Vymezení logistiky a SCM, logistika v nákladovém kontextu, problémy logistiky

LSCM_jaro2025

Factors Affecting National Logistics Costs

Geographical situation. Usually, countries that are close to ports, airports, economic hubs and logistically developed countries have better logistics systems with lower logistics costs.

Logistics infrastructures. Distribution network and communication network are important components of this part.

Human resource. It is interesting to know that one of the factors which led to increasing logistics costs in USA in 2005 was lack of vehicle driver (Cooke 2006).

Administration. In most methods for estimating national logistics costs, share of administration costs is assumed to be 4% of total costs. But actually, this 4% has a significant effect on the remaining 96%.

Technology. Researchers believe that development in ICT is one of the reasons for reducing trend of logistics costs in past decades. They also believe that there is still greater potentiality in technology to further reduce cost in future.

Political and economical stability. This factor can reduce or increase the risks and affect the insurance costs. In addition, political and economical stability can play an important role in attracting investment in national logistics activities.

Business legal rules. Customs, taxes and insurance laws are components of this part. Compatibility of these rules with logistics processes and activities could affect logistics costs.

Rate of interest. This factor is more important in inventory costs because of direct relation between them.

Energy price. increase especially in fuel prices that is used in logistics activities makes inflation in logistics costs, especially in transportation because of nature of its related activities.

TABLE 1.1 The Cost of the Business Logistics System in Relation to a Country's 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

Source: Various country reports.

Logistics Performance Index ranking

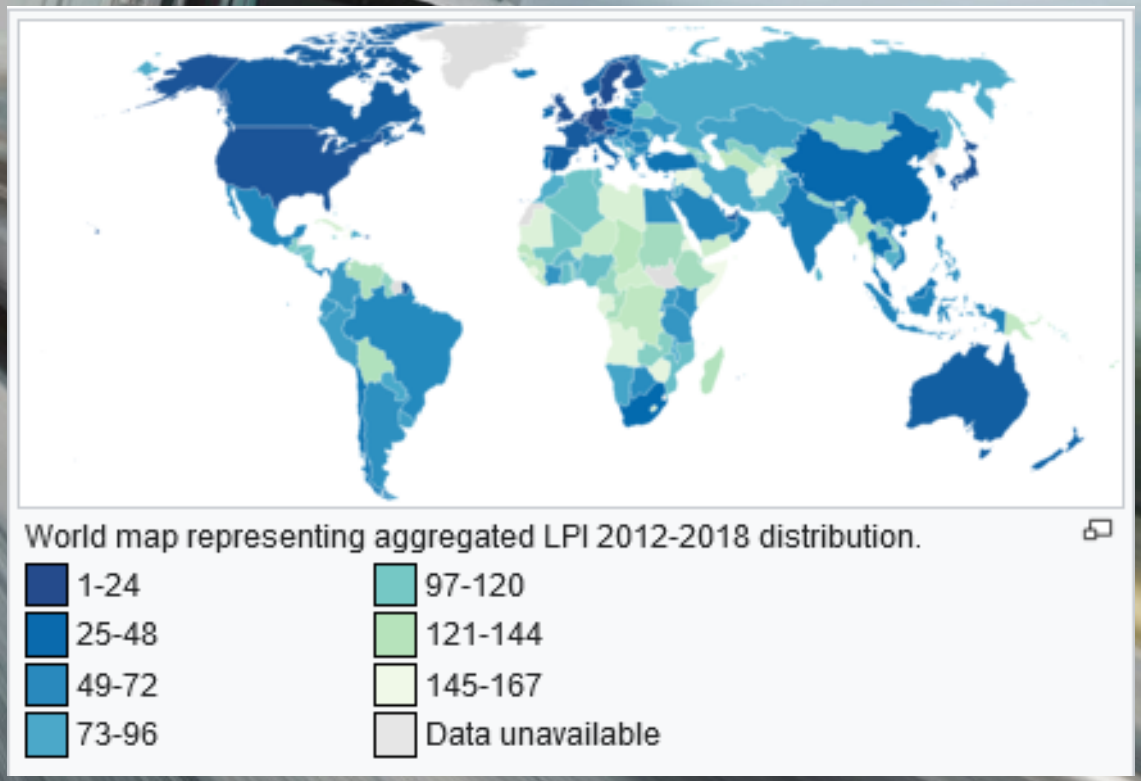
- The LPI is a multidimensional assessment of logistics performance, rated on a scale from one (worst) to five (best). It uses more than 5,000 individual country assessments made by nearly 1,000 international freight forwarders to compare the trade logistics pro-files of 155 countries.
- Better logistics performance is strongly associated with trade expansion, export diversification, ability to attract foreign direct investments, and economic growth. In other words, trade logistics matter.
- The most important aspects of the current logistics environment:
  - Efficiency of the customs clearance process.
  - Quality of trade and transport-related infrastructure.
  - Ease of arranging competitively priced shipments.
  - Competence and quality of logistics services.
  - Ability to track and trace consignments.
  - Frequency with which shipments reach the consignee within the scheduled or expected time.
  - *Nezohledňuje zásoby*

LPI ranking and scores 2018: results

- disparities remain between the top performers and many developing countries.
- Identified eight megatrends likely to drive the future of logistics:
  1. Logistics skill shortages.
  2. Restructuring global value chains.
  3. Supply risk and recovery (resilience).
  4. Digital transformation of supply chains.
  5. Sustainability of supply chains.
  6. E-commerce driving demand chains.
  7. Logistics property and infrastructure.
  8. Collaborative business models.
- Respondents in developing countries see the most severe skill shortage at the managerial level—for example, in filling senior supply chain management positions. In developed countries, the most severe shortage is for a qualified blue-collar workforce, such as truck drivers
- Commerce and production have been disrupted by natural events and man-made disasters, such as civil wars or, recently, cyber-disasters.
- Environmentally friendly supply chains are associated with higher logistics performance
- 23% of all energy-related emissions can be attributed to transport, about 7% of global CO 2 emissions can be attributed to freight transport, which is estimated to have emitted 3.2 gigatons of CO 2 in 2015. This number is estimated to rise in the next decades, with a higher growth in emerging economies than in Europe.

- Zdroj: https://openknowledge.worldbank.org/bitstream/handle/10986/29971/LPI2018.pdf

LPI ranking and scores 2018: results



http://siteresources.worldbank.org/TRADE/Resources/239070-1336654966193/LPI_2012_final

Table 1.1 Top 10 LPI economies, 2018

	2018		2016		2014		2012	
Economy	Rank	Score	Rank	Score	Rank	Score	Rank	Score
Germany	1	4.20	1	4.23	1	4.12	4	4.03
Sweden	2	4.05	3	4.20	6	3.96	13	3.85
Belgium	3	4.04	6	4.11	3	4.04	7	3.98
Austria	4	4.03	7	4.10	22	3.65	11	3.89
Japan	5	4.03	12	3.97	10	3.91	8	3.93
Netherlands	6	4.02	4	4.19	2	4.05	5	4.02
Singapore	7	4.00	5	4.14	5	4.00	1	4.13
Denmark	8	3.99	17	3.82	17	3.78	6	4.02
United Kingdom	9	3.99	8	4.07	4	4.01	10	3.90
Finland	10	3.97	15	3.92	24	3.62	3	4.05

Table 1.2 Bottom 10 LPI economies, 2018

	2018		2016		2014		2012	
Economy	Rank	Score	Rank	Score	Rank	Score	Rank	Score
Afghanistan	160	1.95	150	2.14	158	2.07	135	2.30
Angola	159	2.05	139	2.24	112	2.54	138	2.28
Burundi	158	2.06	107	2.51	107	2.57	155	1.61
Niger	157	2.07	100	2.56	130	2.39	87	2.69
Sierra Leone	156	2.08	155	2.03	na	na	150	2.08
Eritrea	155	2.09	144	2.17	156	2.08	147	2.11
Libya	154	2.11	137	2.26	118	2.50	137	2.28
Haiti	153	2.11	159	1.72	144	2.27	153	2.03
Zimbabwe	152	2.12	151	2.08	137	2.34	103	2.55
Central African Republic	151	2.15	na	na	134	2.36	98	2.57

na is not available.
Source: Logistics Performance Index 2012, 2014, 2016, and 2018.