Autonomy Within Business Groups: A Meso Perspective for Evaluating Intra-group Interlocks (Igl) and Internal Flows

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Abstract

This conceptual paper aims to contribute to the stream of research on autonomy within business group proposing a new perspective by switching the level of analysis from the subsidiaries to an intermediate level based on subsets of firms belonging to the same group. Literature findings concerning two devices for control and coordination of business groups, Intra-Group Interlocks (Igl) and internal flows, have been reviewed to find the concepts have been applied to offer an improvement in understanding the concept of autonomy for affiliated-group firms. Within the subsidiary-management literature, internal flows have been greatly used by scholars as one of the main determinants able to explain the autonomy of the subsidiaries. Less attention has been devoted to the Igl phenomenon even if some interesting findings concerning corporate group governance research on the degree of separation between management and control in holding-subsidiaries relationships can be integrated and adapted offering new theoretical lenses on the concept of autonomy. Considering business groups with more subsidiaries engaged in different activities, the paper offers two propositions able to reveal previously unaddressed aspects of the autonomy within business groups and new hints for further research in this area.

Keywords: Business Groups, Firm Autonomy, Igl, Internal Flows, Conceptual Study.

1. INTRODUCTION

This study is embedded in the context of business group studies and in the wider perspective of the subsidiary management literature (Birkinshaw and Hood, 1998; Paterson and Brock, 2002; Pisoni et al., 2013; Cavanagh et al., 2017). In this stream of research, scholars devoted much of their attention on foreign subsidiaries within Multinational Corporations (MNCs) and the concept of subsidiary autonomy has been generally defined according to the decision-making aspect (Young and Tavares, 2004; McDonald et al, 2008; Ambos et al. 2010; Gammelgaard et al. 2011). Subsidiary autonomy has been investigated in several ways: interesting contributions focused on the subsidiary’s initiative and development stream of research (Birkinshaw et al., 1998; Ambos et al., 2010; Dörrenbächer and Gammelgaard, 2016), the evaluation of the autonomy of an MNC seen as global networks of subsidiaries (Hedlund, 1986; Ghoshal and Bartlett, 1990; McDonald et al., 2008; Rugman et al. 2011b) and subsidiary role literature (White and Poynter, 1984; Bartlett and Ghoshal, 1986; Jarillo and Martinez, 1990; Birkinshaw and Morrison 1995).

However, as stated by Young and Tavares (2004) “autonomy is a relative concept, that is, relative to other subsidiaries and to the parent corporation. Within the multinational system, other subsidiaries may have greater or lesser autonomy and so represent rival sources of power and influence, and are potential competitors for subsidiary initiatives” (Young and Tavares, 2004: 230). Furthermore, defining a business group as a collection of legally independent companies bounded together with formal and informal ties subjected to a common control or, at least, coordination (Granovetter, 1995; Amatori, 1997; Smångs, 2006), corporate governance at group level also plays a role in determining the degree of separation between management and control in holding-subsidiaries relationships.
In a recent work, Colli and Colpan (2016) have reviewed the literature about the corporate governance of business groups. According to their findings, business groups governance attributes concern three different streams of research: group ownership (see among others, La Porta et al., 1999; Cuervo-Cazurra, 2006; Khanna and Yafeh, 2007); intra-group control and coordination devises (see inter alia, Khanna and Rivkin, 2006; Boyd and Hoskisson, 2010; Brookefield, 2010), and relationships between group ownership and intra-group control and coordination devises (see, e.g.: Maman, 1999; Morck et al., 2005; Colpan, 2010). In their review, Martinez and Jarillo (1989) found as centralization/decentralization of decision-making through the hierarchy of formal authority has been one of the most common structural and formal mechanism of coordination. Consequently, considering that “subsidiary autonomy is the antithesis of HQs (Headquarters) control” (Manolopoulos, 2006: 48), is not surprising that subsidiary autonomy and group governance are closely related aspects.

To summarise, both the subsidiary management and the corporate governance of business groups literature streams generally refer to single units such as the subsidiaries, the HQs or the entire corporation seen as a unique entity (MNC or business group). In fact, during the last decades, the object of analysis has increasingly shifted towards the subsidiaries both for the studies in which an MNC has been viewed as a global network of subsidiaries (Hedlund, 1986; Ghoshal and Bartlett, 1990) and those have been based on a dyadic and hierarchical relationship between the parent and the subsidiary (Hedlund, 1980; Prahalad and Doz, 1981; Gates and Egelhoff, 1986). Nevertheless, for the purposes of this study, some findings concerning regional HQs (Ciabuschi et al. 2012; Alfoldi et al., 2012) or business model (Di Carlo, 2016) showed as Intermediate Units (IU) (Pla-Barber et al., 2021) and sub-aggregations of units could play a role within business groups.

Thus, the aim of this conceptual paper is proposing a new perspective to evaluate the autonomy within business groups by switching the level of analysis from the subsidiaries to an intermediate level based on subsets of firms belonging to the same group and answering the following research questions: What variables could better proxy the degree of autonomy for subsets of firms belonging to the same business group (RQ1)? How could subsets of firms belonging to the same business group be more autonomous according to the trend of these variables (RQ2)?

Therefore, to address these research goals, a research methodology design has been defined according to the following steps: review of the studies related to the concept of autonomy for MNCS; selection of the variables useful to explain autonomy within business groups (RQ1); conceptualisation of the model (RQ2).

Literature review takes advantage of some authors that devoted their attention in detecting those variables able to explain the autonomy of the subsidiaries (see, e.g.: Hedlund, 1981; Taggart and Hood, 1999; Raziq et al. 2014). According to the results of a recent SLR on the topic (Ambroselli, 2021), the variables useful to explain the degree of decision-making autonomy of the subsidiaries can be referred to: (1) single subsidiaries; (2) the parent company; (3) the whole MNC (or business group); (4) the internal relations of the units belonging to the MNCs (or business groups); and (5) the relations with the external environment. For this work, the focus is on variables explaining internal relations (4) in terms of control and coordination device and internal embeddedness.

Thus, the model considers two variables, Intra-Group Interlocks (IgI) device for control and coordination of business groups (Maman, 1999; Rommens et al., 2007; Fattobene et al., 2018) and internal flows (see, e.g.: Hedlund, 1981; Garnier, 1982; Gates and Egelhoff, 1986; Jarillo and Martinez, 1990) to proxy the internal embeddedness. For what concerns this study, internal flows are a subset of the Related Party Transactions (RPTs) defined as “a transfer of resources, services, or obligations between related parties” (IAS 24:9). In this context, scholars have generally considered commercial flows proxied in their models by purchases or sales of goods.
Literature findings concerning the above-mentioned variables have been reviewed to find the constructs useful to offer an improvement in understanding the concept of autonomy for affiliated-group firms. Within the subsidiary-management literature, internal flows have been widely used by scholars as one of the main determinants able to explain the autonomy of the subsidiaries and generally a negative correlation has been found (Young and Tavares, 2004). Less attention has been devoted by scholars to the IgI, but for the purpose of this research it is interesting to note that both the two main literature perspectives to explain the phenomenon, Resource Dependence Theory (Pfeffer and Salancik, 1978) and Agency theory (Jensen and Meckling, 1976), imply that a high level of IgI negatively impacts on the autonomy of the subsidiaries.

The adopted method has consisted in relating and integrating the current understanding on the phenomenon revealing new insights for the research by adopting new theoretical lenses (Jaakkola, 2020). A new dimension, the meso perspective, has been identified to analyse the established constructs integrating the range of levels (Klein et al., 1999; Kostova, 1999; Klein and Kozlowski, 2000; Hitt et al., 2007) useful to better understand the concept of autonomy within business groups. Even though the field of application concerns business groups with a specific shape, hierarchical structures with more subsidiaries engaged in different activities named as ‘sectors’ for this study (such as when sub-holdings or segments are present), different streams of literature from diverse scholarly traditions have been examined and changes affecting the accepted relationships between the variables have been identified (Whetten, 1989).

The paper offers two propositions able to reveal previously unaddressed aspects of the autonomy within business groups and new hints for further research in this area. Indeed, both the variables, IgI and internal flows, can be further broken down showing as, under certain conditions, subsets of affiliated-group firms constitute more autonomous parts within the business group.

Scholars may adopt the conceptual model both to enlarge the propositions to other variables and to empirically test the results. Moreover, they could benefit, alongside professionals, from this additional perspective able to show an autonomous intermediate area within business groups. Eventually, regulators may refer to the model to define the most appropriate unit of analysis on a case-by-case basis in relation to the different objectives of policy actions.

The paper is structured as follows: section two illustrates the theoretical foundations of research concerning business group corporate governance and subsidiary autonomy. The formalization of the field of application and the adopted method are described in section three while section four contains the propositions’ development deriving from the meso perspective. Conclusions, limits, and future developments are presented in section five.

2. THEORETICAL BACKGROUND
A review of different approaches and theories related to the concept of autonomy in the context of the business groups’ studies has been carried out. As the pillars of this research, theoretical foundations of business group corporate governance and subsidiary autonomy streams of research have been reviewed in section 2.1. As centralization and autonomy are two related constructs (Brock, 2003), scholars’ findings concerning internal flows and IgI, seen respectively as a variable useful to explain the autonomy of subsidiaries and as a tool for control and coordination inside the business group, have been reviewed in sections 2.2 and 2.3.

2.1 Business Groups and Autonomy
For the present study, business groups may be broadly defined as a collection of legally independent companies bounded together with formal and informal ties subjected to a common control or, at least, coordination (Granovetter, 1995; Amatori, 1997; Smångs, 2006). Most contributions made by scholars focused on diversified business groups (Khanna and Yafeh, 2007; Khanna and Palepu, 2000; Guillén, 2000) and pyramidal business groups that contain a chain of publicly listed firms (Almeida and Wolfenzon, 2006; Morck, 2009; Di Carlo, 2014). Concerning the first stream of research, the concept of diversification or, in other terms, the multi-business aspect became central to define business groups. Ghemawat and Khanna (1998) in
their definition combined the characteristics of diversification across a wide range of businesses also with partial financial interlocks among them, and family control while other authors have expressed the concept of diversification as a number of technologically or product-wise unrelated fields (Colli and Colpan, 2016). In their well-known definition, Cuervo-Cazurra (2006) considers a business group as “a set of legally-separate firms operating in multiple strategically-unrelated activities that are under common ownership and control” (Cuervo-Cazurra, 2006: p. 421).

Defining coordination aspect as administrative tools for achieving integration among different units within an organization, Martinez and Jarillo (1989) identified the centralization/decentralization of decision-making through the hierarchy of formal authority as one of the most common structural and formal mechanism of coordination used by scholars. Colli and Colpan (2016) in their recent literature review about the corporate governance of business groups have identified different research themes concerning business groups governance attributes. For the purpose of this paper, the interest is in the contributions regarding the intra-group control and coordination devises (see inter alia, Khanna and Rivkin, 2006; Boyd and Hoskisson, 2010; Brookefield, 2010).

Assuming that in a business group the parts suffer necessarily of a loss of autonomy, governance at group level plays a crucial role in determining the degree of separation between management and control in holding-subsidiaries relationships. In fact, considering that a business group and/or an MNC is a hierarchical structure in which the headquarters owns, at least formally, the subsidiaries, the first form of power resides only at the headquarters level even if a different type of power exists at the subsidiary level for what concerns e.g., resources, role, and mandates (Dörrenbächer and Gammelgaard, 2016).

However, even though the above-mentioned research themes are not new, in the field of business group studies, relationships between intra-group and coordination devises and autonomy are still under-studied.

Generally, decision-making at a subsidiary level was the common denominator of the definitions of autonomy proposed in the literature. In their seminal contribution, Young and Tavares (2004) distinguished between the available autonomy of a subsidiary in taking certain decisions on its own behalf and the assigned autonomy by the parent (Birkinshaw, 1997). In the field of the studies that investigates the relationships between subsidiary autonomy and initiatives, Ambos et al. (2010) defined autonomy as “the extent to which the subsidiary managers are able to make decisions without headquarters’ involvement” (Ambos et al., 2010:10). McDonald et al. (2008) suggested the distinction between Strategic decision-making autonomy and Operational decision-making autonomy. The first concerns strategic areas of the MNC such as R&D, production systems, product developments, and marketing, while the second aspect is related to operational processes including production, sales, distribution, and human resource management. In the field of the stream of research built on a conceptualization of MNCs seen as networks, some authors argued that autonomy may not only be explicitly assigned to the subsidiary but can also be taken on without being formally granted by HQs (Pisoni et al., 2013). More recently, Cavanagh et al. (2017) proposed the concept of “assumed autonomy” defined as “that which is assumed or independently developed by the subsidiary without any contribution from the head office” (Cavanagh et al., 2017: 1179) in contrast to assigned autonomy, while Dzikowska et al. (2016) argued that autonomy should be evaluated in relation to actual actions carried out in some specific areas.

Furthermore, some authors devoted their attention in detecting those variables able to explain the autonomy of the subsidiaries (see, e.g.: Hedlund, 1981; Taggart and Hood, 1999; Raziq et al. 2014; Ambroselli, 2021). In this perspective, subsidiary autonomy has been considered as a dependent variable for which models have been built to highlight the main factors useful to explain the phenomenon. Data have been generally collected through direct contacts with the MNCs mainly via surveys (see, among others, Young et al., 1985; Picard et al. 1998; Johnston and Menguc, 2007) or combining interviews and surveys (Hedlund, 1981; Garnier, 1982). In other
cases, the complete informative set has been derived by both direct and public sources (Gates and Egelhoff, 1986; Williams and van Triest, 2009; Miozzo and Yamin, 2013) while very few contributions have been totally based their methodology on publicly available or secondary data (De Jong and Dut, 2010; Di Carlo et al. 2016; Liu et al. 2018; Belenzon et al. 2019) deriving from financial reports of the subsidiaries and parent companies.

Based on what emerged so far by this review, subsidiary has been the main unit of analysis in the last decades. In fact, as shown also by Rugman et. al (2011a) in the field of International Business studies, from the 1960s the core unit analysis moved from the country level (CSA: country-specific advantage) to the MNCs and the parent’s firm specific advantages (FSA: firm-specific advantage) and finally to the subsidiaries. The same happened also for the management literature according to both the studies in which an MNC has been viewed as a global network of subsidiaries (Hedlund, 1986; Ghoshal and Bartlett, 1990) and those that have been based on a dyadic and hierarchical relationship between the parent and the subsidiary (Hedlund, 1980; Prahalad and Doz, 1981; Gates and Egelhoff, 1986). Nevertheless, for the purposes of this study, some findings concerning HQs roles and functions within a business group (Birkinshaw et al., 2006; Piekkari et. al, 2010; Benito, 2011; Collis et al., 2012) have been considered. Indeed, some scholars focused their studies on the role of headquarters seen as a set of functions distributed across the multinational enterprise and not as bound to a unique physical location (Ciabuschi et al. 2012; Alfoldi et al., 2012; Pla-Barber et al., 2021). Furthermore, as stated by Egelhoff “hierarchies and HQs still play major roles in most MNCs, and there are logical reasons to expect these roles to continue” (Egelhoff, 2010: 429).

2.2 Internal Flows

Internal flows represent the first element useful for the development of the propositions. Units belonging to the same business group are related parties (IAS 24) and therefore internal flows are a subset of the RPTs such as purchases or sales of goods, purchases or sales of property and other assets, rendering or receiving of services, transfers of research and development.

Within the Headquarters-Subsidiary Relationships literature stream, scholars have mainly used in their quantitative analyses the flows between the parent and the subsidiaries, in terms of purchases from the HQs to explain the subsidiary autonomy (Hedlund, 1981; Garnier, 1982) or the ‘centralization/decentralization’ related construct (Brock, 2003; Gates and Egelhoff, 1986). Within this stream of research, Taggart and Hood (1999) made an advancement including in their model also the relationships with sister subsidiaries as determinants of the autonomy in MNC subsidiary. Always referring to foreign-owned subsidiaries as unit of analysis, Young et al. (1985) included the degree of inter-subsidiary production integration as one of the characteristics able to influence the degree of centralisation/decentralisation of decision-making within the MNC.

The wider concept of intra-group relationships compared to the dyadic parent-subsidiary relationships emerged in the years later according to several contributions related to the autonomy concept. In the perspective of the Integration-Responsiveness (I-R) framework (Prahalad and Doz, 1987), Jarillo and Martinez (1990) in their study concerning the subsidiary role considered variables related to the group level (HQs plus other subsidiaries) and not only the flows between subsidiary and HQs. Based on Bartlett and Ghoshal transnational company (1989), Harzing in her study on subsidiary typology (2000) measured the interdependence as the percentage of intra-company sales and purchases in relation to total sales and purchases. Kobrin (1991) contribution focused on the evaluation of the degree of integration of an MNC, included intrafirm flows according to three dimensions: ‘affiliate to affiliate’, ‘affiliate to parent’ and ‘parent to affiliate’. Young and Tavares (2004) in their seminal review of centralization and autonomy literature recognized as intra-group trade has been used by several scholars to proxy the corporate embeddedness (see among others, Birkinshaw and Morrison, 1995; Andersson and Forsgren, 1996). Internal and external embeddedness have been also used to examine the autonomy of foreign R&D subsidiaries (Ambos et al., 2011). Furthermore, according to a network perspective, Gammelgaard et al. (2012) have investigated the relationship between performance and subsidiary autonomy according to intra-organizational network and inter-organizational
network factors while Chiao and Ying (2013) assessed the strength of both internal network and external network to explain the subsidiary autonomy.

2.3  **Intra-group Interlocks (IgI)**

The second element considered for the propositions is the IgI phenomenon. As “an interlocking directorate (ID) occurs when a person affiliated with one organization sits on the board of directors of another organization” (Mizruchi, 1996: 271), accordingly, IgI exist when the same director is present in two or more affiliated-group companies. More specifically, as stated by Keister (1998) “in the business groups, interlocks occur when member firms acquire shares in each other and place representatives on each other’s boards” (Keister, 1998: 410).

Maman (1999) in his study on business groups in Israel made one of the first attempts to link ownership and interlocking ties within business groups. Other scholars have considered IgI as one of the most common and efficient devices for control and coordination (Brookefield, 2010; Colli and Colpan, 2016) especially necessary when families need to establish their presence in all the firms of the group (Boyd and Hoskisson, 2010; Ataay, 2016). Furthermore, scholars have generally conducted studies concerning the relationships between business groups, performance and IgI in different countries (see, among others: Keister, 1998: China; De, 2003: India; Silva et al, 2006: Chile).

Concerning the European context, Rommens et al. (2007) have analysed the dynamics inside the business group focusing on IgI. In their contribution they investigated the determinants of interlocking directorates for Belgian companies distinguishing between companies belonging to a business group controlled by a listed holding company and stand-alone companies. For the Italian context, a study (Fattobene et al., 2018) focused on IgI and listed companies showing as both ID and IgI are stable traits of the Italian economic system even after the introduction of the Interlocking Ban in 2011 which prohibits ID among financial companies.

3.  **METHOD AND FIELD OF APPLICATION**

For the present paper, a research methodology design has been defined according to subsequent steps: review of the studies related to the concept of autonomy for business groups/MNCs; selection of the variables useful to explain autonomy within business groups; conceptualisation of the model. Figure 1, adapted from Hristov et al. (2022), shows the main aspects of the process.

Firstly, different streams of literature have been examined concerning more specifically corporate group governance and subsidiary autonomy, and findings have been related to integrate the current understanding on the phenomenon under investigation. A new dimension, the *meso* perspective, has been used to integrate the range of levels at disposal for analyses (Klein et al., 1999; Kostova, 1999; Klein and Kozlowski, 2000; Hitt et al., 2007). In the field of the subsidiary management literature, the multi-level approach has been used in several ways such as to advance research on the subsidiary initiative phenomenon (Birkinshaw, 1999; Strutenberger and Ambos, 2014), explore the links between MNC and environmental context (Boojhawon et al., 2007), explain the intersubsidiary collaboration for knowledge development and exchange (Gnyawali et al., 2009) and introduce a framework of intra-firm competition (Becker-Ritterspach and Dörrenbächer, 2009).

The established constructs concerning IgI and internal flows have been adapted by introducing a new theoretical lens switching the level of analysis (Jaakkola, 2020) favouring a better understanding of the concept of autonomy within business groups. As a result, the two determinants of autonomy used for this study, IgI and internal flows, have been decomposed by level and changes affecting the accepted relationships between the variables have been identified (Whetten, 1989). Finally, propositions have been developed in the form of testable hypotheses to allow further contributions in terms of validation (Weick, 1989). The extent to which these propositions deriving from a combination of variables and levels apply together gives rise to
the presence of subsets of affiliated-group firms that constitute more autonomous parts within the business group.

Step 1 – Literature review

1.1 – Definition of the context

**Action**: analysing studies related to the concept of autonomy for business groups/MNCs

**Outcome**: selection of the following literature streams

- subsidiary management
- corporate governance of business groups

Step 2 – Selection of the variables

2.1 – Literature review

**Action**: reviewing the literature findings

**Outcome**: lists of variables able to explain autonomy within business groups/MNCs

2.2 – Selection

**Action**: focusing on variables explaining internal relations of the units belonging to business groups/MNCs (control and coordination devise; internal embeddedness)

**Outcome**: selection of two variables

1. Intra-Group Interlocks (IgI)
2. internal flows

Step 3 – Definition of the model

3.1 – Meso perspective

**Actions**:
- relating and integrating the current understanding on the phenomenon
- defining the scope

**Outcomes**:

- selection of the field of application: business groups with hierarchical structures with more subsidiaries engaged in different activities (‘sectors’)
- adopting the *meso* perspective
- splitting the variables according to the new perspective
  - intra-sector flows and inter-sector flows
  - IgI at top level and IgI at sector level

3.2 – Propositions

**Action**: defining the scenarios

**Outcomes**:

- definition of the propositions
- conclusion on propositions and autonomy within business groups/MNCs

*Sources: author’s elaboration*

**FIGURE 1**: Research methodological approach.

The field of application concerns business groups with a specific shape: hierarchical structures with more subsidiaries engaged in different activities, named as ‘sectors’ for this study (Figure 2). In other words, an internal network with more strategic business units, according to the typology of company networks defined by Trequattrini et al. (2012).
Broadly, a sector can represent the part of a business group under a specific sub-holding, a sub-consolidation area, an operating segment or a division for which more legal entities have been aggregated mainly according to industry and geographical criteria. Considering financial reporting, a sector could coincide more specifically with the part of a group under a sub-holding, sub-consolidating (IFRS 10) or not, or made by units belonging to the same operating segment (IFRS 8). In the latter case, even though according to IFRS 8 an operating segment is a component of an entity and not an entity, a closer relationship among the units belonging to it may exist because a segment “engages in business activities from which it may earn revenues and incur expenses (including revenues and expenses relating to transactions with other components of the same entity); whose operating results are reviewed regularly by the entity’s chief operating decision maker; for which discrete financial information is available” (IFRS 8:2). Even stronger should be the links between legal entities that are included in a sub-consolidated area since for IFRS 10 they are presented as a single economic entity.

Figure 2 presents a simplified scheme of group structure, but some useful elements can be identified to extend the validity of the proposals also for more complex structures. Indeed, the main element of the model concerns the presence of subsets of legal entities positioned at an intermediate level such as a sub-holding and its subsidiaries. According to this condition, number of tiers, horizontal ties and number of subsidiaries can increase but the meaningfulness of the model remain unaltered. For what concern the HQs, the scheme represents a more complex viewpoint when HQs’ functions are performed by different units at different tiers (holding system) (Alfoldi et al., 2012; Ciabuschi et al., 2012; Pla-Barber et al., 2021) but conclusions remain valid also when operates a unique HQs, controlled or not by an Ultimate Controlling Party (UCP). Therefore, in this formalization three different blocks can be recognized, the holding system and the sectors.

The crucial aspect of this conceptualization is the possibility to decompose IGl and internal flows at a lower level than the business group. The former can be considered within the sector (IGl at
sector level) and at the higher levels of the control chain (IgI at the top level). The latter can be evaluated within the sector (Intra-sector flows) or between the sectors (Inter-sector flows).

4. THE MESO PERSPECTIVE AND PROPOSITIONS’ DEVELOPMENT

The starting point for the conceptualization of the model is a business group formalized in terms of structure as shown in Figure 2, in which several sectors formed by more units are present. The variables under investigation, internal flows and IgI, are considered according to a new theoretical lens, the sector. Therefore, literature findings concerning the two variables, generally referred to single subsidiaries or the entire corporation (MNC or business group), have been revised according to this new perspective.

Concerning internal flows, Hedlund (1981) included the degree of interdependence between units in the MNC as one of the determinants of the subsidiary autonomy. The interdependence may assume different forms but probably the easier for measuring is related to the flows of goods and information. His findings confirm the hypothesis that internal flows, seen as a proxy of the interdependence between units in the MNC, are negatively correlated with subsidiary autonomy.

Always considering a dyadic relationship between a parent and a subsidiary, Garnier (1982) in his study of the autonomy of decision-making for foreign affiliates of MNCs included ‘percentage of affiliate’s sales going to parent’ and ‘percentage of affiliate’s purchases coming from parent’ as operating variables to measure the operational dependence and interdependence factor able to affect the decision-making structure. According to his hypotheses, dependency is the most important element in the determination of autonomy and “in both cases, the higher the percentage, the higher the interdependence, and the lower the affiliate’s autonomy” (Garnier, 1982: 901). The results confirmed that the two variables explain most of the variance of the global index of autonomy for all the three models he developed (in two cases, the percentage of affiliate’s purchases coming from parent and, in one case, the percentage of affiliate’s sales going to parent).

Considering the opposite aspect of autonomy, the centralization in HQs-subsidiaries relationships, Gates and Egelhoff (1986) confirmed (their Hp. 14. Centralization for a subsidiary is positively correlated with intra-company purchases by the subsidiary) Garnier (1982) findings: the greater the intracompany purchases by a subsidiary, the more decision-making for the subsidiary would be centralized and it is equivalent to say that “intracompany purchases are a critical type of dependence which leads to reduced autonomy” (Gates and Egelhoff, 1986: 85). The same results have been obtained by Young et al. (1985) in their study of foreign-owned subsidiaries in UK. The ‘degree of inter-subsidiary production integration’ has been considered as one of the characteristics able to influence the degree of centralization/decentralization of decision-making within MNC. More specifically, they showed as centralization increases with the degree of intra-group trade.

Investigating on how the level of autonomy can be predicted from few strategic variables, Taggart and Hood (1999) also used the following variables: ‘proportion of outputs sent to sister subsidiaries for further processing and/or final assembly’ and ‘proportion of material inputs coming from other group plants’. According to their findings, results for the first variable were contradictory confirming a reduction in autonomy when it increases only for affiliates in Germany and not in Japan.

Very interesting for the purposes of this paper has been also the hypothesis of Collin (1998) that, in the field of the business group studies, has suggested as when intercorporate trade seems to be very slight is probably due to the groups’ diversified character.

A further explicit reference to intra-group flows was made by Jarillo and Martinez (1990) even if always referred to the evaluation of the strategy of a subsidiary. They considered several variables able to explain the degree of integration and localization dimensions such as the ‘percentage of inputs that comes from the group’, ‘integration of purchasing with the rest of the
group’ and ‘integration of the manufacturing processes’. Based on the same methodological frame, the I-R frame (Prahalad and Doz, 1987), also other authors found as the subsidiary’s autonomy is positively related to low integration and high local responsiveness (Taggart and Berry, 1997; Taggart, 1998). Still referring to the concept of global integration, Kobrin (1991) considered the intrafirm flows as one indicator of the transnational integration and operationally he derived an index in which all the intrafirm trade relationships have been considered. His starting point has been the following reasoning: “in an integrated firm, subunits are incomplete economic entities and their value is, in large part, derived from relationships with others. Thus, increasing integration should result in increased intrafirm exchanges of people, technology, raw materials, components, and finished goods” (Kobrin 1991:19).

Continuing the scrutiny of the results of the literature findings, Young and Tavares (2004) found as a negative correlation between corporate embeddedness, proxied by intra-group trade, and autonomy has been generally suggested by several authors such as Birkinshaw and Morrison (1995) and Andersson and Forsgren (1996). In other words, Harzing (2000) stated that subsidiaries in MNC to be relative independent are “expected to buy/sell a low proportion of their purchases/sales from either HQs and other subsidiaries” (Harzing, 2000: 109).

Manolopoulos (2006) in his conceptual investigation on the concept of autonomy in the subsidiary management research stated as the subsidiary autonomy extent depends on the subsidiary’s relationships with the HQs, the other subunits of the MNC group, and its embedded environment. More recently, based on a network perspective, Ambos et al. (2011) in introducing their dynamic perspective on subsidiary autonomy, have not found support to their hypothesis that suggested as a high level of internal embeddedness was associated with lower autonomy while Chiao and Ying (2013) showed as the strength of internal network affects subsidiary autonomy negatively.

In conclusion, literature findings have been generally confirmed as intra-group trade and subsidiary autonomy are negatively correlated with very few exception (mixed results for Taggart and Hood (1999) and Ambos et al. (2011)). Furthermore, introducing the concept of global integration allowed some authors to derive some conclusions also concerning the entire MNC. Notwithstanding, internal flows can be treated offering a new perspective. Based on sector level, internal flows can be divided in intra-sector flows and inter-sector flows dimensions. The former consists of the relationships among the units belonging to the same sector while the latter comprises those between sectors and also those with the holding system. Figure 3 allows to consider the concept of autonomy for different unit of analysis. The axes contain the two dimensions, intra-sector flows in the horizontal axis and inter-sector in the vertical one, and for both low and high levels of flows have been indicated to generate four cells.

The first scenario, cell I, occurs when both intra-sector and inter-sector flows are low. In such a situation, the sector perspective does not offer any additional lenses to evaluate the autonomy.

**FIGURE 3**: Internal flows and different perspectives for evaluating the autonomy.
within the business group because relationships among the units belonging to a sector are weak, at least in terms of flows. At the same time, flows are weak also according to the business group perspective due to the low level of inter-sector flows. Therefore, situations of cell I should require the adoption of a subsidiary perspective to evaluate the presence of units more autonomous within the business group.

Cell II reflects a situation in which intra-sector flows are low while the inter-sector ones are high. Although the sector does not seem to influence the operativity of the subsidiaries, the high integration within the business group, proxied by the high inter-sector flows, should lead to favouring the group perspective as shown by several authors according to the network perspective.

Cell III shows those situations in which both the types of flows are high. Notwithstanding a potential role for the sector dimension deriving from high internal flows, the network embeddedness shape resulting from the circumstance that also inter-sector flows are high tends to lean towards the use of the business group as the proper perspective for treating this type of situations.

The final cell (IV) corresponds to the scenario for which the sector perspective offers an additional and more proper lens to evaluate the autonomy within business groups. High intra-sector flows and low inter-sector flows allow us to consider the units belonging to the same sector more integrated with each other but more autonomous in relation to the rest of the group. In these situations, the traditional parent-subsidiary dyadic relationship seems to be more properly treated considering new dyadic connections between the sector and the rest of the group formed by a holding system and other sectors.

According to these findings, the following proposition is suggested:

**Proposition 1:** the greater the flows within a sector and the lower the flows between sectors, the greater autonomy of this sector within the business group.

For IgI, both the two main literature perspectives to explain the phenomenon, Resource Dependence Theory (Pfeffer and Salancik, 1978) and Agency theory (Jensen and Meckling, 1976), imply that a high level of IgI negatively impacts on the autonomy of the subsidiaries. In fact, for the first, IgI positively impacts on value creation of the group managed as a single economic entity (positive perspective), and for the latter, IgI is a monitoring tool of corporate control (negative perspective). As a further development of the interlocking directorate phenomenon (Mizruchi, 1996), some scholars considered IgI as the most common and efficient device for control and coordination (Brookefield, 2010; Colli and Colpan, 2016) within business groups. Boyd and Hoskiesson (2010) considered IgI necessary when families need to establish their presence in all the firms of the group. Generally, IgI and pyramidal structures have been used in conjunction to exercise the control over all the group companies (Morck et al., 2005; Colpan, 2010).

For the purposes of this study, two findings are especially relevant. Firstly, Maman (1999) recognized two types of interlocking directorates, vertical and horizontal: “Vertical interlocking occurs between the parent company and its holding companies, and between each of the holding companies and their subsidiaries. Horizontal interlocking relates to the relations among sister firms” (Maman, 1999: 325). The vertical form has been generally seen as a controlling mechanism while the horizontal one as a coordinating tool. Secondly, Rommens et al. (2007) showed as group companies have more IgI when they are located at a higher hierarchical group level than companies located at a lower hierarchical level.

Relating these findings to a business group structure as formalized in Figure 2, some advancements for IgI interpretation when they are used to evaluate the autonomy within a business group can be proposed. Starting from units A and G, IgI at sector level can be identified
and computed considering their subsidiaries following the control chain. For this study, these type of IgI has been defined as ‘vertical downwards IgI’. At the same time, the units A and G are located at a high level of the hierarchical structure where, generally, IgI are stronger. In this case, IgI at top level contain both horizontal type IgI and vertical type ones (‘vertical upwards IgI’). The scheme for detecting the more proper unit of analysis for connecting IgI and the autonomy concept within business groups, is proposed in Figure 4. Horizontal axis contains IgI at sector level dimension while IgI at top level are in the vertical one.

<table>
<thead>
<tr>
<th>High</th>
<th>No clear perspective</th>
<th>Group perspective</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>Subsidiary perspective</td>
<td>Meso perspective</td>
</tr>
<tr>
<td>Low</td>
<td>High</td>
<td></td>
</tr>
</tbody>
</table>

**FIGURE 4**: IgI and different perspectives for evaluating the autonomy.

Sources: author’s elaboration

Low levels both for IgI at top level and within the sector (Cell I) imply, firstly, a situation in which this control devise does not seem to generate a closer relationship within the units in the sector. Secondly, also the business group perspective does not seem to be adequate leaving the possibility to consider IgI as one of the determinants of the autonomy only at the subsidiary level. Cell II presents those situations in which there are high values for IgI at the top level and low values for IgI at sector levels. Having located the same directors at the top units of the control chain, comprising units A and G, makes vertical downwards IgI not explicative. In fact, the control for the units within the sector could be exercised in other ways than IgI because for the corporate group policy is sufficient to stay in the boards of the top units strengthening horizontal and vertical upwards IgI. In these cases, business group and subsidiary are both the appropriate unit of analysis to consider.

A different scenario occurs when both IgI dimensions are high (Cell III). In these cases, network relationships in terms of boards’ interlocks reach the highest levels showing a situation of a very high integrated business groups.

Finally, Cell IV corresponds to those business groups for which the sector, at least for the IgI dimension, can offer an additional perspective to investigate on the autonomy aspect within business groups. High IgI at sector level and low IgI at top level allow us to consider the units belonging to the same sector more integrated with each other but more autonomous in relation to the rest of the group.

These findings form the basis for the following proposition:

**Proposition 2**: the greater boards’ interlocks within a sector and the lower boards’ interlocks at the top levels of the hierarchical structure, the greater autonomy of this sector within the business group.

In conclusion, when the conditions of the two propositions occur, it is possible to state that the subset of units constituting a sector are more autonomous within a business group (Figure 5).
5. CONCLUSIONS

This conceptual investigation aimed at contributing to the stream of research on autonomy within business group (Brock, 2003; Young and Tavares, 2004, Manolopoulos, 2006) proposing a new perspective by switching the level of analysis from the subsidiaries to an intermediate level based on subsets of firms belonging to the same group. Considering business groups with hierarchical structures and more subsidiaries engaged in different activities, named as ‘sectors’ for this study, the two determinants of autonomy used for this conceptualization, IgI and internal flows (a subset of RPTs), have been decomposed introducing the concepts of IgI at sector level (vertical downwards IgI), IgI at the higher levels of the control chain (horizontal and vertical upwards IgI), flows within the sector (Intra-sector flows) and flows between the sectors (Inter-sector flows). The paper shows as under certain conditions, subsets of affiliated-group firms constitute more autonomous parts within the business group.

The study helps in advancing and completing prior literature on the topic according to three aspects. Firstly, presenting a new perspective, the range of options concerning the different unit of analysis available to investigate on the concept of autonomy for IgI and internal flows has been expanded providing the basis for future insights. For both the variables, subsidiary, business group and sector (meso) perspectives have been considered, showing as the most appropriate unit of analysis for dealing with the autonomy within business groups may vary according to the suggested breakdown measures. Secondly, two propositions have been presented, one for each variable, offering the possibility to deal with some unaddressed aspects of the autonomy within business groups. These propositions suggest that 1) the greater are the flows within a sector and the lower are the flows between sectors, the greater is the autonomy of this sector within the business group, and 2) the greater are IgI within a sector and the lower are IgI at the top levels of the hierarchical structure, the greater is the autonomy of this sector within the business group. Propositions can be evaluated on their own but jointly provide a stronger support to the finding that within a business group may exist subsets of units more autonomous from the rest. Thirdly, the adopted perspective implies a new form of dyadic relationships that no longer consider a subsidiary and its parent but relate a subset of units to the rest of the group.
Findings offer several suggestions for future research having combined different literature streams according to a new theoretical lens. Propositions have been developed in the form of testable hypotheses to allow further contributions in terms of validation (Weick, 1989), and empirical research could focus on quantitative models, firstly to obtain an econometric verification of the results and also to consider other aspects such as industry, countries or size. Future research could also focus on conceptual advancements in order to improve the model in terms of relationships and variables. Furthermore, future research on autonomy and business groups could focus on HQs when corporate functions are distributed across several legal entities (Ciabuschi et al., 2012; Alfoldi et al., 2012) while for what concerns the Journal of Business Research and Management, the work mainly deals with themes related to Organization and Management Theory and International Management clusters (Cristofaro et al., 2021).

Regarding the first research question (RQ1), the study offers a clear vision on the variables that could better proxy the degree of autonomy for subsets of firms belonging to the same business group focusing on which of them are able to explain the internal relations of the units. Considering the second research question (RQ2), the conceptual model shows the scenarios in which the meso perspective could better fit to show a subset of units more autonomous within a business group.

Both scholars and practitioners could benefit from this additional perspective. Under certain conditions, neither the subsidiary nor the business group dimension can show the proper level of aggregation of affiliated-group firms in terms of autonomy and can also be misleading. The results are in line with the findings of Di Carlo et al. (2016) on the boundaries of the business model within business groups that showed as more sub-economic entities may cohabit in the same business group. Furthermore, a recent study on Intermediate Units (IU) highlighted as within a MNC “both hierarchical and network contexts can simultaneously exist” and IUs could play both coordinative and entrepreneurial roles becoming “a structural solution for managing MNCs’ complexity” (Pla-Barber et al., 2021: 7). According to these findings, detecting the proper aggregation of units within a business group become crucial for studies and analysis concerning several aspects such as performance, growth and competitiveness. In fact, economic and statistics data are usually reported on the basis of accounting values related to single subsidiaries (legal entities) and, to a lesser extent, at group level considering the consolidated financial statements. The meso perspective could integrate the knowledge offering a new area of investigation when intra- and inter-sectors flows level may affect data comparison in terms of single legal entities or business groups. At the same time, considerations based on IgI behaviour at sector and top level might imply an intermediate level of analysis as the proper dimension to investigate. Even the regulators could refer to the model to define the most appropriate unit of analysis on a case-by-case basis in relation to the different objectives of policy actions. Thus, the study is in accordance with the evolution of the business group literature moving more and more from single subsidiaries to extensive internal embeddedness considerations (Prahalad and Doz, 1987; Jarillo and Martinez, 1990; Birkinshaw and Morrison, 1995; Andersson and Forsgren, 1996; Maman, 1999; Harzing, 2000; Kobrin, 1991; Young and Tavares, 2004; Ambos et al., 2011; Gammelgaard et al., 2012).

Although integrating the range of levels at disposal for analyses has been a method widely used by scholars for conceptual investigation (Klein et al., 1999; Hitt et al., 2007; Birkinshaw, 1999; Strutzenberger and Ambos, 2014) and the changes affecting the accepted literature findings have been identified (Whetten, 1989), there are two main limitations to this study and hence its findings. Firstly, propositions have been developed according to two variables. In taking the ideas developed in this paper forward, it would also be particularly useful to investigate on other determinants of subsidiary autonomy according to the meso perspective. Secondly, the model presents a static situation referable to a specific period for which internal flows and IgI should be measured and evaluated. From an empirical point of view, longitudinal analysis could be useful in evaluating the stability of the results in the medium term.
6. REFERENCES


