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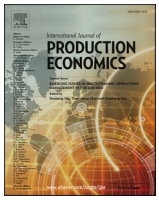

Effects of operations executives' power on shareholder wealth

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ABSTRACT

This study investigates the effect of operations executives' power (OEP) within a firm's organizational structure on the firm's shareholder value. In doing so, we employ a multidimensional measure that captures the relative power dynamics within a firm's TMT and is sensitive to shifts in these dynamics, enabling us to more precisely operationalize the power held by operations executives. Further, we link OEP to abnormal stock returns to evaluate the market's perception of operations executives' influence within a firm's TMT, and to idiosyncratic stock returns risk to explore how this influence contributes to the uncertainty in stock returns. In addition, we examine the contingency roles of firm maturity and market turbulence in moderating the OEP–shareholder value relationship. Using a longitudinal dataset of manufacturing firms (SIC 20–39) from 1998 to 2018, our findings reveal that while OEP boosts abnormal stock returns, it negatively impacts idiosyncratic stock returns risk. Additionally, firm maturity reduces the positive (resp., negative) effect of OEP on abnormal stock returns (resp., idiosyncratic stock return risk), whereas market turbulence enhances the positive (resp., negative) effect of OEP on abnormal stock returns (resp., idiosyncratic stock returns risk). These findings contribute to a deeper understanding of the dynamic interplay between operations executives' influence, firm characteristics, and market conditions in driving shareholder value.

1. Introduction

A firm's top management team (TMT) consists of individuals who are instrumental in crafting and executing major strategic initiatives that drive firm performance (Roh et al., 2016). The background and characteristics of top executives can significantly shape organizational outcomes (Hambrick and Mason, 1984). In line with this theory, both scholars and practitioners have highlighted the value of including operations management (OM) executives on TMTs. Given that OM executives often oversee up to two-thirds of a firm's workforce and manage nearly half of its budget (Vaid et al., 2021), their role is critical for enhancing operational efficiency, fostering innovation, and optimizing cost management. For example, Joshi et al. (2003) show that OM executives can significantly improve business performance by ensuring alignment between manufacturing and business strategies, which they achieve through their dual roles of involvement and influence in strategic decision-making. Similarly, Vaid et al. (2021) suggest that the presence of OM executives on TMTs is crucial for sustaining operational efficiency. Consistently, Hendricks et al. (2015) show that the appointment of OM executives leads to positive market reactions, particularly when the executive is an outsider or when the position is newly created.

However, despite extensive research on the performance implications of operations executives' influence within TMTs, several critical issues remain underexplored in the operations strategy literature. The first issue pertains to the operationalization of operations executives' power within a firm's organizational structure. The power of executives is a multi-dimensional construct, derived from various factors such as their hierarchical rank within the TMT and the breadth of their responsibilities. However, previous studies have tended to oversimplify this concept, measuring influence solely based on the presence of operations executives on the TMT (see, e.g., Vaid et al., 2021). This narrow approach overlooks other critical dimensions of power, potentially leading to a misidentification of the construct, as mere inclusion on the TMT is only one facet of an executive's influence.

Moreover, the power of executives, particularly from a specific function like OM, is inherently a relative concept, influenced by the characteristics of other board members, including their functional roles

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and hierarchical ranks. For instance, an operations executive may hold more sway on a board where all members have operations backgrounds compared to one with diverse functional representation, such as marketing and sales. This variation in influence is due to competition for limited resources, where board members may champion initiatives that align with the strategic priorities of their respective functions. Thus, failing to consider the relative standing of operations executives vis-à-vis their peers could lead to an overestimation of their influence, thereby compromising the validity of findings regarding the performance outcomes associated with their power. Additionally, existing research often uses proxies such as the appointment or exit of operations executives to capture shifts in their influence. However, the power of these executives is dynamic and shaped by factors beyond mere board appointments or exits. Elements like changes in the number of board members, the scope of their responsibilities, their hierarchical ranking, or even the death of a board member can significantly affect an executive's influence. Therefore, adopting a static measure of power that does not account for these evolving dynamics may lead to inaccurate assessments of operations executives' influence and its subsequent impact on firm performance.

The second issue concerns the measurement of the performance implications of operations executives' influence. Prior research in the operations strategy domain has predominantly focused on the return implications of having powerful operations executives on the board, while neglecting the risk dimension of operations leadership. Financial risk is a critical aspect of firms' overall performance, with significant implications for strategic decisions. For instance, elevated risk levels can hamper firms' ability to invest in research and development (R&D) due to increased likelihood of cash shortfalls (Minton and Schrand, 1999). Furthermore, heightened risk can raise the costs of accessing external capital (Panousi and Papanikolaou, 2012). Therefore, to provide a more nuanced understanding of the performance implications of operations executives' power, it is essential to examine its impact on both return and risk as distinct dimensions of firm performance.

In light of these considerations, the primary objective of this study is to investigate the effect of operations executives' power (OEP) on shareholder wealth. We employ a multi-dimensional measure that captures the multifaceted and relative nature of OEP, while also being sensitive to changes in power dynamics within a firm's TMT. Additionally, we examine the impact of OEP on abnormal stock returns and idiosyncratic stock return risk, thereby assessing its implications for both firm returns and risk from the stock market perspective. Also, we investigate the role of firm- and industry-level factors that are likely to influence the OEP–shareholder value relationship. To test our conceptual framework, we assemble a longitudinal dataset from multiple sources, including Compustat's ExecuComp and the Center for Research in Security Prices (CRSP) databases. Our sample comprises 10 056 yearly observations from 1126 manufacturing firms (Standard Industrial Classification (SIC) codes 20–39) over the 1996–2018 period. We utilize the Gaussian Copula method to address potential sources of endogeneity in our estimations.

Our study makes several contributions to literature on operations strategy and organization theory. *First*, building on the department power measure developed by Feng et al. (2015), we extend their approach to the operations management context, resulting in a more refined measure of OEP that offers several advantages over existing proxies for assessing operations leadership. Unlike previous studies that primarily focus on the mere presence of operations executives on TMTs, our measure leverages multiple objective indicators, such as the breadth of responsibilities, to capture the multifaceted nature of operations executives' power. Additionally, our measure accounts for the relative nature of executives' power by incorporating the impact that non-operations board members may have on the operations executives' influence within the board. Moreover, to measure OEP, we consider a comprehensive list of operations-related positions in TMTs. In doing so, we distinguish between the operations and other closely related functions such as supply chain and procurement. Further, we exploit publicly available secondary data on the composition and structure of firms' TMTs to measure OEP; this approach enables us to develop a measure that can be constructed across a large sample of firms and over time.

Second, we contribute to the extant literature by jointly examining the return and risk implications of OEP from the stock market perspective. As such, this study complements nascent literature that explores the operations–finance interface (e.g., Babich and Kouvelis, 2018). In linking OEP to shareholder value, we use abnormal stock returns to determine the net value that the stock market places on the influence of operations executives with a firm's TMT. Further, we link OEP to idiosyncratic stock returns risk to assess the risk in stock returns associated with the influence of operations executives in the TMT. In doing so, we draw on the upper echelon theory (Hambrick and Mason, 1984) and the subunit power literature in organization theory (e.g., Pfeffer, 1981) to explain how OEP influences the development of operations-based resources and capabilities, such as just-in-time (JIT) and lean production. Then, leveraging the resource-based view (RBV) theory (Barney, 1991), we argue that these operations-based competencies serve as sustainable sources of competitive advantage, ultimately driving firm performance and enhancing shareholder value. Our results demonstrate that OEP enhances shareholder wealth by increasing abnormal stock returns and reducing idiosyncratic stock return risk. These findings are of significant importance to practitioners, as maximizing shareholder value is the primary objective for managers of publicly traded firms (Hwang and Kim, 2017).

Third, we develop a contingency framework that examines how firm and industry characteristics moderate the relationship between OEP and shareholder value. At the firm level, we explore the moderating effect of firm maturity. According to the RBV theory, "with managerial action being essential for realizing competitive advantage from resources a firm owns, and these resources somewhat dependent on the firm's stage of development, it is important to explore resource orchestration efforts across the life cycle of a firm (Sirmon et al., 2011, p. 1400)." In this regard, we investigate whether the impact of OEP on shareholder value, materialized through the development of operations-based competencies, is influenced by a firm's lifecycle stage. Younger firms, often characterized by unestablished routines, weaker market positions, and unstable demand, benefit from a focus on operational flexibility, innovation, and resource alignment (see, e.g., Coad et al., 2016). In this context, the role of operations executives in driving shareholder value through the development of operations-based competencies is crucial. In contrast, mature firms typically enjoy the stability and efficiency resulting from their established processes and predictable demand (Balkin and Montemayor, 2000). As a result, the incremental impact of operations executives on driving shareholder value through the building operations-based competencies diminishes for more mature firms. Our results show that firm maturity weakens the positive (resp., negative) effect of OEP on abnormal stock returns (resp., idiosyncratic stock returns risk).

At the industry level, we examine the moderating effect of market turbulence. "Because a firm's unique resources determine its behavior, which is conditioned by the environmental context, the value and management of the firm's resources must be evaluated in the environmental context within which the firm operates" (Tsai and Yang, 2013, p. 1280). Specifically, the competitiveness of a firm's resources and capabilities can vary dramatically in unstable and unpredictable environments (Barney, 2011). In turbulent industries marked by high demand uncertainty, rapid technological advancements, and economic volatility, operations executives can play a crucial role in enhancing flexibility and agility to maintain competitiveness by developing competencies such as lean production (Aitken et al., 2002; Naim and Gosling, 2011). Their organizational power allows operations executives to respond swiftly to market shifts by managing resources effectively and coordinating cross-functional efforts. Consistent with this perspective, we find that market turbulence enhances the shareholder wealth effect of OEP by amplifying its positive (resp., negative) impact on

abnormal stock returns (resp., idiosyncratic stock returns risk).

2. Theoretical background

A firm's TMT comprises individuals who play a crucial role in shaping and executing major strategic initiatives that influence firm performance (Roh et al., 2016). The upper echelons theory suggests that the background and characteristics of top executives significantly impact organizational outcomes (Hambrick and Mason, 1984). Indeed, "experience is a critical contributor to the kind of extensive knowledge base that marks relatively high levels of expertise, and that supports high-quality decision making" (McDonald et al., 2008, p. 1162). The functional expertise of TMT executives can affect the perceptual lens through which they view, evaluate, and address business challenges and opportunities. As subject matter experts with the power to influence corporate decisions, TMT executives play a key role in building the competencies necessary for enhancing competitiveness and performance (Hendricks et al., 2015; Sting and Loch, 2016). Similarly, a firm's TMT composition provides outsiders (e.g., investors, creditors, alliance partners) with valuable information about the firm's performance prospects. In particular, "when externally validated symbols of legitimacy such as development milestones are not convincing to outsiders, the symbolic value of a firm's internal credentials, such as the backgrounds of the firm's upper echelon, are expected to be particularly important" (Higgins and Gulati, 2003, p.250).

In parallel, the power literature in organization theory argues that limited access to competitive resources, on the one hand, and potential divergences in strategic objectives, on the other hand, often necessitate prioritizing business functions within a firm's organizational structure (Hambrick and Mason, 1984). This prioritization, in turn, often leads to a power dynamic among executives in the TMT, as individual leaders seek to influence the firm's strategic decision-making and execution (Pfeffer, 1981; Atuahene-Gima and Evangelista, 2000). Powerful executives play a significant role in determining a firm's overall strategic orientation by influencing resource accumulation and orchestration, coordinating cross-departmental interactions, and guiding the TMT's focus and strategic decision making. Executives with greater power can more effectively shape organizational practices by guiding the TMT's focus toward internal or external threats and opportunities relevant to their respective departments (Delmas and Toffel, 2008; Feng et al., 2015). As such, the distribution of power across a firm's TMT executives can have important implications for its overall competitiveness and performance.

Against this backdrop, it is essential to examine the performance implications of operations executives' power in driving firm success, given their growing significance in modern organizations. Operations executives play a distinct role compared to other functions such as supply chain and marketing within a firm. Unlike supply chain executives, who primarily manage external relationships and logistics, operations executives focus on internal transformation processes, overseeing areas critical to competitiveness and performance, such as production efficiency, innovation, and cost management (Chopra and Meindl, 2004; Hsu et al., 2009). Furthermore, operations executives differ from marketing executives, who are primarily concerned with external market dynamics, customer relationships, and brand positioning. Instead, operations executives are tasked with optimizing internal processes to enhance product quality, reduce costs, and streamline production systems. This focus on internal capabilities highlights the significance of operations executives' role in sustaining a firm's competitive edge and overall performance.

Relatedly, a growing body of literature has empirically demonstrated the significant impact of operations leadership on corporate strategy and firm performance. For example, Krause et al. (2013) observed that the presence of external chief operating officers (COOs) or presidents on a firm's board enhances firm performance, particularly when operational efficiency is declining. Vaid et al. (2021) examined the performance implications of turnover among top management operations executives, revealing that new appointments enhance firm value through improved operational efficiency, while exits can disrupt performance. Hendricks et al. (2015) found that stock markets respond favorably to the appointment announcements of senior corporate OM executive, especially when the appointee is an external hire for a newly created role. Additionally, Koyuncu et al. (2010) highlighted that CEOs with a background in operations achieve higher post-succession performance than those with other functional expertise; they further noted that operations backgrounds are increasingly common in recent successions and under poor firm performance conditions. Finally, Aral et al. (2021) observed that firms are more likely to appoint COOs in response to heightened stakeholder orientation, which correlates with increased firm value.

Despite substantial research on the performance implications of operations executives' influence, several critical issues remain in the operations strategy literature. First, the operationalization of operations executives' influence within TMTs has been oversimplified, often measuring power solely by an executive's presence on the team, overlooking other dimensions such as their hierarchical rank and responsibility scope. Moreover, the power of an executive is relative and can vary depending on the functional composition and hierarchical dynamics of the TMT, making the mere presence of operations executives insufficient to assess their true influence. Existing research also often relies on static proxies like appointments or exits, neglecting the dynamic nature of executive power, which is shaped by various factors such as changes in board composition or responsibilities. Second, most studies focus solely on the return implications of powerful operations executives, while ignoring the financial risk dimension, that is crucial to understanding the full impact of operations executives' influence on firm performance.

Our study investigates the effect of OEP on shareholder wealth. In doing so, we build on the department power measure developed by Feng et al. (2015) to operationalize the power of operations executives with a multidimensional measure that captures the relative nature of power and is responsive to changes in the power dynamics within a firm's TMT. Further, following the extant operations strategy literature (Fitzgerald et al., 2021; Jain and Wu, 2023), we use abnormal stock returns and idiosyncratic stock returns risk to examine the performance effects of OEP. Market-based measures offer several advantages over accounting metrics, such as return on asset (ROA). First, they are inherently forward-looking, as they reflect investors' expectations about a firm's future profitability and growth potential. Unlike traditional accounting measures such ROA, which primarily capture historical performance, stock prices incorporate real-time information about market conditions, competitive dynamics, and strategic initiatives. This forward-looking nature allows us to assess how OEP influences investors' perceptions and ultimately impacts long-term shareholder value. Second, Managers can influence accounting metrics such as ROA through reporting practices like adjusting depreciation schedules, capitalizing operating expenses, or timing revenue recognition to inflate profitability. However, market-based metrics cannot be easily manipulated by managers because they are determined by the stock market.

In this regard, we link OEP to abnormal stock returns to determine the net value that the stock market places on the power of operations executives within a firm's TMT. Firms act in the interest of their profit-seeking shareholders; thus, enhancing firm value is a primary objective of many businesses. Enhancing shareholder value is also important to managers, as when external capital must be raised for purposes of business expansion (Baek et al., 2004). Moreover, we examine the effect of OEP on idiosyncratic stock returns risk to explore the risk implications of delegating power and authority to operations executives. Financial risk is a crucial dimension of firm performance because it can, for example, hinder a firm's ability to invest in capital expenditures. Risk raises the likelihood of cash shortages and financial distress, thereby limiting investment opportunities (see, e.g., Minton and Schrand, 1999).

Additionally, higher risk amplifies concerns among external creditors due to uncertain payoffs, which in turn raises the costs of securing external capital (Panousi and Papanikolaou, 2012).

In theorizing how OEP affects shareholder wealth, we integrate insights from the upper echelons theory (Hambrick and Mason, 1984), the subunit power literature in organizational theory (e.g., Pfeffer, 1981), and the RBV framework (Barney, 1991). From the perspective of upper echelons theory, we argue that the functional expertise of TMTs shapes how they perceive and respond to business challenges, guiding firms' prioritization of developing and leveraging competencies that enhance competitiveness and performance (Hendricks et al., 2015; Sting and Loch, 2016). Building on the power literature, we posit that the presence of more influential operations executives within a firm's TMT facilitates cross-functional coordination and enables them to shape the TMT's strategic priorities. This, in turn, allows for greater autonomy in investing in and utilizing operations-based resources and capabilities. Finally, applying the RBV framework—which asserts that sustainable competitive advantage stems from resources and capabilities that are valuable, rare, inimitable, and non-substitutable (King and Zeithaml 2001)—we demonstrate how these operations-based competencies drive long-term firm success and subsequently shareholder wealth.

Furthermore, we leverage the RBV theory to explore how firm and industry factors can moderate the relationship between OEP and shareholder wealth. Specifically, at the firm level, we investigate how the moderating effect of firm maturity. We argue that OEP facilitates the development and utilization of operations-based resources and capabilities. Yet, according to the RBV framework, the competitiveness of a firm's competencies is shaped by the firm's stage of development (Hasan, 2018; Hasan and Habib, 2017; Sirmon et al., 2011). Therefore, it is crucial to examine how the role of OEP in enhancing shareholder value—realized through leveraging operational competencies—evolves across a firm's life cycle. In this regard, we posit that younger firms, characterized by less established routines, weaker market positions, and fluctuating demand, require a focus on operational agility, innovation, and resource coordination to drive growth (see, e.g., Coad et al., 2016). Conversely, mature firms often capitalize on their established processes to manage predictable demand (Balkin and Montemayor, 2000). As a result, the influence of operations executives in enhancing shareholder value through placing emphasis on investments in operations-based capabilities is more pronounced for younger firms.

At the industry level, we examine the moderating effect of market turbulence. OEP contributes to shareholder wealth by facilitating the development and effective utilization of operations-based resources and capabilities. However, according to the RBV framework, the strategic value of a firm's competencies is contingent on the environmental context in which it operates, with their competitiveness being particularly susceptible to market volatility and unpredictability (Barney, 2011, Tsai and Yang, 2013). In industries characterized by high demand uncertainty, rapid technological advancements, and economic instability, OEP can play a more pivotal role in enhancing shareholder wealth by fostering organizational adaptability, flexibility, and responsiveness through the development and implementation of competencies such as lean production. Moreover, its organizational authority enables the optimization of resource allocation and the facilitation of cross-functional coordination, thereby sustaining competitiveness in dynamic market environments. We plot our conceptual framework in Fig. 1.

3. Hypotheses

3.1. Effect of OEP on abnormal stock returns

We argue that OEP enhances stock returns for several reasons. According to the upper echelons theory (Hambrick and Mason, 1984), a firm's TMT is instrumental in shaping strategy and driving performance, with executives' backgrounds and expertise influencing decision-making and competitive positioning. Top executives' characteristics affect organizational outcomes by shaping how they interpret and respond to business challenges. Furthermore, the power literature in organization theory suggests that power dynamics within the organization impact strategic priorities, as influential executives guide resource allocation, coordination, and overall strategic direction (e.g., Feng et al., 2015; Pfeffer, 1981).

Accordingly, the presence of powerful operations executives on a firm's TMT enables them to shape the firm's competitive strategy by steering strategic decisions and investment priorities toward enhancing and utilizing operations-based resources and capabilities (see Hayes and Wheelwright, 1984). Additionally, executives' power acts as a governance mechanism, enabling the operations managers to coordinate inter-departmental collaborations and enhance resource pooling and knowledge sharing. This power fosters greater autonomy and flexibility, allowing their respective department to commit to and pursue long-term projects—which may initially be challenging to justify—while protecting them from premature scrutiny. For example, by leveraging their control over resources, operations executives can play a vital role in supporting product design initiatives and fostering cross-departmental collaboration, such as with marketing, to ensure successful product launches. Coordinating efforts and ensuring that designs align with the firms' capabilities helps streamline processes, minimize delays, and deliver high-quality products on time (Tatikonda and Montoya-Weiss, 2001). The ability to introduce reliable products faster than competitors is a key differentiator in industries where innovation and speed are crucial. Furthermore, by ensuring the feasibility and scalability of innovative designs, operations executives can enable the development of operationally sustainable products. Successful launches contribute to increased sales and long-term profitability, which in turn positively

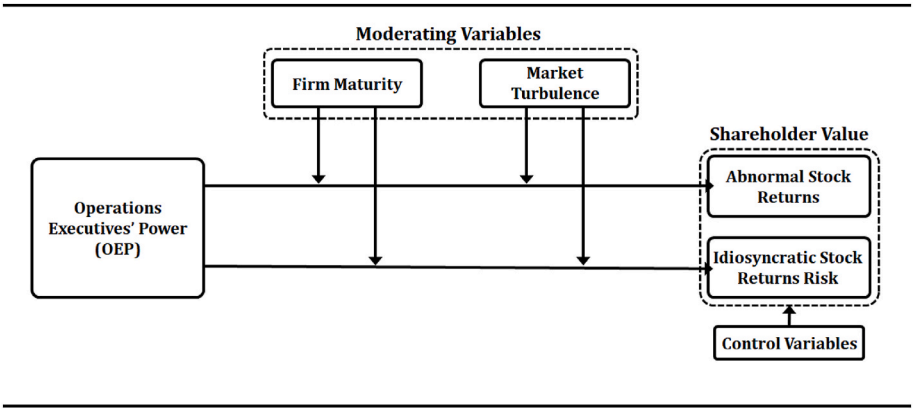

Fig. 1. Conceptual framework.

affect stock returns (Koski and Kretschmer, 2010).

Similarly, OEP enhances the ability of operations managers to implement JIT initiatives by ensuring the timely allocation of resources necessary for efficient production processes. Bottlenecks in procurement, production scheduling, or supply chain logistics can delay the timely flow of materials needed for JIT operations (Ranjeeni et al., 2023). Organizational power enables the operations executives to resolve these issues by influencing other functions within the organization to align their processes with JIT principles, fostering a culture of continuous improvement. Furthermore, OEP can provide the authority to drive organizational changes, such as process re-engineering or supply chain integration, which are often necessary for fully realizing the benefits of JIT, including improved efficiency, reduced lead times, and enhanced operational agility. Likewise, the ability of operations executives to successfully implement total quality management (TQM) initiatives is largely dependent on their influence within the organization. For TQM to work effectively, the operations leadership must have the authority and resources to invest in quality improvement programs, such as advanced training for employees, acquisition of new technology, or process optimization tools (Kaynak, 2003).

Also, OEP plays a pivotal role in driving lean inventory practices by giving the operations managers the authority to streamline and optimize stock management. The ability of powerful operations executives to integrate real-time data across various departments allows for better forecasting and coordination with suppliers, ensuring that the right amount of inventory is available when needed, cutting down on storage costs and waste (Koumanakos, 2008). Additionally, OEP facilitates the allocation of resources toward advanced inventory management systems and staff training, enhancing operational efficiency. This leads to improved profitability by minimizing unnecessary expenses while maintaining flexibility and responsiveness to customer needs.

Taken together, OEP plays a crucial role in enabling the operations executives to develop and leverage key competencies such as new product design, JIT manufacturing, TQM, and lean inventory management. According to the RBV framework, these competencies can serve as difficult-to-imitate sources of competitive advantage, driving improved firm performance. For example, new product design and development allows firms to introduce innovative offerings that meet or exceed customer expectations, enhancing market appeal (Koski and Kretschmer, 2010). Similarly, JIT and lean inventory practices boost operational efficiency by minimizing waste and reducing the need for large inventory holdings, which lowers carrying costs, decreases the risk of obsolescence, and frees up capital otherwise tied to excess stock (Koumanakos, 2008). In addition, TQM not only increases customer satisfaction and loyalty but also reduces inefficiencies like defects and rework, ultimately lowering operational costs and contributing to long-term profitability. We expect shareholders to take these performance implications of OEP into account when evaluating a firm's potential, assigning greater value to firms that exhibit higher OEP.

Hypothesis 1 (H1). Operations executives' power enhances abnormal stock returns.

3.2. Effect of OEP on idiosyncratic stock returns risk

OEP reduces the idiosyncratic stock returns risk for various reasons. According to the upper echelons theory and the subunit power literature, more powerful operations executives are better positioned to utilize operational competencies. For example, executive power enables operations managers to more flexibly invest in and leverage capabilities such as data analytics and system modeling to enhance demand forecasting and planning processes. Also, by having authority and influence within the organization, operations managers can facilitate effective communication channels and establish collaborative relationships with other functions. This collaboration enables the operations executives to gain a deeper understanding of market demands, customer preferences, and emerging trends, which are essential inputs for accurate demand forecasting and planning processes. For example, powerful operations executives can better facilitate the operations function to access the market intelligence gained by the firm's marketing division to develop products or services that best fit customers' requirements; they can likewise promote production planning based on demand forecast information provided by the sales team (Dutta et al., 1999). This enables the firm to align production levels with expected demand, reducing the risk of overproduction or stockouts that can lead to cash flow fluctuations. This is of direct importance because the mismatch between demand and supply would increase the volatility of cash flows and, consequently, uncertainty in stock returns (see Hendricks and Singhal, 2014).

Similarly, OEP can facilitate the implementation of robust inventory management practices. By optimizing inventory levels and utilizing JIT inventory systems, powerful operations executives can more easily adapt inventory levels to demand shocks (see Rumyantsev and Netessine, 2007; Feng and Shi, 2012). Inventory flexibility prevents inventory shortages (resp., excess) due to unexpected increases (resp., decreases) in demand, which leads to more stable earnings (Van Mieghem and Rudi, 2002). In contrast, poor inventory management leads to supply–demand mismatches that result in lost sales or backlog costs that can increase cash flow volatility (Steinker and Hoberg, 2013). Also, top management's active support for operational hedging strategies could serve as a potent lever in reducing a firm's cash flow volatility and hence idiosyncratic stock returns risk. Operational hedging, characterized by "the adjustment of strategies and the structuring of resources and processes to proactively reduce, if not eliminate future risk exposure" (Van Mieghem, 2011), mitigates a variety of concerns such as exchange rate fluctuations and disruption challenges (Huchzermeier and Cohen, 1996; Tomlin, 2006).

Lastly, OEP empowers operations executives to invest in flexible technologies and processes, enhancing the firm's adaptability and resilience in the face of changing market conditions and customer demands. By leveraging their influence, operations managers can allocate resources toward technologies such as automation, modular production systems, or advanced manufacturing tools that allow for quick adjustments in production volumes, product customization, or process reconfiguration. This operational flexibility is crucial in enabling firms to respond swiftly to market fluctuations, whether it is a sudden increase in demand, shifts in customer preferences, or disruptions in the supply chain (Chod et al., 2012). Such adaptability not only ensures the firm's competitive edge, but also fosters resilience, allowing it to maintain efficiency and service quality even during periods of uncertainty.

In summary, OEP facilitates investments in operations-based competencies such as data analytics, flexible technologies, and efficient inventory management, enhancing a firm's adaptability and resilience amid shifting market conditions. Additionally, OEP fosters cross-functional collaboration—particularly with marketing and sales—allowing operations teams to leverage market intelligence, including trends and customer preferences, to better align production with market demand. According to the RBV theory, these competencies provide a sustainable competitive advantage by differentiating firms through superior operational agility and responsiveness. For example, lean inventory strategies combined with agile strategies (leagile) help firms adapt to demand fluctuations with minimal disruption (Naim and Gosling, 2011). By mitigating disruptions, personalizing offerings, and ensuring service consistency, agile firms create seamless customer experiences that build trust and engagement (Carvalho et al., 2011; Holloway, 2025). When customers see a vendor consistently meeting their expectations, they are more likely to develop lasting loyalty, reinforcing customer base stability and driving a more predictable revenue stream (Saad et al., 2022). By minimizing inefficiencies and reducing volatility in demand fulfillment, firms establish a more stable cost structure and revenue stream. This financial predictability smooths cash flows, ultimately lowering the risks associated with stock returns.

Hypothesis 2 (H2). Operations executives' power reduces idiosyncratic stock returns risk.

3.3. Moderating effect of firm maturity

"The resources, capabilities, strategies, structures and functioning of [a] firm vary significantly with particular stages of development" (Hasan and Habib, 2017, p. 164). Aligned with the RBV framework, a firm's competitive assets base is shaped by its developmental stage, as sustaining or improving its market position requires distinct resources and capabilities at different phases of its evolution. For example, securing resources that enhance credibility and legitimacy in the marketplace is especially critical for younger firms (Miller and Friesen, 1984; Sirmon et al., 2011).

In this regard, we argue that OEP's impact on shareholder value—realized through the development and utilization of operational resources and capabilities—evolves throughout the firm's lifecycle, driven by changes in the competitiveness of such assets at each stage of the firm's development. Specifically, we expect the impact of OEP on increasing abnormal stock returns to be weaker in mature firms. Firm maturity represents a stage in a company's lifecycle where growth stabilizes, and the firm tends to become more bureaucratic and rigid, potentially facing organizational inertia (Josephson et al., 2016). Less mature firms often "struggle for market acceptance as they strive to become viable market entities" (Josephson et al., 2016, p. 542). Therefore, leveraging dynamic capabilities such as JIT manufacturing, lean inventory management, and new product development plays a substantial role in helping these firms achieve competitiveness in the marketplace. In the early stages of a firm's life cycle, managers typically have greater discretion in resource allocation to support growth (Kim et al., 2018). Organizational power can enable operations executives to exercise more autonomy and flexibility, allowing them to improve resource pooling and knowledge sharing, which is critical for pursuing operations-related initiatives. As a result, the importance of OEP in achieving operations-based competencies is significantly pronounced for growth-oriented, less mature firms.

However, as firms mature, the need for dynamic adaptability diminishes because mature firms often prioritize formalization and standardization of processes (Balkin and Montemayor, 2000), Additionally, Loderer et al. (2017) highlight that as firms mature, their efficiency and management quality often improve, with productivity rising—evident in higher sales-to-assets ratios—and operational costs decreasing, as reflected in lower cost of goods sold per employee. This improvement occurs because core competencies, such as JIT, TQM, and lean practices, are likely already integrated into the firm's operations before it enters the maturity phase. As these firms have established efficient processes and stable market positions, the incremental value that OEP adds to improving operational efficiency diminishes. Furthermore, firms' ability to engage in radical innovation declines as they mature, leading them to invest less in R&D because their stock of growth opportunities decreases over their lifecycle (Loderer et al., 2017). Consequently, the potential for OEP to drive further shareholder wealth through radical innovation becomes limited with increasing firm maturity.

Hypothesis 3 (H3). Firm maturity weakens the positive effect of operations executives' power on abnormal stock returns.

Similarly, the impact of OEP on idiosyncratic risk varies with a firm's lifecycle stage. According to the RBV framework, a firm's competitive strengths evolve over time (Hasan and Habib, 2017; Sirmon et al., 2011). Therefore, we expect OEP's effect on idiosyncratic risk—driven by the firm's ability to develop and utilize operations-based resources and capabilities—to be lifecycle-dependent, reflecting shifts in the competitive significance of these competencies at different stages. Specifically, we expect OEP to have a weaker effect on reducing idiosyncratic stock returns risk in mature firms. Less mature firms face performance uncertainty due to factors such as limited market experience, unpredictable demand patterns, and resource constraints. Lacking the historical data or established processes that more seasoned companies depend on, younger firms are at a higher risk of operational misalignment (Freeman and Engel, 2007). This misalignment can exacerbate challenges such as inefficient inventory management and hence cash flow instability. Additionally, to strengthen their relatively weaker market positions, younger firms are more likely to pursue risky disruptive innovations in an effort to challenge established market incumbents (Josephson et al., 2016). Under such circumstances, the ability of powerful operations executives to invest in and leverage competencies such as data analytics, demand forecasting, and design capabilities becomes even more critical. For example, by facilitating effective communication and collaboration with other departments, operations managers can better align production with market demand, thereby reducing risks like overproduction or stockouts, which could otherwise lead to cash flow volatility.

However, in mature firms, the need for proactive demand-supply alignment is less urgent due to their stable market positions and more predictable growth trajectories. Additionally, these firms often implement standardized inventory management and supply chain practices (Mauro, 2008), which reduces the necessity for the operations function to frequently adapt to internal shifts. Also, mature firms typically maintain well-established relationships with key stakeholders—such as suppliers, customers, and distributors—which fosters a more predictable and stable exchange of goods and services (Larson, 1992). As a result, the incremental value of OEP in enhancing demand forecasting or inventory management is smaller. Furthermore, since mature firms invest less in R&D as their pool of growth opportunities shrinks over time, they engage less in radical innovation and, consequently, face lower risks associated with disruptive innovations (Loderer et al., 2017). This also leads to a reduced incremental value of OEP in guiding the product design and launch process to mitigate potential risks. Together, these dynamics diminish the value of OEP in enhancing the stability of a firm's cash flow and, therefore, in reducing idiosyncratic stock returns risk.

Hypothesis 4 (H4). Firm maturity weakens the negative effect of operations executives' power on idiosyncratic stock returns risk.

3.4. Moderating effect of market turbulence

We expect market turbulence to amplify the positive effect of OEP on abnormal stock returns. OEP enhances shareholder value by supporting the development and utilization of operational competencies. However, based on the RBV framework, the strategic value of a firm's resources and capabilities depends on market turbulence and volatility (Barney, 2011, Tsai and Yang, 2013). Turbulent industries are marked by heightened demand uncertainty stemming from shifting customer preferences, technological advancements, and economic volatility (Nezami et al., 2018). In such environments, firms must obtain dynamic resources and capabilities that enable them to sustain competitiveness by adapting and responding to environmental uncertainties (Teece et al., 1997).

In this regard, we argue that the role of operations executives in enhancing shareholder value by driving flexibility and agility becomes increasingly crucial in more volatile markets. This is because organizational power enables operations managers to respond swiftly to market shifts by leveraging their control over resources and coordinating efforts across different functions. For instance, more powerful operations executives can implement JIT production and ensure that lean inventory practices align with fluctuating market needs, thus minimizing costs and preventing disruptions. Additionally, in turbulent markets, customer preferences can change unexpectedly, and technology standards can shift rapidly, introducing substantial risk in product development processes (see Wang et al., 2015). The operations executives' influence on product design and their ability to collaborate effectively with other functions, such as marketing, becomes essential in ensuring that new

products not only meet evolving market demands but also remain compatible with emerging technological trends. In this context, more powerful operations executives are better equipped to help the firm stay ahead of competitors by facilitating efficient product launches, minimizing delays, and improving time-to-market, particularly when consumer needs and technology are in flux.

Hypothesis 5 (H5). Market turbulence strengthens the positive effect of operations executives' power on abnormal stock returns.

Similarly, market turbulence strengthens the negative effect of OEP on idiosyncratic stock returns risk. According to the RBV framework, the ability to develop and leverage competencies that enable quicker adaptation to market changes and shifts in demand patterns becomes an increasingly critical source of maintaining competitiveness in turbulent markets (Barney, 2011; Teece et al., 1997). This is because as market conditions grow more uncertain and unpredictable, firms face heightened challenges in aligning their production and supply strategies with rapidly changing consumer needs and behaviors (Christopher et al., 2004; Ye et al., 2023). This can increase the likelihood of mismatches between supply and demand (Nezami et al., 2018). If these mismatches are not addressed promptly, they can lead to inefficiencies, elevated costs, and missed opportunities, all of which contribute to greater financial volatility and risk.

Accordingly, the role of more influential operations executives in investing in and leveraging robust operations-based competencies, such as demand forecasting and inventory management, becomes more crucial in turbulent markets. These capabilities allow a firm to anticipate demand shifts more effectively and adjust its operations accordingly, thereby enhancing the firm's ability to navigate the complexities of turbulent markets. In contrast, the predictability of demand in more stable markets shifts the focus away from immediate investments in operations-based resources and capabilities that would enhance firms' agility and flexibility in responding to potential market changes. Moreover, the power of operations managers facilitates cross-departmental collaboration, enabling the operations team to swiftly adapt production plans based on real-time market intelligence gleaned from marketing or sales functions. This responsiveness is especially critical when market conditions are subject to rapid change (see Fang et al., 2008).

Hypothesis 6 (H6). Market turbulence strengthens the negative effect of operations executives' power on idiosyncratic stock returns risk.

4. Methodology

4.1. Sample construction

To test our conceptual framework, we compiled a panel dataset on publicly traded manufacturing firms with SIC codes of 20–39 between 1996 and 2018. Our starting point for the sample construction was the Compustat's ExecuComp database, which provides information on the composition and compensation of US firms' top management teams. We used the information provided by ExecuComp to construct our measure of OEP. Our initial sample included 18 047 observations pertaining to 1410 manufacturing firms with SIC codes of 20–39. To construct our performance measures, we retrieved stock returns data from the CRSP database. We collected information related to the Fama-French and Carhart factors from French's website.[2] In order to measure abnormal stock returns and idiosyncratic stock returns risk, we limited our sample to firms with at least 250 daily stock return observations in a given year. Imposing this requirement reduced the sample size to 15 368 observations for 1380 firms. We obtained accounting data from the merged CRSP-Compustat database. Also, we used the Compustat Business Segments database to retrieve information on firms' operating segments. Data availability on the moderating and control variables in our models reduced the final useable sample size to 10 056 yearly observations from 1126 manufacturing firms (SIC 20–39) over the 1996–2018 time period.

4.2. Operationalization of variables

Operations executives' power. We use publicly available longitudinal data to develop an objective measure of OEP. Given its multidimensional, unobservable nature, operationalizing the organizational power construct requires identifying its measurable indicators. According to the organization theory literature, executives' power stems from their position in a firm's hierarchical structure (Welbourne and Trevor, 2000). We therefore use an approach similar to that of Feng et al. (2015) and measure OEP using five objective indicators that reflect the operations executives' position in an organization's structure and hierarchy.

First, we consider the presence of operations-related positions in a firm's TMT as a manifestation of the firm's OEP. The reason is that an organization's strategic orientation is determined by its TMT, which defines its strategic priorities and resource allocation and utilization practices (Pfeffer, 1981; Finkelstein, 1992). Hence, a greater involvement of operations executives in a firm's TMT reflects their ability to influence the firm's strategy development and implementation (Roh et al., 2016). We accordingly use *the proportion of a firm's TMT executives with operations-related job titles* as a proxy for the operations executives' representational power. Toward that end, we draw on the information provided by ExecuComp to classify all managers in a firm's TMT as holding operations-related versus non-operations-related job titles. Two independent research assistants coded the titles listed in ExecuComp to identify operations-related titles (e.g., "chief operating officer", "executive vice president [VP] of operations", "senior VP of inventory management") while allowing for differences in capitalization, spelling, abbreviation, and word order. Inter-coder agreement exceeded 83 %, and all disagreements were resolved through discussion. Appendix A provides an illustrative list of keywords used to identify the operations-related (as well as the supply chain- and the marketing-related) job titles in the ExecuComp database.[3]

Second, compensation differentials within a firm's TMT can reflect the relative centrality and power of executives in the organization (Mande and Son, 2012). This is because higher pay scales are a major factor responsible for enticing higher-quality executives into more central roles (Pfeffer and Davis-Blake, 1987; Welbourne and Trevor, 2000). Therefore, we also include *compensation of a firm's TMT executives with operations-related roles—relative to the firm's total TMT compensation*—as another indicator of OEP in the organization.

Third, hierarchical level in an organization is positively related to the perception of power as it induces authority (Brass and Burkhardt, 1993). Those TMT executives in more prominent hierarchical positions are more closely related to leadership and so have more influence on the firm's strategic, operating, and administrative decision making. Hence, we incorporate the rank of operations-related positions in the TMT hierarchical structure into our operationalization of organizational power. In particular, we code the hierarchical rank of operations-related executives in a firm's TMT structure via the following scores: president = 6,

[2] https://mba.tuck.dartmouth.edu/pages/faculty/ken.french/data_library.html.

[3] As executives in operations-related positions may not possess sufficient operational experience, we investigated a random sample of 200 operations executives at the time they initially appeared in our sample. Subsequently, we collected comprehensive data on their career history from various sources, including LinkedIn, corporate websites, and reputable press outlets like the Wall Street Journal. The analysis revealed that approximately 87 % of the executives in this random sample indeed had prior experience in operations positions before being included in our study.

executive VP = 5, senior VP = 4, VP = 3, other = 2, and no operations executives = 1. We then use *the highest-ranked TMT operations executive's hierarchical ranking score* as well as *TMT operations executives' cumulative hierarchical ranking scores* as two proxies for OEP.

Fourth, the extent of an executive's responsibilities is often an indicator of power because it reflects how much control a manager has over resources and decision making across different business activities (Ronchetto Jr et al., 1989). We therefore use *the number of responsibilities of TMT operations executives—as revealed by their position titles*—as another indicator of OEP (see, e.g., Nath and Mahajan 2011).

Given that each indicator is an imperfect measure of organizational power, constructing the OEP measure requires combining these individual power indicators into a composite measure (see Feng et al., 2015). Accordingly, after standardizing all these items for each year and industry—to account for the industry dependence of organizational power—we use principal component factor analysis to combine them. The items are highly correlated (with Pearson correlation coefficients ranging from 0.76 to 0.96) and load onto a single factor (with factor loadings ranging from 0.87 to 0.98). We then rescale (from 1 to 100) the factor scores saved to drive the OEP for each firm in a given year. We plot the yearly average of OEP scores in our sample in Fig. 2.

Abnormal stock returns. To measure abnormal stock returns for each firm in a given year, we use Carhart's (1997) four-factor model:

$$\left(R_{itd} - R_{f,td}\right) = \alpha_1 + \alpha_2\left(R_{m,td} - R_{f,td}\right) + \alpha_3(SMB_{td}) + \alpha_4(HML_{td}) + \alpha_5(UMD_{td}) + \varepsilon_{itd}, \quad (1)$$

where subscripts *i*, *t*, and *d* represent firm, year, and day respectively, throughout the text; R_{itd} denotes the daily stock return; $R_{f,td}$ is the daily risk-free return; $R_{m,td}$ is the daily return on a value-weighted market portfolio; SMB_{td} denotes the daily return on a portfolio of small stocks *minus* the daily return on a portfolio of large stocks; HML_{td} is the daily return on a portfolio of stocks with high book-to-market ratio *minus* the daily return on a portfolio of stocks with low book-to-market ratio; UMD_{td} captures the daily momentum factor; ε_{itd} reflects the error term; and α_1-α_5 are the regression parameters. The predicted residuals (i.e., $\widehat{\varepsilon}_{itd}$) in Equation (1) denote abnormal daily stock returns (see Bendig et al., 2018). We compute annual abnormal stock returns (i.e., ASR_{it}) as follows:

$$ASR_{it} = \prod_{d=1}^{D}(1 + \widehat{\varepsilon}_{itd}), \quad (2)$$

where *D* represents the number of days for which abnormal stock returns are available for a firm during a given year.

Idiosyncratic risk. We calculate idiosyncratic risk for a firm in a given year using the standard deviation of estimated residuals (i.e., $\widehat{\varepsilon}_{itd}$) in Equation (1) (see, e,g., Mishra et al., 2013).

Firm maturity. We follow Kim et al. (2018) to measure firm maturity, using sales growth, dividend payout ratio, capital expenditure intensity, and age as key indicators of a firm's life cycle stage. For each indicator, firms within the same industry and year are ranked in ascending order and then divided into three equal groups. Specifically, for sales growth, dividend payout ratio, and capital expenditure intensity, firms in the lowest third are classified as having a low level of the respective indicator, those in the middle third as medium, and those in the highest third as high. For age, firms in the lowest third are categorized as young, those in the middle third as adult, and those in the highest third as old. Then, we measure firm maturity as the sum of scores across these indicators based on the following rating scheme: 1 for high sales growth, small dividend payout, high capital expenditure intensity, or young age; 2 for medium sales growth, medium dividend payout ratio, medium capital expenditure intensity, or adult age; and 3 for low sales growth, high dividend payout ratio, low capital expenditure intensity, or old age. Therefore, a high overall score corresponds to high maturity.

Market turbulence. We measure market turbulence as the coefficient of variation of the overall sales in a given 2-digit SIC industry over the preceding three years (see Fang et al., 2008).

Control variables. In our analyses, we control for several firm- and industry-level factors that are likely to affect OEP and firm performance. Specifically, the size of a firm plays a key role in determining stock returns (Fama and French, 1992). It can also affect the resources that a firm can devote to its operations function. We thus control for *firm size*, which is computed as the log-transform of total number of employees. Further, previous studies show that the appointment of supply chain- and marketing-related executives to top management teams can drive firm performance (Feng et al., 2015; Roh et al., 2016). Also, the presence of supply chain and marketing executives on a firm's board can affect the extent to which it relies on operations-based competencies as a source of competitiveness. We thus include *supply chain executives' power* and *marketing executives' power* as controls in our models. After identifying the supply chain- and marketing-related job titles in the ExecuComp database (see Appendix A), we follow the same approach explained earlier to construct the supply chain and marketing executives' power measures. Additionally, we control for business diversification, as the breadth of a firm's operations can influence its focus on operational competencies, which in turn may affect the presence and role of operations executives on its board. We measure business scope as the number of 4-digit sic industries in which a firm operates.

We also add *profitability* as a control because it enhance firm value,

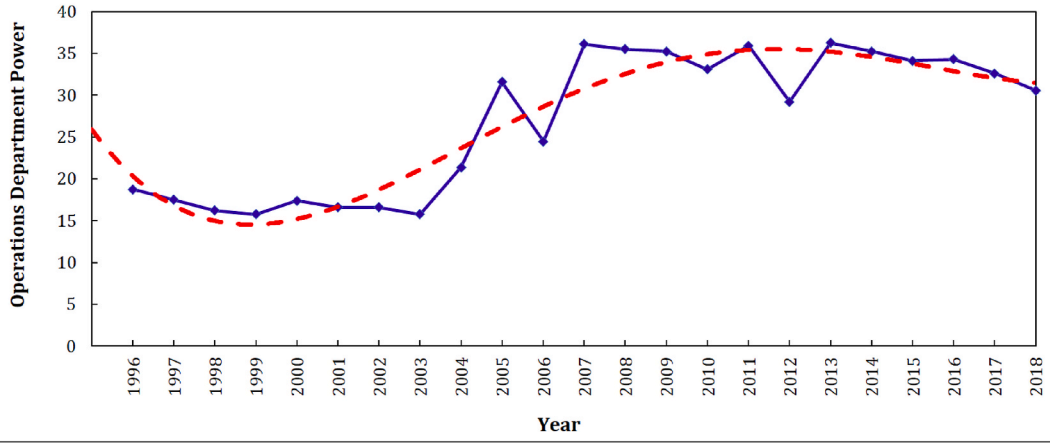

Fig. 2. Average of operations executives' power in the sample.

and can also affect the composition of a firm's TMT (Hendricks et al., 2015). We operationalize profitability as the ratio of net income to total assets (Han et al., 2017). We also control for R&D intensity, or the ratio of a firm's R&D expenditures to its total sales (Curtis et al., 2016). This is because the degree of emphasis on research and development activities is associated with a firm's financial performance (Vaid et al., 2021). Further, given the significant role of the operations function in the innovation management process, it is likely that firms with higher emphasis on R&D delegate more power to their operations executives. In addition, we include financial leverage, or the ratio of long-term debt to total sales, as a control, because it is associated with stock returns through equity risk (Ozdagli, 2013), and can predict the appointment of TMT executives (Roh et al., 2016). Also, we control for *inventory slack*, or the ratio of total inventory to total assets. Improved inventory efficiency affects not only stock returns but also the risk associated with those returns (Mishra et al., 2013). Inventory performance is also a driver of appointment of operations executives to TMTs (Hendricks et al., 2015).

We also include *intangible intensity*, i.e., the ratio of intangible assets to total assets (Barth and Kasznik, 1999). Also, the extent to which a firm invests in intangible assets such as brands can negatively affect the degree of its focus on operations-related competencies. Moreover, we include *acquisitions expenditures*, normalized by total assets, as a control. Acquisition investments can affect stock returns and hence shareholder wealth (Bates et al., 2009), and determine the structure of a firm's TMT (see, e.g., Roh et al., 2016). We also include *vertical integration* as a control because it is a key determinant of a firm's operational and supply chain practices (see, e.g., Orsdemir et al., 2019). We use the ratio of raw materials inventory to total sales as a proxy for a firm's degree of vertical integration.

We use *market growth*, or the yearly growth rate of net industry sales, as a control because it conveys information about the potential for growth and profitability and hence the relevance of operational competencies (Nazir and Afza, 2009). Moreover, we control for *competitive intensity* since it affects the level and stability of a firm's earnings and also determines the importance of operational competencies as a source of competitive advantage (Krasnikov and Jayachandran, 2008). We measure an industry's competitive intensity as 1 *minus* the Herfindahl-Hirschman index (Fosfuri and Giarratana, 2009). Lastly, to account for the effects of temporal shocks, we include year dummies in our models. To mitigate the impact of potential outliers, we winsorize all the continuous variables at the 2.5th and 97.5th percentiles of their respective distributions. Table 1 summarizes our construct definitions and how they are operationalized; descriptive statistics and correlations for the variables are given in Table 2.

4.3. Model specification and identification

In order to examine our conceptual framework, we estimate the

Table 1
Constructs, definitions, and operationalizations.

Constructs	Definitions	Operationalizations (References)
Abnormal stock returns	Stock returns beyond market-level returns	Market-adjusted abnormal daily returns, compounded over a given year
Idiosyncratic stock returns risk	The volatility in stock returns that cannot be explained by market movements	The standard deviation of residuals obtained from estimating Carhart's (1997) four-factor model using daily stock returns
Operations executives' power	Operations executives' authority and control over strategic initiatives within an organization	A composite measure based on the following indicators of: (1) proportion of operations executives in the TMT, (2) operations executives' compensation relative to the total TMT executives' compensation, (3) hierarchical level of the job title of the highest-ranked operations TMT executive, (4) the cumulative hierarchical level of all the operations executives in the TMT, and (5) the number of responsibilities reflected in the job titles of operations TMT executives (see Feng et al., 2015)
Firm maturity	A stage in a company's lifecycle where growth stabilizes, and the firm tends to become more bureaucratic and rigid,	The total score calculated based on the following indicators using this rating scheme: 1 for high sales growth, low dividend payout, high capital expenditure intensity, or young age; 2 for medium sales growth, medium dividend payout ratio, medium capital expenditure intensity, or adult age; and 3 for low sales growth, high dividend payout ratio, low capital expenditure intensity, or old age (Kim et al., 2018)
Market turbulence	The degree of demand uncertainty in a market	The standard deviation of the overall sales in a given 2-digit SIC industry over the preceding five years (Frennea et al., 2019)
Firm size	The size of a firm	The log-transform of number of employees
Supply chain executives' power	Supply chain department's authority and control over strategic initiatives within an organization	A composite measure based on the following indicators of: (1) proportion of supply chain executives in the TMT, (2) supply chain executives' compensation relative to the total TMT executives' compensation, (3) hierarchical level of the job title of the highest-ranked supply chain TMT executive, (4) the cumulative hierarchical level of all the supply chain executives in the TMT, and (5) the number of responsibilities reflected in the job titles of supply chain TMT executives (see Feng et al., 2015)
Marketing executives' power	Marketing department's authority and control over strategic initiatives within the organization	A composite measure based on the following indicators of: (1) proportion of marketing executives in the TMT, (2) marketing executives' compensation relative to the total TMT executives' compensation, (3) hierarchical level of the job title of the highest-ranked marketing TMT executive, (4) the cumulative hierarchical level of all the marketing executives in the TMT, and (5) the number of responsibilities reflected in the job titles of marketing TMT executives (see Feng et al., 2015)
Business diversification	The extent to which a firm operates in different markets	The number of 4-digit sic industries in which a firm operates
Profitability	Net earnings (or loss) of a firm in a given year	The ratio of net income to total assets (Han et al., 2017)
R&D intensity	The extent to which a firm emphasizes R&D activities	The ratio of R&D expenditures to total sales (Curtis et al., 2016)
Financial leverage	The extent to which a firm relies on borrowed capital	The ratio of long-term debt to total sales (Ozdagli, 2013)
Inventory slack	A firm's level of inventory	The ratio of total inventory to total assets (Mishra et al., 2013)
Intangible intensity	The degree to which a firm emphasizes intangible assets	The ratio of intangible assets to total assets (Barth and Kasznik, 1999)
Acquisition expenditure	The level of a firm's investment in acquisitions	Acquisition expenditure normalized by total assets (Bates et al., 2009)
Vertical integration	The extent to which the required resources in the production and sale processes are owned in common by a firm	The ratio of raw materials inventory to total sales
Market growth	The growth potentials of a market	The yearly growth rate of net industry sales
Competitive intensity	Degree of rivalry among firms operating in an industry	1 *minus* the Herfindahl-Hirschman index (Fosfuri and Giarratana, 2009)

following models:

$$ASR_{ijt} = \beta_{1,0} + \beta_{1,1}(OEP_{ijt}) + \beta_{1,2}(OEP_{ijt} \times FM_{ijt}) + \beta_{1,3}(OEP_{ijt} \times MKT\_TURB_{ijt}) + \beta_{1,4}(FM_{ijt}) + \beta_{1,5}(MKT\_TURB_{ijt}) + \mathbf{Z}_{ijt}\mathbf{B}_1 + \mu_{1,ijt}; \quad (3)$$

$$IR_{ijt} = \beta_{2,0} + \beta_{2,1}(OEP_{ijt}) + \beta_{2,2}(OEP_{ijt} \times FM_{ijt}) + \beta_{2,3}(OEP_{ijt} \times MKT\_TURB_{ijt}) + \beta_{2,4}(FM_{ijt}) + \beta_{2,5}(MKT\_TURB_{ijt}) + \mathbf{Z}_{ijt}\mathbf{B}_2 + \mu_{2,ijt}; \quad (4)$$

where subscript j denotes industry; ASR_{ijt} and IR_{ijt} represent abnormal stock returns and idiosyncratic stock returns risk, respectively; FM_{ijt} is firm maturity; MKT_TURB_{ijt} captures market turbulence; Z_{ijt} is the vector of control variables; $\mu_{n,ijt}$ $(n = 1, 2)$ represent unobservable factors; and $\beta_{n,0}$–$\beta_{n,5}$ and the vectors $\boldsymbol{B}_1$ and $\boldsymbol{B}_2$ represent the regression coefficients.

We remark that the presence of unobservable variables in error terms in Equations (3) and (4) may bias our estimates, because they could be correlated with both a firm's financial performance and its degree of OEP and/or firm maturity. For example, firms with more customer-centric structures may place less emphasis on operations-based competencies, leading to fewer operations executives being appointed to their boards. Due to the absence of data on these variables, unobservable factors in the error terms could introduce omitted variable bias in our estimations.

To address the endogeneity of OEP and firm maturity, we estimate Equations (3) and (4) using the Gaussian copula approach, an instrument-free method of handling endogeneity that directly models the correlation between an endogenous regressor and the error term of the equation of interest by utilizing a copula term (see Papies et al., 2017). Including this copula term in the regression model as an additional control variable accounts for the portion of the endogenous variable that correlates with the error term. This approach "resolves the endogeneity bias" and is about as efficient as the instrumental variable method (Papies et al., 2017, p. 612). Copula correction methods offer key advantages for addressing endogeneity issues. For instance, unlike traditional instrumental variable approaches, copula corrections do not require the endogenous regressor to contain an exogenous component or meet strict exclusion restrictions—conditions that are often challenging to justify in practical applications (Qian et al., 2024). This flexibility makes copula methods highly suitable for real-world analyses where such strict requirements may not be feasible.

The Gaussian copula term for an endogenous regressor is defined as $\varnothing^{-1}(H(\textit{endogeneous variable}))$, where $H(\bullet)$ denotes the empirical cumulative density function (CDF) that assigns probability mass to the uniquely observed values of the endogenous regressor in the sample according to their sample frequencies, and $\varnothing^{-1}(\bullet)$ is the inverse CDF of the standard normal distribution (Papies et al., 2017). Therefore, in order to implement the Gaussian copula approach, we specify our models as follows:

$$ASR_{ijt} = \beta_{3,0} + \beta_{3,1}(OEP_{ijt}) + \beta_{3,2}(OEP_{ijt} \times FM_{ijt}) + \beta_{3,3}(OEP_{ijt} \times MKT\_TURB_{ijt}) + \beta_{3,4}(FM_{ijt}) + \beta_{3,5}(MKT\_TURB_{ijt}) + \beta_{3,6}(CT\_OEP_{ijt}) + \beta_{3,7}(CT\_FM_{ijt}) + \mathbf{Z}_{ijt}\mathbf{B}_3 + \mu_{3,ijt}; \quad (5)$$

$$IRR_{ijt} = \beta_{4,0} + \beta_{4,1}(OEP_{ijt}) + \beta_{4,2}(OEP_{ijt} \times FM_{ijt}) + \beta_{4,3}(OEP_{ijt} \times MKT\_TURB_{ijt}) + \beta_{4,4}(FM_{ijt}) + \beta_{4,5}(MKT\_TURB_{ijt}) + \beta_{4,6}(CT\_OEP_{ijt}) + \beta_{4,7}(CT\_FM_{ijt}) + \mathbf{Z}_{ijt}\mathbf{B}_4 + \mu_{4,ijt}. \quad (6)$$

In Equations (5) and (6), CT_ODP_{ijt} and CT_FM_{ijt} represent the copula terms added to address the endogeneity of OEP and firm maturity, respectively; and $\beta_{s,0}$–$\beta_{s,4}$ (s = 3, 4) and the vectors $\mathbf{B}_3$ and $\mathbf{B}_4$ are the

Table 2
Descriptive statistics and correlations.

Constructs		1,	2,	3,	4,	5,	6,	7,	8,	9,	10,	11,	12,	13,	14,	15,	16,	17,	18,
1,	Abnormal stock returns	**-,95420**																	
2,	Idiosyncratic stock returns risk	**,02930**	,00920																
3,	Operations executives' power	**,25930**	**-,33750**	**-,10070**															
4,	Firm maturity	**,25920**	**,17130**	**-,05790**	,00630														
5,	Market turbulence	**-,26920**	**-,48550**	**-,10420**	**,29020**	**-,04470**													
6,	Firm size	**,40350**	-,00150	**,32060**	**-,05320**	**-,05590**	**-,05040**												
7,	Supply chain executives' power	**,03780**	**-,02950**	**,07120**	**-,08660**	**-,03390**	**-,14770**	**,13950**											
8,	Marketing executives' power	**-,02950**	**,21240**	**-,23020**	**-,08640**	**,20430**	**-,07860**	**,41860**	**-,05070**	**-,12290**									
9,	Business diversification	**,21240**	**,35400**	**-,39130**	**-,02790**	**,10840**	**,02840**	**,22180**	**,02330**	**-,03010**	**,04440**								
10,	Profitability	**,35400**	**,31400**	**-,32480**	**-,02720**	**,07610**	**-,18420**	**,31400**	**-,02330**	**-,04840**	**,22740**	**,04800**	**-,14830**	**,33240**	**-,20400**				
11,	R&D intensity	**-,25950**	**,10160**	**-,11630**	**-,02010**	**-,04830**	-,01720	**,08280**	**-,02320**	**-,03080**	**,06580**	**,02990**	**-,05010**	**,18030**	**-,04100**	**,37030**			
12,	Financial leverage	**,05040**	**-,05200**	**,06830**	**,03620**	**-,06040**	,00500	**-,13890**	-,00550	,00470	**-,04160**	**-,04630**	**-,11650**	**-,02630**	**,43650**	**-,07020**	**,04160**		
13,	Inventory slack	**-,06880**	**-,05110**	-,01540	**-,06210**	**-,02290**	**,25470**	**-,02570**	**-,07000**	**-,02960**	**-,03000**	**,08660**	,01620	**-,06030**	**,03700**	**-,06640**	**,02380**	,00040	
14,	Intangible intensity	**,31400**	**-,10270**	**,08720**	**,02420**	**-,06430**	**-,10060**	**-,14440**	**-,05140**	,00610	**-,09280**	**-,05490**	**,26730**	,00810	**-,19790**	-,01940	**,02010**	,01730	**,06730**
15,	Acquisition expenditure	**,10160**	,90098	,02326	27,72049	8,30622	,07948	8,19140	8,79452	12,05283	2,65808	,03417	,08367	,23355	,13069	,19788	,03230	,04829	,03648
16,	Vertical integration	**-,05200**	,08186	,01150	38,18974	1,64785	,03987	1,54579	26,90379	30,55030	1,90134	,11263	,12615	,26507	,07831	,18101	,06361	,03698	,06983
17,	Market growth	**-,05110**																	,95110
18,	Competitive intensity	**-,10270**																	,03173
	Mean																		
	SD																		

Note: All values in bold are significant at $p < 0.05$.

regression parameters. The standard errors obtained from estimating Equations (5) and (6) using fixed-effects panel regressions, however, are incorrect because the copula terms are estimated quantities. To address this issue, we follow Park and Gupta (2012) and bootstrap the entire estimation procedure based on 1000 replications to obtain valid standard errors for the estimated coefficients.

4.4. Estimation results

Table 3 reports the results from our models estimated using fixed-effect panel regressions, excluding the copula terms (i.e., Equations (3) and (4)). In Model 1, the coefficient for the effect of OEP on abnormal stock returns is positive and significant ($\beta = 0.00005$, $p < 0.05$). After introducing the interaction terms in Model 2, the positive effect of OEP on abnormal stock returns remains consistent ($\beta = 0.00026$, $p < 0.01$). Additionally, the interaction between OEP and firm maturity shows a negative and significant coefficient ($\beta = -0.00003$, $p < 0.01$), while the interaction between OEP and market turbulence is positive and significant ($\beta = 0.00070$, $p < 0.1$). In Model 3, the effect of OEP on idiosyncratic stock returns risk is negative and significant ($\beta = -0.00001$, $p < 0.01$). Following the inclusion of interaction terms in Model 4, the negative effect of OEP on idiosyncratic stock returns risk remains unchanged ($\beta = -0.00004$, $p < 0.01$). Furthermore, the interaction between OEP and firm maturity yields a positive and significant coefficient ($\beta = 0.00001$, $p < 0.01$), while the interaction between OEP and market turbulence is negative and marginally significant ($\beta = -0.00009$, $p < 0.1$). Taken together, these results provide initial evidence of the positive effect of OEP on abnormal stock returns and its negative effect on idiosyncratic stock returns risk, as well as the moderating effects of firm maturity and market turbulence.

For hypothesis testing, we rely on the estimation results from the Gaussian copula method, which addresses the endogeneity of OEP and firm maturity (i.e., Equations (5) and (6)). We report the results in Table 4. In Model 1, OEP is found to positively influence abnormal stock returns ($\beta = 0.00006$, $p < 0.01$), providing support for H1. After incorporating the interaction terms in Model 2, the effect of OEP on abnormal stock returns remains qualitatively similar ($\beta = 0.00031$, $p < 0.05$). Additionally, the negative and significant interaction between OEP and firm maturity suggests that the OEP–abnormal stock returns relationship is weaker for more mature firms, supporting H3 ($\beta = -0.00003$, $p < 0.01$). Further, the positive interaction with market turbulence indicates that market volatility marginally strengthens the positive relationship between OEP and abnormal stock returns ($\beta = 0.00072$, $p < 0.1$), supporting H5.

In Model 3, the coefficient for OEP is negative and significant ($\beta = -0.00001$, $p < 0.05$), confirming our prediction in H2 regarding the negative relationship between OEP and idiosyncratic stock returns risk. This negative impact persists in Model 4 even after including the interaction terms ($\beta = -0.00003$, $p < 0.05$). Additionally, the positive and significant interaction between OEP and firm maturity ($\beta = 0.00001$, $p < 0.01$) supports H4, which posits that firm maturity mitigates the negative effect of OEP on idiosyncratic risk. Lastly, the negative interaction between OEP and market turbulence ($\beta = -0.00009$, $p < 0.1$) reinforces H6, indicating that the negative effect of OEP on idiosyncratic stock returns risk is marginally more pronounced in more turbulent markets.

Table 3
Estimation Results: Fixed-effects panel regression estimations.

	Model 1	Model 2	Model 3	Model 4
	DV: Abnormal Stock Returns	DV: Abnormal Stock Returns	DV: Idiosyncratic Stock Returns Risk	DV: Idiosyncratic Stock Returns Risk
	Estimate (SE)	Estimate (SE)	Estimate (SE)	Estimate (SE)
Main effect				
OEP	,00005**	,00026***	-,00001***	-,00004***
	(,00002)	(,00009)	(,00000)	(,00001)
Interaction terms				
OEP × Firm maturity		-,00003***		,00001***
		(,00001)		(,00000)
OEP × Market turbulence		,00070*		-,00009*
		(,00041)		(,00005)
Moderating variables				
Firm maturity	,00557***	,00644***	-,00088***	-,00099***
	(,00063)	(,00069)	(,00009)	(,00007)
Market turbulence	-,10465***	-,12260***	,01370***	,01599***
	(,02638)	(,02855)	(,00355)	(,00281)
Control variables				
Firm size	,02260***	,02238***	-,00347***	-,00344***
	(,00227)	(,00229)	(,00032)	(,00017)
Supply chain executives' power	-,00003	-,00003	,00000	,00000
	(,00003)	(,00003)	(,00000)	(,00000)
Marketing executives' power	,00002	,00001	,00000	,00000
	(,00002)	(,00002)	(,00000)	(,00000)
Business diversification	-,00085	-,00086*	,00014*	,00014**
	(,00052)	(,00051)	(,00007)	(,00006)
Profitability	,14456***	,14475***	-,01850***	-,01852***
	(,01111)	(,01110)	(,00140)	(,00087)
R&D intensity	,06061***	,06031***	-,00878***	-,00874***
	(,02121)	(,02084)	(,00280)	(,00145)
Financial leverage	-,01488***	-,01484***	,00235***	,00234***
	(,00467)	(,00464)	(,00063)	(,00040)
Inventory slack	-,06012**	-,06038**	,01063***	,01067***
	(,02546)	(,02529)	(,00337)	(,00204)
Intangible intensity	,01209	,01241	-,00175	-,00179**
	(,00857)	(,00854)	(,00117)	(,00078)
Acquisition expenditure	,04705***	,04775***	-,00614***	-,00623***
	(,00844)	(,00840)	(,00116)	(,00114)
Vertical integration	,02702	,02714	-,00724	-,00726*
	(,04757)	(,04747)	(,00626)	(,00409)
Market growth	,02256**	,02225**	-,00358**	-,00354**
	(,01117)	(,01113)	(,00147)	(,00140)
Competitive intensity	,10750*	,10637*	-,02197**	-,02182***
	(,06285)	(,06283)	(,00929)	(,00575)
Intercept	,54534***	,54262***	,07883***	,07918***
	(,06272)	(,06274)	(,00918)	(,00568)
Year dummies	Included	Included	Included	Included
Number of observations	10 056	10 056	10 056	10 056
R^2	0,515	0,516	0,482	0,483

* Significant at 10% level, two-sided.
** Significant at 5% level, two-sided.
*** Significant at 1% level, two-sided.

5. General discussion

"In light of their increasingly important role in formulation and execution of firm strategy, operations executives have experienced a flourishing of new responsibilities and positions" (Vaid et al., 2021, p. 2188). This study examines the relationship between operations executives' power and shareholder wealth. In our approach, we extend the department power measure developed by Feng et al. (2015) to assess the influence of operations executives within a firm's organizational structure. This multidimensional measure captures the relative power dynamics within a firm's TMT and is sensitive to any shifts in those dynamics, allowing us to more accurately operationalize the power held by operations executives. To link OEP to shareholder value, we use abnormal stock returns to gauge how the stock market values the influence of operations executives within a firm's TMT. Additionally, we use idiosyncratic stock returns risk to understand how this influence contributes to the variability and uncertainty in stock returns. Further, to offer a more comprehensive picture of the OEP–shareholder value relationship, we examine the contingency roles of firm maturity and market turbulence in moderating this relationship. Drawing on a longitudinal dataset of manufacturing firms (SIC 20–39) between 1998 and

Table 4
Estimation results: The Gaussian copula method.

	Model 1	Model 2	Model 3	Model 4
	DV: Abnormal Stock Returns	DV: Abnormal Stock Returns	DV: Idiosyncratic Stock Returns Risk	DV: Idiosyncratic Stock Returns Risk
	Estimate (SE)	Estimate (SE)	Estimate (SE)	Estimate (SE)
Main effect				
OEP	,00006***	,00031***	-,00001**	-,00003***
	(,00002)	(,00009)	(,00000)	(,00001)
Interaction terms				
OEP × Firm maturity		-,00003***		,00001***
		(,00001)		(,00000)
OEP × Market turbulence		,00072*		-,00009*
		(,00043)		(,00005)
Moderating variables				
Firm maturity	,00603***	,00663***	-,00098***	-,00107***
	(,00120)	(,00140)	(,00017)	(,00016)
Market turbulence	-,10459***	-,12316***	,01365***	,01600***
	(,02300)	(,02413)	(,00307)	(,00315)
Control variables				
Firm size	,02261***	,02237***	-,00346***	-,00344***
	(,00158)	(,00153)	(,00020)	(,00022)
Supply chain executives' power	-,00003	-,00003	,00000	,00000
	(,00002)	(,00003)	(,00000)	(,00000)
Marketing executives' power	,00002	,00001	,00000	,00000
	(,00002)	(,00002)	(,00000)	(,00000)
Business diversification	-,00086*	-,00086*	,00014***	,00014***
	(,00044)	(,00046)	(,00005)	(,00005)
Profitability	,14455***	,14458***	-,01851***	-,01853***
	(,01041)	(,01105)	(,00148)	(,00141)
R&D intensity	,06058***	,06043***	-,00877***	-,00874***
	(,01517)	(,01452)	(,00179)	(,00242)
Financial leverage	-,01487***	-,01496***	,00235***	,00235***
	(,00361)	(,00420)	(,00046)	(,00044)
Inventory slack	-,06025***	-,06011***	,01062***	,01066***
	(,02113)	(,01568)	(,00199)	(,00263)
Intangible intensity	,01208*	,01232**	-,00177**	-,00179**
	(,00683)	(,00605)	(,00070)	(,00074)
Acquisition expenditure	,04694***	,04799***	-,00611***	-,00623***
	(,00801)	(,00921)	(,00100)	(,00114)
Vertical integration	,02685	,02741	-,00726*	-,00733
	(,04115)	(,03576)	(,00390)	(,00461)
Market growth	,02264**	,02211*	-,00363**	-,00355**
	(,00990)	(,01187)	(,00147)	(,00143)
Competitive intensity	,10762**	,10756**	-,02230***	-,02176***
	(,04541)	(,04336)	(,00621)	(,00645)
Copula term (ODP)	-,00058	-,00203***	-,00007	-,00010
	(,00091)	(,00075)	(,00010)	(,00010)
Copula term (Firm maturity)	-,00076	-,00025	,00017	,00013
	(,00195)	(,00194)	(,00025)	(,00022)
Intercept	,54111***	,53879***	,07994***	,07971***
	(,04867)	(,04379)	(,00659)	(,00673)
Year dummies	Included	Included	Included	Included
Number of observations	10 056	10 056	10 056	10 056
R^2	0,515	0,516	0,482	0,484

*Significant at 10% level, two-sided.
**Significant at 5% level, two-sided.
***Significant at 1% level, two-sided.

2018, our results indicate that while OEP enhances abnormal stock returns, it exerts a negative impact on idiosyncratic stock returns risk. Further, firm maturity weakens the positive (resp., negative) effect of OEP on abnormal stock returns (resp., idiosyncratic stock returns risk). Conversely, market turbulence marginally enhances the positive (resp., negative) effect that OEP exerts on abnormal stock returns (resp., idiosyncratic stock returns risk).

5.1. Theoretical contributions

Our research offers several theoretical contributions to the extant literature. This study extends the scope of upper echelons research in the operations literature. This line of research has so far explored the performance implications of appointing operations executives to TMTs (e.g., Hendricks et al., 2015) as well as the mobility of operations managers (e.g., Vaid et al., 2021). Our study complements the extant literature by investigating the association between building a powerful operations leadership and firm performance. In this regard, we use publicly available information to develop an objective measure of OEP. Unlike survey-based measures that are obtained from cross-sectional studies with small-sized samples, our measure can be constructed for large, generalizable samples and over long-time windows. Researchers and practitioners can use our measure to calibrate OEP and further develop their empirical understanding of whether and how it may be associated with various firm and market phenomena, including new product/service development, business model innovation, internationalization, and environmental sustainability and emergency management. Such analyses could help operations executives identify the most promising ways to contribute to firm performance.

Moreover, this research represents the first large-scale empirical analysis examining both the return and risk implications of OEP from a stock market perspective simultaneously. As such, our study complements a nascent literature that aims to demonstrate the accountability of operations management within organizations by building a necessary interdisciplinary bridge to finance research (e.g., Hendricks et al., 2015; Babich and Kouvelis, 2018; Vaid et al., 2021). By using market-based measures of firm return and risk, we extend prior operations leadership literature that has primarily used unidimensional accounting metrics such as ROA and return on sales to measure firm performance (see, e.g., Roh et al., 2016). In addition, by establishing the relationship between OEP and idiosyncratic risk, our research contributes to previous studies that have primarily focused on the return implications of operations leadership. Our analyses imply that developing a more nuanced picture of the performance outcomes of operations leadership requires integrating risk as a key determinant of shareholder value into theoretical frameworks as well as empirical analyses.

Our findings highlight the significant importance of operations leadership within a firm. The operations function serves as the backbone of the firm, supporting and enabling the successful realization of its strategic objectives. While other functions like marketing and sales are responsible for driving front-end growth by attracting customers, creating demand, and generating revenue, it is the operations function that ensures the efficient and effective execution of the firm's activities behind the scenes. Without a well-functioning operations department, the efforts of marketing and sales may fall short due to inefficiencies, delays, or inconsistencies in delivering products or services to customers. In addition, the operations function plays a critical role in fostering innovation and agility within the firm. More powerful operations executives can better support the implementation of new ideas and initiatives, facilitating the firm's ability to respond quickly to market changes and seize new opportunities. This, in turn, enables the firm to be nimbler and more responsive in a dynamic business environment.

By investigating the moderating roles of firm maturity and market turbulence, we offer a better understanding of the contingent nature of the OEP–performance linkage. Our findings indicate that the effect of OEP on shareholder value is stronger for younger firms, given that they face greater strategic uncertainty and resource constraints. Similarly, delegating organizational power to operations executives is more effective in turbulent markets, as heightened uncertainty demands greater operational agility and adaptability. We observe that this effect is only marginally statistically significant. This could stem, for example, from regulatory changes in volatile markets, which can impose operational constraints that partially offset the additional efficiency, flexibility, or agility advantages that OEP can provide in turbulent

environments. For instance, the imposition of trade tariffs on imported components may compel firms to modify their sourcing strategies, thereby adversely affecting their operational agility.

Future research can expand our findings by exploring the role of other dimensions of corporate strategy in determining the effectiveness of OEP. For example, customer centricity (i.e., the extent to which a firm aligns its organizational structure with its key external customer groups, Lee et al., 2015) likely affects a firm's degree of emphasis on external relationships versus internal operations. Examining the moderating role of such factors would help firms obtain a more comprehensive picture of the role of operations executives in driving firm performance.

5.2. Managerial implications

Our findings offer critical managerial implications. The analyses reported here reveal an apparent decline in OEP over the last few years (see Fig. 2). Indeed, the yearly average of OEP scores in our sample has steadily fallen from 36 in 2013 to 30 in 2018. This observation indicates that the operations function's role has become less central in top management teams. However, we show that powerful operations executives make a significant contribution to shareholder wealth by enhancing abnormal stock returns and by reducing idiosyncratic stock returns risk. Hence, senior managers should gauge the need for future organizational changes to ensure that not only the operations executives are present on the firm's TMT, but they are also actively engaged in the process of developing and implementing strategic initiatives. Our results are of practical importance to the investment community as well. In particular, OEP can provide valuable signals about the future financial health of a firm; this means that OEP must be incorporated into portfolio composition assessments. Based on the descriptive statistics in Table 2 and the parameter estimates for the full models with the interaction terms in Table 4, a one-standard-deviation increase in OEP is associated with an approximately 1.3 % increase in abnormal stock returns for an average firm in our sample, corresponding to a $89.82 million increase in the firm's market value.[4] Similarly, a one-standard-deviation increase in a firm's OEP results in an average reduction of 4.93 % in its idiosyncratic stock return risk. Given the economic significance of these effects, we hope that our findings with respect to the performance effects of OEP will generate a thought-provoking discussion among senior management, operations and finance executives, and the investment community on the important role of the operations function in driving shareholder wealth.

Moreover, our findings suggest that delegating organizational power to operations executives is particularly effective for younger firms and in turbulent markets. In the case of younger firms, this delegation is advantageous because it empowers operations executives to drive operational agility, which is crucial for scaling quickly and efficiently in the early stages of growth. As these firms seek to expand, having an operations leader with direct influence over decision-making can streamline processes, reduce bottlenecks, and facilitate rapid adaptation to new opportunities and challenges. In turbulent markets, where volatility, uncertainty, and competitive pressures are heightened, operations executives play a key role in enabling the firm to respond swiftly and effectively. Their expertise in managing day-to-day operations, optimizing resources, and ensuring operational flexibility positions them uniquely to make decisions that can mitigate risks and capitalize on changing conditions. In such environments, centralized decision-making or overly hierarchical structures can hinder the speed of response, whereas delegating power to operations executives ensures a more nimble and adaptive approach to market fluctuations. Thus, our results underscore the importance of aligning leadership structures with both the firm's stage of development and the external environment to maximize effectiveness and resilience.

5.3. Limitations

Our study has limitations that offer opportunities for future exploration. In the first place, data availability dictated that our sample include only publicly traded firms. Although our theory is applicable to a wide range of firms, future studies could examine the effectiveness of OEP in the private sector. Second, our sample includes only US-based manufacturing firms. Cross-cultural research that explores how the power of operations executives—and the performance implications of that power—vary across different cultural contexts is a fruitful area that scholars could pursue. Also, future studies can adopt our framework to investigate the role of OEP in service firms. Finally, our study focuses on the performance implications of OEP; building on our findings, future studies can explore the role of mechanisms such as operations and R&D capability in linking OEP to shareholder value. Another important future extension is to investigate how OEP affects operational outcomes such as delivery lead time through improving a firm's operations-based competencies.

CRediT authorship contribution statement

Mehdi Nezami: Methodology, Formal analysis, Data curation, Writing – original draft, Writing – review & editing. **Sara Rezaee Vessal:** Writing – review & editing, Writing – original draft, Investigation, Formal analysis. **Ali Shantia:** Writing – review & editing, Investigation, Formal analysis.

Appendix A

Illustrative Examples of TMT Executives' Job Titles Listed on ExecuComp

Operations Executives	chief operating officer; chief manufacturing officer; chief technology officer; executive vice president of technology and operations; chief technology and operations officer; co-president of production; company operations leader; corporate VP of operations; general manager of operations; executive VP of manufacturing; executive VP of operations; executive operating officer; VP of exploration and production; senior operations officer; VP of manufacturing; VP of operations and technology; VP of production; VP of field operations; executive VP of global technical operations; executive VP of operational excellence; executive VP of operations integrity; executive VP of operations optimization; executive VP of operations, products and strategy; executive VP of product and business operations; head of operations; chief operating and growth officer; chief technology and product officer; head of technology and operations; chief operating and infrastructure officer; executive VP of operations and strategic planning; executive VP of operations administration; executive VP of production operations; executive VP of product operations; executive VP of service and technology operations; president of manufacturing; chief production officer; senior VP of business operations optimization; senior VP of operations oversight; senior VP of manufacturing integration; VP of new products; VP of plant operations; VP of production and operations planning; VP of manufacturing operations and quality

(continued on next page)

[4] The average of market value—calculated as the product of the end-of-fiscal-year stock price and the number of outstanding common shares—for the firms in our sample is $6.84 billion.

(*continued*)

Supply Chain Executives	director of supply chain; chief merchant; chief merchandising officer; VP of global supply chain; chief delivery officer; executive VP of supply; chief distribution officer; chief value chain officer; chief logistics officer; chief merchant and sourcing officer; chief procurement officer; chief sourcing officer; chief strategy and supply chain officer; president of logistics; chief procure officer; executive VP of distribution; head of distribution; executive VP of parts and supply management; general manager of global supply chain division; president of fulfillment-supply chain and sourcing; president of order fulfillment and supply chain; senior VP of distribution; general merchandise manager; senior VP of logistics; senior VP of merchandise distribution, planning and supply chain; senior VP of supply chain integration; senior VP of upstream supply chain; VP of delivery; VP of merchandising; VP of supply chain and strategic sourcing;
Marketing Executives	brand director; brand president; chief brand officer; chief marketing officer; chief brand experience officer; chief client management officer; chief commercial officer; senior VP of marketing and public relations; chief customer officer; head of global sales and marketing; chief experience and brand officer; senior vice president of marketing; chief of sales and marketing; executive VP of marketing; executive VP of customer care; executive VP of sales promotion and marketing; executive VP of brand development; executive VP of advertising; brand leader; head of customer communications; president of direct marketing; marketing director; executive VP of analytics and customer loyalty; executive VP of client management; executive VP of customer engagement; executive VP of customer experience; chief commercialization officer; global brand president; executive VP of wholesale marketing; global head of sales and marketing; president of brands; chief multibranding officer; president of customer management; president of brand building; senior VP of sales and marketing; senior VP of client relationships; senior VP of consumer research; senior VP of customer advocacy; senior VP of customer engineering; senior VP of emerging brands; senior VP of product and vertical marketing; senior VP of licensing and marketing; VP of sales and marketing; VP of advertising; VP of customer satisfaction

Data availability

Data will be made available on request.

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