

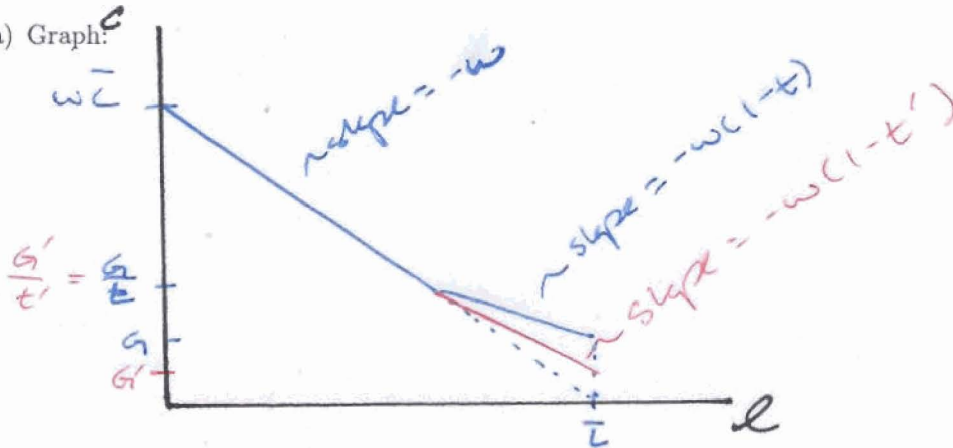
Economics 4351: Labor Economics

Southern Methodist University

Department of Economics

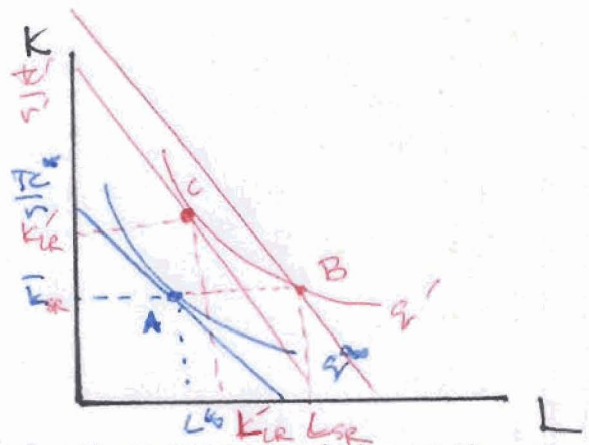
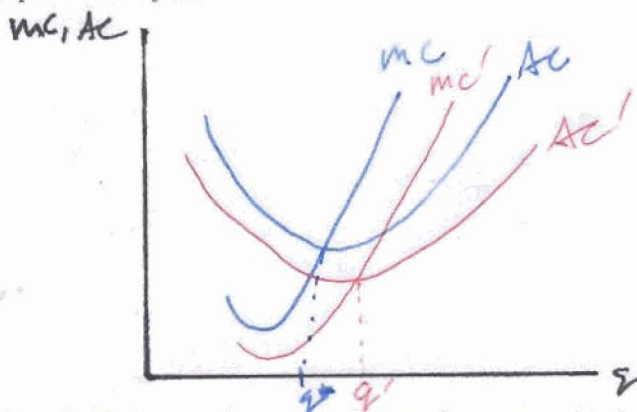
Final - Answers

1. (a) Graph:



(b) To assess the impact on time allocation of a simultaneous reduction in the lump-sum component and the implicit tax rate, one should analyze the two changes together. From the graph, the net effect of the two changes on an individual initially working only a little, is to shift the BC down. This implies that total income has fallen. If leisure is a normal good, then the IE says that labor supply will increase (and leisure decrease). However, the price of leisure has also changed, as seen by the fact that the new BC has a different slope. Specifically, the new BC is steeper, implying a higher opportunity cost of leisure (since the implicit tax was reduced, take home pay increases). Thus, the SE says that leisure is reduced and labor supply increases. The total effect is to increase labor supply.

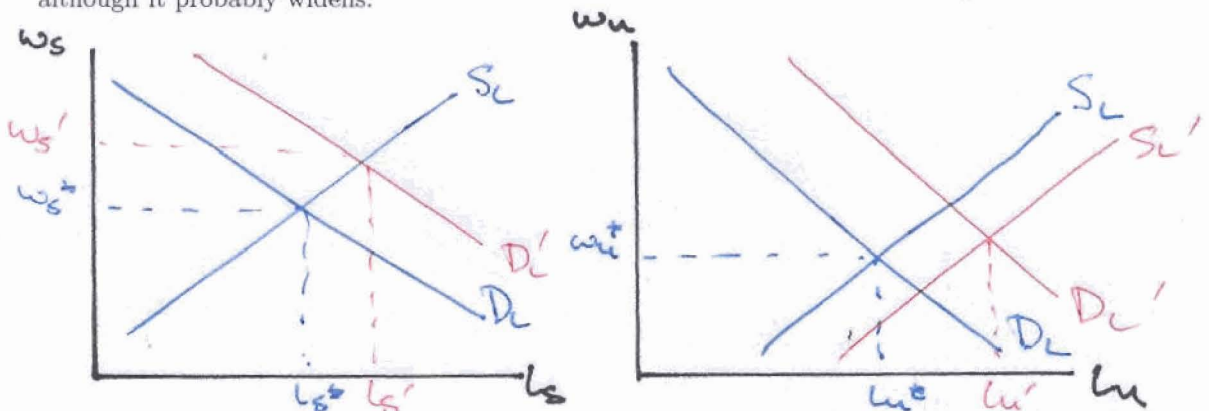
2. Capital subsidy ...



The subsidy lowers the marginal cost of output and induces the industry to produce a higher quantity. To expand in the short-run requires more labor since capital is fixed ($A \rightarrow B$). In the long-run, firms substitute away from labor to the relatively cheaper capital ($B \rightarrow C$). Thus, labor increases in the short-run, with fixed capital; in the long-run, labor falls and capital increases.

3. Dual sector model...

- (a) The immigrants shift out the L^S curve in the unskilled sector. The immigrants also cause the L^D curves to shift out in both sectors due to the increase in price of the final goods. Thus, $\uparrow w_s^*$, and the effect on w_u^* is ambiguous (although the increase in labor supply probably dominates in practice); the change in the wage gap across skilled and unskilled jobs is ambiguous as well, although it probably widens.



- (b) Assuming the wage adjusts within each market, there is no unemployment before or after the immigration.

4. There is not enough here to conclude that Stanford offers a better education. If better students attend Stanford – and the education offered by both Stanford and SMU are identical – then Stanford graduates may earn more. Better students may be attracted to Stanford if it provides a better signal to employers than SMU.
5. No, it is not a valid conclusion. The argument presented states that white Americans tend to be higher skilled workers on average relative to Mexican immigrants and that the return to skilled labor have increased relative to unskilled labor. Thus, the widening wage gap between white Americans and Mexican immigrants is, at least in part, due to the change in the returns to skilled labor. Absent additional information, there is no reason to suspect discrimination to be present.
6. Transitional matrices:
- (a) By examining the matrix it is obvious that the probabilities are 10%, 5% and 0%, respectively.
- (b) Similarly, the probabilities are 0%, 0% and 10%, respectively.
- (c) What we see from the table is that there is some movement to higher groups, but no movement to lower groups (all of the probabilities in the lower half of the matrix are equal to zero). Therefore we see that there is some mobility to high groups, but only a small percentage (5%) from the lower two quintiles (20th and 40th) are able to move to the upper two quintiles (80th and 100th). I would suspect that the distribution is bimodal (rich and poor) and there was some movement ahead (positive shift), but that it may only change marginally.

