

Describe three ways in which progress in information technology affects the expected size of firms, including at least one factor that favours larger firms and at least one factor that favours smaller ones.

(12 marks)

If the US Department of Justice had managed to split Microsoft into an operating systems company and an applications company, do you think the demerged companies would have been worth more, or less, in the long run?

(4 marks)

Would such a demerger have had an effect on the size of the average software company, and if so, what?

### Model answer

First part is bookwork: Coase's theory of the firm and basic network economics. Reducing transaction costs will lead to smaller firms, but network effects lead to larger ones (because of the tendency to a dominant-firm model) and the same can be said for switching costs (which computerisation increases) and the combination of high fixed costs and low marginal costs.

part 2: Microsoft clearly believes the firm would have been worth less, as it would have become harder for the Windows and Office monopolies to reinforce each other. OTOH the precedent of IBM (where a demerger attempt failed) and AT&T (where one succeeded) suggests the contrary outcome. But then, Coase's theorem suggests the actual outcome may depend on transaction costs.

Part 3: This can also be argued either way. On the one hand, application markets will tend to either favour dominant-firm models, or not, regardless of whether the platform on which these applications are developed is a monopoly or not, and regardless of whether that platform is called 'Windows' or 'Office'. On the other hand, the progressive incorporation of ~~discrete~~ markets for products such as file compression and VPNs into the underlying platform may act as a damper on innovation. Here (as elsewhere in the question) the marks awarded will depend mainly on the quality of argument, and there are many possible lines of argument.