

TOBACCO TAX HIKES : IMPACT ON SMUGGLING, EXTERNAL COSTS AND HOUSEHOLD POVERTY

1. Introduction

2. Tobacco Smuggling 1: Homogeneous Good

3. Tobacco Smuggling 2: Low Quality Goods

4. Household Effects

5. Conclusion

1. INTRODUCTION

1.1 Purpose & Focus :

- WB study claims that tax hikes boost revenue and reduce total (i.e. legal & smuggled) consumption; i.e. fall in legal sales > increase in smuggled sales

Thus tackle smuggling head-on rather than refrain from raising taxes (also Jha & Chaloupka)

Sweden raised tax by 43 % - smuggling increased but total demand did fall and revenue did increase

- We argue that evidence is mixed and that WB & others (e.g. Joossens & Raw) ignore the **externality issue; the substitution of low for high quality tobacco; and intra-household effects among the poor**

1.2 Nature of Smuggling :

Bootlegging versus large-scale organised smuggling

Low quality rather than standard brand smuggled tobacco, especially in developing countries – health effects, job losses, etc.

1.3 Some Facts :

- Contrabound trade more than doubled in the 1990s – largely due to tax-induced price increases
- 1996 : 355 bill cigarettes smuggled – 7 % of total world trade; a trend that continued into the 2000s

2. TOBACCO SMUGGLING 1 : HOMOGENEOUS GOOD

WB scenario ; assumptions

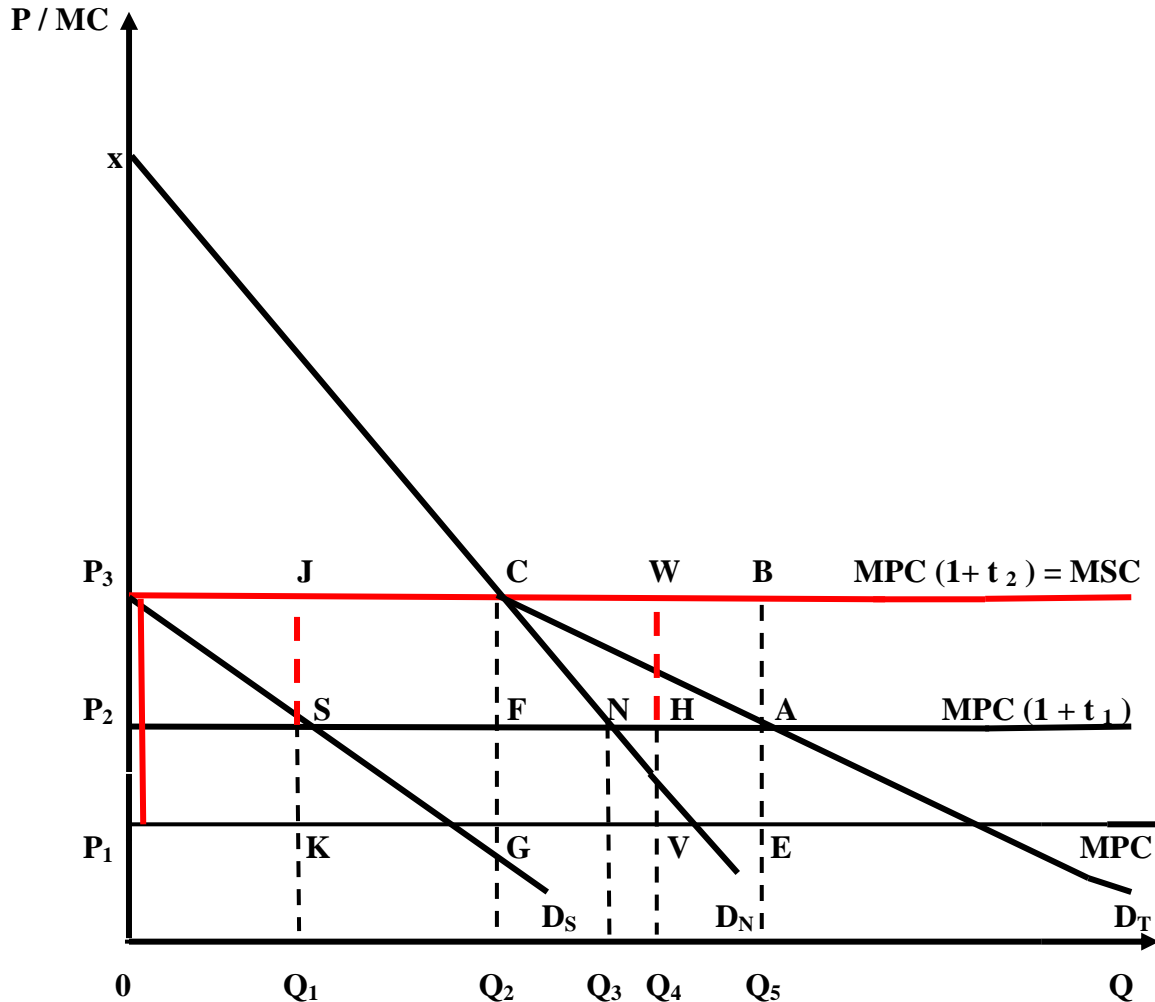


Fig 1

- Starting at A, tax hike & *no Smuggling* → Pigouvian solution at point C
- *Smuggling* by segment S → point S : $0Q_1$ at P_2
- Result consistent with WB : lower Q ($0Q_4$) and higher revenue ($P_3 CGP_1 > P_2 AEP_1$)
- But **negative externality higher** than before smuggling (and larger than optimal value) – $P_3 WVP_1$

3. TOBACCO SMUGGLING 2 : LOW QUALITY GOODS

- Smuggled tobacco may be of a lower quality and carry a higher negative externality than the standard brands – health effects of Bidis, Kreteks, Pan, etc (next section)
- Q^L & P^L = quantity & price of low quality tobacco substitutes

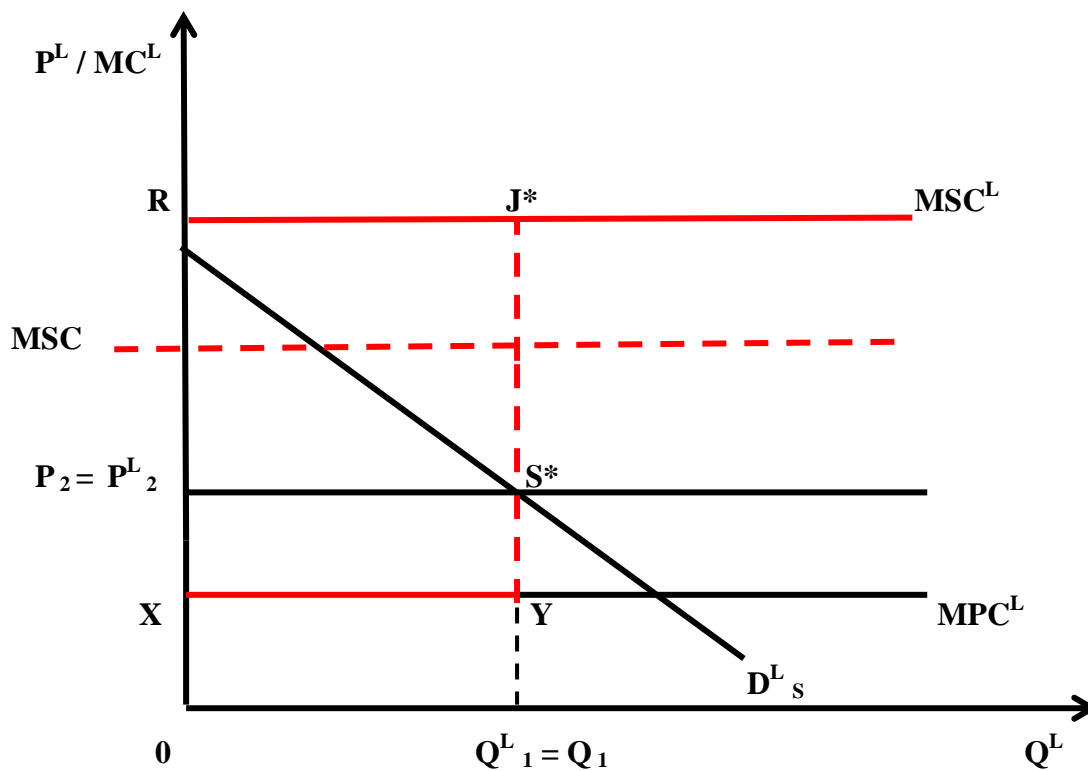


Fig 2

Net Effect :

- Negative externality from segment S's consumption of low quality tobacco (RJ^*YX) much higher than before smuggling
- Possible that *total* negative externality, $RJ^*YX + P_3CGP_1$ (from Fig 1), is larger than the externality *before* the tax-induced increase in the price of standard brand tobacco

4. HOUSEHOLD EFFECTS

- Household head satisfies addiction by substituting low for high quality tobacco – e.g. Bidis, Kreteks, Pan, chewing tobacco and poor quality (cheap) cigars (e.g. WHO)
- Adverse health effects – e.g. twice as likely to develop lung and heart diseases (WHO; Henn et al) ; + loss of jobs & income
- Household budget *before* tax-induced smuggling:

H^e_1	$P_X X_1$	$P_T T^L_1$
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- Now, assume additional smoke-related health expenses and loss of job & income;

Budget after smuggling and loss of income:

H^e_2	$P_X X_0$	$P_T T^L_1$
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- Fiscal implications:
 - Increased social transfers & unemployment benefits
 - Increased health treatment at state clinics & hospitals

5. CONCLUDING NOTE

- **Should policy makers cut tobacco taxes to (i) reduce the incidence of smuggling; (ii) avoid the negative household effects; (iii) possibly reduce the size of the negative externality; and (iv) possibly increase government revenue?**
- **And / or should they “crack down on smuggling activity”, e.g. raising penalties; eliminating duty-free sales; introducing tobacco-specific licenses with conditions; etc?**
- **Re household effects: should governments provide more facilities for addiction treatment?**
- **Should governments consider zero rating those (selected) food items, health care products and education-related products not already subsidised or zero rated (partly in lieu of social transfer payments)?**
- **Does the same / similar argument also apply to alcohol taxes?**