



Challenges for Global Value Chain Interventions in Latin America

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Development Bank**

Competitiveness and
Innovation Division

TECHNICAL NOTE

No. IDB-TN-548

May 2013

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2013

Cataloging-in-Publication data provided by the
Inter-American Development Bank
Felipe Herrera Library

Pietrobelli, Carlo, 1959-.

Challenges for global value chain interventions in Latin America / Carlo Pietrobelli, Cornelia Staritz.
p. cm. (IDB Technical Note ; 548)

Includes bibliographical references.

1. International trade—Government policy—Latin America. 2. International economic relations. 3. Business logistics—Latin America. 4. Industrial Policy—Latin America. I. Staritz, Cornelia. II. Inter-American Development Bank. Competitiveness and Innovation Division. III. Title. IV. Series.
IDB-TN-548

<http://www.iadb.org>

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Abstract*

Value chain interventions are increasingly used by international organizations and national donor agencies in the context of their private sector development strategies. This paper argues that an understanding of Global Value Chains (GVCs), their drivers, and their governance structures is necessary for effective interventions to further enterprise development. The focus of value chain interventions is to improve market access conditions, upgrade opportunities, and change the distribution of risks and benefits in GVCs in favor of developing country firms and producers. The paper offers an overview of relevant interventions by international organizations and donors, and analyzes a sample of IDB value chain projects to develop broad conclusions regarding its value chain approach and logic. However, so far there appears to be limited overview and coordination of and no common understanding or framework for value chain interventions. The paper concludes arguing that a deep and common understanding of core value chain concepts and approaches is needed, and that tailor-made, context-specific upgrading strategies need to be developed and supported. It proposes to consider the potential role of the involvement of lead firms and first-tier suppliers/ intermediaries, and the importance of innovation systems and local learning efforts to enable upgrading processes within GVCs.

Keywords: global value chains, private sector development, governance, upgrading

JEL codes: F23, O14, O25

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Executive Summary

Value chain interventions are increasingly used by international organizations and national donor agencies in the context of their private sector development strategies. These interventions focus on improving market access conditions for and upgrading the opportunities of developing country firms and producers in global value chains (GVCs).

This paper argues that **an understanding of GVCs, their drivers, and their governance structures is necessary for effective interventions to further enterprise development**. Value chain approaches that assess how firms and producers in developing countries are integrated in value chains and how their positions can be improved serve as a basis for designing effective policies and programs that ensure enterprise development, learning, and innovation. However, donors' value chain interventions too often encompass such a variety of approaches that they risk losing focus and transforming into a "label" with no real underlying concept.

The methodology of this paper is a desk review of relevant literature on GVCs and of reports and evaluations of value chain interventions, and an analysis of a sample of the Inter-American Development Bank's (IDB) value chain projects. Hence, this paper relies on published information, not evaluations of individual value chain programs or projects.

The focus of value chain interventions is to improve market access conditions, upgrade opportunities, and change the distribution of risks and benefits in GVCs in favor of developing country firms and producers. Value chain approaches improve on "traditional" private sector development approaches because they

- offer a multi-scalar sector-based framework where competitiveness goes beyond the individual firm;
- acknowledge the important role of lead firms and governance structures, and the dynamic nature of GVCs and upgrading; and
- focus on access and upgrading as well as identifying bottlenecks and leverage points.

GVC interventions can be classified as targeting:

- i. **Access and integration into GVCs**
- ii. **Value capture within GVCs**

The former type of interventions is particularly important in lesser developed countries and regions that are not yet integrated into GVCs. Such interventions focus on attracting investments, lead firms and first-tier suppliers/intermediaries; easing GVC functioning (i.e., by reducing trade barriers and improving logistics and other hard or soft infrastructures); and improving the supply capacity of local firms to interact with GVCs (i.e., by developing skills and business linkages). The latter type of interventions is particularly relevant for more developed countries. They aim to develop better technological capabilities and intangible assets, and to attract the innovation-related segments of GVCs.

Value chain interventions may have the following objectives:

- i. **To strengthen the weakest link** to address a possible bottleneck in the chain (e.g., improve capacities and capabilities of local input suppliers);
- ii. **To strengthen the linkages** between firms to make the chain more productive (e.g., by improving flows of knowledge and resources between local firms and lead firms/intermediaries and suppliers of inputs and capital equipment);
- iii. **To create new or alternative links** in the chain to link local firms to GVCs or to new lead firms and end markets.

Value chain interventions differ along certain dimensions, most importantly with regard to (i) the scope of the interventions, the levels addressed, and the fields of actions; (ii) the patterns of engagement and actors targeted; and (iii) their main objectives and explicit focus on broader development objectives, including, most importantly, poverty reduction.

The paper offers an overview of relevant interventions by international organizations and donors, including the World Bank, United Nations International Development Organization (UNIDO), International Labour Organization (ILO), International Trade Center (ITC), Gesellschaft für Internationale Zusammenarbeit (GIZ), and United States Agency for International Development (USAID). For the IDB, a sample of value chain projects is analyzed to develop broad conclusions regarding the IDB's value chain approach and logic. Several of the IDB's units/departments have developed GVC-inspired projects, with broadly similar objectives and approaches. However, so far there appears to be limited overview and coordination of and no common understanding or framework for value chain interventions. To get a snapshot of the IDB's GVC-related programs, we searched the Bank's databases and identified 132 interventions classified as value chain interventions in a broad sense since 2000. Total IDB financing for these interventions amounted to US\$813 million. However,

this preliminary and incomplete overview reveals that key value chain concepts and issues are missing in most sample projects, like an explicit analysis of lead firms, governance structures, rents, and added value. In some projects, upgrading is reduced to production efficiency without taking into account functional, channel, and chain upgrading.

This overview of the GVC literature and value chain interventions helps identify the following eight key issues that are relevant to increasing the effectiveness of value chain interventions:

- i. **The need for a common understanding of core value chain concepts and approaches**, including an assessment of governance structures and power relationships that influence competitive pressures, entry barriers, and upgrading prospects.
- ii. **The development of a tailor-made, context-specific upgrading strategy**, including an assessment of the complexities of upgrading processes and the costs, risks, and benefits.
- iii. **A useful role for and involvement of lead firms and first-tier suppliers/intermediaries**, taking into account their ambivalent role as partners in ensuring upgrading but also with diverging interests from supplier firms and countries.
- iv. **The importance of innovation systems and local learning efforts** to enable upgrading processes within GVCs and to attract GVCs more willing to support upgrading and increase local sourcing and embeddedness.
- v. **The importance of clusters and collective actions to facilitate upgrading within value chains** through collective efficiency, provision of club and public goods, and as a means of implementing interventions.
- vi. **Private and public stakeholder involvement and cooperation**, focusing on building public capabilities for strategic policy formulation and implementation and on developing avenues for private–public cooperation.
- vii. **The exploitation of market diversification and the potential of emerging, regional, and domestic markets** and development of consistent value chain programs and policies.
- viii. **The integration of different development objectives, including poverty alleviation**, into value chain policies and programs.

1. Objectives and Overview

Value chain interventions are increasingly used by international organizations and national donor agencies in the context of private sector development strategies. These interventions focus on improving market access conditions for and upgrading the opportunities of developing country firms and producers in GVCs with the broader objectives of promoting private sector, market-based, and, often, export-oriented development. However, they differ along several dimensions, most importantly with regard to (i) the scope of the interventions, the levels addressed, and the fields of actions; (ii) the patterns of engagement and sectors and actors targeted; and (iii) their main objectives and explicit focus on broader development objectives, including, most importantly, poverty reduction.

This paper argues that an understanding of GVCs, their drivers, and their governance structures is necessary for effective interventions to further enterprise development because the increasing importance of value chains in the global economy has important impacts on the organization of production at the global, regional, and local levels. Value chain approaches that assess how firms and producers in developing countries are integrated in value chains and how their positions can be improved serve as a basis for designing effective policies and programs that ensure enterprise development, learning, and innovation. However, donors' value chain interventions too often encompass such a variety of approaches that they risk losing focus and transforming into a "label" with no real underlying concept.

In this context, this paper provides an analysis of value chain interventions by international organizations and donors, and explores their underlying logic. It develops definitions of core value chain concepts and a typology for value chain interventions that are then used to analyze value chain interventions by the IDB and other relevant donors. Based on this assessment, this paper identifies key issues for developing value chain programs, as well as knowledge gaps that are particularly relevant for the IDB and its efforts to (i) develop a common understanding and broad framework for value chain interventions and (ii) enhance the effectiveness of these interventions by improving the design and implementation of operations. A longer term objective includes (iii) improved coordination and collaboration within the IDB and between the IDB and other actors engaged in value chain interventions. The methodology of the paper is a desk review of relevant literature on GVCs and of reports and evaluations of value chain interventions, and an analysis of a sample of the IDB's value chain projects. Hence, this paper relies on published information, not evaluations of individual value chain programs or projects.

Section 2 gives an overview of the broader context, discussing changes in global production and international trade in the past three decades that led to the increasing importance of GVCs in a diverse set of sectors and to new opportunities and challenges for developing country firms, producers, and workers. Section 3 discusses why public policies are required in the context of value chains, the issue of market and coordination failures, and how such failures play out in the context of GVCs. Section 4 discusses and defines core concepts of value chain approaches and identifies main characteristics of these approaches that differentiate them from other private sector development initiatives. Section 5 starts with a discussion of the recent importance of value chain interventions in international organizations and national donor agencies, and develops a typology. Section 6 gives an overview of relevant interventions by international organizations and donors, including the World Bank, UNIDO, ILO, ITC, GIZ, and USAID. For the IDB, a sample of value chain projects is analyzed to develop broad conclusions regarding the IDB's value chain approach and logic. Section 7 identifies key issues that are crucial to increasing the effectiveness of value chain interventions, as well as knowledge gaps.

2. The Importance of Value Chains for Governments and Donors

The global economy has changed significantly in the past three decades in the context of globalization, and this is having an effect on the organization of production at the global, regional, and local levels. This change has a quantitative dimension, as reflected in a considerable rise in trade (as a share of output) and in foreign direct investment since the 1980s. But the qualitative change in the structure of international trade and global production is even more significant. The global economy and a rising share of global trade, GDP, and employment is structured around fragmented and geographically dispersed value chains where transnational corporations break up the production process in different parts and locate them on a global scale. The activities that compose a value chain can be locally based but they are often carried out in inter-firm networks on a global or regional scale (Gereffi and Kaplinsky, 2001). Such global production arrangements—which have been referred to as “integration of trade and disintegration of production” (Feenstra, 1998)—can be found in sectors as diverse as apparel, footwear, automobiles, electronics, commodities (such as fruits, vegetables, coffee, cocoa, and minerals), and services (such as tourism, business-related services, and bio-technology).

De Backer and Yamano (2012) use input–output tables to construct indicators of imported intermediates, offshoring, and vertical specialization that show the growing

fragmentation of production across economies.¹ The growing importance of international sourcing across industries and countries is clearly reflected in the ratio of imported to domestic inputs and in offshoring that increased significantly between 1995 and 2005 in almost all countries. The results on vertical specialization—calculated as the direct and indirect imported inputs that are included in a country’s exports—show that countries’ exports are increasingly composed of intermediate inputs that are imported from abroad.²

Several factors have contributed to these transformations. Starting in the 1970s, transnational corporations increasingly concentrated on their “core competencies”, such as research and development (R&D), marketing and branding. Manufacturing and, increasingly, other functions that were formerly considered core activities, such as input sourcing, logistics or design, have gradually been contracted out to independent suppliers (outsourcing) and to countries with cost-advantages (offshoring). The underlying rationale for this re-orientation is that these intangible activities are less prone to competition because they are based on unique resources and capabilities that other firms find difficult to acquire and, hence, they are sources of superior returns (Kaplinsky, 2005). As a result, there has been a significant change in the industrial organization driven by transnational corporations across a variety of sectors, shifting the focus away from internal scale economies through vertical integration toward external economies related to outsourcing (Gibbon and Ponte, 2005). However, this shift does not mean that transnational corporations have become less important in global economic activities, only that many of them have changed their role from being global producers to becoming global buyers (e.g., retailers, supermarkets, and global brands) and coordinators of value chains.

Hence, changing competitive strategies of lead firms, trade liberalization orchestrated by the World Trade Organization (WTO), advances in information and communication technologies, and technological changes in transport, logistics (e.g., containerization), and operations management by using Information and Communication Technologies (ICT), all made the transfer of production processes to geographically dispersed locations possible, and led to the globalization and fragmentation of production. Initially, offshoring and outsourcing remained limited to rather simple, labor-intensive production steps in specific sectors. However, these arrangements became more complex and extended to a large range of

¹ This data is only available for 43 countries, including OECD countries, Argentina, Brazil, China, India, Indonesia, Philippines, Russia, Singapore, South Africa, Thailand, Malaysia and Vietnam, for the years 1995, 2000 and 2005 (or the nearest available years).

² These measures are still imperfect, and efforts are underway by the OECD, other international agencies and academics to develop new metrics for GVCs, such as data on trade in value added.

manufacturing, agriculture, and services sectors as the organizational and technological capabilities of large firms to functionally integrate geographically dispersed activities grew (Levy, 2005).

These changes in global production provide both opportunities and threats in terms of global trade, production, and employment and how developing country firms, producers, and workers are integrated in the global economy. The extension of GVCs and the offshoring and outsourcing of production have often provided a stepping stone for developing country firms to integrate into the global economy. Participation in GVCs can facilitate access to external and diversified markets, economies of scale and scope, technological learning and knowledge transfer, and access to competitive imports for local or export production. However, integration into GVCs can also lock firms and countries in low value-added activities that rely on static competitive advantages based on low production (often labor) costs without long-lasting benefits for learning, innovation, and development.

These challenges are related to heightened competition in global markets and the asymmetric market and power structures embodied within GVCs (Kaplinsky, 2005). Lead firms outsource “commodity-like” activities that add little value while they retain direct control over intangible, high value-added activities. These are generally characterized by high entry barriers such as high technological, organizational, and skill requirements that allow rents to be captured in oligopolistic markets (Kaplinsky and Morris, 2001; Levy, 2005). In contrast, widely dispersed low value-added activities are generally characterized by low entry barriers and high competition, which makes it difficult to capture rents and increase value, profits, and wages even when exports and capabilities of firms are rising (Milberg, 2004; Kaplinsky, 2005).

Notwithstanding these structural asymmetries, market, and power structures within GVCs are complex as different degrees of power or powerlessness are usually found along the chains (Altenburg, 2007). In several sectors, such as automotive, electronics, and apparel, large powerful suppliers have emerged in developing countries that bundle diverse activities, coordinate complex production and sourcing networks, and take influential positions in logistics, financing, design, and product development (Appelbaum, 2008). These global first-tier suppliers have developed a global footprint and have challenged the power of traditional lead firms. In other sectors, such as agro-food, important intermediaries, such as traders, have emerged that also pursue powerful governing positions in value chains. Lead firms have also appeared in emerging and developing countries, increasingly selling in regional and global

markets. The growing importance of developing country markets, particularly in large developing countries, has supported this trend. These developments have also furthered an increase in South-South and regional value chains (Cattaneo, Gereffi, and Staritz, 2010; Staritz, Gereffi, and Cattaneo, 2011).

Important asymmetries exist between and within developing countries in firm and state capacity to capture these learning and development opportunities. Entry barriers to certain GVCs have increased because of the sophisticated requirements of lead firms from developed and, increasingly, also emerging and developing countries and of global first-tier suppliers and intermediaries, as well as the consolidation of larger and more capable suppliers. Less developed countries and smaller firms that are unable to meet these requirements may be excluded from these GVCs. However, there are important differences in terms of sectors and value chain segments (e.g., actors, competition, requirements, and standards). In automotive and electronics, for instance, scale economies linked to supplier capabilities are crucial, especially among global contract manufacturers in electronics and first-tier suppliers and assemblers in automotive, which makes it difficult for smaller firms and small and medium sized enterprises (SMEs) from developing countries to access such chains (Kawakami and Sturgeon, 2011).

There are other manufacturing GVCs (e.g., apparel, toys, sporting goods, and other light consumer products), as well as food, agriculture, and some services where suppliers are much more varied in size, and smaller firms and smallholders have more opportunities to participate in GVCs (e.g., Fernandez-Stark, Bamber, and Gereffi, 2011 and 2012). Although there exist sectoral differences, in most GVCs, production efficiency is a necessary but not sufficient factor, because entry and upgrading in GVCs increasingly involves fulfilling high performance requirements with regard to quality, lead times, and flexibility, efficiency of processes, complexity of products, and different types of technological, social, and environmental standards, as well as broader functions and the ensuing skills and capabilities (Kaplinsky and Morris, 2001; Pietrobelli and Rabellotti, 2007).

3. Understanding Why Value Chains Require Public Policies

The debate on public policies in the context of GVCs is part of the broader debate on the role of states and markets in the development process. The debate has traditionally focused on the existence of market failures—such as economies of scale, imperfect competition and market power, uncertainty and imperfect information, externalities and knowledge spillovers, and public goods—to justify the need for public policies. This is particularly the case (but not

only) in developing countries where markets are highly imperfect, underdeveloped or missing, and where uncertainty and imperfect information is widespread (Pietrobelli, 2007). Coordination failures represent a further justification for policy intervention. Individual firms' performance crucially depends on the behavior of other actors (e.g., production and investment decisions in upstream and downstream segments, investment in and provision of related infrastructure, and public goods), but markets often lack the means to induce consistent behavior, leading to sub-optimal allocation of resources. As investments by one firm can have a positive effect on the profitability of investments by other firms, everybody would be better off if all parties were investing, but market forces alone cannot take the economy from a low investment to a high investment equilibrium. Public policies need to help this transition by fostering coordination (Rodrik, 2004 and 2007).

These issues are particularly problematic in the area of technology, innovation, and learning, which are at the center of the development process. Neoclassical approaches assume that technology is freely available and that firms absorb it without cost or risk. In contrast, the technological capability approach states that technological change is the result of firms undertaking activities purposefully. Technological change is neither exogenous nor automatic but requires efforts by firms to invest in learning and building technological capabilities, which involves costs and risks (Lall, 1992 and 2001; Morrison, Pietrobelli, and Rabellotti, 2008). Learning is a central determinant of value chain interventions, and its success depends on “the efficacy with which markets or institutions function, uncertainty is coped with, externalities tapped, and coordination achieved. If the learning period, costs, uncertainties, and leakages are very high, coordination with other firms in the supply chain exceptionally difficult, or information, labor, and capital markets particularly unresponsive, ‘difficult’ knowledge may not be absorbed—even where it would be efficient to do so.” (Pietrobelli, 2007: 24) These market and coordination failures are particularly relevant in the context of GVCs.

Once one firm signals the potential and the means required to integrate into a GVC, there is potential for externalities on other firms. Access to markets increasingly does not take place through arms' lengths market relationships but requires entering networks and building relationships with lead firms or their intermediaries. For individual firms in developing countries, getting access to lead firms and their networks is a crucial challenge that requires awareness and investments. Once one firm from a country has gained the reputation and a contract from a lead firm, it is easier for other firms to follow, and the “signaling” of such a successful model is enhanced. This represents an externality and justifies support to generate

and disseminate information about markets, standards, and the requirements of lead firms or global suppliers/intermediaries, as well as country and sector marketing and networking activities. It also justifies fostering and supporting negotiations with lead firms, global suppliers, and intermediaries.

Coordination failures may affect the influence of GVCs on participating firms. Competitiveness and upgrading in value chains often involve investments and activities by different actors along value chains. Without coordination, suppliers would not invest to upgrade their processes and organization because the risk of not fulfilling the requirements of lead firms is often too high; lead firms would not support such upgrading processes because beneficiary firms could walk away and supply alternative value chains. Achieving contracts that are mutually binding is hard. In principle, lead firms could play a crucial coordinating role, but they will only support upgrading processes of local firms as long as it is in their strategic interest, it does not threaten their core competencies and the costs to switch to other suppliers is not excessive (i.e., externalities are limited). Moreover, GVCs often depend on complementary manufacturing and services facilities where linkages and coordination are required. Coordination is also required with other entities, in particular private and public support providers like, for example, technical training and education providers because a skills mismatch between what lead firms demand and what local firms supply is likely to emerge.

More complex and knowledge-intensive industries and activities tend to generate greater spillovers for other industries or activities. Upgrading to such higher-value activities and learning involves costs, risks, and uncertainty, in particular functional upgrading, and firms may not appropriate all the benefits of spillovers of their upgrading activities. In the absence of long-term contracts and coordination, both lead firms and suppliers may engage in upgrading activities to a lesser extent than would be socially desirable. Insofar as knowledge flows and training efforts are not fully captured by lead firms, externalities lead to underinvestment in knowledge transfer, technology creation, and diffusion. The high uncertainty and risks related to upgrading and potential externalities may justify public policies to support upgrading efforts by suppliers, in particular by providing information, support for negotiations, and access to funds and skills, and potentially other incentives.

The distribution of rents along GVCs is affected by substantial market failures and entry barriers in specific segments (e.g., branding and product conception). Lead firms that govern the distribution of specific activities, outsource activities where there is or they can

create competition among firms, making it difficult to capture rents, and stick to activities where entry barriers are high and rents prevail. Such entry barriers may stem from high technological, organizational, and skill requirements, but also from power and the ability to create such asymmetric market structures. While lead firms in GVCs may have oligopoly power in product markets (downstream), they may operate in factor or input markets that are highly competitive. If market structures were less asymmetric and markets worked more efficiently in these specific high-rent segments, value chains would work more efficiently, resources would be better allocated, and large rents would not be generated.

In addition to the market failure and efficiency argument related to asymmetric market structures in GVCs, there is also an equity argument. Value chains include highly unequal power structures that influence entry and upgrading possibilities and the distribution of resources, information, costs, risks, and rewards within value chains. Public policy may have a role to play in rebalancing these power relations and inequalities. In particular, it would be crucial to influence the behavior of lead firms in terms of making information about their investment, sourcing, and subcontracting policies more open; providing more secure orders and longer term contracts that would in turn induce local firms to invest in the necessary learning and improvements; and engaging in supplier development programs and knowledge transfer from lead firms to suppliers.

However the existence of market and coordination failures does not alone establish a case for intervention. Interventions have their own costs and risks and it is necessary to assess whether their benefits outweigh their costs. The institutions needed to make markets work effectively are often weak in developing countries (Lall, 2005), but governments and public institutions can learn and improve their capacity to design and implement effective policies (Chang, 2012; Morris, 2010). Very important in this learning and capacity development process is public and private collaboration since effective policies require partnership and relational independence between government and the private sector and an institutionalized learning process between these two (Rodrik, 2007; Morris, 2010). Industrial policy is a discovery and strategic process of collaboration between governments and firms that involves mutual learning and experimenting (Rodrik, 2004; Kaplinsky and Morris, 2008).

4. Factors that Characterize Value Chain Approaches?

a. Core Concepts of Chain and Network Research

Value chain and network approaches have been developed in the past two decades to conceptualize and analyze how global production is organized and governed and how this

affects the development prospects of firms, regions, and countries (Coe and Hess, 2007). Although the first approach to value chain analysis can be traced back to Porter (1986), the strand of literature that crucially contributed has its roots in development studies and addresses the whole process of value creation along the chain and its relationship with development strategies, income distribution, and entry barriers (Altenburg, 2007).³ GVC analysis explores how the linkages between the production, distribution, and consumption of products are globally interconnected along value chains that embody a network of activities and actors and questions how developing country firms and producers can enter and improve their positions within these chains (Gereffi, 1999; Sturgeon, 2002; Kaplinsky and Morris, 2001; Kaplinsky, 2005). By focusing on the sequences of tangible and intangible value-adding activities, from conception through the different phases of production to end use, GVC analysis provides a holistic view of global industries—both from the top down (e.g., examining how lead firms govern their global-scale affiliate and supplier networks) and from the bottom up (e.g., asking how these business decisions affect the trajectory of upgrading or downgrading in specific countries and regions)—and the implications for both firms and countries (Gereffi, 1994 and 1995).

A **value chain** describes the full range of tangible and intangible value-adding activities that are required to bring a product from conception through the different phases of production, marketing and distribution to final consumers, providing a holistic view of global industries including a network of activities and actors. The activities constituting a value chain can be contained within a single firm or distributed among different firms, as well as within a single geographical location or spread over different countries and regions (Gereffi 1994, 1995).

GVC analysis generally covers the following four main dimensions (Gereffi, 1994 and 1995):

- i. The input–output structure identifies the key economic activities and value-adding stages encompassed in the transformation of raw materials and other inputs into finished products
- ii. The territorial configuration maps the geographic scope and the different geographic scales (local, national, regional, and global) at which GVCs operate
- iii. Governance structures highlight the power relations within GVCs and particularly the role played by lead firms (i.e., the firms that coordinate and govern GVCs) in establishing product specifications, technical standards, and cost and performance structures according to which global industries operate

³ For a discussion of the different chain and network approaches, including commodity chains, global commodity chains, global value chains and global production networks, see Altenburg, 2007; Bair, 2005 and 2009; Coe, Dicken, and Hess, 2008; Plank and Staritz, 2009 and 2011; and www.globalvaluechains.org.

- iv. The institutional context assesses how local, national, and international regulations, policies, and contexts shape GVCs

Most research has focused on the governance dimension and the role of lead firms in governing GVCs.

The role played by lead firms is highlighted in various typologies of GVC governance. The initial distinction between producer-driven and buyer-driven chains was introduced in the mid-1990s to highlight the rise of global buyers.⁴ The novel feature of buyer-driven chains is that lead firms are not vertically integrated transnational manufacturers but large retailers (e.g., Walmart, J.C. Penney, Marks & Spencer, and Tesco) and global brands or marketers (e.g., Nike, The Gap, and H&M) (Gereffi, 1994 and 1995). Taking into account the increasing complexity of GVCs, a more differentiated typology of GVC governance patterns was developed to identify **three network forms of governance** between the two extremes of markets and hierarchies (i.e., vertical integration): modular, relational, and captive (Gereffi, Humphrey, and Sturgeon, 2005). In relational networks, interactions between firms are frequent and complex and characterized by high asset specificity that is managed through reputation, social, and spatial proximity or family and ethnic ties. Modular networks are characterized by lower degrees of mutual dependence and greater reliance on codified instead of tacit knowledge. In contrast to relational and modular networks, in captive networks, relationships are more asymmetric because suppliers tend to depend on lead firms that exert a high degree of control and seek to lock suppliers into the relationship. In this typology, the mode of governance is determined by the following three variables:

Governance analyzes the relationships between actors in value chains, highlighting the power relations within value chains and particularly the role played by lead firms in establishing specifications, standards and rules according to which global industries operate. With its focus on power it is more than merely coordination including the flow and allocation of resources, benefits and risks within chains, and entry barriers and upgrading prospects (Gereffi 1994, 1995).

- i. The complexity of the information that suppliers need to produce for specific lead firms
- ii. The ability to codify this information
- iii. The capabilities of suppliers

⁴ “The former are characteristic of more capital-intensive industries (e.g., motor vehicles) in which powerful manufacturers control and often own several tiers of vertically organized suppliers, as opposed to light manufacturing industries (apparel being the classic case), where far-flung subcontracting networks are managed with varying degrees of closeness by designers, retailers and other brand-name firms that market, but do not necessarily make, the products that are sold under their label.” (Gereffi, 1994: 112)

The concept of **upgrading** has developed into a cornerstone of GVC research. Upgrading is often used in a broad sense as a process by which economic actors—countries, regions or firms—improve competitiveness and their positions in the international hierarchy of value-added activities, moving from low-value to high-value activities (Bair and Gereffi, 2003). Humphrey and Schmitz (2001 and 2002) proposed an influential upgrading classification that has been discussed and extended by various authors (e.g., Gereffi and Sturgeon, 2013). Upgrading moves away from static concepts of competitive advantage and stresses that targeting production efficiency is not enough.

While production and cost efficiency is often a necessary condition for entering and participating in value chains, critical notions are also functional upgrading, which involves repositioning in chains and entering different value-adding activities, and strengthening backward and forward linkages; and channel upgrading, which involves diversifying or moving to new markets. This puts the focus on specific segments of value chains that offer higher added value and rewards, rather than simply focusing on efficiency improvements and avoiding being locked into low-value activities (Giuliani, Pietrobelli, and Rabellotti, 2005). Entry into value chains is also a relevant dimension for value chain interventions that support the entry of economic players—often SMEs—in local, regional or global value chains.⁵

Upgrading involves production efficiency at the firm level (**process upgrading**), but also **product, functional, and channel upgrading**:

1. **Process:** Reduce costs, increase productivity and improve flexibility by reorganizing the production system or investing in new or better equipment/technology.
2. **Product:** Shift to more sophisticated, complex or better-quality products.
3. **Functional:** Acquire responsibility for more or higher value-adding activities both horizontally and vertically and strengthening backward and forward linkages.
4. **Channel:** Diversify to new buyers or new geographic or product markets.

Some authors also include “entry upgrading” when new actors attract chain leaders and begin to participate in specific value chains

Source: Adapted from Humphrey and Schmitz, 2001 and 2002; Gereffi and Fredrick, 2010; Frederick and Staritz, 2011; Gereffi et al., 2005; Fernandez-Stark et al., 2011; Gereffi and Sturgeon, 2013.

The GVC literature stresses that upgrading processes are shaped by the type of value chain in which developing country firms are inserted, and in particular by the governance structure of the chains. Governance structures determine the power relations among the different actors and the flow and allocation of resources within chains, hence, developing countries firms’ prospects of upgrading and the distribution of benefits along the chain (Gereffi, 1999; Gereffi, Humphrey, Kaplinsky et al., 2001; Gereffi et al., 2005; Kaplinsky and Morris, 2001; Pietrobelli and

⁵ Some authors have proposed conceptualizing it as a further upgrading dimension (Fernandez-Stark et al., 2011).

Rabellotti, 2007). Lead firms', global suppliers', and intermediaries' governance strategies can enhance and hinder upgrading for supplier firms (Humphrey and Schmitz, 2001 and 2002). Despite important sector, country, and firm differences, chain leaders are generally more supportive in process and product upgrading than in functional upgrading, which is only supported if it does not encroach on the core competencies of lead firms in activities offering higher returns such as design, branding, marketing, and R&D (Kaplinsky and Morris, 2001; Kaplinsky, 2005).⁶

A narrow definition of **competitiveness** captures production efficiency at the firm level, hence, the ability of a firm to offer products that meet the quality standards of markets at prices as low as or lower than competing firms. Firm-level competitiveness depends on a wide range of factors that relate to the internal capabilities of the firm, the dynamics in value chains, and the institutional, policy and macro environment. Value chain competitiveness involves a more systemic understanding of competitiveness (Giuliani, et al., 2005).

In recent years, the GVC approach, in particular research on upgrading, has received considerable attention from development country governments, international and regional organizations, and donors (Humphrey and Navas-Aleman, 2010; Stamm and von Drachenfels, 2011). The GVC approach “(...) opens up **a way of looking at trade and production networks as opportunity structures for organizational learning** on the part of developing countries. Not only can local firms access international markets via such chains, but the implication is that firms can actively seek to change the way that they are linked to global chains in order to increase the benefits they derive from participation in them (...)” (Bair, 2009: 29). This is exactly the focus of value chain interventions: improving market access conditions and upgrading opportunities, and changing the distribution of risks and benefits in GVCs in favor of developing country firms and producers.

b. How Value Chain Approaches Improve on Traditional Private Sector Development Approaches

The increasing importance of the GVC approach in policy and program formulation is closely related to the shift toward private sector development approaches in the early 1990s, which stressed the important role of the private sector in furthering economic development, generating employment, and reducing poverty. Approaches encouraging private sector development have evolved from being focused on the supply side to more interventions on the demand side (Humphrey and Navas-Aleman, 2010). In the 1980s, the focus was on firm-level assistance, providing financial and other support services to individual firms. In the 1990s,

⁶ Giuliani, et al. (2005) suggest that the prospects for upgrading also depend on the technological features of the industrial sectors: where the tacit components of technology are central, an active lead firm role to support upgrading is expected. This contrasts with sectors where knowledge is more codified and a modular organization of production is possible.

focus shifted to enhancing the functioning of markets, including the development of markets for business development services, and improving the overall business environment. In the late 1990s and the 2000s, value chains and other concepts that focus on linkages between firms and private and public support institutions, such as clusters, increased in importance (UNIDO, 2010). In this context, donor agencies often combine GVC approaches with their existing private sector development programs.

The GVC approach provides an analytical framework for designing value chain interventions. In particular, the following aspects are relevant and differentiate these interventions from more traditional private sector development interventions, such as local economic development, enterprise development, market development, clusters or livelihood approaches (Riisgaard, Fibla, and Ponte, 2010).

Multi-scalar sector-based framework: In contrast to conventional social sciences approaches that largely focus on individual firms and/or nation states as the unit of analysis, the GVC approach is based on a multi-scalar framework since trade links go beyond nation states and production is integrated through cross-national chains. With its focus on sectors and inter-firm relations, the GVC approach can integrate the global with the local and the firm-level with the meso and macro levels.

Competitiveness goes beyond the individual firm: Competitiveness is not only determined by the actions and performance of individual firms but also by their interactions with other firms, suppliers, buyers, and service providers. Therefore competitiveness requires a systemic understanding and value chain alignment (Kaplinsky and Readman, 2001; Kaplinsky and Morris, 2001) and a look beyond the individual firm (Humphrey and Navas-Aleman, 2010).

Important role of lead firms and governance structures: The value chain approach acknowledges that value creation and trade are largely structured and governed by lead firms. Lead firms control resources and enjoy market power; they structure and govern value creation through product specifications, cost, performance requirements, and standards that in turn may constrain entry and upgrading of firms. Understanding the strategies and requirements of lead firms and the resulting power asymmetries is essential to determine how entry barriers are created and how risks and benefits are distributed.

Focus on access and upgrading: The focus on upgrading opens the way to policy-related research and policy formulation. Conventional trade theory sees trade patterns determined by comparative advantage and the underlying differences in factor endowments across countries. In contrast, the GVC approach shows how trade is coordinated and strategically shaped by

lead firms that react to and influence production factor availability (Altenburg, 2007). Further, by going beyond the traditional focus on production, the concept of value chain upgrading reveals how value can be created through a variety of non-manufacturing activities (e.g., design, logistics, and distribution) and factors such as variability, reliability, responsiveness, flexibility, and adaptability.

Dynamic nature of GVCs and upgrading: Value chains are not static and change their organization, governance, and linkages with changes in markets and competition. Upgrading is also a dynamic and relative (to other firms and producers in the global economy) concept in an uncertain world of high competition and rapid innovation (Kaplinsky, Readman, and Memedovic, 2009).

Applicability to various types of firms and issues: The GVC approach takes into account that value chains are composed of different types of firms from large lead firms and intermediaries/traders, to global first-tier suppliers, to SMEs, smallholders, and micro enterprises. These different actors have distinct positions in value chains and face diverse constraints. The GVC approach addresses these differences in an integrated fashion (Gereffi, 2013).

Identification of bottlenecks and leverage points: The meso-level approach of GVCs is a useful starting point for policy interventions because industries and even GVC segments are quite different (e.g., competition, requirements, and standards). The GVC approach can help define what is needed to make enterprise development more effective by identifying constraints and opportunities for different actors and bottlenecks. Further, change agents and leverage points along value chains can be identified to better target interventions.

5. Value Chain Interventions

Since the late 1990s, value chain interventions have increased in importance in the programs and policies of local and national governments, nongovernment organizations (NGOs), international and regional organizations (including UNIDO, ILO, ITC, FAO, and UNCTAD), and national development agencies (including USAID, GIZ, and DANIDA). They promote private sector, market-based, and, often, export-oriented development and address a wider range of social and environmental development issues (Stamm and von Drachenfels, 2011; Henriksen, Riisgaard, Ponte, et al., 2010).⁷

⁷ Some agencies have not developed an explicit value chain approach, but GVCs have an important role in broader programs such as Department for International Development's Market Development for the Poor (M4P). M4P emphasizes the development of capacities and capabilities among poor producers in developing countries so they can react to market conditions and opportunities.

Interventions can be classified as those targeting **access and integration into GVCs** and those targeting **value capture within GVCs**. The former type of interventions is particularly important in lesser developed countries and regions that are not yet integrated into GVCs. Such interventions focus on attracting investments, lead firms, global suppliers, and intermediaries (i.e., by creating a favorable business environment, reducing investment barriers and attracting foreign direct investment), easing GVC functioning (i.e., by reducing trade barriers and improving logistics and other hard or soft infrastructures), and improving the supply capacity of local firms to interact with GVCs (i.e., by developing skills and business linkages). The latter type of interventions is particularly relevant for more developed countries that are already integrated into GVCs but aim to capture higher economic benefits. In such interventions, the capacity to develop better technological capabilities and intangible assets, and to attract innovation, is especially important. This requires policies to help firms upgrade and enter higher value activities within GVCs.

Therefore value chain programs include a variety of possible levels of interventions that call for consideration of a coherent system of interdependent relationships since value chains are systemically embedded (Schulpen and Gibbon, 2001). Programs include firm-level interventions and linkages with other firms along value chains, including suppliers, service providers, intermediaries or lead firms, or clusters. Interventions that develop private and public support institutions (e.g., business associations, technical centers, business development services providers, quality and SMTQ institutions, training institutes and universities, and trade unions) have important roles in enabling and sustaining firm-level upgrading processes. The initiatives of actors at the firm and institutional levels also depend on the national policy framework, business environment, and macro-regional or global policy context.

a. Developing a Typology for Value Chain Interventions

In an effort to develop a typology, it may be useful to identify the main value chain objectives of interventions (Humphrey and Navas-Aleman, 2010):

- i. **To strengthen the weakest link** to address a possible bottleneck in the chain (e.g., improve capacities and capabilities of local input suppliers);
- ii. **To strengthen the linkages** between firms to make the chain more productive (e.g., by improving flows of knowledge and resources between local firms and lead firms, global suppliers/intermediaries, or suppliers of inputs and capital equipment, by

improving the efficiency at an identified bottleneck by building trust or setting up institutions to manage and reduce risks);

- iii. **To create new or alternative links** in the chain to link local firms to GVCs or to new lead firms, global suppliers/intermediaries, and end markets.

Some interventions may also explicitly focus on chain leaders, particularly lead firms but also global first-tier suppliers or intermediaries (**work with the strongest link**, Stamm and von Drachenfels, 2011).

Value chain interventions have several common characteristics. However, they also differ along certain dimensions, most importantly with regard to (i) the scope of the interventions, the levels addressed, and the fields of actions; (ii) the patterns of engagement and the sectors and actors targeted; and (iii) their main objectives and explicit focus on broader development objectives, including, most importantly, poverty reduction. In what follows we develop a typology of value chain interventions based on earlier typologies and guides (e.g., GIZ, 2008; Humphrey and Navas-Aleman, 2010), evaluations of donors' value chain interventions, and observation of experiences from the field.

The main dimensions to classify value chain interventions include the following (see Table 1 and Figure 1):

1. **Beneficiaries:** Interventions have a number of beneficiaries, including the beneficiary country and sector or product, the geographic and social target, and the scope of the intervention (i.e., local, national, regional, or international).
2. **Mediators and funders:** Interventions can be mediated through different actors, most importantly the government, the private sector, civil society organizations (CSOs) and NGOs, and donors. Mediators have to be differentiated from funders; the two may overlap but are often different actors.
3. **Patterns of engagement:** Per Humphrey and Navas-Aleman (2010), patterns of engagement include the following:
 - a. **Lead firm projects** focus on large firms and the development of their supply chains. These projects aim to incorporate SMEs into the value chains and encourage the transfer of knowledge and resources from lead or other international firms (such as global suppliers or intermediaries) to local suppliers. Lead firm projects often take the form of linkage or matchmaking, supplier development, outgrower schemes, and technology transfer projects. In these projects, lead firms

are often key implementing partners and donor assistance is sometimes even funneled through them. Such projects seek to provide advantages for lead firms, global suppliers, or intermediaries in improving their local sourcing conditions, but they also try to change lead firms’ strategies to make them more inclusive, sustainable, and advantageous for (existing and potential) local suppliers.

- b. **Value chain linkage projects** target missing, weak, or inefficient links between different actors in value chains. In value chain linkage projects, local firms or producers are directly assisted to access markets, develop linkages and upgrade their activities without any coordination with particular lead firms. The focus of these projects is often on micro and small enterprises (MSEs) and small producers.
- c. The two previous categories may be complemented by projects that develop and support service providers and other support institutions that affect how well value chains operate, as well as the ensuing entry and upgrading opportunities. Such projects focus on the institutional level and may be called **public–private partnership (PPP)** projects for the partnerships they often develop.⁸

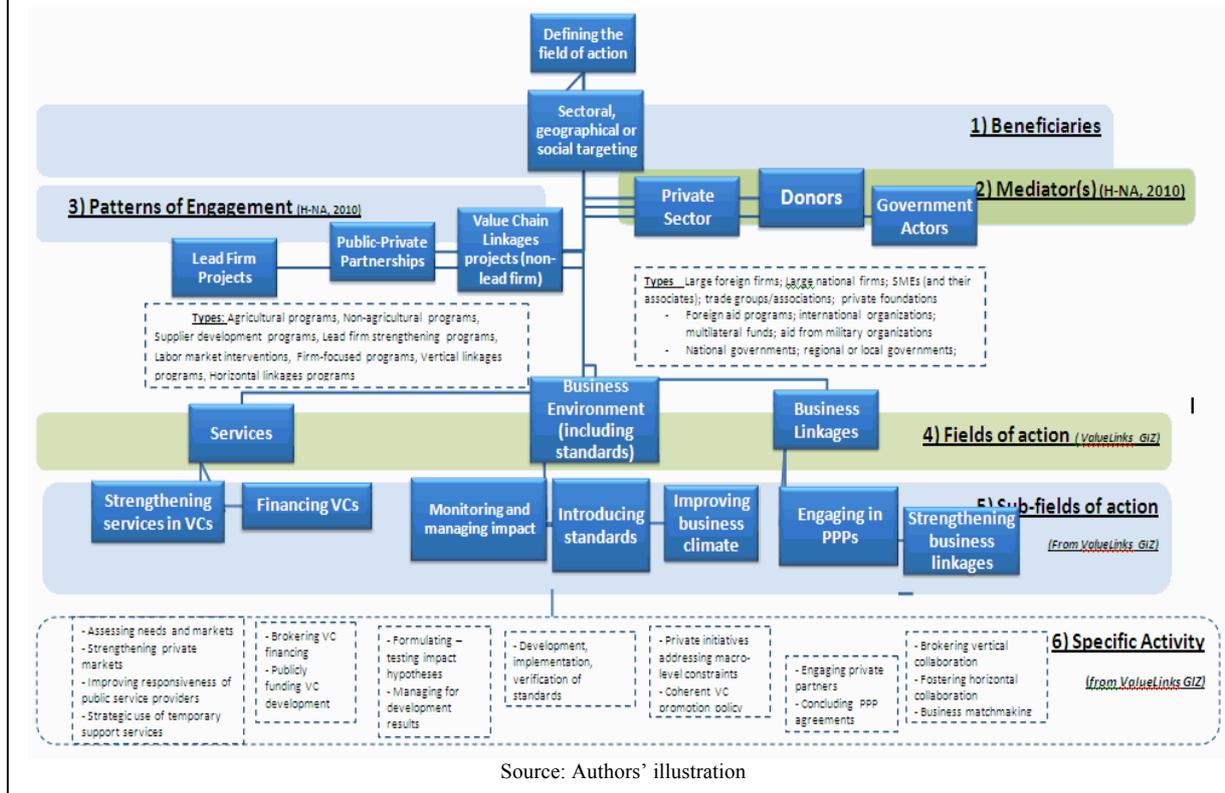
Table 1: Dimensions for a Value Chain Typology

1. Beneficiaries				
Sector/product	Geographic	Social	Scope (local-global)	
2. Mediators and funders				
Government actors	Private sector	CSOs/NGOs	Donors	
3. Patterns of engagement				
Chain leader/ Lead firm (top down)	Value chain linkages (bottom up)	PPP (horizontal)		
4. Fields of action (and sub-fields)				
Business linkages	Services	Business environment		
5. Upgrading-related objectives				
Supply chain: backward and forward linkages	Process/cost efficiency	Product/quality	Functional/ new activities	Channel/ new end markets

CSO = civil society organizations; NGO = nongovernmental organizations; PPP = public–private partnerships
Source: Authors’ analysis.

⁸ In a way, these three approaches could be also described as top down (lead firm projects), bottom up (value chain linkage projects), and horizontal approaches (service providers or other private/public support institutions).

Figure 1: Dimensions for a Value Chain Typology



4. Fields of actions: Interventions can be classified with respect to the fields of actions they focus on. We use the GIZ Value Link manual as a basis for the classification of activities, where three fields of actions are identified: business linkages, services, and business environment. These three main fields include several sub-fields: business linkages include strengthening private business linkages and associations and engaging in PPPs; services include strengthening services in and financing value chains; and business environment includes introducing social, ecological, and product quality standards, improving the business environment of chains, and monitoring and managing impact. The sub-fields can be further differentiated in specific activities (GIZ, 2008: 2):

- Strengthening private business linkages and associations:** The focus is on coordinating and improving vertical and horizontal business linkages.
- Engaging in PPPs:** These activities support PPPs and explore the possibilities of taking advantage of the direct or indirect contributions to development made by private businesses.

- c. **Strengthening services in and financing value chains:** These activities develop support service providers, work on service market failures, and build the capacity of service providers.
 - d. **Introducing social, ecological, and product quality standards:** The focus is on how to promote value chain upgrading by developing and implementing standards, and by building quality assurance schemes as well as verification systems and mechanisms.
 - e. **Improving the business environment of chains:** These activities focus on advocacy to and influence on relevant government institutions.
 - f. **Monitoring and managing impact in value chain promotion.**
5. ***Upgrading-related objectives:*** Production related objectives cover the different dimensions of upgrading, in particular upgrading related to
- a. process/cost efficiency (i.e., improving technology and production, management and organizational processes, and increasing the size and strengths of the existing value chain);
 - b. product/quality (i.e., developing more sophisticated, higher-quality products and diversifying products);
 - c. functional/new activities (i.e., increasing the functions performed by firms shifting to higher-value and higher-skill activities);
 - d. channel/new end markets (i.e., diversifying end markets and buyers in the same or new export, regional, or domestic markets).

Entry (i.e., insert new actors that were not previously participating in local, regional, or global value chains) is another strategic objective that some authors consider upgrading-related. We tend to consider entry a preliminary necessary and inter-related condition for upgrading. An additional element to consider in classifying GVC interventions is whether broader development objectives are integrated in the intervention, in particular poverty reduction but also social and environmental objectives such as quality of employment and decent work, gender equality, and environmental sustainability.⁹

⁹ Some interventions attempt to reach the poor through sectoral (targeting sectors where the poor are likely to be engaged), geographical (targeting areas where the poor live), or socio-economic targeting (working with specific groups of poor and vulnerable people) (Henriksen et al., 2010).

6. Overview of Donors' Value Chain Projects

a. Relevant Multilateral and Bilateral Donors' Value Chain Projects

This section gives an overview of value chain interventions by relevant donors. The focus is on the approach used by donors and not on specific projects. Getting an overview of approaches and types of projects is difficult because only part of the information is publicly available and since often, particularly in regional and international organizations, several departments/units are involved in value chain interventions that have different approaches, objectives, and beneficiaries and do not coordinate with each other. Hence, there is a vast range of activities implemented under the value chain label, even within single organizations. There are two main forums for coordinating donors' activities on value chains: the Donors Committee on Enterprise Development (DCAD)¹⁰ and the UN Value Chain Development Group (UN VCD Group).¹¹ The following overview has been compiled on the basis of website information and publications regarding value chains of the respective organizations, as well as on existing reports and evaluations that have assessed value chain programs and projects of different donors.¹² For the UN organizations, the overview builds on Stamm and von Drachenfels (2011), which describes the value chain interventions of seven UN organizations (IFAD, ILO, UNIDO, UNDP, ITC, UNCTAD, and FAO) based on overviews written by the organizations themselves. Table 2 summarizes the approaches, main foci, and differences of the donors based on the classification developed above. Appendix 1 discusses these approaches in more detail. Many value chain interventions focus solely on parts of the issues and constraints and do not take a consistently systemic or holistic approach to analysis and interventions (Fernandez-Stark et al., 2012).¹³

¹⁰ DCAD has more than 20 member agencies, including bilateral donor agencies and international organizations such as FAO, IFAD, ILO, OECD, UNDP, UNIDO, and the World Bank. It has an inter-agency database on developing value chains, linkages, and service markets and provides information from many agencies, working on value chain interventions and enterprise development.

¹¹ The UN VCD Group works to increase the coherence of the UN's work on value chain development and involves ten UN agencies: FAO, IFAD, ILO, ITC, UNCDF, UNCTAD, UNECE, UNDP, UNIDO, and WFP. The Group aims to enhance effectiveness and recognition of the UN system as a credible partner in value chain development, and learning, coordination, and collaboration among UN agencies in the formulation and implementation of value chain development initiatives at the country and regional levels (Stamm and von Drachenfels, 2011).

¹² Although there has been considerable policy interest in GVCs and increasingly value chain interventions have been used by donors, only recently have studies and evaluations emerged that compare different approaches, develop typologies, and assess the effectiveness of such interventions. The most important recent comparative assessments of GVC interventions include Stamm and von Drachenfels (2011), Humphrey and Navas-Aleman (2010), Henriksen et al. (2010), Mitchell and Coles (2011), and Fernandez-Stark et al. (2012).

¹³ In this regard, Fernandez-Stark et al. (2012) propose a *Four Pillars model* that focuses on the necessary preconditions to overcome the barriers to participate in value chains. The pillars are Access to Market (linkages, preferences, certifications, and standards); Access to Training (technical, entrepreneurial, financial literacy, and

Table 2: Overview of Donors' Value Chain Interventions

Framework	World Bank	UNIDO	ILO	ITC	GIZ	USAID
Value chain approach	focus on cost-based analysis and benchmarking; link to logistics chains and corridors	guide for systemic industrial value chain analysis but diverse approaches	common guide but diverse approaches; focus on cost structures	focus on cost structures and markets	Value Links manual; focus on cost structures, markets, and stakeholders	Value Chain Development Wiki; focus on cost structures and markets
Beneficiaries	largely governments, all sectors, focus on global chains	manufacturing and agri-processing, global and local chains	all sectors, global and local chains	all sectors, small businesses, global chains	all sectors, small producers, rural areas, global and local chains	all sectors, MSEs, global and local chains
Patterns of engagement	PPP, focus on policy context	lead firms, linkages, PPP	lead firms, linkages, PPP	linkages, PPP	linkages, PPP	linkages, PPP
Fields of action	business enabling environment/ investment climate, financing value chains	business linkages, services, standards	business linkages, services, social dialogue	business linkages, services, trade-related infrastructure	business linkages, services, support of cooperatives and associations	business linkages, services
Upgrading-related objectives	process/cost efficiency	process/cost efficiency, upgrading	process/cost efficiency, upgrading	process/cost efficiency, upgrading	process/cost efficiency, upgrading	process/cost efficiency, upgrading
Broader considerations	focus on macro level, public policy, institutional and infrastructure factors	focus on firm-level, value addition, and meso level capacity building	focus on micro and meso capacity building, horizontal linkages	focus on micro and meso level, exports, stakeholder involvement	focus on micro and meso level, market structures, and market-based services	focus on micro and meso level
Development considerations	—	environmental impacts	social impacts, employment generation, and working conditions	—	poverty reduction, social impacts, employment generation	poverty reduction

Source: Authors' elaboration.

b. The IDB's Value Chain Projects¹⁴

Several units/departments at the IDB have developed GVC-inspired projects. Some are explicitly labeled as value chain interventions, while others are not even though they have similar objectives and use similar approaches. Value chain interventions, often driven by governments, are not centrally planned or coordinated but have emerged out of a mix of client demands, unit/department strategies, and donor preferences. So far, there appears to be limited overview and coordination of and no common understanding or framework for such interventions, which makes identifying them inside the IDB difficult.

soft skills); Access to Finance (infrastructure, equipment, certifications, and standards); and Collaboration and Coordination, Horizontal (among producers) and Vertical (among value chain actors).

¹⁴ This section has been developed through a detailed search of keywords in IDB repositories of projects that appear to follow a value chain approach. The search could not be systematic and necessarily fails to include all value chain interventions. The results need to be interpreted as indicative of a general tendency rather than proofs of detailed hypotheses. The authors acknowledge Chris Hooton for his work on this search.

In order to get a snapshot of the IDB's GVC-related programs, we searched through the Bank's databases and identified 132 interventions classified as value chain interventions in a broad sense since 2000. Total IDB financing for these interventions amounted to US\$813 million (Table 3). We derived the following conclusions based on our analysis of a sample of projects:

- The sample covers a wide range of projects that focus on different issues and use value chains as a label rather than as a clear approach with defined concepts. The sample projects also differ in their scope and budgets; some focus on a few specific interventions, while others address a large range of constraints.
- The sample projects can be classified based on typologies developed in the literature, but the classification is not straightforward given the range of different approaches used and activities covered—sometimes within one project and across projects.
- Key value chain concepts and issues are missing in the description of most sample projects. For example, an explicit analysis of lead firms, governance structures, rents, and value addition is often not included in the project overview. In some projects, upgrading is reduced to entry and production efficiency without taking into account functional, channel, and chain upgrading.
- Value chain selection and value chain analysis—which are prerequisites for value chain interventions—are not conducted or discussed in the majority of the sample projects. It is therefore not clear how value chains have been selected, objectives identified, specific types of interventions developed, and stakeholders involved in the process. There is also often no reference to any analytical framework to develop an upgrading strategy, identify constraints, opportunities and objectives, and design interventions.

Table 3: Overview of Budget of the IDB's Value Chain Interventions

Costs by funding type	No. of projects	IDB financing (US\$)	Total costs (US\$)	IDB share (%)
Loan	14	723,600,000	926,160,000	78
Multilateral Investment Fund	71	73,367,776	136,744,165	54
Small and special projects	10	8,650,000	18,688,550	46
Technical cooperation	21	6,576,963	8,109,363	81
Special operations	5	879,336	879,336	100
Total		813,074,075	1,090,581,414	75

Source: Authors' analysis.

- In the sample, broadly three types of projects can be identified (see Table 4 after the following descriptions):
 - **Type 1: value chain linkage projects that focus on MSEs and small producers in largely agriculture or agri-based processing activities.** A significant number of sample projects focus on MSEs and small producers in agricultural sectors and aim at supporting their integration into local or global value chains. Such projects seem to be especially relevant for lesser developed IDB member countries and rural areas. Projects generally emphasize enabling entry, increasing productivity and efficiency, and improving products and quality to be able to integrate into value chains. Hence, the goal is to create new links or strengthen existing links, and to concentrate on the weakest link. Some projects focus explicitly on horizontal linkages in the form of linking producers and other business associations to facilitate upgrading. Others focus on establishing or improving private or public institutions to support producers in terms of training or standards. There is often no specific emphasis on end markets and buyers, except sometimes on large domestic firms (see also Fernandez-Stark et al., 2012). Given the importance of these types of projects and their similar objectives, the development of a common understanding and approach would be useful. An assessment of their objectives, approaches, patterns of engagement, fields of actions, and extent of focus on vertical and horizontal linkages as well as on private and public support services would also be useful. A more consistent focus on horizontal linkages to increase competitiveness could be useful given the size and challenges of

beneficiary firms, as well as on market dynamics and the potential offered by different value chains.

Table 4: Overview of Typical Examples of the IDB’s Value Chain Projects

	MSEs in agriculture	Larger manufacturing firms	CSR and environmental focus
Beneficiaries	MSEs and small producers, agriculture and related sectors, local to global chains	medium-sized and larger firms, manufacturing sector, focus on global chains	SMEs, local to global chains of larger buyers
Patterns of engagement	largely value chain linkage projects (one lead firm project)	value chain linkage projects (also suitable for lead firm projects)	value chain linkage projects (also suitable for lead firm projects)
Fields of action	largely services, business linkages	services, business linkages	business environment, improving standards
Upgrading-related objectives	integration in value chain, productivity and quality improvements, process and product upgrading	diversify markets, process efficiency	diversify markets
Value chain objectives	weak, new, and strengthening links	strengthening links between firms	weak, new, and strengthening links
Broader considerations	to varying extents focus on horizontal linkages, business associations, and private–public institutions	horizontal linkages, innovation system	service providers
Development considerations	largely poverty reduction	eco-efficiency	CSR
Examples	orchards in Guatemala; milk in Ecuador; sesame in Bolivia; fruits in Brazil; agriculture and tourism in Dominican Republic	technology transfer and eco-efficiency in Brazil	sustainable value chains/CSR in Argentina

- **Type 2: projects that focus on larger firms in manufacturing and take into account lead firms and technology transfer.** Projects that focus on medium-sized and large firms and on capturing higher value within value chains, upgrading, and innovation and technological capabilities may be more relevant for higher income countries. Such projects are underrepresented in the sample and may represent an area of future development. One project that can be classified in this category focuses on strengthening eco-efficiency (resource use and energy consumption), competitiveness, and market opportunities of SMEs by enhancing technology transfer.
- **Type 3: projects that focus on corporate social responsibility (CSR) and environmental sustainability.** These issues are linked with competitiveness, but in the sample projects it is not well explained if and how CSR issues and competitiveness can go together. The assumption behind a typical project is that raising awareness and building capacity are required for SMEs to comply with CSR standards, and that increased CSR knowledge should increase the competitiveness of SMEs and help

SMEs integrate into value chains that consider CSR important for their business success. The objective is to sensitize the business community to the importance of CSR using promotions, seminars, international conferences, and case studies.

7. Recommendations and Knowledge Gaps

This section discusses lessons learned based on a review of the GVC literature and value chain interventions. Through these lessons, it is possible to identify key issues for the IDB to consider in its efforts to develop a common understanding and broad framework for value chain interventions and enhance the effectiveness of these interventions by improving the design and implementation of operations. The section also points out knowledge gaps, topics that are inadequately understood, and questions that might inform future analytical and applied study.

a. Key issues for Value Chain Interventions

It is important to address the following eight issues to increase the effectiveness of value chain interventions. Each is discussed further below.

Key issues for Value Chain Interventions
1. The need for a common understanding of core value chain concepts and approaches, including an assessment of governance structures and power relationships that influence competitive pressures, entry barriers, and upgrading prospects.
2. The development of a tailor-made, context-specific upgrading strategy, including an assessment of the complexities of upgrading processes and the costs, risks, and benefits.
3. A useful role for and involvement of lead firms, global suppliers, and intermediaries/traders, taking into account their ambivalent role as partners in ensuring upgrading but also with diverging interests from supplier firms and countries.
4. The importance of innovation systems and local learning efforts to enable upgrading processes within GVCs and to attract GVCs more willing to support upgrading and increase local sourcing and embeddedness.
5. The importance of clusters and collective actions to facilitate upgrading within value chains through collective efficiency, provision of club and public goods, and as a means of implementing interventions.
6. Private and public stakeholder involvement and cooperation, focusing on building public capabilities for strategic policy formulation and implementation and on developing avenues for private–public cooperation.
7. The exploitation of market diversification and the potential of emerging, regional, and domestic markets and development of consistent value chain programs and policies.
8. The integration of different development objectives, including poverty alleviation, into value chain policies and programs.

Source: Authors' analysis.

i. Common understanding of core value chain concepts and approaches

Value chain interventions encompass a variety of objectives, approaches, concepts, and definitions and overlap with other private sector development approaches. Given the popularity of value chain interventions, there is also a tendency to label generic initiatives to support local firms and private sectors as value chain interventions. This creates confusion and risks that these interventions lose focus and transform into a “label” with no real underlying concept. Given the broad use of value chain approaches by governments and donors, it is crucial to have a common understanding of the major concepts of this approach and some standardization of value chain interventions. Currently, such a common understanding seems to be missing within the IDB but also among donor agencies and governments.¹⁵ Based on this understanding, different roles, advantages, and competencies can be identified and intra- and inter-organizational coordination and cooperation improved. This paper developed suggestions for such definitions and a framework that could be the basis of a discussion to agree on common definitions and frameworks.

ii. Tailor-made, context-specific upgrading strategy

The focus of value chain interventions is the development of an upgrading strategy based on an analysis that, firstly, maps value chains to show where firms of different sizes and types and other actors are located and, secondly, identifies value chain drivers, governance structures, constraints, and opportunities. Several types of upgrading have been identified that are the basis of many value chain interventions, including entry into value chains for firms that were not or were only beginning to participate in value chains. Process upgrading is driven by competition and the need to cut costs and/or increase output to increase production efficiency. Product upgrading is often motivated by changes in end markets, usually stemming from changes in lead firms’ requirements and consumer preferences concerning product quality and standards. Functional upgrading is motivated by the desire to eliminate intermediaries, improve the flow of information, and reposition roles in value chains by developing higher value and skill activities. Channel upgrading is motivated by the desire to diversify markets and buyers and in so doing reduce risks. Of course there is often a connection between different types of upgrading. Thus, there is a link between product and channel upgrading in that product upgrading may be a requirement for entering new markets. Similarly, the creation of direct relationships between producers and lead firms (functional upgrading) facilitates the flow of information about the type and quality of products in

¹⁵ For recent exceptions see Cattaneo et al. (2013) for the World Bank and Fernandez-Stark et al. (2012) for MIF.

demand (product upgrading). Process upgrading is also often a prerequisite for product and channel upgrading.

Upgrading is often perceived as a mechanical and linear process. But upgrading processes are complex, contested, and relative (Morrison et al., 2008). Upgrading to more efficient production processes, higher-value products, and/or broader functions may be advantageous for one firm or country. But if many firms or countries upgrade and offer similar levels of efficiency, product sophistication, and functions, these capabilities may become the new industry standards for suppliers and may not lead to extra rewards. In this context of increased competitive pressures “(...) all potential suppliers are ‘running to stand still’” (Knorringa and Pegler, 2006: 474). Hence, although upgrading is a necessary condition for gainful integration in the global economy, it may not be sufficient to secure higher and sustainable incomes and broader development effects (Kaplinsky and Readman, 2001). A careful analysis of the costs, risks, and benefits involved in upgrading processes suggest that it may not always be beneficial to “go up the value ladder”. Building and deepening capabilities at the same task in the value chain, as is emphasized through process upgrading or diversifying end markets to lower-value but more stable markets, may be a safer or complementary strategy to moving to higher-value products and functions (Pietrobelli, 2007 and 2008). In sum, there is **no one-size-fits-all upgrading strategy** that is available for different industries and all circumstances because **upgrading strategies always need to be tailor-made and context-specific** and need to take into account local capabilities, value chain dynamics, and expected costs, risks, and benefits.

iii. Useful role for lead firms, global suppliers, and intermediaries/traders

Important issues in value chain interventions relate to market access and understanding and complying with the specific requirements and standards of markets and lead firms or global suppliers/intermediaries. In this regard, value chain interventions often try to mobilize and leverage the technological and organizational knowledge advantages and resources of lead firms. Lead firms define the requirements and standards that existing and potential suppliers have to meet, and hence know best what suppliers need to change to meet these conditions. Partnerships with lead firms secure access to orders and markets and hence production and employment. Lead firms are therefore used as points of leverage for upgrading local firms and producers (Altenburg, 2007).

Lead firm value chain projects often assume that the interest of lead firms can be easily aligned with supplier interests and broader development objectives in developing

countries. However, this assumption is often too easy (Neilson and Pritchard, 2011). Supplier development and knowledge transfer programs may align lead firm, local supplier, and public interests: thus lead firms' sourcing may become more efficient while local spillovers may lead to employment and improved competitiveness and technological skills in supplier firms. However, conflicts of interest between lead and supplier firms may also prevail. "Wherever (lead) firms seek to suppress technology transfer, externalize social costs, or restrict competition, this creates a conflict of interests with governments and other local stakeholders. (...) Lead firms often try to diversify their supply base in order to weaken the bargaining power of suppliers and be able to appropriate a larger share of value added... restrict capital formation in local firms and (...) even drive local firms into bankruptcy." (Altenburg, 2007: 30) Lead firms may further put pressure on the host or supplier country government to cut taxes and exempt them from certain requirements (such as national equity shares, contributions to skill development, and local content) that have the explicit objective of increasing local spillovers and value added and making foreign firms and their investment and sourcing strategies more locally embedded.

Therefore, value chain interventions need to find an adequate balance between supporting lead firms in their efforts to upgrade local suppliers and pursuing public interests potentially not congruent with those of the lead firms. Hence, in value chain interventions, the motivation and interests of lead firms need to be identified clearly, more so if lead firms are used as implementing agents. Humphrey and Navas-Aleman (2010: 65) conclude in their review of 13 lead firm projects: "Perhaps the most important task for the donor/facilitator is to get a commitment from the buyer that they will consider and work towards, in conjunction with the donor (and perhaps other actors in the area) the increase of the benefits that flow to the poor from their business operations and to consider the areas in which there is scope for enhancing the pro-poor impact of their business." Those benefits occur most directly if **lead firms engage in supplier development, knowledge transfer, and skill development of local firms**, producers, and workers. Projects that focus on changing the behavior of lead firms in order to make their sourcing and investment policies more locally embedded and socially inclusive will have significant impacts on the overall value chain and the opportunities for suppliers, as well as broader development impacts.

iv. *Stronger local learning and innovation systems*

The value chain approach also stresses the importance of upgrading non-firm actors such as states, regional and international organizations, business associations, trade unions, NGOs, service providers, research and training bodies, and regulatory institutions. An explicit account of the local innovation system may be crucial to exploit the potential of GVCs for upgrading, learning, and innovation (Morrison et al., 2008; Pietrobelli and Rabellotti, 2011). The innovation system framework focuses on how interactions among local firms, institutions, research and training bodies, and policy making agencies contribute to learning and innovation within firms. It stresses that innovation does not occur automatically but needs firms to invest in learning and building technological capabilities (Morrison et al., 2008). Bringing the GVC and innovation system literature together and understanding the implications for upgrading is fruitful for policy and program formulation (Pietrobelli and Rabellotti, 2011 and 2012). Learning mechanisms and possibilities can vary widely in the various forms of governance in GVCs. GVCs, in particular lead firms, may support learning and innovation, and improve local innovation systems. However, GVC dynamics may also block upgrading processes, in particular when they encroach on core competencies of other actors, either lead firms or higher-tier suppliers. Indeed, the relationship between innovation systems and GVCs is clearly two-way, with innovation systems also crucially influencing the capabilities of local firms and thereby the performance and functions of local firms in GVCs.

The focus on local innovation systems also reveals that technological efforts and absorption capabilities of local firms and public support may in turn increase lead firms' interest in supporting upgrading processes, locating higher-value activities, and sourcing higher-value products locally (Pietrobelli and Rabellotti, 2011). This implies that it is obviously untrue that entering GVCs—by itself—will lead to innovation and better industrial performance in developing countries. This is not a mechanistic and riskless process, and local firms need to invest in learning and building capabilities. Skill and workforce development plays a particularly important role in this process because the composition of skills varies systematically by industry, size of firm, and position in value chains (Gereffi, Fernandez-Stark, and Psilos, 2011; Barrientos et al., 2011). As the nature of knowledge changes along the value chain, the absorption capabilities of local producers need to change accordingly. Moreover, it may well be that the upgrading activities supported by lead firms are more related to their strategies to appropriate most of the benefits (e.g., to reduce leakages and speed up process or product development) than to learning opportunities for local firms and

producers. The local innovation system plays an important role in moderating these effects (Pietrobelli, 2008).

v. *Importance of clusters and collective actions*

Although value chains and clusters are often analyzed separately, they are inter-related phenomena. Upgrading processes of local firms in value chains are often enhanced through horizontal linkages and collective efficiency in local clusters (Pietrobelli and Rabellotti, 2007). The cluster perspective stresses inter-firm linkages and linkages between firms, service providers, and institutions as crucial for competitiveness, and the importance of joint collective action (Pietrobelli, 2007). Hence, firms that are part of networks and clusters can overcome the obstacles resulting from isolation through the (complex) equilibrium between competition and cooperation, and therefore improve productivity and performance.

Engaging in collective actions through institutional networks of firms, clusters, business associations, and training and research centers is an important path to entering and upgrading in value chains, in particular for smaller firms. Horizontal collaboration can facilitate upgrading in several ways. It can increase local firms' bargaining power, reduce buyers' transaction costs of dealing with large numbers of firms, and provide a platform for sharing information and demonstrating new products, processes, or technologies. By facilitating bulk purchasing of inputs or enabling large orders to be filled, horizontal linkages can help small firms generate economies of scale and interact with large buyers. Horizontal collaboration can facilitate firms' access to and (joint) provision of support services such as training, extension, or finance, and it can provide a platform for buyers to offer embedded services to larger numbers of suppliers.

vi. *Private and public stakeholder involvement and cooperation*

The involvement of private and public stakeholders in the development, design, and implementation of upgrading strategies and value chain interventions is crucial. Clearly, upgrading strategies require the commitment of the private sector actors that take market positions in the value chain and supply, produce, sell, and buy products (GIZ, 2008). The operations private actors engage in will depend, to a large extent, on economic incentives and their own capacity; public support can only be a part of the incentive to engage in the business. If economic incentives to private stakeholders are missing, even the best-designed intervention is doomed to fail (Riisgaard et al., 2010). Private sector actors have the essential knowledge to make key strategic decisions, such as where to focus on new or alternative

linkages in value chains; a donor or the public sector would hardly know what new or alternative linkages should be promoted (Humphrey and Navas-Aleman, 2010).

However, this involvement and coordination of different actors is often missing, and the creation and strengthening of public and private institutions and their forms of coordination is especially important (Rodrik, 2007; Morris, 2010). In most developing countries such institutions exist but they are often ineffective, inefficient, and lack a clear mandate. Public–private dialogue and collaboration is a necessary requisite for effective policies, particularly those that cannot be defined ex-ante and need a continuous process and pragmatic assessments and experiments (Pietrobelli, 2007). In particular cooperation between industry associations and public actors has played a critical role in this regard.¹⁶ **The value chain approach enables chain actors to coordinate with each other because it helps engage policy makers, firms, and other actors in formulating and implementing strategies.** This **process** can be more important than the value chain development and upgrading strategy itself. Such coordination process goes in line with the argument that industrial policy must focus less on policy outcomes and more on the process of policy formulation, bringing together private and public actors to solve problems in the productive sphere, with each side learning from the opportunities and constraints faced by the other (Rodrik, 2004; Kaplinsky and Morris, 2008).

vii. Exploitation of market diversification and potential of regional and domestic markets

Since the 1990s, and accelerated by the global economic crisis, demand has stagnated in the historically dominant Northern countries and shifted to emerging countries (Farooki and Kaplinsky, 2011). **End markets have important implications for the dynamics of GVCs, the upgrading prospects of firms, and the ensuing policies** (Staritz et al., 2011). Demand factors decisively shape upgrading possibilities not only by determining the size and growth of markets, but also by the nature of demand that is distinct in lower-income countries compared to traditional (high-income countries) end markets. Demand in high-income countries has become increasingly sophisticated, including high expectations with regard to quality levels, product differentiation, and rate of innovation, and high standards with regard to products and processes (Farooki and Kaplinsky, 2011). In contrast, demand in lower-income countries is generally for less sophisticated products in terms of quality, variety,

¹⁶ For example, in the apparel sector in Turkey, Bangladesh, Sri Lanka, and Mauritius (see Staritz, 2011; Staritz and Frederick, 2012).

fashion/innovation content, and frequency of deliveries, while process and product standards tend to receive less attention.

These different characteristics of demand have implications for entry and upgrading prospects in GVCs. The sophisticated demand requirements in high-income countries have increased entry barriers, furthering consolidation in GVCs and the emergence of large global first-tier suppliers that can fulfill these requirements. A number of less developed countries and smaller firms have been unable to meet these strict requirements and have been progressively excluded from GVCs. Entry barriers in GVCs feeding into lower-income countries tend to be lower, and the shift in demand to the South has resulted in new opportunities for exports of cheaper, less sophisticated, and lower-quality products. With regard to upgrading, evidence is mixed. On the one hand, the lesser importance attributed to process and product standards in developing country end markets may hinder upgrading prospects. On the other hand, the less sophisticated nature of demand could help suppliers develop higher-return activities, such as product development and design, branding, and marketing that are tailored to their new customers' needs that developing country firms know better, and where consumers tend to prefer "good enough" quality at a reasonable price rather than cutting edge technology for a premium (e.g., contributions in Staritz et al., 2011).

Hence, shifting end markets offer both opportunities and challenges for developing country suppliers. It will be important to understand and respond to these new end market dynamics and build up the required capabilities. To this meet this goal, policies will need to be broadened to consider the potential offered by emerging, regional, and domestic markets. **Local value chains may require different upgrading strategies** where standards and sophisticated processes are not as important.

viii. Different development objectives for value chain policies and programs

An increasing share of donors' value chain interventions emphasize their potential to reduce poverty by improving access of the poor to markets and support services, and improving the distribution of benefits. However, the extent to which reducing poverty and other development objectives (e.g., decent work, gender equality, and environmental sustainability) are explicitly integrated in value chain interventions varies considerably (Henrikson et al., 2010). Some approaches focus solely on making value chains work more efficiently and have little or no focus on poverty apart from the overall assumption that there is an automatic effect on the poor through income growth (Humphrey and Navas-Aleman, 2010: 22). Sometimes value chain interventions are qualified as "pro-poor" on the basis of the sectors, geographical

areas, or type of beneficiaries (i.e., small producers and SMEs) targeted. Some interventions more specifically address the constraints that prevent poor people or poor women from participating in or benefiting from value chain participation (Riisgaard et al., 2010). More specifically, the pro-poor focus is achieved by targeting micro and small firms and producers, while a focus on poor workers is less widespread. Poor people are therefore conceptualized as producers and entrepreneurs. However, many poor people are also workers (formal or informal) in large or medium-sized firms. Further, focusing on activities where poor people are concentrated does not take into account the necessity to open up new opportunities for the poor in the context of structural change. Thus “(...) poverty may be alleviated not so much by assisting poor people to continue pre-existing activities albeit in a more effective way, but rather by offering opportunities for different activities.” (Humphrey and Navas-Aleman, 2010) Recently, the GVC approach has been expanded to assess the relationships between economic and social up- and downgrading where social upgrading is understood as improved working conditions and the creation of higher-skilled, better-paid jobs (Barrientos et al., 2011). Economic upgrading can have different impacts on different groups of firms as well as workers and producers defined according to income, skills, formality, or gender. Understanding these impacts is crucial to assessing the overall development impact of upgrading processes and interventions.¹⁷

b. Knowledge gaps and open questions

This section identifies knowledge gaps as well as issues that are inadequately understood and questions that might inform future analytical and applied research. It asks what it is that we do not know and would need to know to understand value chains and their prospects for upgrading and enterprise development in developing countries and to build effective value chain interventions and programs.

Links between upgrading and entry barriers, economic rents, and sustained incomes:

The final objectives of value chain interventions are sustained incomes and national growth and development through participation in value chains. Upgrading is often a necessary but not sufficient prerequisite for this. The interactions between the different dimensions of upgrading, costs, risks, and rewards are complex and, despite the breadth of literature on GVC upgrading, require further analysis in the context of broader macro- and industry-level dynamics and structural change. Further analysis includes questions of inclusion and

¹⁷ For more background on the relationship between economic and social upgrading, see the Capturing the Gains Research Network website, www.capturingthegains.org/.

exclusion and the distribution of added value and incomes in the context of asymmetric but shifting market and power structures in the global economy. The concepts of economic rents and entry barriers remain critical for this analysis since they provide the key to sustainable added value and income growth (Kaplinsky and Morris, 2008). Such research is crucial for value chain interventions as, if not well designed, they may accelerate asymmetries and competitive pressures. First, interventions could help create winners and losers, thus triggering processes of inclusion and exclusion. Second, interventions focus on upgrading but generally not on how the benefits (and potential costs and risks) of increased productivity and competitiveness are distributed and if local firms can capture the gains of such improvements or if they are forced to siphon these gains to their lead firms that ultimately are the main beneficiaries of the intervention (Milberg and Winkler, 2010).

Linking value chains, clusters, and local learning and innovation systems: The branches of literature on value chains, clusters, and local learning and innovation systems are related in many ways, but they still focus on different aspects of competitiveness, upgrading, and enterprise development. For example, value chain approaches do not sufficiently address the upgrading process itself and the process of learning and technological capability development in and between firms. Also, local institutional contexts and relationships between local firms and non-firm actors are not often considered, in spite of their importance for upgrading (Giuliani et al., 2005). An additional area of research would need to seek a more consistent link between the literature on and concepts of collective efficiency, governance in value chains, and local contexts, and the aim of exploring the implications for value chain interventions.

Understanding the opportunities and challenges related to shifting end markets: Research and interventions still focus on high-income end markets even though emerging and large developing countries' markets have increased in importance in many sectors. These markets have different entry barriers, and buyers set different requirements and sourcing policies. They may provide viable alternatives, especially (but not only) for smaller producers, and better deals in terms of prices, sustainability, and learning. However, there is limited understanding of these differences and implications on entry and upgrading dynamics, and the limited research comes to conflicting assessments (e.g., Farooki and Kaplinsky, 2011; Staritz and Morris, 2012). An understanding of end market characteristics, competitive dynamics, and governance structures, as well as the contradictory and sector-specific upgrading potentials of these value chains, will be crucial for value chain interventions to be effective.

Role of industrial policies in the context of GVCs: Industrial policies have gained renewed interest among governments, international institutions, and donor agencies given the growth success of China and other emerging countries, and the global crisis. Important questions are: What are effective industrial policies in the context of increased liberalization and the dominance of GVCs in many sectors? How do industrial policies have to be adapted to the prevailing reality of GVCs? How can GVC-oriented industrial policies help small economies? How can industrial policies contribute to make lead firms' and global buyers' behavior more development-enhancing (e.g., by securing longer term relationships and supporting local supplier development and upgrading initiatives)?¹⁸

Upgrading in the context of small firms and producers: Even though many interventions focus on MSEs, SMEs, and small producers, there is still limited understanding of the way small firms and producers are linked to GVCs, how they can improve their positions, and their related upgrading dynamics. Smaller firms have different dynamics in terms of operations and sustainability than larger formal firms and face different constraints but potentially also opportunities. For smaller firms, linking cluster-related concepts with value chain approaches is even more relevant for production efficiency and upgrading and as a means of implementing value chain interventions.

8. Conclusions

The GVC approach provides a useful analytical framework to analyze global production processes, governance structures, and the distribution of activities, rewards, and risks in the global economy. It is a multi-scalar framework that goes beyond traditional approaches that either focus on the state or the firm. With its focus on sectors and inter-firm relations, the GVC approach can integrate the global with the local and firm (micro) level and with the meso (sector) and macro level. It is therefore a useful instrument to analyze the role of developing country firms and producers in global production and international trade and how their positions can be improved.

Three points may be stressed for an effective design of value chain interventions:

- i. Integration in GVCs should not be seen as “a panacea” for development but as “windows of opportunity” (Phillips and Henderson, 2009: 60) that can have important development effects. However, such opportunities require strategic policies at different levels. The role of lead firms, global suppliers, intermediaries, and traders in

¹⁸ See Gereffi and Sturgeon (2013) for a first effort in this direction.

initiating learning and upgrading can be instrumental, but they can also block upgrading processes. The potential benefits and blocks need to be considered when designing value chain interventions that target global, regional, and domestic markets.

- ii. With regard to value chain approaches, a broad perspective on value chains going beyond narrow cost- and infrastructure-based analyses and production efficiency is necessary to include critical concepts of the GVC approach, such as governance and power structures, economic rents, and entry barriers, the different dimensions of upgrading, and the local and international institutional set up. In addition to a focus on the private sector, the important role of institutions and, particularly, of strategic state policies is crucial.
- iii. GVC approaches have the potential to make private sector and enterprise development interventions more effective (Cattaneo et al., 2003). However, value chain interventions by international organizations and donors encompass an excessive variety of objectives, approaches, concepts, and definitions, and risk losing focus and effectiveness (Stamm and von Drachenfels, 2011). An improvement in the definition of concepts and approaches, and their standardization, is therefore urgently called for.

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Appendix 1: Overview of Value Chain Interventions by Selected International Organizations and Donors

World Bank (largely based on FIAS, 2007): It is difficult to define a standard approach to value chain interventions at the World Bank Group. There are several knowledge products, including books and working papers, on different sectoral value chains. Concerning operations, the Financial and Private Sector Development unit uses the value chain approach most widely, particularly the Investment Climate Department (CIC) that includes the Foreign Investment Advisory Service unit (a joint facility of the International Finance Corporation, Multilateral Investment Guarantee Agency, and the World Bank). Value chain analysis plays an increasing role in particular in the World Bank's work to improve the investment climate. Sometimes value chain analyses are standalone studies, but they can also be an integrated part of larger studies (e.g., sources of growth studies, growth and competitiveness strategies, and investment climate assessments). The value chain approach is used as one of various tools to support the competitiveness of private sectors that include doing business reports, enterprise surveys, investment climate assessments, and FIAS' regulatory reform and investment generation products. The industry-specific value chain approach complements these products by focusing on the overall business environment.

The integration of the public policy environment with market relationships makes the World Bank's value chain approach different from other agencies whose primary focus is addressing market failures, often with the objective of helping SMEs and producers create markets, strengthen links with global buyers, and better integrate with value chains. Since 2007, the World Bank, in particular the trade facilitation team of the International Trade Department, has also focused on logistics chains and corridors, integrating value chain analysis with more transport and trade-related instruments for policy making. The World Bank's value chain approach relies on the traditional market related context of value chain analysis in identifying failures in sourcing, manufacturing, and delivery. Yet, the analysis also recognizes the key public policy, institutional, and infrastructure factors underlying constraints in the business environment. The Financial and Private Sector Development unit's value chain approach puts a strong focus on breaking down stages of the value chain, analyzing and benchmarking them from a cost perspective, and identifying binding constraints to competitiveness. In this approach, some core concepts of GVC analysis, including global dynamics, the role of governance and lead firms, and the importance of upgrading for competitiveness in contrast to merely focusing on cost efficiency are sidelined.

United Nations Industrial Development Organization (UNIDO) (largely based on Stamm and von Drachenfels, 2011): The value chain approach is used in most UNIDO units with different foci. The study of value chains started with analytical research on the apparel industry (Gereffi and Memedovic, 2003), the agri-food sector (Humphrey and Memedovic, 2006), and the furniture industry (Kaplinsky, Memedovic, Morris, et al., 2003). The focus of project-related research is on how to conduct industrial value chain analysis to meet sustainable industrial development goals. Unlike conventional value chain analysis, UNIDO's tools place particular emphasis on adding value and the processing and manufacturing segments and their downstream (market) and upstream (supplies) relationships. This research adds to the existing literature on value chain analysis by introducing the "industrial perspective" and complements other value chain analysis tools that focus on "primary production" and "market orientation." UNIDO's recent approach uses a systemic perspective of development in which partnering and collaboration between the public and private sectors are imperative. Hence, interventions in the private sector related to production and services, while on the institutional side it is building capacity in industry associations and governments. UNIDO has developed various training courses and manuals such as "Agro-Value Chain Analysis and Development: The UNIDO Approach", "Diagnostics for Industrial Value Chain Development: An Integrated Tool", "Practitioner Guide for Pro-Poor Value Chain Development: 25 Guiding Questions for Designing and Implementing Agro-industry Projects", and "Agro-Food Value Chain Interventions in Asia: A Review and Analysis of Case Studies".

International Labour Organization (ILO) (largely based on Stamm and von Drachenfels, 2011): ILO's work on value chain development has expanded rapidly in recent years to 25 active projects in 2011 in more than 20 countries that have value chain development as their core objective. The value chain approach is used by the International Training Centre (ITC) in Turin, the Skills Department, the ILO- International Finance Corporation Better Work Program, and the Sectoral Activities Department of the ILO. With regard to sectors, value chain interventions cover more than 50 subsectors evenly distributed between agriculture, services and manufacturing. The focus of value chain interventions is on job creation and enterprise development with a link to employment and job quality improvements. ILO's specific approach to value chain interventions distinguishes itself by having "a strong focus on those chains that are most relevant for job creation and job quality improvement". The ILO presents itself as the UN agency that promotes enterprise development and competitiveness, not as a goal in itself, but as a means to create decent work and equal opportunities for both

women and men. Interventions do not only focus on international value chains but also local and national ones that have the best chances of either increasing employment and/or improving working conditions. Programs focus on vertical and horizontal linkages. Vertical value chain interventions focus on strengthening dialogue between large firms that dominate value chains and smaller firms to identify opportunities for increased participation in the value chain by small, local firms. Horizontal value chain interventions focus on access of smaller, less powerful businesses to business and financial services they require to participate more effectively in national and GVCs, as well as on collective actions they can engage through business associations and cooperatives. ILO has developed various tools for value chain promotion such as “Value Chain Development for Decent Work: A guide for development practitioners, government and private sector initiatives”, “Making the strongest links: A practical guide to mainstreaming gender analysis in value chains”, and ITC’s course “Enterprise development through Value Chains and Business Services Markets: a Market development Approach to Pro-Poor Growth”.

International Trade Center (ITC) (largely based on Stamm and von Drachenfels, 2011): ITC’s mission is to foster small business export success in developing and transition countries by providing, with partners, sustainable and inclusive trade development solutions to enterprises, trade support institutions, and policy makers. Sectors of operation include agriculture, manufacturing, and services, particularly supporting export and trade. ITC has developed its value chain approaches over 10 years, with interventions in more than 70 sectors worldwide. It has provided technical assistance, methodologies, and supporting tools to private sector stakeholders, poor communities, government agencies, sector associations, banks, and trade support institutions to support the design, implementation, and coordination of national or regional sector and value chain development strategies. The ITC approach is based on participatory tools and orientates stakeholders to market opportunities and buyer requirements. The approach enables value chain stakeholders to design market-led development strategies, organize and coordinate their implementation, and match buyer requirements to supply side potential to convert commercial value chain opportunities into new business and income.

Gesellschaft für Internationale Zusammenarbeit (GIZ) (largely based on GIZ, 2008): GIZ uses the value chain approach in particular in its work on rural and regional economic and private sector development. The objective is to improve the competitiveness of firms and sectors to generate income and jobs, in particular for the poor. This means improving

coordination between firms and service providers along the value chain and increasing market transparency. GIZ supports small producers in particular and promotes employment in processing and commercial operations to improve value creation. Particular importance is attached to developing market structures by, for example, developing public service providers, introducing quality standards, and strengthening private associations. GIZ only intervenes in markets where entry barriers prevent the poor from participating or where a lack of public services results in ongoing stagnation. GIZ provides expertise on value chain analysis in selected subsectors and markets, and plays the part of facilitator, helping firms and public agencies agree on and implement investments in new products, technologies, sales channels, and standards. To this end, GIZ has developed a comprehensive and methodological approach known as ValueLinks, which has been introduced in many countries. The approach consists of a set of action-oriented and participatory methods for value chain promotion in developing countries. It focuses on production that offers market access for micro-, small-, and medium-sized firms and producers.

United States Agency for International Development (USAID) *(based on the Value Chain Development Wiki Website)*: Achieving economic growth that reduces poverty requires attention to not only on small and very small firms that the poor own and operate, but also the performance of industries in which large numbers of the poor participate. USAID's approach to enterprise development has evolved from facilitating markets for business services to a broader value chain perspective. The premise of USAID's new approach is that enterprise development can create wealth in poor communities and promote economic growth by sustainably linking large numbers of MSEs to international, national, and/or local value chains. To achieve this goal, the approach links small firms to economic growth opportunities, while ensuring both the incentives for and the capability to compete in and benefit from market participation. The structures, systems, and relationships that define the value chain can be influenced to enable MSEs to improve (or upgrade) their products and processes, and thereby contribute to and benefit from the chain's competitiveness. To this end, the Microenterprise Development Office of USAID has developed the value chain development wiki called Micro Links that codifies good practice in value chain development and shares experiences in designing, implementing, and supporting value chain development programs.