



Agency theory: Review of the theory and current research

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Abstract

This article intends to review the theoretical aspects and current research on agency theory. It aims to explore the main ideas, problems, and issues related to agency theory through a survey of the current literature. Agency theory is caused by agency relationships and information asymmetry which causes agency problems and agency costs. This article not only categorizes agency problems into six categories representing various concepts and problems but also solutions offered related to agency theory research over the last five years. This literature survey will enlighten practitioners and researchers in understanding, analyzing, mitigating agency problems, and guiding future research on agency theory.

Keywords: Agency Theory; Agency Relationship; Agency Problem; Agency Cost; Literature Survey

Abstrak

Artikel ini bermaksud untuk meninjau aspek teoretis dan riset terkini tentang teori keagenan. Hal ini bertujuan untuk mengeksplorasi ide-ide utama, masalah, dan isu-isu yang terkait dengan teori keagenan melalui survei literatur saat ini. Teori keagenan disebabkan oleh hubungan keagenan dan asimetri informasi yang menyebabkan masalah keagenan dan biaya keagenan. Artikel ini tidak hanya mengkategorikan masalah keagenan ke dalam enam kategori yang mewakili berbagai konsep dan masalah tetapi juga menawarkan solusi terkait dengan riset teori keagenan selama lima tahun terakhir. Survei literatur ini akan mencerahkan praktisi dan peneliti dalam memahami, menganalisis, mengurangi masalah keagenan, dan membantu memandu riset selanjutnya tentang teori keagenan.

Kata Kunci: Teori Keagenan; Hubungan Keagenan; Masalah Keagenan; Biaya Keagenan; Survei Literatur

INTRODUCTION

Agency theory is a theory that focuses on learning the contract design for solving agency problems and agency costs arising as a result of agency relations, especially the delegation of decision-making to agents. Agency theory is a part of positive accounting theory, game theory, and organizational theory. Positive accounting theory is a theory trying to explain and predict which company will not use certain accounting methods and accounting methods that have to be used for the company (Watts & Zimmerman, 1986). Game theory aimed to understand the situation where decision-makers interact (Osborne, 2000). While the organizational theory is a study of the structure, function, organizational performance, and the behavior of groups and individuals within them (Howard, 1984).

In financial accounting theory, agency theory has a role in explaining and predicting the choice of using accounting methods by the manager. Agency theory is also becoming the primary of efficient contracting theory. Besides, agency theory with the efficient market

hypothesis and contracting theory is being used in important predictions of positive accounting theory, namely bonus plan hypothesis, debt/equity hypothesis, and political cost hypothesis. Agency theory is also used as a basis to understand profit management. The existence of broad agency problems in various types of organizations has been used this theory as one of the important theories in the economy and financial literature in the accounting field, economy, political science, sociology, organizational behavior, and marketing (Panda & Leepsa, 2017). Agency theory can also be used as a basis for generating new theories, such as agency theory and crowding reactance (Lim, 2021). Moreover, agency theory has developed into Behavioural Agency Theory and Social Agency Theory.

The article is written by literature survey method aimed to describe agency theory and analyze the research in agency theory over the past five years. Previous author such as Eisenhardt (1989), Kiser (1999), Shapiro (2005), along with Panda and Leepsa (2017) has surveyed and captured various aspect of agency literature due to its wide popularity. But there have been no articles analyzing the research of agency theory over the last five years. The study of research about agency theory over the past five years is important to do because the agency problem raises agency costs that need to be mitigated to increase the company's competitiveness. Reserach over the past five years is expected to offer workable solutions.

The article is expected to give a theoretical contributions and practical contributions. The expected theoretical contribution is (1) to provide an overview of the history of the development of research literature related to agency theory; (2) to broaden the types of agency problems that have not been studied until 2017; (3) to provide current agency theory research directions, which is related to agency problems from various new problem perspectives that have not been studied in previous research and offered solutions; (4) present the research theme of agency theory which is still rarely studied. While the expected practical contribution is to provide applicative solutions to mitigate agency costs caused by various types of agency problems.

This article is written with the following systematic: Section 2 contains the theory that describes the background, assumption, agency cost, and the problem types of agencies; section 3 contains the research of agency problem and the solution for agency problem and agency cost over the past five years which can be used as a reference for further agency theory research.

Background of Agency Theory

The background of agency theory is the existence of an agency relationship between principals and agents, in which the principal delegates or employs agents to do work in the best interest of the principal, including in making decisions. These decisions include the allocation of resources within the firm, coordination across subunits, pricing, costing, compensation, and incentives (Fitriani, 2019). The delegation of decision-making authority can cause a loss of efficiency and an increase in costs which are called agency costs (Deegan, 2014). In addition to agency costs, there are agency problems related to difficulties or problems in motivating agents to work in the best interest of the principal. Agency problems arise due to inefficiency and information asymmetry.

Information asymmetry is a concept that recognizes that some parties in business transactions may have an information advantage compared to other parties (Myers & Maljuf, 1984). According to Scott (2015), there are two types of information asymmetry, namely (1) Adverse selection is a condition in which managers and other insiders usually know more information about the condition and prospects of the company than outsiders.

The manager only conveys sufficient information and does not convey other important information that can influence the decision-making of the shareholders. (2) Moral hazard is a condition where the activities carried out by a manager are not fully known by shareholders or lenders so managers can take actions outside the knowledge of shareholders that violate contracts and ethics.

Agency Theory Assumptions

According to Eisenhardt (1989), agency theory is based on three assumptions: (1) Assumptions about human nature, emphasizing that human has self-interest, bounded rationality, and do not like risk aversion. (2) Assumptions about the organization, namely the existence of conflict between members of the organization, efficiency as a criterion of productivity, and the existence of information asymmetry between principals and agents. (3) Assumptions about information, namely that information is seen as a commodity that is traded.

Meanwhile, Scott (2015) assumes that agency theory is a part of game theory thus considering that agency theory has the characteristics of cooperative and non-cooperative games. It is said to have cooperative characteristics because each party must be able to commit to a contract, namely binding themselves to work together or play by the rules. However, it also has non-cooperative characteristics, because the two parties did not specifically agree to perform a particular action, but the action was motivated by the contract itself. The commitment of both parties can be enforced by the legal system, using a binding agreement (escrow), and by the ethical behavior and reputation of the parties to the contract. Therefore, agency theory is also assumed to use cooperative games.

Agency Cost

Agency costs are any potential loss of profits incurred by underperforming managers which are considered costs resulting from the delegation of decision-making in an agency relationship (Deegan, 2014). According to Jensen and Meckling (1976), in general, it is impossible in zero cost conditions, the principal can ensure that the agent will make optimal decisions from the principal's point of view so that there are three types of agency costs (1) Monitoring cost by the principal, in which the principal creates appropriate incentives for the agent designed to limit the agent's deviant behavior or activities. (2) Bonding cost to guarantee that the agent will not do harm to the principal or ensure that the principal will receive compensation if the agent does this. (3) Residual loss is the currency value equivalent to a decrease in the principal's welfare as a result of the difference between the agent's decisions and the decisions made to maximize the principal's prosperity.

Type of Agency Problem

Panda and Leepsa (2017) categorized agency problems based on research conducted for forty-seven years, from 1968 to 2015 and found that there are three agency problems as follows: (1) Type 1 Owner - Agent; (2) Type 2 Owner (Majority) - Owner (Minority); (3) Type 3 Owner- Creditor.

METHOD

The literature survey method is used to find agency problems from various perspectives, new problems that have not been discussed in previous research and the solutions offered. For this purpose, researchers have explored various journals, books, and

chapters available in online databases of international repute to improve the quality of literature studies, namely DOAJ, Scopus, Thomson Reuters, Elsevier, Springer, Wiley Online Library, and Taylor & Francis to collect the literature on agency theory. This article has searched articles, working papers and chapters by keyword agency theory, agency problem, agency relationship, and agency cost in the title of the article via Google Scholar, and found 114 articles. Of these, articles that are closely related to agency problems and solutions offered to overcome agency problems and agency costs were filtered for 43 articles.

This study also uses coding to place specific content found in text into certain categories (Saldana, 2016). Coding is done by grouping articles into agency theory themes, namely types of agency problems and solutions to agency problems and agency costs. To increase the reliability of the research, researchers conducted reliability tests with intercoder reliability to guarantee that the article found by the researcher is the intended article. The researcher asked for the help of another coder who understands agency theory to code 20 percent of the total articles. The coding results from the coder were then entered into the SPSS program for the Kappa Cohen test and a Kappa Cohen coefficient value of 0.625 was obtained as shown in Table 1.

Table 1. Kappa Test

	Value	Asymptotic Standard Error	Approximate	Approximate Significance
Measure of Agreement	0.625	0.171	2.739	0.006
N of Valid Cases	9			

The value indicates that the agreement between the researcher and the coder is strong (Altman, 1991). Then, the researcher continued by reading and summarizing all the articles.

RESULT AND DISCUSSION

Agency Problems in Recent Agency Theory Research

Type 1 Owner - Agent

Research in the last five years in agency theory regarding the problem of owners and agents can be categorized into seven issues as shown in the following Table.

Table 2. Agency Research Issues Type 1 Owner-Agent

No	Issue	Researchers and Years of Research
1	Gender and ethnicity	Banks et al (2018), Zou et al (2021), Khuong et al (2022), Nguyen and Soorbaroyen (2022),
2	Cash holdings	Shaikh and Peter (2018), Chen and Liu (2021), Khajar and Kusumaningtyas (2021)
3	Company Size	Baral and Patnaik (2020), Liu and Sickles (2021)
4	Corporate Governance	Chari et al (2019), Lin et al (2020), Naz et al (2021)
5	Financial Report	Vitolla et al (2020), Raimo et al (2021)
6	Corporate Social Responsibility (CSR)	Calvo and Calvo (2018), Hussaini (2021)
7	Dividend	Pahi and Yadav (2021)

Each researcher, research year, country, sample, and research findings in Type 1 agency problems in each issue are presented in table 3 to table 9 as follows.

Table 3. Type 1 Agency Problem - Gender dan Ethnicity

No	Researcher	Year	Country	Sample	Finding
1	Banks et al	2018	United States	74 independent studies with 12,271 individuals	Service quality was a stronger predictor of tip percentage than food quality, patronage frequency, and meal party size. Additionally, racial minority servers tend to be tipped less than white servers. Women also tend to be tipped more than men.
2	Zou et al.	2021	China	data from China's A-share market companies and national census datasets	Local ethnic diversity is negatively related to the efficiency of the company's investment. social trust and agency costs play a mediating role between ethnic diversity and investment efficiency
3	Khuong et al.	2022	Vietnam	companies registered in Vietnam during 2015-2019	The presence of female directors is positively related to company performance. The percentage of women has a positive relationship with agency costs, which harms firm performance.
4	Nguyen and Soorbaroyen	2022	British	240 of the UK's largest charities	Greater trustee board diversity (particularly gender and educational diversity) and the presence of a remuneration or nomination committee were positively related to CEO compensation. Dependence on government funding, nonprofit CEO work experience, and the presence of a financial/accounting expert on the audit committee are negatively related to CEO compensation. The existence of an audit committee, the internal audit function, the use of specialist external auditors and the characteristics of the CEO (gender, ethnicity, and managerial experience) were not significant factors.

Table 4. Type 1 Agency Problem - Cash Holdings

No	Researcher	Year	Country	Sample	Finding
1	Shaikh and Peters	2018	United States	cross-section of US S&P 1500 companies between 1997 and 2007	The emphasis on outside directors heightens the lack of investment in R&D; a more independent board encourages a better allocation of resources when a company has high free cash flow that needs to be paid back to owners.
2	Chen and Liu	2021	Taiwan	annual data of domestic companies (Taiwan) registered from the website of the Financial Supervisory Commission and the Taiwan Economic Journal for the period 2000-2018	Seasoned equity offerings (SEO) companies are mostly in the expansion or growth stage and SEO reduces company performance, both in the short and long term. After considering the free cash flow, the effect of SEO on performance decreases. The results support that most ROC companies are in the decline stage and ROC improves long-term company performance. However, free cash flow does not

No	Researcher	Year	Country	Sample	Finding
3	Khajar and Kusuma ningtyas	2021	Indonesia	companies listed on the Indonesia Stock Exchange during 2015-2019	affect the performance of companies involved in ROC. Corporate governance can moderate the effect of cash holding on increasing firm value.

Table 5. Type 1 Agency Problem - Company Size

No	Researcher	Year	Country	Sample	Finding
1	Baral and Patnaik	2020	India	35 Indian commercial banks from 2008-2018	In large banks, the board structure, board independence, and board committees influence agency costs. Whereas in the case of small banks, the structure of the board and board committees has an impact on agency costs.
2	Liu and Sickles	2021	United States	The 50 largest commercial banks in the US between 2000 and 2017	Bigger banks offer bigger bonuses and tend to have lower managerial efficiency and diminishing economies of scale.

Table 6. Type 1 Agency Problem - Corporate Governance

No	Researcher	Year	Country	Sample	Finding
1	Chari et al.	2019	United States	2,753 companies listed on the S&P 1500 in 1995-2016	The risk-return paradox is exacerbated by agency problems that contribute to career problems (i.e., CEO career horizon), and mitigated by various governance mechanisms that curb agency problems by aligning managers with shareholders (such as monitoring by the market for corporate control, large block owners, institutional owners, vigilant boards, and CEO incentive alignment).
2	Lin et al.	2020	China	382 state-owned public companies registered in central China from 2004 to 2017	A higher proportion of gain-handover contributes to more effective corporate governance. However, the positive effect will be weaker with stronger firm profitability. In addition, we examine the internal transfer mechanism of profit-sharing pressure within corporate groups and find that the positive effect is stronger the weaker the parent company's cash flow rights.
3	Naz et al.	2021	Pakistan	The non-financial company listed on Pakistan Stock Exchange from 2009 to 2018	The corporate governance quality index and working capital management efficiency are positively related to company performance. Working capital management partially mediates the relationship between corporate governance and firm performance.

Table 7. Type 1 Agency Problem - Financial Report

No	Researcher	Year	Country	Sample	Finding
1	Vitolla et al.	2020	Multinational	134 international companies	There is a positive relationship between board size, independence, diversity, activity, and the quality of integrated reporting.
2	Raimo et al.	2021	Multinational	125 international companies	There is a positive effect of size, independence, and frequency of audit committee meetings on IRQ and a non-significant effect of financial expertise.

Table 8. Type 1 Agency Problem - CSR

No	Researcher	Year	Country	Sample	Finding
1	Calvo and Calvo	2018	European Union	airline company in Curacao	By increasing the costs of worker mobility, the European Union hinders corporate CSR strategies from employee engagement. This contrasts with the EU's stated goal of promoting worker mobility.
2	Hussaini et al.	2021	United States	US takeovers that occurred during the period from 1992 to 2014	Higher CSR performance at the acquirer level is associated with higher takeover premiums that are consistent with the shareholder cost view.

Table 9. Type 1 Agency Problem - Dividend

No	Researcher	Year	Country	Sample	Finding
1	Pahi and Yadav	2021	India	1142 Indian companies registered on NSE from 2001 to 2018	Managers have to pay fewer dividends when companies operate in highly competitive industries and vice versa so policymakers should design corporate governance norms after considering industry competitiveness.

Tables 2, 3, 4, and 5 show empirical evidence of agency costs, namely the cost of supervising agents by principals in the form of CEO compensation, which can be designed through gender and ethnic factors, cash holdings, company size, and corporate governance. Table 6 shows empirical evidence regarding agency costs, namely binding costs in the form of factors that affect financial reporting. Table 7 shows empirical evidence of agency costs in the form of residual costs when the agent's decision-making is different from the principal's decision. Whereas table 8 shows empirical evidence regarding dividend payments by agents to principals, where non-competitive companies face more significant agency problems and therefore pay higher dividends than competitive companies. The effect of internal corporate governance on dividends becomes much higher and more significant in the case of non-competitive companies as compared to competitive companies.

Type 2 Owner - Owner

Research related to type 2 agency problems between owners (majority or controlling shareholders) and owners (minority shareholders) related to regulations created to regulate protection for minority shareholders. Hu et al. (2021) tested the effect of political

connections on agency conflicts between controlling shareholders and minority shareholders using the exogenous setting of File 18, imposed by China's central government to restrict officials from taking positions in companies. Researchers found that tunneling by controlling shareholders of politically connected companies has decreased significantly since the implementation of File 18. The decline in tunneling was more pronounced for companies operating in more corrupt areas and more significant for companies that were less creditworthy or had greater financing needs. The researchers' findings are consistent with the fact that political connections motivate tunneling.

Yoon and Jin (2021) examine the incentives and economic impacts of related party transactions (RPT) by controlling shareholders (CSH) of group companies. The results explain the regulation of the RPT: RPT distortions arise not only from unfair transfer pricing but also from large transaction volumes. This implies that competition policies regarding market power leverage and anti-competitive vertical mergers can be applied to regulate dangerous RPT

Type 3 Owner - Creditor

Research related to type 3 agency problems that occur between owners and creditors is as follows:

Nishihara et al. (2019) researching the concept of debt overhang (leverage firms that maximize equity will be underinvested relative to firms that maximize firm value) find that the effect depends on how underinvestment is measured. When measured in terms of the expected investment value now, flexibility can reduce or exacerbate the problem of underinvestment, depending on the cost of installed capacity. But when measured by agency costs, flexibility always exacerbates the problem of underinvestment. It is shown numerically that, at an optimal leverage ratio, agency costs with reasonable parameter values can become economically significant. Thus, with flexibility in choosing the timing and size of investments, the problem of accumulating debt can be of significant practical relevance in a company's investment decisions.

Trinh et al. (2021) showed that busy boards of directors (that is, outside directors with multiple directorships) increase a bank's financing capacity by lowering its cost of debt, which is consistent with the signal quality hypothesis. It was further revealed that these negative associations were more prominent in conventional banks than in their Islamic counterparts.

Tran et al. (2021) tested the impact of economic policy uncertainty (EPU) on a bank's funding structure (FUD) and found that high policy uncertainty strengthened a bank's FUD. For banks with pre-existing low FUD, an increase in EPU increases FUD. However, for banks with pre-existing high FUD, the relationship between EPU and FUD becomes negative and economically significant.

Ma and Ma (2019) find that firms' use of trade credit significantly facilitates their access to bank loans in the future, suggesting a complementary relationship. Such relationships are more profound for firms with higher perceived agency costs, that is, firms with unclear firm information, firms located in regions with less developed external agencies, and firms in the early stages of existence. Companies are shifting from trade credit to bank loans as their main source of debt financing as they age. However, the process is slower for firms with greater levels of corporate information opacity and firms located in regions with weak external institutions.

Type 1 (Owner - Agent) and 2 (Owner - Owner)

Research related to agency problem types 1 and 2 that occur between owner-agent and owner-owner are as follows.

Dagnino et al. (2018) and Huang et al (2022) examined the relationship between cash holdings and agency problem types 1 and 2 and found that the research results were consistent with the idea that agency problem Types 1 and 2 affect a company's cash holdings. Tahir et al (2021) found that managers and controlling shareholders make suboptimal investments when the quality of disclosure is lacking in the company thus having implications for regulatory bodies responsible for ensuring the effective implementation of corporate governance mechanisms and in responding to calls for additional controls such as voluntary disclosure, it is important to establish voluntary reporting standards.

Yusuf et al. (2018) found that in Pakistan, there is no variation in the risk preferences of principals (minority shareholders) and agents (majority shareholders). They also find that remuneration and board independence packages are not an effective tools for governing owner-manager in Pakistan so policy-makers should shift their focus from lenient internal governance mechanisms to appropriate remuneration and board independence. Thus proposing a strict external audit function, and the appointment of an independent director and external audit firm by the regulator.

Grant (2021) proves that the dual agency of unions as agents and owners of company shares present a dilemma for unions where pursuing their responsibilities under one agency role runs directly at odds with their responsibilities under another.

Type 1 (Owner - Agent) and 3 (Owner - Creditor)

Research related to agency problem types 1 and 3 that occur between owner-agent and owner-creditor are as follows.

Imes and Anderson (2021) investigating the relationship between executive equity payments and the cost of debt suggest a “u-shaped” relationship between bond yields and equity payments. These results are consistent with the notion that bondholders prefer a moderate amount of executive equity payments and above or below that level, bondholders increase yields to protect their interests. These findings suggest that a moderate level of equity payments reduces agency costs between firm stockholders and bondholders.

Chan et al. (2021) investigating the relationship between CEO bonuses and bank lending spreads support the agency cost view that bank lenders demand significantly higher returns, more collateral, and tighter agreements from firms with higher CEO benefits. The researcher concludes that banks consider CEO allowances as a type of agency fee when they make lending decisions.

Type 4 Agent - Agent

In research related to agency theory in the last five years, a new category of agency problems emerged that had never been studied before, namely type 4 agency problems that occur between agents and agents as follows:

Virag (2021) uses Gioia's method to investigate the managerial rationale for this exercise and draws attention to the various problems and needs that can be addressed by agile methods procedures in Information System Development (ISD). The analysis found that control mechanisms were put in place not only because of agency issues, but also to enhance cooperation and communication, to signal senior management, and to be isomorphic with other projects.

Shaikh et al. (2020) based on agency theory examine the role of corporate governance in enabling R & D project managers and their teams to commercialize radical technologies. The agency theory explanation is that incumbent firms struggle with radical innovation because opportunistic managers invest excess free cash flow in radical ideas, with limited commercial value. The problem does not lie in the desire of middle managers to enrich themselves at the expense of shareholders but rather arises from a failure to select, encourage, and monitor the commercialization activities associated with technological innovation, the further away from the early recognition of opportunities.

Type 5 Company -Supplier

In research related to agency theory in the last five years, a new category of agency problems emerged that had never been studied before, namely type 5 agency problems that occur between companies as principals and suppliers as agents as follows:

Maestrini et al. (2018) based on agency theory identified the mediating effect of goal alignment and supplier opportunism in the direct relationship between monitoring/incentives and supplier operational performance. The results reveal that both monitoring and incentives positively influence supplier operational performance. Goal congruence is not a significant mediator whereas supplier opportunism mediates the monitoring-performance relationship and the performance-incentive relationship. Providing incentives to suppliers increases the likelihood of opportunistic behavior, which in turn reduces the operational performance of suppliers. While the main empirical evidence supports the generally positive impact of monitoring and incentives on performance, incentives appear to be a double-edged sword because of their potentially counterproductive effect in increasing supplier opportunism.

De Morais et al. (2021) analyze a company's supply chain financing using an agency theory perspective. Research results show that the costs of obtaining certification are borne by the company's resources, which are motivated by pressures from environmental demands. The main conclusion from this research is that companies that are driven by an economic perspective, tend to play a role as a driver of supply chain development.

Type 6 Customer - Company

In research related to agency theory in the last five years, a new category of agency problems emerged that had never been studied before, namely type 6 agency problems that occur between customers as principals and companies as agents as follows:

Reim et al. (2018) by applying an agency theory lens, examines provider-customer relational problems and solutions in the Product Service System (PSS) to identify agency problems and propose mechanisms to mitigate adverse customer behavior in the provision of PSS. The findings of the researchers are as follows: (1) identify and explain the reasons underlying adverse customer behavior related to goal differentiation and monitoring challenges. (2) different agent mechanisms (i.e. sharing, monitoring, and trust) are presented as an approach to reduce the possibility of adverse customer behavior.

Solutions to Agency Problems and Agency Costs in Recent Agency Theory Research

Several researchers have given certain solutions to the agency problem, which are cited below:

Work from Home:

Lowering the cost of employee monitoring efforts has made it cheaper for companies to allow work from home (White, 2018).

Board Propotion:

A larger board and proportion of independent directors help reduce agency costs for group affiliate companies. The busyness of the board and the duality of the CEO helps in reducing agency costs (Katti & Raithatha, 2018).

Trade liberalization:

Trade liberalization reduces agency problems in firms with production inefficiencies and encourages these firms to improve management quality. When the economy is open to trade, managers of the least productive firms are incentivized to exert more effort, even though they face a shrinking market size in an open economy which leads to increased productivity in these firms. We show that managerial incentives have a non-monotonic impact on aggregate productivity gains from trade liberalization. Thus, the interaction between managerial incentives and trade liberalization has a quantitatively large effect on the productivity gains from trade (Chen, 2019).

Stochastic Production Process:

Before concluding a contract, principals and agents can engage in a joint stochastic production process to exert efforts to increase agent productivity in the company. Principals can use synchronous deployment, or one of the actors can take a leadership role (Marino, 2019).

Legitimacy:

Changes in non-financial information disclosure (NFI) regulations from voluntary to mandatory realm as in Directive 2014/95/EU (EU directive requiring large companies to disclose information about how they operate and manage social and environmental challenges) can shape owner expectations and improve agency theory predictions (Mio et al., 2020).

Artificial Intelligence (AI):

With AI, there will be new boundaries including the certainty of intelligent information sharing which, in the context of agency theory, is available to agents and principals. The advantages of AI are updating and connectivity which allows agents to quickly pick up on differences in information. AI can collect information from various sources which will be updated in the principal system, considering that the system will be integrated. Knowing that AI intelligent agents are widely used and that these intelligent systems can collect data from different repositories, will moderate agent behavior to align with principals (Moloi & Marwala, 2020).

Three-stage assessment:

Tolstov and Sevchenko (2020) use a new approach involving a three-stage assessment, where interrelated indicators are selected and calculated according to a defined procedure, all significant information environments are identified; a qualitative assessment of the indicators that allow identifying the strengths and weaknesses of the company taking into account its industry affiliation is carried out and the results of the second phase are consolidated in the final assessment of financial management quality, which allows not only to determine the quality of financial management but also to identify the weaknesses of the current business model, that is, senior management decisions that are not in the interests of the owner can significantly weaken the company's business model.

Ethics:

Best results are obtained when hiring agents who maintain their reputation and refrain from unprofessional behavior (Charles et al., 2021).

Aligned Profit Target (*APT*):

Kamrad et al. (2021) use the Newsvendor framework to describe how company shareholders (for example, through the board of directors) can align these two seemingly disparate decision approaches: maximizing the expected profit versus maximizing the likelihood of hitting the profit target. Alignment is achieved by setting *APT* - profit targets that result in the same managerial action that is the same amount of stock, in both decision approaches.

CONCLUSION

Agency theory is a theory that focuses on learning the contract design for solving agency problems and agency costs arising as a result of agency relations, especially the delegation of decision-making to agents. This article is a literature survey on research over the last five years related to agency theory, especially on agency problems and the solutions offered to solve agency problems and agency costs, which consist of monitoring costs, binding costs, and residual costs.

From the results of the literature survey, it can be concluded that there are six types of agency problems studied in the last five years, namely type 1 owner-agent, type 2 owner-owner, type 3 owner-creditor, type 4 agent-agent, type 5 company (principle)-supplier (agent), and type 6 customer (principle)-company (agent). The emergence of a new agency problem category that has never been researched before, by Panda and Leepsa (2017) which are then categorized into agency problems of types 4, 5, and 6 indicating the wider use of agency theory in exploring and solving problems in organizations, especially companies. There is a gap in agency theory research in which the most researched agency problem is type 1, namely the agency problem between the owner and the agent.

In the type 1 agency problem between the owner and the agent, empirical evidence is obtained in the form of agency costs shows (1) agency costs, namely the cost of supervising agents by principals in the form of CEO compensation, can be designed through gender and ethnic factors, cash holdings, company size, and corporate governance. (2) binding costs in the form of factors that affect financial reporting; (3) residual costs when the agent's decision-making differs from that of the principal. In the issue of type 1 agency problems, much research focuses on control costs. In addition, there is empirical evidence regarding dividend payments by agents to principals, in which non-competitive firms face more significant agency problems and therefore pay higher dividends than competitive firms.

In the agency problem type 2 owner - owner, type 3 owner - creditor, type 4 agent - agent, type 5 company (principal) - supplier (agent), and type 6 between customer (principal) - company (agent), researchers in research over the last five years have showed empirical evidence of agency costs and various efforts to mitigate agency problems through regulations and systems that regulate opportunistic parties..

Several researchers have given specific solutions to the agency problem related to Work from Home, Board proportion, trade liberalization, Stochastic Production Process, legitimacy, Artificial Intelligence (AI), three-stage assessment, ethics, and Aligned Profit Target (*APT*). The solutions offered by recent research show better and more modern solutions and are supported by empirical evidence that can be used to solve agency problems and agency costs.

This article has limitations. The limitation is the literature used in this article may not cover the entire population of agency theory literature because it only uses keywords agency theory, agency problem, agency relationship, and agency cost and limited availability in online databases of international repute so that the issues discussed in this article may not be the entirety of agency theory.

Based on the results of this research, further studies and research are expected to expand data analysis and data sources. Further studies and research are also expected to broaden the sub-themes related to the types of agency problems that have not been studied and researched by previous research, namely agency problem type 2, 3, 4, 5, and 6. In addition, it is hoped that further studies and research can offer solutions to mitigate agency costs caused by agency problems to increase company competitiveness.

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