

What Enhances Sustainable Supplier Upgrading?

Assessing some structural antecedent of supplier strategies in the Philippines

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Abstract

This paper presents a first effort to conceptually link archetypical sustainable supply chain management strategies of leader companies to bottom-up effects with supplier companies. The main function of this paper is to interpret part of the unique data collected from the 2012 Survey on Adjustments of Establishments to Globalization (SAEG) as part of the 'escaping the middle income trap' project in the Philippines. In this project the alignment of top-down and bottom-up approaches around various types of supplier 'upgrading' are considered as benchmark for sustainable development. This alignment can appear within global or local value chains. The related question that will be addressed in this paper is whether companies in the Philippines that are part of global value chains have adopted different upgrading strategies than those that are not. An additional question we are interested in is whether it matters that these value chains are coordinated by home or host companies. This paper is primarily conceptual to define the kind of supply chains that are needed to escape from the middle income country trap. But it also shortly presents the first results of the SAEG survey.

Key words: sustainable supply chain management, middle income trap, vertical and horizontal upgrading, empirical test in the Philippines

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1. Introduction: The Middle Income Country Trap

The so-called Middle-Income Country Trap (MICT) has become a prominent theme in both academic literature and popular media, especially in East Asia. After decades of rapid growth, countries like China have been experiencing wage increases, thereby compromising their competitiveness in the high-volume, low value-added segment of manufacturing exports. However, transitioning into the niche of technology and innovation-based products and services is hindered by insufficient skills and entrepreneurship needed to aggressively open up new markets. Stiff competition from more efficient developed-country producers further discourages risk-taking in the development of new products. This is the middle-income country trap as the Gill & Kharas (2007) of the World Bank define it: countries being squeezed out by the low-wage economies in mature industries on one side, and by the more technologically advanced countries specializing on innovation-intensive sectors on the other.

The problem of MICT is not new, as the World Bank has earlier used it to analyze the stagnation of some Latin America and Middle East countries after a period of relatively high growth. What is new is the manner in which the MICT is being depicted as a competitiveness problem instead of a purely income trap. Needless to say, these are two sides of the same coin, certainly in today's context. However, the countries that have recently expressed some apprehension about this phenomenon are precisely those with robust growth such as Malaysia, China, Vietnam, Thailand, Indonesia, India, South Africa, Turkey, etc., and could therefore be hardly typified as being at risk of landing in a trap. Still, the dependence on exports as driver of rapid growth, together with the perceived difficulties in carving out a strong global market niche for higher value-added exports, create doubts as to whether these countries could replicate the kind of growth surge that catapulted countries like South Korea to a high income status.

For lower middle-income countries experiencing modest growth, there are considerable catch-up still to be realized by simply improving governance and increasing infrastructure spending critical to raising productivity. However, the same competitiveness squeeze attributed to MICT is palpable in cheap-labor-dependent sectors such as electronics and textiles & clothing, which are major contributors to the export earnings of these countries. Thus, the MICT phenomenon could potentially encompass a large part of the developing world, prompting the World Bank (2010) and the Asian Development Bank (2011) to draw greater attention to this growth ailment.

While a deep and thorough scientific scrutiny of the MICT is still scarce, there is hardly any disagreement about the menu of policy cures countries need to consider. First on the list is a greater push towards innovation and upgrading. Government initiative is seen as critical in providing higher levels of investment in education, science & technology, and physical infrastructure, as well as in facilitating access to financing venture enterprises and grassroots innovators. Local entrepreneurs, on the other hand, must develop and adopt innovative production processes and step-up capacity to introduce new or improved goods and services. For lower-middle income countries, more basic reforms are needed in the area of public governance and institutional development, banking & financial systems, among other things. The result is a daunting policy agenda that is often at a level of generality stopping far short of practicability.

An assessment of the feasibility of the various escapes routes presented to MICT countries will quickly give one an appreciation of why such a trap exists in the first place. Crafting a proactive industrial vision and mustering the broad political consensus to implement it entails strong leadership, which is often difficult to come by or sustain. But even if the needed political will is in place, to "tech-up" an economy can be enormously expensive, especially if one takes into account the high costs of obtaining the enabling conditions (e.g. physical infrastructure, skill-absorption

capacity), which in turn ensure that returns to these huge investments are eventually reaped. Foreign Direct Investments are therefore often seen as the shortest and cheapest route to technological and industrial upgrading. Countries engage in a race to attract foreign capital in anticipation of the knowledge spillovers they are believed to generate. However, the benefits of FDI are themselves subject to a host of threshold conditions such as institutional/governance quality and sufficient absorptive capacity of the domestic workforce. Moreover, knowledge and technology are highly guarded assets of transnational firms, which are rarely voluntarily shared to local partners (and potential competitors).

Export diversification is yet another object of policy advice. Many developing countries do tend to produce and trade an extremely narrow range of goods and services. Against the backdrop of falling terms of trade of labor-intensive manufacturing exports and stagnating value-added, it is clear that product and market diversification should be a principal policy goal. To achieve this, much emphasis is placed on the issues of market access and trade facilitation, and export development policies such as cluster strategies and the targeting of export champions or priority sectors. What is often neglected, however, is the fact that market access is largely determined by the links local producers are able to make with foreign lead firms, who through their key roles in global value chains, control the access to technology, design, marketing and consumer market information. The problem of market access is therefore one of finding more effective means of linking local firms with global buyers and manufacturers. For latecomer developing countries with a small pool of local firms efficient enough to supply global buyers, it is important to know how local supplier firms emerge and evolve over time.

But once integrated in these GVCs, the dilemma is whether to make deliberate attempts to upgrade and escape the low value-added segments of production, or to remain compliant to the strict parameters set by foreign lead firms to avert any possible relocation to more attractive hosts elsewhere.

Two types of actors have generally been identified as potential change agents in the supply chain: lead firms that could be anywhere in the chain and smaller firms at the bottom of the chain. For the first category, the biggest challenge has been how to identify them, consider 'governance' modalities and assess their impact on the value chain. For the second category of firms, the biggest challenge has been how to measure and value success. Here the concept of 'upgrading' has been introduced. Interestingly, neither consumers nor governments have been considered particularly relevant as change agents in global supply chains.

2. Global value chain governance and upgrading

An increasing number of authors are pointing at the importance of so called 'lead' or 'core' companies that have an above-average influence over chains. While more developing countries become involved in supply, trade is organised by a decreasing number of global buyers (Humphrey and Schmitz 2001: 19; Schmitz and Knorringa 2000: 177). This has resulted in the dominance of so called 'incomplete firms' where the complete process from beginning to end-product does not take place within one firm but within a chain of legally independent firms (Gereffi et al 2001: 2). Gereffi (1999) also called these firms 'manufacturers without factories'. Others have referred to these corporations as 'hollow firms' (Van Tulder with Van der Zwart, 2006). The consequential 'fragmentation of production' leads to increased levels of specialisation and differentiation, with firms in developed countries increasingly focusing on intangible aspects of value creation (product design, branding, marketing, and communication) and firms in developing countries increasingly focusing on the tangible aspects of value creation. Developing country firms specialise in labour-intensive production as labor costs are generally low in these countries. Even though purchasing

companies do not manufacture, they do specify what products should look like, how it is to be produced, and when. This results in 'coordination without ownership' (Gibbon et al 2008: 318; Humphrey and Memedovic 2006; Humphrey 2004; Schmitz and Knorrninga 2000: 178).

Lead or Core firms are mostly located in developed countries and are powerful in determining "what is to be produced, how, and by whom" (Gereffi et al 2001: 1). This includes determining whether to outsource, make components in-house or something in between, and specifying the price, volume, production, quality, and distribution (Gibbon 2008: 319). Value chains governed by global buyers are so-called because they buy (semi-) finished products globally. They have increased in importance the last two decades. At the same time competition among producers in developing countries is increasing as well (Schmitz 2004: 5-6; Schmitz and Knorrninga 2000: 177-178). Most authors assume one or a limited number of actors governing most of global commodity chains. The degree of both explicit coordination and power asymmetry in international chains depends on (1) the complexity of transactions (in particular the complexity of information and knowledge transfer), (2) codification possibility of information, and (3) the capabilities of the suppliers.

Governance is seen as an important aspect of sustainable supply chain management. Low producer prices, certain labor conditions, and environmental impact of production are, for example, seen as a sustainability problem and TNCs are held responsible for these problems.

The demand for accountability stimulates in particular lead companies to adopt standards and quality marks towards their suppliers. Standards are one way to describe what has to be produced, how, and by whom. Through codification, standards reduce the complexity of information transmission. Whereas standards used to describe (or prescribe) technical, tangible specifications and characteristics, current standards also include process characteristics, such as labour and environmental standards. Design and enforcement of standards is carried out by different actors, including both public and private actors. Governing (monitoring and enforcing compliance) is generally more complicated for process than for product standards as certain product and process qualities cannot be identified at the end product. As these qualities cannot be identified at the end-product, the process needs to be monitored. Products possessing unidentifiable product and process qualities were called 'credence goods' by Reardon et al (2001; Humphrey and Memedovic 2006: 4, 15; Gereffi et al 2005: 85). Standards are codified in certification systems to address what has to be conformed to and how, in which way this is verified and published, and what non-conformance would result in. In the case of external standards, buyers provide suppliers that are unable to conform in general assistance only when the suppliers are important (Humphrey 2004: 5).

The question on the fairness of the chain requires in particular an assessment of the effects of inclusion 'upstream' in supply chains of small firms and farmers – often referred to as 'small-holders'. Certainly when this is coupled to quality marks of often competing lead firms, an inclusion in international chains become a mixed blessing for suppliers. Suppliers can get 'locked into' chains that increase their dependence and limit their development possibilities. This represents both a theoretical as well as empirical challenge for research on effective chain management from a developmental perspective. One particularly interesting measure of success for supply chains is whether inclusion in global (commodity) chains leads to 'upgrading' possibilities for firms and farmers at the bottom of the chain. Upgrading is defined by Giulian et al (2005) as "innovation to increase value added". Schmitz and Knorrninga (2000: 181) define upgrading as "means enhancing the relative competitive position of a firm". In light of global value chain analysis, upgrading can also define sustainability according to the following definition: "sustainability [...] refers to the business upgrading opportunities that the retail supply chains offers to developing country suppliers" (Van Wijk et al., 2008:4).

The literature on supply chains has also focused much more on the actual behaviour of the upstream actors, such as farmers and small-holders. A particularly interesting measure of sustainability for supply chains introduced in the literature is whether inclusion in global (commodity) chains leads to 'upgrading' possibilities for firms and farmers at the bottom of the chain. Schmitz and Knorringa (2000: 181) define economic upgrading as "means enhancing the relative competitive position of a firm". Sustainable upgrading would add social and environmental dimensions to this definition. The business model that relates to economic and sustainable upgrading contains five types of 'upgrading' (Humphrey and Schmitz 2002; Barrientos et al. 2008; Van Tulder, 2010; Humphrey, 2014):

- *Process upgrading*: transforming inputs into outputs more efficiently by reorganising the production system or introducing superior technology
- *Product upgrading*: moving into more sophisticated product lines (which can be defined in terms of increased unit values)
- *Functional upgrading*: acquiring new functions (or abandoning existing functions) to increase the overall skill content of activities
- *Inter-sectoral upgrading*: firms of clusters move into new productive activities (diversification)
- *Social and ecological upgrading*: enhancing the capabilities and entitlements of workers as social actors, and enhances the quality of their employment and their environment.

The first three types of upgrading relate to the competitive position of suppliers in the value chain. They can also be dubbed 'vertical upgrading'. The last two types of upgrading relates to the competitive position of the suppliers beyond the value chain that they are engaged in. This can be dubbed 'horizontal upgrading'. Combining both strategies (of competitiveness and inclusiveness) present the delicate balancing act that companies need to engage in in order to gain long term commercial and social success, and contribute to more sustainable development of the whole region and country (see position paper Pelkmans and Van Tulder, 2016). A top-down approach would look at these indicators of upgrading and considers the extent to which so-called leader firms are able and willing to combine all five upgrading elements. A bottom-up approach to this question primarily considers the extent to which small holders firms and suppliers in general (to particular leader firms) are able and willing to invest in one or a combination of all five elements. The latter often presents a power struggle, and depends on the strategic insight of suppliers (either individually or as a group). The former depends on the willingness and the managerial insights of the leader company to focus on the right metrics for creating a really sustainable supply chain.

The first three dimensions of upgrading relate to the existing supply chain (and vertical governance relationships), the last two dimensions relate to a much broader (horizontal) and networking perspective of supply chains. Suppliers can achieve a more sustainable competitive position in a supply chain in case they do not become too locked-in into one value chain and one lead company through means of diversification and social upgrading. The various combinations of upgrading measures alter the supply chain and provide different conditions under which sustainability of the whole supply chain can be enhanced. This perspective takes an inclusive approach and is based on the governance of the chain, stakeholder theory and the resource-based view of the firm. The degree of sustainability in supply chains from the perspective of upstream actors then can be related to the degree of 'inclusiveness' of them. Their position in supply chains does not only become one of suppliers, but also of buyers. In economic geography the sustainability of the supply chain is then measured as the transition from a linear supply chain (globally integrated) to a circular supply chain (locally embedded). The benchmark of sustainability in this relational perspective relates to how local suppliers can find a balance between horizontal and vertical governance measures, between competitiveness and inclusiveness.

The benchmark of 'upgrading' provides an interesting benchmark for economic and social success of supply chains. But there is criticism as well. In particular in case only a few of the upgrading elements

are adopted. Van Wijk et al. (2008) for instance argue that upgrading not necessarily means moving up the chain, but rather means doing things different from competitors. It could thus be 'downgrading' as well. In addition it is noteworthy that upgrading to more value adding stages is not always preferred as it can bring more uncertainties. Kaplinsky (2000) argues that increased output and employment not necessarily can be defined as upgrading. Participation in the global economy is beneficial if it leads to sustainable income growth. A sustainable growth of income has not been practice for every developing country actor within a value chain. Kaplinsky uses the term 'immiserising growth' which "describes a situation where there is increasing economic activity (more output and more employment) but falling economic returns" (Kaplinsky 2000). A parsimonious approach to upgrading therefore seems to put longer term sustainable development at risk.

3. Sustainable Supply Chain Management: the top-down perspective

Leader companies can adopt sustainable supply chain strategies either voluntarily or under the influence of trigger events (such as human rights violations, industrial accidents in their supply chain). Depending on the motivation of leader companies, one can take their ambition to become more sustainable in their supply chain approach more serious. But often, even with the right motivation, managers do not have to adopt the right strategies, i.e. those that are not only in their interest, but also in the long-term interest of their suppliers. There is considerable ambiguity in the literature and the management practice what 'sustainable supply chain management' actually entails and in whose interest some strategies are adopted. Consequently, there is also major dispute on the degree of PR-talk that can be observed with leading companies. Believing a company on its intentions is quite naïve; but unfounded cynicism on the motivation of companies to make the change might actually stall further progress (cf. Van Tulder with Van der Zwart, 2006). So in the interaction between motivation and realization of supply chain management strategies what indicators can help us in defining where companies are in their real strategy?

Authors that tried to study relevant practices on how to implement real SSCM suggest that this question can best be organized by focusing on the specific unit of analysis adopted: (1) as a compliance challenge for buying/lead firm in which the lead firm acts as main unit of analysis; (2) as internal alignment challenge in which the company's processes and procedures become the main units of analysis, or (3) as an external alignment challenge in which the buyer-supplier relationship is adopted as level of analysis. Extant research is particularly focused on dimensions 1 and 3, but in a static and relatively prescriptive manner. For this paper, we are particularly interested in the managerial suggestions stemming from each of these perspectives.

Compliance: in the compliance perspective of SSCM, studies have focused primarily on the activities of supply chain managers in the relation with suppliers targeting supplier codes of conduct, supply or supplier criteria and supplier requirements. Based on internal decisions with regards to sustainability or inspired by the codes developed by international organisations (Spence and Bourlakis 2009) firms require suppliers to live up to the same standards (Björklund 2010). This depends on the diversity and complexity of the product chain, the power of the company in the chain and the level of ambition of the strategy (Cramer 2008). Compliance strategies are grounded in risk management and the fear of reputation losses in case of lacking sustainability (Seuring and Müller 2008). Environmental and social criteria are taken up to complement economically based supplier evaluations, in which supply chain managers translate internal codes of conduct into purchasing criteria (Leire and Mont 2010) and/or include sustainability as an additional key performance criterion in Kraljic's purchasing portfolio (Krause et al. 2009).

The compliance perspective is most closely related to general supply chain management strategies adopted by lead firms. It departs from the buyer's firm perspective and assumes that a company can

set the rules of the game by imposing its internal sustainability approach on its suppliers. Transaction cost economics forms a dominant theoretical basis of this perspective, while practitioners are also advised to stay close to what they know (core capabilities), help them to manage risks and allow companies to stay in control. International sustainability frameworks such as ISO 26000 and the Global Reporting Initiative (GRI) add to this compliance perspective by assuming that the lead firm can control sustainability issues and mitigate sustainability risks – in interaction with a selected group of stakeholders -, even if they are happening elsewhere in the supply chain. Compliance strategies include other supply chain actors as well, which define the extent to which not only risks are managed, but also opportunities are created and seized. Several authors have pointed to the limited effect of code of conduct to generate real change (Barrientos and Smith 2007; Egels-Zandén and Lindholm 2014). A recent study, focusing on one specific certification scheme for instance showed that codes and its necessary audits are unable to identify all aspects of non-compliance, which is “explained by either an illusion of improvement, with actors focusing on corrected non-compliances rather than the new non-compliances that emerge in parallel, and/or pre-first-audit improvements and/or that codes mitigate overall compliance decline” (Egels-Zandén and Lindholm, 2014:22).

Internal alignment. The internal alignment perspective connects the final user with the primary supplier (Foerstl et al. 2014). Literature on internal alignment (or CSR in general) strategies provides both organisational suggestions as well as managerial prerequisites to enhance sustainable supply chain management within the organisation. Van Tulder et al. (2013) followed twenty frontrunner companies and describe how organisations can realise a sustainable business model in general. They argue that a large number of functional departments need to be aligned along a common understanding and common goals. The purchasing department is thereby one of the key departments that plays an important role in creating a sustainable enterprise. In order to employ sustainable supply chain management, sustainability has to be embedded in the entire organisation and needs specific endorsement from lead procurers and top management in order to be effective (Andersen and Skjoett-Larsen 2009; Wittstruck and Teuteberg 2011). Implementing sustainable supply chain management starts with developing internal policies and setting purchasing criteria. Next, a company moves to applying assurance policies, managing supply relations and building internal responsible purchasing capacity (Leire and Mont 2010). Interestingly, it has been found that HRM policies can have an important function in aligning the purchasing department with other department by stimulating sustainability activities between employees (Cantor et al. 2012) Supply chain managers, furthermore, need specific managerial capabilities to realise effective sustainable supply chain management. From a study of 47 business-to-business companies, Mariadoss et al. (2011) posit that, in addition to practical capabilities, supply chain managers need to understand sustainability in order to manage a supply chain in a sustainable manner. Carter and Rogers (2008) conclude thereby that most supply chain managers still see sustainability mainly as primarily environmental management with limited reference to the economic and social dimensions of sustainability. The internal perspective provides the basis for sustainable supply chain management transition processes from an inside-in perspective. It shows the vital position of the purchasing department in the general sustainability strategy of a company, but the literature has hardly been able to link internal change processes to external stakeholder relations and/or possible governance structures.

Relational perspective: external alignment. When studies adopt a more interactive approach (inside-out; outside-in) they tend to look at the supply chain in terms of dynamic buyer-supplier relationships in which both parties becoming mutually dependent. For instance the supplier codes of conduct can be used to ensure that suppliers live up to the set standard, which represents a control perspective. But the audit results are fed back into the supply chain relations, leading to improved performance of the supplier as well as the buyer firm. This creates a buyer-supplier relationship that consists of a multiple loop process driven by reiterating actions such as internal and external audits, stakeholder dialogues and supplier ratings (Teuscher et al. 2006). Brammer et al. (2011) propose a

similar process where supplier development becomes an integral part of the sustainable supply chain management process. Wittstruck and Teuteberg (2011) conclude that all companies within a network benefit from companies that exchange relevant SSCM information and technology with their supply chain partners. Green or sustainable supplier development focuses on knowledge transfer and communication, investment and resource transfer and management and organization practices in order to develop supplier capabilities (Trapp and Sarkis 2016). Others encourage firms in supply chains to work together on their strategic corporate responsibility, in which they consequently can create a much larger and more valuable market than they ever could by working individually. These 'inter-firm resources and capabilities' emerging from supply chain wide collaboration are prone to become sources of sustained inter-firm competitive advantage. Since they are socially complex, causally ambiguous and historically grown, they are difficult to imitate by competitors (Heikkurinen and Forsman-Hugg 2011; Gold et al. 2010:230). Perry and Towers (2013) highlight the concept of trust between supply chain actors. It enables buyers and suppliers to share confidential information, invest in understanding each other's business and customise their products and processes. Better cooperation, coordination and collaboration between supply chain partners can contribute to the effectiveness and the sustainability of the supply chain. Vermeulen and Seuring (2009) thereby point to emerging supply chain governance practices. The joint product sector approach and the cross sector approaches suggest firms within a supply chain to cooperate to improve the sustainability of their supply chain. Pagel and Wu (2009) looked at ten exemplar companies to develop a sustainable supply chain model. They conclude that for supply chains to become more sustainable it needs to be clear who is part of the chain, the chain needs to be efficient and effective and most importantly, supply chain partners need to maintain a conversation with each other. They stress that environmental and social outcomes cannot be afterthoughts of areas of occasional focus; they need to be interwoven into how an organisation makes money (ibid).

In combining the relevant insights from sustainable supply chain management literature regarding theoretical foundations and transition dynamics, we can conclude that the dominant perspective of resource based and transaction cost economics has resulted in a strong emphasis on compliance-based arguments in the SSCM literature. In case stakeholders are involved these are primarily included as activists and governance mechanisms are largely aimed at managing risk and reputation effects. The literature is strongly biased towards SSCM as a defensive/reactive approach towards external societal pressure. Both internal- and external alignment literature is much less pronounced and developed. In case of internal alignment strategies the resource based view, however, provides interesting reference points, whereas for external alignment questions most literature relates to stakeholder theory. In most cases, however, this literature is relatively case based, prescriptive and static.

The three perspectives and four theoretical foundations of sustainable supply chain management can be portrayed as different stages companies go through in their development of (more) sustainable supply chain management. The transition to a sustainable supply chain requires the identification of a large number of barriers – and the way they can be overcome. The literature on SSCM offers only limited suggestions on how to manage the transition to a more sustainable supply chain, other than the more general literature on corporate responsibility which is much clearer about different stages and related business models. In general four types of business models can be distinguished, ranging from a limited approach, where sustainability activities contribute to economic success, to an extended approach, where sustainability is fully integrated in companies' strategies and aimed at systemic change. Authors have framed the stages differently, but the general idea of the different kinds of CSR business models overlap and boil down to three stages (Van Tulder et al. 2013).

In the first transition from an inactive to a reactive business model company strategies start to focus on risk avoidance. Companies implement sustainability in their company to abide to (voluntary) national and international rules and regulations, such as (sector) codes of conducts and ISO norms.

This way companies feel protected from external critique. When moving to an active business model companies internalize external expectations on sustainability and CSR into the companies' activities. Companies recognize they have to respond to social and environmental concerns and provide an answer through their corporate strategy. Sustainability becomes part of the long-term strategy internally and partly externally. In the third transition to a pro-active business model, companies start integrating sustainability in their whole supply chain, while looking at creating positive impacts for the value chain as well as the related communities. Pro-active companies have to work together with different partners in this stage to establish the intended impact and create the institutional preconditions for actually facilitating the transition.

To move from one stage to another, companies need to overcome certain barriers, which can be done by both positive and negative incentives. Literature suggests specific types of impulses to move through the four stages identified above. To move from the first to the second stage companies need an external trigger, often related to a specific sustainability issue gaining attention, such as child labour in production locations or oil spills. When confronted with a specific sustainability problem companies resort to compliance behaviour, finding answers to alleged claims through complying with international norms. Martinuzzi and Krumay (2013) describe the second stage as 'avoid doing bad'. When sustainability related problems arise with companies that were only interested in the economic value of their sustainability activities, they move in response to the stage where they avoid doing bad. Van Tulder et al. (2013) identified this as a shift from an inactive to a reactive attitude. A compliance based reaction to an external trigger creates the realisation that companies can do more on CSR. This sparks internal evaluation of the activities and prepares them to move from the second to the third stage. The impulse that realises this shift is internal alignment. Martinuzzi and Krumay (2013) define the third stage as strategic CSR, or 'rethink your business'. Only when companies are intrinsically motivated to implement sustainability will they move beyond the compliance phase. This means that internal departments need to be aligned around a shared sustainability strategy. Van Tulder et al. (2013) identified this as a shift from a reactive to an active attitude. The last stage is reached through external alignment. Since the final phase requires companies to move beyond the own company and start creating positive impacts for society as a whole, it is necessary to align the company goals with society's goals. Hence, external alignment is necessary. The decision as to which issues to tackle depend on a materiality assessment, where the company's business model and future goals are aligned with the expectations and contributions of external stakeholders. This contains a shift from an active to a proactive attitude. (ibid)

The sustainable supply chain management literature acknowledges the role of external pressure, amongst which government, clients and other stakeholders, in order to ignite sustainable supply chain management practices. (Gold et al. 2010; Foerstl et al. 2014) The compliance perspective results from a liability oriented attitude and is extrinsically motivated. As such this perspective is in line with the second stage or reactive approach. This perspective introduces qualitative features from external developments, generally for the sake of company reputation. Taking a closer look at the literatures' description of best practices and managerial suggestions related to the compliance perspective there are a few characteristics that seem to encompass this perspective. SSCM within the compliance perspective is based on international standards and external stakeholder requirements. The focal company translates this input into a management system or a code of conduct, which suppliers have to comply with. Checks and balances of the code of conduct and management systems are realised through supervision, monitoring and reporting. Evaluation of the results is either acceptance of the supplier through continuation of the contract or rejection of suppliers that do not comply with the standards. (Björklund 2010; Egels-Zandén and Lindholm 2014; Searcy 2014)

Tipping points that can help purchasing departments to move beyond the compliance perspective is to focus on shared (chain) responsibility instead of chain liability (van Tulder et al. 2009). Another possibility is to change from a negative control oriented code of conduct to a positive change-

oriented one (van Tulder et al. 2013). The internal perspective of sustainable supply chain management as introduced above can relate to the third stage or active phase, where a company is intrinsically motivated to implement sustainability. Some companies are only guided by diverting liability while others are searching for internal alignment. Van Tulder et al. (2013) identified a large number of tipping points that spark development of the purchasing department to more sustainability and help internal alignment. For example, if the purchasing department instead of being an isolated profit oriented department is closely connected with other departments and when a company moves from product oriented to process oriented purchasing. These tipping points create internal alignment to further develop sustainability within a company, but also within a chain. Taking a closer look at the literatures' description of best practices and managerial suggestions related to the internal alignment perspective there are a few characteristics that encompass this perspective. Sustainable supply chain management within the internal alignment perspective reflects the internal structure of the company and is linked to the overall (CSR) strategy. This (CSR) strategy is translated into specific supply chain management activities, leading to a further integration of CSR within the company. Integration and alignment is realised through assigning sustainability related tasks within the purchasing department and providing training and education for purchasers. Several authors point to the decisive factor of top management in realising this internal alignment (cf. Björklund 2010; Wittstruck and Teuteberg 2011; Luthra et al. 2015). Pagell and Shevchenko (2014) argue that internal alignment may make a focus on sustainable supply chain management obsolete, because all supply chain management will be aligned with the triple bottom line.

Lastly, the relational perspective focuses on shared responsibility within a wider sustainability context. As an antecedent for this perspective literature suggest a supply chain analysis focused on the wider supply chain scope of the focal company. This perspective is related to the fourth stage or pro-active approach, which stems from internal, strongly relational and moral considerations. This is about 'doing good'. To move towards this stage companies need to focus on external alignment. Changes related to this impulse in supply chain management can be sparked by moving from confrontation with stakeholder NGOs to cooperation on chain management themes, to change a simple sustainable purchasing policy to an organisational learning model with improved suppliers and lower costs and to change to integral optimisation of the entire supply chain (van Tulder et al., 2013). A closer look at the literatures' description of best practices and managerial suggestions, proposes that sustainable supply chain management within the relational perspective is based on an analysis of the sustainability context within which a company operates, that spans beyond the border of the standard supply chain. Suggestions within this perspective do not address suppliers, but use 'partner' to describe the relationship between companies. Progress on sustainability is measured through dialogue and sharing information, know-how and product specificities. The relationships are long-term oriented and companies seek solutions together in case certain sustainability goals are not met. Lastly, within the relational perspective authors look beyond the classic approach to supply chain management and address new developments such as closed loop supply chain. The various tipping points also boil down to a different approach to the relationship with smaller suppliers in general and smallholders in specific (in case of commodity chains).

The main characteristics of the three perspectives are summarized in Table 1. When leader companies move from passive approaches towards increasingly more active business models they first have to adopt different generic supply chain management strategies in terms of supplier selection and general governance type. With these strategies come different locations of the responsibilities for sustainability with suppliers (inactive) to joint responsibilities and co-creation (proactive). When turning to more specific SSCM strategies, we see that the responsibility for sustainability moves from one primarily put with suppliers to one ultimate as a co-creation strategy. The transition towards more active involvement and empowerment of suppliers – as a precondition for longer term sustainability – also implies different governance mechanisms. The more companies become active or proactive in this respect, the more relational and modular governance types are

needed. Each archetype will focus on different dimensions of the upgrading challenge that suppliers are faced with. In fact, the upgrading intentions of the leader company, in combination with the actually achieved degrees of upgrading in all five elements define the degree to which the whole supply chain can be considered 'sustainable'. The table adds, therefore, a final element to this overview, which is the capacity development and training with suppliers that is needed to enable them to achieve the required upgrading dimension. Each type of upgrading requires other skills and capabilities. The right combination of specific capabilities probably presents the greatest challenge. What can be called 'sustainable supplier upgrading' become a balancing and sequencing act. Aligning top-down (lead companies) and bottom-up (supplier) strategies presents a necessary condition for success and requires capabilities, motivation and insights from both sides of the supply chain.

Table 1 Four archetypical supply chain management strategies

Attitude→	Inactive	Reactive	Active	Pro-active
Tipping point	[1] compliance→	[2] Internal alignment→	[3] External alignment	
Supplier selection	Strong competition between suppliers stimulated: multiple-sourcing	Strong selection of suppliers: multiple→ single sourcing (limit inefficiencies)	On the basis of their approach towards e.g. labor issues; single sourcing	On their ability to engage in sustainability issues (co-creation); single sourcing
Dominant Governance type	Markets (buyer driven)	Markets, captive or modular; supplier code of conduct	Modular/captive/hierarchy	Relational, modular
Responsibility for sustainability	With suppliers	Suppliers should comply with codes of lead company	Buyers are in the lead (sphere of influence);	Joint responsibility; co-creation
Upgrading	Process Same product, but increased production and/or efficiency.	Product More advanced products or production line. More value added to the product at the supplier.	Functional Improve skills, knowledge or content of activity. Allow for differentiation within the same sector.	Social/intersectoral Improve general knowledge, beyond the product, the production process and the sector. Allow for diversification of the supplier company.
Education/skills/capabilities	Activities related to non-core activity funding or activities related to education	Education/ skills/capabilities for suppliers on main process/ compliance with CoC	Education/ skills/capabilities for buyers/sales	Education/ skills/capabilities for suppliers on general capabilities (allowing for diversification)

4. A bottom up perspective: first analysis of Philippine empirics

In accompanying research projects, we have been focusing on the business models and SSCM strategies of the leader companies (cf. Van Lakerveld and Van Tulder, 2016 for the EMIT project). This research considers in particular the intentions and the framing by leader companies on issues of sustainability in general and upgrading in specific. In the EMIT research project, however, a bottom-up approach was envisaged in order to test the question whether the intention of leader companies actually materializes ‘on the ground’. The aim of this effort has been to start linking the top-down (intentions) and the bottom-up (realization) perspective of sustainable supply chain efforts. It is by no means certain that intention/input and realization/outcome can be aligned easily or without major alterations (cf. Mintzerg et al, 2010). Part of this analysis, in any case, should focus on the

results of the theoretical clash between leader companies and suppliers in value chains from the perspective of the supplier firms.

This is what we actually have done. The first rough analysis in this section is based on the results of the 2012 Survey on Adjustments of Establishments to Globalization (SAEG) conducted by then the National Statistics Office (NSO)² as commissioned by the Escaping the Middle Income Trap (EMIT) Research Programme.³ The SAEG results provide a unique dataset containing information about the impact of globalization on an original sample of 450 Philippine establishments in the manufacturing sector.⁴ The survey collected data on firm-level characteristics (e.g., size, age, organization, nature of activity), operations (e.g., products, revenues, costs, compensation, investments, assets, capacity utilization), international transactions, competitiveness position, major operational challenges, innovative activities, and value chain linkages, among others. The questions were also aimed at getting a more longitudinal view of the upgrading strategies. So the respondents were asked to assess their activities for the years 2007-2011. This approach, obviously contains a certain confirmation bias. So the fact that most companies noted that they have increased their activities in most of the areas, is not really revealing. When they note a decrease in activities, however, this provides the research with an interesting topic for further research. We will see that this finding in particular applies to inter-sectoral upgrading (grey boxes in the Tables). For the discovery of relative patterns between different types of respondents, however, this technique is appropriate. One ambition for further research is to link the suppliers to the actual leader firm/MNE with which they do business.

In the survey we were particularly interested in the five dimensions of upgrading; how supplier firms in the Philippines show different orientations and how these patterns are influenced by the nature of the supply chain they are involved in. We designed question on the various dimensions of upgrading as specified in the literature on GVC (cf. e.g. Kaplinsky and Morris, 2001); Humphrey and Schmitz, 2001). Firms' product and process upgrading activities for instance involve introduction of new products and internal processes or improving the existing ones with the explicit goal of being more competitive than rivals. Functional upgrading includes changes in the firm's mix of responsibilities within the chain in order to increase its value added. Inter-sectoral (Chain) upgrading focuses on expanding the firm's activities through participation in other value chains. In general, a successful upgrading depends on a firm's ability to implement faster and more effective innovations than its competitors (Kaplinsky and Morris, 2001). Ultimately, GVC upgrading should result in higher value capture. Social upgrading is related to enhancing the capabilities and quality of workers and work).

The SAEG data make it possible to come to a rich and detailed analysis in which several indicators related to a firm's innovative activities can for instance be used to understand the conditions under which firms can add value. From the survey results, micro data are available on research and development (R&D) spending, capital expenditures on information and communication technology (ICT), share of technical staffs in total employees, trainings, quality certifications, and new products launched. There are also a number of binary indicators for specific innovative activities such as

² By virtue of Republic Act No. 10625 or the Philippine Statistical Act of 2013, the NSO was merged with the National Statistical Coordination Board (NSCB), Bureau of Agricultural Statistics (BAS)s and Bureau of Labor and Employment Statistics (BLES) to form the Philippine Statistics Authority (PSA).

³The EMIT Project is an international research consortium organized to study the "middle-income country trap" phenomenon. The consortium is composed of Erasmus University Rotterdam (EUR) and the Rotterdam School of Management (RSM) in the Netherlands, the University of the Philippines School of Economics (through the UPecon Foundation), the University of the Philippines Sociology Department, and the Asian Institute of Technology (AIT) in Thailand.

⁴ The PSA (2015a) defines an establishment as "an economic unit, which engages, under a single ownership or control, in one or predominantly one kind of activity at a single fixed physical location". Throughout this study, establishment and firm are used interchangeably.

upgrading of machinery and equipment, introduction of a new technology, development of a new product or improvement of an existing line, and entry into new markets as a result of process or product improvements. In an accompanying research project (Mendoza et al. 2016 for the EMIT project) further statistical analyses will be presented on many other dimensions of vertical and horizontal upgrading strategies in the Philippines.

For the exploratory purpose of this paper we focused on the 121 companies in the sample that specifically indicated to supply to Multinational Enterprises (MNEs). Within this relatively small sample it is not yet possible to come to statistically significant results, but we can use the data for first impressions on two basic questions:

- Involvement in Global Value chains: is there a difference in upgrading strategies when comparing companies supply to MNE to companies supplying to non-MNEs. The latter category of firms are not included in global value chains and might therefore be less inclined to be competitive, and more inclined to aim at social upgrading for instance.
- Impact of differences in governance: is there a difference in the upgrading strategies of companies that are subsidiary to MNEs compared to those that are not (but nevertheless supply to MNEs). Furthermore, does it make a difference whether these companies are subsidiary to a domestic (home) or a foreign (host) Multinational?

General descriptives

Of the 121 companies that supply to a MNE, 76 indicate that they have learned any new technology from the MNE. From these 76 companies 68 companies indicate that not only have they learned new technologies, they are also able to use these new technologies in another product line or service than the current product line which is of interest to the MNC. When we look more closely at these 68 companies we learn that

- All companies are manufacturing companies
- 46 companies supply an end product
- 17 companies supply an intermediate product
- 3 companies supply a capital good
- 2 companies did not indicate what kind of good they produce
- 10 companies do not conduct any training. Of the others 5 only train skilled workers and 5 only train production workers.

Do value chains matter?

We can compare two relatively big samples of distinct companies: the 121 companies that supply MNEs (table 2) and the 236 companies that do not supply to MNEs (Table 3) and thus are not directly involved in global value chains. The second group in this study can act as control group.

Table 2 Upgrading strategies of companies supplying directly to MNEs (N=121)

	2007	2008	2009	2010	2011
Process upgrading (i.e. increased production efficiency)	27%	33%	42%	50%	53%
Product upgrading (i.e. moving into more sophisticated product lines)	21%	22%	33%	41%	46%
Functional upgrading (i.e. increase overall skill content of activities)	17%	20%	25%	31%	40%
Inter-sectoral upgrading (moving into other sectors; diversification)	2%	4%	10%	8%	14%
Social upgrading (enhance the capabilities and quality of workers and work)	25%	29%	35%	34%	44%

Table 3 Upgrading strategies of companies that do not supply MNEs (N=236)

	2007	2008	2009	2010	2011
Process upgrading (i.e. increased production efficiency)	24%	26%	30%	37%	47%
Product upgrading (i.e. moving into more sophisticated product lines)	13%	16%	21%	26%	33%
Functional upgrading (i.e. increase overall skill content of activities)	15%	18%	25%	31%	32%
Inter-sectoral upgrading (moving into other sectors; diversification)	3%	6%	5%	8%	10%
Social upgrading (enhance the capabilities and quality of workers and work)	17%	21%	26%	31%	40%

The general pattern is relatively clear:

- All firms put the biggest priority with process upgrading;
- All firms put by far the least priority with inter-sectoral upgrading (diversification);
- The attention for all dimensions of upgrading is steadily growing over time, with no major growth differences between categories;

Comparing the two categories of firms shows a number of distinctive patterns:

- Firms that supply to MNEs score higher on all dimensions of upgrading than those that do not directly supply MNEs;
- Domestic oriented firms have relatively more attention for social upgrading than for product and functional upgrading;
- MNE oriented suppliers on the other hand have relatively more attention for product upgrading than for social and functional upgrading;
- The attention for inter-sectoral upgrading with supplier to MNEs has increased slightly faster than with suppliers to non-MNEs

In other parts of the EMIT project it was found that horizontal and social upgrading are important prerequisites for countries to move beyond the middle-income trap. The influence of MNEs in the Philippines (through their supply chain and suppliers) is somewhat more positive in this respect. This is particularly true for social upgrading, but much less so for inter-sectoral (horizontal) upgrading. The stronger effects on vertical upgrading are also noticeable. But this could be expected from related International Business research.

Does ownership matter?

Suppliers can be integrated in supply chains as independent or as more dependent companies. Ownership generally matters also for the manner in which the leader companies is able to manage the supply chain in a more or less direct way. The GVC literature puts much emphasis on the governance structure of the value chain. So we have asked a number of questions on the nature of the relationship. One of the dimensions includes the question whether a company is a subsidiary to a host or home MNE. 57 companies were registered as subsidiary of an MNE (Table 4) of which 5 were subsidiary of a Philippine (home) MNE (Table 5) and 52 of a host MNE (Table 6). The origins of these host MNEs are 36 Asian and 14 subsidiaries of MNEs for the 'rest of the world'. The small number of home MNE companies might be representative for the distribution of relevant respondents in the Philippine industrial landscape, but this needs further inquiry.

Table 4 Upgrading strategies of MNE subsidiaries (N=57)

	2007	2008	2009	2010	2011
Process upgrading (i.e. increased production efficiency)	30%	33%	37%	53%	61%
Product upgrading (i.e. moving into more sophisticated product lines)	19%	25%	28%	33%	51%

Functional upgrading (i.e. increase overall skill content of activities)	16%	23%	26%	26%	46%
Inter-sectoral upgrading (moving into other sectors; diversification)	2%	2%	5%	4%	9%
Social upgrading (enhance the capabilities and quality of workers and work)	25%	26%	33%	42%	58%

Table 5 Upgrading strategies of Home MNE subsidiaries (N=5)

	2007	2008	2009	2010	2011
Process upgrading (i.e. increased production efficiency)	20%	20%	40%	60%	60%
Product upgrading (i.e. moving into more sophisticated product lines)	40%	40%	60%	60%	80%
Functional upgrading (i.e. increase overall skill content of activities)	20%	20%	20%	20%	40%
Inter-sectoral upgrading (moving into other sectors; diversification)	0%	0%	0%	0%	0%
Social upgrading (enhance the capabilities and quality of workers and work)	40%	40%	40%	60%	80%

Table 6 Upgrading strategies of Host subsidiary MNEs (N=52)

	2007	2008	2009	2010	2011
Process upgrading (i.e. increased production efficiency)	31%	35%	37%	52%	62%
Product upgrading (i.e. moving into more sophisticated product lines)	17%	23%	25%	31%	48%
Functional upgrading (i.e. increase overall skill content of activities)	15%	23%	27%	27%	46%
Inter-sectoral upgrading (moving into other sectors; diversification)	2%	2%	6%	4%	10%
Social upgrading (enhance the capabilities and quality of workers and work)	23%	25%	33%	40%	56%

Comparing the general findings of the category of subsidiaries (Table 4) with the general sample of companies (Tables 2 and 3), we find the following:

- Being a subsidiary of a MNE positively influences the attention for all dimensions of upgrading....
- ...except for inter-sectoral upgrading; here MNE subsidiaries score (marginally) lower than the general group; because of the higher scores of the other dimensions of upgrading, this difference becomes relatively more revealing;
- being a subsidiary of an MNE, also seems to have greater impact on the relative importance given to social upgrading, as compared to the other dimensions of upgrading; this corroborates other International Business research that found that MNEs operating in developing countries on average pay higher salaries than local companies;

The difference between home or host MNE subsidiaries is difficult to establish because of the small number of observations for the home MNE subsidiaries:

- the complete absence of inter-sectoral upgrading with home MNEs is interesting; this might be influenced by the lacking recognition by governments of the importance of this form of upgrading;
- The home MNE subsidiaries are the only category that gives greater importance to social upgrading than to process upgrading;

- Host MNE subsidiaries give relatively the biggest importance to process upgrading.

5. First conclusions

The EMIT project developed the premise that economies need to develop a balanced upgrading approach in order to move beyond the middle income status. Vertical upgrading implies a better position in particular value chains, horizontal upgrading implies a better position beyond certain value chains. The latter dimension adds to the resilience and inclusiveness of an economy and its companies. The former adds to its competitiveness. Sustainable supplier upgrading is a balancing act in which combinations of various upgrading strategies are particularly helpful at specific moments in transition pathways. The first results of the company survey that was executed in the Philippines shows a mixed picture, but with some clear trends. At the level of individual supplier firms in the Philippines companies have focused on specific combinations of upgrading strategies. Some have found their niche in specialization, others in efficiency. But this exploratory analysis also shows that not many companies have been given inter-sectoral upgrading much priority. This pattern is quite universal for supplier companies in the Philippines.

This study also shows that these patterns are influenced by the nature of relationships and ownership in value chains. The first results show that there is potential in understanding the links with MNEs and Global value chains. Policy conclusions can be drawn from the relatively poor attention for inter-sectoral upgrading. Here lies a point of attention. There are some distinct patterns also with regard to yes/no belong to particular value chains, but this has to be researched in much more detail. The survey will provide some data. More can be expected from tweaking the survey data with the strategies of specific MNEs. For instance the five domestic MNE compared to five host MNE. A case study approach seems very appropriate to give more depth to the above quantitative analysis. Why does it seem so hard for companies (either top-down or bottom-up) to emphasize the importance of horizontal upgrading? The present research, however, might also have revealed that there is a sequencing question involved: at this stage of development the Philippine supply system does not need diversification. This might be a mistaken conclusion, however.

Bibliography

See position paper Balaoing and Van Tulder, 2016
Van Lakerveld and Van Tulder, 2016