# Guns, Latrines, and Land Reform: Dynamic Pigouvian Taxation
# Online Appendix

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**Sketch proof of proposition**

Strategies comprise a subsidy path $s(t)$ for the government, and a minimal acceptance price $p_{min}(t)$ for the agents. Before $t_S^*$, the government doesn't want the individual to take up. In the subgame after $t_S^*$ , the government wants the individual to take up immediately, whatever the cost. The individual will take up immediately if $p - s(t)$ falls at rate no faster than g both locally and globally, and if buying subsidized is better than waiting to buy unsubsidized. Consider a price path such that $p - s(t)$ is falling at the maximal rate, starting at any given $s(t_S^*)$. The best response of an individual facing this path is to wait until $t_s^*$, and then buy at minimal price $p - s(t)$ in future periods. The markov perfect best response of the government, to this best response of an individual facing the path, is the path itself.