

## **Logistics in supply chains**

## The expansion of global supply chains

Today, supply chains are increasingly complex and involve many different companies in many different parts of the world. This expansion of supplychains is driven by firms looking to cut costs by, for example, moving production activities to a country with lower wages and less regulation.

This **globalisation of supply chains** is part of the process of economic globalisation that has occurred since the 1980s, resulting in economic activities becoming increasingly integrated on a global scale. This process is the result of several historical developments:

- The collapse of the Soviet Union and the integration of former socialist countries into the global market
- Liberalisation policies that removed national economic controls, regulations and barriers to foreign investment
- The rise of multinational corporations with operations all over the world
- The growth of subcontracting and outsourcing on a global scale
- Shifts in the global division of labour, with manufacturing moving from Europe and North America to developing countries
- Technological advancements in transportation/ shipping and communications/information technology that enable the smooth operation of supply chains on a global scale.

## The logistics revolution

Logistics is the strategic management of the movement of materials, parts, products and information flows through the whole supply chain. Logistics has become extremely important to managing complex global supply chains so that they operate smoothly and goods and information are available exactly when and where they are needed.

An example of the growing importance of logistics is the emergence of **just in time supply chain strategies**. Big retailers such as Walmart now collect data at the point of sale and transmit it up the supply chain to tell producers what to produce and in what quantity at very short notice. This enables retailers to respond to changing demand

so that they only have exactly the stock they need at any given time. This enables the retailer to cut costs associated with keeping large amounts of stock in reserve. Logistics is extremely important to this business model because just in time strategies rely on the integrated management of the entire supply chain so that it functions smoothly as a whole and goods arrive at the right place at exactly the right time at short notice.

As a result of this 'logistics revolution', logistics now involves a range of different functions that are necessary for the management of global supply chains.

- Purchasing the procurement of goods and services from suppliers
- Transportation moving goods between organisations and locations by air, sea, road or train
- Unpacking/deconsolidation breaking down shipments into smaller units
- Warehousing storing goods in the correct conditions
- Inventory management controlling what goods are stored by an organisation and in what quantity
- Handling moving goods and materials within an organisation
- Order processing picking, sorting and packaging the goods required for a customer order
- Reverse logistics the return of goods from the customer to the supplier for recycling, returns or waste disposal
- Communication as well as physical goods, supply chains rely on flows of information about products, customer demand, stock levels, availability, problems, costs, etc

Take the example of T-shirts sold in a Walmart store in the USA: first, the garments are purchased from an independent factory in Bangladesh. They are then transported by container ship to an import distribution centre in California. There the consignment of is unpacked from the container and stored in a warehouse. From here, it is transported inland by road or rail to a regional distribution centre. Local Walmart stores use point of sale data















to manage their inventory levels on a just in time basis. This means that as soon as a certain number of T-shirts are sold, replenishments are ordered electronically from the regional distribution centre. The T-shirts are picked by warehouse workers, combined with other orders and delivered by truck to the store, where they are unpacked and put on the shelves. After purchase, if the customer returns the garment for being defective it will be transported by road from the store to a regional return centre. From here, it will either be returned by truck and container ship to the supplier in China, or donated to a local charity in order to cut transportation costs.

Most companies provide at least some of these logistics functions in house. However, the growing complexity of supply chain management means that many companies also outsource some functions to specialist logistics service providers (LSPs). In the context of the logistics revolution, giant multinational LSPs have emerged offering a variety of logistics services as well as integrated supply chain management. For example, DHL offers air and ocean freight, trucking, warehousing, courier services, and overall supply chain management.

## What does this mean for transport workers and their unions?

The globalisation of supply chains and the logistics revolution has created a demand for cheap and flexible logistics services, leading to the restructuring of the transport sector:

- LSPs use agency workers, meaning that employment in this sector is increasingly precarious and casualised, and employees lack guarantees of regular work
- LSPs set up subsidiary companies and outsource functions to smaller providers, making it unclear who the real employer is and what the workers' rights are
- These processes of outsourcing and casualisation also have the effect of undermining union membership

These trends are having a detrimental effect on the wages and conditions of transport workers. Despite this, the globalisation of supply chains means that transport workers are more **important than ever**, as goods have to move greater distances across a variety of modes of transport. This means that transport workers potentially have more bargaining power. In addition, the increasing length, complexity and time sensitivity of global supply chains makes them more vulnerable to disruption, potentially increasing transport workers' bargaining power. For example, just in time strategies mean that companies do not keep large amounts of stock. As a result, even a temporary blockage in the supply chain has the potential to cause big problems for these firms.

Complex and time sensitive global supply chains are particularly vulnerable to disruption at **logistics chokepoints**. A logistics chokepoint is the point at which a whole supply chain is vulnerable to disruption due to, for example, industrial action. Although every supply chain has different chokepoints, congested logistics facilities that are shared by multiple users are particularly vulnerable. These include large ports and airports, and road networks in and around large cities.

Recently, there has been a global trend towards the development of large logistics hubs that concentrate different transport modes and logistics facilities (such as warehouses and assembly/processing plants) on a single site. These hubs are typically built adjacent to seaports, airports and at strategic inland locations. These logistics hubs are used by multiple LSPs, as well as shippers (such as big retailers and manufacturers) as it enables them to cut costs by sharing resources and facilities. This high concentration of logistics activities means that these hubs are potential chokepoints. As such, the workers at these facilities can cooperate to exercise power over multiple global supply chains











