



Management Accounting in a Military-Business Conglomerate: A Critical Realist Perspective

Asmamaw Getie Mihret¹, Padakanti Laxmikantham², Abebaw Kassie Gualu³

ABSTRACT

The study investigated the use and design of management accounting in a conglomerate business that produces both military and civilian products. Data were collected from interviews, video and document archives, and analyzed using a critical realist thematic approach with the assistance of MAXQDA software. The findings revealed that the organizational structure was largely symbolic, and budgeting and costing were not effectively utilized, with limited expression of plans in financial terms. Performance measurement was a combination of military, ideological, and business logic, with military discipline logic taking precedence over business efficiency and effectiveness in measuring performance. The focus was on output rather than process, with little considerations to financial performance measures. This suggests that management accounting is not a neutral tool for achieving organizational goals, but rather is used interchangeably with state ideology and military logic to balance ideological and political interests with business objective.

KEY WORDS

*Critical realism,
Management
accounting,
Retroduction,
Military-managers*

1 Introduction

The management accounting design and use attracted research interest to build practical designs that fit in varied contexts (Chenhall, 2003; Demartini & Otley, 2019; Ferreira & Otley, 2009; Grabner & Moers, 2013; Otley, 1999; Sitkin et al., 2020). The management accounting system design and use are influenced by the characteristics of top executives (Hiebl, 2014), the leadership style (Abernethy et al., 2010; Jansen, 2011a), and context (Alawattage et al., 2017; Bobe et al., 2017). In state-owned enterprises, accounting encompassed a different political logic to facilitate the centralization of power (Alawattage & Alsaïd, 2018). Management accounting plays a critical role in development through central planning, requires iterative budgeting between state organs and enterprises, and current market-based policies are predicated upon private interests fostering more efficient controls and bearing on development issues like governance, planning, employment, and quality of life (Hopper et al., 2009). Management accounting can be used selectively regardless of economic functionality (Li & Soobaroyen, 2020). Hence the design and use of

management accounting cannot be taken for granted in different contexts and state ideologies.

Management accounting includes the processes, structures, and information for organizational decisions, governance, control, and accountability (Hopper et al., 2009). They are technologies that underpin social, moral, and natural order by functioning as a set of institutionalized practices, as a ritual, or as a means of disciplining and controlling actors (Ezzamel, 2009, p. 349). They describe and create contexts (Busco & Quattrone, 2018; Revellino & Mouritsen, 2015), sustain order (Ezzamel, 2009), legitimize actions (Hiebl, 2018; Richardson, 1987), serves as a negotiating instrument to settle conflicting issues (Järvinen, 2016), and rational signaling to stimulate parties to trust (Free, 2008; Vosselman & Meer-Kooistra, 2009). The dominant social group (Ashraf & Uddin, 2015), state ideology (Alawattage & Alsaïd, 2018; Li & Soobaroyen, 2020), leadership style (Abernethy et al., 2010; Jansen, 2011), and context (Alawattage et al., 2017; Bobe et al., 2017) influence these roles. Although studies enhance our understanding of MA use, it cannot be understood simply from the functionalist view because it is

¹ PhD student at Addis Ababa University & Assistant Professor at St. Mary's University, P.O.Box 1211, Addis Ababa, Ethiopia Email: Asmamaw_Getie@smuc.edu.et/asmegtie@gmail.com

²Associate Professor at Department of Accounting and Finance, College of Business and Economics, Addis Ababa University P.O.Box 1176, Addis Ababa, Ethiopia

³Assistant Professor at Department of Accounting and Finance, College of Business and Economics, Addis Ababa University P.O.Box 1176, Addis Ababa, Ethiopia

implicated in forming its context (Ahrens & Chapman, 2007).

Management accounting and control practices can be selectively used to coordinate and balance the state's political ends and the enterprise's economic interests (Li & Soobaroyen, 2020). It can also play a political role in institutionalizing structural reforms, and that role evolves with the political ideologies of the state (Alawattage & Alsaïd, 2018). In addition, the design and use of management accounting are affected by the interplay between international public management programs and the public sector's political, economic, and cultural contexts (van Helden & Uddin, 2016). Furthermore, management accounting and control studies concentrated in western countries call for further research in the context of developing countries (Mihret et al., 2022). Management accounting and control systems can be seen as an organizational outcome or an aspect of organizational structure (Chenhall, 2003). Hence, The design and use of management accounting vary in different contexts and managerial characteristics.

Previous studies investigated the management accounting design used in a state-owned enterprise using institutional theory (Alawattage & Alsaïd, 2018; Gooneratne & Hoque, 2016; Lasyoud et al., 2018; Suthewasinnon et al., 2016), and neo-Gramscian concepts of hegemony (Li & Soobaroyen, 2020). Despite those studies enhancing understanding in the area, they lack concepts to understand contexts fully. Institutional theory underestimates the role of power in structuring fields; actors lack resources, interests, or positions that determine what they can get (Fligstein & McAdam, 2011, 2012). Besides, research on how institutions are created, modified, or transformed lacks integration of exogenous shocks (Micelotta et al., 2017). On the other hand, the theory of hegemony will not hold in different contexts since hegemony operation differs (Williams, 2020), which leads to a different management accounting design and use. Moreover, (Ashraf & Uddin, 2015; Steccolini, 2019; van Helden & Uddin, 2016) recommended more management accounting research using a solid theoretical foundation to capture socio-political and socio-cultural contexts. Hence, existing studies fail to understand military business dynamics and management accounting use and design in developing countries, including Ethiopia.

This study investigated the role of military managers and the management accounting system design and use in a state-owned military and business conglomerate. It applies a critical realist analysis following Wiltshire & Ronkainen (2021) approach to critical realist thematic analysis. Studies also suggested more management accounting research that considers the role of military managers (Ashraf & Uddin, 2015). This study used a case with a mix of military and civil product manufacturing companies organized together as a public enterprise and managed by military managers. Hence,

the case gives a unique opportunity to understand management accounting design and use in military and civil logic simultaneously. Moreover, management accounting is context-dependent (Bobe et al., 2017) and influenced by the state ideology in public sector organizations (Li & Soobaroyen, 2020). Studies used the theory of historical institutionalism to understand the MA design and use (Alawattage & Alsaïd, 2018). However, the design and transformation of management accounting cannot be developed linearly. Thus, research using a critical realist analysis help to understand management accounting design and use.

This study aimed to enhance understanding of how management accounting in pure business logic, military discipline, and secrecy logic interact in a single organization context following a critical realist thematic analysis approach. The approach enables us to see how the leaders' values and external pressure influence the design and use of management accounting in a military business conglomerate and the causal mechanisms using a retrodictive inference. Data were collected from a military business conglomerate company archives and interviews and analyzed following theory-based coding and critical realist approach to thematic analysis approaches with the help of MAXQDA software. The study's findings contribute to the existing literature by providing a clear view of how the economic efficiency logic of institutions interacts with the military discipline and secrecy logic in the same case company.

The next part is organized in the following ways. Part two addresses the theoretical framework of the study. Part three outlines the methodological details. Part four presents the data analysis, followed by a discussion and conclusions.

1. Theoretical framework- Critical Realism

Critical realism acknowledges the existence of mind-independent reality but rejects an objective way of verifying it (Bhaskar, 1998). Under this view, a "real social world" can be experienced objectively with our senses while the observation is simultaneously modeled by personal, social, historical, and cultural frameworks (Mukumbang, 2021). Phenomena and events do not happen on their own; there are objects' underlying powers/properties that generate phenomena and events (Sayer, 1992). Reality is stratified into three domains; the real, the actual, and the empirical. To explain an empirically manifested social phenomenon, researchers must first identify the structures (and their associated tendencies) and then the human agency, a concept known in critical realism as analytical dualism (Archer, 1995). The critical realist approach research is recommended in management accounting research to tackle the subjective and objective ontological divide (Mihret et al., 2022; Modell, 2009).

Structures are not deterministic; they can permit and restrict events through their intrinsic mechanisms (Archer, 1995). Bhaskar (1998) notes explicitly that social structures can enable and constrain social activities while being changed by the activities. The objective of critical realist scholars is to construct a non-fusionist perspective that treats actors' actions and structures as two separate, ontologically different, but connected levels of reality (Leca & Naccache, 2006). These levels are connected but not reducible (Bhaskar, 1978). Both structures and "actors' acts exhibit distinctive emergent features, relative autonomy, a past existence, and causal efficacy, and they are in continual interaction (Bhaskar, 1998). It requires determining the ontological specificities of both actions and structures to build a model that considers the constraints imposed by the structures that actors must interact with and their freedom of action (Leca & Naccache, 2006). Critical realist research approaches provide new opportunities to holistically explore complex organizational processes (Wynn & Williams, 2012) that build a stratified ontology.

The stratified ontology distinguishes between three domains; the real, the actual, and the empirical. The domain of the real comprises the structures and causal powers that cause occurrences called mechanisms. These mechanisms are transfactual; they exist whether or not they function in the specific environment under consideration. From the realist viewpoint, the causal explanation is not about the deterministic or stochastic correlations of patterns of occurrences, nor about experiences, but the ascription of causal capabilities to [structures]'. In other words, causal abilities can exist regardless of empirical outcomes. This approach is motivated by the reality that the social world is an open system in which multiple causal forces may coexist (Sayer, 1992). We need to examine the mechanisms of underlying strata (find out what explains them) to build our knowledge of a stratum. The empirical domain is the actors' experiences, impressions, and perceptions of reality. Actors have immediate access to the level. The domain of actual encompasses occurrences, whether witnessed or not. Such phenomena can occur regardless of the actors' experience or perspective. Circumstances can happen and not be moved into the empirical domain until human action correctly identifies those events and changes them into experience (Bhaskar, 1978). Researchers will be able to discover occurrences that could have evaded actors' perspectives due to their unique concentration and training. Indeed, the actual domain is the arena of theory development by researchers. However, the realm of the actual is still the surface of reality (Selboe, 2002). Such occurrences arise when the causal mechanisms of the objects and structures are triggered. One of the essential elements of critical realism is that explanation includes delving below the surface of reality to reach the realm of real and identify those structures and mechanisms and the ways they work (Sayer, 1992).

Agents generate these beliefs and intentions while inhabiting specific structural positions, so studying social events necessitates an independent investigation of the two. Since these structural conditions predate any generation of agents that come to occupy these structural positions, the study of social phenomena should start from (1) the identification of structures, their powers and properties, and (2) the powers of agents and their interaction with each other while they are within given structural positions (these interactions may result in changing structures). This analytical separation of structure and agency to analyze their influence on each other is called analytical dualism and is a characteristic of critical realism (Archer, 1995). Mechanisms are the causal structure that creates or triggers events we may see. They are frequently concealed and sensitive to alterations in the circumstances. We can explain the outcome by proposing a hypothesis about the reasons that normally bring it about. Elder-Vass (2010) argued that several dimensions' causal mechanisms influence relational emergence. First, because multiple levels of causal power interact, it is crucial to understand how an entity affects other entities located at the same level as it is to discern between upward and downward causations. Second, distinct causal factors are connected to organizational configurations (configurational powers and potentials) and norms and regulations (normative powers and possibilities). Normative abilities and potentials result from recurring patterns in the actions of the individuals that make up a given institutional process. These actions, which make up the ingrained patterns of daily existence that repeatedly recreate and alter particular institutional systems, can be thought of in terms of their origins and antecedents. Because examining typical behavior helps to understand participant actions better, how larger or external contexts influence these, and the internal motivations people have as they engage with particular routines, it is beneficial to consider this normative aspect of institutional mechanisms.

Besides, configurational powers and potentials derive from a particular spatial arrangement of individuals, where "there is a sense in which the members of the organization operate together like pieces of a machine to produce collective impact." The classic illustration is Adam Smith's pin factory: the factory technique divides pins into several specialized tasks, producing far more pins than each individual making more pins. Instead of the abilities of atomized individuals, the particular combination of effort in this situation is a causal attribute of the collective or institution. Even though the individuals that make up these institutions reproduce identical norms and values, variously organized and scaled institutions have varied strengths and potentials. Because of this, it is essential to consider this dimension (observing a game between unevenly matched teams usually demonstrates this point). The moral logic of small groups might have unique ramifications for institutional processes at levels above (Vincent & Wapshott, 2014). The powers and potentials of norms work in both ways: upward and

downward causations. In upwards causation, the causal powers of the parts interact to impact the causal capabilities of the whole (super construction). In downward causation, the emergent relations transform due to modifications inside a 'higher level' organizational structure or system, of which the case is partially constitutive (intrastructuration). The higher-level entity works via the person; those traits that the individual obtains by taking a role in an organization are important attributes of the organization localized in the individual' (Elder-Vass, 2010).

Management accounting cannot function in isolation; it requires the active involvement of actors within a specific social, political, cultural, and technological context. The utilization of management accounting is shaped by the interplay of these factors, which are governed by underlying mechanisms that help explain the reasons and ways in which management accounting is applied. Given that individuals operate within multiple structures simultaneously, the outcomes of their interactions within these structures cannot be reliably predicted. Empirical events are influenced by the complex interplay of various structures, such as the political, economic, and social dimensions, all mediated through human agency (Ashraf & Uddin, 2015). Therefore, adopting a critical realist perspective allows us to understand how actors influence the design and use of management accounting, thus expanding our knowledge in this field.

2. Methodology

This study is a historical case of a state-owned military-business conglomerate organization producing military equipment and civil products. The organization, known as the Metal and Engineering Corporation (METEC), comprises 15 civil and military industries and over 98 manufacturing companies. METEC operates as a public enterprise under the leadership of military managers. The research collected data from various sources, including archival materials and interviews. Archival sources comprised strategic documents, plans, project feasibility studies, internal performance reports, project performance reports, publicly available video interviews related to the organization, and information from websites and online media outlets. Public enterprises are responsible to the general public, and communication with stakeholders occurs through the media. The availability of publicly accessible data allows us to examine how actors communicate with stakeholders to gain legitimacy and understand the role of management accounting in this process. The following table shows specific details regarding the video archives.

Table 1 Summary of archival data collected

Archival Data	Production	Length of recording/Minutes
Participant 1	Pro1	107 minutes
Participant 1	Pro2	45.54 minutes
Participant 2	Pro3	86 minutes

Source: Publicly available video files

On the other hand, interviews were conducted with a partner who has worked under the supervision of the case organization and a consultant who consulted the case organization.

Interviews

The first author conducted interviews. The first interviewee was the former research and development head of the Ethiopian national defense force, who worked closely with the case organization as a consultant. Interviewee 2 worked with METEC as a private partner on aircraft manufacturing projects. The interviews are recorded based on the interviewees' consent, and the record was reheard and transcription edited. The data collected from the first and the second interviewee enabled us to understand the use of management accounting tools in the case organization from the user's and consultant's perspectives. The details of the interviews are presented in the following table 2.

Both audio archives and interviews were transcribed following an orthographic transcription approach for further analysis using a critical realist thematic analysis approach. Thematic analysis was selected because of its accessibility and flexibility in analyzing qualitative data (Braun et al., 2006). It recognizes that individuals make meaning from their experience and that the broader social context impinges on the meanings in which language is acknowledged to describe and create reality (Braun & Clarke, 2012).

The theme generation is conducted based on the critical realist approach to thematic analysis suggested by (Wiltshire & Ronkainen, 2021). This analysis approach requires the researchers to ask at least one research question that seeks a causal explanation (Fryer, 2022). According to Wiltshire & Ronkainen (2021) model of a critical realist thematic analysis, philosophical principles can be translated into methodological practice by explicitly using three types of themes that are distinctive yet reliant upon each other: experiential, inferential, and dispositional (Wiltshire & Ronkainen, 2021).

Interviewee Code	Position	Highest academic qualification	Interview Data	Total number of minutes
Interviewee 1	ENDF- Former Research and Development Head	Msc, DipIFRS, Captain	November 30 2022	91 minutes
Interviewee 2	METEC-Former Private partner	MSC	10 October 2022	61 minutes

Source: Interview

Themes are developed from a non-linear research process rigor, and validity does not come from simply following a list of steps. Experiential themes refer to subjective viewpoints such as intentions, hopes, concerns, beliefs, and feelings captured in the data, and it tries to capture the subjective viewpoints of actors. Inferential themes refer to inferences and conceptual redescrptions using more abstract language. These themes offer more abstract and theoretically informed summaries of these viewpoints and actions. Dispositional themes, on the other hand, refer to theories about the properties and powers that must exist to produce the studied phenomena. These themes capture the causes that underlie the events of interest.

1. Data analysis

Establishment

Participant 1 stated that METEC was established "when the government assessed the necessity to move from agriculture-led economic development to industrial-led industrial development and planned the development transition, it concluded that the military industry sector of the time could serve as the vital leaven of the change." Before its establishment, METEC operated under the Ministry of Defense (defense industry) with separate budgets. The industry comprised complexes that could renovate and repair military equipment and coordinated engineers and technicians who were more or less trained in engineering.

When the government assessed the necessity to move from agriculture-led economic development to industrial-led industrial development and planned the development transition, it concluded that the military industry sector of the time could serve as the vital leaven of the change. When the government chose this, it examined the deficiencies and limits of the military-industrial sector at the time, highlighted the existing strengths, and aligned it with the directions of the development strategy. For the sake of the general management and development trends, in other words, to comprehend the development trends and define the direction to be followed, it is good to look back at the current level at a strategic level.

Participant 1 stated that two starting directions were laid out when METEC was organized to carry out the country's industrial development at the forefront. One primary direction is that the capability of national defense technology cannot grow and prosper in isolation. Because the national defense technology capability was based on economic development, prosperity, and national economic growth. This means that it should not only grow following the growth and prosperity of the national industry but also support and enhance the national industrial growth. According to this perspective, it was said that we should follow an industrial development approach that prioritizes the development of the national industry and works with the results obtained from the development of the national industry.

The second primary direction is to build an industrial structure under government ownership to solve the market deficit. The government should be led by strategies that make the private investor an engine and carry out a broad-based and self-sustaining industrial development that allows society to benefit at all levels. Market failure is an expected result of the free market, but it has many aspects. The main ones are market failure caused by a lack of capital equipment and rising prices. Market losses and political problems must be avoided. In this regard, METEC intended to identify possible sources of market deficits in the engineering industry field and maintain the market balance through plant engineering and ecumenical products. In addition, technological asymmetry, which plays a significant role in creating differences in skills and abilities, and causes market deficits and failures in the economy of countries and one economy, can be solved by establishing an engineering industry and making this institution grow the national capacity by dreaming up technology. As Participant 1 stated, "the two leading ideas of the establishment of METEC can be described as creating a national infrastructure that would carry out the country's industrial economy at the forefront by integrating and feeding the development and defense industries."

The establishment of the case organization was based on the party/state decision. As participant 1 indicated that the organization is established based on:

[...] the decision made (government level) on February 22, 2010, preparation work continued until the ministers' regulation was announced in June of the same year. The time it has taken to transform a corporation that was formerly budgeted and focused on producing defense weapons and equipment into a business enterprise was minimal under this preparation work structure. In this short time, the structure, workflow, mission, and equip the workforce with the required knowledge and research work were completed (within less than five months). It was not that difficult to organize.

The process shows that the establishment work was started before the regulation. The time it has taken to transform a corporation that was formerly budgeted and focused on producing defense weapons and equipment into a business enterprise was minimal and completed within less than five months. The establishment was the party-state decision without a feasibility study of whether merging different organizations in a single management control was appropriate.

It was established to lead the country's industrialization and was responsible for producing military and civil equipment. The then government considers the conglomerate as critical to the centrally-planned economy and a program to transform the country to achieve a national objective of being a middle-income country by 2025 through investments in infrastructure and manufacturing. The developmental state ideology advocates government involvement in the market, and public development is a national development that the private sector cannot achieve.

The Emergence of Military Managers in the case

In the establishment process and after its establishment, individuals from a military background dominated management. The military was dominated by individuals who were part of the gorilla fighting struggle for 17 years, led by the Tigray People Liberation Front (TPLF). He is Major General and, usually addressed by his military rank, and attends meetings with higher government officials in military uniform. The following table shows the list of industries and the military rank of general managers just before the restructuring.

Table 2: List of Industries, the military rank of general managers, and their function

No	Industries	Military rank of General manager	Main function
1	Adama Agricultural machinery industry (AAMI)	Let. Colonel	Assembly of tractors; manufacturing of various construction equipment such as trailers, loaders, water tankers etc.; assembly of water pumps
2	Adama Garment industry	Major	Manufacture various clothing, canvas and leather products, drag chutes, car & airplane chairs, combat boots, safety shoes, raincoats, gloves, backpacks, small bags/pouche
3	Akaki Basic Industry (ABI)	Major	A wide variety of high- and low-precision assembled and manufactured spare parts and capital items such as sugar mill rollers, sugar boiler spare parts, steel ball & armor plates, manhole covers and frames, suspensions and cross-arms.
4	Bishoftu Automotive Industry (BAI)	Colonel	Assembly of city buses, tractors, dump trucks, low-bed trucks and high-bed trucks, manufacture of different construction machineries; assembly of pick-ups, cross-country buses, mid-size buses.
5	Dejen Aviation Industry (DAVI)	Colonel	Manufacturing various aircraft bodies, parts accessories, military and filament pipes, manufacturing of fibre products used for fixed and rotary winged aircraft parts, and manufacturing and integrating different unmanned aircraft and hovercrafts.

6	Ethio Plastic Industry (EPI)	Major	Manufacturing of pipe and poly, injection and blow moulding products, PVC profile, polyethylene products, military plastic products
7	Ethiopian Power Engineering Industry (EPEI)	Let. Colonel	It produces and assemble transformers, compact substation, power factor corrector, energy meter, diesel generator, cable and wire, solar panels turbines within 7 manufacturing companies under it.
8	Gafat Armament Industry	Let. Colonel	Launchers, machine guns, and various types of spare parts used for heavy industries.
9	Hibret Manufacturing and Machine Building Industry	Major	Industrial machinery, spare parts, engraving & pressing products, bolts & nuts.
10	Hitech Engineering Industry (HTI)	Colonel	Manufacture of electronic and electromechanical technology products and provision of services.
11	Homicho Ammunition and Chemical Industry (HAEI)	Colonel	Small, medium and heavy ammunition; gun and tank shell, long-range rockets, bombs, various sizes and types of spare parts.
12	Metal and Fabrication Industry	Major	Fabrication, manufacturing and assembly of various metal-based products such as construction machinery, bus body frames, boats, tower cranes, construction lifters, transmission towers, dismantable houses and forging and pressing products.
13	Construction machinery manufacturing sub-industry	Major	Earth-moving machines; asphalt-making equipment; plant for e.g. stone-crushing and concrete-batching.
14	Fuel and Propellant Sub Industry	Not available	Liquid chemical propellant and solid chemical propellants
15	Locomotive manufacturing Sub Industry	Major	Produce light and heavy carriages and locomotives that transport cargo and passengers within and inter cities.

Source: Gebregziabher (2019) and interview

As shown in the above table, managers are from a military background. In addition, the business is diversified and produces civil and military products. The argument behind using military managers was that the defense is believed to have 'accumulated value and the experience" (Participant 1). These accumulated values are gained through their experience in military operations and military discipline. The argument behind using military managers, according to (Participant 1), "they (military managers) have accumulated value and the experience gained through their experience in military operations and military discipline that enables them to build a successful company within a short period and achieve organizational objectives." These values include that in a long history of warfare, the defense forces are believed to have accumulated valuable experience. These three significant concerns have

prompted the METEC to begin with the military industry's possibilities (Participant 1). These three significant concerns have prompted the METEC to begin with the military industry's possibilities.

The first value is that military managers have the ability and experience to work in a team and a culture of discussion that enable them to predict problems ahead of time and minimize the potential risk before the actual problem happens. This activity follows a research and development cycle that may be characterized as identifying the problem's cause, specifying the source, and proposing a solution. Second, they have the value of trust and serving the citizen. The military has developed a public-service mindset and culture through military routines. Third, there is a culture of predicting risk and good risk-taking culture. There is a capacity to identify which one is possible and which one is not scientifically. Furthermore, there is a

culture of working to minimize them, "to think about how to solve an issue rather than run or pretend that one does not exist." This encapsulated the possibility of finding answers to the situation by carefully assessing what is feasible and what is not.

Interviewee 1 stated that establishing the case based on the defense background can leverage the management in the bargaining process. Moreover, they are paid based on military rank, enabling the organization to reduce costs. Military discipline can also help the organization avoid staff turnover because they are managed based on military discipline to avoid overtime payment and can work for 24 hours if necessary, without paying overtime in line with the military discipline.

Participant 1 stated that

[...] the management believes the defense force is determined and reliable for the system. *It is not a foreign army; it is the defense army of the federal democratic republic of Ethiopia. It is neither difficult nor requires much research to see how it emerged. Moreover, it is not an institution that should be feared as a foreigner, and it should not be feared that it will become a monopoly. At the same time, we should not be afraid of domestic corporations' economic monopolies in our country. It is absurd to think that a national institution would threaten the system, as are foreign companies.*

This suggests that the manager is blending the military logic and role with the business. Moreover, the management legitimizes the military role in the business sector. Besides, the initial intent of organizing METEC was to compete with the private monopoly since that creates inefficiency in the economy. The management believes a monopoly is less damaging if the company is domestic. Moreover, the management believes that the employees are working for their country without considering the economic benefit of the company.

As Participant 1 argued:

[...] they are Ethiopians who did not come to benefit themselves but to serve. All soldiers employed in the defense industry would earn far more if they worked independently than the military paid them. However, they willingly work with the military salary allocated by the government. Moreover, they used to work for at least 14 hours a day. The most important thing was to train those with prior experience working in groups, tackling problems, searching for solutions, and bringing solutions.

The respondent emphasizes that the main objective of workers in the case company was having the defense discipline in mind regardless of the business logic.

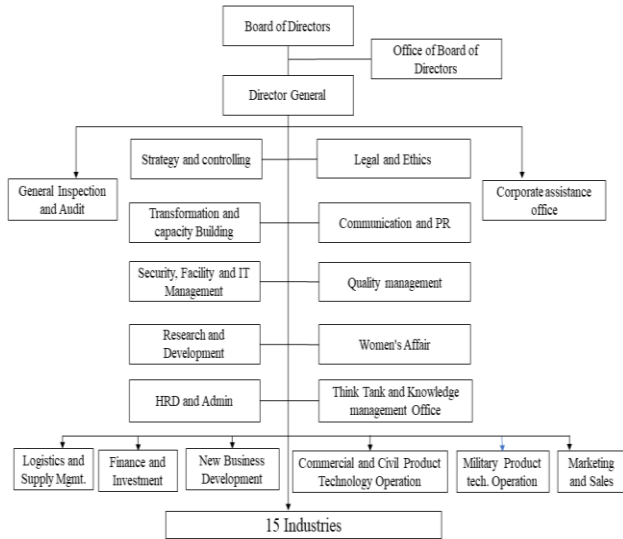
[...] the government owns METEC. Is it the employees in the METEC who are paid the lowest salary per the country's standards, work with national pride, and can thus develop the country.

This suggests that leader believes individuals are working for the love of the country and job. They disregard the personal benefits that emanate from their background as soldiers. Moreover, the case organization focused on assigning individuals to a position so that they "could learn by doing" Participant 1. This shows that the leader is using military logic to justify individuals' fit for the position. Interviewee 1 stated that "establishing the case based on the defense background can give leverage to the management in the bargaining process. Moreover, they are paid based on military rank, enabling the organization to reduce costs. Military discipline can also help the organization avoid staff turnover because they are managed based on military discipline to avoid overtime payment and can work for 24 hours if necessary, without paying overtime in line with military discipline."

Organizational structure

Given the objective of establishing the company to industrialize the country, METEC was established by making directly responsible to the prime minister's office. Most board members were senior members of the ruling party and known political figures in the country. Moreover, once the conglomerate was established, individuals from a military background dominated management. The military was dominated by individuals who were part of the gorilla fighting struggle for 17 years by the Tigray people liberation front (TPLF).

METEC was established by making it directly responsible. However, it was established under the public enterprise proclamation No 25/1992. As the proclamation states, the purpose of organizations established under this proclamation has been under the supervision of the Public Enterprises Holdings and Administration Agency (PEHAA). The highest management Body was the Board of directors, comprised of higher government officials of the time.



METEC was established by combining pre-existing military industries and newly established civil product manufacturing companies (Gebregziabher, 2019). The organizational structure mainly classifies the company's operation into two semi-autonomous industries. These include civil and commercial products operations and corporate military products production operations. According to the industry organization manual of METEC, there will be no more than seven manufacturing companies and not more than five workshops under the manufacturing company (METEC, 2013 P.13). The following figure shows the organizational structure of industries.

Figure 1: First layer of Organizational structure (the main office): Source: METEC 2013

Even though the organization was expected to be responsible to the public enterprises' authority, the reporting is direct to the prime minister's office. As indicated by Participant 1;

[...] The authorities were always in charge of equipping, organizing, training, and distributing work, and they created that work cooperatively and reciprocatively.

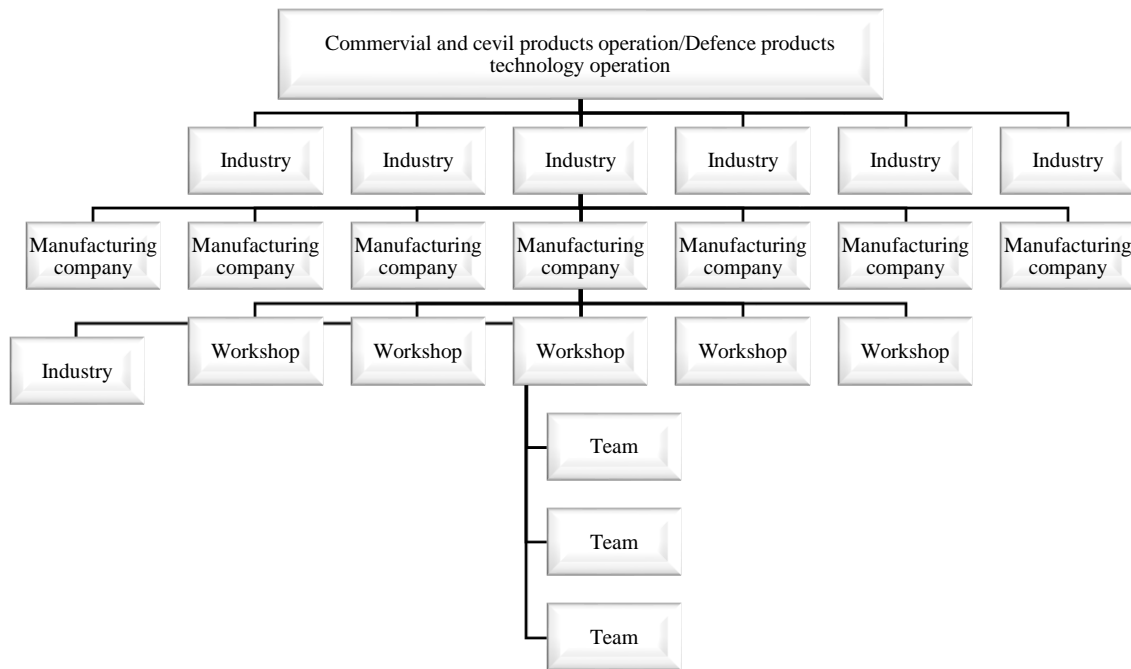


Figure 2: General organizational Structure of Industries Source: METEC 2013

As it is depicted in the above figure, the line of responsibility was clearly shown in the document.

However, interviewee 2 stated, "the top management was helpful and directly involved in operational activities without waiting for formal requests following the organizational structure." There was military discipline, and no one questioned the organization's top management. This suggests that the formal organizational structure was simply symbolic. It can arguably be traced to the managements military background of respecting and executing what the top management wants to do regardless of the formal business line of responsibility.

Budgeting and costing

The budgeting and costing process in the case company is understood from internal reports and the agreements and performance reports of the case about the mega government projects. Specifically, immediately after its establishment, the company became known and acknowledged as the leader in the nation's industrialization, and it started producing civil and military products. Based on the government's decision to use local companies in its mega projects and advocate learning by doing, the company secured mega projects like the electro-mechanical work of the Great Ethiopian Renaissance Dam (GERD), the Sugar corporation, and the construction of fertilizer manufacturing companies.

As the then board chair of Ethiopian Electric Power and member of the party's central committee, stated in the interview with the Ethiopian reporter that, "the government decided to award METEC the electro-mechanical work of the project for political reasons." There was no feasibility study or plan to get mega government projects from the government. However, the leader indicated that there was a feasibility study, which showed that the cost plan of the case organization compared with the international bidders is lower. Although projects are awarded to METEC for political reasons, METEC prepares plans after securing those projects. The case organization's management believes that the government's decision to provide projects to METEC as a contractor is appropriate. Participant 1 argued that "the difference is not in numbers; in all respects, it is whether foreign investors or Ethiopians build our country. Actual development comes from local actors."

This suggests the issue should not be whether a detailed feasibility study is conducted to win mega government projects. The way projects are given to the case as a contractor is not based on the business logic of whether the company can do the assigned job. In other words, there were no budgeting and costing activities to secure projects. The logic is beyond business as the political ideology of the party-state is reflected. As long as activities align with the interest of the party-state, the budgeting and costing issues were not relevant.

The initial conception of the dam, as Participant 1 stated,

[...] We Ethiopians began working on the Renaissance Dam project, knowing that we Ethiopians can build a dam without bending to others and that there is no such thing as growth and development if we wait for others to build it for us.

Performance reporting

Performance measurement in the case company is understood from the company's performance reporting and measurement to the state, performance report of the industries to their head office and industries and company managers. METEC was responsible for the prime minister's office. The following figure shows the director general of METEC reporting performance to government higher officials, including the then prime minister, the defense minister and other ministers and party central committee members.

With his full military uniform, the director general acknowledged higher government officials by saying, "Thank you very much for visiting and giving us constructive feedback." We also have projects to be completed soon and if the prime minister is willing, please visit us with your executive body." The management shows what the company is doing to the higher government officials. This is one way of visualizing to maintain the interaction order. Moreover, the CEO

[...] even though we are working in line with the detailed directions provided by the board, we need direction (from higher government officials).

This suggests that the management directly communicates with the government executive body. This implies that the management disregards the budgeting, costing, and financial performance measures and focuses on idealization, aligning the organization's activities with the interest of the party-state. Moreover, the director general wore a military uniform and addressed his military rank. This suggests that performance measurement using a budget is ignored, and the ideological interest overrides the business logic of efficiency and effectiveness. Besides, the then prime minister believes that METEC is doing great. This shows the presence of close collaboration between the management and the government. This is obvious, given the essence of the case's establishment.

Moreover, the performance of industry and manufacturing company managers was subjective and not aligned with budgeting and costing. The performance measures include the strength and weaknesses, level of the manager based on the industry leader's judgment and the assessment and

remark on whether a promotion is recommended. The following table shows sample performance measurements of manufacturing company managers.

Table 3: Six months Performance measurement of company managers (Sample)

No	Name	The assessment criteria (the main ones)		The set Level			Remark
		Strength	Weakness	Strong (A)	Medium (B)	Weak (C)	
1	Manager 1 (Captain)	Good leadership skill	No noticeable weakness	✓			shall work one level above
2	Manager 2 (Captain)	Good Personality Superior in organizing, leading and controlling Helping managers by organizing units and leading controlling in Omo Kuraz, Aafar and Tana beles thermal Power Plant In maintenance, shade construction, transportation and helping to put in the appropriate place. He is superior in this regard.	Does not delegate	✓			Better to continue as interim manager
		Freely express his ideas	He usually goes to head office and lacks close supervision of employees				
		Make employees busy at work.					
		Provide training to employees					
		Delegate authority (give an opportunity to decide)	Reactiveness.				
3	Manager 3 (Captain)	His report quality is timeliness and clear	When the factory breakers were Stolen, the follow-up was weak		✓		He has the capacity to work one level above his current position. But he has to work at least a year in the current position
		Have sincere personality w	Poor cooperation in workers emanated from poor leadership skill				
			Too much softening to take actions				

Source: METEC 2014

As it is shown in the above table, the performance measures are purely subjective. The strength and weaknesses are based on the personal characteristics of the manager. Moreover, the budget and the actual performance are not part of the performance measurement. It was mainly inclined to the military discipline logic and disregarded efficiency and effectiveness in financial terms and it was not measured in financial terms. Hence, the performance measurement and promotion process was not based on objectively measured indicators.

The performance measurement practice in the case organization is assessed from the reports related to the case organization and mega government projects. There were delays in completing projects. There is a huge variance between the plan and the actual implementation. For example, the fertilizer project completion percentage was 43%, and received a payment of 60% percent (The Government of Ethiopia 2018). However, the leader believed that variance in the plan and the actual performance in monetary terms was not a big issue. As Participant 1 noted:

[...] The main question is how the direction of the developmental industry can benefit society through knowledge, productivity, skills, income, and, above all, developing production capacity.

This expression undermines the efficiency and effectiveness logic of business. It disregards the value of the performance measurement approach in line with the business logic. The performance measurement does not align with the project plan and the efficiency and effectiveness of employees or against the initial plan. In addition, there were no clear performance measures and the management acknowledged the limits of individuals. Moreover, the management believes that regardless of the inability to achieve performance targets according to the budget, the benefit of the work to society is worth more than that. However, when the management is questioned for its failure to complete projects and criticized for the

Themes and management accounting

Table 4:Experiential, inferential and dispositional themes

Experiential themes	Inferential Themes	Dispositional themes
Symbolic Organizational structure	Result oriented	Developmental state ideology
No feasibility study	Technology transfer	Party-state
Absence of financial planning	Learning/informal learning by doing	Democratic centralism
No proper costing system	Military discipline	Vanguard party system
Risk-taking	Internal capacity building	Central decision
Non-financial performance measurement		
Lower cost		

absence of a proper plan and performance measure, the management responds that the projects have been led based on a proper plan. Participant 1 Argued that:

[...] (they) came to this project because METEC developed a fantastic design that a third party approved.

This suggests that although there are plans, they are ex-post as a ritual. The management tries to shift the frame using the presence of a plan as a justification and to shift the blame to other external issues. Participant 1 argued, "I believe we worked hard to realize the projects, against all odds and making sacrifices for the country's development and the work on the ground speaks for itself." The management provides contradicting evidence that success is measured based on the activities that benefit society. At the same time, it was acknowledged that the company was inefficient because of external factors to shift the blame to external issues, citing the multiple external factors. As Participant 1 stated: "foreign currency shortages, regular power cuts, political unrest METEC's administrative problems as reasons for poor performance for impeding the progress of those projects."

The plan was not a base to measure performance in this phase of the organization's life. Despite the plan, the management disregards it and justifies the inability to achieve the plan using actions that benefit society in other than monetary terms

[...] many contractors or subcontractors need to work with it to make it accessible to the public.

Participant 1 stated, "everyone is not born with abilities; they can learn by doing." This argument is in line with the human resource leadership frame. In this regard, management accounting, specifically performance management based on business logic, is disregarded. This shows that the leader is undermining the value of a business enterprise's performance measurement in line with the business efficiency effectiveness logic.

Feasibility after securing projects based on
government decision
Visual performance report
Wearing military uniform

Source: Author's coding

As it is shown in the above table, the critical realist view of the result shows that the performance report was mainly visual and non-financial subjective performance measurements. The budgeting and costing design and use were limited. The reasons for this are to see these in a retroductive way, the alignment of the organization's activity with the party state's interest (idealization), and the military discipline and secrecy logic. These can be further traced to the party states developmental state ideology that is characterized as having a vanguard party system and major decisions as a causal mechanism.

3. Discussion and Conclusion

The study assessed how management accounting is used in a military business conglomerate. Data were obtained from archival sources and interviews, and these collected data were subjected to theory-based coding and a critical realist thematic analysis approach, employing retroductive inferences. The ideology of the developmental state played a detrimental role in undermining budgeting, costing, and performance measurement practices. Legitimation primarily stemmed from the party's ideology, resulting in management accounting tools, such as organizational structure, budgeting, costing, and performance measurements, being reduced to symbolic rituals. Furthermore, management accounting was neglected in favor of military discipline and the logic of secrecy.

METEC was established by making directly responsible to the prime minister's office, given the importance of industrializing the country and achieving national goals. The management developed the formation of the company and the systems designed within with close supervision and consultation of the then prime ministers. The formation was more of a political coalition instead of a hierarchical arrangement. The case managers and the party-state share the same history in the armed struggle to get central power.

The organizational structure was depicted and showed that METEC was organized in industries. Under industries, there are manufacturing companies, workshops and themes, respectively. Managers are from a military background with common history with the party-state leaders. Management discretion emanated from the close alignment of the management, the board and the party state. This makes the board weaker and submits to the ideological justification for every action. This suggests that

the management and the party-state share the same culture, one of the capitals (cultural capital) (Bourdieu, 2018), and strong social capital that enabled them to do what they were doing from the establishment of the company up to the restructuring of the case. As Bourdieu (2018) Stated "Social capital is the aggregate of the actual or potential resources which are linked to the possession of a durable network of more or less institutionalized relationships of mutual acquaintance and recognition—or in other words, to membership in a group—which provides each of its members with the backing of the collectively- owned capital, a "credential" which entitles them to credit, in the various senses of the word." This suggested that the shared history of the management and the party-state led to a common understanding of the ideological background that influenced the management accounting system design and use.

The budgeting and costing practice in the case organization was reflected in the case's handling of national mega projects. The party-state gave the projects for political reasons. The management believes that managers with military backgrounds have risk-taking behavior and problem-solving skills. This makes them suitable for achieving organizational and national goals. No detailed feasibility study shows the organization's poor budgeting and costing practices. The literature also suggested that accounting can be utilized as an ideological weapon (Goddard, 2002). The system can be purposely designed as a malleable object to reflect and facilitate diverse political ideologies as part of their hegemonic processes (Ezzamel et al., 2007).

The company's performance was measured using non-financial indicators, including the production volume, while manager's performance was measured in a more subjective base focused on military discipline. The budget and the variance were not part of the decision. The military discipline logic and the state ideology were the main justifications for actions and performance gauges. The focus is on the output instead of the process, which aligns with military logic. Hence, the performance measurement in the case organization aligned with the ideology of the party-state, military discipline, and secrecy logic. The management focused on non-financial performance indicators like production volume compared with the planned volume. There was no focus on the process. Instead, the management focused on the output regardless of the cost incurred. This implies that the military philosophy of victory dominated the organization established as a business enterprise.

Moreover, the performance of company managers was measured using non-financial measures and not based on the planned budget and its variance. Rather, the performance indicators are subjective and more disciplinary indicators. This implies that military discipline overrides the business logic of transparency, efficiency, and effectiveness (Perray-Redslob & Morales, 2022). Moreover, the performance report was mainly in pictures, which is an objectified cultural capital (Bourdieu, 2018) that can be used to convince stakeholders.

Hence, the management accounting tools were resisted in the name of discipline and secrecy. Even though the case is organized as a business enterprise, the mix of civil and military product manufacturing accompanied by the presence of military managers gives leverage to the case company managers to avoid management accounting. Management accounting is used interchangeably to balance the interests of managers and party-state and is mainly replaced by state ideology, military discipline, and secrecy logic. It was mainly used to facilitate the centralization of power. This suggests that further study can enhance understanding by investigating how the state ideology transcends to the organizational level using a comprehensive theory.

All in all, management accounting is a tool that is interchangeably used with military discipline and secrecy logic. The organizational structure was symbolic, while the budgeting and costing practice is widely neglected. The performance measurement was subjective and did not consider financial performance measurements. The state's ideological commitment and military discipline override the management accounting value. Hence the management accounting system design and use reflect the characteristics of the executives and their link with the party-state.

References

- Ahrens, T., & Chapman, C. S. (2007). Management accounting as practice. *Accounting, Organizations and Society*, 32(1–2), 1–27. <https://doi.org/10.1016/j.aos.2006.09.013>
- Alawattage, C., & Alsaid, L. A. (2018). Accounting and structural reforms: A case study of Egyptian electricity. *Critical Perspectives on Accounting*, 50, 15–35. <https://doi.org/10.1016/j.cpa.2017.09.001>
- Alawattage, C., Wickramasinghe, D., & Uddin, S. (2017). Theorizing management accounting practices in less developed countries. *The Routledge Companion to Performance Management and Control*, 287–305. <https://doi.org/10.4324/9781315691374>
- Archer, M. (1995). *Realist social theory: the morphogenetic approach thus not only rejects*. Cambridge University Press. <http://books.google.co.uk/books?id=SMbNRp5EseMC>
- Ashraf, J., & Uddin, S. (2015). Military, “managers” and hegemonies of management accounting controls: A critical realist interpretation. *Management Accounting Research*, 29, 13–26. <https://doi.org/10.1016/j.mar.2015.07.002>
- Bhaskar, R. (1978). *A Realistic Theory of Science*. (Vol. 24, Issue 5). Hassocks, UK, Harvester Press Limited. <https://doi.org/10.2307/2215817>
- Bhaskar, R. (1998). The possibility of naturalism: A Philosophical Critique of the Contemporary Human Sciences. In *Harvester Wheatsheaf, Hemel Hempstead [1998]* (3rd ed.). Routledge. <https://doi.org/10.4324/9781315756332>
- Bobe, B. J., Mihret, D. G., & Obo, D. D. (2017). Public-sector reforms and balanced scorecard adoption: an Ethiopian case study. *Accounting, Auditing and Accountability Journal*, 30(6), 1230–1256. <https://doi.org/10.1108/AAAJ-03-2016-2484>
- Bourdieu, P. (2018). The Forms of Capital. In *The Sociology of Economic Life, Third Edition* (pp. 78–92).
- Busco, C., & Quattrone, P. (2018). Performing business and social innovation through accounting inscriptions: An introduction. *Accounting, Organizations and Society, March*, 0–1. <https://doi.org/10.1016/j.aos.2018.03.002>
- Chenhall, R. H. (2003). Management control systems design within its organizational context: Findings from contingency-based research and directions for the future. *Accounting, Organizations and Society*, 28(2–3), 127–168. [https://doi.org/10.1016/S0361-3682\(01\)00027-7](https://doi.org/10.1016/S0361-3682(01)00027-7)
- Demartini, M. C., & Otley, D. (2019). Beyond the system vs. package dualism in Performance Management Systems design: A loose coupling approach. *Accounting, Organizations and Society*, xxx, 101072. <https://doi.org/10.1016/j.aos.2019.101072>
- Dessalegn, H. (2016). *Prime Minister Hailemariam Dessalegn Comment on METEC*.
- Elder-Vass, D. (2010). *The Causal Power of Social Structures : Emergence , Structure and Agency*. Cambridge University Press.
- Ezzamel, M. (2009). Order and accounting as a performative ritual: Evidence from ancient Egypt. *Accounting, Organizations and Society*, 34(3–4), 348–380. <https://doi.org/10.1016/j.aos.2008.07.004>
- Ferreira, A., & Otley, D. (2009). The design and use of performance management systems: An extended framework for analysis. *Management Accounting Research*, 20(4), 263–282. <https://doi.org/10.1016/j.mar.2009.07.003>
- Free, C. (2008). Walking the talk? Supply chain accounting and trust among UK supermarkets and suppliers. *Accounting, Organizations and Society*, 33(6), 629–662. <https://doi.org/10.1016/j.aos.2007.09.001>

- Fryer, T. (2022). A critical realist approach to thematic analysis: producing causal explanations. *Journal of Critical Realism*, 1(20).
<https://doi.org/10.1080/14767430.2022.2076776>
- Gebregziabher, T. N. (2019). Soldiers in business: the pitfalls of METEC's projects in the context of Ethiopia's civil-military relations. *Review of African Political Economy*, 46(160), 261-278.
<https://doi.org/10.1080/03056244.2019.1613222>
- Goddard, A. (2002). Development of the accounting profession and practices in the public sector – a hegemonic analysis. In *Accounting, Auditing & Accountability Journal* (Vol. 15, Issue 5).
<https://doi.org/10.1108/09513570210448957>
- Gooneratne, T. N., & Hoque, Z. (2016). Institutions, agency and the institutionalization of budgetary control in a hybrid state-owned entity. *Critical Perspectives on Accounting*, 36, 58-70.
<https://doi.org/10.1016/j.cpa.2015.12.003>
- Grabner, I., & Moers, F. (2013). Management control as a system or a package? Conceptual and empirical issues. *Accounting, Organizations and Society*, 38(6-7), 407-419.
<https://doi.org/10.1016/j.aos.2013.09.002>
- Hiebl, M. R. W. (2014). Upper echelons theory in management accounting and control research. *Journal of Management Control*, 24, 223-240.
<https://doi.org/10.1007/s00187-013-0183-1>
- Hiebl, M. R. W. (2018). Management accounting as a political resource for enabling embedded agency. *Management Accounting Research*, 38(xxxx), 22-38. <https://doi.org/10.1016/j.mar.2017.03.003>
- Hopper, T., Tsamenyi, M., Uddin, S., & Wickramasinghe, D. (2009). Management accounting in less developed countries: What is known and needs knowing. *Accounting, Auditing and Accountability Journal*, 22(3), 469-514.
<https://doi.org/10.1108/09513570910945697>
- Järvinen, J. T. (2016). Role of management accounting in applying new institutional logics. A comparative case study in the non-profit sector. *Accounting, Auditing & Accountability Journal*, 29(5), 861-886.
- Lasyoud, A. A., Haslam, J., & Roslender, R. (2018). Management accounting change in developing countries: evidence from Libya. *Asian Review of Accounting*, 26(3), 278-313.
<https://doi.org/10.1108/ARA-03-2017-0057>
- Leca, B., & Naccache, P. (2006). A critical realist approach to institutional entrepreneurship. *Organization*, 13(5), 627-651.
<https://doi.org/10.1177/1350508406067007>
- Li, X., & Soobaroyen, T. (2020). Accounting, Ideological and Political Work and Chinese multinational operations: A neo-Gramscian perspective. *Critical Perspectives on Accounting*, 102160.
<https://doi.org/10.1016/j.cpa.2020.102160>
- Mihret, A. G., Laxmikantham, P., & Gualu, A. K. (2022). Management Control Systems and Strategy : Trends , Gaps and Opportunities for Future Research. *Journal of Business and Administrative Studies*, 14(1), 77-102.
- Modell, S. (2009). In defence of triangulation : A critical realist approach to mixed methods research in management accounting. 20, 208-221.
<https://doi.org/10.1016/j.mar.2009.04.001>
- Mukumbang, F. C. (2021). Retroductive Theorizing: A Contribution of Critical Realism to Mixed Methods Research. *Journal of Mixed Methods Research*, 0(0), 1-22.
<https://doi.org/10.1177/15586898211049847>
- Otley, D. (1999). Performance management : a framework for management control systems research. *Management Accounting Research*, 10(4), 363-382.
- Perray-Redslob, L., & Morales, J. (2022). Resisting accounting in the name of discipline. *Accounting, Auditing and Accountability Journal*.
<https://doi.org/10.1108/AAAJ-01-2021-5092>
- Revellino, S., & Mouritsen, J. (2015). Accounting as an engine: The performativity of calculative practices and the dynamics of innovation. *Management Accounting Research*, 28, 31-49.
<https://doi.org/10.1016/j.mar.2015.04.005>
- Richardson, A. J. (1987). Accounting as a legitimating institution. *Accounting, Organizations and Society*, 12(4), 341-355. [https://doi.org/10.1016/0361-3682\(87\)90023-7](https://doi.org/10.1016/0361-3682(87)90023-7)
- Sayer, A. (1992). *Methods in Social Science: A realist Approach* (2nd ed.). London and New York, NY: Routledge.
- Sitkin, S. B., Long, C. P., & Cardinal, L. B. (2020). Assessing the Control Literature : Looking Back and Looking Forward. *Annual Review Of Organizational Psychology and Organizational Behavior*, 7, 339-68.
- Stergiou, K., Ashraf, J., & Uddin, S. (2013). The role of structure and agency in management accounting control change of a family owned firm: A Greek case study. *Critical Perspectives on Accounting*, 24(1), 62-73.
<https://doi.org/10.1016/j.cpa.2012.09.007>
- Sutheewasinnon, P., Hoque, Z., & Ochoki, R. (2016). Development of a performance management system in the Thailand public sector: Isomorphism and the role and strategies of institutional entrepreneurs. *Critical Perspectives on Accounting*, 40, 26-44.
<https://doi.org/10.1016/j.cpa.2015.06.002>
- van Helden, J., & Uddin, S. (2016). Public sector management accounting in emerging economies: A literature review. *Critical Perspectives on Accounting*, 41, 34-62.
<https://doi.org/10.1016/j.cpa.2016.01.001>
- Vincent, S., & Wapshott, R. (2014). *Critical Realism and*

the Organizational Case Study : A Guide to Discovering Institutional Mechanisms . Studying Organizations Using Critical Realism : A Practical Guide .

- Vosselman, E., & Meer-Kooistra, J. van der. (2009). Accounting for control and trust building in interfirm transactional relationships. *Accounting, Organizations and Society*, 34(2), 267–283. <https://doi.org/10.1016/j.aos.2008.04.002>
- Wiltshire, G., & Ronkainen, N. (2021). A realist approach to thematic analysis: making sense of qualitative data through experiential, inferential and dispositional themes. *Journal of Critical Realism*, 20(2), 159–180. <https://doi.org/10.1080/14767430.2021.1894909>
- Wynn, D. jr, & Williams, C. K. (2012). Principles for Conducting Critical Realist Case Study Research in Information Systems. *MIS Quarterly*, 36(3), 789–810.