

## Mediating Effect of Management Accounting System on The Relationship Between Competition and Performance

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E-ISSN XXX-XXXX	<b>Abstract</b>
P-ISSN XXX-XXX	<b>Purpose</b> - This study aims to investigate the role of management accounting systems in mediating the relationship between competition and managerial performance in manufacturing companies in Banten
Volume 01 No 01 2022	<b>Design/method/approach</b> - Respondents in this study were middle managers in manufacturing companies in Banten. The choice of respondents using purposive sampling technique and data collection of respondents using the survey method. Partial Least Square is a data analysis technique used in this study
DOI:	<b>Finding</b> - The results of the study show that there is a positive relationship between competition and the management accounting system on performance. In addition, competition can supply a positive and considerable influence. SA, accounting systems play a role in mediating competition and performance.
Received 04 May 2022	<b>Originality</b> - This research was conducted to supply an overview of the role of the management accounting system in influencing the level of competition in manufacturing companies in Banten which has an impact on performance.
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## Introduction

Change world economy and its tight competition increased business \_ mature this demand company for utilise existing capabilities \_ as much as possible to superior in competition. because of that, management need have ability for view and use opportunities, find problem, and select as well as implementing the adaptation process with right. Managers are also bound keep continuity life as well as control organization so that expected goal \_ could achieved. Key success company is creation and ability information by precise and exact. A number of expert managements emphasize that company that dominates information have superiority competitive in environment macro business.

Exactly correct and detailed information impact to effectiveness decisions made by managers \_ so that will increase performance managerial a company. Performance managerial defined as results from the activity process effective management \_ start from the planning, implementation, administration, reporting processes accountability, coaching, and supervision. So that quality information held by managers \_ Becomes key enhancement performance managerial.

Management accounting system (MANAGEMENT ACCOUNTING SYSTEM) is system that can support manager for access and use necessary information \_ for reach destination company and its consequences increase performance managerial them (Chung et al., 2012).

MANAGEMENT ACCOUNTING SYSTEM plays role lock in most organization with supply useful information. \_ Company should enclose quality MANAGEMENT ACCOUNTING SYSTEM information as size performance main from function accounting (Walker et al., 2012; Fleischman et al., 2010). Department accountancy management should evaluate how they could increase quality the information they serve so that give enhancement taking decision users and upgrades productivity organization (Walker et al., 2012). because of that, characterization of MANAGEMENT ACCOUNTING SYSTEM in Thing features is aspect important for study the latest that makes study Chenhall and Morris (1986) as base theory. Diverse study from time-to-time use theory and instrument characteristics of MANAGEMENT ACCOUNTING SYSTEM developed by several researcher (i.e., Agbejule, 2005; Hammad, et al., 2010; Tillema, 2005). According to Chenhall and Morris (1986), the information provided by MANAGEMENT ACCOUNTING SYSTEM is sourced from four characteristics the information namely, room scope, integration, precision time and aggregation.

Leave from various study before could understood that MANAGEMENT ACCOUNTING SYSTEM has significant impact \_ for achievement performance more companies \_ good. So that could assume company moment this tend apply MANAGEMENT ACCOUNTING SYSTEM as alternative solutions for improvement performance especially performance managerial to use win competition.

Banten is one of the the axis of the manufacturing industry in Indonesia. because \_ that environment competition between company extremely strict so that MANAGEMENT ACCOUNTING SYSTEM implementation is one of the Street go out achievement performance company to stay survive. However, thing the not yet could

recognize impact Management Accounting System to performance managerial. This thing proven with growth of the manufacturing industry in Banten from the years 2014-2018 which tend to be decreased (BPS Banten, 2019).

Temporary that , study accountancy management before has researching connection Among environment , characteristics organization , MANAGEMENT ACCOUNTING SYSTEM, and performance ( eg Abdel- cadre and Luther, 2008; Bouwens and Abernethy, 2000; Cheng, 2012; Chong and Egelton , 2003; Erserim , 2012; Jermias and Gani , 2004; Mat, 2010; Tsui, 2001) , however only a little studies empirical and systematic testing \_ is performance managerial affected by competition and change MANAGEMENT ACCOUNTING SYSTEM characteristics . Study this tried fill the knowledge gap in accounting management. Besides that, research this tried give a number of contributions understanding about MANAGEMENT ACCOUNTING SYSTEM antecedents and their impact to performance. A number of his contribution among others are h

First, System Accountancy Modern management and control systems will have level different effectiveness \_ between countries (Etemadi et al., 2009). Import method accountancy modern management and techniques, and using they are in developing countries possible not as effective in developed countries because diverse cultures and organizations (Etemadi et al., 2009). Likewise, the factor environment for business in developing countries different with related developed countries \_ with market competition, access to input produced, source power people, infrastructure, regulations government and law. Especially, Iran, which is categorized as a developing country, supply contrast interesting culture \_ for western countries because emphasis new to Islamic law and values after revolution politics in 1979 (Etemadi et al., 2009). However , some big studies about MAS (Abdel-Kader and Luther, 2008; Agbejule , 2005; Bouwens and Abernethy, 2000; Emsley, 2005; Erserim , 2012; Stergiou et al., 2013; Susanto, 2010; Tsui , 2001) have concentrates on companies in the US, Singapore, Australia, Finland and Sweden with lack of proof about how does MAS change in perspective Iranian company . because of that, proof empirical from Iran will give significant insight \_ to in role variable contingency in implementation of MAS across boundaries national.

Second, until moment this, there a number of studies empiricisms that focuses on four MAS characteristics. Part big from they concentrated on one or two characteristics from MAS, some big on dimensions room broad scope. \_ Although, space wide scope \_ is one of the most important among MAS characteristics, better for consider characteristics other. This must decide that the information provided by MAS is prompt, integrated and aggregated which will \_ \_ used by taker decisions and managers in something organizations (Bouwens and Abernethy, 2000; Agbejule, 2005). Study this consider all four characteristics from MAS and investigate potency overlap overlap Among them and how they influence performance managerial. Fourth, partially big study previously considered by MAS as variable independent (Tsui, 2001; Mia and Patiar, 2001; Chong and Eggleton, 2003; Agbejule, 2005; Susanto, 2010) or variable dependent (Emsley, 2005; Abdel-Kader and Luther, 2008; Mat, 2010; Erserim, 2012; Stergiou et al., 2013). Only a number of from them (Jermias and Gani, 2004; Cheng, 2012) studied role mediation from MAS. because of that, this needed for look for more carry on about role mediation from MAS. Study this use mediation or idea intervention theory contingency (Baines and Langfield - Smith, 2003; Hoque, 2011; Mayr, 2012) to

test is change MAS characteristics mediate, or intervene connection Among competition and performance

## **Theoretical Framework and Hypotesist Development**

### *Competition*

Competition is something form work conducted so that get victory or get more positions \_ good without must occur collision physique or conflict. Competition (competition) in something community could grouped Becomes two if seen from the origin that is competition originating \_ from in organization that which is called internal and the competition that comes from from outside organization it is called external.

So that definition about competition as said by Kotler and Porter said that competition in context marketing is state where companies in the product market or service certain will show the advantage respectively, with or without bound regulation certain in skeleton reach customers (Kotler, 2002). Whereas According to Porter, competition will happen to some group competitors who do not only on product or service similar, can be on the product or service substitution nor upstream and downstream competition (Porter, 1996).

The company must start give Management Accounting Systeme attention \_ big to competitors \_ with what is given to customers \_ target them. Successful company is the one who designs and operates system for gather continuous information \_ about competitors. \_

### *Management Accounting System*

Management accounting system (MANAGEMENT ACCOUNTING SYSTEM) is something mechanism supervision organizations that can make it easy supervision with method make report and create real actions \_ to evaluation performance from every part in organization (Chia, 1995 in Ritonga and Zainudin, 2002). Simons (1997), Bouwens and Sbernethy (two thousand) in Evi (2004) said that MANAGEMENT ACCOUNTING SYSTEM is formal system designed for supply information for manager. MANAGEMENT ACCOUNTING SYSTEM is something control organization as well as is effective system \_ in the supply useful information \_ To use predict consequences \_ occur from various activities that can conducted (Hong, 1996 in Evie, 2004).

According to Atkinson (1995) in Evi (two thousand) MANAGEMENT ACCOUNTING SYSTEM is system information that collects operational and financial data, processes it, stores it, and reports it to user. one \_ The products produced by MANAGEMENT ACCOUNTING SYSTEM are information accountancy management like expenses incurred \_ in department operations, calculations cost production, services, and activities.

Management accounting system have three destinations general (Hansen and Mowen, 2006; 4), namely:

1. Supply information used \_ in calculation price tree desired services, products, and other purposes management.
2. Supply information used in planning , controlling, evaluating, and improving sustainable.
3. supply information for taking decision.

Aspect control something important organization \_ is coordination various segment in sub- organizations. Helpful characteristics of MANAGEMENT ACCOUNTING SYSTEM coordination covers target specification showing influence interaction segment and information about influence decision on surgery all organizational subunits. Chenhall and Narayan (1984) in Ekawati (2003) found proof empirical about characteristics useful information \_ according to managers ' feelings namely:

#### *Broadscope*

Gordon and Narayan (1984) in Nazarudin and Fajry (2005) said MANAGEMENT ACCOUNTING SYSTEM information that is broad scope (scope area) is dimensions focus (external and internal), quantification (financial and non- financial), and time horizon. In doing his job manager need information from various natural source \_ broad (Robbins 1994:8, in Juniarti and Evelyne, 2003). Because of that manager need information that has characteristics broad scope that is information that has broad and complete coverage which is usually cover aspect economy such as Gross National Product, total market sales , and market share of a company industry , or may also be non-economy like factor demographics , consumer tastes , competitors ' actions and developments \_ technology (Chia, 1995 in Juniarti and Evelyne, 2003). Wide scope of MANAGEMENT ACCOUNTING SYSTEM covers size nonmonetary to characteristics environment external (Gordon and Miller, 1976 in LakManagement Accounting System and Muslichah, 2002). Beside That is, the broad scope of MANAGEMENT ACCOUNTING SYSTEM will give estimation about possibility happening future events \_ come in the size probability (Lak Management Accounting Systemana and Muslichah, 2002).

#### *Timeliness*

Timeliness (accuracy time) conceptualized in study this have two sub dimensional that is frequency reporting and speed make report. Frequency interpreted with how much often information supported managers, while \_ speed interpreted as grace time Among needs will information with availability information (Ritongga and Zainudin, 2002). Timeliness states accuracy time in get information about something events (Echols, 1996:593 in Juniarti and Evelyne, 2003). Information said proper time if information they reflect condition up-to- date and proper with needs manager (Bordnar, 1995:399 in Juniarti and Evelyne, 2003).

Chia (1995) in LakManagement Accounting System and Muslichah (2002) said that timing information pointing to distance time Among demand and availability information from MANAGEMENT ACCOUNTING SYSTEM to requesting party. \_ According to Prasetyo (2002) timeliness information is available information \_ when needed and often reported by systematic.

Managers ' abilities for respond by fast to something incident influenced by the timeliness of the MANAGEMENT ACCOUNTING SYSTEM. Muslicah (2002) in Ekawati (2003) argue that timeliness information will increase facility management accounting

system for report recent events and for \_ give bait come back by proper to decisions that have been made. Precise information \_ time will help manager in taking decision (Chusing, 1994:16 in Juniarti and Evelyne, 2003).

#### *Aggregation*

Information Aggregation is summary information according to function, period timing, and decision models (Ritonga and Zainudin, 2002). Aggregation shows the process of reducing the volume of data. Aggregation needed to reduce or save cost in provision information accounting (Ekawati, 2003). Information be delivered in more shape \_ concise, but permanent covers things important so that no reduce score information that himself (Bordnar, 1995; Alwi, 2001 in Juniarti and Evelyne, 2003). Aggregated information \_ with proper will give input important in taking decision because time needed \_ for evaluate information more a little compared with information that is not organized or information still \_ raw (Nazaruddin, 1998). MANAGEMENT ACCOUNTING SYSTEM gives information in various form ranged aggregation \_ from gift ingredient basic, data that is not processed until various aggregation based on period time or specific area for example center accountability or functional. Type other aggregations refer to to consistent variety of formats with a formal decision model such as discounted cash flow analysis for capital budgeting, simulation and linear programming for application budget, analysis cost - volume - profit, and control model supplies. In development last, aggregation information is merging information functional and temporal such as sales area, center, cost, department production and marketing, and the resulting information by special for a formal decision model.

#### *Integration*

Information integration is information that reflects existence coordination Among one segment \_ with other segments (Prasetyo, 2002). Information that reflects complexity and mutual linkages Among part one and the other (Nazaruddin, 1998). Information integration covers aspect like target conditions or calculated activity \_ of the interaction process between subunit one with other subunits will reflected in information integration (Nazaruddin, 1998).

According to Gordon (2001) in Ekawati (2003) information integration beneficial for manager for to do taking decisions \_ will affect on part other. because of that, information integration will play a role in coordinate policy in company to happen harmony in reach destination main company. Existence information integration will lead to managers for consider element integration in the to do evaluation performance (Ansari, 1979 in Justriana, 2007). Aggregated information \_ will working as useful input \_ in taking decision, because more a little time needed \_ for evaluate it, so that increase efficiency work management (Chia, 1995 in Juniarti and Evelyne, 2003). Integrated information \_ play a role as coordinator in control taking various decisions \_ variety (Chia, 1995 in Juniarti and Evelyne, 2003). Benefit integrated information \_ feel important moment manager faced with a situation where must take decisions that will effect on other parts /units.

one \_ role main information accountancy management is supplied information that eases the retrieval process decisions (Angraini, 2003). Information accountancy management as one \_ product management accounting system play a role in help

predict consequences \_ occur on various alternative actions that can performed on various activity like planning, controlling, and taking decisions (Nazaruddin, 1998). Mia and Clark (1999) in Faisal (2007) said that use information management accounting system could help managers and organizations for adopt and implement plans they in respond for environment competition

### *Managerial Performance*

Performance managerial is size how much effective and efficient manager has work for reach destination organization (Stoner, 1992 in Juniati and Evelyne, 2003). When company have superior performance \_ so company optimistic will could reach level success wanted by the company. With thereby continuity life company guaranteed. However, when performance company bad so company pessimistic for could reach level success wanted by the company.

Performance managerial is individual performance \_ in activity managerial. Performance personnel cover eight dementia namely (Narsa and Yuniawati, 2003):

Planning, in meaning ability for decide goals, policies and actions or implementation, scheduling work, budgeting, planning procedures, and programming.

Investigation, that is ability collect and deliver information for records, reports, and accounts, measure result, decide inventory, and analysis job.

Coordination, that is ability to do swap swap information with others in the section other organizations for linking and customizing programs, notifying part others, and relationships with manager another.

5. Evaluation, namely ability for assess and measure proposals, saw performance or reported, appraisal employee, appraisal notes results, ratings report finance, audit product.

Supervision (supervision), namely ability for direct, lead and develop subordinates, guide, train and explain the rules work on subordinates, assign tasks work and handle subordinates.

7Staffing arrangements, namely ability for keep force work in the you, recruiting, interviewing, and selecting employee new, placing, promoting and mutation employee.

Negotiation, that is ability in to do buying, selling or to do contract for goods and services, contact supplier, bargain bid with the sales representative, bargain bid by group and

Representative (representative), namely ability in attend meetings with other company, meeting gathering business, speech for social events, approach society, promote destination general company.

Evaluation on performance performed by managers \_ variety depending on the culture developed each company (Ivancevich, 1999: 187 in Juniati and Evelyne, 2003). Following this a number of sizes used \_ for evaluate performance management, based on perspective non- financial (Juniati and Evelyne, 2003):

Ability manager for make planning (Schermerhorn, 1999:138 in Juniati and Evelyne, 2003). Good planning \_ could increase focus and flexibility manager in handle her job. Problem focusses and flexibility is two Thing important in environment high and dynamic

competition. \_ Ability manager in make planning could be one \_ indicator for measure performance managers (Nazaruddin, 1998 in Juniati and Evelyne, 2003).

2. Ability for reach the target. Performance manager could be measured from ability they for reach what have \_ planned (Mulyadi, 2001:302 in Juniati and Evelyne, 2003). Target must be enough specific, involving participant, realistic and challenging as well as have range clear time (Hess, 1996:83 in Juniati and Evelyne, 2003).

3. Gait manager outside \_ company. Intensity manager in represent company for relate with party outside show trust company to manager that. Trust this could arise because a number of things, one of them is superior performance \_ from manager. Wagner (1995:50) in Juniati and Evelyne (2003) also reveal that role manager in represent company show level its performance.

Mahoney et al (1965) in Justriana (2007) defines performance managerial based on functions existing management \_ in theory management classic, which is how much far manager capable doing functions management which includes: planning, investigation, coordination, evaluation, supervision, staff selection, negotiation, and representation

## **Hypothesis Development**

### *Competition and Management Accounting System*

Globalization is happening in the last few decades has change factor environment organization that causes enhancement more market uncertainty and competition height compared to the past. DeGeus, (1988); Senge (1990); Day (1991) mentions that in skeleton keep superiority compete, organization need adapt self with fast to market environment. Increase level competition cause turbulence, stress, risk, and uncertainty for company. That thing demand company give correct response \_ to threats and opportunities in condition competitive and capable designing as well as using MANAGEMENT ACCOUNTING SYSTEM on conditions that (Laitinen, 2008).

The use of MANAGEMENT ACCOUNTING SYSTEM is especially important for manager especially in perfecting the retrieval process decision, because fact from they face competition level high (Santos et al., 2012). because of that, competition could influence MAS design inside an organization and can also cause company need evaluate return design organization moment this and strategy for resolve uncertainty in competitive environment (Laitinen, 2008).

Management accounting system could use in face competition or competitive. because of that, information system accountancy relevant management \_ could help organization in evaluate products, prices, and costs. Management accounting system could help company for find opportunity to use increase score customer, with thereby company keep existing customers \_ exist and improve market share (Hoque, 2011)

Relevant literature \_ show that processing and use information by manager influenced by level the competition they feel in environment organization business them. because of that, manager have needs superior quality information. A sophisticated MANAGEMENT ACCOUNTING SYSTEM ( extensive in scope , right time , integrated and combined ) able give information important for manager , because MANAGEMENT ACCOUNTING SYSTEM is integral part of information and systems



control business this support management taking decision for increase performance management (Hoque, 2011; McManus, 2013; Mia and Patiar , 2001; Santos et al., 2012).

Various researcher the first to find influence from competition to management accounting system this among others, Chenhall and Morris, (1986); Gordon and Narayanan, (1984); Gul, (1991); Hoque, (2011); Tillema , 2005; Mat *et al*, (2010b); McManus, (2012); mia and Patiar , (2001); Santos *et al* ,(2012) Ghasaemi *et al* , (2016); Cooper, (1995); DeFond and Park, (1999); Khandwalla , (1972); Krishnan, (2005); and Aliyah and Hidayat , (2015). In results research, said that something organization will face competitive market environment, with use management accounting system company could evaluate strategy for resolve uncertainty environment or factor environment business. Information management accounting system needed by a manager for knowing information about company / organization alone nor about competitor, management accounting system is integral part \_ from information business and system control, support taking decision managerial and improve performance managerial.

On base discussion this, MAS can used for by efficient handle factors competitive. MAS Information Because it is relevant could help manager organization in evaluate product attributes, prices, and costs from product substitute on the market. MAS can help company for find opportunity for increase score customer; because of that, keep existing customers \_ exist and improve market share (Hoque, 2011). because of that, the use of MAS helps manager company for make more decisions \_ good and improve performance managerial. The results of the discussion above in Hypotheses 1 and 3 as following:

**H1. Competition has positive effect to management accounting system.**

**H1<sub>a</sub>. Competition has positive effect to management accounting system (broad scope)**

**H1<sub>b</sub> Competition have positive effect to management accounting system (prompt)**

**H1<sub>c</sub> Competition have positive effect to management accounting system (integrated)**

**H1<sub>d</sub> Competition have positive effect to management accounting system (aggregate)**

#### *Management Accounting System and Performance*

Atkinson (1995) said that management accounting system is system information that collects operational and financial data, processes it, stores it, and reports it to user. Products generated by the management accounting system is information accountancy management.

Academics in the field of accountancy management show that organization run more effective when they apply and take advantage of MANAGEMENT ACCOUNTING SYSTEM to resolve condition organization and environment them (Etemadi et al., 2009; Hoque, 2011). In condition this is expected MANAGEMENT ACCOUNTING SYSTEM could help organization for endure life in competitive and changing environment \_ with supply useful information \_ for planning, controlling, checking, and taking decision. With so,

information this then will used for increase performance managerial (Ismail and Isa, 2011).

Role main from MANAGEMENT ACCOUNTING SYSTEM is for support manager in taking decision, planning and control. prospect this, comes from from the economic model of the taking country deep decision \_ environment that is not sure, achievement to useful information \_ cause allocation source power upgraded and raised possibility results positive improved (Hammad et al., 2010). In other words, an association conditional considers that useful information \_ help manager in make effective decisions, which improve performance managerial (Baines and Langfield - Smith, 2003; Chenhall, 2003; Hammad et al., 2010). because of that, use MAS information by manager could help they in make more decisions \_ correct, which will cause enhancement performance (Ismail and Isa, 2011).

MANAGEMENT ACCOUNTING SYSTEM at a company supply manager with variety information for study about problem, about results and about opportunity, cause correct and proper decision make response. designed with good and sophisticated MAS possibility for provide manager with proper information \_ for set destination performance, standard evaluation performance and feed back to leading performance \_ to performance managerial improved. A MAS is considered advanced when produce extensive information \_ in scope, accuracy time high, aggregation height, and integration high (Rasid et al., 2011). Study this treat performance managerial level \_ macro (organization), as results related management by whole organization. Reason for treat performance management at the level macro reflect that rare use of MAS personalized with needs user certain individual. On the other hand, in MAS design for an organization, some common denominators chosen for allow a number of use destination MANAGEMENT ACCOUNTING SYSTEM information and data by all user management interested (Colson, 1980). Realize use of research MANAGEMENT ACCOUNTING SYSTEM this is also a hypothesis connection positive Among MAS usage and performance. because of that, the discussion above results in

As for researcher previously found \_ influence management accounting system to performance managerial among others, Etemadi *et al* , (2009); Hammad *et al* ., (2010); Hoque, (2011); Ismail and Isa, (2011); Rashid *et al* , (2011); Ruzita and Ghazali , (2013); Sulani and Dedi , (2013); Handayani and Hariyati , (2014); Aliyah and Hidayat , (2015); Wicaksono and Oviantari , (2015); and Ghasaemi *et al* , (2016). In results the research showing that management accounting system with characteristics *broad scope*, *timeliness*, *aggregation* and *integration* take effect by significant to performance managerial, MANAGEMENT ACCOUNTING SYSTEM information can be help management in find opportunity for increase score consumers, so capable keep existing customers and increase market share.

In the condition environment continuous business \_ develop existence management accounting system expected could help organization for endure in competition and change environment with give useful information \_ for planning, controlling, checking and decision-making decision. Hammaed *et al* (2010) said that in environment that is not sure, information especially useful help manager in make effective decisions, which will increase performance managerial. Use management accounting system by manager could help managers \_ in make more decisions \_ proper

or more effective, which will increase performance. because \_ that proposed hypothesis are:

**H2. Management accounting system has an effect positive to performance managerial**

**H2<sub>a</sub>. Management accounting system *broad scope* have positive effect to performance managerial**

**H2<sub>b</sub>. Management accounting system *prompt* have positive effect to performance managerial**

**H2<sub>c</sub>. Management accounting system *integrated* effect positive to performance managerial**

**H2<sub>d</sub>. Management accounting system *aggregative* have positive effect to performance managerial**

### *Competition and Performance*

The company must start give Management Accounting System attention \_ big to competitors \_ with effect exerted \_ to customers \_ as target them. Successful company is the one who designs and operates system for gather continuous information \_ \_ \_ about competitors. \_ De Geus (1998); Senge (1990); Day (1991) suggests that in skeleton keep superiority compete, an organization need adapt self with fast to market environment. Kohli and Jaworski (1990) said that that big competition something company should market oriented (capable of find desire *customers*) and create *customer* superior value for achievements satisfaction. A manager in skeleton keep superiority compete and face uncertainty environment business, one manager needs planning, monitoring, controlling, negotiating for help in increase performance managerial through taking effective and efficient decisions. \_ As for study previously found \_ influence competition with performance managerial with mediated by the management accounting system among others Hoque, (2011); Mia, (two thousand); Mia and Winata, (2008); Aliyah and Hidayat, (2015) and Ghasaemi *et al*, (2016). In results the research show that height level market competition causes disturbance, risk, and uncertainty. With height level competition something organization for keep business, related information \_ with continuation business something organization needed by a manager for make strategy in compete, the information obtained will help manager in take right decision. \_ because \_ that proposed hypothesis \_ are:

**H3. Competition has positive effect to performance managerial**

### *Effect of Management Accounting system in mediate Connection Among Competition to Performance Managerial*

In part previously has discussed about connection direct from market competition for MAS and relationships positive between MANAGEMENT ACCOUNTING SYSTEM and performance. Chang et al. (2003) in research find, if, decentralization and uncertainty related tasks \_ with MANAGEMENT ACCOUNTING SYSTEM and MANAGEMENT ACCOUNTING SYSTEM correlated with performance, then decentralization and uncertainty Duty influence performance through MAS. In study others, Ismail, and Isa

(2011) suggest that technology manufacture Up correlated with MANAGEMENT ACCOUNTING SYSTEM and MANAGEMENT ACCOUNTING SYSTEM correlated with performance, then there is connection no direct from technology manufacture Up mediate connection between MANAGEMENT ACCOUNTING SYSTEM and performance. Mia and Clarke (1999) conclude that, if, the perceived intensity correlated market competition with MANAGEMENT ACCOUNTING SYSTEM and MANAGEMENT ACCOUNTING SYSTEM correlated with performance, then there is connection no direct Among perceived intensity \_ market competition and performance through MANAGEMENT ACCOUNTING SYSTEM.

because of that, based on part before and following the researchers this could mentioned that there is affect direct from competition to MANAGEMENT ACCOUNTING SYSTEM and MANAGEMENT ACCOUNTING SYSTEM against performance. because of it can concluded that there is influence no direct Among competitive against MANAGEMENT ACCOUNTING SYSTEM and MANAGEMENT ACCOUNTING SYSTEM against performance managerial. so, the proposed hypothesis is

**H4. Management accounting system mediates connection Among competition and performance managerial**

## **Research Methodology**

This is study quantitative. Study this aim for test hypothesis connection between independent and dependent variables According to Sekaran, (2006) Population is whole group of people, events, or thing you want researcher careful in study this population used \_ is whole company manufacture company in Banten province with unit of analysis is *Middle Manager*.

Sample is part from population consisting of on amount selected members \_ from population Management Accounting System in study this whole company manufacture scale multinational company in Banten Province.

Method withdrawal Management Accounting Systemple in study this use technique *Purposive Management Accounting System playing* where in the method this Management Accounting Systemple and respondent has determined. Respondent in study this is the middle manager in the company manufacture scale multinational company in Banten Province with criteria as following:

1. Have statement vision and mission or credo or statement management philosophy
2. Middle manager at the company scalable manufacturing \_ multinational
3. Ready for researched related influencing factors \_ *Culture Control* and its impact to performance organization
4. Experienced in position is a minimum of 5 years.

Data were collected by using survey method. Respondent were asking several questions statement using the questionnaire distribute by author. Data analyzed by using partial least square technique a powerful method to analyze SEM.

## **Finding**

## **RESEARCH RESULTS AND DISCUSSION**

This research was conducted on a manufacturing company I in Banten Province, which amounted to seventeen manufacturing companies. The manufacturing companies studied are in the fields of Chemistry, shoes, metals, food, toys, and textiles. These multinational manufacturing companies are in the Cilegon City area, Serang Regency, Tangerang City and Tangerang Regency. \_

Respondents in this study used a *purposive Management Accounting systemizing technique Middle manager*. The respondents in this study were *Middle managers* in Finance, Human Resource and Development, Marketing and Production, with a minimum of 3 years of experience in the position. Of the twenty-five manufacturing companies that were used as research objects, only seventeen manufacturing companies returned a complete questionnaire. Therefore, only 14 manufacturing companies can be used as Management Accounting Systemples in this study.

### *Measurement Model*

This study uses *structural equation modeling (SEM) analysis with the partial leases square (PLS) method* as the data analysis instrument. *Partial Least Square* is a predictive technique that can handle many independent variables, even if there is multicollinearity between these variables (Ramzan and Khan, 2010).

According to Wold, PLS is a powerful analytical method because it is not based on many assumptions or conditions, such as normality and multicollinearity tests. This method has its own advantages, among others: the data does not have to have a multivariate normal distribution. Even indicators with categorical, ordinal, interval to ratio data scales can be used. Another advantage is that the Management Accounting Systemple size does not have to be large. *SmartPLS software* version 2.0 is used as a tool to help analyze data with *SEM-PLS technique*.

Testing the validity of the data in this study is using *PLS software with an Outer Model*, namely *Convergent validity* which is seen by the *average variance extracted (AVE)* value of each construct where the value must be greater than 0.5. Another way is to compare the value of the *square root of average variance extracted (VAVE)* of each construct (latent variable) with the correlation between the construct and other constructs in the model. If the AVE square root value of each construct is greater than the correlation value between the construct and other constructs in the model, then it is said to have a good *discriminant validity* value.

Table I describes the value of AVE and the AVE root of the construct competition, management accounting systems and managerial performance. Each construct (variable) has an AVE value above 0.5. This shows that each construct has a good validity value from each of its indicators or the questionnaire used to describe competition, management accounting system and managerial performance.

Reliability is a tool to measure a questionnaire which is an indicator of the construct variable. A questionnaire is said to be dependable if someone's answer to the statement produces the Management Accounting Systeme answer from time to time. The reliability test in this study used the *Crobanch alpha value*. A construct is said to be dependable if it gives a *Crobanch alpha value* >0.60 (Ghozali, 2008).

**Table I. Measurement Model**

<b>Variable</b>	<b>AVE</b>	<b>Composite Reliability</b>	<b>Cronbachs Alpha</b>	<b>R-Square</b>
Managerial Performance	0.728	0.907	0.886	0.674
Competition	0.854	0.931	0.907	-
Management Accounting System	0.800	0.972	0.970	0.819

Based on the table, it is known that the value of *Cronbach's Alpha* variable Competition of 0.907 greater than the standard reliability value of a construct that is 0.60/N value of Cronbachs *Alpha* variable Managerial Performance of 0.970 which is greater than the standard reliability value of a construct which is 0.60. Meanwhile, the Cronbachs *Alpha* value of the MANAGEMENT ACCOUNTING SYSTEM variable is 0.886 which is greater than the standard reliability value of a construct, which is 0.60. And. So, it can be concluded that all indicators used to measure all constructs in this study are consistent (dependable).

The reliability test is also intended to measure *the internal consistency* of a questionnaire which is an indicator of a variable or construct. The reliability measurement is conducted using the *Composite Reliability test criteria*. An indicator can be said to be *dependable* if the number calculated by the data is greater than or equal to 0.70 (Ghozali, 2008:43).

From table each construct or latent variable has a *composite reliability value* above 0.7 which writes down that the *internal consistency* of the competition variable, management accounting system and managerial performance has good reliability.

In assessing the structure of the PLS model, it can be seen based on the *R-Square value* for each latent variable. The *R-Square values* in the data processing of this study Table I describes the *R-Square value* of the research model. Based on the table, it is known that the *R-Square value* of the management accounting system variable is 0.819 or it can be interpreted that the management accounting system can be explained by the competition variable of 81.9% while 17.1% is explained by variables outside the study, while the managerial performance variable can be explained. by the variable management accounting system and competition by 67.4% and the rest is explained by variables outside the study.

#### *Hypothesis Testing*

Testing of *the inner model* or structural model is conducted to see the relationship between the construct, significance value and *R-square* of the research model. The structural model was evaluated using *R-square* for the dependent construct, *Stone-Geisser Q-square test* for *predictive relevance* and t-test and significance of the coefficients of structural path parameters.

The significance of the estimated parameters supplies especially useful information about the relationship between the research variables. The limit for rejecting and accepting the proposed hypothesis is  $\pm 1.96$ , where if the value of t statistic is greater than t table (1.96) then the hypothesis is accepted, otherwise if the value of t

statistic is smaller than t table (1.96) then the hypothesis is rejected. Table 4.16 supplies the estimated output for evaluating the structural model.

The significance of the estimated parameters supplies especially useful information about the relationship between the research variables. The limit for rejecting and accepting the proposed hypothesis is  $\pm 1.96$ , where if the Tstatistic value is greater than T table (1.96) then the hypothesis is accepted, otherwise if the Tstatistic value is smaller than T table (1.96) then the hypothesis is rejected (Ghozali, 2008). Table 4.14 gives the *output estimation* for structural model testing.

**Table II Hypothesis test**

Hypothesis	Original Estimate	T-Stats	Description
Competition -> Managerial Performance	0.084701	2.195484	Accepted
Competition -> Management Accounting System	0.905186	96.182430	Accepted
Management Accounting System -> Managerial Performance	0.743992	19.648579	Accepted

Table above describes the results of hypothesis testing using the *SEM-PLS data analysis technique*. Based on the table, it is known that competition has a positive effect of 0.084 on managerial performance and is significant at the level of 5%. The significance is due to the t-statistic value which is  $2.19 >$  from the t-count value which is 1.96. The competition construct also has a positive effect of 0.905 on the management accounting system construct and is significant at  $\approx 5\%$ . This is due to the t-stat value of the competition relationship to the management accounting system which is 96.182 which is greater than the t-count at  $\approx 5\%$  which is 1.96. In addition, the management accounting system has a positive effect of 0.743 on managerial performance. In addition, the relationship between management accounting system and managerial performance is significant at  $\approx 5\%$  ( $19.648 > 1.96$ ).

The first hypothesis in this study states that competition has a positive effect on the management accounting system. The results of tests conducted using the SEM-PLS method found that the competition construct had a positive effect of 0.084 and was significant at a significance level of 5%. So that the tighter competition faced will improve the quality, effectiveness and efficiency of the management accounting system owned by manufacturing companies in Banten.

Competition is a form of business conducted to get a win or get a better position without having to have a physical collision or conflict. The elevated level of competition encourages companies to strive to be *sustainable* and win the competition. One of the efforts that companies can take to survive is to get quality, precise and fast information so that it can be used in decision making. In addition, a system that can process data is needed so that it becomes right information, and a management accounting system is one of the alternative choices owned by the company.

Management Accounting System is a system that produces output using certain inputs and processes them to achieve management aims. A process can be described by

activities such as collecting, measuring, storing, analyzing, reporting, and managing information. While the output can be in the form of special reports, product costs, customer costs, budgets, performance reports, and even personal communications. Management Accounting Systems are not bound by a formal criterion that describes the nature of the inputs or processes and outputs. The criteria are flexible and based on the aims to be achieved.

Increased competition in a company's business environment causes companies to become less stable and managers face high market uncertainty. Therefore, managers will ask for copious amounts of information produced by the management accounting system. The information that managers need is information that has a broad scope, is prompt, integrated and aggregated. The information generated by the Management Accounting System they use to aid them in their daily activities and making decisions that are beneficial to their company. So that the intensity of competition will affect the effectiveness of the management accounting system,

This study is in line with research conducted by Ghasemi (2016) who conducted research on the role of competition, equity, and managerial performance in financial institutions in Iran. The results of this study reveal that competition influences the management accounting system. In addition, research conducted by (Hoque, 2011; Tillema, 2005) showed comparable results.

The second hypothesis in this study states that the management accounting system has a positive effect on managerial performance. The test results using the *SEM-PLS method* reveal that the path coefficient value of the relationship between Management Accounting System and managerial performance is 0.743 and the t-statistic value is 19.648 which is greater than the t-count value at a significance level of 5% which is 1.96. So, it can be said that Management Accounting System has a positive and significant effect on managerial performance. Based on the test results, it can also be used to accept the second hypothesis, namely that there is a positive influence between Management Accounting System and managerial performance.

A management accounting system is an information system that collects operational and financial data, processes it, stores it, and reports to users. The product produced by the management accounting system is management accounting information (Atkinson, 1995).

The implementation of Management Accounting System by managers helps them in making the right decisions and can improve performance (Baines and Langfield-Smith, 2003; Hammad et al., 2010). Management Accounting System works by supplying information that has a broad scope, prompt when needed, well integrated and aggregated. This information is used as a fundamental basis for managers in making decisions. Thus, the right information will increase the effectiveness of decision making which has an impact on improving managerial performance.

This study is in line with research conducted by Ghasemi (2016) who conducted research on the role of competition, equity, and managerial performance in financial institutions in Iran. The results of this study reveal that Management Accounting System has an effect on managerial performance. Research conducted by (Baines and Langfield-Smith, 2003; Etemadi et al., 2009; Hammad et al., 2010; Hoque, 2011; Ismail and Isa, 2011; Rasid et al., 2011) found consistent results on the relationship between



positive Management Accounting System with managerial performance.

The third hypothesis in this study states that competition has a positive influence on managerial performance. The test results using the *SEM-PLS method* state that competition has a positive effect of 0.084 and is significant at a significant level of 5%. This significance is due to the t-statistic value of the relationship between competition and managerial performance of 2.195, which is greater than the t-count at a significance level of 5%, which is 1.96. Based on the test results, it can be concluded that competition has a positive and significant effect on managerial performance.

Competition is a process and effort to outperform competitors in achieving the desired thing. High competition causes uncertainty so that managers must increase creativity in obtaining information from competitors that can be used as a means and basis in planning, selecting, and designing strategies to win the competition and make effective decisions to improve overall performance.

This study is in line with research conducted by Ghasemi (2016) who conducted research on the role of competition, equity, and managerial performance in financial institutions in Iran. The results of this study reveal that competition influences managerial performance. Based on the results of statistical testing, earlier research, and field data, the third hypothesis in this study is accepted

## **CHAPTER V CONCLUSION**

### **Conclusion**

Based on results testing and discussion as has served in chapter before, then could draw a number of conclusions as following: Variable competition has positive effect and significant to Management accounting system. The stricter intensity the competition faced by the company eat the more advanced design Management accounting system created by management \_ company. That thing because needed a capable *tool* \_ capture data and process it Becomes information that has coverage required by management, accuracy \_ acquisition information moment needed, integration and aggregation information that has an impact on decision making decision. There is positive and meaningful relationship \_ Among Management accounting system with Performance Managerial. Management accounting system is means provider broad *scope*, *prompt*, *integrated* and *aggregated* information. Information provided by the accounting system management help accuracy taking decisions made by management \_ especially decision crucial impact on increasing \_ performance managerial. Competition take effect to performance managerial. High competition \_ will push management for tried creating variety ways and *tools* that can used for getting information used \_ in planning, formulation policy, checking and evaluation strategies that have an impact on improving performance managerial.

Practiacal implications is this study expected I can give contribution for development field knowledge accountancy management especially in development design, determinants and benefits of the accounting system management and effects for enhancement performance. So that expected future academics do \_ \_ comprehensive research \_ as well as accounting system development management on

various type of industry For practitioner accountancy management, research this expected capable add repertoire knowledge about the role and benefits of the accounting system management. So that could Become base in accounting system development sophisticated, effective, and efficient management \_

Limitation of research is research use method data retrieval with method deliver questionnaire by direct to respondents. However, in practice still many companies that do not accept questionnaire given by the researcher, so that in his research next recommended for to do confirmation willingness respondent for fill in questionnaire. Future research is expected \_ for search and explore other variables that can be affect the accounting system management.

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