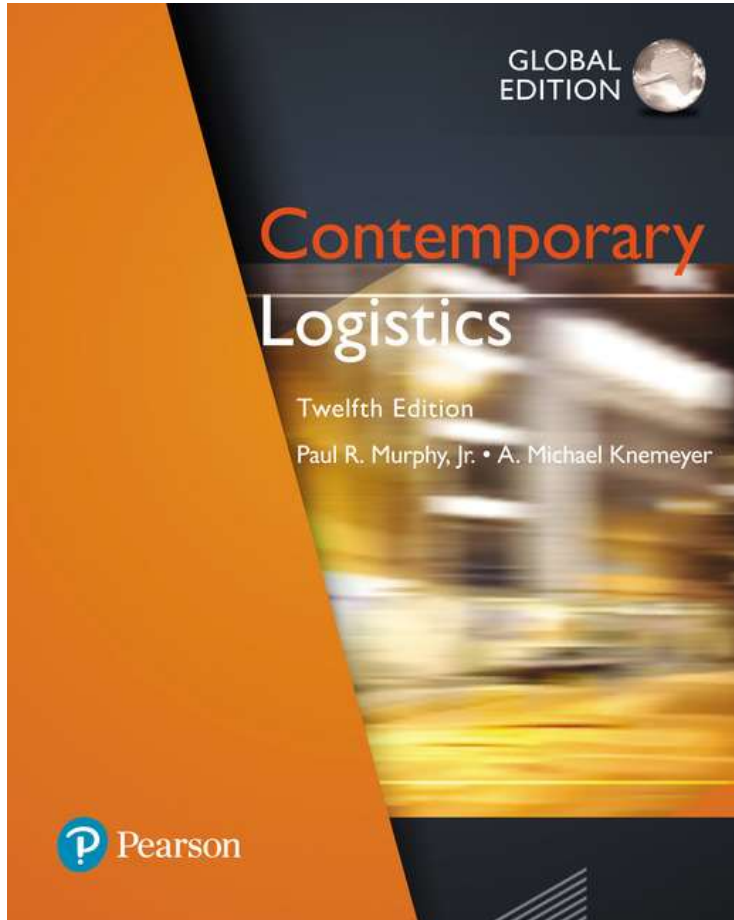


Contemporary Logistics

Twelfth Edition, Global Edition



Chapter 1

An Overview of Logistics

Learning Objectives

- 1.1 To discuss the economic impacts of logistics
- 1.2 To define what logistics is
- 1.3 To analyze the increased importance of logistics
- 1.4 To discuss the systems and total cost approaches to logistics
- 1.5 To expose you to logistical relationships within the firm
- 1.6 To introduce you to marketing channels
- 1.7 To provide a brief overview of activities in the logistics channel
- 1.8 To familiarize you with logistics careers

History of logistics in Arabian Peninsula

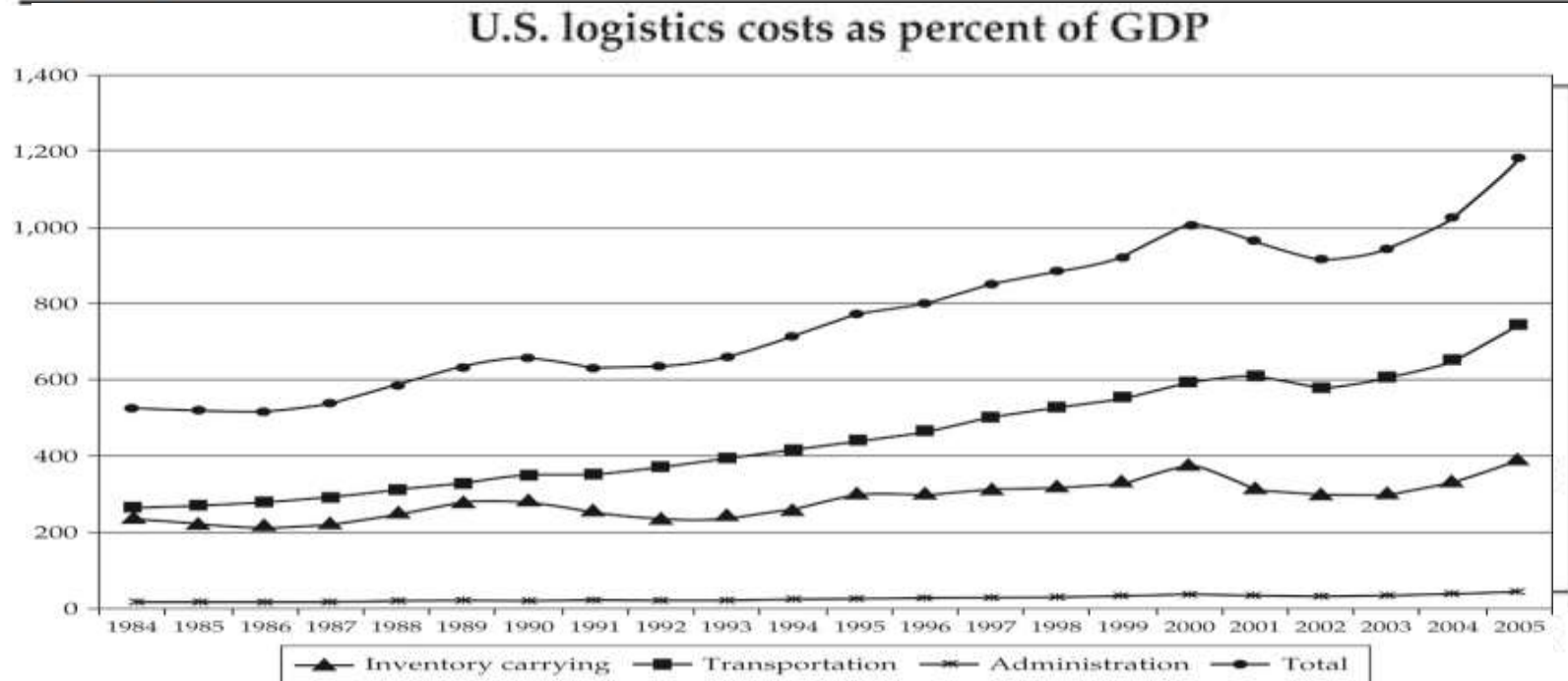


Economic Impacts of Logistics

- Macroeconomic impacts
 - Logistics is an important component in any country's economy
- Economic utility: the value, or usefulness, of a product in fulfilling customer needs. It has 4 forms:
 1. Possession utility: value, or usefulness, coming from a customer able to possess a product. **Own or use a product**
 2. Form utility: product being in a form that can be used by the customer and is of value to the customer. **A usable form**
 3. Place utility: products available *where* they are needed by customers . **Available at the right location.**
 4. Time utility: having products available *when* they are needed by customers. **Available at the right time.**

Table 1.1: The Cost of the Business Logistics System in Relation to Gross Domestic Product

Country	Logistics as a Percentage of GDP
United States	8.5
Brazil	12.0
South Africa	12.8
India	13.0
People's Republic of China	18.0
Vietnam	25.0
Indonesia	27.0



Logistics: What It Is

- Council of SCM Professionals (CSCMP) definition:

“Logistics management is part of supply chain management that plans, implements, and controls the efficient, effective forward and reverse flow and storage of goods, services, and related information between the point of origin and the point of consumption in order to meet customers’ requirements”¹

“Supply chain management encompasses the planning and management of all activities involved in sourcing and procurement, conversion, and all logistics management activities. Importantly, it also includes coordination and collaboration with channel partners, which can be suppliers, intermediaries, third party service providers, and customers. In essence, supply chain management integrates supply and demand management within and across companies”

¹www.cscmp.org

The Increased Importance of Logistics (1 of 2)

- A reduction in economic regulation
 - Allowed individual carriers, e.g., airfreight, railroad, and trucking industries, flexibility in pricing and service. Facilitated the implementation of tailored logistics approach, in the sense that companies could specify different logistics service levels, and prices could be adjusted accordingly
- Changes in consumer behavior
- Technological advances
 - Internet, e-shopping, RFID, shipment tracking GIS, AI, Robotics, Electric vehicles,

Insight: Logistics became important not because companies wanted it to be—but because markets became faster, customers became more demanding, and competition became global.”

The Increased Importance of Logistics (1 of 2)

- Advances in retailing
 - Different channels. e.g., online, in-store, and mobile app.
Omnichannel retailing is a strategy focusing on providing customers a seamless shopping experience regardless of sales **channel**
- Globalization of trade
 - International logistics
 - Shipping **container** is often championed as an important catalyst for the growth in global trade
 - Geographic distances between buyers and sellers are often greater, monitoring logistics processes is sometimes complicated by differences in business practices, culture, and language



Capacity 24,000 containers

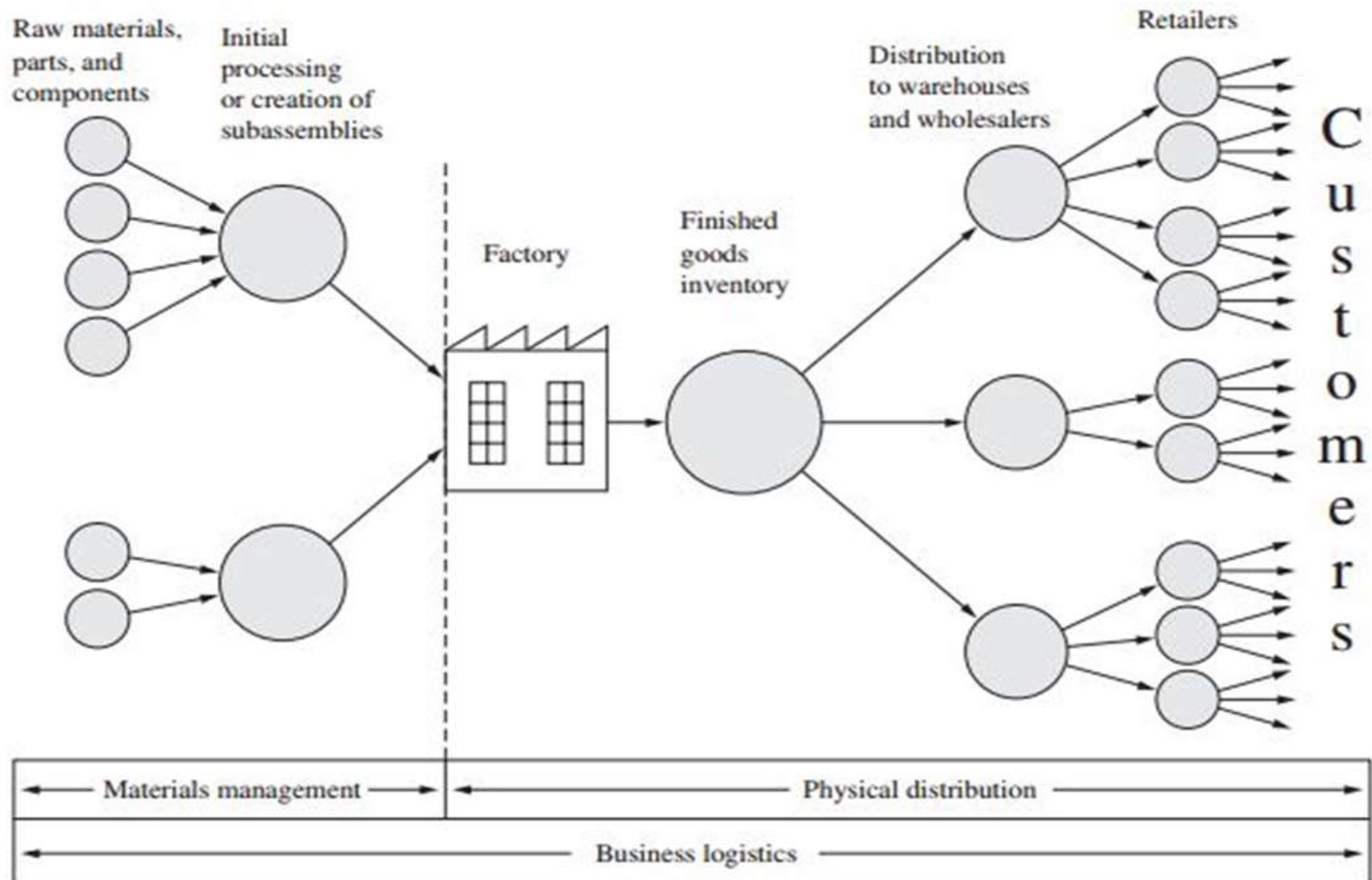
The Systems and Total Cost Approaches to Logistics (1 of 2)

- Systems approach
 - Compatibility between a company's goals and objectives and major functional area goals and objectives
 - Interdependence of functional areas (marketing, finance, production, and logistics)
 - Example: Stock-keeping units (SKUs)
 - Interdependence of logistics activities or intra-functional logistics between materials management and physical distribution



Almarai's mission to provide quality and nutritious food & beverages that enrich consumers' lives every day

Figure 1.1: Control Over the Flow of Inbound and Outbound Movements



The Systems and Total Cost Approaches to Logistics (2 of 2)

- Total cost approach
 - Cost trade-offs: changes to one activity cause some costs to increase and others to decrease.
 - Example, a decrease in transportation costs is often associated with an increase in warehousing costs. Why?
 - Total logistics concept: integration of all activities into a unified whole that seeks to minimize distribution costs in a manner that supports an organization's strategic objectives

Logistical Relationships within the Firm (1 of 2)

- Finance

- Finance dep. is often instrumental in approving capital budgeting decisions that affect logistics, such as the acquisition of materials handling equipment and packaging equipment
- Finance department often measures inventory in terms of its cost or value in dollars, whereas logistics tends to measure inventory in terms of units

- Production

- production favors long production runs of individual products because this allows the fixed costs to be spread over more units, thus resulting in a lower production cost per unit
- Larger stocks for logistics and some excess stock of slow-selling units
- **postponement** concept to delay of value-added activities such as assembly, production, and packaging until the latest possible time and possible done in warehouses.

Logistical Relationships within the Firm (2 of 2)

- Marketing: 4 Ps (Place, Price, Product, Promotion) of decisions
 - **Place decisions:** place decisions involve new strategies for reaching customers. **Co-branding** is an alliance that allows customers to purchase products from two or more name-brand retailers at one store location.
 - **Price decisions:** Price influence demand. **Landed costs:** refers to the price of a product at the source plus transportation costs to its destination. Online merchants require a minimum order amount (e.g., \$50) to qualify for “free” delivery.
 - **Product decisions:**
 - **Stockouts dilemma:** Marketers prefer to carry high quantities of stocks to avoid stockout. For logistics higher quantities of inventory (1) necessitate additional storage space and (2) increase inventory carrying costs
 - **Sustainable products (Fair trades)**

Promotion decisions

Alibaba Singles Day Event 11/11

- 24hour of Sales
- 250,000 brands from 5 millions companies
- 800 million shoppers
- In 2020 \$74 billion in sales
- In 2019, 1.3 billion order
- Logistics Network
 - Network of 730 warehouses
 - 3,000 charter flights (within China)
 - 3,000,000 people involved in processing and shipping orders
 - 10,000 lockers delivery (without human contact)
 - 700 robots used in Wuxi warehouse

Marketing Channels (1 of 2)

- Marketing channels refer to “a set of institutions necessary to transfer the title to goods and to move goods from the point of production to the point of consumption and, as such, which consists of all the institutions and all the marketing activities in the marketing process.”²
- Main channel members:
 - Manufacturers
 - Wholesalers
 - Retailers

²American Marketing Association Dictionary, www.marketingpower.com

Marketing Channels (2 of 2)

Channel members work in different arrangements

- Ownership channel
 - Covers movement of the title to the goods
- Negotiation channel
 - Buy and sell agreements are reached
- Financing channel
 - Payments for goods
- Promotions channel
 - Promoting a new or existing product
- Logistics channel
 - Contributes the sorting function to the overall channel process in terms of sorting product, accumulating, allocating, and assorting

Channel Intermediaries/Facilitators

- Ownership channel
 - Banks, finance companies
- Negotiation channel
 - Brokers
- Financing channel
 - Banks, insurance companies, finance companies
- Promotions channel
 - Advertising agencies, public relations agencies
- Logistics channel
 - Freight forwarders (eg Aramex)

Activities in the Logistical Channel

- Customer service
- Facility location decisions
- Inventory management
- Order management
- Procurement
- Transportation management
- Demand forecasting
- International logistics
- Materials handling
- Packaging
- Reverse logistics
- Warehousing management

Logistics Careers (1 of 2)

- Entry-level position examples include:
 - Logistics (supply chain) analyst
 - Consultant
 - Customer service manager
 - Fulfillment supervisor

Logistics Careers (2 of 2)

- Second-level position examples include:
 - International logistics manager
 - Supply chain software manager
 - Purchasing manager
 - Transportation manager
 - Warehouse operations manager

Key Terms (1 of 2)

- 3D printing
- Big-box retailer
- Co-branding
- Container
- Cost trade-offs
- Disintermediation
- Economic utility
- Form utility
- Humanitarian logistics
- Landed cost
- Logistics
- Marketing channels
- Mass logistics
- Materials management
- Omnichannel retailing

Key Terms (2 of 2)

- Physical distribution
- Place utility
- Possession utility
- Postponement
- Sorting function
- Stock-keeping units (SKUs)
- Stockouts
- Sustainable products
- Systems approach
- Tailored logistics
- Time utility
- Total cost approach