



30-10-2012

## Logistics Clusters: Much More than Hubs for Freight

By Professor Yossi Sheffi, Director, MIT Center for Transportation & Logistics

Logistics clusters – agglomerations of firms that provide logistics services – are well established components of global supply chains. Yet the power of these entities to increase the efficiency of goods distribution and stimulate economic development is not well understood, and frequently underestimated. I believe that if there was greater awareness of these benefits, logistics clusters would attract more investment from both public- and private-sector organizations worldwide.

As I describe in my new book *Logistics Clusters: Delivering Value and Driving Growth* (MIT Press, October 2012), Europe has a strong tradition of building communities around specific types of expertise. An artists' colony in 14<sup>th</sup> century Florence, Italy, produced great works of art, for example. The Netherlands is the center of Europe's floral market and a major international exporter of flowers owing, in part, to a cluster of firms that includes growers, packers, and distribution centers that specialize in the floral business. This "cluster effect brings a competitive advantage and as it provides customers with an impressive assortment of products (one-stop shopping)," states a blog post published by European Logistics Hub (*Valentine's just-in-time flowers from Holland*, 14<sup>th</sup> February, 2012).

A similar phenomenon is evident in the logistics space. In fact, Europe's largest cluster of this kind, the PLAZA (Plataforma Logística de Zaragoza) logistics park, near Zaragoza, Spain, inspired my book. Created by a collaborative effort that involved the MIT Center for Transportation & Logistics and the government of Aragón in Spain, *PLAZA opened in 2000 as part of a grand strategy to reorient the regional economy towards the logistics industry and create jobs. The strategy has proved extremely successful. Today, more than 10,000 people work in this complex, which has attracted major companies to Aragón.*

*Logistics clusters have thrived across the world because the concept is self-reinforcing. These hubs generate large volumes of freight traffic, which bring efficiencies such as economies of scale and scope. As a result of such improvements, transportation costs fall and service levels increase, benefits that attract more companies to the community. The expanding base of member companies promotes further efficiencies, and so on.*

In addition, logistics clusters offer advantages based on the interchangeability of transportation and logistics assets. Rail cars, containers, trailers, and airplanes come in standard sizes and shapes regardless of what company owns and/or operates them. These assets – as well as specialized knowledge and best practices – can be shared by enterprises in the community.

*As the global footprint of logistics clusters has expanded, so they have become significant generators of jobs. The port of Rotterdam, Netherlands, for example, employs 55,000 people directly and 90,000 indirectly. Louisville International Airport in the United States (the UPS Worldport hub) provides 55,000 jobs and a \$2 billion payroll, generating \$277 million in annual sales and local taxes.*

*Moreover, the employment opportunities tend to be varied. These include blue collar jobs associated with activities such as warehousing, white collar positions in management, customer service, and IT, and an assortment of skilled jobs created by value-add services such as product tagging, light manufacturing, and repair work. UPS, for example, employ technicians to repair Toshiba laptops in its Supply Chain Services campus next to the carrier's Louisville Worldport hub.*

Crucially, these jobs tend not to be "offshorable" because postponement operations –the final assembly of products and preparation for retail display – must be performed in close proximity to end markets, when final demand is known. This makes it difficult to

### Categories

#### Categories

- [Advanced Logistics](#)
- [Air Freight Forwarding](#)
- [Dutch Logistics](#)
- [Eu Logistics Hub](#)
- [Events](#)
- [Green Logistics](#)
- [News](#)
- [Warehousing & Distribution](#)

### Archive

- [October 2012](#)
- [May 2012](#)
- [April 2012](#)
- [March 2012](#)
- [February 2012](#)
- [January 2012](#)
- [December 2011](#)
- [November 2011](#)
- [October 2011](#)
- [September 2011](#)
- [August 2011](#)
- [July 2011](#)
- [June 2011](#)
- [May 2011](#)
- [April 2011](#)
- [March 2011](#)
- [February 2011](#)

outsource these activities to overseas manufacturing centers. In addition, job creation is not tied to a single industry. Indeed, one of the virtues of logistics clusters is that they tend to attract a wide cross section of manufacturers. As a result, regional employment in logistics clusters is less vulnerable to the business cycles of individual industries.

Logistics clusters also foster environmental sustainability. Since freight traffic is concentrated in these hubs, many clusters are striving to improve their environmental performance by developing greener logistics practices. For example, by consolidating loads they can improve vehicle utilization rates and use larger conveyances, strategies lower the carbon footprint of supply chains. These clusters are also environmental innovation hubs, taking the lead in developing alternative fuel trucks and congestion mitigation infrastructure.

These attributes continue to drive growth in the number of logistics clusters worldwide. As new markets open up – some two billion people are joining the middle class in the BRIC (Brazil, Russia, India and China) countries– the operational flexibility that these entities bring will become even more important. Similarly, advances in environmental sustainability, and the potential for creating jobs, make logistics clusters an attractive prospect for companies and governments.

Logistics clusters are an integral part of global supply chains. But as I explain in my book, they also deliver wider, societal returns in the form of economic opportunity and innovation.

For further informations <http://logisticsclusters.mit.edu/>

About the author



*Yossi Sheffi, an international expert in supply chain management, is Professor of Engineering Systems at MIT and Director of the MIT Center for Transportation and Logistics. He has worked with leading manufacturers around the world on logistics issues and is an active entrepreneur, having founded or cofounded five companies since 1987.*

0	0	0	New
Share	Tweet	Email	Share

Posted in [Warehousing & Distribution](#) by patrick

[No Comments »](#)

Leave a Reply

Name (required)

Mail (will not be published) (required)

Website

