



SCHOOL OF ECONOMICS AND MANAGEMENT

Impact of Performance Measurement System on Employees' Motivation and Work Effort in Organizations Offering Non-Incentivized Compensation Scheme: The Case of Banking Sector

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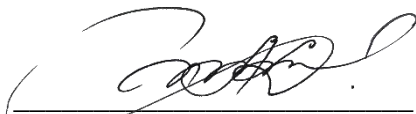
Abstract

- Title:** Impact of Performance Measurement System on Employees' Motivation and Work Effort in Organizations Offering Non-Incentivized Compensation Scheme: The Case of Banking Sector
- Word count** 13 188 words
- Authors:** Alivija Kovalova & Alina Romanyceva
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- Course:** BUSN79: Degree Project in Accounting and Finance, 15 ECTS
- Final seminar:** 1st of June, 2023
- Purpose:** The study has two purposes: in the setup of heavily regulated industry (banking) and non-incentivized compensation scheme, (1) to investigate separately bankers' enabling and coercive perceptions of PMS and how they contribute to motivation and work effort; and (2) to explore to what extent the combination of enabling and coercive perceptions of PMS influences motivation and work effort.
- Methodology:** The study was based on the online questionnaire, which was distributed using convenience and snowball sampling techniques (N=105). The survey results were further analyzed using the PCA, correlation matrix, and OLS regression in the SPSS software.
- Theoretical framework:** The psychology theories suggest that the relationship between management control and personnel performance is mediated by psychological constructs, such as motivation (Birnberg, Luft & Shields, 2006). In the subject research, PMS was studied on the basis of Adler and Borys' (1996) framework of enabling and coercive controls, while self-determination theory was applied to investigate what type of motivation (autonomous or controlled) mediates the link between PMS and work effort.
- Results & Conclusion:** In opposition to the theoretical perspective, coercive perceptions of PMS were found to affect bankers' work effort positively and directly, and controlled motivation does not mediate the subject relationship. Neither direct nor indirect link (via autonomous motivation) exists between enabling perceptions of PMS and work effort; though, the perceptions of PMS as enabling have direct positive impact on bankers' autonomous motivation. Finally, the study discovered that enabling and coercive PMS features must be conceptualized as interdependent rather than opposite sites, as it was revealed that simultaneous perceptions of PMS as both enabling and coercive do not lead to higher effort in comparison to the separate perceptions.
- Keywords:** PMS; Enabling and Coercive Control; Autonomous and Controlled Motivation; Work effort; Banking sector

Acknowledgements

We would like to express our sincerest gratitude to our supervisor Johan Dergård for his insightful feedback, active involvement and interest in our thesis throughout the degree project course. We are also grateful for all survey participants, who found time to voluntarily support our research by filling in the questionnaire and sharing it with their colleagues. What is more, we would like to thank Alumni Association of Stockholm School of Economics in Riga for helping us with the survey distribution.

Lund, Sweden
25th of May, 2023



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List of Abbreviations

CEO	Chief Executive Officer
PMS	Performance Measurement System
KPI	Key Performance Indicator
R&D	Research and Development
MCS	Management Control System
BSC	Balanced Scorecard
SDT	Self-Determination Theory
KYC	Know Your Customer
PCA	Principal Component Analysis
OLS	Ordinary Least Squares

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1. Introduction

The CEO of Ericsson Börje Ekholm once said: “Companies are only as good as their people” (Ericsson, 2021, p.3), which suggests that organizational performance primarily depends on behavior and actions of its employees. Consequently, while establishing management controls such as performance measurement system (PMS) that is aimed to direct personnel actions towards reaching organizational goals, it is essential to design it carefully to avoid undesirable consequences such as employees feeling depressed or burned-out, which will further lead to counterproductive behavior that could be detrimental for companies’ success. Therefore, it is relevant to investigate the influence of design of PMSs on personnel motivation and effort levels. The researchers who investigated the subject field argued that it is a more valuable approach of evaluating the control effectiveness, as employees’ behavior is the key determinant of organizational performance, while the drivers behind the behavior are their perceptions/mental representations about the working environment (Mahama & Cheng, 2013). As management controls such as PMS are parts of the working environment, employees’ perceptions about them will play a noticeable role in explaining their behavioral outcomes from interacting with the controls (Mahama & Cheng, 2013). In addition, nowadays companies experience shortage of talent and issues with retention of high-skilled professionals, which implies that performance management approaches are required to change (Capelli & Tavis, 2016) and, thus, more research regarding what kind of PMSs work better in certain contexts is required. For instance, referring to Capelli and Tavis (2016), there is a need to downsize accountability mechanisms and refocus on promotion of employees’ development. However, is this proposal beneficial independently of context? To get some valuable conclusions from the underlying study, it was decided to investigate PMS impact on motivation and work effort in a thought-provoking context, namely, a heavily regulated industry – banking – where non-incentivized compensation scheme (i.e., employees do not receive monetary bonuses tight to fulfillment of KPIs) is quite a common setup.

In the underlying research PMS will be studied on the basis of the enabling and coercive control framework initially introduced by Adler and Borys in 1996, who intended “to explain how perceptions and attitudes towards control are shaped by looking at the design aspect of the control” (Ekström, 2018, p.26). As the brief introduction of the concepts, coercive control takes its route from the idea that employees are the sources of potential problems, and thus, it is required to constrain their opportunistic behavior via decent control mechanisms (Adler & Borys, 1996). Enabling control, in turn, is grounded on an opposite premise that employees are

key organizational assets that possess relevant knowledge which organization should make use of by providing employees a discretion to address inevitable work-related issues by themselves (Ahrens & Chapman, 2004). It is worth noticing that the framework is quite under-researched in comparison to, for example, Simons' levers of control, and it was studied in a limited number of contexts – most extensively represented contexts are manufacturing companies, followed by R&D departments, public hospitals, a restaurant chain, and a law firm (Ekström, 2018).

The first proposition to explore enabling and coercive controls in the banking industry was brought within the doctoral dissertation of Ekström (2018); however, her research is qualitative, more of the descriptive nature. She argued that banking offers quite compelling context for research, as a bank implies a setup where coexistence of both coercive and enabling controls is present: on the one side, the bank is forced to comply with the strict regulations set by local and European level authorities; while on the other side, the bank is primarily a service provider which offers financing for both private and legal customers. This implies that bankers execute their jobs under pressure imposed from two ambivalent sides – clients and external control functions.

If one considers quantitative studies in a field, it is worth noticing that the previous academics neglected coercive control in their empirical models, testing only the link between comprehensive or enabling PMS, motivation, and personnel performance (Hall, 2008; Yuliansyah & Khan, 2015; Souza & Beuren, 2018; Van der Hauwaert et al. 2022), motivating this by the fact that the definition of coercive control by default predicts its negative relationship with the performance/effort. Notwithstanding, some authors, for example, Jørgensen and Messner (2009) argued that enabling controls besides their positive outcomes might possess some risks, as provision of extensive transparency and discretion for employees might lead to the situations when employees misuse given discretion for the sake of their own benefits.

To address identified research gaps, the aim of the subject study is to conduct quantitative research – survey among bankers to measure their perceptions of PMS, whether they are coercive and/or enabling; and as the next step relate these perceptions with their motivation and effort levels. The survey participants were mainly from Latvia (76%), as one of the subject paper's authors has a noticeable working experience in the Latvian banking sector; however, the rest of the sample was mainly represented by bankers from Scandinavia and other Baltic countries. It is worth noticing that the same banking groups dominate these markets such as

Swedbank, SEB, Nordea, and DnB (in the Baltics, Nordea and DnB merged and spined-off as Luminor in 2017). Furthermore, the research context is advanced by the presence of only base salary setup – which is the area to the subject paper authors’ knowledge quite overlooked by the previous researchers; nonetheless, Kuvaas et al. (2017) mentioned that the association between base pay and motivation is a potential fruitful area for further research. Unsurprisingly, the former researchers primarily focused on monetary rewards’ effects on workers’ satisfaction and effort levels. For instance, Landry and Whillans (2018) proved empirically that rewards satisfaction result in better employees’ functioning independently of cultural characteristics.

Summarizing the aforesaid, the subject study has two research purposes. In a setup of heavily regulated industry (banking) and non-incentivized compensation scheme, at first, to investigate separately bankers’ enabling and coercive perceptions of PMS and how they contribute to motivation and work effort; second, to explore to what extent the combination of enabling and coercive perceptions of PMS influences motivation and work effort.

Having not excluded coercive perceptions of PMS from the research model, we discovered that they exert direct and positive impact on bankers’ work effort despite the opposite predictions from the theory perspective. Enabling perceptions of PMS have neither direct nor indirect influence on work effort, though they positively impact bankers’ autonomous motivation. Moreover, it was found that when bankers simultaneously perceive PMS as both enabling and coercive, this does not lead to higher work effort in comparison to the separate perceptions, which suggests that enabling and coercive perceptions of PMS work independently. The subject thesis’ findings, therefore, primarily contribute to practical knowledge regarding the effects of coercive PMS and coexistence of both enabling and coercive characteristics within the same control.

The remainder of the thesis has the following structure. Section 2 describes the theoretical framework, while in Section 3 we proceed with hypotheses development, depicting the research model at the end. Section 4 presents the applied methodology, and Section 5 – empirical findings. Further, in Section 6 we debate on implications of our results, while Section 7 concludes, discusses contributions and limitations of the study, as well as proposes directions for further research.

2. Theoretical framework

2.1 PMS

PMS is one of the control mechanisms under management control system (MCS), implying a set of tools and procedures that help employees and management to measure and analyze performance on individual, team, and organizational level (Ferreira & Otley, 2009). PMS consists of informational elements – the ways how organization communicates its strategies and goals to its employees, making its vision and mission to unfold and penetrate throughout all hierarchical levels; feedback that employees receive regarding their performance from direct managers or other various stakeholders; feedforward which aims to improve working processes before occurrence of foreseen issues; rewards systems, and specific measures of performance – key performance indicators (KPIs) (Ferreira & Otley, 2009). Bititci et al. (2012) used a term performance measurement which implied a combination of three disciplines: management account, operations, and strategic control perspectives, that is used to influence individuals' effort, satisfaction and performance level by their activity monitoring and assessment, via stimulating their motivation (Bititci et al. 2012). Contemporary performance measurement systems tend to offer a holistic approach, linking a combination of financial and non-financial measures to organizational strategy (Franco-Santos, Lucianetti & Bourne, 2012). The most frequently used example of such systems is a balanced scorecard (BSC), which integrates four areas focused on financial, customer, internal process, learning and growth perspectives (Franco-Santos, Lucianetti & Bourne, 2012). BSC stands out by establishing cause-effect links between its components via strategy or mental maps. Other examples are Simons' levers of control and performance prism (Franco-Santos, Lucianetti & Bourne, 2012). Such systems enable the whole organizational strategy implementation and could be designed either in an enabling or coercive way (Souza & Beuren, 2018).

2.2 Enabling control

Adler and Borys (1996) proposed two types of formalization: coercive and enabling functions of control. Enabling controls are created to organize management processes in a way that promotes employees' individual autonomy and lets them master their task routines. Its four main characteristics – repair, internal and global transparency, and flexibility – are the key indicators of the procedures' implementation and features being considered as an enabling control (Adler & Borys, 1996). Repair characteristic ensures that in the case of a system's breakdown, workers are enabled to avoid work interruption and have autonomy to repair the

process. The example of the repair feature could be a visibility of performance management elements to workers, ensuring their capability to understand and improve it. Internal transparency stands for the ability to understand the logic beyond the system and access to its working status, which guarantee that in the case of an unexpected error, employees have intelligible instructions and opportunity to edit the process and fix the error. In contrast, global transparency is the accessibility to the information about the whole process cycle. For example, budgeting, as a management control tool, could be integrated with operational activities in a layered way, for example, by granting employees in a division with an access to lookup tables with their department's expected values to adapt internal transparency; or providing employees from other departments with key targets of other units, and in this way implementing global transparency (Ahrens & Chapman, 2004). Fourth enabling control element – flexibility – is the autonomy given to employees to modify a process or a system in order to improve it (Adler & Borys, 1996).

2.3 Coercive control

In contrast to enabling control, coercive control is based on the assumption that employees are potential sources of problems, and therefore is focused on the formal procedures' design, whose aim is to force compliance and evoke effort (Adler & Borys, 1996). What is more, coercive control logic assumes that deviations from the prescribed procedures are suspicious and must not be tolerated. Nevertheless, coercive controls tend to lead to deskilling process, as in the case of the process shut down, employees are expected to follow the strict guidelines, rather than apply their professional skills to solve the problem in the most effective and efficient way that is possible (Adler & Borys, 1996).

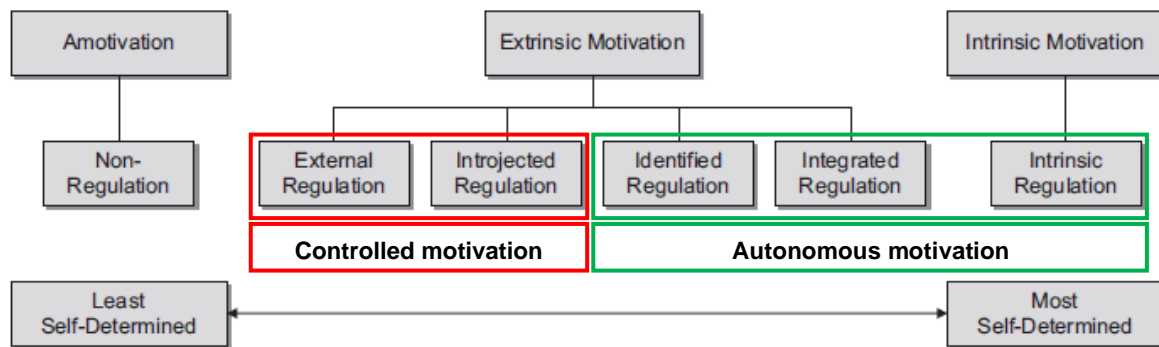
2.4 Self-determination theory

In the last 10 years it has become popular to discover whether it is possible to motivate people not only by financial rewards, but by other types of non-monetary incentives which are designed to increase work-engagement, and as a result, worker's productivity (Kuvaas et al. 2017). Initially, the researchers contended that there is a distinction between intrinsic and extrinsic motivation. Intrinsic motivation implies a will to perform a task to experience the satisfaction and a pleasure of the execution, while extrinsic motivation entails a desire to execute a task either to gain extra compensations or due to the willingness to avoid undesirable consequences, such as punishments (Kuvaas et al. 2017). What is more, non-interesting, repetitive activities usually require rewards to boost extrinsic motivation (Kuvaas et al. 2017).

Based on these definitions, extrinsic motivation started to be considered as something ‘bad’ by default, while intrinsic motivation - as a ‘good’ one.

However, later self-determination theory (SDT) proposed that extrinsic motivation is not always negative, there could be different outcomes from extrinsic rewards on intrinsic motivation: it could have no impact on it, slight, or large effect on intrinsic motivation (Deci, Olafsen, Ryan, 2017). Therefore, SDT divided extrinsic motivation into subcategories depending on the “degrees to which the value and regulation of the requested behavior have been internalized and integrated” (Ryan & Deci, 2000, p.71). Internalization is an extent to which individuals “take in” an external regulation, while integration is a “transformation of regulation” into an individual’s own (Ryan & Deci, 2000, p.71).

Figure 1. The types of motivation and regulation within SDT, along with their placement along the continuum of relative self-determination (Deci & Ryan, 2008, p.17).



Furthermore, according to Ryan and Deci’ (2000) framework, there are two types of behavior: nonself-determined and self-determined. Amotivation refers to a nonself-determined type of behavior that occurs when an individual is not feeling competent to execute a task, is not interested in the task, or is not expecting to reach a desirable result (Ryan & Deci, 2000). In contrast, intrinsic motivation is the opposite term referring to spontaneous interest, enjoyment of activity or even mastery and is a self-determined, autonomous behavior (Ryan & Deci, 2000). However, it will only flourish in the conditions that support the expression of intrinsic motivation; moreover, external factors and non-supportive conditions tend to disrupt it. Extrinsically motivated behavior is presented to vary in accordance to the level of its regulation; such as, external regulation is affected by the contingency of reward or external demand; introjected regulation is a type of regulation that is taken in but not fully accepted by an individual and as a result, action is committed to avoid sense of guilt or pride (Ryan & Deci, 2000). Both, external regulation and introjected regulation are referred to controlled extrinsic motivation, and could be results of coercive PMS, which provides employees with external

regulations that might not be internalized and could be followed to satisfy an external demand. Introjected regulations are partly internalized by individuals, but are still associated with intrapersonal control. It is more difficult for employees who experience it to cope with failures and anxiety (Ryan & Deci, 2000). Two other, more self-determined or autonomous types of extrinsic motivation are: identified regulation, when an action is perceived to be personally important, and the regulation is valued; and integrated or fully assimilated regulation which is aligned with individuals' needs or values (Ryan & Deci, 2000). As individuals assimilate regulation to a higher extent, it increases the sense of autonomy of their actions, which is one of the elements of SDT (Ryan & Deci, 2000).

Moreover, SDT is also focused on the satisfaction of three basic psychological needs, such as competence, relatedness and autonomy, as it is the basis of predictions whether intrinsic or extrinsic motivation will be facilitated (Ryan & Deci, 2000). Different studies found that extrinsic motivation's integration and internalization is enhanced by the above-mentioned needs, while autonomy has the most significant impact on the integration (Gagné & Deci, 2005). The examples of how basic needs could be satisfied in a workplace are: to increase intrinsic motivation employers provide feedback, promoting a job autonomy; training aimed to increase level of employees' competence; and team-building events which stimulate workers' sense of relatedness (Kuvaas et al. 2017). If all three psychological needs are satisfied, according to SDT, it is believed to increase employees' autonomous motivation and improve their performance (Ryan & Deci, 2000).

2.5 Work effort

Work effort is a combination of beneficial to the organization behavior, both voluntary and required by the formal job duties. Kanfer (1990) proposed that there are three critical components of work effort: employee work intensity, persistence, or how long an employee works and what task he/she does (direction). What is more, effort could be assessed in several ways: in terms of objective outcomes, e.g., number of working hours, number of calls made, etc., or subjective measures such as customer reviews and supervisor ratings. Third type of assessment is a self-rating scale used in questionnaires, measuring employees' perceived level of effort that they are willing to exert (De Cooman et al. 2009).

3. Hypotheses development

3.1 The mediating effect of motivation on the relationship between enabling/coercive perceptions of PMS and work effort

Birnberg, Luft and Shields (2006, p.113) contended that the relationship between management controls and personnel performance could be explored with the help of cognitive, motivation, and social psychology theories that, in general, suggest that humans' "behavior depends on individuals' mental representations", which might significantly differ from real objective circumstances. In detail, the psychology theories distinguish between motivational and informational effects from management controls (Birnberg, Luft & Shields, 2006). Motivational effects, at first, imply that a person's effort level that he/she is willing to execute for a task rests on his/her comparison of a potential outcome with a reference point established by its perceptions of the task (Birnberg, Luft & Shields, 2006). In case of PMS, it could be exemplified that an employee is willing to execute lower effort when he/she perceives KPI as hardly achievable. Second, motivational effects also lie in a person's aspiration to experience consistency among his/her mental representations (Birnberg, Luft & Shields, 2006). For example, for a set KPI to lead to better employee's performance, its level should be in line with this person's "positive mental representation of [his/her] choice and perhaps of [himself/herself]" (Birnberg, Luft & Shields, 2006, p.131). Considering informational effects, management controls (such PMS, budgeting) could affect the manner how individuals perceive and process the information which is brought to light by a system (Birnberg, Luft & Shields, 2006). For instance, BSC or mental map are two types of PMS, however, even if grounded on the same raw data, they will differ in how they represent information, what aspects they highlight as central, and this, in turn, will further impact users' attention allocation and decision-making process. Furthermore, the magnitude of the informational effect will depend on a person's previous experience and knowledge, as well as characteristics and context of an assignment (Birnberg, Luft & Shields, 2006).

The aforesaid explains why most of the previous researchers explored the link between management control and personnel performance by (1) operationalizing the control via humans' perceptions of it, as well as (2) hypothesized that the subject relationship is mediated by psychological constructs such as motivation (autonomous/controlled), or psychological empowerment – a type of intrinsic motivation. In fact, Hall (2008), Yuliansyah and Khan (2015), and Souza & Beuren (2018), who tested the existence of a direct link between comprehensive or enabling PMS and personnel performance, proved empirically that no direct

link exists between the constructs, however, the subject relationship is mediated by psychological empowerment.

It is interesting to note that there was an attempt to find alternative explanations for the impact of MCS on individuals' behavior via construal level theory, according to which enabling control should lead to more positive employees' behaviors, as it is associated with more abstract mental representations, in which individuals' attention is directed to more global issues and possibilities, thus, broadening their mental horizons; while coercive control – with more concrete ones, resulting in employees focusing on a system's constraining details towards reaching a target (Santos & Beuren, 2022). However, Santos and Beuren (2022) concluded that mental representations as the mediator provide only partial explanation for the relationship, having indicated that contextual and motivational factors might lead to better justifications.

The subsequent sections are devoted to deeper argumentation why enabling perception of PMS should be associated with autonomous motivation, while coercive perception of PMS – with controlled motivation; and what effects autonomous and controlled motivations exert on work effort.

3.2 The relationship between enabling perceptions of PMS, autonomous motivation and work effort

There should exist a positive relationship between enabling perceptions of control and autonomous motivation, as features of enabling control could be associated with the reasons why individuals experience the feeling of being autonomously motivated at work. For example, enabling control implies that employees are provided with some discretion to address issues or react to possibilities, and repair inefficient internal processes without involvement of senior/top management when such situations arise (Ahrens & Chapman, 2004). When the discretion is allowed by the control, employees could interfere and feel that they are considered competent in the eyes of senior managers and are also granted a desired autonomy. This, based on SDT, enhances their autonomous motivation, as their main psychological needs – autonomy and competence – are met. Moreover, enabling control implies that employees are trusted by their managers (Ahrens & Chapman, 2004). There is an impressive example – Svenska Handelsbanken, when provision of trust helped to turnaround a distressed bank, having saved it from bankruptcy. In 1970, while being opposed to noticeable issues, the newly appointed CEO Jan Wallander suspended bank budgeting and handed over most of the lending decisions to operational level employees. Wallander's main argument in favor of such a move was that

“trust promotes initiative and trustworthiness” (Ellingsen & Johannesson, 2007, p.140). The strategy in fact turned out to be successful and Handelsbanken has remained one of the major industry players up until today.

Most of the precedent studies investigated the link between enabling PMS/control and psychological empowerment, a construct closely related to autonomous motivation, implying a person’s perception whether he/she is capable of changing aspects of his/her work role (Spreitzer, 1995). For example, Ekström (2018) conducted in-depth research in a Swedish bank with the aim to explore what is perceived as enabling and coercive in the bank’s MCS by branch managers, and how these perceptions contribute to employees’ feeling of being empowered. In relation to the PMS, Ekström (2008) identified that internal transparency and repair features are present in this control. In the underlying context, internal transparency entails that employees understand the definition of performance measures, as well as the reasons why certain measures are included in their domain (Jordan & Messner, 2012; Adler & Borys, 1996). As per Ekström (2018), this enabling control feature contributed to employees’ feeling of self-determination, providing them with a sort of autonomy in their actions, as easily comprehensible KPIs yielded relevant information based on which branch managers could take informed decisions and act in line with the bank’s strategy. Gagné and Deci (2015) also stated that if the social context is supporting autonomy, people’s autonomous (namely, identified and integrated) motivation level for the domain increases. Repair feature, in turn, was identified in the fact that there was the same set of KPIs for all branches; however, if a branch manager felt that they are not enough to fully grasp the aspects driving a branch’s results, he/she was allowed to complement existing KPIs (Ekström, 2018). Such a possibility conveys that top management considers their employees skilled enough to modify ineffective processes by themselves, and this, in turn, enhances branch managers’ feeling of competence (Ekström, 2018).

It is important to note that there are quantitative studies in the field that reinforced Ekström’s (2018) conclusions statistically. Hall (2008), Yuliansyah and Khan (2015), Souza and Beuren (2018) all proved existence of positive relationship between PMS with enabling features and psychological empowerment despite a hierarchical level within organizations that was chosen for analysis (managers- or operational employees-level), and focal industry (manufacturing industry in Australia, banking sector in Indonesia, on shared service center in Brazil, respectively). They argued that PMS that is successful in communicating a company’s goals/strategy (global transparency) and providing clarity on how internal processes function (internal transparency) strengthens employees’ intrinsic motivation due to the following. First,

information regarding progress on KPIs from such PMS boosts personnel's competence - they see that they can make a noticeable impact. Second, such PMS also reveals what the direction for further actions is. This, in turn, reinforces their self-determination.

The most recent research in the field – Van der Hauwaert et al. (2022) – was the first one which proposed to substitute psychological empowerment with autonomous motivation. The authors based their research model on SDT theory, having also included three basic psychological needs as antecedents of autonomous motivation. They argued that enabling PMS satisfies the need of autonomy, as it offers a 'meaningful rationale' why certain actions and behaviors are expected from employees. The rationale contributes to internalization of work requirements by the employees, thus, making them autonomously motivated. As enabling PMS does not force personnel to execute tasks but calls for action through competent-relevant feedback, offering flexibility in actions, it reinforces the sense of competence (Van der Hauwaert et al. 2022). The authors' arguments were supported empirically. Finally, they also suggested that global transparency, as it promotes communication throughout a company, should lead to satisfying employees' need for relatedness; however, the existence of this link was not proved statistically.

Despite the substantial evidence that ensures that there should be positive outcomes from enabling PMS, it is worth mentioning that two studies were found - Jørgensen and Messner (2009), Jordan and Messner (2012) - which highlighted the negative effects that might arise from enabling control. Jørgensen and Messner (2009) studied the company in strategic change, and accurately proposed that in such a case enabling control represented in 'incremental repair efforts' might be inefficient and costly as strategic change requires radical modifications of controls/systems. In addition, Jordan and Messner (2012) concluded that transparency in relation to set KPIs might expose measures to scrutiny from personnel's side. Employees might notice some incompleteness in KPIs and start challenging them, as while being incomplete, measures might not adequately reflect their performance. Furthermore, in case of contradicting situations, when KPIs are also utilized with the purpose to decide what further steps are required to reach desired improvements, incompleteness might also lead to problems with coordination of actions (Jordan & Messner, 2012). However, as there is an evident consensus among the precedent researchers that enabling features of PMS enhance autonomous motivation, we propose that:

H1a: There is a direct positive relationship between bankers' perception of PMS as enabling and their autonomous motivation.

Regarding the impact of autonomous motivation on work effort, Deci, Olafsen and Ryan (2017) contended that as autonomous motivation entails that (1) a person executes a task because value from the task has been brought into harmony with the person's own values, and (2) the person experiences feeling that he/she has been given choice and his/her volition has been considered when the task has been assigned, SDT predicts that autonomous motivation will lead to improved person's well-being, better quality of performance, and higher persistence and patience. Moreover, the authors also contended that autonomous motivation results in personnel being more inclined to learn and adjust their behavior to required one, as under working environment which facilitates autonomous motivation employees fully comprehend the purpose of their jobs, perceive themselves as being in charge of jobs' outcomes, as well as get relevant feedback and assistance.

Deci, Olafsen and Ryan (2017) summarized precedent research grounded on SDT and determined that there is a substantial empirical evidence and agreement among different type of studies that SDT's predictions are true: autonomous motivation results in less incidents of nervous breakdowns or exhaustion at workplace and is associated with lower employee turnover rate. In addition, it also leads to greater employee engagement, higher job satisfaction and work effort levels. It is interesting to note that the above-mentioned remains relevant independently of cultural context. This was explained by the fact that basic psychological needs are universal for all nationalities (Ren, Zhang & Wei, 2021).

Some studies attracted our particular interest. For instance, Baard et al. (2004) examined employees' motivational outcomes in two banks of New York, having found that the more bankers perceive their managers and work environment as autonomy supportive, the higher levels of satisfaction they report for basic psychological needs, which, in turn, lead to better employees' performance. Another relevant study is Kuvaas et al. (2016) which investigated the connection between autonomous/controlled motivation and work effort under different pay setups – (1) when a firm pays only base salary, (2) when a firm offers annual or quarterly pay-for-performance. The authors contended that as autonomous motivation is facilitated under conditions when an employer recognizes and appreciates workers' previous experience, education, and skills, it should lead to increase in work effort. Base pay in fact is used as a tool to communicate the level of this recognition. Kuvaas et al. (2016) managed to find empirical

support for these arguments. In addition, the authors discovered that autonomous motivation is negatively related to employees' turnover intentions. To sum up, there is a strong agreement between the researchers that SDT is accurate in predicting work effort, and autonomous motivation is the one that leads to better outcomes; therefore, we predict that:

H1b. There is a direct positive relationship between autonomous motivation and bankers' work effort.

Taking into consideration (1) the arguments presented in the Section 3.1 that, according to the psychology theories, perceptions of management control affect employees' work effort through motivation rather than directly; and (2) joint predictions of Hypotheses 1a and 1b, it is proposed that:

H1c. There is an indirect positive relationship between bankers' perception of PMS as enabling and their work effort, through autonomous motivation.

H1d. There is no direct relationship between bankers' perception of PMS as enabling and their work effort.

3.3 The relationship between coercive perceptions of PMS, controlled motivation and work effort

Referring to Ahrens and Chapman (2004), coercive control implies traditional top-down control method that accentuates necessity to closely monitor its employees to limit their opportunistic behavior. In addition, based on its definition, it could be devised that coercive control does not value individuals' skills, talents, knowledge; its aim is simply to get the strategy devised from top management fulfilled. If exemplified on PMS, coercive design might entail that employees are made accountable for not meeting KPIs without digging into details and reasons what the causes of not achieving targets were. Therefore, when confronted with such coercive control, there is a high probability that employees will not internalize the value of a task, feeling that they are executing an assignment because they are forced by their employer: taking an action due to presence of external pressure implies experiencing controlled motivation, namely, external regulation (Ryan & Deci, 2000).

Among researchers who investigated attitudinal outcomes originated from coercive control, there is a common agreement that coercive control is associated with a lack of trust, conflict situations, and defensive behavior (Ahrens & Chapman, 2004; Free, 2007). For example, Ahrens and Chapman (2004), who studied management control practices in a restaurant chain,

contended that the elements of coercive controls were represented in the worries of head-office managers about the lack of central standards throughout separate restaurants, and therefore, willingness to make the control tighter, forcing employees to comply. They were particularly concerned that, in their view, there are obvious inefficiencies in the reporting system that open a room for data manipulation for restaurant managers. However, the researchers managed to find evidence that some worries were totally ungrounded and imaginative. Moreover, such a mistrust from the head office also led to restaurant managers questioning the reliability of the reporting system but from another perspective; for instance, that there are intentional errors from the head office's side which result in poorer margins, and consequently, incorrectly reflect performance of restaurant managers. As a result of the aforesaid, restaurant managers described that they feel as "glove puppets" – their experience and knowledge of customer needs seemed totally useless for the head office, as top managers just were willing to make them follow prescribed rules. This example makes it visible that in such a situation it is impossible to satisfy basic psychological needs (competence, autonomy). Moreover, under such circumstances individuals' deskilling could occur (Ekström, 2018) which further ruins feeling of competence. Therefore, it could be concluded that when confronted with coercive control, employees take actions under controlled motivation.

It is interesting to note that written rules describing working processes, procedures, or standards like the ones that the top management was willing to impose in the example above (i.e., coercive controls), are not always associated with negative outcomes. For example, Rousseau (1978) found that such rules/procedures have a positive impact on lowering employees' willingness to leave and psychological stress; however, the negative effect still seemed to be higher as it was represented in reduced job satisfaction level and lower innovativeness. In addition, Ellingsen and Johannesson (2007, p.142) also stated that employees might value some type of attention from higher-level managers, but only if it is not "intrusive or exploitative". Therefore, the aforesaid further reinforces that coercive control has closer relations with controlled motivation.

Considering other research, Free (2007) investigated design and use of enabling and coercive controls in an interorganizational setting, namely, the relationship between retailers and suppliers in the UK supermarkets. The author found that coercive control was illustrated in the dominance of one counterparty – in his case it was the buyer/retailer which imposed rigid outcome controls on suppliers, such as formal evaluations. In addition, coercive control was represented in the lack of informal type, face-to-face communication between counterparties.

When there is no personal interaction in partnership, no emotional bond can be created between people. It could be argued that in such a case suppliers acted under controlled motivation (introjected regulation), because the controls set by the buyer might have been accepted solely to avoid negative consequences, such as being withdrawn from the list of potential partners or getting fines. To strengthen this argument, Ryan & Deci (2000) statement could be brought up that pressured evaluations, unreachable targets, and even deadlines are associated with diminishing intrinsic motivation. Moreover, inability to grasp the rationale behind controls is also related to controlled motivation (Ryan & Deci, 2000). Suppliers most probably work with many other buyers under more relaxed terms, and therefore, they might question why in this case terms could not be simplified.

Examples of coercive controls identified by Ekström (2018) in the bank, such as regulations, ‘decision mandate’ (i.e., a branch manager is not allowed to take a lending decision if loan amount exceeds prescribed limit), and stipulated routines (e.g., necessity to fill in know-your-customer (KYC) questionnaires for all clients), were not perceived as totally negative; moreover, some positive attitudinal outcomes were captured. For example, ‘decision mandate’ was perceived as constraining to some extent, as for branch managers it implied sometimes unnecessary bureaucratic step to get approval of lending transactions which obviously will get positive decisions from higher-level bodies. However, some branch managers indicated that the positive aspect of ‘decision mandate’ is that it “provide[s] sense of security” (p.199) for them as they share accountability for a riskier decision with other managers. It could be argued that while being confronted with the ‘decision mandate’, branch managers were acting on the borderline between controlled and autonomous motivation, as the extent to which the required behavior from the control was internalized was quite high: ‘decision mandate’ was partially accepted when led to decreased personal accountability for making higher risk decisions.

Among other researchers who also concluded that coercive control is not always associated with negative attitudinal outcomes are Beuren and Santos (2019). It is worth noting that they were the first ones who proposed operationalization of coercive control, while testing the relationship between MCS and organizational resilience, and in contrast to their expectations, found out there is a positive association between coercive control and organizational capacity to successfully operate in the contextually uncertain and turbulent environments. Otherwise, there exist no quantitative studies which tested the impact of coercive control on motivation. Summing up the above-stated, it is assumed that:

H2a. There is a direct positive relationship between bankers' perception of PMS as coercive and their controlled motivation.

At the same time, as controlled motivation is defined as a willingness to act but under the pressure, it was found to lead to a worse outcome quality or effort, such as employees being less engaged in the work, having worse well-being, and lower performance ratings (Deci & Ryan, 2008). Relevant studies also highlighted that if employees' high-quality motivation is not supported by the psychological needs' satisfaction, their performance, persistence, innovativeness, and flexibility tend to decrease (Deci & Ryan, 2008). Avoidance of adverse consequences such as guilt, fines, and punishment are the examples when a person acts under controlled motivation (Kuvaas et al. 2017). Intrinsic motivation could be decreased by extrinsic if additional rewards are offered, meaning that autonomous and controlled motivation types are not additive and even could work against each other (Deci & Ryan, 2008). Therefore, establishing which type of motivation is dominant among employees is important in shaping workers' motives, inspiring them to reach better results, and creating a win-win situation for both employees and top managers. Moreover, extrinsic or controlled motivation was found to be negatively related to effective organizational commitment (Kuvaas et al. 2017).

Deci, Olafsen and Ryan (2017), based on existing research in the field, also summarized that independently of whether there exists a reward or external power of somebody, controlled motivation results in decline in workers' efforts and engagement levels, leading to only short-term benefits at expense of long-term goals. Reizer, Brender-Ilan, and Sheaffter (2019) explained this by the fact that while being guided by controlled motivation individuals to a great extent become disconnected from their inner aspirations and values. The authors also found that controlled motivation is associated with negative emotions, higher desire to leave a job, burnout, and exhaustion. Grant et al. (2011, p.249) contended that controlled motivation leads to poor performance and diminishes willingness to take initiative because external pressure "reduces focus of attention and prevents internalization of the goal". This, in turn, further decreases and limits an individual's cognitive resources, and reduces his/her energy level. Moreover, the authors also stated that highly controlled motivation causes compliance-oriented behavior, as the result of which a person becomes less committed and does not want to take ownership over a task's outcome.

Finally, it is of utmost importance to note that the outcome of controlled motivation on employees' performance is not universal for every cultural setting. Ren, Zhang and Wei (2021,

p.6) proved empirically that controlled motivation results in increased performance for Chinese employees, explaining this by the fact that Chinese people are more inclined to act in “interdependent manner, focusing more on social, interpersonal, and relational styles”. This further transforms into higher willingness to adjust behavior to meet well-rooted society’s expectations. Therefore, there is some probability that other contextual factors such as highly regulated industry (e.g., banking) might moderate the relationship between controlled motivation and work effort. However, as there still exists quite extensive body of research stating that controlled motivation leads to poor outcomes in terms of well-being and performance, we predict that:

H2b. There is a direct negative relationship between controlled motivation and bankers’ work effort.

Similarly to the arguments presented in the Section 3.1, and taking into account joint predictions of Hypotheses 2a and 2b, the following is proposed:

H2c. There is an indirect negative relationship between bankers’ perception of PMS as coercive and their work effort, through controlled motivation.

H2d. There is no direct relationship between bankers’ perception of PMS as coercive and their work effort.

3.4 Coexistence of enabling and coercive controls or its features within the same control

Among the researchers who did not omit coercive control from their study scope argued that it is quite untypical that a company is represented solely by enabling or coercive controls, usually they coexist together, complementing each other (Ahrens & Chapman, 2004; Mundy, 2010; Ekström, 2018; Beuren & Santos, 2019; Santos & Beuren, 2022). Burney, Radtke and Widener (2017) argued that systems that are constructed in a too enabling way give employees a room for amoral actions, rules violation, and freedom in acting in a self-interested way, leading to negative outcomes for organizations. On the other hand, too rigid coercive systems cause a sense of powerlessness experienced by employees, which also lead to amoral and destructive actions taken to recover (Burney, Radtke & Widener, 2017). In addition, referring to Mundy (2010), imbalanced use of two types of controls, coercive and enabling, is associated with resources wastage, instability, slowed decision-making process and poorer performance because: coercive controls tend to overshadow innovativeness, creativity and improvements which if flourish could lead to performance increase; while enabling type could be not efficient

or even harmful for organizations working in the stable environment. At the same time, balanced use of the controls is perceived as the most effective, while interrelations between them help to develop the best organizational capabilities, by shaping employees' behavior and boosting their performance (Mundy, 2010).

Later, while examining the link between MCS and organizational resilience, Beuren and Santos (2019) stated that complementary and interdependent coexistence of two types of control, organic (enabling) and mechanistic (coercive), is the most effective in providing the best outcome from MCS that eliminate tension between tight control and freedom, innovativeness and efficiency. Finally, Santos and Beuren (2022) found that when individuals are confronted with enabling PMS, they tend to be more satisfied with the system, feel greater support from an employer, and show higher commitment to organizational goals; however, this conclusion did not suggest that coercive PMS led to completely opposite behavior. Instead, it also supports employees with the aforesaid though to a weaker extent compared to enabling PMS.

Ekström (2018) made a step forward in the direction of coexistence of controls, stating that there could be two different types of coexistence. Not only simultaneous systems such as in the cases of the above-mentioned authors, but also the same control could be perceived by some people as enabling while by others as coercive (i.e., simultaneous cognition), implying that one control incorporates in itself both enabling and coercive design features (Ekström, 2018). The most eye-catching example from her study is that even such coercive control as a necessity for every bank's employee to follow the regulations could incorporate the feature of enabling control, namely, global transparency. As the outcome of her research, Ekström (2018) extended Adler and Borys' (1996) framework via developing the notion of global transparency. She determined that global transparency connotes not only understanding by employees the overall context of how a firm functions as a whole, but also comprehending the context beyond organizational boundaries, i.e., environmental context the firm operates in. In particular, Ekström (2018) noticed that all interviewed bankers are well-aware of the main principles on which the banking sector is built on. This, in turn, led to the fact that regulations were not fully perceived as something constraining or impeding the work process. Instead, some positive attitudes towards them were captured due to branch managers' realizing the benefits of regulations, namely, their contribution in sustaining sound and trustworthy image for banking industry.

Ekström (2018) also investigated how branch managers react to both types of coexistence and concluded that the coexistence led to either tensions or business opportunities. For example, tensions were illustrated by the fact that enabling features of PMS signal that the employer values bankers' competence, however, while leaving some parts of performance measures as incomplete limits their possibilities to fully apply their competence; thus, employees feel that their professionalism is constrained by external force. Considering business opportunities, this was captured via the example of banking routines imposed by regulations, namely, fulfillment of KYC questionnaires. Branch managers who work with their customers for more than three years usually do not want to bother them with additional questions of a technical nature. However, while eventually asking some obligatory questions demanded by the regulations, some clients' needs in terms of banking products could be identified, creating new business opportunities. To sum up, Ekström (2018, p.227) concluded that "coexistence of enabling and coercive control could strengthen or moderate the outcome of the control design".

To propose what type of motivation mediates the relationship between simultaneous perceptions of PMS as enabling and coercive and bankers' work effort, we relied on the research of Grant et al. (2011), which examined how the relationship between autonomous/controlled motivation and performance is mediated by individuals' willingness to take initiative. The researchers communicated a thought-provoking idea that in any context (e.g., workplace context) there should exist an interplay between autonomous and controlled motivation, i.e., that both motivation types could be experienced by a person at the same time, and consequently, there exist four possible combinations – both autonomous and controlled are either high or low concurrently, or high (low) autonomous and low (high) controlled motivations. The authors argued and managed to prove empirically that initiative led to better performance when autonomous motivation is high while controlled one is low, because when autonomous motivation prevails, a person's actions are guided by curiosity, spirit, and enthusiasm. It might seem at first stance that the best possible outcome could be achieved when both autonomous and controlled motivation are high; however, the authors refute this idea, as in such setup individuals are usually preoccupied by managing their "experiences of ambivalence" to decide whether to act or not (p.243). Based on this, the following is predicted:

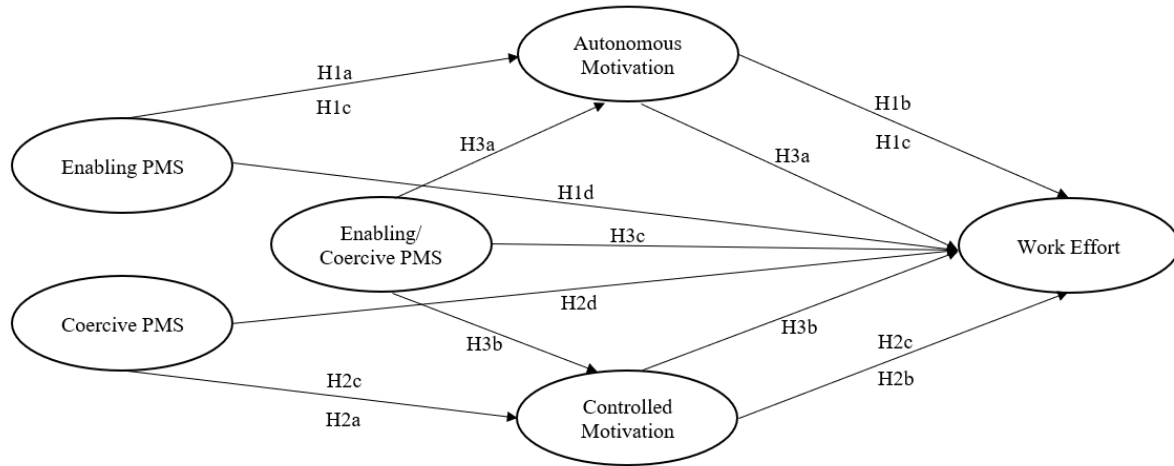
H3a. The bankers' simultaneous perceptions of PMS as both enabling and coercive lead to their higher work effort, through autonomous motivation, in comparison to their separate perceptions of PMS as either enabling or coercive.

H3b. There is no indirect relationship between banker’s simultaneous perception of PMS as both enabling and coercive and their work effort, through controlled motivation.

H3c. There is no direct relationship between bankers’ simultaneous perception of PMS as both enabling and coercive and their work effort.

We conclude the section by depicting our research model (see Figure 2).

Figure 2. Research model.



4. Methodology

4.1 Data collection

This study was conducted via an online survey constructed with the help of Google Forms (see Appendix 1) that was disseminated to bankers using the combination of convenience and snowball sampling techniques. Convenience sampling was utilized at the beginning, as the survey link was distributed via LinkedIn to our personal connections working in banks. Secondly, snowball sampling was adapted, as the personal connections were asked to share the link with their several colleagues. Finally, we connected to the Alumni Association of Stockholm School of Economics in Riga that distributed the questionnaire through their media channels on LinkedIn group, Facebook, and the internal “Alumni Newsletter” with a remark of being interested only in the bankers’ responses.

Online survey was anonymous and combined using four existing assertions which had already been validated in other research, and which we adapted to measure the perception of coercive and enabling PMS, motivation, and work effort specifically for the banking sector employees. As some modifications of the original questions took place, two experts, middle-level managers

working as Client Executives, were asked to conduct a pre-test, during which they filled in the online survey, independently one from another. They were asked to provide feedback about any unclear questions or any difficulties that were faced during the fill-in process; they also determined the execution time. The experts noted that they had some difficulties with several questions' meaning; therefore, those questions were paraphrased to meet the vocabulary that is used within the industry. Furthermore, a few questions were removed, as they were marked by the experts as similar and asking about the same terms or features. To avoid receiving questionnaires that are not fully filled in, all the questions were marked as compulsory to answer to submit the survey.

As respondents were asked to send the survey link to their colleagues from the banking sector, it is impossible to calculate the response rate. In total, 125 responses were obtained; however, 20 answers were eliminated, as the respondents answered to the control question that they do receive monetary bonuses that are related to their performance. Such setup was not the focus of our research, as our aim was to test the relationship between the constructs in the base-salary remuneration context. Extrinsic rewards could cause a crowding out effect and decrease autonomous motivation (Groen et al. 2017); therefore, to ensure that there are equal conditions affecting the motivation, the answers of the respondents who get bonuses were not included in the further analysis. Descriptive characteristics are provided in Table 1.

Table 1. Descriptive characteristics.

	N	%	Mean	Std. deviation	Min	Max
AGE	105		33.8	8.1	22	57
GENDER	105		1.6	0.5	1	2
Male	40	38%				
Female	65	62%				
EDUCATION	105		2.6	0.5	1	4
High school	1	1%				
Bachelor's degree	37	35%				
Master's degree	66	63%				
Doctoral degree	1	1%				
COUNTRY	105		2.4	1.4	1	9
Lithuania	7	7%				
Latvia	81	77%				
Estonia	3	3%				
Sweden	7	7%				
Denmark	1	1%				
Norway	2	2%				
UK	2	2%				
Germany	1	1%				
Russia	1	1%				

Table 1. Descriptive characteristics. (continued)

	N	%	Mean	Std. deviation	Min	Max
POSITION	105		1.3	0.5	1	3
Lower-level employee	80	76%				
Middle-level manager	22	21%				
Higher-level manager	3	3%				
OTHER	105					
Years in current position			4.0	3.5	0	17
Years in banking sector			10.1	7.3	0	30
Develops personal KPIs			1.4	0.5	1	2
Develops department KPIs			1.6	0.5	1	2
Sets personal targets			1.2	0.4	1	2
Sets department targets			1.6	0.5	1	2
CONSTRUCTS	105					
Enabling PMS			5.0	1.1	1	7
Coercive PMS			5.3	0.9	3	7
Autonomous Motivation			5.5	1.0	2	7
Controlled Motivation			4.2	1.3	1	7
Work Effort			6.0	0.6	4	7

4.2 Statistical estimation methods

To start with, the survey questions were carefully chosen from existing validated constructs and were adapted to banking industry and research purposes, what led to the next following steps. First, KMO (Kaiser-Meyer-Olkin measure of sampling adequacy) and Bartlett's test of Sphericity were performed which conclude whether the data suits for factor analysis. KMO assesses the strength of partial correlation between a construct's components and must be ideally closer to 1.0 but not less than 0.5, in detail "the values between 0.5 and 0.7 are mediocre, values between 0.7 and 0.8 are good, values between 0.8 and 0.9 are great, and values above 0.9 are superb" (Verma, 2013, p.365). Bartlett's test of Sphericity is utilized to test the hypothesis that "the correlation matrix is not an identity matrix" (Verma, 2013, p.365). The identity matrix, in turn, implies that the variables of interest are unrelated and not suited for factor analysis (Verma, 2013). Significant Bartlett's test will mean that correlation matrix is not an identity matrix, and consequently, factor analysis could be applied in such case (Verma, 2013). See Appendix 2 with the results of KMO and Bartlett's Test of Sphericity, with KMO measures in range of 0.7 – 0.9 for all constructs except 'Amotivation' that has the result of 0.677, and statistically significant results (<0.001) for all constructs within Bartlett's Test of Sphericity.

Second, factor analysis was executed; in particular, we performed principal component analysis (PCA). PCA is used to estimate whether variables correlate as they measure the same construct,

while ‘varimax rotation with Kaiser normalization’ used for this estimation is a rotation technique maximizing the variance of a factor’s squared loadings in a matrix (Verma, 2013). Extraction based on Eigenvalues above 1.0. As a result, each factor is rated with either high or small loading, where small loading is a coefficient that is lower than 0.700 (Verma, 2013). Factors with the lowest loadings were eliminated until rotation ended up with one construct and all factor loadings were close 0.700. Afterwards, Cronbach’s alpha which quantifies indicators’ variance proportions, was calculated for each final instrument (Bedford & Speklé, 2018). Minimal value 0.700 for Cronbach’s alpha is recommended (Hair Jr. et al. 2021). See Appendix 3 with PCA test results, which exhibits principal components, eigenvalues, % of variance explained and Cronbach’s alphas. Correlation was tested using the Pearson correlation coefficient and 2-tailed significance (Verma, 2013). See Table 3.

For all the regression estimations (see Table 4, 5, 8) we used SPSS software and ordinary least squares method (OLS) (Wooldridge, 2013), producing the unbiased linear estimation (Verma, 2013). Exemplified on H1a, the model for the examination of the direct relationship was as follows (Wooldridge, 2013):

$$Autonomous\ Motivation_i = \beta_0 + \beta_1 Enabling\ PMS_i + \beta_{2-12} Control\ variables_i + \varepsilon_i$$

Exemplified on H1c, the indirect relationship was tested via the following (Wooldridge, 2013):

$$\begin{aligned} Work\ effort_i &= \beta_0 + \beta_1 Enabling\ PMS_i + \beta_2 Autonomous\ motivation_i \\ &+ \beta_3 (Enabling\ PMS_i * Autonomous\ motivation_i) \\ &+ \beta_{4-14} Control\ variables_i + \varepsilon_i \end{aligned}$$

4.3 Measures

The summary of the constructs applied in the underlying research is presented below.

Table 2. Summary of the applied constructs.

Construct	Source	Likert scale	Cronbach's alpha
Coercive PMS	Beuren & Santos (2019)	7-point (originally 5-point)	0.781
Enabling PMS	Van der Hauwaert et al. (2022)	7-point	0.888
Motivation (autonomous/controlled)	Van der Hauwaert et al. (2022)	7-point	0.846/0.856
Work effort	De Cooman et al. (2009)	7-point	0.870

4.3.1 Coercive PMS

Coercive control was measured using the Beuren and Santos’ (2019) construct, which originally was designed for MCS, but as PMS is one of the MCS elements, we changed and

adjusted the construct to capture the perception of PMS of the banking industry. The original instrument consisted of 7 questions; we kept all of them in the modified form for our survey. After conducting the PCA analysis, question A7 asking whether “The PMS is used to divide the areas of responsibility for each manager”, was eliminated, as its principal component coefficient was the lowest (-0.040). We attribute this to the fact that the statement might not be perfectly associated with PMS and for bankers might seem closer related to other management control. We afterwards ran the PCA for the second time, having deleted question A7. The component matrix formed one pattern, resulting in all the other indexes becoming above 0.600, while its interrelatedness measured by Cronbach’s alpha was equal to 0.781; percent of variance explained by single factor added up to 48.890%.

4.3.2 Enabling PMS

Enabling PMS is measured through a construct developed by Van der Hauwaert et al. (2022), which is directly focused on the employees’ perception of PMS. The construct is created using four characteristics of enabling PMS: repair, flexibility, internal and global transparency. The original survey questions had been validated by other researchers several times (Van der Hauwaert & Bruggeman, 2015; Souza & Beuren, 2018). We included the whole framework consisting of the 12 items into the questionnaire; however, after conducting the PCA, examining whether patterns cluster together, some questions were eliminated. First, question A13 representing the global transparency characteristic and asking whether “The PMS makes it possible to communicate with the stakeholders of the bank” was eliminated from the construct, as its principal component index was significantly lower than 0.700 (0.144). It is assumed that the question was not clustering together with the pattern as banks tend to have extended hierarchy and workers could only communicate with the closest to their positions’ supervisors, while PMS are developed by top-managers to whom lower-level employees could not have any connection. Next, question A15 – “The PMS makes it possible to react in time to issues or possibilities that sometimes arise at work, and consequently to avoid problems” was removed (0.168). PMS developed for the banking sector usually focuses on financial results (Ekström, 2018) and could not be universally used to avoid arising problems; therefore, respondents reflected it by their answers. Finally, two questions representing the flexibility feature of enabling PMS were excluded: A19 – “The PMS provides me with valuable advice/hints which help me with day-to-day decision-making at work” and A18 – “New KPIs can be added, or existing ones could be changed to meet specific work needs” with the factor loadings 0.275 and 0.325 correspondingly. The potential explanation lies in the fact that banks

are highly regulated structures that do not allow their low-level and middle-level employees to flexibly change the metrics; at the same time, financial targets focused on value-maximization could not provide valuable advice; therefore, participants were more disagreeing with those two statements. The above-mentioned questions were excluded one after another, and after each question elimination, a new PCA test was run until one component was formed in the component matrix and all the coefficients became above 0.500. The final construct's Cronbach's alpha was equal to 0.888, and single factor solution explaining 56.844% of the variance.

4.3.3 Enabling/Coercive PMS

To measure the simultaneous perception of PMS as both enabling and coercive, two constructs – coercive PMS and enabling PMS – were multiplied to form a new instrument enabling/coercive PMS, which was next used in the regression analysis to test the combined effect hypotheses (H3a, H3b, H3c). Such approach is quite common, being used, for example, by Bedford (2015) who multiplied diagnostic and interactive systems' constructs to capture their simultaneous use by ambidextrous firms; and Gibson and Birkinshaw (2004) who multiplied exploitation and exploration constructs to measure ambidexterity.

4.3.4 Autonomous, Controlled Motivations and Amotivation

Autonomous, controlled motivations and amotivation were measured using the Multidimensional Work Motivation Scale originally developed in the Dutch language by Gagné et al. (2015), containing 59 items; Gagné et al. (2015) validated it in seven languages and in nine countries. Van der Hauwaert et al. (2022) applied this scale for their research capturing autonomous motivation's mediating effect between enabling PMS and managerial performance. However, they decreased the number of items from 59 to 19, as too high number of questions asked in a questionnaire increases dropout rate and could also raise response bias. Remaining 19 items test two types of motivation: autonomous (identified and intrinsic), controlled (external-social, external-material, and introjection); the construct also included reverse-coded questions about amotivation, which were used to protect from common method bias (Ren, Zhang & Wei, 2021). However, it is important to mention that even though we collected data on amotivation, those questions were further used only for robustness check of the main results. In our final survey we used 17 questions from the construct, having excluded 2 statements, as one of them asked about financial rewards, which is not our research scope, while another one was omitted during the pre-test phase. PCA analysis revealed that question

B1 – “I work because I personally consider it to be important to put efforts when I execute my job” – had the lowest PCA loading (0.116). After its elimination, questions formed one construct for autonomous motivation with the loadings higher than 0.600, Cronbach’s Alpha equal to 0.846, and percent of variance explained by single factor of 62.645%. Question B1 raised concerns already during the pre-test, as the experts noted that the statement is doubtful and should be paraphrased. It is assumed that even after paraphrasing, the question remained non-applicable for the banking industry. For controlled motivation construct, we excluded question B7 – “I work to get others’ recognition” – due to its PCA coefficient being the lowest (0.125); this resulted in the one construct formation with Cronbach’s alpha being equal to 0.856, and single factor explaining 54.250% of the variance. It is believed that the question was eliminated as bankers’ answers reflected that they do not associate recognition by others as a motivating factor. For amotivation, none of the questions were excluded, as three questions perfectly formed one construct with PCA coefficients above 0.790, Cronbach’s alpha equal to 0.849, percent of variance explained by single factor of 77.214%.

4.3.5 Work effort

Finally, to measure employees’ effort, we used the Work Effort Scale developed by De Cooman et al. (2009), which originally had 20 questions; however, after conducting test-retest reliability performed on two samples, the construct creators decreased the number of items to 10. We used all 10 questions in our research, while PCA results showed that due to the coefficient (-0.018), question C1 – “I do not give up quickly when something does not work well” – should be eliminated. The remaining 9 questions formed one common pattern exhibiting Cronbach’s alpha of 0.870; single factor explaining 51.195% of the variance. We consider that question C1 did not fit the construct as all the remaining 9 questions were result-oriented, while C1 seemed to capture participants’ behavior/attitude to difficulties during a working process.

4.3.6 Control variables

Data about respondents’ age, gender, education, and country was collected, as demographic variables were found to be explaining the differences in employee work performance (Groen et al. 2017). In line with Van der Hauwaert et al. (2022), we decided to control the hierarchical level of an employee, whether he/she is in a lower-level position such as project manager, analyst, specialist, or managerial position (middle- or higher-level manager). We also included control questions about the number of years employees work in their current position and in

the banking sector overall (Ren, Zhang & Wei, 2021). Furthermore, control questions, such as participation in personal and/or department KPIs and target development were included, as precedent researchers found a positive indirect relationship between the employees' participation in performance measurements creation and their performance (Groen et al. 2012; Groen et al. 2017). Nevertheless, performance measures' co-development tends to increase transparency and impacts employees' perception of KPIs as being fair, while measures that are set by individuals for themselves, usually overlap with their intrinsic goals and autonomous motivation (Groen et al. 2017). Finally, a control question about receiving monetary bonuses was used to eliminate respondents who receive not only base salary but also financial rewards tight to fulfillment of KPIs.

4.3.7 Measurement scale

Throughout the whole questionnaire, we used 7-point Likert-scale from 'totally disagree' to 'totally agree', as per the authors who developed constructs for measuring enabling PMS and coercive MCS (Van der Hauwaert et al. 2022; Beuren & Santos, 2019), and argued that perception should be measured through respondents' answers implying their total agreement or disagreement. Furthermore, such scale allows not to name items in the middle which helps to avoid a neutral response option, such as 'neither agree nor disagree', as it could distort the answers. Exactly 7-point Likert scale was chosen, as all the authors, except Beuren and Santos (2019), used it, while the latter utilized 5-point scale.

4.3.8 Assessment of common method bias

Self-reported questionnaires tend to result in common method bias, which was minimized in our study by the survey's anonymity and reverse-coded questions. What is more, Harman's single-factor test was performed, which assumes that if a common method variance exists, it will result in a single factor accounting for most of the covariance (>50%) in the variables (Podsakoff & Organ, 1986). According to the result of the test, the single factor explains 20.753% of the total variance, meaning that the common method bias is not an issue for this research.

5. Empirical results

5.1 Correlation and regression results

Table 3 presents the correlation results for all variables including control questions. Enabling PMS showed positive significant correlation with coercive type of PMS (0.620**), and with autonomous motivation (0.308**), whereas two asterisk marks highlight that the significance takes place at 1% level (Verma, 2013). If one asterisk is noted, it means that the correlation takes place at 5% significance level (Verma, 2013). Coercive control was positively and significantly related to controlled motivation (0.197*) and autonomous motivation (0.355**); at the same time, autonomous motivation is positively related to work effort (0.403**). Controlled motivation also positively correlated with work effort (0.248*). Surprisingly, controlled variable 'education' had positive correlation with coercive control (0.255**) at 1% significance level.

Table 4 presents the OLS regression results for all hypotheses both without including control variables and with them. Our results exhibited the existence of a highly significant link between enabling PMS and autonomous motivation ($\beta=0.267$, $p=0.001$); and autonomous motivation and work effort ($\beta=0.263$, $p<0.001$), confirming H1a and H1b. For the former relationship none of the control variables were found to be significant, while for the latter gender was significant at 1% level. In contrast to the predictions, H1c showed that the relationship between enabling PMS and work effort is not mediated by autonomous motivation, which suggests that H1c is rejected ($\beta=0.024$, $p=0.621$). Hypothesis H1d, in turn, is supported as there is no direct relationship between enabling type of PMS and work effort ($\beta=0.103$, $p=0.065$). In line with the previous researchers (e.g., Hall, 2008) we consider that 10% significance level shows very weak association between constructs. Moreover, while including control variables the effect became statistically non-significant. For H1c and H1d, in terms of control variables gender showed significance at 5% level.

For H2a weak association was found between coercive PMS and controlled motivation ($\beta=0.287$, $p=0.044$); when control variables were included, p-value diminished to 0.062. In terms of specific control variables, the country showed significant effect at 1% level. H2b was rejected, as in contrast to initial expectations, controlled motivation was found to positively affect work effort ($\beta=0.120$, $p=0.011$). When control variables were included, the effect became slightly stronger ($\beta=0.127$, $p=0.010$); gender and country were significant at 5% significance level. Furthermore, H2c, stating that there could be a mediating effect of controlled

motivation on coercive PMS and work effort relationship, was declined ($\beta=-0.077$, $p=0.107$). In contrast to enabling PMS and initial predictions, coercive PMS has a direct impact on work effort ($\beta=0.171$, $p=0.013$), therefore, rejecting H2d. For H2c gender showed significance at 5% level, while for H2d none of control variables were statistically significant.

When the employees perceive that PMS combines both enabling and coercive characteristics, this does not lead to higher work effort levels (though autonomous motivation) compared to H1c, H1d, H2c, or H2d, which suggests that hypothesis H3a was rejected ($\beta=0.003$, $p=0.592$). H3b was supported as the relationship between the subject constructs was not found to be mediated by controlled motivation ($\beta=-0.006$, $p=0.236$). Finally, H3c had reverse to our expectations result, as it showed that there is a direct relationship between simultaneous perception of PMS as enabling and coercive and work effort ($\beta=0.016$, $p=0.014$). The control variables did not modify the link between constructs; though, only for H3a and H3c gender exhibited impact at 5% significance level.

5.2 Robustness check

Van der Hauwaert et al. (2022) approach was followed for performing a robustness check of the results. The authors tested the impact solely of enabling PMS on managerial performance, and how autonomous motivation mediates this link. Within the robustness check, autonomous motivation was substituted with controlled motivation, and their results remained robust, exhibiting a non-significant effect of enabling PMS on controlled motivation. In the underlying research we tested the link, at first, between enabling PMS and controlled motivation; second, between coercive PMS and autonomous motivation. For the former relationship our finding ($\beta=0.130$, $p=0.258$) is in line with Van der Hauwaert et al. (2022). In contrast, for the latter relationship, we discovered a highly significant positive relation ($\beta=0.384$, $p<0.001$), which will be discussed in detail in the next section.

As an additional robustness check we regressed enabling PMS and then coercive PMS on amotivation, and consistently with our main results found the negative and statistically significant effect ($\beta=-0.357$, $p<0.001$; $\beta=-0.386$, $p=0.001$). Therefore, it could be concluded that there are no major problems with the main results of the subject study.

Table 3. Correlation table.

	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.	15.
1. Enabling PMS															
2. Coercive PMS	.620**														
3. Autonomous motivation	.308**	.355**													
4. Controlled motivation	0.111	.197*	.256**												
5. Work effort	0.181	.243*	.403**	.248*											
6. Age	.218*	0.146	0.146	0.081	0.070										
7. Gender	.198*	0.066	0.024	0.159	.242*	-0.013									
8. Education	0.190	.255**	0.085	0.028	-0.063	.209*	-0.131								
9. Country	-0.001	0.029	-0.077	-.247*	0.081	-0.116	-0.047	0.187							
10. Position	0.044	-0.031	0.056	-0.115	-0.068	.230*	-.247*	0.078	-0.066						
11. Years in current position	0.040	.197*	0.106	0.061	0.048	.515**	0.123	-0.055	-0.155	-0.097					
12. Years in banking sector	.201*	0.131	0.173	0.077	0.034	.916**	-0.038	.216*	-.198*	.258**	.556**				
13. Develops personal KPIs	-.202*	-0.058	-0.093	0.072	-0.022	-0.151	0.036	0.037	0.103	-.249*	0.087	-0.122			
14. Develops department KPIs	-0.111	0.068	-0.046	0.021	0.154	-.202*	0.006	0.072	-0.053	-.259**	0.077	-0.168	.335**		
15. Sets personal KPIs	-.246*	-0.064	0.021	0.058	0.011	-0.050	-0.112	-0.024	-0.066	-0.090	-0.061	-0.025	.200*	0.140	
16. Sets department KPIs	0.017	0.107	-0.010	0.088	0.147	-0.170	-0.035	-0.042	-0.111	-.259**	0.018	-0.157	.256**	.592**	0.088

******, ***** indicates p-value <0.01, <0.05

Table 4. Regression results.

Relationship between the constructs	Hypothesis	Without control variables			With control variables		
		Value	t-value	p-value	Value	t-value	p-value
Enabling PMS → Autonomous Motivation	H1a	0.267	3.280	0.001	0.274	2.867	0.005
Autonomous Motivation → Work Effort	H1b	0.263	4.474	<0.001	0.271	4.670	<0.001
Enabling PMS → Autonomous Motivation → Work Effort	H1c	0.024	0.497	0.621	0.043	0.869	0.387
Enabling PMS → Work Effort	H1d	0.103	1.869	0.065	0.084	1.374	0.173
Coercive PMS → Controlled Motivation	H2a	0.287	2.035	0.044	0.287	1.893	0.062
Controlled Motivation → Work Effort	H2b	0.120	2.594	0.011	0.127	2.635	0.010
Coercive PMS → Controlled Motivation → Work Effort	H2c	-0.077	-1.624	0.107	-0.056	-1.135	0.259
Coercive PMS → Work Effort	H2d	0.171	2.537	0.013	0.169	2.352	0.021
Enabling/Coercive PMS → Autonomous Motivation → Work Effort	H3a	0.003	0.538	0.592	0.004	0.677	0.500
Enabling/Coercive PMS → Controlled Motivation → Work Effort	H3b	-0.006	-1.192	0.236	-0.005	-0.885	0.379
Enabling/Coercive PMS → Work Effort	H3c	0.016	2.508	0.014	0.015	2.128	0.036
Robustness check							
Enabling PMS → Controlled Motivation	na	0.130	1.137	0.258	0.101	0.786	0.434
Coercive PMS → Autonomous Motivation	na	0.384	3.856	<0.001	0.386	3.435	0.001
Enabling PMS → Amotivation	na	-0.357	-3.885	<0.001	-0.347	-3.257	0.002
Coercive PMS → Amotivation	na	-0.386	-3.319	0.001	-0.416	-3.263	0.002

Table 5. Full main regression results.

Hypotheses:	H1a	H1b	H1c	H1d	H2a	H2b	H2c	H2d	H3a	H3b	H3c
Dependent variable:	Autonomous motivation	Work effort	Work effort	Work effort	Controlled motivation	Work effort	Work effort	Work effort	Work effort	Work effort	Work effort
Mediating variable:	na	na	Autonomous motivation	na	na	na	Controlled motivation	na	Autonomous motivation	Controlled motivation	na
Independent variables:											
Enabling PMS	0.274**	-	-0.231	0.084	-	-	-	-	-	-	-
Coercive PMS	-	-	-	-	0.287	-	0.350	0.169*	-	-	-
Enabling/Coercive PMS	-	-	-	-	-	-	-	-	-0.016	0.032	0.015*
Autonomous Motivation	-	0.271**	0.067	-	-	-	-	-	0.165	-	-
Controlled Motivation	-	-	-	-	-	0.127**	0.397	-	-	0.234	-
Enabling PMSxAutonomous Motivation	-	-	0.043	-	-	-	-	-	-	-	-
Coercive PMSxControlled Motivation	-	-	-	-	-	-	-0.056	-	-	-	-
Enabling/Coercive PMSxAutonomous Motivation	-	-	-	-	-	-	-	-	0.004	-	-
Enabling/Coercive PMSxControlled Motivation	-	-	-	-	-	-	-	-	-	-0.005	-
Age	-0.015	0.019	0.020	0.015	0.023	0.013	0.012	0.014	0.018	0.012	0.014
Gender	-0.047	0.323**	0.306*	0.305*	0.346	0.300*	0.282*	0.323	0.291*	0.259	0.290*
Education	0.063	-0.175	-0.197	-0.162	0.091	-0.158	-0.218	-0.217	-0.206	-0.216	-0.205
Country	-0.031	0.083	0.089	0.075	-0.268**	0.109*	0.090	0.073	0.088	0.097	0.074
Position	0.048	0.022	0.011	0.036	-0.277	0.068	0.032	0.030	0.014	0.037	0.029
Years in current position	0.025	-0.015	-0.018	-0.008	-0.035	-0.008	-0.017	-0.022	-0.019	-0.014	-0.015
Years in banking sector	0.020	-0.009	-0.009	-0.004	-0.009	-0.001	0.000	0.001	-0.008	-0.001	-0.001
Develops personal KPIs	-0.087	-0.084	-0.064	-0.104	0.291	-0.163	-0.126	-0.094	-0.067	-0.126	-0.093
Develops department KPIs	-0.033	0.251	0.267	0.245	-0.229	0.253	0.225	0.232	0.269	0.247	0.253
Set personal targets	0.288	0.035	0.028	0.119	0.156	0.054	0.060	0.078	0.051	0.090	0.113
Sets department targets	-0.004	0.143	0.128	0.138	0.141	0.147	0.119	0.122	0.117	0.115	0.117
Number of observations	105	105	105	105	105	105	105	105	105	105	105
R²	0.127	0.305	0.311	0.157	0.155	0.200	0.242	0.189	0.313	0.237	0.180

6. Discussion of the results

In the underlying study we examined both direct and indirect effects of enabling and/or coercive perceptions of PMS on work effort. Considering enabling PMS, in line with the psychology theories and the precedent empirical research in the field (Hall, 2008; Yuliansyah & Khan, 2015; Souza & Beuren, 2018), it was discovered that (1) there are positive and highly significant ($p\text{-value} < 0.01$) separate links between enabling PMS – autonomous motivation, and autonomous motivation – work effort; (2) there exists no direct relationship between enabling PMS – work effort. However, while testing indirect/mediating effect of autonomous motivation on the enabling PMS – work effort link, no statistical proof was found for the existence of such effect, which contradicts the theory predictions and Van der Hauwaert et al. (2022). It could be argued that this is the case because employees do not perceive enabling features of PMS as control mechanisms that are aimed to direct their behavior to certain outcomes; instead, such features are considered as tools that assist and support them in becoming successful in their job, therefore, leading to experiencing autonomous motivation. Further on, autonomous motivation executes direct and positive impact on work effort; however, bankers do not perceive that their effort level is impacted by enabling PMS. Such findings could be attributed to the subject research context, the nature of which is quite exclusive and where coercive PMS perceptions seem to prevail over enabling ones.

In addition, the survey results revealed that in terms of enabling design elements, internal transparency followed by global transparency, namely, making the link between own assignments and bank's goals explicit, are the main ones present in banking sectors' PMSs in the context of base pay. Such features, therefore, contribute to employees' understanding of rationale behind set tasks, they also see tasks' importance from a global perspective and how they contribute to success of an organization (Ahrens & Chapman, 2004). This, in turn, enhances their feelings of being autonomously motivated, through recognition of their competence and providing them with desired autonomy to make meaningful contributions (Deci, Olafsen & Ryan, 2017).

Regarding repair and especially flexibility features, we concluded that bankers in the investigated context are not provided with extensive rights to repair PMS or use it flexibly. For instance, bankers did not perceive that they are granted rights to add new KPIs, or they can rely on PMS to a larger extent in terms of valuable suggestions. If the current findings are compared with Ekström (2018), similarities could be found in terms of presence of internal transparency in PMS, while no congruence could be caught in terms of repair feature. The potential

explanation for divergence in the findings could lie in fact that hierarchical level of study participants matters to a great extent: Ekström (2018) focused on branch managers (i.e., middle-level managers) who could be provided with a greater discretion to repair system in comparison to operational-level employees. In contrast, internal transparency seemed to be important independently of industry (manufacturing vs. service) and hierarchical level (Hall, 2008; Yuliansyah & Khan, 2015). If one also relates current findings with Van der Hauwaert et al. (2022), who conducted the research solely focusing on managers, middle- and high-level, from both manufacturing and service industries, it is interesting to note that managers perceived enabling PMSs as having all four design elements. It could be argued that when it comes to operational-level employees it is risky to establish PMS which incorporates all enabling features, as this might lead to opportunistic behaviors, opening a room for fraud. Jørgensen and Messner (2009) were the first ones who contended that enabling controls might entail such type of drawback. The general conclusion from the aforesaid is that enabling PMS implies different configurations due to presence of contextual factors such as hierarchical level of employees. Furthermore, even if enabling PMS does not fully incorporate all four design elements, it still helps employees to internalize value from assigned tasks, which results in experiencing autonomous motivation; while autonomous motivation is beneficial despite any context, leading to higher effort due to employees feeling that their volitions were considered while setting tasks (Ryan & Deci, 2000).

Considering coercive perceptions of PMS, at first stance the results might seem surprising as they contradict with the proposed hypotheses. In contrast to enabling PMS, coercive PMS exhibits direct, positive, and significant relationship (p -value < 0.05) with work effort; controlled motivation does not mediate this relationship. Furthermore, when examined separately, a weak relationship (p -value < 0.10) was found between coercive PMS and controlled motivation. In our opinion, the main explanations for such results lie in the research context. First, the study was conducted in a heavily regulated industry where coercive features of PMS are inevitable. The survey results confirmed this, as bankers agreed to a high extent that PMSs are established in a way to monitor and report to top management whether their actions are compliant with internal policies, set priorities, etc. However, as bankers comprehend very well the reason why such coercive features are part of their work environment, they do not find themselves under pressure of controlled motivation. This reason, in turn, is the acknowledgment that coercive controls are aimed at sustaining a trustworthy image of the industry (Ekström, 2018). Consequently, the aforesaid also suggests that while

confronted with coercive PMS, bankers do not spend time on questioning the system, instead, they directly proceed with the execution of set requirements, which explains the direct and positive link between coercive PMS and work effort.

It is interesting to note that while examining the separate relationship between controlled motivation and work effort, a positive and significant link was identified (p -value < 0.01). However, as there is a weak association between coercive PMS and controlled motivation, it could be argued that experiencing of controlled motivation occurs due to other management controls or contextual factors. Positive relationship between the constructs might seem unexpected, as there is substantial empirical evidence confirming the opposite (Deci, Olafsen & Ryan, 2017). However, as noted in the Section 3.3, there exist some authors such as Ren, Zhang and Wei (2021) who found that controlled motivation enhances effort levels in case of Chinese employees due to personal qualities which are distinctive for their nationality. We consider that in the subject research, non-incentivized remuneration setting might provide explanations for the outcome of controlled motivation. According to Cadsby, Song and Tapon (2007), individuals who prefer base pay setup over pay-for-performance tend to be more risk-averse. Therefore, bankers who chose to work under fixed remuneration contracts might also be characterized as risk averse. Furthermore, it could be argued that risk-averse employees are more inclined to follow prescribed rules and procedures because this satisfies their need of risk avoidance, and consequently, this justifies positive impact of controlled motivation on work effort.

If one compares the effects of autonomous versus controlled motivation on work effort, it could be concluded that autonomous motivation exerts two times stronger impact on work effort than controlled one. This finding might be attributed to a non-incentivized compensation scheme. Kuvaas et al. (2016) proved empirically that autonomous motivation is the mediator of the relationship between base pay and work effort, explaining this by the facts that, at first, fixed remuneration scheme emphasizes mid/long-term achievements of employees over short-term results, while long-term oriented assignments are usually more engaging and interesting; second, it provides a relevant signal to an employee to what extent employer values his/her skills, education, and previous experience.

Within the underlying research it was also estimated that when employees perceive that PMS incorporates both enabling and coercive features, this does not lead to higher work effort level if compared to the outcome solely from coercive PMS. Therefore, it could be concluded that

enabling and coercive features must be conceptualized as independent rather than opposite sites. The studied context exemplified that both PMS characteristics coexist, each targeting its own 'working space', and do not result in negative outcomes. In our opinion, banks managed to achieve this as succeeded in providing employees with a meaningful rationale why PMS integrates both features, and this, in turn, overrides potential negative attitudinal outcomes that could have been expected from coercive controls. Our findings are also congruent with the evidence provided by Ekström (2018) who stated that when confronted with tension which arises from coexistence of enabling and coercive controls in case of banking, employees tend to cope with it by decoupling the purposes of the controls. This implies that bankers usually do not waste their time and energy on blaming or questioning coercive parts, instead they focus their attention on areas where they can make an impact. Considering the mediating effects of motivation types on the link between enabling/coercive PMS and work effort, it was devised that the relationship is not mediated by any type of motivation, which is not surprising given the results of separate effects from solely enabling or coercive PMS. To sum up, the aforesaid provides a valuable conclusion for practitioners that effective PMS could embody both enabling and coercive design elements, however, each element must have a clear and transparent purpose why it has been included.

Finally, we consider it is relevant to discuss the result of the robustness check, as it revealed that there is a positive and highly significant association between coercive PMS and autonomous motivation. Some precedent researchers touched upon the idea that controls could be perceived as enabling while having quite clear coercive characteristics (Jordan & Messner, 2012; Ekström, 2018; Cäker, Siverbo, & Åkesson, 2022). We believe this is exactly the case in the banking sector and our findings underpin empirically the qualitative findings of the previous studies. Ekström (2018) interfered that coercive control such as regulations entail the extended version of global transparency feature, implying that bankers not only possess relevant knowledge of how a bank functions as a whole, but they also grasp very well what is occurring in the sector as such, i.e., why certain regulations are imposed or modified, what ensures stability of the sector, what competitive landscape is faced, etc. We would like to argue that such deep dive in the working context results in internalization and integration of coercive features of PMS to quite high extent, leading to experiencing autonomous motivation type – identified regulation, under which individuals consciously value externally imposed requirements and favor them as believe that they are right, relevant, and up to the point (Ryan & Deci, 2000). In addition, such environmental global transparency should also entail the

message that banking sector plays a pivotal role in development of economies and promoting well-being of society via provision of financial resources. This could contribute to bankers' feeling of relatedness, as they might feel themselves as part of such a relevant industry as banking; while relatedness, being of one the basic psychological needs, precedes autonomous motivation. The underlying finding also provides evidence why distinction between autonomous/controlled motivation is more powerful in comparison to intrinsic/extrinsic. The subcategorization under autonomous/controlled motivation allows to distinguish between different extents of regulation/task internalization, therefore, providing more accurate insights, as exemplified by the current research.

7. Conclusion

The subject thesis had two research purposes. First, to explore separate effects from coercive and enabling perceptions of PMS on motivation and work effort. With the help of the subject research context - heavily regulated industry (banking) and non-incentivized compensation scheme, we discovered that coercive perceptions of PMS do not always lead to diminishing work effort as predicted from the theoretical perspective; instead, they exert direct and noticeably positive effect on bankers' effort levels. In contrast, enabling perceptions of PMS have neither direct nor indirect impact on effort, instead they positively influence only autonomous motivation. Second, we aimed to investigate to what extent the combination of enabling and coercive perceptions of PMS influences work effort. It was revealed that the simultaneous perceptions have only direct positive impact on work effort, though it is minor, suggesting that enabling and coercive perceptions of PMS work independently, each aiming to ensure certain behavioral outcomes.

The underlying thesis implies four main theoretical contributions. First, the study adds to the framework of enabling and coercive control developed by Adler and Borys (1996), which has been less-researched so far; however, has started to gain popularity in recent years. Second, the thesis contributes to knowledge of the effects of coercive control, as it challenges the previous researchers' assumption that its impact is predictable based on its definition (Hall, 2008; Yuliansyah & Khan, 2015; Souza & Beuren, 2018; Van der Hauwaert et al. 2022). Third, the subject thesis is among a few studies which bring up the concept – coexistence of enabling and coercive features within one control (in this case PMS) (Ekström, 2018), thus, strengthening the awareness of the concept and emphasizing its importance for future studies based on the framework of Adler and Borys (1996). Finally, the thesis contributes to the literature regarding the impact of previously under-researched contextual factors – namely, base pay setup (Kuvaas

et al. 2016) and regulated industry contexts (Ekström, 2018) – on personnel perceptions of PMS.

In terms of practical implications, first, organizations are recommended to thoroughly evaluate what enabling features to include while designing PMS: contextual factors, namely, hierarchical level of employees who will be confronted with PMS, industry type (heavily or moderately regulated), and remuneration setup, should be taken into consideration. Our research revealed that in the studied context bankers perceived that only internal and global transparencies were present in PMS to a great extent, and these two enabling features were enough to enhance their effort through autonomous motivation. This highlights that it is not necessary to have all four enabling control design features implemented. Provision of extensive flexibility and repair features were not recognized by the bankers as existing in PMS, which is explained by the fact that banking is a highly regulated industry and it would be costly for banks to provide its employees with too much discretion. Second, organizations which work under the setups close to the investigated one are also advised not to avoid inclusion of coercive features in their controls as they appeared to be helpful for employees' effort enhancement.

Considering limitations of the subject research, first, we studied only one element under MCS – PMS. However, Malmi and Brown (2008) stated that it is more accurate to study the whole MCS of an organization as a package, while Fris, Hansen and Vámosi (2015) argued that besides the aforesaid, it is important to examine MCS from the system's perspective, examining interdependencies, in form of complements and substitutes, between different controls with MCS package. Ekström (2018) also contended that in the case of banking sector it is more beneficial to study the whole MCS rather than its one part such as PMS. The main reason is that there is a risk of overlooking some relevant effects which originate from other controls such as regulations and prescribed routines. We admit and agree with this view; however, we decided to focus on PMS solely given our specific research purpose. Second, we relied on self-reported data, which might possibly result in common method bias; we minimized the concern by having made the survey anonymous and included reverse-coded statements. However, it would be useful to replicate the research by collecting data via employee-manager pairs, where the manager assesses subordinates' effort levels, as was done in the study of van Triest, Kloosterman and Groen (2023). Finally, numerous control variables were encompassed in our research model to downsize endogeneity concerns; however, there still might exist other correlated variables which were overlooked. For instance, it might have been relevant to ask bankers the control question: whether they work directly with clients' servicing or not.

In terms of further research, we strongly recommend not to omit coercive features while studying the relationship between management control and personnel performance. It would be relevant to verify our findings in other settings and test how the perceptions of coercive controls differ depending on other contextual factors. Second, we believe it could be useful to examine the relationship between PMS and work effort within a case-study of one bank/company, as the case-study setup also helps to reduce endogeneity concerns, reducing the number of factors specific to each certain workplace. To conduct a case-study was our initial intention; however, eventually the bank chosen for the research refused to participate in the study as it found the survey questions too sensitive. Therefore, the confidentiality of banks' internal data is one of impediments for research in the subject field. Third, it could be advantageous to study not only mediators but also moderators of the relationship between PMS and personnel performance. For example, this was done by van Tries, Kloosterman and Groen (2023) who found that task routineness moderates the link between enabling controls, in their case action and results controls, and employee performance. Finally, we believe it would be fruitful to replicate our research model under the setup of pay-for-performance in banking to see how remuneration setup modifies our conclusion.

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Appendix 1. Survey

Introductory letter

Dear Banker,

You are kindly asked to participate in a survey within the Master's Thesis project of Lund University, Sweden. The thesis aims to investigate how characteristics of performance measurement system (hereinafter - PMS) are associated with employees' motivation and effort levels.

Today's business environment is surrounded by a number of challenges, and one of them attracted our attention the most – the retention of high-skilled professionals. The CEO of Ericsson Börje Ekholm once stated: “Companies are only as good as their people”, and we totally agree with this statement. Thus, it is relevant for firms to take care of their employees, promoting their well-being at work, and we believe this could be achieved via effective design of PMS.

Before you proceed, there are a couple of technical remarks. First, we would like to emphasize that the survey is anonymous, i.e., your names will not be collected. Second, the estimated time to complete the survey is 10-15 minutes. Third, the survey contains four sections. In the first section you are kindly asked to provide us with general information about yourself. The subsequent sections are devoted to PMS, motivation, and effort topics, respectively, and you are asked to share your perceptions and assessments of statements via 7-point Likert scale – to what extent do you agree or disagree with a certain statement. Fourth, when providing answers, please attempt all questions and keep in mind that there is no ‘right’ or ‘wrong’ answer. Finally, please do not hesitate to contact us via al7440ko-s@student.lu.se if you have any questions or concerns.

Thank you for your participation.

Kind regards,

Alivija & Alina

Section 1

Please provide us with some general information about yourself.

1. What is your age?
2. What gender do you identify with?
3. What is your highest education level?
 - High school graduate
 - Bachelor's degree

- Master's degree
- Doctorate degree

4. In which country do you work?

- Estonia
- Latvia
- Lithuania
- Other (please indicate)

5. How long have you been working in your current position?

6. How many years have you been working in banking sector overall?

7. Are you involved in developing KPIs for yourself?

8. Are you involved in developing KPIs for your department?

9. Are you involved in setting targets for yourself?

10. Are you involved in setting targets for your department?

11. Do you get monetary bonuses that are connected to the fulfillment of your KPIs?

Section 2

The following questions will allow us to evaluate how you perceive the performance measurement system (hereinafter - PMS) in your organization. By the PMS we imply a set of tools and procedures that help employees and management to measure and analyze performance on individual, team and organizational level. The PMS consists of informational elements – the ways how organization communicates its strategies and goals to its employees; feedback that you receive regarding your performance from direct manager or other various stakeholders you collaborate with; and specific measures of performance – key performance indicators (KPIs) (Ferreira & Otley, 2009).

To what extent do you agree or disagree with the following statements...

A1. The PMS is developed in a way to steer my actions towards complying with policies and procedures set by the bank's top management.

A2. The PMS is developed in a way to direct my actions towards reaching the bank's goals.

A3. The PMS establishes a specific division of tasks for each bank's employee.

A4. The aim of the PMS is to report to higher-level managers whether my actions are in line with what was required/expected from me.

A5. The PMS is established with the aim of monitoring employees with regards to compliance with the bank's policies and procedures.

A6. The PMS is used to communicate to employees what level of performance is required/expected from them.

A7. The PMS is used to divide the areas of responsibility for each manager (e.g., Head of a Department, Head of Client team – Client Executive).

A8. I understand the KPIs which are set to evaluate my performance.

A9. I understand the reasons why certain KPIs are set to evaluate my performance.

A10. There is information available about how I am performing in the relation to my KPIs.

A11. The PMS gives me an indication of how I execute my job.

A12. The link between my own tasks and the goals of the bank is clear.

A13. The PMS makes it possible to communicate with the stakeholders of the bank.

A14. The KPIs set for me, help me to achieve better results of my work.

A15. The PMS makes it possible to react in time to issues or possibilities that sometimes arise at work, and consequently to avoid problems.

A16. The PMS makes it possible to put forward measures that can serve as ‘alarm bells’, i.e., highlights areas which require immediate actions for performance improvement.

A17. The PMS provides me with the information on which I can ground my work-related decisions.

A18. New KPIs can be added, or existing ones could be changed to meet specific work needs.

A19. The PMS provides me with valuable advice/hints which help me with day-to-day decision-making at work.

Section 3

These questions are about motivation. To what extent do you agree or disagree with the following statements...

B1. I work because I personally consider it to be important to put efforts when I execute my job.

B2. I work because putting efforts in this job aligns with my personal values.

B3. I work because putting efforts in this job has personal significance to me.

B4. I work because I have fun doing my job.

B5. I work because what I do in my work is exciting.

B6. I work because the work I do is interesting.

B7. I work to get others’ recognition (e.g., from my boss, clients, family).

- B8. I work because others will respect me more (e.g., my boss, clients, family).
- B9. I work to avoid being criticized by others (e.g., my boss, clients, family).
- B10. I work because I risk losing my job if I don't put enough effort in it.
- B11. I work because I have to prove to myself that I can.
- B12. I work because it makes me feel proud of myself.
- B13. I work because otherwise I will feel ashamed of myself.
- B14. I work because otherwise I will feel bad about myself.
- B15. I do little, because I really feel that I'm wasting my time at work.
- B16. I do little, because I don't think this work is worth putting efforts into.
- B17. I don't know why I'm doing this job, it's pointless work.
-

Section 4

The following questions are devoted to work effort levels. To what extent do you agree or disagree with the following statements...

- C1. I do not give up quickly when something does not work well.
- C2. I really do my best to get my work done, regardless of potential difficulties.
- C3. When I start an assignment/ task, I pursue it to the end.
- C4. I do my best to deliver result that is expected from me.
- C5. I am trustworthy in the execution of the tasks that are assigned to me.
- C6. I really do my best to achieve the objectives of the bank.
- C7. I think of myself as a hard worker.
- C8. I really do my best in my job.
- C9. I put a lot of energy into the tasks that I commence.
- C10. I always put the same effort when I execute my job.

Appendix 2. KMO and Bartlett's Test of Sphericity results

Table 6. KMO and Bartlett's Test of Sphericity results.

Construct	Question	KMO	Bartlett's Test of Sphericity			
			Approx. Chi-Square	df	Sig.	
Coercive PMS	A1	0.764	180.240	21	<0.001	
	A2					
	A3					
	A4					
	A5					
	A6					
	A7					
Enabling PMS	A8	0.836	709.280	66	<0.001	
	Internal Transparency					A9
						A10
						A11
	Global Transparency					A12
						A13
	Repair					A14
						A15
	Flexibility					A16
						A17
A18						
A19						
Autonomous Motivation	Identified	0.768	310.585	15.000	<0.001	
						B1
						B2
	Intrinsic					B3
						B4
						B5
Controlled Motivation	External (social)	0.750	458.539	28	<0.001	
						B6
						B7
	External (material)					B8
						B9
	Introjection					B10
						B11
B12						
Amotivation	B13	0.677	158.993	3	<0.001	
	B14					
	B15					
Work Effort	B16	0.884	417.377	45	<0.001	
	B17					
	C1					
	C2					
	C3					
	C4					
	C5					
	C6					
	C7					
	C8					
C9						
C10						

Appendix 3. PCA results

Table 7. PCA results (excluded questions marked in bold).

Construct	Question	Principal Component	Eigenvalue	% of variance explained	Cronbach's Alpha	
Coercive PMS	A1	0.753	2.933	48.890%	0.781	
	A2	0.652				
	A3	0.699				
	A4	0.714				
	A5	0.690				
	A6	0.440				
	A7	-0.040				
Enabling PMS	A8	0.877	4.548	56.844%	0.888	
	Internal Transparency	A9				0.875
		A10				0.800
		A11				0.680
	Global Transparency	A12				0.410
		A13				0.144
	Repair	A14				0.586
		A15				0.168
	Flexibility	A16				0.168
		A17				0.393
		A18				0.325
A19		0.275				
Autonomous Motivation	B1	0.116	3.132	62.645%	0.846	
	Identified	B2				0.222
		B3				0.432
		B4				0.827
	Intrinsic	B5				0.885
		B6				0.881
Controlled Motivation	B7	0.125	3.797	54.250%	0.856	
	External (social)	B8				0.225
		B9				0.672
		B10				0.747
	External (material)	B11				0.705
		B12				0.558
	Introjection	B13				0.879
B14		0.807				
Amotivation	B15	0.920	2.316	77.214%	0.849	
	B16	0.914				
	B17	0.797				
Work Effort	C1	-0.018	4.608	51.195%	0.870	
	C2	0.531				
	C3	0.225				
	C4	0.649				
	C5	0.647				
	C6	0.752				
	C7	0.825				
	C8	0.711				
	C9	0.624				
	C10	0.439				

Appendix 4. Full robustness check results

Table 8. Full robustness check results.

Hypotheses:	Robustness check			
	Controlled motivation	Autonomous motivation	Amotivation	Amotivation
Dependent variable:				
Mediating variable:	na	na	na	na
Independent variables:				
Enabling PMS	0.101		-0.347**	
Coercive PMS		0.386**		-0.416**
Enabling/Coercive PMS	-	-	-	-
Autonomous Motivation	-	-	-	-
Controlled Motivation	-	-	-	-
Enabling PMSxAutonomous Motivation	-	-	-	-
Coercive PMSxControlled Motivation	-	-	-	-
Enabling/Coercive PMSxAutonomous Motivation	-	-	-	-
Enabling/Coercive PMSxControlled Motivation	-	-	-	-
Age	0.025	-0.016	-0.018	-0.018
Gender	0.337	0.040	-0.144	-0.266
Education	0.202	-0.029	0.340	0.418
Country	-0.264*	-0.034	-0.105	-0.102
Position	-0.268	0.033	-0.101	-0.083
Years in current position	-0.013	-0.008	0.007	0.045
Years in banking sector	-0.017	0.033	-0.007	-0.022
Develops personal KPIs	0.260	-0.096	0.081	0.109
Develops department KPIs	-0.218	-0.086	-0.242	-0.170
Set personal targets	0.202	0.150	-0.063	0.115
Sets department targets	0.186	-0.001	0.136	0.109
Number of observations	105	105	105	105
R²	0.127	0.157	0.177	0.177