

Labour supply and demand

Role play with exercises and discussion

'Firework sale' role play

Background

For three generations, the Blaser family has been running a successful village shop in one of the larger Swiss municipalities. On free afternoons and Saturdays, the Blaser family's two children, Lea (16) and Tim (14), also help out in the shop. While they don't receive a fixed wage, for several years now they've been allowed to organise and run the sale of 1 August merchandise during the summer holidays and keep the profits.

Three weeks before the national holiday, Lea and Tim each set up their own stall and sell fireworks and other 1 August items (lanterns, candles, decorations, etc.) six days a week. Last year, after deducting the cost of materials, they earned 2,160 francs each, i.e. 120 francs per person per day. This means that working eight hours a day, Tim and Lea made 15 francs per hour. But things are a little more complicated this year, as a conversation between the two reveals:

Lea: Tim, have you thought about how we want to organise the 1 August sale this year?

Tim: Well. Just like we always do, or what do you mean exactly?

Lea: My friends are going camping in Ticino in July and I'd like to go with them.

Tim: You're right. It'd be cool for once to have some time off with my friends in July. Of course the money's great, but some free time wouldn't be bad either. Hey, I have an idea! Why don't we ask our classmates if anyone would do the selling for us? Then we could enjoy the holidays!

Lea: That's a great idea! I feel the same way. Depending on the weather, the others will be heading to Ticino early or a bit later, and I should earn a little extra money for the holidays as well. Depending on how much our stand-ins cost, I'd want to work a few days myself. Come on, let's ask around to see how many days people would even be willing to work depending on how much we pay them per hour...

Lea and Tim ask their classmates if they'd be interested in taking over their sales jobs and, if so, how many days they'd be willing to work depending on the hourly wage on offer.

Exercise

- In groups of four, take on the roles of Tim and Lea (labour demand) and two possible holiday substitutes (labour supply).
 Note: In technical terms, labour supply refers to all employees and labour demand refers to all employers.
- a. The first step is to consider in your role how many eight-hour days you would be willing to work, depending on the hourly wage offered or requested. Then, Tim and Lea move on to 1b) and the holiday substitutes move on to task 1c).
- b. Tim and Lea fill in the 'Labour demand' column in the table below. They can enter anything from 0 (they don't want a substitute on any day) to 18 (they want a substitute for the entire three weeks).
- c. The holiday substitutes fill in the 'Labour supply' column. They can enter anything from 0 (they won't work any day at all) to 18 (they'll work for the entire three weeks).

Hourly wage in francs	Labour supply (substitute) in number of days of work	Labour demand (Lea or Tim) in number of days of work
20		
19		
18		
17		
16		
15		
14		
13		
12		
11		
10		
9		
8		
7		

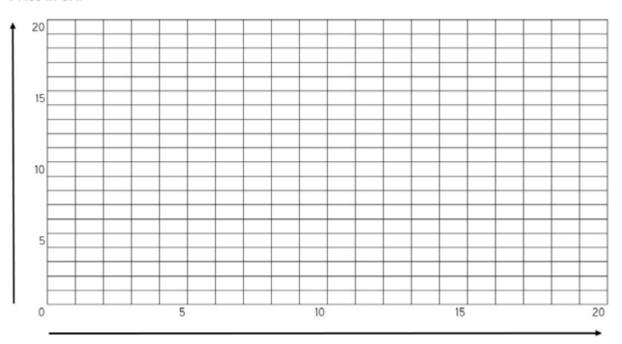
2.	Negotiations You don't yet know what the person negotiating with you wants. Negotiate in pairs (Lea and her potential substitute, Tim and his potential substitute) without showing each other your completed tables. See if you can reach an agreement. If you can reach an agreement, go to 2a). If you can't reach an agreement, go to 2b).
a.	Agreement Fill in the gaps in the text below.
	The substitute will work 9 days at an hourly rate of 14 francs during the three weeks (= 18 working days) prior to 1 August. Tim or Lea (as the case may be) will work the remaining 9 days themselves.
b.	No agreement
	Tick the main reasons for why you didn't reach an agreement. Add to the list if necessary.
	 □ The employer only wanted to go on holiday if their substitute demanded almost no pay. □ The employee only wanted to work a few days. They would only consider working many days for a very high wage. □ The employee and employer have different preferences in terms of their work and holidays. □ Other reasons:

3. Price-quantity diagram

Use the price-quantity diagram below to graphically represent the completed labour supply and demand table from exercise 1. The horizontal x-axis shows the number of days of work. The vertical y-axis shows the hourly wage in francs. Each small square represents one franc or one day of work.

- a. Plot the labour supply (second column in the table) in blue for each hourly wage (first column in the table) in the graph. Connect the individual points to form a line.
- b. Plot the labour demand (third column in the table) for each hourly wage (first column in the table) in the graph in red. Connect the individual points to form a line.
- c. If you have reached an agreement, the two lines will cross at a certain point. This intersection represents market equilibrium. At this point demand matches supply. If you have a market equilibrium, mark the point in yellow.

Price in CHF



Quantity in days of work

1.	What factors determine how many days of work you want to offer or demand?
2.	Compare the results of the two teams in your group of four. What conclusions can you draw?
3.	When is an agreement reached, and when not?
4.	Can you find other examples where suppliers and demanders negotiate?

Questions for discussion

5.	What factors and conditions are important for markets to function?
6.	Brain teaser:
	What happens if Tim and Lea negotiate labour supply and demand not only with two potential holiday substitutes but with the whole class?