



Global purchasing: State of the art and research directions

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Abstract

This article presents a review of published research on global purchasing in the period 1990–2005. We rely on 123 articles to discuss the fields' conceptual foundations and methodological approaches. We synthesize findings on the central phenomenon, its antecedents and consequences as well on the globalization process of purchasing. This review learns that the conceptual foundation of this field remains premature. Global purchasing research would benefit from a significant convergence in and formalization of its conceptual basis as well as from more explanatory and less descriptive empirical work.

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1. Introduction

Over the last decades, many firms have redefined their position in the supply chain in an effort to face or even preempt the consequences of the ongoing globalization of competition. Decisions to expand in certain parts of the chain and to subcontract other activities are increasingly taken in a global perspective (Grossman and Helpman, 2005). In academia alike, global supply chain management has recently received extensive attention (e.g., Kotabe and Mol, 2006). Global purchasing, to the contrary, is notable for its absence (Kotabe and Murray, 2004; Trent and Monczka, 2002). This is surprising since global purchasing is inherently related to, if not the first step towards, global supply chain management. Moreover, in many industries the impact of purchasing on the performance of a global supply chain continues to increase (Eurostat, 2005; Leenders et al., 2002).

Recently, scholars have pled univocally for more and more rigorous research on global purchasing (e.g., Kotabe and Murray, 2004; Mol et al., 2004; Quintens et al., 2006). To back up these calls, we present a state of the art on global purchasing research. Apart from Babbar and

Prasad's (1998a, b) and Samli et al.'s (1998) partial reviews, the present is the first extended review of published research on global purchasing in the period 1990–2005. The present review gives an extended and structured insight in what has been published and assesses the relevance of these findings for future research.

The remainder of this paper goes as follows. First, we define global purchasing and give an overview of the applied research designs and analytical methods. Next, we synthesize findings on the antecedents and consequences of global purchasing as a strategic choice of firm or business unit. Furthermore, we focus on the globalization process of purchasing. Finally, we identify gaps in the conceptual as well as empirical bases of the field and formulate specific research questions.

2. A definition of global purchasing

Global purchasing literature suffers from a lack of consistency. Not in the least, this is due to the diversity in the terminology and definitions of the central phenomenon: global purchasing. In fact, a wide variety of terms has been coined: global sourcing (Kotabe, 1998), international purchasing (Motwani and Ahuja, 2000), worldwide sourcing (Monczka and Trent, 1992), import sourcing (Swamidass, 1993), offshore sourcing (Frear et al., 1992)

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and international procurement (Scully and Fawcett, 1994), to name a few. In some papers, these terms have been clearly delineated (e.g., Trent and Monczka, 2002), in other they were used interchangeably (e.g., Rajagopal and Bernard, 1993).

In line with Bozarth et al. (1998) and Van Weele (2005), we define global purchasing as the activity of searching and obtaining goods, services and other resources on a possible worldwide scale, to comply with the needs of the company and with a view to continuing and enhancing the current competitive position of the company. This definition builds upon three ideas. First, global purchasing is perceived as more than the physical sourcing. It includes not only the operational task of buying but also the more strategic responsibilities such as supplier development and the generation of global purchasing synergies. Global purchasing can be the result of a reactive, opportunistic decision to decrease the purchasing cost of one item but can also be a strategic and coordinated effort to pro-actively enhance the competitive position of the company. It includes all phases of the purchasing process, from before the definition of the specification list, over supplier selection and buying to the follow-up and evaluation phase (Van Weele, 2005; Robinson et al., 1967).

Secondly, the definition acknowledges that not all global search activities should lead to cross-border purchase. If a firm concludes that a product is best bought from a local supplier after evaluating possible foreign suppliers as well, this decision fits within a global purchasing strategy. The focus of this definition is not only on the outcome of global purchasing but also on the process. As a consequence, the degree of global purchasing cannot be captured by merely measuring the ratio of cross-border-to-total purchases. Thirdly, the definition refers to the ambitions of a firm. Global purchasing is believed to emerge because of the presupposed competitive advantages it may generate for a company. In this respect, not only the strategy formulation but also the organizational alignment and implementation processes are part of global purchasing research.

In contrast to alternative definitions, the present does not explicitly distinguish between international and global purchasing. Trent and Monczka (2002, 2005), for instance, argue that international purchasing is a more reactive approach to foreign opportunities, where coordination among affiliates is lacking. Global sourcing, on the other hand, is seen as the more strategic way of international purchasing, where affiliates of an MNC perform a joint search for common items, suppliers and technologies (Trent and Monczka, 2002, 2003a b; Arnold, 1989). We argue that the process towards global purchasing—like any other internationalization process—does not proceed through discrete steps (Johanson and Vahlne, 1990). As a consequence, the label ‘international’ may only refer to an artificial cut off point in (the early phases of) the process towards more advanced global purchasing. We elaborate on this issue when discussing the globalization process of purchasing in a section below.

In line with this definition, global purchasing should be further developed within the logic of a particular research project. As an example, we presented Global Purchasing Strategy within a contingent resource-based perspective of the firm (Quintens et al., 2006). We operationalize the concept as a multidimensional latent construct with four dimensions: the configuration of the global purchasing process, the standardization of the global purchasing process, the standardization of product-related characteristics and the standardization of organizational characteristics.

3. Paper selection

We adopted a semi-structured approach to identify and select published material on global purchasing. Despite some interesting findings in books and non-published manuscripts, the vast majority of academic insights have been reported in journal articles. Global purchasing is not (yet) the central theme of a peer-reviewed international journal. Nevertheless, we are aware of 14 journals with a particular interest in global purchasing. These journals reside in three domains: supply chain management (Journal of Supply Chain Management, Journal of Purchasing and Supply Management, Supply Chain Management, International Journal of Physical Distribution and Logistics Management, International Journal of Operations and Production Management), international marketing management (Industrial Marketing Management, Journal of International Marketing, International Marketing Review, European Journal of Marketing, Journal of Business and Industrial Marketing) and international business (Journal of International Business Studies, International Business Review, Management International Review, Journal of Business). All issues in the period 1990–2005 of these journals have been checked. In addition to this screening, we consulted EBSCO a publisher-independent article database, as well as databases from the publishers of the 14 full-checked journals, using the search terms ‘global’, ‘international’, ‘foreign’, ‘offshore’, ‘inward’ and ‘worldwide’ in combination with ‘purchasing’, ‘sourcing’, ‘procurement’ and ‘import’. Finally, a number of published articles were found by a snowball approach on the basis of the literature list of previously identified papers.

Although we are aware of a limited number of non-English published papers on global purchasing (e.g., Barreyre and Lentrein, 1992), we did not include these in the review for two reasons. First, it is our impression that global purchasing researchers outside the English-speaking world also published in English/American journals and, as a consequence, this review captures their insights to a large extent. Furthermore, we are aware of some major cross-national research projects on this issue that have been the basis for papers in one or more of the included journals (e.g., Ghymn, 1983 [United States]; Ghymn and Jacobs, 1993 [Japan]; Ghymn et al., 1993a [China]; Ghymn et al., 1993b [Thailand]; Ghymn et al., 1999 [Australia]).

In general, articles were eligible when (1) the focus was on cross-border purchasing at the industry, firm or business unit level and (2) the ambition of the paper was to contribute to the understanding of the central phenomenon. Therefore, we did not withhold papers in which an analytical technique was presented and tested in a global purchasing environment, without any ambition to contribute to the theoretical development on global purchasing. Similarly, we excluded studies on cross-border buying behavior of consumers as well as comparative studies about local buying behavior between countries. Finally, we excluded papers that solely focus on countertrade yet included papers on intra-firm purchasing. The latter

provide interesting insights that have potential value in the study of inter-firm purchasing. Mainly international business researchers have explicitly focused on global intra-firm purchasing as a logical consequence of their theoretical paradigms (Kotabe and Murray, 1996; Dunning, 2002). Despite its inclusion here, intra-firm purchasing is excluded from the definition of global purchasing, which implicitly builds upon a long-term independent economic (or arm’s length) relationship between the buyer and the seller.

Eventually, this approach results in 123 articles published in 31 different academic journals (Table 1). When comparing the output across different years of publication, no clear-cut trend is noticeable in the popularity of global purchasing as a research theme. Nevertheless, when journals give special attention to global purchasing (e.g., through special issues), some years show a peak (International Journal of Physical Distribution and Logistics Management, 1993 or Journal of Business Research, 1995). Although we consider the number of articles found as rather low, the general interest in global purchasing seems not to grow. Fig. 1 shows the yearly number of publications between 1990 and 2005.

Table 1
Published articles on global purchasing 1990–2005

Journals	Number of papers
European Journal of Marketing	1
Industrial Marketing Management	13
International Business Review	6
International Journal of Operations and Production Management	3
International Journal of Physical Distribution and Logistics Management	13
International Marketing Review	6
Journal of Business and Industrial Marketing	7
Journal of Business Research	4
Journal of International Business Studies	9
Journal of International Marketing	6
Journal of Purchasing and Supply Management ^a	6
Journal of Supply Chain Management ^b	15
Management International Review	4
Supply Chain Management: an International Journal	2
Other sources	28
Total	123

^aBefore 2003 known as the European Journal of Purchasing and Supply Management.

^bBefore 1999 known as the International Journal of Purchasing and Materials Management and before 1991 as the Journal of Purchasing and Materials Management.

4. Research designs and methods

In the mid 1990s, it was argued that scholars in the field failed to test their claims and models empirically (Ellram and Carr, 1994; Thorelli and Glowacka, 1995; Carter and Narasimhan, 1996). Indeed, many earlier papers presented brief and anecdotic descriptions or were purely conceptual. At best, findings were supported by descriptive statistics. Today, more papers include empirical testing and cover a wider variety of research methods. Most popular is the use of a survey (mostly by mail, occasionally electronic mail). In evaluating determinants (drivers and barriers) of global purchasing, factor analysis is a preferred method (e.g., Alguire et al., 1994; Cho and Kang, 2001; Deng and Wortzel, 1995; Güdüm and Kavas, 1996; Kraft and Chung, 1992). Studies that evaluate the performance in terms of

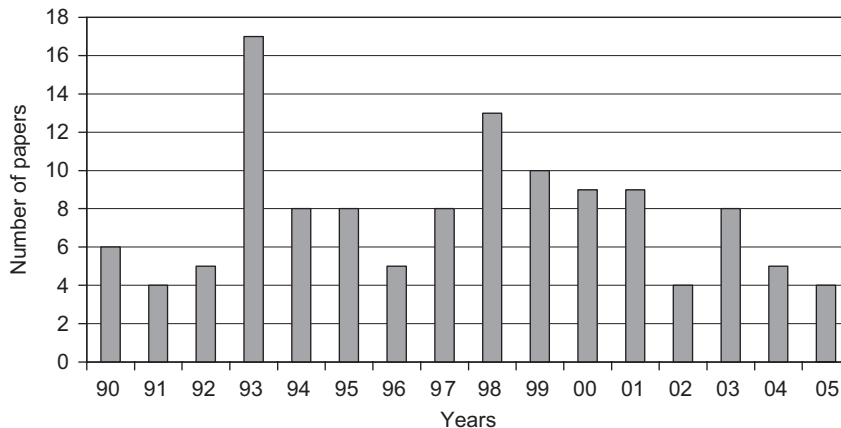


Fig. 1. Number of journal publications on global purchasing (1990–2005).

market performance or stronger buyer–supplier relationships are often based on multiple regression analysis (e.g., Kotabe and Murray, 1990; Kotabe et al., 1998; Mol et al., 2005; Sawhney Celly et al., 1999). A relatively limited number of (mostly recent) studies make use of structural equation models (e.g., Fawcett and Scully, 1998; Petersen et al., 2000; Hult, 2002; Skarmas et al., 2002; Ha et al., 2004).

Although the quality of the research designs is increasing, we feel global purchasing research falls behind research approaches in international marketing or in international business. This conclusion concurs with Carter and Ellram (2003), who evaluated the methods used in the Journal of Supply Chain Management, yet is more optimistic than Heijboer (2003) who assessed the methodological quality of articles published in the Journal of Purchasing and Supply Management, the Journal of Supply Chain Management and in the proceedings of the IPSERA conference, one of the leading international conferences in the field of purchasing. In general, papers tend to use more quantitative hypothesis-testing techniques when (1) one of the authors has a marketing or international business background and/or (2) the focus of the study is not only rooted in the purchasing field. Although within the scope of this review, empirical process studies are scarce and mainly rely upon descriptive analysis (e.g., Carter and Narasimhan, 1990).

In sum, the relative number of empirical papers on global purchasing as well as the quality of the empirical research designs is increasing. Nevertheless, the fields hold a significant backlog in applying advanced quantitative techniques against, for instance, international marketing and falls behind international management research in applying advanced qualitative approaches. Nevertheless, we believe that this backlog is not unnatural. Indeed (global) purchasing is a young research field that still requires ample conceptual and empirical exploration. In fact, the current added value of advanced theory-testing structural equation models can be questioned. In our perspective, this field is still in need of more profound and longitudinal case-base studies that allow a more in-depth exploration of the phenomenon. As we will discuss below, the current conceptual framework around global purchasing appears to be superficial and poorly explored. We call for a more iterative research process that initially builds upon rigorous in-depth exploration balanced by particular injections with established theoretical advancements from adjacent fields. This should result in more advanced and theoretically integer models that can then be tested by using advanced quantitative techniques. A mere focus on the latter may not help current progression in the field.

5. Antecedents of global purchasing

Although several reasons for initiating or intensifying global purchasing have been coined, they all (implicitly) aim at safeguarding or increasing the competitive strength

of the firm (Cavusgil et al., 1993; Herbig and O'Hara, 1993; Carter and Narasimhan, 1996; Zeng, 2000). Literature has extensively focused on antecedents of global purchasing, which can be roughly classified into three categories:

- *Drivers*: elements that favor or speed up the global purchasing decision (Rajagopal and Bernard, 1993; Rexha and Miyamoto, 2000; Leonidou, 1998),
- *Facilitators*: conditions that do not necessarily lead to (more) global purchasing, but ease its implementation (Birou and Fawcett, 1993; Fawcett and Scully, 1998; Cavusgil et al., 1993) and
- *Barriers*: factors that make it more difficult or even impossible to pursue or intensify global purchasing (Ellram, 1991; Alguire et al., 1994; Ghymn et al., 1999).

The antecedents shape a company's decision to initiate or expand its global purchasing activities or withdraw from particular purchase markets. Table 2 presents an overview of antecedents that have been discussed in the literature. We classify the three types of antecedents following five levels of analysis. Although Table 2 offers a large number of (potential) antecedents, four have been investigated more intensively: quality requirements, cost pressure, the need for on-time delivery and the lack of locally available products.

Product quality has been identified as a major driver and barrier. Min and Galle (1991), Ghymn and Jacobs (1993), Scully and Fawcett (1994) and Ghymn et al. (1999), among others name it as the number one determinant for global purchasing. Birou and Fawcett (1993) ranked it fifth and Rexha and Miyamoto (2000) fourth. Lacking quality assurances (Zeng, 2000) and quality control (Ghymn and Jacobs, 1993) have been discussed as major obstacles for global purchasing. Nevertheless, further investigation is required. It remains unclear whether the quality determinant is a mere perceptual input and to what extent international industry standards (e.g., DIN norms) attenuate/strengthen this effect. Research on perceived foreignness and country-of-origin effects may shed additional light on the relationship between perceived product/technology quality and the buyer's attitude.

Secondly, the cost of global purchasing and the pursuit for cheaper products have frequently been mentioned as major drivers for global purchasing (Min and Galle, 1991; Rexha and Miyamoto, 2000; Cho and Kang, 2001). Birou and Fawcett (1993) indicate lowest-price seeking behavior as the main motivator to cross-borders. Nevertheless, the cost of global purchasing remains a vague and multi-dimensional concept. In one of the first efforts to explore this issue more in depth, Park (2000) distinguishes between direct procurement costs (i.e., the negotiated prices) and transaction costs. Zeng and Rosetti (2003) discern six types of transaction costs: transportation, inventory holding, administration, customs, risk and damage, and handling and packaging costs. These elements correspond to the cost elements described by Carter and Narasimhan (1990) and

Table 2
Proposed antecedents of global purchasing

	Drivers	Facilitators	Barriers
Product	Cost advantages (materials and components)	Product type	Limited production volume
	Better delivery performance Higher-quality products Unique or differential products Obtain better technology	Supplier certification Top management support Nationality of parent company	Different product standards Regular design changes Insufficient product modifications Delivery delays
Firm/management	Assure organizational flexibility	Knowledge on foreign businesses, exchange rates and global opportunities	Parallel trade
	Global attitude, orientation and experience Centralization of decision making	Planning for global purchasing	Lack of resources needed for global purchasing (staff, time, money, etc.) Cost of travel and communication
	Integration of worldwide activities	Operational philosophy (lot sizes, number of suppliers, etc.) Development of communication skills	Accurate demand forecasting Nationalistic purchasing behavior Increased paperwork
Network	Take advantage of existing logistics systems	Long-term relationship prospects	JIT sourcing requirements
	Diversification of the supplier base	Buying alliances	Finding qualified suppliers Foreign supplier image
Industry/competition	Competitive positioning Protect proprietary technology Gain a foothold in new markets Market size	Type of industry Technological orientation of industry	Diverse business practices Limited industry information Agents/brokers fees Intensity of foreign competition
	Environment	Cost advantages (labor) Satisfy countertrade requirements	Development of trade zones Better foreign transport and communication
Guard against currency fluctuations Stimulating foreign government policies Advantageous legal and economic environment		Capable intermediaries Cultural similarities	Adverse political environment Adverse economic environment
			Customs regulations
			Different time zones Lack of government assistance Language/cultural differences

Sources: Alguire et al., 1994; Birou and Fawcett, 1993; Bozarth et al., 1998; Cavusgil et al., 1993; Ellram, 1991; Fagan, 1991; Fawcett and Scully, 1998; Fawcett and Birou, 1992; Handfield, 1994; Katsikeas and Kaleka, 1999; Keown, 1985; Kotabe, 1998; Leonidou, 1998, 1999; Liu and McGoldrick, 1996; Nellore et al., 2001; Rexha and Miyamoto, 2000; Servais and Møller Jensen, 2001; Zeng, 2000.

Handfield (1994). Further research is required to relate these cost elements of global purchasing to outcome factors. More in particular it is interesting to investigate which of these cost drivers affects the overall perception of the transaction costs most. Moreover, it should be investigated whether the assessment of the transaction costs is related to the relative height of the procurement costs.

While on-time delivery has been raised several times as an important antecedent, it remains unclear whether it should be considered a driver, a facilitator or a barrier. Frear et al. (1992) classified it as a driver of global purchasing. Ghymn and Jacobs (1993) and Ghymn et al. (1999) rank on-time delivery as major barrier for global purchasing. Although Deng and Wortzel (1995) identified on-time delivery on top of their 42 investigated determi-

nants, the vague findings on this issue call for an explicit process perspective. Finally, authors identified the lack of locally available products and technology as a critical prerequisite (Rexha and Miyamoto, 2000). Birou and Fawcett (1993) and Min and Galle (1991) indicate it among the top drivers. Servais and Møller Jensen (2001) report that 43% of their respondents had to source abroad because of a lack of suppliers in their home country. While the lack of locally available products and technology might be a more prominent antecedent in smaller and less developed countries, it remains a mere external qualifier for global purchasing and the globalization of purchasing.

More than ranking several drivers or barriers in order of importance, it would be relevant to look at the underlying strategies, from which these factors emerge, that may enhance or retard global purchasing. For instance, product

quality, the pursuit for cheaper products and on-time delivery may be expressions of, respectively, a product differentiation, cost leadership or service differentiation strategy. In this perspective, we plead for a more theoretically sound approach in which controllable and non-controllable antecedents of global purchasing are modeled within a particular business paradigm or theory of the firm. The main advantage of this approach over a key success factor approach is that the former helps to understand the fundamental business logic of global purchasing. In this respect, Table 2 presents additional and promising, yet poorly investigated antecedents, which might fit in theory-driven models:

- external political and macro-economic conditions (Dobilas and MacPherson, 1997; Motwani and Ahuja, 2000; Servais and Møller Jensen, 2001);
- technology seeking versus technology protection behavior (e.g., Rexha and Miyamoto, 2000; Petersen et al., 2000; Cavusgil et al., 1993; Frear et al., 1992);
- commitment and training of staff (Arnold, 1989; Cavusgil et al., 1993);
- firm orientation towards, for instance, long-term relationships (Matthyssens et al., 2003; Fagan, 1991; Birou and Fawcett, 1993; Ellram, 1991);
- international experience (Thorelli and Glowacka, 1995);
- ethnocentrism, cultural distance and country of origin reactions (Murphy and Daley, 1994; Bradley, 2001; Min and Galle, 1991, 1993; Quester et al., 2000; Das and Handfield, 1997b; Motwani and Ahuja, 2000);
- fit between buying and selling culture (Keown, 1985; Thorelli and Glowacka, 1995);
- top management support (Birou and Fawcett, 1993; Thorelli and Glowacka, 1995);
- supplier selection methods and supplier development strategies (Ellram and Carr, 1994; Min, 1994; Min et al., 1994; Motwani and Ahuja, 2000).

In sum, earlier studies about the antecedents of global purchasing have been largely anecdotic and descriptive. Indeed, the main ambition was to identify drivers, barriers and facilitators. It is time now to focus on a business paradigms and theories of the firm, which have to be translated into a global purchasing logic. This will herald the transition from descriptive to explanatory research on global purchasing.

6. Consequences of global purchasing

Only a limited amount of empirical studies have investigated the outcomes of global purchasing. Moreover, several (especially qualitative) studies remained vague on the (performance) outcomes of global purchasing. Nevertheless, the findings or suggested outcomes can be considered at three levels: the product, the firm and the network/supply chain level. Table 3 summarizes the indicated/investigated outcomes.

Table 3
Consequences of global purchasing

Consequences	
Product	High-quality products Better delivery performance Access to world-wide technology Reduced total cost of ownership Cycle time management Functional performance
Firm	Improved financial performance (return on sales, return on investment) Improved strategic performance (market share, sales growth rate, etc.)
Network/Supply chain	More satisfying buyer–supplier relationship Worldwide supply chain integration

Sources: Birou and Fawcett, 1993; Bozarth et al., 1998; Hult, 1997; Hult and Nichols, 1999; Kotabe et al., 1998; Liu and McGoldrick, 1996; Murray et al., 1995a, b; Nellore et al., 2001; Scully and Fawcett, 1994.

When implemented properly, global purchasing should bring what it aims for: higher-quality products, cheaper products, access to worldwide technology, etc. Despite the fact that these lower-level factors have been discussed and studied as drivers of global purchasing, it remain largely unclear whether their materialization eventually mediates towards ultimate firm performance. In fact, research remains silent on whether the drivers of global purchasing fit with the strategic ambitions of the firm and to what extent a fit between the drivers of global purchasing and the strategic ambitions of the firm contributes to more effective and efficient global purchasing. Surprisingly enough, the literature does not report on consequences of global purchasing at the functional level. More in particular, the impact of the intensity of global purchasing on the effectiveness and efficiency of the overall purchasing function of the firm should be investigated.

The literature does not equivocally conclude that global purchasing enhances firm performance directly. Murray et al. (1995a) report that the domestic component of purchasing has a significantly larger impact on firm performance than its foreign component. Kotabe et al. (1998) conclude that global purchasing of supplementary services is negatively related to market performance. Although the debate remains open, it is advised first to agree on a single yet multidimensional performance construct at the venture of firm level, which allows future comparison and meta-analyses across studies. Finally, the entire supply chain presents itself as a valuable level of analysis. Indeed, several scholars reported effects of global purchasing on the entire supply chain (Chung et al., 2004; Fawcett and Birou, 1992; Das and Handfield, 1997b). Intensified global purchasing may result in shorter and more efficient supply chains, but also in more superficial and more complex relationships within this chain (e.g., Das and Handfield, 1997b). The impact of global purchasing on

the performance of supply chains remains a fallow research field.

In sum, academic research on the consequences of global purchasing is still in its infancy. Outcomes can be defined at the product, functional, firm and supply chain level. Particular multidimensional as well factual measures should be identified, developed and agreed upon across several research programs. Finally, outcome measures should be brought in line with the fundamental choices on the business paradigms that underpin the hypothesized antecedents of global purchasing.

7. Process models of global purchasing

The earliest articles on purchase management presented normative stage models on the purchasing process (e.g., Robinson et al., 1967). More recent studies in a global context have introduced particular process barriers and hindrances such as perceived risk, cultural differences, complexity of regulations, increased bureaucracy, time differences, different evaluation criteria needed, etc. (e.g., Handfield, 1994; Hult, 1998; Liang and Stump, 1996). Nevertheless, a purchasing process that crosses borders is not fundamentally different from a domestic process (Carter and Narasimhan, 1990; Van Weele, 2005).

More relevant for the present review, is the globalization process of purchasing. ‘How does cross-border purchasing emerge?’ and ‘How does it grow?’ (Trent and Monczka, 2003a, b). This research focus is relevant as Trent and Monczka (2002) show that the increasing coordination and integration of purchasing across countries brings additional firm performance. Within the two extremes of no and fully integrated global purchasing, lies an interesting field of purchasing that is partially coordinated and integrated across borders. Arnold (1999) explores the pursuit for an optimal degree of purchasing configuration, which he compares to a pendulum that swings between full centralization and full decentralization. By integrating the effects of internationalization and centralization on the

company and functional level, Arnold (1999) presented three types of global purchasing: the central purchasing model, the coordination model and the outsourcing model. Giunipero and Monczka (1997) describe four types of centralization: totally decentralized global purchasing, decentralized/coordinated global purchasing, centralized responsibility for worldwide purchasing, and functional global purchasing groups. Finally, Faes et al. (2000) discuss the centralization–decentralization dichotomy with respect to achieving effective global purchasing synergy.

To date, scholars largely adhere to stages models of internationalization to describe the globalization process of purchasing in a more general fashion (Table 4).

The models suggest that some kind of non-linear stepwise order exists, in which companies move from one phase to another and ultimately reach the phase in which their activities are fully coordinated and integrated, i.e., global. The idea behind these stepwise models is that a gradual implementation of global purchasing will be most successful (Fagan, 1991; Reichel, 1988). Table 4 gives an overview of the suggested (and largely comparable) stages models. Using their model as a descriptive portray, Trent and Monczka (2002) report that more than half of the surveyed companies expect to reach stage 5—full globalization—in the near future. It is questionable, whether this prediction holds external validity as the final stage may not be the optimal level of globalization for a wide range of companies. The ultimate aim for firms that purchase abroad is not to have more global purchasing as such. Rather, depending on elements such as competition, customer demands, product value versus transportation costs, intermediate stages of globalization may turn out to be more economically interesting (Trent and Monczka, 2003a, b).

The latter is only one of the more fundamental weaknesses of the suggested stages models. Despite their descriptive elegance, these models have no explanatory power whatsoever. In fact, stages model of global purchasing mirrors the stages models of firm internationalization

Table 4
Stages models of global purchasing

	Luostarinen (1978)	Monczka and Trent (1991)	Swamidass (1993)	Trent and Monczka (2002)
Stage 1	Domestic purchasing	Domestic sourcing only	No import sourcing	Engage in domestic purchasing only
Stage 2	Purchasing foreign items in domestic markets	Foreign buying based on need	Import sourcing for cost minimization	Engage in international purchasing as needed
Stage 3	Stage of purchasing from abroad, starting from markets with short business distance	Foreign sourcing as part of procurement strategy	Import sourcing for competitive advantage	International purchasing as part of sourcing strategy
Stage 4	Foreign purchasing stage	Integration of global procurement strategy	Import sourcing is a strategic asset: global firms	Integration and coordination of global sourcing strategies across worldwide buying locations
Stage 5				Integration and coordination of global sourcing strategies with other functional groups

that have dominated the international business literature in the 1980s. Since then, these models have been criticized on several grounds. Reid (1984), Turnbull (1987), Welch and Luostarinen (1988) and Andersen (1993), among others, report on the lack of external validity of these stages models. Moreover, the models concentrate on the early stages of the globalization. As a consequence, the stages fail to capture the consolidation of global coordination and integration of cross-border purchasing. Andersen (1993) argues that no explanation is provided for the transition from one stage to another. This relates to criticized predetermined character of the models (Reid, 1984; Turnbull, 1987; Melin, 1992). Unlike the stages models, observed variations in the globalization process have their genesis in strategic decision making under particular resource and market conditions. As such, certain stages may be leapfrogged, others may never materialize (Welch and Luostarinen, 1988). In general, stage models have been criticized for their lack of theoretical power. Andersen (1993) argues that the description of the transition of a company from one stage to another is close to being trivially obvious. Finally, no argumentation is provided for the very start of this globalization process.

Notwithstanding the failure of these stages models to explain the globalization of purchasing, the underlying logic of the respective authors holds potential for the development of more powerful process theories. Accordingly, some scholars in the field have recently refocused the lens: Trent and Monczka (2002) properly argue that the global purchasing process is not idle as it cannot be separated from corporate strategy. Fletcher (2001) pleads for a more holistic view in which the overall internationalization process and theory of the firm embeds the globalization process of purchasing. Zeng (2000) even proposes to theorize on the globalization process of purchasing in the context and on the level of the supply chain to which it belongs. To reach these ambitions, scholar should fall back on more fundamental process theories of company behavior, evolution and learning, some of which have been successfully operationalized in the context of the internationalization process of the firm (e.g., Strandskov, 1986; Melin, 1992; Johanson and Vahlne, 1990).

8. Conclusion and research directions

Global purchasing is gaining a more prominent role in the strategic arena of an increasing number of firms (Samli et al., 1998). It has been transformed from an operational, supporting business activity (opportunistic sourcing) into a competitive weapon (strategic sourcing). Given this managerial reality, the aim of this article was to provide an overview of the current research findings on global purchasing. While academia is well aware of the managerial relevance of global purchasing, the present review illustrates that literature remains stuck in a descriptive and premature discourse. Authors have mainly described global

purchasing while falling back on anecdotal cases more than they tried to explain the phenomenon's occurrence, evolution, antecedents and consequences. Here, we plead for a more in-depth exploration of the phenomenon as a final step towards more formal modeling and theory testing.

Towards this advancement, the present review has introduced several conceptual and methodological anchors and topics for future research. To complete the aforementioned suggestions, this final section adds three additional issues that may advance the research field significantly: conceptual benchmarking, convergence in the measurement of constructs and analytic generalization.

First, global purchasing researchers should broaden their scope to adjacent fields such as international marketing, international business, organizational learning, supply chain management research, etc. In this respect, conceptual benchmarking with other domains is a valuable approach and could result in swift progress. We see two advantages. Given its backlog, global purchasing may significantly benefit from borrowing and translating existing concepts and models from more advanced fields. Moreover, this openness is a guarantee for the required embedding of theoretical progression in the mainstream of management theory. Indeed, more than pleading for the foundation of a particular journal for global purchasing, we would encourage global purchasing scholars to publish more in classic and respected management journals. Only then, global purchasing will get accepted as a research field on its own, which holds the 'authority' to develop unique theoretical advancement (Das and Handfield, 1997a). Other fields can also benefit from global purchasing research. Indeed, global purchasing settings provide interesting labs for knowledge-based theories of the firm, relationship management theory and internationalization process research, to name a few.

A second route for advancement is the proper definition and operationalization of a researcher's principle arms: the central concepts of the field. Throughout this review we noticed a surprisingly high vagueness and divergence in the definition of central concepts. For instance, a large number of studies refer to the degree of purchasing internationalization, without specifying the concept. Only a handful of articles (e.g., Katsikeas, 1998; Leonidou, 1998; Mol et al., 2004) take the degree of global purchasing explicitly into account. When made explicit, it is often only measured by one item: the ratio of cross-border to total purchasing (Birou and Fawcett, 1993; Servais and Møller Jensen, 2001; Swamidass and Kotabe, 1993). Recently, Mol et al. (2004) defined the degree of purchasing internationalization as a two-dimensional concept, referring to the depth (economic value) and the scope (diversification among countries) of global purchasing.

Finally, the field would largely benefit from analytic generalization. Apart from conceptual benchmarking, analytic generalization of current knowledge is also accomplished through the exposure of findings to new

empirical contexts. In fact, the majority of findings in the literature concerns global purchasing behavior of multinational enterprises. Hardly any empirical research has been done in the context of small- and medium-sized firms or SMEs (notable exceptions are for instance: Korhonen et al., 1996; Tikkanen, 1998; Leonidou and Katsikeas, 2003). A focus on SMEs may not only test the validity of earlier findings, it may also bring new insights. In a similar vein, more research is needed in non-US settings (e.g., Servais and Møller Jensen, 2001).

Today, global purchasing is one of the last business functions that has the potential for a double-digit impact on firm performance when improved or expanded (Eurostat, 2005; Leenders et al., 2002). Despite academic progress in the field over last decades, however, global purchasing fails to take up its appropriate position in mainstream academic literature. The present review provides anchors and directions for future successful research in global purchasing.

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