Propositions

to accompany the Thesis

"Of Machines and Men:
Optimal Redistributive Policies under Technological Change"

by

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1. Suppose that the government can tax labor income non-linearly, and that income taxes can be conditioned on education: in simulations, skill-biased technical change (SBTC) leads to higher marginal tax rates for incomes around the marginal college graduate, and lower marginal tax rates towards the top of the income distribution.

2. Suppose that the government can tax labor income linearly and can subsidize going to college: (SBTC) has theoretically ambiguous impacts on both optimal income taxes and education subsidies, since SBTC simultaneously changes i) distributional benefits, ii) distortions in education, and iii) wage compression effects of both policies.

3. If the government can tax labor income non-linearly, but cannot condition taxes on occupation, it is optimal to distort the price of robots for redistribution.

4. If routine workers are found in the middle of the income distribution, it is theoretically ambiguous whether robots should be taxed or subsidized.

5. Although it is in theory optimal to distort the price of robots, the welfare impact of doing so is small.

6. Technological unemployment is a misnomer. One should rather talk about technological non-participation.

7. Whether automation leads to substantial nonparticipation crucially depends on the speed at which displaced workers can learn to perform new tasks.

8. In the near future, automation is more likely to lead to income inequality than to massive nonparticipation.

9. Labor market institutions play a crucial role in shaping the response of labor markets to automation.

10. The impact of artificial intelligence on income inequality might be quite different from that of automation.

11. We tend to overestimate the effect of a technology in the short run and underestimate the effect in the long run. (Roy Amara)