

If you wish to discuss the tutorial questions please come to my [office hours](#).

1. Think of two to three examples of goods or services where there are likely to be switching costs. What are the sources of the switching costs in your examples?
2. (*Cabral 12.2*) Empirical evidence suggests that, during the 1970s, a firm with an IBM 1400 was as likely as any other firm to purchase an IBM when making a new purchase, while a firm with an IBM 360 was more likely to purchase an IBM than a firm that did not own an IBM 360. Software for the IBM 1400 could not run on the succeeding generations of IBM models (360, 370, 3000, 4300), while software for the IBM 360 could run on the 370, 3000 and 4300. How do you interpret these results?
3. (*Cabral 12.3*) A market analyst in Brussels said the following at the time of the introduction of the euro:

I think the euro will bring lower prices over all, but that the price differences will be more or less the ones we have right now.

What might have been the analyst's reasoning?

[*Hint*: Think about the effect of the introduction of the euro on search costs.]

4. Suppose there are n firms and that initially each firm has an equal share of the consumers. There is a continuum of consumers of mass one, each willing to pay up to v for a unit of the good. They incur a switching cost s when purchasing from a different firm to their initial firm. The marginal cost of production is c where $0 \leq c < v$. For what values of s is it a Nash equilibrium for all firms to price at the monopoly level? How does your answer depend on n ?
[*Hint*: Proceed as in the $n = 2$ case covered in the lectures. Start by finding the profit of each firm when all firms price at the monopoly level and then provide a condition on s such that it is not profitable for a firm to deviate.]
5. (*Cabral 12.4*) A study on retail prices for books and CDs finds that price dispersion (weighted by market shares) is lower for internet retailers than for conventional retailers.¹ Discuss.

¹Brynjolfsson, E and M Smith (1999), "Frictionless commerce? A comparison of internet and conventional retailers", Working paper, MIT.