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Institutional and relational underpinnings of vertical FDI spillovers in international buyer-supplier relationships: Insights from automotive suppliers

Tulay Ilhan Nas [a], Fatih Sahin [b], Ismail Golgeci [c,d,*], Tarhan Okan [e]

[a] Karadeniz Technical University, Business Department, Trabzon, Turkey
[b] Gumushane University, Management and Organization Department, Gumushane, Turkey
[c] Information Systems and Operations Management, The University of Auckland, Auckland, New Zealand
[d] International Business and Marketing Strategies, University of Vaasa, Vaasa, Finland
[e] Bandirma Onyedi Eylul University, Department of Management Information Systems, Balikesir, Turkey

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ABSTRACT

This study takes a fresh approach to explore the mechanisms of foreign direct investment (FDI) spillovers in the context of emerging economy firms, specifically focusing on the Turkish automotive industry. Given emerging economy firms' inherent constraints in R&D and resources, FDI serves as a critical avenue for them to acquire technological and managerial knowledge. While previous literature has extensively analyzed spillovers from an economic perspective, our research introduces a neoinstitutional perspective in organizational sociology to understand how these spillovers manifest and influence productivity and innovation. Importantly, we examine the role of international buyer-supplier relationships, a key aspect in shaping spillover outcomes. In so doing, we draw on rich qualitative data from 7 Turkish direct and sub-suppliers of large automotive multinational enterprises (MNEs). Our findings underscore the significant influence of the institutional context and relational mechanisms on the effectiveness of FDI spillovers, revealing why anticipated positive effects may not always materialize. This study contributes to the existing literature by addressing the limitations of prior research and provides practical insights for policymakers in emerging economies, empowering them to leverage FDI for economic growth and organizational success.

1. Introduction

The generation and diffusion of technological and managerial knowledge, which is often vital for organizational success and economic growth, has been extensively explored (Audretsch and Belitski, 2020; Grossman and Helpman, 1991). Knowledge spillovers across organizations are particularly important for emerging economy firms typically constrained in R&D activities, resources, and ownership advantage. Foreign direct investment (FDI) from developed to emerging economies (EEs) has been among the major sources of such spillover (Demena and van Bergeijk, 2019; Moralles and Moreno, 2020; Wang and Kafouros, 2020), as FDI can be a valuable means for local firms to acquire the knowledge they find challenging to generate independently. Moreover, the instrumental value of

* Corresponding author at: Information Systems and Operations Management, The University of Auckland, New Zealand.
E-mail addresses: tulayco@ktu.edu.tr (T.I. Nas), fatihsahin@gumushane.edu.tr (F. Sahin), ismail.golgeci@auckland.ac.nz, i.golgeci@uwasa.fi (I. Golgeci), tokan@bandirma.edu.tr (T. Okan).

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such knowledge spillovers is likely higher than that of spillovers between organizations located in the same context, due to knowledge and resource asymmetries and complementarities.

However, the existing literature on the spillover effects of FDI (e.g., Wang and Kafouros, 2020) primarily focuses on the direction and magnitude of these effects using econometric models. These studies generally adopt a positivist approach, adopting a functionalist paradigm that attempts to explain objective reality through causal models (Burrell and Morgan, 1979), while largely ignoring the subjective, institutional, and relational dimensions of these processes. The predominant focus on efficiency and cost structures overlooks the complex interplay of institutional and socio-political factors that shape interorganizational behaviors and outcomes (Audretsch and Belitski, 2020; Demena and van Bergeijk, 2019; Ilhan-Nas et al., 2021). This oversight has contributed to long-standing contradictory findings in the field. Some studies attribute these contradictions to methodological limitations (Altomonte and Pennings, 2009), while others highlight the moderating effects of variables such as ownership structure (Javorcik and Spatareanu, 2008), technological gaps (Meyer and Sinani, 2009), and absorptive capacity (Moralles and Moreno, 2020). These studies are groundbreaking in terms of advancing our understanding of the subject, but they remain limited in addressing the underlying mechanisms that drive positive or negative spillovers. Because FDI spillovers are defined as externalities that do not typically rely on formal contracts, they are often susceptible to informal interactions such as local business circles, labor flows, common suppliers, and sectoral networks (Eapen, 2012). Therefore, the existing literature is open to further development, particularly through subjective studies that focus on the social context in which horizontal and vertical linkages are established.

Furthermore, a significant gap in the literature is the predominance of studies that emphasize multinational enterprises (MNEs) as the primary sources of knowledge, with insufficient attention paid to the role of local firms in the spillover process (Javorcik and Spatareanu, 2008). While spillovers are often portrayed as unintended knowledge externalities opposed to transfer, the absorptive capacity of local firms plays a critical role in determining the extent of spillover benefits. However, current research tends to reduce absorptive capacity to tangible factors, such as R&D capacity and technological gaps (Grimpe and Sofka, 2009). Studies addressing the impact of contextual conditions, including institutional environments, are needed.

Moreover, the role of the institutional context in shaping buyer-supplier relationships, particularly in vertical spillovers, remains underexplored (Krammer, 2015). Although a few studies adopt an institutional perspective (e.g., Du et al., 2011), they typically focus on regulatory institutions, overlooking the impact of normative and cognitive pillars, which can be more difficult to measure but equally influential (Munir, 2002). Additionally, buyer-supplier relationships centered at vertical spillovers are often analyzed using economic indicators such as input-output tables (e.g., Lenger and Taymaz, 2006). Although those studies use appropriate methodologies based on their paradigmatic standpoints, there is a need to focus on the informal dimension of buyer-supplier relationships embedded in the institutional context.

Finally, the literature has yet to thoroughly investigate how social factors, such as perceived legitimacy and mutual trust between firms, influence the success of spillovers. These relational mechanisms are central to vertical spillovers, as local firms engage with foreign counterparts at varying levels based on their position in the supply chain (Pérez and Sánchez, 2001; Wasti et al., 2009). Although FDI spillovers are defined as externalities that do not rely on formal contracts, these effects do not occur among completely unconnected firms; they often occur among actors who are socially, spatially, or sectorally close to each other (Javorcik, 2004), for example, buyers, suppliers, and regional competitors. Especially in EEs, information flows can be achieved without formal alliances between firms through factors such as trust-based, repeated interactions, local business networks, and spatial proximity. Thus, what we mean by "relational mechanisms" here is not formal agreements, but rather informal relations, social ties, or shared institutional environments. Furthermore, the isomorphic efforts of local firms—driven by a desire to emulate foreign counterparts—are shaped by their knowledge and legitimacy gaps. DiMaggio and Powell's (1983) proposition that the increasing number of role models weakens the isomorphic mechanism presents an important avenue for understanding the contradictory spillover findings. In conclusion, a more nuanced examination of the relational and institutional mechanisms in FDI spillovers is necessary to address existing gaps and explain why spillovers sometimes fail to yield positive outcomes (Liao, 2015).

Against this background, we aim to unravel the underlying mechanisms of FDI spillovers and the ensuing productivity and innovation outcomes for local firms, considering the institutional context and international buyer-supplier relationships in which they are embedded. We focus on local suppliers in the Turkish automotive industry when explaining vertical spillovers. We use detailed qualitative data from 7 Turkish direct and sub-suppliers to large MNEs. Our study responds to calls to break the economic perspective limits of the FDI spillover literature (Wang and Kafouros, 2020) and unravel the role of buyer-supplier relationships in spillovers from a neoinstitutional perspective in organizational sociology (Hoque and Rana, 2020). By responding to these calls, we aim to contribute to expanding the existing literature (Eapen, 2012; Fershtman & Gandal, 2011), which is characterized by an insufficiently socialized view of spillovers. Qualitative research methods are suitable for emphasizing the context, as they are context-sensitive and offer significant benefits for understanding phenomena from the perspective of individuals who experience them.

The Turkish context presents a unique research setting for studying FDI-based knowledge spillovers. As a country characterized by late industrialization and relatively low R&D expenditures compared to OECD countries and the global average, Turkey relies heavily on FDI as a key source of knowledge. This is particularly evident in the Turkish automotive industry, which hosts numerous MNEs and offers ample spillover opportunities. Due to institutional weaknesses, these MNEs, as knowledge-owning parties of FDI spillovers, do not suffer from "liability of foreignness" and can function as regulatory institutions for their business environment and supply networks. Thus, in the Turkish automotive industry, multiple institutional fields emerge where the local institutional context and each firm's home country-specific institutional mechanisms interact. Despite this, the institutional mechanisms that shape the nature and success of these spillovers remain underexplored.

Our study contributes to the literature by elucidating the often-overlooked institutional and relational mechanisms that underlie spillovers. We illuminate the reasons for unexpected or contradictory spillover effects in EEs, particularly highlighting the role of

institutional frameworks and buyer-supplier relational mechanisms. Furthermore, our findings carry significant implications for policymakers in EEs, where there is an expectation that inward FDI will result in productivity gains and innovation. Understanding the institutional conditions and buyer-supplier relationships that facilitate or obstruct these outcomes can help shape more effective policies to maximize the benefits of FDI.

2. Theoretical background

2.1. Channels of knowledge spillovers from FDI

FDI is a significant conduit for transferring knowledge and technology from MNEs to local firms. The concept of FDI spillovers, which is included in the international business literature as a form of external knowledge spillover (Wang and Kafouros, 2020), refers to the spread of MNEs' knowledge to local firms through FDI. They denote the unintended and involuntary transfer of knowledge, skills, technologies, and other intangible assets from FDI firms to local firms in the host country. These spillovers are considered externalities because they occur without being explicitly contracted for or agreed upon by foreign and local firms. However, these externalities do not only occur between unrelated firms. Informal relationships established between competitors, buyers, and suppliers are among the most important channels of spillovers.

While the overall positive effects of inward FDI on economic development of EEs are widely acknowledged (Demena and van Bergeijk, 2019; Moralles and Moreno, 2020; Wang and Kafouros, 2020), there remains ongoing debate regarding its specific impact on local firms (Demena and van Bergeijk, 2019; Ilhan-Nas et al., 2021). Some studies highlight the positive spillovers of FDI on productivity and innovation (Liu et al., 2009; Tian, 2007), while others report negative spillovers due to competitive pressures, market theft, and exclusion (Aitken and Harrison, 1999).

The mixed results in the literature are often attributed to methodological limitations (Altomonte and Pennings, 2009) and the nature of the spillover channels being studied. Spillovers may occur through horizontal (intra-industry) linkages, where local firms compete directly with MNEs within the same industry (Javorcik, 2004; Liu et al., 2009), or through vertical (inter-industry) linkages, arising from buyer-supplier relationships between MNEs and local firms (Lenger and Taymaz, 2006; Liu et al., 2009). Understanding the specific channels through which spillovers occur is crucial to explaining the divergent outcomes reported in the literature.

Incorporating the relational view to horizontal and vertical spillovers can provide a nuanced understanding of how knowledge spillovers occur through FDI (Shi et al., 2022). With horizontal linkages, local firms can adopt relational mechanisms to pursue strategies such as copying MNE competitors' products through activities like developing mimetic isomorphism in their managerial practices (DiMaggio and Powell, 1983) or transferring labor (Lenger and Taymaz, 2006). These spillovers are more effective when collaborative relationships among competitors are characterized by mutual trust and shared norms. Moreover, local firms competing in the same industry as MNEs are compelled to utilize their resources and invest in R&D by developing more innovative products and processes to survive (Liu et al., 2009). Additionally, horizontal linkages can also have negative effects by creating various pressure mechanisms (reverse labor flow, market theft) on locals caused by MNEs (Aitken and Harrison, 1999; Javorcik, 2004).

Vertical spillovers happen between firms at different supply chain stages, typically between MNEs and their local suppliers from EEs (Lenger and Taymaz, 2006; Liu et al., 2009). Robust, trust-based long-term buyer-supplier relationships can enhance the likelihood of vertical knowledge spillovers (Shi et al., 2022). Local firms with extensive networks, including ties with foreign firms, can more effectively leverage these connections to acquire valuable knowledge (Borgatti and Foster, 2003). Concurrently, network embeddedness and deeper relationships ensure that local firms can reciprocate and adapt the acquired knowledge to their specific contexts, enhancing the overall impact of spillovers (Borgatti and Foster, 2003). Such studies, which emphasize the social context by examining the role of social networks in spillovers (Eapen, 2012), provide important insights into overcoming the econometric limitations mentioned earlier. However, research that explores the guiding effect of institutional contexts beyond social networks and incorporates different theoretical perspectives is also necessary for a better understanding of the social background of spillovers.

2.2. Spillover mechanisms and vertical knowledge spillovers from FDI

The dominant view of knowledge spillovers from FDI is that vertical linkages lead to more positive spillover effects than horizontal linkages due to the absence of exclusion and competition effects in vertical linkages (Lenger and Taymaz, 2006; Javorcik, 2004; Meyer and Sinani, 2009). MNEs can also utilize their technological and managerial knowledge to benefit local suppliers (Ilhan-Nas et al., 2021; Javorcik, 2004). Additionally, MNEs seeking to maximize their own interests may tend to partially share their connections with local suppliers.

Although vertical spillovers are more likely to have positive impacts, these are not guaranteed. Even if MNEs are willing to share knowledge, local organizations need to have the necessary absorptive capacity to create positive spillover effects (Marin and Bell, 2006). Additionally, in knowledge flows, local organizations must be aware of the opportunities offered by MNEs, as well as their motivations and resources (Meyer and Sinani, 2009). Similarly, the fact that some MNEs also relocate their own suppliers to host countries may reduce the potential for vertical spillovers by creating a weak level of relationships with local suppliers. The closeness of the relationships between organizations and the institutional environment that regulates these relationships can also significantly guide spillovers (Lenger and Taymaz, 2006). Thus, we draw on neoinstitutional theory to explain the problem and aim to contribute to the existing literature that focuses on vertical spillovers solely in terms of the economic value of investments and relationships.

2.3. Institutional context and vertical knowledge spillovers from FDI

The neoinstitutional theory (DiMaggio and Powell, 1983; Meyer and Rowan, 1977; Scott, 1995) links organizations to the social context in which they exist. According to the theory, institutions create spheres of influence that define the activities of organizations and the conditions under which they gain legitimacy by applying different pressure mechanisms (Meyer and Rowan, 1977; Scott, 1995). These institutional pressures may encourage firms to adopt common norms, routines, and strategies (DiMaggio and Powell, 1983). According to institutional theory, actors exerting these pressures include key buyers, suppliers, competitors, and government agencies (Ke et al., 2009; Scott, 1995). Therefore, vertical spillovers from buyer-supplier relationships can be sensitive to the type and level of pressures created by the institutional environment and the degree of legitimacy emanating from these pressures. Moreover, we argue that the institutional environment plays a key role in understanding spillovers by shaping the patterns of competition and cooperation between organizations.

However, the FDI spillover literature has paid insufficient attention to the institutional environment from an organizational perspective, focusing more on formal institutions, such as regulatory frameworks, intellectual property rights, and foreign trade regimes, often from an institutional economics perspective (e.g., Du et al., 2011; Meyer and Sinani, 2009). These studies typically examine the relationship between the quality of formal institutions and the direction of spillovers using econometric models. While valuable, this focus on formal institutions overlooks the broader, more complex institutional environment that includes normative and cognitive dimensions (Kostova and Roth, 2002; Kostova and Zaheer, 1999).

Although their effects are less obvious and difficult to measure (Munir, 2002), the normative and cognitive dimensions of institutions are important in shaping the context in which organizations are embedded. These dimensions create the underlying social and cultural frameworks that influence organizational behavior. We argue that these less explored dimensions, alongside the mechanisms of institutional pressure and isomorphism as defined by DiMaggio and Powell (1983), provide a useful framework for understanding FDI spillovers. Mechanisms such as imitation, observation, and mimicking, which are fundamental to spillovers, align closely with institutional isomorphism. Given the diversity of existing institutional environments worldwide (Kostova and Roth, 2002; Munir, 2002), exploring how the institutional environment affects spillovers could provide additional insights.

The normative dimension of institutions may play a crucial role in the context of aligning management and organizational structures among the parties involved, as normative pressures from the dominant party in the buyer-supplier relationship can encourage spillovers by promoting isomorphic business norms (Ke et al., 2009). Additionally, the business norms within the host country can shape local organizations' perceived trust and legitimacy, which in turn influences the proximity of buyer-supplier relationships and the extent of spillovers. When legitimacy gaps -the asymmetry between organizations' perceived legitimacy stemming from international business norms, trust, and identity- favor MNEs, foreign buyers may perceive local suppliers as less trustworthy, reducing the likelihood of productivity and innovation spillovers. As an essential normative institution, trust fosters knowledge sharing within buyer-supplier relationships (Hoque and Rana, 2020).

The cognitive dimension of institutions is related to how buyer preferences and expectations are perceived. In buyer-supplier relationships, local suppliers may engage in mimetic isomorphism, believing that aligning with the expectations of foreign buyers will ensure their success. Thus, mimetic isomorphism provides a theoretical foundation for understanding spillover mechanisms, as local suppliers may imitate MNE practices to enhance their own outcomes. The extent to which local suppliers view MNEs as models to emulate can significantly shape how spillovers occur.

Our study builds on these theoretical insights by focusing on the local institutional context and the role of local actors within it, aiming to address unresolved issues in the spillover literature. Furthermore, we aim to contribute to the ongoing expansion of institutional theory, which has increasingly shifted from focusing on public institutions, such as schools and hospitals, to exploring its relevance in the private sector and technological activities.

3. Method

Due to the exploratory nature and in-depth examination goals of our research, we employed a qualitative multiple-case research design, based on in-depth interviews with senior managers who had directly experienced FDI spillovers (see Table 1). The multiple-case method enables theories to be formed or extended through an abductive approach by continually juxtaposing data against theory, facts, and cases (Dubois and Gadde, 2002). Additionally, institutional theory is part of the interpretive paradigm (Burrell and Morgan, 1979), which suggests an anti-positivist methodology suitable for qualitative research methods. The structure of the qualitative method we use, which is compatible with the ontological, epistemological, and methodological assumptions of institutional theory (Burrell and Morgan, 1979, p. 3), is an important motivation for our methodological choice. The procedure Yin (2009) recommended was followed in the research design and reporting of the findings.

3.1. Research context

The automotive industry is among the most technologically and R&D-intensive industries due to the heavy worldwide pressures of competition and buyer expectations. To respond to these pressures, MNE automakers shift their production to low-cost EEs, such as Turkey, while performing more strategic and knowledge-intensive activities, such as R&D, in their home countries (Pavlínek, 2015). The fact that developed economy MNEs prefer to remain conservative in internationalizing their R&D activities, despite numerous incentives, due to intense competitive pressure (Reger, 2004), and the industry's distinct supply chain configuration, causes the industry to have a unique structure. All these dynamics make EEs essential research sites for studying vertical FDI spillovers.

Table 1
Characteristics of sampled firms and data collection.

Firms	Alpha	Beta	Gamma	Delta*	Epsilon	Zeta*	Kappa
Firm demographics							
Supply chain position	Tier-2 (sub-supplier)	Tier-2 (sub-supplier)	Tier-1 (direct-supplier)	Tier-2 (sub-supplier)	After market (sub-supplier)	OEM and Tier-1 (direct-supplier)	OEM and Tier-1 (direct-supplier)
Product range	Diverse components	Electrical and electronic equipment	Chemical matter	Aluminum parts	Diverse components	Electric vehicle and battery systems	Body structure and plastic body
Main buyer MNCs	Ford, Renault, Toyota, Delphi, Federal Mogul	VDL, Arobus, Siemens	Volkswagen, Mercedes, Audi	Mahle, Valeo, Bosch, Rexroth	–	Iveco, Mercedes Benz	Volkswagen, BMW, Mercedes, Tesla
Years of operation	57	55	28	35	56	57	52
Years of export	30	39	10	15	22	30	25
Number of employees	658	100	98	290	140	200	5000
R&D intensity	1%	0%	6%	1%	5%	4%	21%
Export intensity	80%	65%	15%	80%	25%	60%	90%
Ownership type	Family	Family	Private	Public	Family	Family	Private
Interview details							
Number of interviews	2	2	2	2	2	2	2
First interview							
The role of the interviewee	Project manager	Founder	Vice president	Product manager	Export director	Project manager	Export director
Time of interview	47 min	115 min	45 min	60 min	45 min	57 min	40 min
Pages of interview	7 pages	16 pages	6 pages	10 pages	6 pages	12 pages	8 pages
Second interview							
The role of the interviewee	R&D manager	Tech. manager	R&D manager	Product manager	R&D manager	Project manager	R&D manager
Time of interview	88 min	150 min	110 min	120 min	60 min	85 min	75 min
Pages of interview	18 pages	24 pages	24 pages	24 pages	12 Pages	27 pages	22 pages
Secondary data details							
Company documents	16 pages	65 pages	180 pages	950 pages	7 pages	10 pages	45 pages
Online media	9 news	–	36 news	76 news	–	–	72 news
Product brochures	–	24 pages	–	–	–	40 pages	25 pages

* Companies where interviews were held with the same managers in different periods.

Today, the automotive industry has significantly increased its R&D activities, leading to developments in the Turkish automotive industry. Especially with Law No. 5746 on Supporting R&D Activities enacted in 2008, innovative activities are supported by the government. Additionally, MNEs operating in this industry are often highly skilled in terms of R&D activities, technology, and international experience. 16 of 21 automakers are MNEs, while only 25% of 460 enterprises are foreign-owned in the supply industry. In this respect, our context is well-suited for studying the phenomenon of vertical spillovers, where local organizations act as suppliers and foreign organizations act as buyers.

3.2. Sampling strategy

Due to the nature of our research methodology, we adopted the purposive sampling strategy that emerged from the interpretivist research tradition. In this study, we aim to explain the vertical FDI spillover phenomenon from the perspective of local suppliers, a perspective that is currently neglected in the existing literature. Therefore, we selected our cases among local suppliers operating in the Turkish automotive industry. In this way, we aimed to find an opportunity to conduct a post-hoc institutional analysis of the spillover phenomenon. Additionally, given the specific dynamics of the automotive industry, we ensured that local firms at various points in the supply chain are represented in the cases.

Another important issue in multiple case studies is the number of cases. According to Eisenhardt (1989), the optimal number of cases ranges from 4 to 10. Fewer cases may lead to inadequacy in generating and developing theory (Eisenhardt, 1989), while too many cases could result in a loss of depth (Miles and Huberman, 1994). Another issue to consider is data saturation. We found that data reached saturation after the seventh case. Accordingly, the seven supplier cases presented in this study represent our sample (Table 1). Past research suggests that several well-defined and carefully selected cases are sufficient for exploratory research (Yin, 2009). To enhance the reliability of our findings, we conducted two interviews with each case at different times. In other words, our primary data consists of 14 face-to-face interviews. Both the sample selection criteria and the inclusion of eligible cases were guided by the fieldwork of the large-scale project (Ilhan-Nas et al., 2021) from which this study was derived. This project was supported by the Scientific and Technological Research Council of Turkey (TUBITAK).

3.3. Data collection

Using data from multiple sources in multiple case studies is recommended to increase credibility and obtain in-depth information (Yin, 2009). Two face-to-face interviews were conducted with each case at different times. In some cases, interviews were repeated with the same manager, while in other cases, interviews were conducted with different managers (Table 1). We obtained data from different sources, including interviews, observations, and documents. The average 90-min face-to-face interviews with each case constituted our primary data source.[1] The interviews were voice-recorded and then transcribed. As additional data sources, we utilized our fieldwork observations to interpret abstract and implicit themes. Finally, various secondary data sources (corporate websites, industry magazines, local and national newspapers, etc.) were also included in the research to verify the accuracy of the participants' claims and statements.

3.4. Data analysis

The primary unit of analysis of this study is local supplier organizations. We conducted content analysis to systematically transform the collected data into codes and themes and to draw abductive inferences (Dubois and Gadde, 2002; Strauss and Corbin, 1998). Each case was first analyzed individually, and statements were verified using additional data (observations and secondary data). The coders read the documents six times consecutively. Instead of using a predetermined list of codes, we allowed codes to emerge from the data (Strauss and Corbin, 1998), thus preserving the exploratory nature of our study. The data were coded separately by two different coders. The agreement between the coders was measured as 78%. It is generally accepted in the literature that this rate is sufficient for coding to be considered reliable (Miles and Huberman, 1994). The 22% inconsistency between the coders was eliminated by repeating the coding process together.

4. Findings

The automotive industry's supply chain structure is quite hierarchical compared to other industries. Therefore, we expect the level of linkages established to differ according to the position in the SC. For this reason, we included organizations from each position of the supply chain while determining the cases. We classified our cases as “Direct” and “Sub” suppliers according to this initially determined theme (Fig. 2). Sub-suppliers are Tier-2 and after-market with limited direct communication and connections with foreign buyers. We labeled OEM and Tier-1 organizations that have the opportunity to realize this communication and connections more directly and in interaction as “direct.” Fig. 1 presents the codes and main themes that emerged from the content analysis. Furthermore, the detailed coding and analysis of interviews, observations, and secondary data are reported in Appendix 1. We analyzed the participants' statements using the meaning coding method. After each statement was coded, similar codes were grouped under three different main

[1] Prior to data collection, ethical committee approval was obtained, and informed consent was obtained from the participants before the interviews.

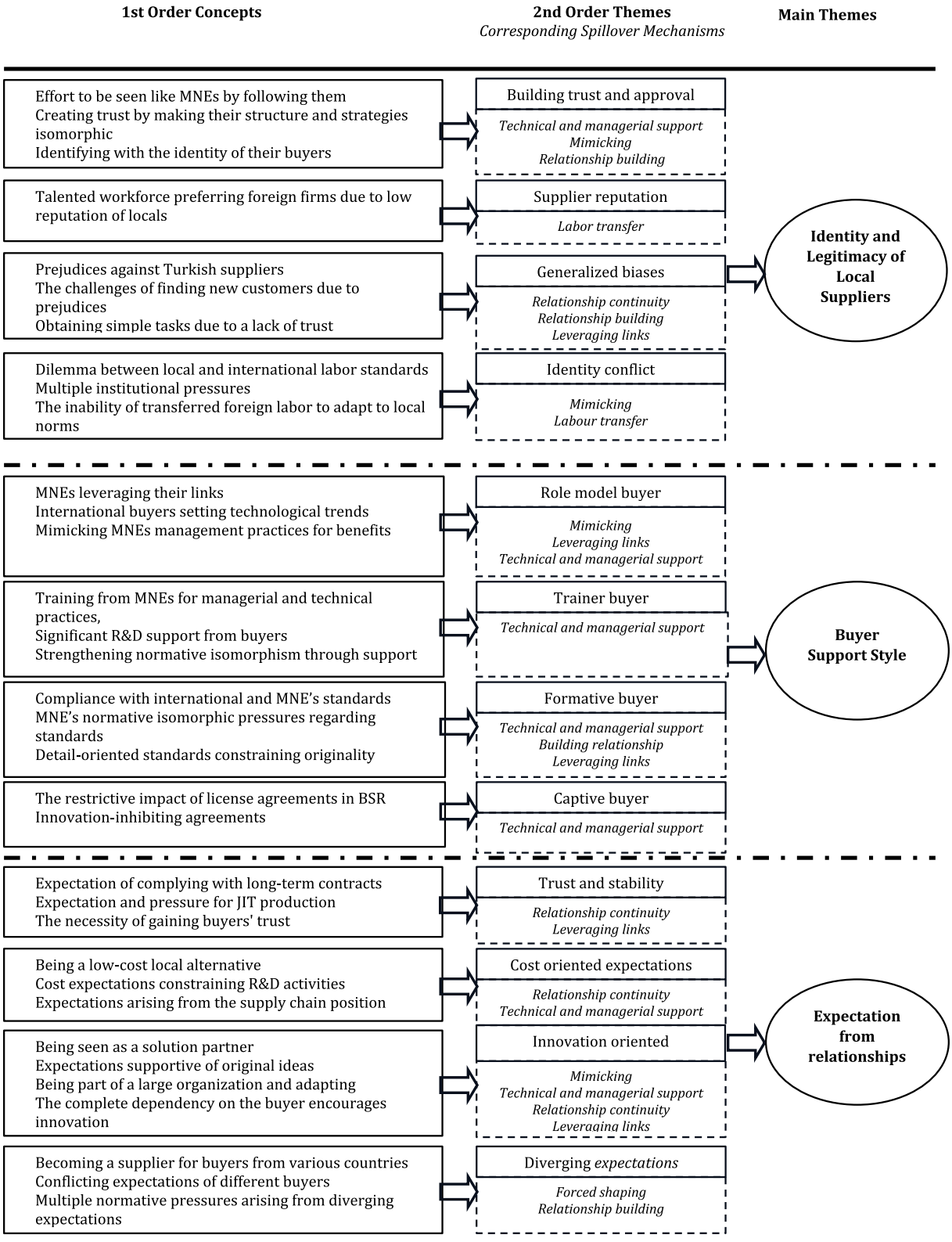

Fig. 1. Data structure and content analyses.

themes. Fig. 1 and Appendix 1 also illustrate the mechanisms of vertical FDI spillover to which each statement and code relates, as well as the concepts of institutional theory used to explain this relationship.

4.1. Identity and legitimacy of local suppliers

Both direct and sub-suppliers made statements that heavily emphasized the theme of "identity and legitimacy of local suppliers". Both types of suppliers stated developing strategies and undertaking activities that focused on the need to "build trust and approval". However, there was a difference in their perceptions. The statements of the sub-suppliers indicated that they had a trust and approval problem. To overcome this problem, sub-suppliers used a normative isomorphism mechanism to engage more with MNEs and benefit from technical and managerial support and carried out several activities beyond their technical requirements (1_{Alpha}, 2_{Delta}, $3_{Epsilon}$).[2] As the R&D manager of Alpha notes:

We are working with Honda company. They do 5-min exercises every morning before they start working. All employees and management gather in front of the production facility and do the exercises. We started to implement this to say, "Look, we are following you; we want to be like you." Now, we start working every morning with 5 min of collective exercises. After all, to do business with them, especially with companies of Far Eastern origin, you need to somehow show that you are like them.

Direct suppliers, on the other hand, did not see "building trust and approval" as a problem. They observed and followed the buyers' managerial practices through a mimetic isomorphism (4_{Gamma}, 5_{Zeta}). Their statements revealed that they pursued a strategy of building trust and approval by identifying their identities with those of the buyers.

Another element of this theme was related to the perceived supplier reputation. Accordingly, in the interviews with all sub-suppliers, we got the impression that they face several difficulties due to their low perceived reputation. Two suppliers (6_{Alpha}, 7_{Delta}) stated that they even have difficulties transferring skilled labor for this reason. Sub-suppliers also expressed a problem of bias (9_{Beta}, 10_{Beta}), which puts Turkish suppliers facing extra efforts and difficulties that are not expected from foreign suppliers. Moreover, we found that these biases, stemming from a legitimacy gap between them and their foreign competitors, were not firm-specific but were generalized against all other suppliers (8_{Alpha}, 11_{Beta}). This problem created an institutional barrier for local suppliers to develop and sustain relationships with MNEs. This identity-based bias problem observed in sub-suppliers appeared as a kind of "Identity Conflict" in directs (Fig. 1). Direct suppliers did not express any prejudice issues due to their ability to develop long-term and trust-based buyer-supplier relationships. However, we found that they were subject to multiple institutional pressures (12_{Gamma}, 13_{Zeta}, 14_{Kappa}) between business norms rooted in their local identities and international norms that they were trying to develop normative isomorphism. Kappa's R&D manager's statement highlights how conflicting institutional pressures significantly influenced the success of labor transfer and mimicking:

We have collaborated with German and Japanese engineers for some projects in the past. Their way of doing business is very different from ours. We are much more flexible and able to think creatively on the spot. While they prefer to specialize deeply in one area, in our case, engineers are expected to provide solutions to a variety of different problems. So why should I make the transfer?

4.2. Buyer support style

Our analysis revealed that another endemic factor to which the vertical FDI Spillover in the Turkish automotive industry is sensitive relates to the knowledge deficit between the parties in favor of the buyer and, correspondingly, the way buyers support suppliers. Our findings reveal that the buyer support style of its suppliers depends on the level of knowledge deficit between it and its suppliers. The way suppliers provide support created a quadruple typology (see Fig. 1). First, some suppliers internalized their buyers, whose managerial and technological know-how was significantly greater than their own, through a mimetic mechanism of isomorphism and identified them as "role model buyers" (15_{Zeta}, 16_{Gamma}). The statements of the Zeta project manager support this inference:

The Japanese, or more specifically Toyota, have various management practices. We often follow these. There are multiple reasons why we mimic Toyota. After all, it is Toyota! Following its practices and implementing them in your own factory is beneficial. When you produce for foreign customers, you can benefit from their connections. For example, we produce for Daimler. We had a foreign customer who had previously examined us, and we could not reach an agreement. When we learned about the business with Daimler, that customer gave us work.

These cases also reported that in some instances, they received direct technical and managerial training from their buyers, whom we labeled "trainer buyers," and were even provided with knowledge on R&D support (17_{Zeta}, 18_{Gamma}). As evident from the statements of Kappa's R&D manager, such buyers can cause turning points for organizations' long-term horizons:

If today we can invest so much in R&D and have improved ourselves, the most important reason for this is the expectations and support of our buyers. Normally, investing in R&D in Turkey is not easy. Convincing the bosses is difficult. But our buyers supported and trained us in various ways so much that we have begun to reap the rewards of the investments made today. Let me tell you, today, we are no longer the ones receiving education but rather the ones providing education in the field of R&D.

Both cases saw their buyers as role models and trainers as direct suppliers. Regarding how sub-suppliers defined their buyers, we identified two different types of buyers, the first of which was the "formative buyer". Formative buyers offer their suppliers the technical and managerial support they need but tend to control the structure and strategy of their suppliers through detailed standards

[2] Detailed information about the expressions coded in parentheses can be found in Appendix 1.

and their own business norms (19_{Beta}, 20_{Delta}). As expressed by the founder of Beta, conforming to these standards and business norms appears to require quite intense effort and time:

In the automotive industry, surrendering yourself can make you much more efficient. Because there are very detailed standards involved. They provide you with a lot of technical and managerial support in this regard. But conforming to these standards is not as easy as it may seem from the outside. Thousands of pages of manuals, continuous training, and audits can be quite exhausting and time-consuming… They conduct an audit, and you feel like you're losing your mind! Are the employees satisfied? What's your financial

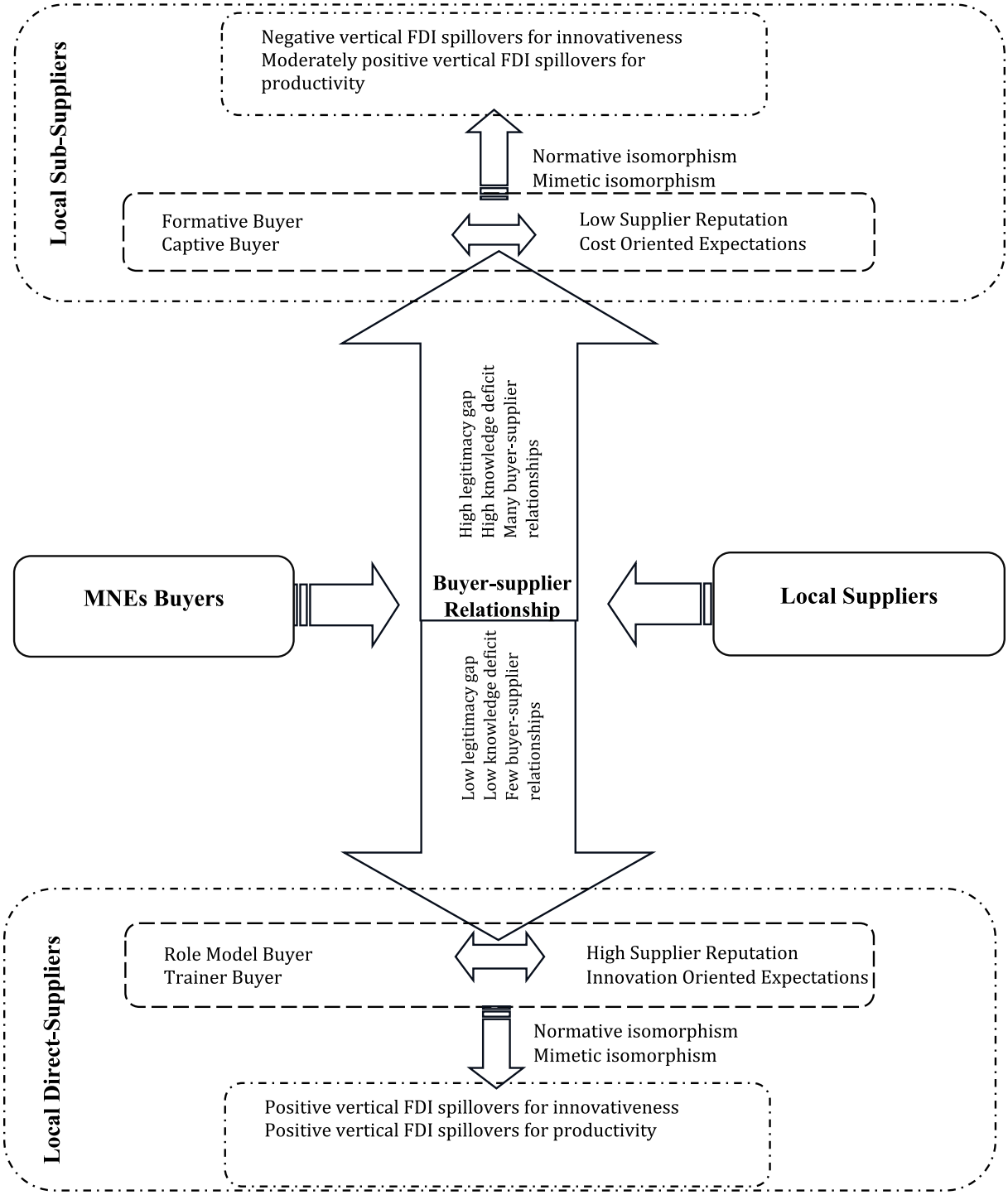

Fig. 2. Conceptual model.

situation? Have you done the maintenance of the machines? They scrutinize everything. But at the end of the day, when you consider it as managerial and technical support, you can become much more efficient.

Our last buyer type shows characteristics of limited managerial and technical support to local organizations for their own benefit maximization and limiting them, especially in their innovative activities. We labeled this buyer type as "captive buyer" (21_{Alpha}). As Delta's project manager stated, the innovation limitations of this customer type can reach very high levels:

Some buyers are such that when you do business with them, they even hinder you from obtaining patents. Because they want you to exist solely for them and do not want you to improve yourself. I've seen a foreign company warning a manager transferring to another company, saying, 'You cannot use the knowledge and experience you gained while working with us!'.

We found that these two types of buyers exert more normative pressures on sub-suppliers, attempting to transform them into suppliers that conform to their norms and expectations rather than improving them.

4.3. *Expectations from relationships*

Another theme that emerged from our findings was related to buyers' expectations. Analysis showed that these expectations also form a quadruple typology (see Fig. 1). The two sub-supplier cases reported that trust and stability are the most important expectations of buyers (22_{Beta}, 23_{Alpha}). These expectations required local suppliers to be isomorphic to their buyers regarding business norms and were important for the continuity of established relationships and mechanisms for benefiting from linkages. Sub-suppliers' statements

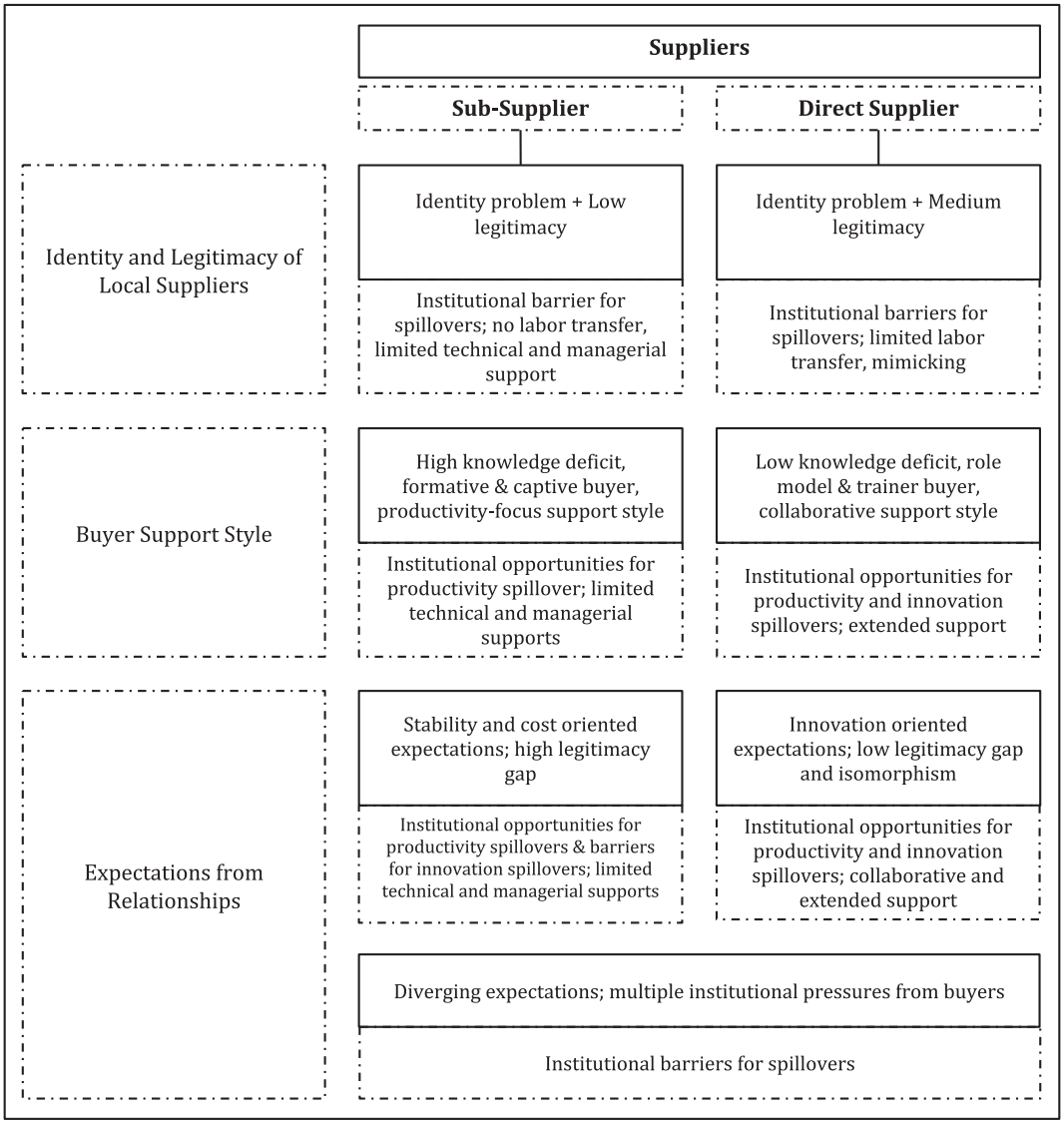

Fig. 3. Vertical spillover patterns of "direct" and "sub" local suppliers.

showed that buyers' other expectations were "cost-oriented expectations," which puts innovation in the background (see Fig. 3). Delta project manager's statement proves the existence of these expectations that restrict innovation:

> But we never had the chance and expectation of investing in a machine and saying, "Let's find a job for it!". Such a way would not be the right way anyway because we are not trendmakers. We only work as subcontractors in this sector. We are valuable to them to the extent that we can be productive. This pushes us very hard both in terms of creativity and innovation. That's why buyers want us to be extremely competitive in terms of both price and quality.

These expectations, which we have found to stem from the "legitimacy gap" between local suppliers and buyers, led to maintaining the current state of relations and providing technical and managerial support limited by productivity. Direct suppliers, on the other hand, had different expectations arising from their relatively positive legitimacy. Such suppliers faced "innovation-oriented" expectations in parallel with being seen as solution partners. These expectations activated many spillover mechanisms, such as the establishment and development of buyer-supplier relationships and technical and managerial support, which had the potential to trigger not only productivity but also innovation outcomes through mimetic and normative isomorphism (28_{Gamma}, 29_{Kappa}, 30_{Kappa}, 31_{Kappa}). As the R&D manager of the Kappa noted:

> Now, you may wonder whether being too integrated or completely dependent on the buyer can be an obstacle to some issues. Well, Daimler is doing it, Volkswagen is doing it, and BMW has started to do it; these are examples I can give you right now. They call you once a year and ask for an innovation presentation. In other words, what kind of work have you done for a year to develop and improve that work, that process, that piece, whatever it is. What is new and creative about you? So, even if you are not going to do anything, the main industry pushes you to do so. So you can't go and say I haven't done anything. I'm not going to do anything.

The statements of one sub and two direct suppliers about buyers' expectations revealed a different type of expectation ($32_{Epsilon}$, 33_{Gamma}, 34_{Zeta}). According to these statements, local organizations that were suppliers to more than one automaker buyer faced diverging expectations that were sensitive to both their buyers' work norms and countries of origin and the level of supplier they were for their buyers. Meeting these diverging and conflicting expectations created multiple institutional pressures.

5. Toward an empirically-grounded conceptual framework of institutional underpinnings of vertical FDI spillovers in buyer-supplier relationships

Our findings reveal that, via vertical linkages, local suppliers can internalize foreign buyers' managerial and technical practices by *mimicking*, *receiving technical and managerial support*, *transferring skilled labor*, and *leveraging their linkages* (see Table 1). In analyzing the vertical spillovers that tend to be positive through these mechanisms, we discuss our findings through an institutional theory lens by focusing on these mechanisms. Our study discovered that vertical linkages do not unconditionally lead to positive FDI spillovers. Our results suggest that when FDI spillovers from vertical linkage have positive effects, as summarized in Fig. 1, these effects are conditioned by factors such as the "identity and legitimacy of local suppliers," "buyer support style," and "expectations from relationships." However, we found clear differences between direct and sub-suppliers in these determinants (see Figs. 2 and 3). We also found that productivity and innovation spillovers emerge through distinctly different mechanisms.

In our context, the most important concept embedded in the context and associated with the spillover process was "legitimacy," as defined by neoinstitutional theory (DiMaggio and Powell, 1983). Their perceived low legitimacy in the eyes of buyers drove local suppliers toward strategies primarily aimed at building trust and approval. Consistent with the view that MNEs tend to develop trusting relationships with a small number of suppliers (Wasti et al., 2009), this prompted sub-suppliers to adopt normative isomorphic strategies to maintain existing relationships and build new ones by fostering trust and approval. In doing so, we found that they adopted a strategy of "decoupling" between their technical requirements and their search for legitimacy, which encourages the mimicking mechanism of vertical spillovers, but only in terms of productivity spillovers. Since all sub-suppliers stated that they compete on price and quality, they have developed buyer-supplier relationships based on short-term contracts. Additionally, the fact that technical and managerial support applies to technical standards and does not encompass R&D supports our conclusion. Our results extend the findings of Wasti et al. (2006) that the trust problem for local organizations leads to a style of buyer-supplier relationship based on detailed contracts, where suppliers compete primarily on price. While the sub-suppliers tried to show that they were "like them" or "one of them" by copying the practices of their powerful foreign buyers through mimicking, the direct suppliers' view was to mimic and internalize the practices of foreign buyers through mimicking (Fig. 2), which they thought it was the right way of doing business and being successful.

Another important consequence of the legitimacy problem faced by local suppliers was the perceived damage to their reputation, which hindered the "labor transfer" mechanism of spillovers. Employees, who were seen as important agents of knowledge spillovers, faced a legitimacy gap when they had to choose between sub-suppliers and their former firms, which was important for their careers. However, although they did not explicitly mention a reputation problem, we also observed that direct suppliers were not active enough in transferring labor from their foreign buyers and did not see themselves as attractive businesses in this regard.

Faced with identity and legitimacy issues compared to their international competitors, Turkish suppliers encounter several negative biases regarding spillover mechanisms, including developing relationships, leveraging buyers' connections, and maintaining existing relationships. Underlying these biases is the issue of establishing trust associated with the identities of Turkish organizations (see Fig. 1). The statements of our participants suggest that competence and goodwill alone are insufficient for establishing trust in Turkish organizations. This contextual factor, which leads to a preference for international suppliers over local suppliers, constrains

both productivity and innovation spillovers because local organizations are unable to develop buyer-supplier relationships to the same extent as they can strengthen spillover outputs. Those relationships that are developed are preferred to be lower down the SC, which limits the spillover of technological and managerial knowledge. This pattern, which we generally observe in the discourse of sub-suppliers, was not detected in the discourse of direct suppliers. At this point, it is worth mentioning that two of the three organizations, in our case, have international experience as direct suppliers. In this way, we can say that the relatively high legitimacy of direct suppliers, resulting from their existing knowledge and international experience, enables them to overcome these problems. This finding is consistent with the work of Eapen (2012), who argues that existing capabilities are important for local organizations to use spillover mechanisms effectively.

Identity and legitimacy issues that cause sub-suppliers to benefit only to a limited extent from productivity spillovers are not entirely invalid for direct suppliers. In other words, being a direct supplier does not guarantee the benefits of innovation spillovers. Our results show that although direct suppliers have higher legitimacy than sub-suppliers, they are constrained by an identity conflict regarding labor transfer mimicking mechanisms. While trying to be isomorphic to IB norms to maintain their legitimacy, direct suppliers face constraints imposed by Turkish identity and business norms (see Fig. 3). For example, due to non-compliance with business norms, these organizations choose not to use the skilled workforce of foreign buyers enough to have a positive spillover experience. As Zeta's project manager said, "*the project is already over until we adapt the foreign employee to our organizational culture*."

Our result corroborates Van Wijk et al. (2008) argument that for the labor flow mechanism of spillovers to be effective, the parties in buyer-supplier relationships should have similar management and organizational structures. Moreover, due to the identity conflict, organizations cannot effectively carry out strategic R&D activities that would strengthen their absorptive capacity and benefit from innovation spillovers, thereby maintaining their position and becoming international players. As the Gamma R&D manager said, "*our logic and facts say invest in R&D, but our Turkish mind says focus on getting your investment back in the short term*." Thus:

P_{1a}. . When the legitimacy gap between buyers and suppliers is high in favor of buyers, the resulting decline in perceived trust and supplier reputation hinders productivity and impedes innovation spillovers.

While the challenges associated with Turkish identity regarding legitimacy are commonly acknowledged among local suppliers, it would be erroneous to universally apply this notion to all organizations. Evidence suggests that entities successfully surmounting this trust deficit and legitimacy challenge over time may attain a favorable position within the automotive industry. Insights from their narratives suggest that suppliers such as Kappa and Zeta, initially struggling to establish rapport with foreign entities during their formative years, have since strengthened their legitimacy and cultivated business relationships conducive to productivity and innovation (see Table 1). Moreover, it is apparent that Kappa, once relegated to lower positions within the supply chain due to legitimacy concerns in the 1990s, now boasts overseas R&D centers (as stated on its corporate website) and maintains a consistent track record of international patent applications (as listed on epo.org). In fact, some direct suppliers declare that they are no longer the recipients of support but the providers of technical support to other suppliers of MNEs. In this way, we can say that the relatively high legitimacy of direct suppliers, resulting from their existing knowledge and international experience, enables them to overcome these problems. This finding is consistent with the work of Eapen (2012), who argues that existing capabilities are crucial for local organizations to leverage spillover mechanisms more effectively. Accordingly, we put forward the following proposition:

P_{1b}. . When the legitimacy gap between buyers and suppliers is low in favor of buyers, the resulting increase in perceived trust and supplier reputation amplifies both productivity and innovation spillovers.

Our results also revealed that apart from suppliers' identities, MNEs' support styles for suppliers and the varying isomorphic pressures that these styles put on suppliers are also important determinants of vertical FDI spillover (see Fig. 1 and Fig. 3). Sub-suppliers, typically with a higher knowledge deficit vis-à-vis their buyers, emphasized strict controls and specifications, stating that buyers shape their production activities and processes to guarantee their product quality and productivity (not innovation).

This clearly enabled local organizations to benefit from the productivity spillovers by contributing to the standardization of their processes. Moreover, these suppliers interpreted the support style of buyers as short-term and limited, focusing only on securing established relationships. They even stated that their buyers blocked innovative activities. For example, "*We produce for projects that we are completely involved in. However, when we try to get a patent for these works, the main industry prevents us. They say, you produce for my project, I support you, you cannot get a patent*" (Delta). Unlike direct suppliers, sub-suppliers were disadvantaged in terms of the absorptive capacity that local organizations should possess for knowledge spillovers, despite the long-standing buyer-supplier relationships they had established. The direct suppliers, in our cases, had independent R&D activities and various patent applications. However, we found that sub-suppliers lack these resources and are disadvantaged in terms of international experience and managerial knowledge. Based on this, we found a significant knowledge deficit and low absorption capacity against sub-suppliers (see Fig. 3). Therefore, we can conclude that our existing understanding, which suggests that MNEs in EEs often learn from their local suppliers, does not apply to sub-suppliers in our context. Moreover, the absence of any patent applications from Alpha after redirecting its activities to the automotive industry, despite consistently filing patent applications every year while operating in different industries, supports this inference. Thus:

P_{2a}. . When the knowledge deficit between buyers and suppliers is high in favor of buyers, they tend to adopt support styles as formative and captive, which obstruct innovation spillovers and constrain productivity spillovers.

On the other hand, according to the support style typology, when interpreting the support their buyers provide, direct suppliers sometimes describe them as role models and trainers, especially when the knowledge deficit between buyers and suppliers is low (see Fig. 2). We found that the knowledge deficit between buyers and direct suppliers was typically lower than that of between buyers and

sub-suppliers. When interpreting our results regarding spillovers, we find that local suppliers who view buyers as role models and mimic them are enabled to expand their business networks in the automotive industry and benefit from positive spillover effects. Also, the statements of the direct suppliers revealed that they identified their buyers as highly knowledge-laden organizations. For instance, the project manager of Zeta and the R&D manager of Gamma emphasize the significant benefits of the training and innovation support they receive from foreign buyers, particularly highlighting the buyers' high legitimacy, knowledge, and experience (17_{Zeta}, 18_{Gamma}).

Moreover, thanks to their absorptive capacity and R&D awareness, these suppliers could transform the technical and managerial support they received. Because these suppliers generally had the resources to strengthen their absorptive capacity, such as international experience and R&D centers. In this way, they could carry out activities isomorphic to buyers' business norms and, therefore, benefit from productivity and innovation spillovers. Thus, we suggest:

P_{2b}. . When the knowledge deficit between buyers and suppliers is low in favor of buyers, they tend to adopt support styles as role models and trainers, which enhance both productivity and innovation spillovers.

Particularly in the automotive industry, powerful MNEs are known to set business norms and can even act as a source of regulatory pressure (Meyer and Rowan, 1977). Our study found that the type and extent of MNEs' expectations from local suppliers determine which mechanisms and types of spillovers they encourage (see Fig. 1). First, we found that expectations from sub-suppliers are shaped by a cost-oriented and stability-seeking framework that is far from innovation. One participant's statement exemplifies this inference:

> The first factor that hinders R&D activities is time. We don't have much time; we don't have time to develop things with an innovative mind. Because there is a lot of pressure from buyers to deliver on time and reduce costs. In fact, when we respond to these pressures, we no longer need to be innovative (Delta).

These expectations that limit innovation spillovers become more understandable when combined with the strategic choices of local organizations that accept these expectations, as is clearly understood from the last sentence of the Delta manager's statement. This situation can enable local organizations to achieve positive productivity spillovers by activating mechanisms such as establishing and developing relationships, as well as benefiting from technical and managerial support in terms of cost. Such expectations constrain innovation spillovers, which are driven by sub-suppliers' trust issues, as well as the legitimacy gap resulting from their lack of international experience and recognition. This is because local suppliers who can meet cost-oriented expectations tend to maintain their current status and continue to meet these expectations when they feel the positive effects of productivity spillovers. Thus, a complete fit emerges between suppliers' strategic choices and buyers' expectations of them. Local suppliers seem to be attracted by short-term productivity outcomes rather than the long-term perspective and structural reform challenges of innovative activities. As the Beta technical manager said,

> I spend most of my daily, monthly, and annual work hours examining the standards imposed on me and keeping up with them. When I achieve this, I can be involved in enough projects and earn very good money. To be frank, why bother trying to be innovative when I do this?"

The statement above from Beta's technical manager indicates that cost-oriented expectations and time pressure hinder innovative activities, and local organizations do not express concern about this situation. Based on these findings, we propose the following proposition:

P_{3a}. . When the legitimacy gap between buyers and suppliers is high in favor of buyers, buyers' expectations are stability and cost oriented, which enhance productivity spillovers and obstructs innovation spillovers.

Expectations from direct suppliers were more focused on innovation. Due to their position in the supply chain, these suppliers were more experienced than others and had been developing relationships with different foreign buyers for many years. The learning effect and the experience they gained from these long-lasting relationships enabled them to position themselves more as solution partners in their current relationships. These strategic choices necessitated them to become more innovative to maintain their relationships with foreign buyers. One participant stated, "*Although we saw it as a burden at first, we saw the gains of innovation over time and understood that innovation is an indispensable structure for growth in this sector*" (Kappa). These strategic choices, combined with normative and imitative isomorphism pressures, especially in R&D, show that direct suppliers can benefit from the innovation spillover of the expansions in addition to the efficiency spillover (see Fig. 2). As Gamma, Zeta, and Kappa managers clearly stated, the primary motivation for these suppliers to establish R&D centers was to meet the innovation-oriented expectations of foreign buyers. Therefore, the buyer-supplier relationships they develop are seen as strengthening the innovation and efficiency dimensions of spillovers by encouraging R&D investments. Moreover, the fact that Epsilon, which is not yet a direct supplier, explains its motivation for establishing an R&D center on its corporate website as "to be a supplier to the global main industry organizations of the automotive industry" supports our conclusion. As a result, we put forth the following proposition:

P_{3b}. . When the legitimacy gap between buyers and suppliers is low in favor of buyers, buyers' expectations are innovation-oriented, which enhance both productivity and innovation spillovers.

One of our interesting findings was that local suppliers had to respond to different expectations from multiple sources. For both direct and sub-suppliers, these expectations stemmed from the fact that they were working with multiple foreign buyers from different origins. For example, Alpha indirectly supplies 7 leading automotive industry organizations. Not only for our sample, but many local suppliers in the Turkish automotive industry are also suppliers for dozens of buyer firms from different countries and, therefore, have different working norms. However, the nature of the relationships between these buyers and local suppliers, which are numerous in the

cases we examined, is striking. We did not detect close relationships between these buyers and suppliers in our cases. This is also consistent with DiMaggio and Powell's (1983) argument that the greater the number of role models to imitate, the weaker the isomorphism mechanism will be. This role of different expectations in limiting spillovers can be explained by one of the central debates in institutional theory: the liability of foreignness. We found that these multiple institutional pressures, which the traditional literature (e.g., Kostova and Zaheer, 1999) defines as a problem for MNEs, evolved into a liability of localness (Un, 2016) in the Turkish automotive industry due to the legitimacy problem faced by local organizations. Unlike organizations operating in environments dominated by institutional pressures from a single organizational field or society, organizations that have to respond to multiple institutional environments, which often contain incompatible demands (Meyer and Rowan, 1977), can be expected to experience isomorphism processes that are much more painful (Pache and Santos, 2010). In our context, it is quite clear that MNEs that do not face the liability of foreignness do not feel obliged to adapt to the business norms of the local context. The divergent norms of the local context and MNEs seem to hinder spillover by weakening the isomorphism mechanism on the one hand and reducing the likelihood of success of critical spillover mechanisms, such as labor transfer, on the other. This difficulty weakens the isomorphism mechanism and creates an institutional barrier for spillovers. Hence, we put forward the following proposition:

P_{4a}. . When suppliers have relationships with many buyers, multiple normative pressures increase, which hinder productivity and innovation spillovers.

The findings presented above suggest that developing relationships with buyers from multiple and different countries of origin weakens spillovers by giving rise to multiple normative pressures. In the context under consideration, we believe that closer relationships should be developed with a few buyers to achieve both efficiency and innovation outcomes in deployments. Because it is an emulation story based on emanations, the small number of models that can be emulated will also strengthen the isomorphism mechanism. In addition, as some suppliers clearly state, developing buyer-supplier relationships with buyers who are competitors also causes some disadvantages for local organizations. In such cases, foreign buyers may view local suppliers as a means for their unique technology and knowledge to be acquired by competitors, and may be hesitant to share their critical technologies. More precisely, information protective policies can be activated, and dissemination is restricted in these contexts. However, developing close relationships with a small number of buyers will prevent such disadvantages from arising and strengthen their expansion. Therefore, our final proposition suggests:

P_{4b}. . When suppliers have relationships with fewer buyers, isomorphism is strengthened, which enhances both productivity and innovation spillovers.

Overall, interpreting our results, we argue that vertical FDI spillovers in the Turkish automotive industry exhibit different patterns for direct and sub-suppliers due to variations in relational mechanisms across these two types of suppliers. Moreover, although not explicitly addressed in the prior literature, we claim that innovation and productivity spillovers emerge differently due to the institutional determinants discussed above. Based on these findings, we have developed the following conceptual framework (Fig. 2), which has the potential to contribute to the existing literature.

6. Discussion and conclusions

The management of FDI spillovers in buyer-supplier relationships is crucial for local upgrading and competitiveness (Audretsch and Belitski, 2020; Krammer, 2015). Our research addresses the strategic management of these spillovers, focusing on their relational and institutional foundations. We examine FDI-based vertical spillovers' effects on local productivity and innovation within the Turkish automotive industry, using in-depth interviews with seven local suppliers. Our findings suggest that the factors driving vertical FDI spillovers are rooted in the local institutional context, making institutional theory a vital tool for understanding these mechanisms. This study is the first to explore knowledge spillovers from this perspective, offering significant theoretical and practical insights.

6.1. Theoretical implications

Our study enhances theoretical and methodological perspectives by integrating neoinstitutional theory into the qualitative analysis of buyer-supplier relationships in the Turkish automotive industry. This approach offers a deeper understanding of FDI-based spillover mechanisms and clarifies the diverse outcomes noted in the spillover literature.

First, we address the legitimacy gap and its role in supplier trust and reputation. Our findings reveal that when local suppliers face a high legitimacy gap, their perceived trust and reputation diminish. This decline restricts productivity spillovers and creates barriers to innovation spillovers. This insight contributes to institutional theory by highlighting how legitimacy perceptions shape the dynamics and effectiveness of knowledge and productivity spillovers within buyer-supplier relationships. Contrary to the prior literature, which suggests that spillovers affect internationalization, our findings reveal that international experience and legitimacy are necessary to benefit from spillovers in the Turkish automotive industry. Nonetheless, our results also align with previous research arguing that positive spillover effects cannot occur in contexts where local organizations are constrained in their absorptive capacity (Lane et al., 2006). However, unlike the technology gap suggested by the econometric studies, we extend the existing literature by showing that our proposed legitimacy gap may condition productivity and innovation spillovers across different directions and magnitudes. In short, while the spillover literature includes studies discussing the effects of a capacity and technology gap between MNEs and local organizations (Meyer and Sinani, 2009), to the best of our knowledge, this is the first study discussing the role of the legitimacy gap in spillovers.

Second, we explore the role of buyer support styles vis-à-vis the knowledge deficit between buyers and suppliers. Our study shows that a low knowledge deficit leads buyers to adopt role model and trainer support styles, fostering productivity and innovation spillovers. Conversely, a high knowledge deficit results in formative and captive support styles, obstructing innovation spillovers and only minimally supporting productivity spillovers (see Fig. 3). Our findings go beyond existing econometric models that measure buyer-supplier relationships as central to vertical spillovers with input-output tables, revealing the social background of actors and context and broadening our understanding of the reasons for conflicting spillover findings from different institutional contexts.

Third, we analyze how buyers' expectations affect spillovers. A high legitimacy gap leads buyers to prioritize stability and cost, promoting productivity spillovers but hindering innovation. Conversely, a low legitimacy gap encourages innovation-oriented expectations, fostering both types of spillovers. Multiple buyer-supplier relationships can further impede these outcomes, highlighting the role of institutional pressures in shaping spillover variability (see Fig. 3). On the other hand, according to preliminary literature (Kostova and Zaheer, 1999), to overcome the liability of foreignness faced in host countries, MNEs are compelled to become isomorphic with the business norms and various institutional mechanisms of the local context, in addition to those of the home country. However, unlike what the literature puts forth, in our context, the pressures on MNEs do not emerge in this direction. On the contrary, local organizations feel such multiple normative pressures due to the legitimacy asymmetry that emerges in favor of the mentioned MNEs. At this point, we found that these organizations face the liability of locality (Un, 2016). As a result, organizations with sufficient institutional capacity to cope with such multiple normative pressures can benefit more from the positive effects of spillovers. We claim that these findings emerged from our methodological approach, which was carried out from an interpretive perspective, unlike the dominant methodological approach in the existing literature.

Finally, our findings highlight the impact of selectivity versus inclusivity in buyer-supplier relationships on institutional pressures, which in turn affect productivity and innovation spillovers. Multiple buyer-supplier relationships expose suppliers to diverse and often conflicting norms, leading to confusion and inefficiencies as they struggle to meet varying expectations. This complexity can hinder their focus on productivity and innovation. While multiple pressures can occasionally benefit organizations, they require a minimum level of "institutional capacity" to manage these complexities effectively (Stenholm and Hytti, 2014). These findings challenge the conventional view that conformity norms always benefit organizational performance, as it hints that an overload of normative expectations can be counterproductive. Our paper contributes to institutional theory by demonstrating that the effectiveness of normative pressures is context-dependent and can, under certain conditions, hinder rather than enhance organizational outcomes, thereby adding complexity to the understanding of institutional conformity. Our findings align with Pérez and Sánchez (2001), who suggest that suppliers with fewer buyer-supplier relationships achieve positive knowledge flows at the strategic partnership level. This reduction allows suppliers to align more easily with a smaller set of expectations, promoting streamlined operations and clearer strategic directions. Consequently, this fosters an environment conducive to productivity improvements and innovation. This supports DiMaggio and Powell's (1983) concept of isomorphism, indicating that fewer relationships can create a homogeneous set of norms leading to positive productivity and innovation outcomes.

Overall, our study's integration of institutional theory into the analysis of FDI spillovers provides a richer, multi-faceted understanding of the factors influencing productivity and innovation spillovers. Our abductive approach allows us to explore new explanatory concepts and juxtapose them against concepts derived from institutional theory when addressing FDI spillovers. This approach not only explains the heterogeneous results observed in existing literature but also introduces new concepts that can be explored in future research. For example, we introduce the concept of "legitimacy gap" to the literature. The legitimacy gap represents a concept sensitive to social context. It has a higher explanatory power for the differential findings between productivity and innovation spillovers, serving as an alternative to the concept of the technology gap used in measuring absorptive capacity in econometric studies. Furthermore, we found that the "supply chain position" and the number of buyer-supplier relationships that local suppliers engage in simultaneously are critical concepts that have not yet been addressed in the existing literature. These concepts are likely to enhance the explanatory power of spillover models as boundary conditions in future studies. Another contribution we believe we make beyond the current econometric perspectives relates to our finding that MNEs' expectations from local organizations influence the recipient typology, resulting in significant differences in productivity and innovation spillovers. This finding expands our understanding of spillovers when considered alongside recent criticisms that, although the existing literature conceptually represents the FDI spillover phenomenon better, the neglect of innovation stems from the methodological shortcomings of the findings in reflecting the desired relationship patterns (Rojec and Knell, 2018).

6.2. *Practical and policy implications*

From a practitioner's perspective, our study offers several actionable insights for enhancing the productivity and innovation effects of spillovers, which are vital for local firms. The different spillover patterns of "direct" and "sub" local suppliers are particularly noteworthy and are elaborated upon further below. These implications can guide policymakers, MNEs, and local suppliers in fostering more effective and beneficial buyer-supplier relationships. Fig. 3 illustrates the comparative analysis of vertical spillover patterns among "direct" and "sub" local suppliers, highlighting the practical relevance of our study.

First, EE governments should not only focus on attracting FDI but also on facilitating robust and close buyer-supplier relationships between MNEs and local suppliers. Policies that promote collaborative engagements and long-term partnerships can be particularly effective. As identified in our study, encouraging frequent interactions and knowledge-sharing activities, such as joint training programs and collaborative innovation projects, can help bridge the knowledge deficit between buyers and suppliers, thereby promoting both productivity and innovation spillovers, as is the case with "direct" local suppliers.

Second, enhancing the legitimacy of local suppliers is crucial. Policymakers should implement measures that help local suppliers

build and maintain a reputable and trusted image in the eyes of their foreign buyers. This can include certification programs and compliance with international standards. Establishing local supplier development programs that support achieving these certifications can significantly reduce the legitimacy gap, foster productivity spillovers, and reduce barriers to innovation spillovers. Also, maintaining fewer but deeper, more focused, and strategically aligned buyer relationships may enhance suppliers' ability to innovate and improve productivity.

Third, policymakers should be mindful of the expectations set by MNEs regarding their local suppliers. When MNEs have high legitimacy expectations and focus on innovation, local suppliers are more likely to engage in activities that promote productivity and innovation spillovers. Governments can influence these expectations through policies that incentivize innovation-oriented goals, such as tax breaks for R&D activities, grants for technological upgrades, and support for participation in international trade fairs and expos.

Finally, managing the multiple normative pressures that arise from local suppliers' relationships with numerous buyers is essential. Suppliers often face conflicting demands from different buyers, hindering productivity and innovation spillovers (see Fig. 3). Governments and industry associations can play a role in harmonizing these pressures by developing standardized industry norms and practices. Creating platforms for dialogue among stakeholders to align expectations and share best practices can help mitigate the adverse effects of these pressures.

6.3. Limitations and future research avenues

While our study contributes significantly to understanding the role of the institutional context in FDI-based vertical productivity and innovation spillovers, it also has several limitations that open avenues for future research. First, our focus was primarily on the perspective of local suppliers. This single-sided view, while insightful, may not fully capture the complexity of spillover processes. Future research could benefit from adopting a bilateral perspective, examining the mechanisms from both the suppliers' and buyers' viewpoints. Researchers can gain a more holistic understanding of how spillovers occur and how they can be optimized by incorporating the experiences and strategies of MNEs. Such studies could explore how MNEs perceive their roles in facilitating or hindering spillovers and how their strategies align or conflict with the capabilities and expectations of local suppliers.

Second, our study employed an institutional theory framework to explore the spillover phenomenon. While this perspective highlighted the importance of institutional contexts, it limited our ability to explore other potentially influential factors. Future research could adopt a multi-theoretical approach to provide a richer and more nuanced analysis. For instance, incorporating resource dependence theory could shed light on how power dynamics and resource allocation between suppliers and buyers affect spillovers. Similarly, applying social network theory (Borgatti and Foster, 2003) could help understand the role of inter-organizational relationships and network structures in facilitating knowledge spillovers and innovation.

Third, our research was context-specific, focusing on the Turkish automotive industry. While this provided depth in understanding the local institutional mechanisms, it may limit the generalizability of our findings. Future studies could expand the scope to include different industries and geographic regions to compare and contrast how institutional contexts influence spillovers across diverse settings. Such comparative studies could identify common patterns and unique challenges, providing broader insights into how various institutional environments shape the spillover effects of FDI.

Furthermore, our methodological approach was qualitative, relying on in-depth interviews and content analysis. While this allowed for a detailed exploration of the themes and mechanisms at play, future research could complement this with quantitative methods to validate and extend our findings. Large-scale surveys, scenario-based experiments, or econometric analyses could quantify the relationships between institutional factors and spillover outcomes, providing statistical robustness to the observed patterns.

Lastly, the rapidly evolving global business environment, particularly following the COVID-19 pandemic, suggests that institutional contexts and spillover dynamics are likely to change over time. Longitudinal studies that track these changes could offer valuable insights into how shifts in the global economy, technological advancements, and evolving institutional frameworks impact the spillover process. This temporal perspective could help policymakers and practitioners continuously adapt their strategies to optimize the benefits of FDI for local economies.

CRediT authorship contribution statement

Tulay Ilhan Nas: Writing – review & editing, Supervision, Software, Resources, Project administration, Methodology, Investigation, Funding acquisition, Data curation, Conceptualization. **Fatih Sahin:** Writing – review & editing, Writing – original draft, Visualization, Validation, Methodology, Funding acquisition, Formal analysis, Data curation, Conceptualization. **Ismail Golgeci:** Writing – review & editing, Writing – original draft, Visualization, Project administration, Methodology, Conceptualization. **Tarhan Okan:** Writing – original draft, Visualization, Methodology, Investigation, Formal analysis.

Ethics approval

Prior to data collection, ethical committee approval numbered E-82554930-050.02.04-124,355-726 was obtained from the Karadeniz Technical University Social and Human Sciences Ethics Committee. Informed consent was obtained from the participants before the interviews.

Declaration of competing interest

All authors declare that they have no conflict of interest. The work described was original research that has not been published previously and is not under consideration for publication elsewhere, in whole or in part. All the authors listed have approved the manuscript that is enclosed.

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Appendix A. Supplementary data

Supplementary data to this article can be found online at https://doi.org/10.1016/j.intman.2026.101340.

Data availability

The data that has been used is confidential.

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