Approaches and critiques of Positive Accounting Theory (PAT) and Normative Accounting Theory (NAT) : a literature review

Abordagens e críticas à Teoria Positiva da Contabilidade (PAT) e à Teoria Normativa da Contabilidade (NAT): uma revisão da literatura

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ABSTRACT
Positive Accounting Theory (PAT) is an accounting theory that aims to explain and predict accounting practices carried out by companies. This theory emerged as an alternative to the normative approach which emphasizes more on what accountants should do in presenting financial information. However, PAT also received criticism related to the assumptions used in this theory. Therefore, this paper aims to review how the approach and criticism of PAT. The method used in this research is Systematic Literature Review (SLR) which is conducted by identifying, assessing, and interpreting all available research evidence regarding approaches and criticisms of PAT. The sources used in this paper are articles, books, and journals related to Positive Accounting Theory (PAT) and the criticisms raised against it. The results show that PAT has developed into a science that can be used to explain the choice of methods to be used by managers and other constituents of financial statements that can be used for decision making. However, PAT has also been criticized including issues related to research methods, methodology, and the basic assumptions underlying the theory. In conclusion, Positive Accounting
Theory (PAT) has had a significant impact on accounting practice, but keep in mind that this theory also has limitations and has been criticized by some parties. This paper provides an in-depth insight into the approaches and criticisms of Positive Accounting Theory (PAT), as well as highlighting the importance of critical evaluation of accounting theory in the development of accounting science as a whole.

**Keywords:** positive accounting theory, normative accounting theory, critique.

**RESUMO**
A Teoria Positiva da Contabilidade (PAT) é uma teoria contábil que visa a explicar e prever as práticas contábeis realizadas pelas empresas. Essa teoria surgiu como uma alternativa à abordagem normativa, que enfatiza mais o que os contadores devem fazer ao apresentar as informações financeiras. Entretanto, a PAT também recebeu críticas relacionadas às suposições usadas nessa teoria. Portanto, este artigo tem como objetivo analisar a abordagem e as críticas à PAT. O método utilizado nesta pesquisa é a Revisão Sistemática da Literatura (SLR), que é conduzida por meio da identificação, avaliação e interpretação de todas as evidências de pesquisa disponíveis com relação às abordagens e críticas da PAT. As fontes utilizadas neste trabalho são artigos, livros e periódicos relacionados à Teoria Positiva da Contabilidade (PAT) e às críticas levantadas contra ela. Os resultados mostram que a PAT se transformou em uma ciência que pode ser usada para explicar a escolha dos métodos a serem usados pelos gerentes e outros constituintes das demonstrações financeiras que podem ser usadas para a tomada de decisões. Entretanto, a PAT também foi criticada, incluindo questões relacionadas aos métodos de pesquisa, à metodologia e às pressuposições básicas subjacentes à teoria. Em conclusão, a Teoria Positiva da Contabilidade (PAT) teve um impacto significativo na prática contábil, mas lembre-se de que essa teoria também tem limitações e foi criticada por algumas partes. Este artigo fornece uma visão aprofundada das abordagens e críticas da Teoria Positiva da Contabilidade (PAT), além de destacar a importância da avaliação crítica da teoria contábil no desenvolvimento da ciência contábil como um todo.

**Palavras-chave:** teoria positiva da contabilidade, teoria normativa da contabilidade, crítica.

**1 INTRODUCTION**

The practice of accounting has developed since before Christ. Accounting can be broadly defined as a measurement and communication technique to provide users with appropriate economic information. Accounting theory is often used as the basis for an action or accounting practice (Fransesco et al., 2021). Where on the basis of its objectives, accounting theory can be divided into two types, namely normative accounting theory which provides a formula for accounting practices and positive accounting theory which seeks to explain and predict phenomena related to accounting (Ghozali and Anis, 2007).

The early development of accounting theory resulted in normative theory which is defined as theory that requires. The classical approach that focuses more on normative...
thinking experienced its glory in the 1960s, but in the 1970s there was a shift in the approach to accounting research. The reason behind the emergence of positive accounting theory is that the normative approach that has triumphed for a decade cannot produce accounting theories that are ready to be used in daily practice (Tharifah et al., 2021). As a result, there was a suggestion to descriptively understand the functioning of accounting systems in real practice. Another reason is to move the accounting research community that focuses on economic and behavioral approaches. The hope is that with understanding from direct practice, a more meaningful accounting system design will emerge (Ghozali, 2000).

Positive accounting research was first discovered by William H. Beaver (1968) with the publication of an article entitled "The Information Content of Annual Earnings Announcements" (Jensen & Meckling, 1976). Furthermore, positive accounting theory was recognized when Watts & Zimmerman published their article entitled "Towards a Positive Theory of the Determination of Accounting Standards" in 1978. The article has created a paradigm domain of accounting research with positive accounting theory based on qualitative empirics and can be used to justify various accounting techniques or methods now used or find new models for the development of accounting theory in the future (Wiratama & Asri, 2020). In this case, positive accounting theory tries to explain or predict real phenomena and test them empirically (Godfrey, et al, 1997 in Ghozali and Anis, 2007). Explanations or predictions are made according to their suitability for observation with the real world.

Despite its strong approach, PAT has also been criticized. (Boland & Gordon, 1992) stated that positive accounting theory is proven to apply economic positivism and has been criticized by various parties. For this reason, in this paper, a literature review of approaches and criticisms of Positive Accounting Theory will be conducted. This paper will involve an analysis of various articles and literature relevant to this topic, with the aim of providing a comprehensive understanding of the approaches and criticisms of this theory.

2 LITERATURE REVIEW
2.1 THE RISE OF POSITIVE ACCOUNTING THEORY (PAT)

Watts & Zimmermen (1978) say that the history of conflict between changing business flows in the US in the 1950s and 1960s. The negotiation paradigm regarding the changing flow of American business in the late 50s and early 60s. The business education
report set by the Ford Foundation and Carnegie Corporation in New York was the catalyst for this change. Creating and remembering hypotheses requires good research. In addition, the emergence of PAT was also caused by advances in calculation facilities that facilitate the process of analyzing large amounts of data used in PAT research as stated by Watts & Zimmermen (1978), namely computers and machine readable databases (CRSP and Compustat) became available in the 60s and in response to the decreasing costs of empirical work, finance and positive economic theory became available for use by accounting researchers. This led to the development of positive accounting research and researchers trained in positive theory methodology. Criticism of normative accounting theory was also the reason for the emergence of PAT. Jensen & Meckling (1976) stated that a theory in accounting is nothing more than a normative proposition. Accounting theory almost entirely contains what accountants should do. Jensen even added that accounting research is not scientific because the focus of accounting research is only definitional and too normative. From some of the reasons stated above is the beginning of the emergence of PAT in the accounting world. Positive accounting research was first discovered by William H. Beaver (1968) with the publication of an article entitled "The Information Content of Annual Earnings Notices" (Jensen & Meckling, 1976). Furthermore, positive accounting theory became known when Watts & Zimmerman published their article entitled "Towards a Positive Theory of Accounting Standard Setting" in 1978. The article has made positive accounting theory as The dominant paradigm of accounting research is based on empirical qualitative and can be used to justify various accounting techniques or methods now in use or seek new models for the development of accounting theory in the future.

2.2 POSITIVE ACCOUNTING THEORY (PAT)

Positive accounting theory develops along with the need to explain and predict the reality of accounting practices in society. Positive accounting theory seeks to explain observed accounting phenomena based on the reasons that cause an event to occur (Nurmadi et al., 2018). In other words, Positive Accounting Theory (PAT) is intended to explain and predict the consequences that occur if managers make certain choices. At present, positive theory emphasizes on explaining the reasons for current practices and predicting the role of accounting and related information in the economic satisfaction of individuals, companies, and others who play a role in capital market and economic activities (Nasution et al., 2020). However, the assumptions underlying the positive
research project have been criticized because proponents of positive theory use alternative rejections, aka other thinking. This means that positive theory is not free from value judgments or prescriptive implications. This is because implicit value considerations often underlie or influence the form and content of the research conducted. Researchers cannot avoid the element of bias in all research conducted. Thus the element of bias clearly shows the manifestation of the orientation of the researcher.

Positive accounting theory seeks to explain a process, which uses the ability, understanding, and knowledge of accounting and the use of accounting policies that are most appropriate to deal with certain conditions in the future. Positive accounting theory in principle assumes that the purpose of accounting theory is to explain and predict accounting practices. The purpose of positive accounting theory is to explain (to explain) and predict (to predict) accounting practices. Explanation means providing reasons for observed practices. For example, positive accounting theory seeks to explain why companies continue to use historical cost accounting and why certain companies change their accounting techniques. Meanwhile, prediction in accounting practice means that the theory tries to predict phenomena that have not been observed. From the above description, it can be said that PAT emphasizes whether the accounting theory put forward in the accounting literature can explain the accounting practices carried out and predict the causes of the phenomena that occur today and their influence in the future.

2.3 NORMATIVE ACCOUNTING THEORY (NAT)

The Ford Foundation and Carnegie Corporation in New York were the catalysts for this change. Creating and remembering hypotheses requires good research. The early development of accounting theory resulted in normative theory which is interpreted as a mandatory theory. In normative theory, minimum value judgments are used that contain premises. At the beginning of its development, writing normative accounting theory did not use a formal investigative approach. The theory is structured primarily to develop accounting postulates. Watts & Zimmerman (1986) explain the idea of normative theory as accounting theorists became more concerned with determining how companies should report, who became more normatively concerned with what should be done. Very little concern is shown for the empirical validity of the hypotheses underlying normative provisions. From this understanding, normative theory seeks to explain what information should be. So normative theory tries to explain what accountants should do (what should be) in the process of presenting financial information to its users and not explain what
financial information is (what is) or why it happens. Normative theory is not generated from empirical research, but is generated from semi-research activities.

2.4 PERSPECTIVE FRICTION FROM NORMATIVE ACCOUNTING THEORY (NAT) TO POSITIVE ACCOUNTING THEORY (PAT)

In studying accounting theory, we sometimes confuse normative accounting theory and positive accounting theory. The shift towards positive theory cannot be separated from dissatisfaction with normative theory (Watt & Zimmerman, 1986). It is further stated that the reason for analyzing accounting theory with a normative approach is too simple and does not provide a strong theoretical basis. To reduce the gap in the normative approach, Watt & Zimmerman developed a positive approach that is more oriented towards empirical research and justifies various accounting techniques or methods now in use or looks for new models for the development of accounting theory in the future. If normative theory shows the best way of doing things based on premises, norms or standards, then positive theory tries to explain or predict real phenomena and test them empirically (Arif, 1999). Explanations or predictions are made according to their compatibility with observations of the real world. Watts & Zimmermen (1986) stated several reasons why there was a shift from normative theory to PAT, namely the inability of the normative approach to test the theory empirically, the normative approach focuses more on the welfare of individual investors than the welfare of the wider community, and the normative approach is unable to test the theory empirically. does not encourage or allow the optimal allocation of economic resources in the capital market. Positive theory refers more to empirical research that maximizes profits (both investors, managers, and society at large) in choosing existing accounting methods. Positive theory deals with matters of fact, while normative theory deals with matters of value. As explained in the introduction above, because the concept of the efficiency market hypothesis (EMH) states that stock prices will change quickly if there is new information, this has an impact on the development of accounting theory. This concept brings about a shift from normative accounting theory to Positive Accounting Theory (PAT).

In detail, the three basic reasons for the shift in the normative approach towards the positive (Januarti, 2004) are:

a. The inability of the normative approach to empirical testing of theories is due to the foundation of false assumptions or premises that cannot be tested for validity.
b. The normative approach focuses more on the prosperity of individual investors rather than the prosperity of society at large.

c. The normative approach provides neither motivation nor possibility for the optimal allocation of economic resources in the capital market. It is reminiscent of an economic system based on market mechanisms, accounting information that can be a control tool for society on the efficient allocation of economic resources.

2.5 DEVELOPMENT OF POSITIVE ACCOUNTING THEORY (PAT)

The development of positive theories cannot be separated from dissatisfaction with normative theories. If normative theories indicate the best way to do things based on premises, norms or standards, then positive theories try to explain or predict real phenomena and test them empirically (Godfrey et al., 1997). Explanations or predictions are made according to their conformity with observations of the actual situation. Furthermore, Godfrey et al. (1997) stated that the accounting theory Positive accounting attempts to answer, among others, the following questions from an economic point of view, namely what are the costs and benefits of alternative accounting methods?; What are the costs and benefits of regulation and the process of determining accounting standards?; and what is the impact of published financial statements on stock prices? To answer the above questions, positive accounting theory was developed which can be grouped into two stages, namely the first stage, this stage contains research on the relationship between earnings announcements and stock price reactions. Research at this stage also shows that accounting statements prepared in accordance with the historical cost method provide information used in stock valuation. The Efficiency Market Hypothesis (EMH) and the Capital Asset Pricing Model (CAPM) are also included in this stage. proposed by Fama in 1965. EMH is a concept where the capital market is said to be efficient if stock prices truly reflect all relevant information. In 1970, Fama divided three levels in the EMH concept, namely weak form efficiency (it is assumed that current stock prices reflect past information), semi-strong form efficiency (it is assumed that current stock prices reflect past information and information published to investors), and strong form efficiency (it is assumed that current stock prices reflect all information whether published or not). Second stage, the research included in this stage emphasizes more on the literature that explains and predicts cross-firm practices. The theory developed from research at this stage is closely related to the firm's objective of maximizing shareholder welfare. The famous research at this stage is about agency costs
conducted by Jensen and Meckling in 1976. Research conducted by Jensen and Meckling found that managers (agents) appointed by shareholders (principals) often experience conflicts of interest in reality. This conflict of interest is called the agency problem which will cause agency costs.

Positive Accounting Theory (PAT) in the last four decades has developed into a science that can be used to explain the choice of methods to be used by managers and other financial statement constituents that can be used for decision making. Deegan (2014) argues that the development of PAT cannot be separated from the papers of Ray Ball and Philip Brown, Ball and Brown's publication in 1968 in the Journal of Accounting Research generated widespread interest in positive research in capital market research related to accounting. In addition, the development of PAT is also supported by the work of Fama theorists related to the development of EMH. According to Watts & Zimmermen (1986), PAT has two main elements, namely assumptions and hypotheses. Assumptions are the starting point where a researcher begins his research. Researchers use assumptions to organize, analyze, and understand empirical phenomena related to the focus of research such as the use of LIFO and FIFO methods to minimize tax liabilities. From these assumptions, researchers can use hypotheses to be tested empirically. The assumptions used in PAT are the agreement that the capital market is efficient (efficient capital markets), opportunistic behavior and also accounting information is an economic commodity and a political commodity and each individual acts on behalf of himself rationally. Watts and Zimmermen in their paper entitled "Positive Accounting Theory: A Ten Years Perspective" (1990) put forward three PAT hypotheses, namely:

1) Bonus Plan Hypothesis. This hypothesis states that managers will choose accounting procedures that will shift future income to the current period with the aim of earning bonuses.

2) Debt Covenant Hypothesis. This hypothesis states that for companies that will violate debt covenants, managers will have the possibility of choosing accounting procedures that shift future income to the current period so as to increase net income and ultimately avoid technical errors.

3) Political Cost Hypothesis. This hypothesis states that companies that have high profitability will tend to shift their income from this period to the next period to avoid political costs. These three hypotheses are important components of the PAT and will generate predictions that can be tested empirically.
3 METHODS

Research conducted by means of SLR (Systematic Literature Review) is a term for a way of identifying, evaluating, and interpreting all available research that is relevant to the problem formulation or topic area under study (Calderon and Ruiz 2015). Systematic Literature Review (SLR) is defined as the process of identifying, assessing and interpreting all available research evidence with the aim of providing answers to specific research questions (Kitchenham et al., 2009). Therefore, the methodology used is pure literature analysis regarding approaches and criticisms of Positive Accounting Theory, evaluation, and conclusions are drawn from the theoretical analysis and discussion results, which are expected to add deeper insights to achieve better understanding.

4 RESULTS AND DISCUSSION

The purpose of Positive Accounting Theory (PAT) is to explain (to explain) and predict (to predict) accounting practices. Explanations and predictions in PAT are based on the contracting process or agency relationship between managers and other groups such as investors, creditors, auditors, capital market managers and government agencies (Watss and Zimmerman, 1986). Explanation means providing reasons for the observed practice. For example, in PAT it is explained why companies continue to use historical costs and why certain companies change their accounting techniques. Meanwhile, prediction of accounting practices means that the theory tries to predict phenomena that have not been observed.

4.1 RESEARCH SUPPORTING POSITIVE ACCOUNTING THEORY (PAT)

Positive research in accounting began in the mid-1960s and became the dominant paradigm in the 1970s and 1980s. Since its emergence in the 1970s, PAT has produced several important studies to empirically explore accounting practices and the behavior of related parties in an organization. Positive research in accounting began in the mid-1960s and became the dominant paradigm in the 1970s and 1980s (Deegan, 2004: 205). Positive accounting theory has been widely tested using a selection of accounting methods. Christie (1990: 15-36) concluded that there are six proxies that have been known to have the ability to explain practices that are a reflection of the application of positive accounting theory. The six proxies include firm size, risk level, managerial compensation,
the portion of debt to assets or capital, restrictions on debt settlement, and dividend payout ratio.

The results of Zmijewski and Hagerman's (1981) research provide evidence that the choice of accounting policy incorporates individual accounting principles into a company's earnings strategy. Four factors (size, management compensation, concentration ratio, and ratio of total debt to total assets) have a significant relationship with accounting policy choice. This choice of accounting policy is strong evidence and consistent with PAT. Christie's (1990) research further concluded that there are 6 proxies that have the ability to explain PAT practices, namely firm size, risk level, managerial compensation, total debt to derivatives or capital, derivatives in debt settlement, and dividend payout ratio.

4.2 RESEARCH THAT CRITIQUES POSITIVE ACCOUNTING THEORY (PAT)

Lev and Ohlson in 1982 in Ekowati (2006) viewed that PAT could not be used to model multipersonal, multiperiod equilibria, there was also a gap between strategic consedirations and the game theory approach which was used as the basis for formal theory development. Houlthausen and Leftwich in 1983 saw that there was a problematic dichotomy of the dependent variable that presented approval or disapproval in the determination of accounting standards. McKee, Bell and Boatsman in 1984 also viewed that there was a statistical identification bias in Watts and Zimmerman's study.

Christenson (1983) says that viewing science does not have to be viewed from the difference between normative and positive, but can be viewed as a product, namely a set of systemized knowledge or viewed as a process, namely human activity in producing knowledge. However, positivists emphasize the view that science is a product, which is shown through formal structures in the form of empirical propositions that give birth to inductive positive theories. Meanwhile, philosophy of science emphasizes the view that science is a process, which starts from idealism and is then derived into deductive normative theories. Christenson argues that it is not important whether the achievement of science is done normatively or positively because everything is valid and everything is also true. Christenson further states that at one time the achievement of science needs to be done normatively, then in the end it is positive. In this case, what is different is that the achievement of empirical science is based more on products and processes.

Positive accounting theory does not provide prescriptions and therefore does not provide the means to improve accounting practice. Howieson in Deegan (2004:202-240)
provides a view that by failing to provide prescriptions, positive accounting theorists may separate themselves from practicing accountants.

Positive accounting theory is not value-free, as asserted. If we look at the various studies that use PAT, we will see that there is no formula, i.e. there are no guidelines as to what should be done. This is justified by positive accounting theorists by saying that they do not want to impose their views on others but rather provide information about the expected implications of certain actions and leave people to decide for themselves what they should do. For example, they may provide evidence to support a prediction that organizations approaching debt-based accounting agreements will use accounting methods that increase their reported profits and assets.

From the outline of the criticisms of PAT above, the content of the criticisms can be categorized into critical issues regarding: research methods (including inferences drawn), methodology (including philosophy of science); and other areas. Each group of criticisms will be further explained below.

4.3 A CRITIQUE OF RESEARCH TECHNIQUES OR METHODS

Lawrence A B, 1992, in this case it is stated that the writing on positive accounting that has been surveyed fails to describe the model of the multi person / human as a whole as well as for the multi period / time as a whole and is weak in both strategies, namely: in theoretical considerations and approaches that may be useful in the development of formal theory.

Houlthausen and Leftwich (1983) see a problematic dichotomy of the dependent variable representing approval or disapproval in the determination of accounting standards. McKee, Bell and Boatsman (1984) view that there is statistical identification bias in the 1978 Watts and Zimmerman study.

4.4 A CRITIQUE OF RESEARCH METHODOLOGY (PHILOSOPHICAL ISSUES IN SCIENCE)

Positive theories are theories that contain value. Tinker et al (1982, 167) argue that all research is value-laden and not neutral. In particular, "Realism operating within the set of positive theories, claims theoretical supremacy because it elicits facts, not values" (page 172).

Cristenson (1983) also added that positive research questions are only fixated on the sociological approach rather than accounting theory, this is because descriptions and
predictions are only about the behavior of accountants and managers, not the behavior of accounting entities.

4.5 CRITIQUES IN OTHER SPHERES

PAT still has many loopholes that can provide space for irresponsible parties to manipulate or enrich individuals by using applicable accounting policies. One of the criticisms of PAT is that this theory does not provide prescriptions and does not provide means to improve accounting practices.

Sterling (1990) considers PAT does not qualify as a complete science but is only considered a "cottage industry". In terms of accounting practice, PAT aims to explain and predict. It defines accounting phenomena as mathematical constructs used to present forms of accounting information. For Sterling, these constructs are considered to only describe words and numbers that can be seen in real terms and real events.

Whittington (1987) in Lo (2003) criticized the statement that positive accounting theory is free from subjective judgments and is scientific while normative theory has high subjective and unscientific judgments, unacceptable with two objections as follows, first, positive accounting theory is not free from subjective judgments and unscientific judgments or prescriptive implications; second, the assumption that all non-positive theories are normative in the sense of referring to prescriptions, is incorrect.

Deegan (2014) lists several criticisms of PAT, including:

a. The PAT is not prescriptive and therefore does not provide a means to improve accounting practices. Sterling added that the PAT cannot provide a number of answers because it is only a descriptive question.

b. The second criticism of PAT is that it is not value-free, as asserted. If we look at the various studies that use PAT, we will see no formula (i.e. no guidelines on what to do).

c. The third criticism of PAT relates to the basic assumption that all actions are driven by the desire to maximize one's well-being. For many researchers, such an assumption suggests an overly negative view of humans.

d. Another criticism of the PAT is that since its inception generally in the 70s the issues discussed have not shown major developments. A review of the PAT literature now shows that this hypothesis continues to be tested in different environments and in relation to different accounting policy issues even after twenty years have passed since Watts and Zimmerman in 1978.
A further criticism is that PAT is scientifically flawed. It is argued that when hypotheses result in the pursuit of the PAT often the proposed hypothesis is not supported, hence scientifically the PAT should be rejected.

5 CONCLUSION

Positive Accounting Theory (PAT) is the result of dissatisfaction with normative theory (NAT) because doing something is only based on premises, norms, or standards. Meanwhile, positive theory provides theory by explaining or predicting real phenomena and testing them empirically. In more detail, the analysis of accounting theory with the normative accounting theory (NAT) approach is too simple and does not provide a strong theoretical basis. Thus, the positive accounting theory (PAT) approach was developed which is more oriented towards empirical research and justifies various accounting techniques or methods now in use or looks for new models for the development of accounting theory in the future. Positive Accounting Theory (PAT) is able to explain practices that are a reflection of the application of positive accounting theory. The six proxies include company size, level of risk, managerial compensation, portion of debt to assets or capital, restrictions on debt settlement, and dividend payout ratio. However, the success of a theory is inseparable from various criticisms such as criticism of positive accounting theory (PAT) in the form of: 1) PAT is not decisive and therefore does not provide a means to improve accounting practices. 2) PAT is not value-free, 3) PAT is related to the basic assumption that all actions are controlled by the desire to maximize one's welfare. 4) PAT problems and policies are different after Watts and Zimmerman in 1978 so the hypothesis must always be tested. 5) PAT has scientific flaws.
REFERENCES


