

## Potential Theft as an Indirect Tax

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## Potential Theft as Indirect Taxation:

A Brief Note:

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Some years ago, Gordon Tullock (1967, p. 231) argued that "theft itself is a pure transfer, and has no welfare cost, but the existence of theft as a potential activity results in very substantial diversion of resources to fields where they essentially offset each other, and produce no positive product." It is the purpose of this note to demonstrate that theft as a potential activity may entail a welfare cost in addition to that of resource diversion to the anti-theft field. This welfare cost results from the characteristics of potential theft as being in effect an indirect tax on "stealable" property (in general, property, other than money, most often associated with theft), with some positive probability that the tax will be paid.

Figure 1 presents the indifference map  $(I_1, I_2, \text{ etc.})$  of individual  $\underline{X}$  for commidity  $\underline{P}$ , which represents "stealable" property, and commodity  $\underline{Y}$ , which represents all other goods and services (including saving). Given  $\underline{AB}$  as the budget line without considerations of potential theft, individual  $\underline{X}$  maximizes his satisfaction (subject to  $\underline{AB}$ ) with the combination of  $\underline{Y}$  and  $\underline{P}$  given at point  $\underline{C}$ ,

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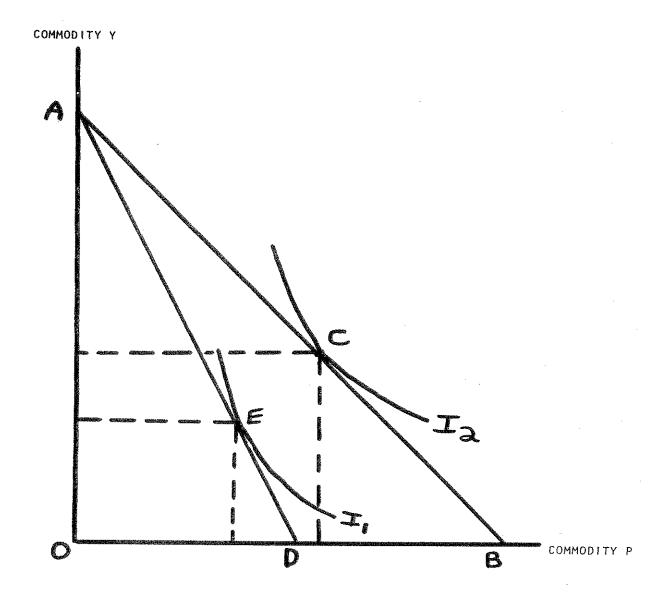


FIGURE 1.

thereby attaining indifference locus  $I_2$ . After consideration of potential theft, budget line  $\underline{AD}$  represents the alternatives open to  $\underline{X}$ . The steeper slope of the budget line  $\underline{AD}$  versus that of  $\underline{AB}$  reflects the probability that a theft will be committed against the "stealable" property of individual  $\underline{X}$ . That is, the individual will subjectively assign to all "stealable" property ( $\underline{P}$ ) a certain positive probability that it will in fact be stolen. Thus, if the price of good  $\underline{P}$  were initially  $\underline{\alpha}$ , its price may in effect now rise to  $\underline{\alpha} + \underline{\beta}$  ( $\underline{\beta} > 0$ ), after allowing the probability of theft to raise the effective price of the commodity to the consumer (not the seller) to its "true" level. The slope of the budget line accordingly rotates through point  $\underline{A}$  from  $\underline{AB}$  to  $\underline{AD}$ , thereby diminishing at all points except  $\underline{A}$  the potential purchasing power expected by the consumer. In other words, in terms of the budget line, the

<sup>&</sup>lt;sup>1</sup>The value of  $\beta$  might easily be viewed as some form of proxy for an insurance premium.

expected probability that a theft will be committed against  $\underline{X}$  is similar to the effect of an indirect tax on  $\underline{P}$ ,  $^2$  but, with some probability that  $\underline{X}$  will be required to pay the tax. The configuration of  $\underline{AD}$ , of course, depends on whether the tax is progressive, regressive, or proportional in effect.

Thus, in this case, individual  $\underline{X}$  selects the combination of  $\underline{Y}$  and  $\underline{P}$  indicated by point  $\underline{E}$ , with a resulting lower level of satisfaction (welfare) than before consideration of the potential theft (point C). Clearly, there is an "excess burden" from potential theft similar to that which results from an indirect tax with some probability of payment. In addition, this also creates a bias for consumption to drift from "stealable" items to substitute items. The greater the degree to which  $\underline{P}$  and  $\underline{Y}$  are substitutable, the greater this impact.

## REFERENCES

Musgrave, Richard, The Theory of Public Finance, New York, 1959.

Tullock, Gordon, "The Welfare Costs of Tariffs, Monopolies, and Theft," Western Economic Journal, Vol. V, No. 3, June, 1967, pp. 224-232.

<sup>&</sup>lt;sup>2</sup>See Musgrave (1959, pp. 142-147).