

microNOTE #53

Three Steps in Value Chain Analysis

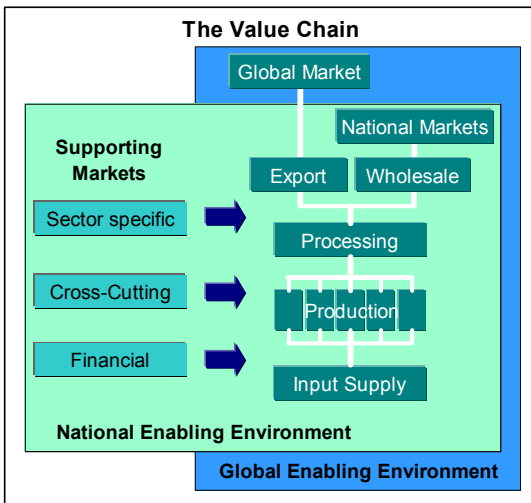


Figure 1. Value Chain Structure

Three main steps can be distinguished in value chain analysis: (1) Identify the main functions and types of firms in the value chain; (2) Analyze structural connections; and (3) Analyze dynamics.

This microNOTE provides a brief explanation of the three main steps in value chain analysis.

Projects go through distinct stages: analysis, strategy development, planning, implementation, and control. This note presents a bird eye's view on the analytical stage of value chain projects. Three main steps can be distinguished in value chain analysis (VCA). (1) Identify the main functions and types of firms in the value chain; (2) Analyze structural connections, and (3) Analyze dynamics.

Step One

First, the main functions and firm types are identified. This involves mapping out the main activities and services involved in moving the product from the producer to the final consumer (input supply, production, processing, and distribution). The value of the end-product to the end-consumer has many components (price, taste, convenience, image, etc.) and is the cumulative outcome of every value-adding activity along the value chain (value can be added or lost at each link in the chain). Hence the perspective that it is value chains rather than individual firms that are competing with each other. The various activities and services adding value to the products are executed by various firms. Value chain actors are those firms in the value chain that actually take ownership of the product as it flows through the supply chain. In VCA it is taken into account that value chain actors at a certain horizontal level often are a quite heterogeneous group. This group needs to be broken down in more homogenous sub-groups in order to take the variation in terms of the firms' capacities and objectives into account. For example, VCA distinguishes between small processors using primitive technologies and large processors using state-of-the-art equipment. Firms that do not take ownership of the product, but help add value to it, are service providers. For the latter, sector-specific, cross-cutting and financial service providers are distinguished. Basic data on the numbers of firms, volumes and values for the various firm-types need to be collected.

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Step Two

Second, VCA analyzes how the various firms are structurally connected, using the framework depicted in Figure 1. There are five structural elements: end-markets, the business enabling environment, vertical linkages, horizontal linkages, and supporting markets. Value chain analysis starts from an end-market analysis which looks at market sizes and growth rates, market segmentation, consumer behavior, supplier requirements, competitive position (benchmarking), network relationships, and so on. It also takes the process of globalization into account. Globalization increases both the competitive threats in domestic markets (imports) and the opportunities in overseas markets (exports). The business enabling environment (both national and global) analysis looks at policy, regulations, trade agreements, and public infrastructure. The analysis of vertical linkages looks at the governance mechanisms and transaction costs between successive value chain actors. It also includes how information flows and capacity building within the value chain are stimulated (e.g., through embedded services). The analysis of horizontal linkages assesses the degree of collaboration between value chain actors at the same level in the chain. The value chain actors can for example jointly purchase inputs or market outputs, and thus benefit from economies of scale and increased bargaining power. On the flip-side, collusion may reduce competitiveness and, in turn, innovation. Supporting markets (the service firms) play a key role in firm-level upgrading. These include

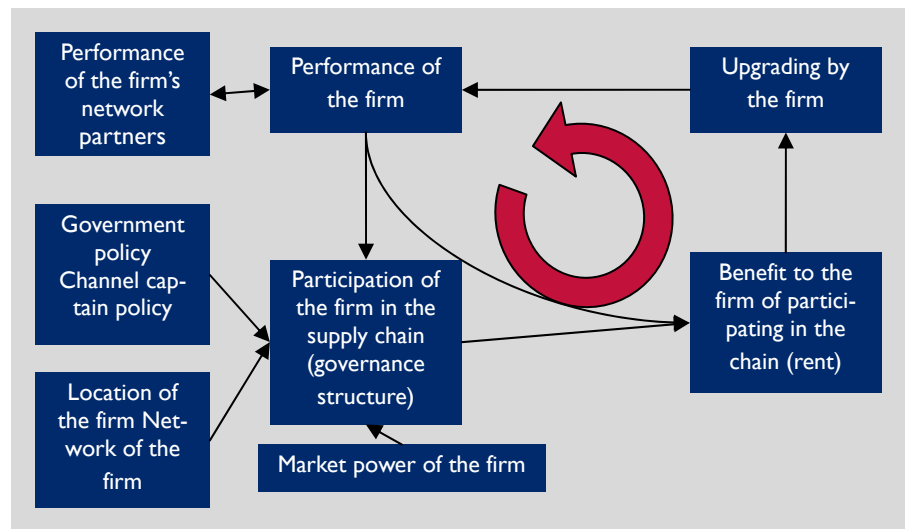


Figure 2: The Positive Feedback Loop Driving Firm Growth in Value Chains

cross-cutting services such as business management consulting, transportation and communications; sector-specific services such as specialized equipment manufacturers; and financial services.

Step Three

Third, VCA analyzes the dynamics that affect how the structure changes over time. The primary factors driving or blocking the dynamics of the value chain include changes in: market demand, technology, available services, profitability, risk, barriers to entry, large-firm behaviour, input supply, and policy. Change spreads through a number of dynamic elements, including: upgrading through investment by individual firms, value chain governance, power exercised by firms in their relationships with each other, inter-firm cooperation and competition, and the transfer of information and

learning between firms.

The dynamic perspective on value chains implies positive or negative feedback loops. To further illustrate this at the firm-level, economic growth can be modeled as the outcome of a positive feedback loop from performance (customer value creation) to governance structure (contract) to profits (rent) to upgrading (profit reinvestment) and back to performance (Figure 2). MSMEs typically do not keep records and financial literacy levels are often very low. For the greater part, these small agri-businesses have only a vague idea of their profitability. However, profitability is essential. It's the basic but often not fully assessed premise of economic development: growth implies profits.

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