Solutions for problem set 3

Most answers can be found in Booth, 1995, *The Economics of the Trade-Union*, Cambridge University Press.

1. See section 5.6 Bargaining and strikes, pages 141-143

   (i) A union without any possibility to control (and eventually withdraw) labour supply would have no bargaining power. A firm that has the option to hire non-member workers in a sufficient amount may not be willing to negotiate with a trade union. However, when an important part of the workforce is member of a trade-union, the firm who wants to hire labour in sufficient amounts must bargain with the union. The monopoly power of a union is reflected by the cost that it can provoke to the firm by means of strikes. If the firm could replace the incumbent union workforce at no cost (only wage costs), strikes would not cause high damages to the firm and the union would be powerless. It can be expected that the union's strike threat becomes more powerful when the firm's opportunity costs are high because of high demand for its products, high profitability, high fixed-costs (see also ii).

   (ii) It is difficult to find a rationale for the occurrence of strikes. When an agreement is found at the end of a strike, it is difficult to explain why this same agreement was not settled before the strike broke out. In this last case both parties would be better off, since they have reached the final agrement without bearing the costs of the strike. In order to explain the occurrence of strikes, economists have considered either limited rationality of the parties involved, or asymmetric and imperfect information. For instance, the level of profitability may be better known by the firm than by the union, but firms often do not have an incentive to communicate its true level (or unions are not particularly inclined to believe firm's claim about profitability). As a consequence of this imperfect information the firm and union may not agree upon the level of wages and this conflict may lead to a strike that may reveal some information about true profitability. After all, if the firm's opportunity costs are truly low because of low demand for its products/low profitability, it will be more willing to live through a prolonged strike and thus signal that it is serious about times being bad.

2. (i) In the UK in general, non-members may also be covered by labour contracts

negotiated by unions: employees can therefore benefit from the union without being member, this is called a free-rider behaviour in the literature.

(ii) Suppose we have data on wages and union status of individual workers and want to measure union wage-effects by linear regressions as discussed in class.

If workers have to be union members to get union wages, the decision to join a union typically depends on how the worker's potential union wage compares to the worker's non-union wage. We have seen an extreme stylized example in one of the lectures in which workers decide only on the basis of the individual union wage gap. If the worker's union wage gap (difference between the worker's potential union and non-union wages) is higher, it is more attractive for the worker to join and incur the membership costs. The problem in measuring union wage-effects in this case is that we observe only union wages for workers with relatively high union wage gaps and non-union wages for workers with relatively low (or negative) union wage gaps. In a way, union status is "endogenous" with respect to the wage gap we try to measure. We have seen in the lecture (in a simple stylized example with 2 types of workers) that a direct comparison of union and non-union wages in the data may not give a good measure of (average) individual union wage gaps. A more careful (and more difficult) econometric model/method has to be used. This is quite involved and we will not discuss it here.

With free-riding this problem may be less severe. With free-riding we may want to compare covered and uncovered workers rather than members and non-members. In turn, union coverage may be less directly controlled by workers than union membership. Then, individual union coverage can be expected to be more loosely related to individual union wage gaps (between covered and uncovered workers).

See also Booth [1995, p.173-175].

3. Without working out the answer, here are some points you could have used as a starting point:

   (i) Usually there is about one to three months notice for employers to fire their employees (or/and very costly).

   (ii) Labour contract are not renewed on an hourly or daily basis

   (iii) Most temporary labour contracts are for 6 months to 3 years.

   (iv) An important percentage of working persons do not change their work in a given year.

   (v) In the UK, a person aged 65 has in average changed six time her/his job (Polachek and Siebert p.253).

(vi) Wages are not fluctuating as much as prices on stock markets: some stickiness in nominal wages is often observed, in fact nominal wages rarely decrease.

(vii) Firms often invest in on the job training and long term carrier building plans, which require a long term commitment from both sides.

(viii) There are some "adjustment costs", which make hiring and firing costly to firms. As a result of this, firms may prefer to hoard labour in downturns and to let work overtime hours in booms instead of adjusting the number of employees instantaneously after a change in the level of production that is perceived as being temporary.

(ix) Workers often have firm specific skills that are valuable within the firm they are working, but loose (a part of) their value when worker switch to work in another firm.

(x) Risk averse workers have a preference for steady jobs.