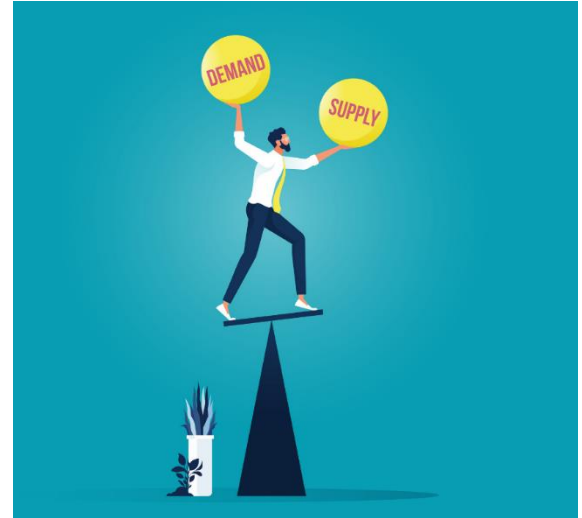


**PRE-CLASS ACTIVITIES**

1. Write notes to explain the difference between the words in each pair and find one pair of synonyms. Consult a dictionary if necessary.
  - a) supply vs demand Possible answer: supply is a stock of goods available for use; demand is a need for goods to be sold or supplied.
  - b) shortage vs excess Possible answer: shortage is a situation when there's a lack of something you need; excess is when there is more of something than you need.
  - c) spike vs surge Possible answer: both might mean a sudden and considerable increase.
  - d) stock vs warehouse Possible answer: stock means available goods, supplies; a warehouse is a place to store goods, supplies.
  
2. Complete the gaps using the words from ex. 1. One of the gaps can take two words.
  - a) I don't think it's fair to increase the price for taxi services when there's a **spike/surge** in demand.
  - b) There is rarely a **shortage** of goods these days because companies do a good job predicting demand.
  - c) I only buy things that are in **stock**. I don't like to wait for my order for a long time.
  - d) Automation in **warehouses** is not a good thing as it makes many people unemployed.
  - e) There's a high **demand** for IT professionals in my country.
  - f) **Excess** of some goods is no better for the economy than shortage.

**IN-CLASS ACTIVITIES****3. Discuss the statements.**

- I don't think it's fair to increase the price for taxi services when there's a surge in demand.
- There is rarely a shortage of goods these days because companies do a good job predicting demand.
- I only buy things that are in stock. I don't like to wait for my order for a long time.
- Automation in warehouses is not a good thing as it makes many people unemployed.
- There's a high demand for IT professionals in my country.
- Excess of some goods is no better for the economy than shortage.

**4. Match the halves to create collocations.**

- |                           |                    |
|---------------------------|--------------------|
| a) spending <b>5</b>      | 1) chain           |
| b) devise <b>3</b>        | 2) demand          |
| c) fragile <b>6</b>       | 3) a plan          |
| d) meet <b>2</b>          | 4) the competition |
| e) supply <b>1</b>        | 5) spree           |
| f) stay ahead of <b>4</b> | 6) system          |

## Are we running out of things?

5. Read a story about Toyota and complete the gaps. Watch the first part of a [video](https://youtu.be/-PQEP3wdVo0) [https://youtu.be/-PQEP3wdVo0] (to 01:21) and check your answers.

[These are possible answers. You could discuss synonyms if students use other vocabulary.]

In the past, companies stored enough goods to **meet** demand. They even had an extra amount in case there was an **increase** in demand. But then Toyota executive Taiichi Ohno realized that storing **excess** parts cost his company money. So he **devised** a plan where Toyota ordered only what was needed making sure that parts arrived just in time. That allowed the company to free up money that was spent on expensive **warehousing** which in turn enabled Toyota to expand and **stay ahead of** the competition.

6. Watch the second part of the [video](#) (from 01:22 to 03:56) and answer the questions.

- a) What are the two main things that make a just-in-time system fragile? **If a problem occurs anywhere in the supply chain (materials not arriving), production stops. Also, if there's a spike in demand, because there are no excess supplies business cannot respond to the surge. [01:35]**
- b) Why do shops run out of toilet paper quickly whenever there is a spike in demand? **Because toilet paper is a bulky and low-profit item, and supermarkets don't want to store it. [02:19]**
- c) Why are spending sprees problematic on a global scale? **As the shipping industry is dominated by the just-in-time system, any spike in demand might stall the system. [02:42]**
- d) What is an example of a just-in-time supply chain? **Raw materials leave Australia and are supplied to China for refining. Then, they are supplied to Germany for manufacturing and, after that, to retailers all around the world, including back to Australia. [03:07]**
- e) What are the two real examples of problems that occurred in a supply chain? **Ports closing in China during the pandemic [03:25] and delays related to filling out more forms after Brexit. [03:47]**

## Are we running out of things?

**7. Think about other areas of life where just-in-time systems might be problematic. Watch the third part of the [video](#) (from 03:57) and check your answers.**

Military (lack of protective gear and weapon supply), medicine (supply of protective equipment), job recruitment.

**8. Discuss the questions.**

- Have you heard about just-in-case and just-in-time systems before? Do you think changing from a just-in-case system to a just-in-time system is always a good idea?
- Will companies ever return to just-in-case? Will the climate crisis be the main reason for it? Who should be responsible for the transition – manufacturers/businesses or governments?
- Do you think a just-in-time system can be applied to areas of life other than manufacturing?
- What has always been in demand in the place you live? Are manufacturers able to meet the demand? Have you ever experienced a shortage of some goods?
- Think about a recent crisis in your country or anywhere else in the world (the pandemic, the economic crisis, etc.). Which goods had a surge in demand? Did they have excess supplies?

**9. Do a role play. Imagine that you work at a company that manufactures computers. Your supply chain includes many other companies around the world, and you need a lot of warehouses to store excess parts and components. The company is trying to choose between just-in-case and just-in-time systems.**

- Student A advocates for just-in-case.
- Student B advocates for just-in-time.
- You should come up with supporting arguments and use the vocabulary in the box.

devise a plan      excess      fragile system      meet demand  
shortage      spending spree      spike      stay ahead of the competition  
stock      supply chain      surge      warehouse