

# Sustainability of the value chain and supply of education

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## Abstract

Today, higher education institutions (HEI) play a role in economic and social transformation. However, there must be multidirectional flow relationships in the education system of the country, from the primary sector, and higher education. The main results will monitor the role of resources in the sector to enable efficient sustainability.

Keywords: High education; value and chain, sustainability

## Introduction

Overall, one can conclude that there is a rapid growth in research related to topics related to higher education, from supply and demand. This topic has been recently studied as a system of value and supply of higher education (Ortega, et. al, 2011). In studies where flows from inputs, processes, intermediate demanders until the end and, as such flow can be dynamically fluctuating throughout the system.

However, even such a dynamic not seen or studied from the perspective of the sustainability of the value chain and supply, as well as a system or as the sustainability of the supply chain and proper. In these terms such sustainability is geared to identify a number of resources that have been identified taking into account the value and supply chain (Porter, 1985). These resources can be defined flow of students entering higher education also can identify flows of monetary resources or technical research oriented, following this flow are observed transiting these resource flows to the direct beneficiaries, also traveling to final beneficiaries identified as beneficiaries are they governmental, civil society, private companies, etc.

Also, with the benefits that companies have realized as a result of globalization have come significant increases in the strategic importance and complexity of the supply chain arguments. Research has identified major risks and concerns that emerge in global supply chains, including supply chain disruption and discontinuity (Craighead et al., 2007), inconsistent or inadequate product quality (Foster, 2008), unpredictable delivery times (Levy, 1997) and substantial, unanticipated additional costs (Geary et al., 2006). Many of these risks are exacerbated by the increasing geographical scope of firms' supply chains that exposes supply chain managers to a variety of cultural, legal, administrative, linguistic, and political issues (Mentzer et al., 2007; Branch, 2008).

## **Review of literature**

Over the past 10 years, the increase of published papers in this area has been exponential, reflecting the greater number of articles published in broader literatures in supply chain management and sustainable supply chain management. A deeper examination of the data reveals that this pattern is similar for both practitioner and academic research in this literature, and that the growth in both types of articles occurs broadly in parallel. The recent decline in the number of studies addressing sustainability in international supply chains could, we speculate, arise from the reduced salience of such issue in times of global economic crisis.

Also studies have reviewed research on supply chain management, “primarily with a view to identifying the boundaries and core features of supply chain research in an attempt to promote recognition of supply chain research as a discernable “field” or “discipline” within management research, (croom et al., 2000; harland et al., 2006)”. Also consistent with that aim, two primary goals of existing reviews have been to generate robust definitions of supply chain management in conceptual and empirical terms, and to describe the state of research and the field of education, regarding the latter, most reviews have concluded that supply chain research is in its infancy, relative to other fields in business and management research, and thus is characterized by a relative absence of (1) theoretically informed research and (2) a large amount of descriptive empirical research. For example, croom et al. (2000) found that more than half of the studies surveyed in their review were descriptive empirical studies, whereas only 6% of extant research provided theoretically grounded prescriptions for management practice. Similarly, a later review by Burgess et al. (2006) concluded that “scM [supply chain management] is a relatively young field with exponential growth in interest from researchers...., a reliance on the manufacturing and consumer goods industries, [and]...mostly descriptive-type theories” (Burgess et al., 2006, 721).

Research in the area of international sustainable supply chains appears to be at an earlier stage, reflecting the relatively recent salience of societal concerns related both to how firms source branded goods internationally and to the working conditions present in these overseas plants.

The research we reviewed emphasizes the scope and nature of the issues encountered in international supply chains but seldom goes beyond problematizing the sustainability properties of international supply chains. the contexts under investigation are varied in all senses, providing little opportunity for triangulation or robust comparison of the specific themes present in each individual article.

## Flow Supply and demand within the sustainability

Within the flow dynamics of the supply chain and seen as a system, can also be analyzed from the perspective of the sustainability of the supply and value chain of higher education. This is to map, identify, manage and administer a range of resources ranging from raw material flows (students), technical and financial resources through research, teaching and / or knowledge transfer and capacity building of human resources of the higher education institutions (Figure 1).

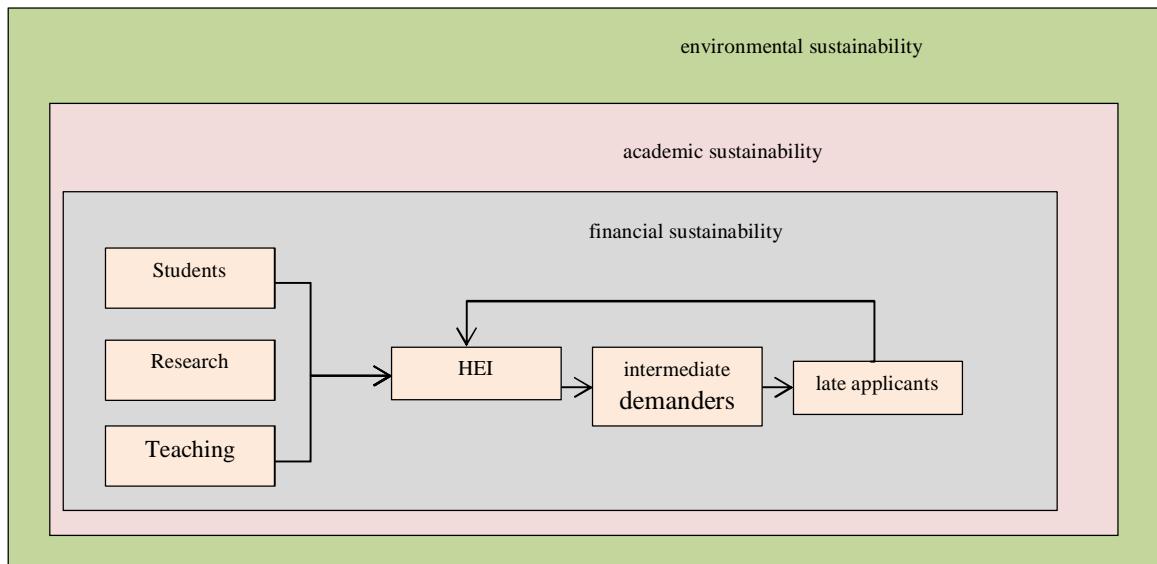


Figure 1. Functions of the sustainability of System of value chain and supply

Adapted from Ortega, et, al, 2011.

Figure 1 shows the following parts of fundamental functions and education equivalence:

- *Input logistics:* they receive and store inputs. Distribution to production (i.e. goods and services) is according to need (research, investment, teaching, etc).
  - Recruitment, admission, registration, research purposes, grants, etc.
- *Operations:* they are processes to transform inputs into finished goods and services.
  - Teaching, research, counseling, tutoring, etc.
- *Output logistics:* storage and distribution of finished goods and services.
  - Graduation, publications, placement, performance, etc.
- *Marketing and sales:* identification of needs of demanders and delivery generation.
  - Recruitment, technology and knowledge transfer, and research, development and innovation (RD&I).
- *Service:* post-delivery support to users of goods and services as service value.
  - Academic support, society services, alumni support, RD&I support

Likewise, the following components are part of supportive activities from Figure 1 above:

- *Infrastructure and facilities*: organizational structures, control systems, administration management, financial management, etc.
- *Human resources (HR)*: employee recruitment (search and hiring), training, development, and compensation (provision for academic and administrative units).
- *Technology development*: technologies to support activities that add value (IT management and other technologies, class management, research resource management).
- *Procurement*: input purchase such as educative materials (stationary, instruction materials, etc.), supplies and equipment (furniture, computers, network equipment, etc.)

In this way, today most of companies motivate to embark on improving the sustainability of their supply chains of the education. And it ask what conditions appear to favour firms' involvement and success in sustainably managing their supply chains, also what evidence suggests payoffs for sustainably managing such supply chains?. Earlier research has suggested that numerous factors play a role in shaping firms' desire to address sustainability in their supply chains. At the same time, the lion's share of these motivations might be characterized as "defensive" or "reactive" in nature among the most prevalent motivations are a desired to maintain customers or to attract new custome, to manage supply chain risks and the goal of complying with regulation and legislation. Appearing much less frequently in prior research are more "positive" or "pro-active" motivations, such as the desire to reduce costs, improve efficiency, or gain access to overseas markets.

For that reason, first, before investing in a company, it should estimate the exposure of the utility companies to factors such as the level of outsourcing and production sites. For example, certain industries such as electronics (computers, mobile phones, televisions, education, etc.) The supplements industry, textiles and food, are at high risk. Also would you know if these industries are also subject to regulatory risks by the use of certain substances or must prove the environmental footprint of its products.

While outside the education sector, which plays an important role in the economic transformation that contributes to the smooth flow of the dynamics involved in the resources of education, and where its flow as a dynamic flow exerts an important aspect in determining the economic, environmental, academic, etc. Also, some companies exposed to problems in its supply chain, can be differentiated by the quality of the sustainability of its chain, which covers the following elements:

- Policies and procedures
- effective monitoring
- Collaboration,
- Investor Relations.
- Etc.

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