficult perfect information from the companies concerning how the applications work, although the applications are very detrimental to their work and income (Nastiti, 2017). This situation leaves them with no choice but to follow the application and makes them highly dependent on the applications developed by the companies.

The crucial information for drivers is a punishment from companies such as suspending or breaking up partners. When application companies give penalties to drivers, they are always not given a clear explanation and do not conform with the driver. Meanwhile, the driver felt that he had not committed the actions that the company suspected. These due to false feedback by customers so that adversely affect driver performance (Stark & Levy, 2018). Drivers who got suspended from the company, the driver will pay a fee to seek information from the informal group service that has the algorithmic ability to change the driver's account.

### **The Effect of Transaction Costs on Partnerships**

The effect of transaction costs on partnership relations is not significant because the income of partners, in general, is higher after joining the companies. Therefore, the partners can still cover the transaction costs from the money that they get from their job as online-transportation drivers or riders. Hence, although the transaction costs are increasing, the partnership relations remain well and not significantly affected because their income now is still higher than it was before joining the companies. The use of platform applications can provide cost efficiency to users (Henten & Windekilde, 2016). According to Lessig (2008), the sharing economy was built by commercial entities that purpose to increase value. For this reason, the motivation for transportation users is economic problems to increase income and work time flexibility (Barnes & Mattsson, 2016). Based on the results, the majority of drivers who joined application companies experienced increased welfare. Therefore, many drivers who initially join as part-time jobs then becomes the main job.





These findings are in line with a study conducted by Berger *et al.* (2019) on Uber drivers in the UK. The study showed most drivers shifted their part-time jobs to permanent full-time jobs. Drivers got increased revenue after partnering with Uber. Drivers report higher levels of life satisfaction than other workers. Even though drivers have an increase in income, they are worried about the long-term sustainability of their welfare. The partnership pattern that intertwines between the driver and the company causes the driver to be a flexible worker and uncertainty in the income he receives (Hahn & Metcalfe, 2017).

### **The Effect of Asymmetric Information on Partnership**

The effect of asymmetric information on partnership relations is significant. The higher the information asymmetry, the higher the negative perceptions concerning the relationship between the companies and the partners. Limited information provided by the application makes the partners unable to increase their bargaining power, otherwise, the companies have overwhelming control over the partners and their job. Asymmetric information that occurs related to transaction information, incentive information and sanction information. These results are in line with the study of Rosenblat and Stark (2016) and Nastiti (2017) that found application companies have more information than their driver-partners. The drivers under algorithmic management not characterized by freedom and flexibility but with opposite conditions (Rosenblat & Stark, 2016). Algorithmic management establishes a game-like pattern of working relationships with an income target to encourage drivers to longer and harder in work. At the same time, the company imposes costs and risks on the driver. At the same time, the company imposes costs and risks on the driver (Nastiti, 2017). The study conducted by Laurell and Sandstrom (2017) found that the sharing economy in Sweden creates a state of logical instability in the market. The occurring information asymmetry makes some partners establish communities independently only to share information with other drivers or riders or help fellow partners.

Various literature suggests several mechanisms to overcome information asymmetry, including through contract incentives and monitoring (Fama, 1980; Jensen, 1986; Wiseman & Gomez-Mejia, 1998). Another argument for dealing with the uncertainty caused by information asymmetry is to include an institutional perspective in the study of the many problems that have cooperative structures (Eisenhardt, 1989). The solution that can apply is to balance information on driver partners through government intervention in the form of institutions. The government makes regulations and facilitates driver-partners to form independent associations to accommodate all drivers (Dermawan *et al.*, 2020). The role of this institution is to reduce incomplete contracts which are caused by uncertainty so that there are ample opportunities for the emergence of contingencies (Klein, 1980). Therefore, the contract here also is interpreted as a compensation instrument designed to eliminate the impact of asymmetric information. The appropriate contract to use is a relational contract, which is a contract that cannot calculate all uncertainties in the future, but only based on past, current agreements, and expectations of future relationships between the actors in the contract (MacNeil, 1974).



The driver is considered by the company not to be a partner but an application user just like a customer. The difference in treatment between accounts owned by drivers and customers in obtaining information. Moreover, accounts owned by customers and easy to get information so that customers feel more secure and comfortable. Meanwhile, from the driver's account, not much information is obtained regarding sanctions, rewards, and orders. According to Cohen and Sundararajan (2015), the use of digital platforms can reduce information asymmetry between application providers and consumers through online platforms. Therefore, in good faith, the company can reduce the information asymmetry that occurs to the driver and provide driver safety and comfort at work. According to Yamagishi and Matsuda (2002), that reputation can give solutions-well to the problem of information asymmetry. The government can provide a stimulus so that new application companies can grow and compete with existing companies. The healthy competition of application companies will encourage the company to maintain its reputation in the eyes of driver-partners and consumers. This reputation is more crucial for drivers to join. The government can also determine the price upper and lower limits for the driver's income and taxes received (Hruška *et al.*, 2018). The government has not widely known about the use of algorithm technology on application platforms, so there is no control from other parties. This requires an audit of algorithmic technology by the government to obtain accurate information on online transportation practices.

## **6. Conclusion and Suggestion**

Asymmetric information in online transportation partnership hinders partnership relations. The appearance of this information asymmetry is due to an incomplete contract between the driver and the company. Impact of this information asymmetry also raises transaction costs to the driver. Transaction fees incurred by the driver are relatively small when compared to the income received by the driver. So, the transaction costs do not affect the partnership relationship in online transportation. The most dominant indicators of asymmetric factors affecting the partnership relationship are transaction information, incentive information and sanction information. The results of this study still lack and limit only from the driver as a respondent and do not get a response from the application company. These caused the company has not accepted to be a respondent for data collection and interviews. As a result, in terms of using application technology, it cannot be explored optimally. Therefore, further study to get confirmation from the company regarding the information asymmetry that occurs to the driver is needed. This study given benefits related to the image that online drivers experience in partnership. Greatly expect, future research can use these instruments to complete the experience by application companies. This is to obtain information on the use of algorithm technology to provide government recommendations for conducting company technology audits. The government can also use the results of this research to make online transportation partnership regulations more fairness.



## References

- Acquier, A., Daudigeos, T. & Pinkse, J. (2017). Promises and paradoxes of the sharing economy: An organizing framework. *Technological Forecasting and Social Change*, 125(C), 1–10. doi: 10.1016/j.techfore.2017.07.006.
- Akbar, Y. & Tracogna, A. (2018). The sharing economy and the future of the hotel industry: Transaction cost theory and platform economics. *International Journal of Hospitality Management*, 71, 91–101. doi: 10.1016/j.ijhm.2017.12.004.
- Akerlof, G. (1970). The market for lemons: Quality uncertainty and the market mechanism. *Quarterly Journal of Economics*, 84, 488–500. doi: 10.2307/1879431.
- Akerlof, G., Spence, M. & Stiglitz, J. (2001). Markets with asymmetric. *Nobel Prize In Economics Documents 2001-2*, Stockholm: Nobel Prize Committee, p. 1.
- Barnes, S. & Mattsson, J. (2016). Understanding current and future issues in collaborative consumption: A four-stage Delphi study. *Technological Forecasting and Social Change*, 104(C), 200–211. doi: 10.1016/j.techfore.2016.01.006.
- Beckman, V. (2000). A theory of determination of the mark-up under oligopoly. *Journal of Economic Literature*, 38, 595–613.
- Belk, R. (2014). Sharing versus pseudo-sharing in web 2.0. *The Anthropologist*, 18(1), 7–23. doi: 10.1080/09720073.2014.11891518.
- Benham, A. & Benham, L. (2001). The cost of exchange. *Ronald Coase Institute Working Papers*, Number 1.
- Berger, T., Frey, C.B., Levin, G., & Danda, S.R. (2019). Uber happy? Work and well-being in the “Gig economy”. *Economic Policy*, 34, 429–477. doi: 10.1093/epolic/eiz007.
- Boeck, H. & Wamba, S. (2008). RFID and buyer seller relationships in the retail supply chain. *International Journal of Retail & Distribution Management*, 36(6), 433–460. doi: 10.1108/09590550810873929.
- Cockayne, D. (2016). Sharing and neoliberal discourse: The economic function of sharing in the digital on-demand economy. *Geoforum*, 77, 73–82.
- Cohen, M. & Sundararajan, A. (2015). Self-regulation and innovation in the peer-to-peer sharing economy. *University of Chicago Law Review*, 82(1), 116–133.
- Cronbach, L. (1951). Coefficient alpha and the internal structure of tests. *Psychometrika*, 16, 297–334. doi: 10.1007/BF02310555.
- Dehlen, T., Zellweger, T.M., Kammerlander, N., & Halter, F. (2014). The role of information asymmetry in the choice of entrepreneurial exit routes. *Journal of Business Venturing*, 29(2), 193–209. doi: 10.1016/j.jbusvent.2012.10.001.
- Dermawan, D., Ashar, K., Noor, I., & Manzilati, A. (2020). Asymmetric information of sharing economy. *Proceedings of Advances In Economics, Business And Management Research*, 144, 29–33.
- Dunk, A. (1993). The effect of budget emphasis and information asymmetry the relation between budgetary participation and slack. *The Accounting Review*, 68, 400–410.
- Dutta, S., Bergen, M. & John, G. (1994). The governance of exclusive territories when dealers can bootleg. *Marketing Science*, 13(1), 83–99. doi: 10.1287/mksc.13.1.83.
- Eckhardt, G. & Bardhi, F. (2016). The relationship between access practices and economic systems. *Journal of the Association for Consumer Research*, 1(2), 210–225. doi: 10.1086/684684.
- Eisenhardt, K. (1989). Agency theory: An assessment and review. *The Academy of Management Review*, 14(1), 57–74. doi: 10.2307/258191.
- Fama, E. (1980). Agency problems and the theory of firm. *Journal of Political Economy*, 88, 288–307. doi: 10.1086/260866.
- Frenken, K. & Schor, J. (2017). Putting the sharing economy into perspective. *Environmental Innovation and Societal Transitions*. 23, 3–10. doi: 10.1016/j.eist.2017.01.003.



- Frenzen, H., Hansen, A.K., Krafft, M., Mantrala, M.K., & Schmidt, S. (2010). Delegation of pricing authority to the sales force: An agency-theoretic perspective of its determinants and impact on performance. *International Journal of Research in Marketing*, 27(1), 58–68. doi: 10.1016/j.ijresmar.2009.09.006.
- Hahn, R. & Metcalfe, R. (2017). *The ridesharing revolution: Economic survey and synthesis*, Paper prepared for Oxford University Press Volume IV, p. 20.
- Hair, J., Ringle, C. & Sarstedt, M. (2013). Partial least squares structural equation modeling: Rigorous applications, better results and higher acceptance. *Long Range Planning*, 46(1–2), 1–12. doi: 10.1016/j.lrp.2013.08.016.
- Hall, J. & Krueger, A. (2018). An analysis of the labor market for uber’s driver-partners in the united states. *ILR Review*, 71(3), 705–732.
- Henten, A. & Windekilde, I. (2016). Transaction costs and the sharing economy. *Info*, 18(1), 1–15. doi: 10.1108/info-09-2015-0044.
- Hruška, L., Krajčík, V. & Formánek, I. (2018). The conceptual model of collaborative economy. *Scientific pers of the University of Pardubice, Series D, Faculty of Economics and Administration*, 25, 80–91.
- Jensen, M. (1986). Agency cost of free cash flow, corporate finance, and takeovers. *American Economic Review*, 76(2), 323–329.
- Keane, M. & Stavrunova, O. (2016). Adverse selection, moral hazard and the demand for medigap insurance. *Journal of Econometrics*, 190(1), 62–78. doi: 10.1016/j.jeconom.2015.08.002.
- Klein, B. (1980). Transaction cost determinants of “Unfair” contractual arrangements’. *American Economic Review*, 70(2), 356–362.
- Laurell, C. & Sandstrom, C. (2017). The sharing economy in social media: Analyzing tensions between market and non-market logics. *Technological Forecasting & Social Change*, 125, 58–65. doi: 10.1016/j.techfore.2017.05.038.
- Lessig, L. (2008). *Remix: Making Art and Commerce Thrive in a Hybrid Economy*. New York: Penguin Press.
- Liu, C., Chan, R.K.H., Wang, M., & Yang, Z (2020). Mapping the sharing economy in china. *Sustainability*, 12(16), 6333. doi: 10.3390/su12166333.
- MacNeil, I. (1974). Restatement (second) of contracts and presentation. *Virginia Law Review*, 60(4), 589–610. doi: 10.2307/1072414.
- Mair, J. & Reischauer, G. (2017). Capturing the dynamics of the sharing economy: Institutional research on the plural forms and practices of sharing economy organizations. *Technological Forecasting & Social Change*, 125(C), 11–20. doi: 10.1016/j.techfore.2017.05.023.
- Mas, A. & Pallais, A. (2017). Valuing alternative work arrangements. *American Economic Review*, 107(12), 3722–3759. doi: 10.1257/aer.20161500.
- Mburu, J. (2002). Collaborative management of wildlife in kenya: An empirical analysis of stakeholders’ participation, costs and incentives. *Socio-economic Studies on Rural Development*, 130, 1–3.
- Munoz, P. & Cohen, B. (2017). Mapping out the sharing economy: A configurational approach to sharing business modeling. *Technological Forecasting and Social Change*, 125(C), 21–37. doi: 10.1016/j.techfore.2017.03.035.
- Nastiti, D. (2017). Worker unrest and contentious labor practice of ride-hailing services in Indonesia. *Arryman Symposium*, 1–40.
- Nunnally, J. (1975). Psychometric theory— 25 years ago and now. *Educational Researcher*, 4(10), 7–21. doi: 10.3102%2F0013189X004010007.
- Pratt, J. & Zeckhauser, R. (1985). *Principals and agents: The structure of business*. Boston: Harvard Business School Press.
- Rosenblat, A. & Stark, L. (2016). Algorithmic labor and information asymmetries: A case study of uber’s drivers. *International Journal of Communication*, 10, 3758–3784. doi: 10.2139/ssrn.2686227.



- Spencer, M. (1977). *Contemporary economics 3rd edition*, New York: Worth Publishers InC.
- Sprague, R. (2015). Worker (mis)classification in the sharing economy: Trying to fit square pegs into round holes. *ABA Journal of Labor & Employment Law*, 53, 1–23.
- Stark, L. & Levy, K. (2018). The surveillant consumer. *Media, Culture & Society*, 40(8), 1202–1220. doi: 10.1177/0163443718781985.
- Stephany, A. (2015). *The business of sharing: Making it in the new sharing economy*. New York: Palgrave MacMillan.
- Stiglitz, J. (2000). The contributions of the economics of information to twentieth century economics. *The Quarterly Journal of Economics*, 115(4), 1441–1478. doi: 10.1162/003355300555015.
- Vinzi, V. E., Chin, W. W., Henseler, J., & Wang, H. (2010). *Handbook of partial least squares: concepts, methods and application*. Berlin: Springer. doi: 10.1007/978-3-540-32827-8.
- Wibisono, D. (2003). *Riset bisnis*. Jakarta: Gramedia Pustaka Utama.
- Wilhelms, M., Henkel, S. & Falk, T. (2017). To earn is not enough: A means-end analysis to uncover peer-providers' participation motives in peer-to-peer carsharing. *Technological Forecasting and Social Change*, 125(C), 38–47. doi: 10.1016/j.techfore.2017.03.030.
- Williamson, O. (2010). Transaction cost economics: The natural progression. *American Economic Review*, 100(3), 673–690. doi: 10.1257/aer.100.3.673.
- Wiseman, R. & Gomez-Mejia, L. (1998). A behavioral agency model of managerial risk taking. *Academy of Management Review*, 23(1), 133–153. doi: 10.5465/AMR.1998.192967.
- Wright, C. F., Wailes, N., Bamber, G. J., & Lansbury, R. D. (2017). Beyond national systems, towards a “Gig economy”? A research agenda for international and comparative employment relations. *Employee Responsibilities and Rights Journal*, 29, 247–257. doi: 10.1007/s10672-017-9308-2.
- Yamagishi, T. & Matsuda, M. (2002). *Improving the lemons market with a reputation system: An experimental study of internet auctioning*. Sapporo: Hokkaido University, p. 43.

