



EE 442
Economics of Public Revenue

Topic 11
Tax Avoidance and Tax Evasion

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Definition of tax evasion and tax avoidance

- Tax evasion:
 - Tax payers intend to reduce their tax payment and do not follow tax codes.
 - Tax evasion is illegal.
- Tax evasion behaviors:
 - Boarder trading without paying import duty fees and excise taxes.
 - Fake accounts.
 - Paying cash for transaction in order to evade VAT.
 - Under report real income.
 - Not reporting all of one's income.

- Tax avoidance:
 - Taking full advantage of the provisions of the tax code to reduce one's tax obligations.
 - Entails compliance with the tax laws, but recognizing that they tax different forms of income differently.
- Tax loopholes → provisions of the tax code that allow an individual to escape paying taxes or to reduce tax obligations.
- Tax avoidance behavior:
 - Divide income into many portions or groups in order to lower income tax bracket.
 - Invest in variety types of financial instruments which have different tax rates and different risks in order to minimize the amount of tax payment. → tax arbitrage.
 - Postpone the sale from the end of the year to the beginning of next year in order to postpone tax payment.

- EX: Sell the houses not more than 50 sq.wa → avoid local development tax.

Own a house not more than 50 million baht → avoid land and building tax.

- Alcohol content less than degrees → avoid paying high excise tax rate.

Principles of tax avoidance

1. Postponement of taxes
 - Accounting tricks
 - Capital gains and the postponement of taxes
2. Shifting and tax arbitrage: Income that accrues to different individuals is taxed at different rates, or that different kinds of income are taxed at different rates.

- *2.1 Income Shifting*

Under a tax structure with increasing marginal rates, a tax-payer at a high marginal rate will always want to “shift” income to a taxpayer with a low marginal rate.

Several important points to note about income shifting.

- The transfer of an asset such as stocks, bonds, real estate, or a share in the parents’ business.
- Set up non-juristic body of persons.
- Income shifting works simply because of the fact that marginal tax rates increase with income.
- There is a limit to the tax savings an individual can achieve through income shifting.
- The government has attempted to limit income shifting, with only partial success.

- *2.2 Tax Arbitrage*

Arbitrage involves taking advantage of price differences for the same commodity.

Tax arbitrage entails taking advantage of the different rates at which different kinds of income or different individuals are taxed.

- EX: Mr. C has 100,000 baht.
- Mr. C's choices are:
 - Buy mutual fund with 4% rate of return per year.
 - Buy an 100,000 baht house. Suppose that he takes loan from a bank with 6% interest rate per year and the interest payment can be tax deductible.
- Mr. C will get advantage from tax arbitrage.
- Mr. C buy mutual fund with his 100,000 baht and get 4% rate of return (return = 4,000 per year).
- And Mr. C take a loan to buy a house (100,000 baht) and pay 6% interest rate (pay interest 6,000 baht per year and can deduct interest payment from his income tax base).
- If he has to pay 50% income tax rate.
- He can get 3,000 baht from his interest payment deduction.
- He pays interest for his home loan just 3,000 baht ($6,000 - 3,000 = 3,000$ baht)
- He will earn 1,000 baht each year ($4,000 - 3,000 = 1,000$ บาท) from tax arbitrage.
- If Mr. C buys the house with cash and does not buy the mutual fund, he will not get the benefit of 1,000 baht.



- *Tax Shelters*

- Investment schemes that reduce one's tax liabilities.

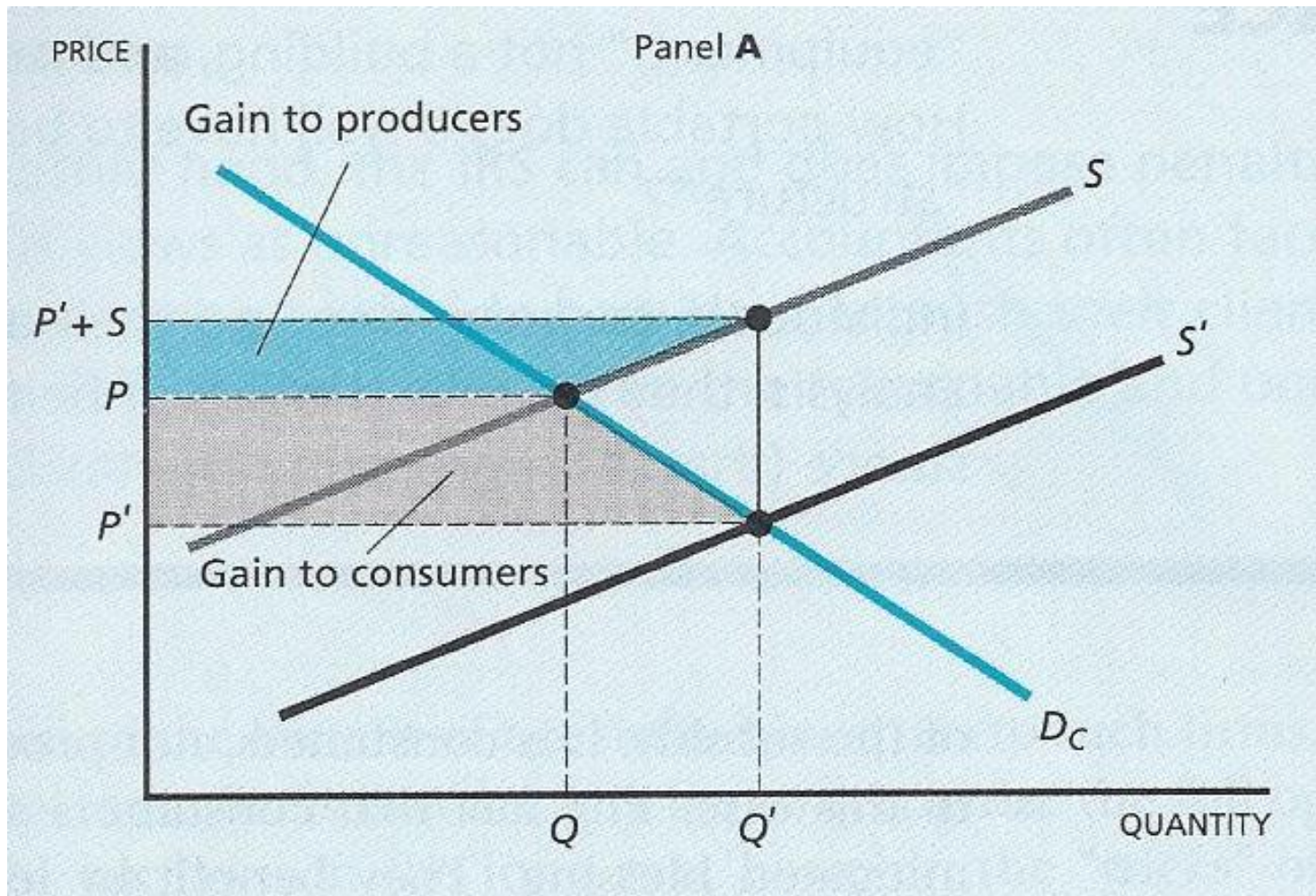
- A tax shelter exists when deductions from one income source can be offset against income from another source.

- EX: Special favorable tax provisions for the gas and oil industries. → similar to depreciation allowances for machine.
- Oil is extracted from a well, the well become less valuable. To compensate for this, the government provides depletion allowances. These are related to the value of the oil extracted.
- The taxpayer can use these deductions to shelter other income from taxation.

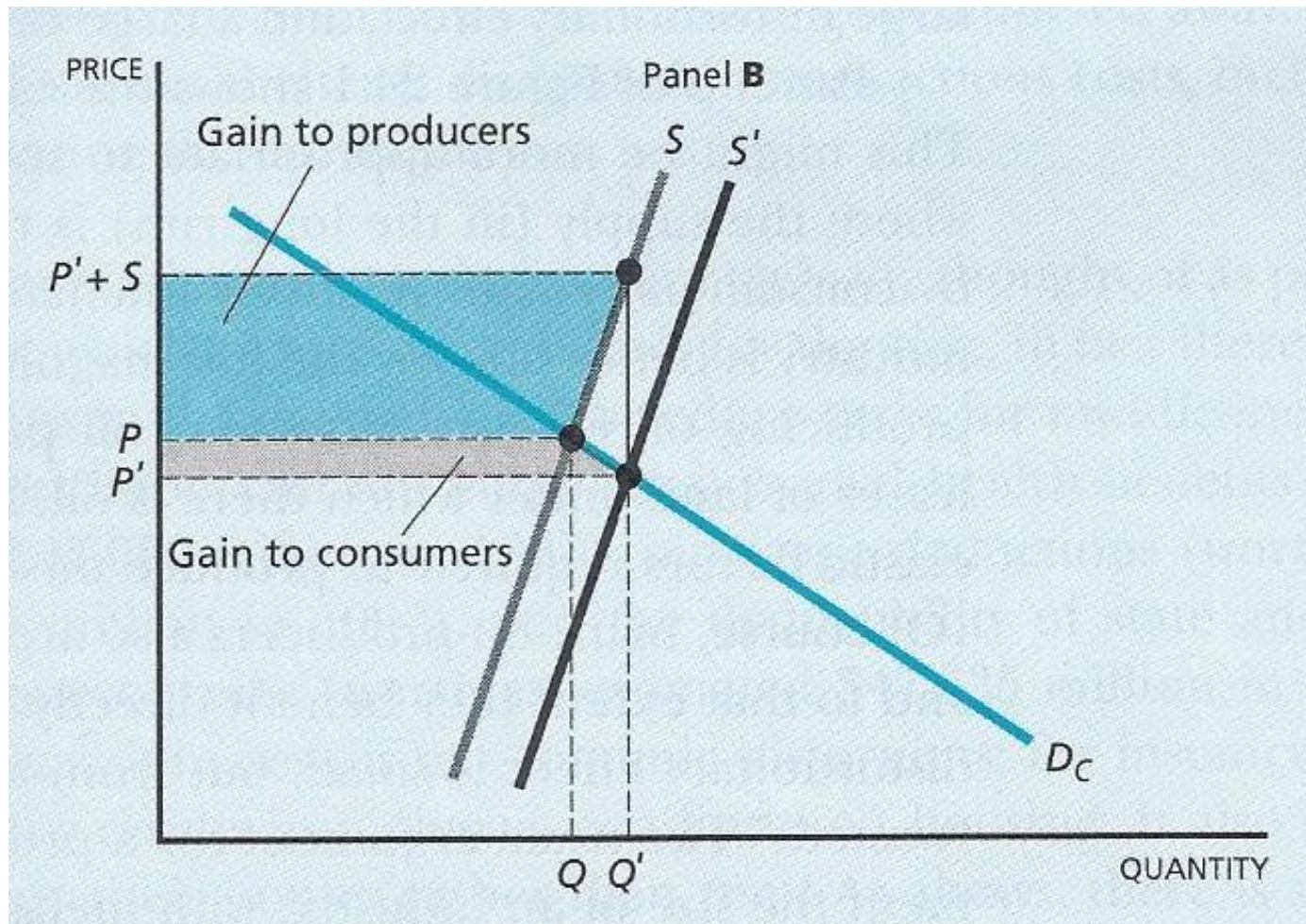
Who gains from tax shelters?

- Ex: Oil industry tax shelter. There are 5 possible beneficiaries.
 - ❖ The benefit could accrue to the “intended” beneficiary, the oil industry.
 - ❖ It could be shifted forward to consumers, in the form of cheaper oil.
 - ❖ It could be shifted back to the owners of the land under which there is oil.
 - ❖ The benefit could accrue to the Wall Street firms that put together tax shelter deals.
 - ❖ The benefits could be completely dissipated in excessive transactions costs.

- If there were no transaction costs, the theory of incidence would tell us that who benefits depends on elasticity of demand and supply curves.
- The case of a highly elastic supply curve: The special tax treatment can be thought of as lowering the cost of production, → shifting the supply curve down → the market price is lowered by almost the full amount of the subsidy. → Consumers benefit from the subsidy.
- In this case, they benefit by less than the amount of the subsidy. → Large dead weight loss and large distortionary effect.



- The case of highly inelastic supply curve: → More appropriate for special tax provisions for oil and gas. → Prices paid by consumers remain relatively unchanged.
- In the beginning, the industry is better off-by the full magnitude of the tax benefits. But because producing oil is more attractive, oil producers compete more actively for leases of land under which there is oil. It is these owners of land-of the inelastic factors required to produce oil-who get the benefit of the subsidy. (Many oil producers also are large owners of oil-producing land, and to that extent they benefit directly.)
- With an inelastic supply curve, the distortionary effect is small, but from a social point of view, the subsidy is “wasted”.



- In the L-R, in neither case would we expect to see the returns to investment in the subsidized industry higher than normal.
- Capital flows in until its rate of return (taking into account the subsidy) is the same as elsewhere. → Capital in the affected industry does not receive much of the benefit.
- Evidence supports these theoretical predictions: the returns in heavily subsidized industries, like gas and oil, are no higher than returns elsewhere, adjusted for risk.

- *Middle-class tax shelters*
- There are variety of provisions in the tax code which reduce taxes for middle-income taxpayers.
- EX: Mortgage deductions and the deductibility of income taxes.
- Each of these provisions results in economic distortions.
- EX: Mortgage deductibility results in higher expenditure on housing. It also bias individuals to buy their homes rather than rent.

Tax Evasion

- Tax evasion: Not paying taxes → Illegal.
- EX: Not reporting taxable income, Not reporting business's buying and selling value.
- The problems of tax evasion:
 - Difficult to monitor.
 - Costly to monitor even when you can.
 - A lack of clarity to the law and tax codes.

- Some methods of tax evasion:
 - 2 books of business transaction activities and accounts.
 - Receive income in cash.
 - Agreements to pay cash.

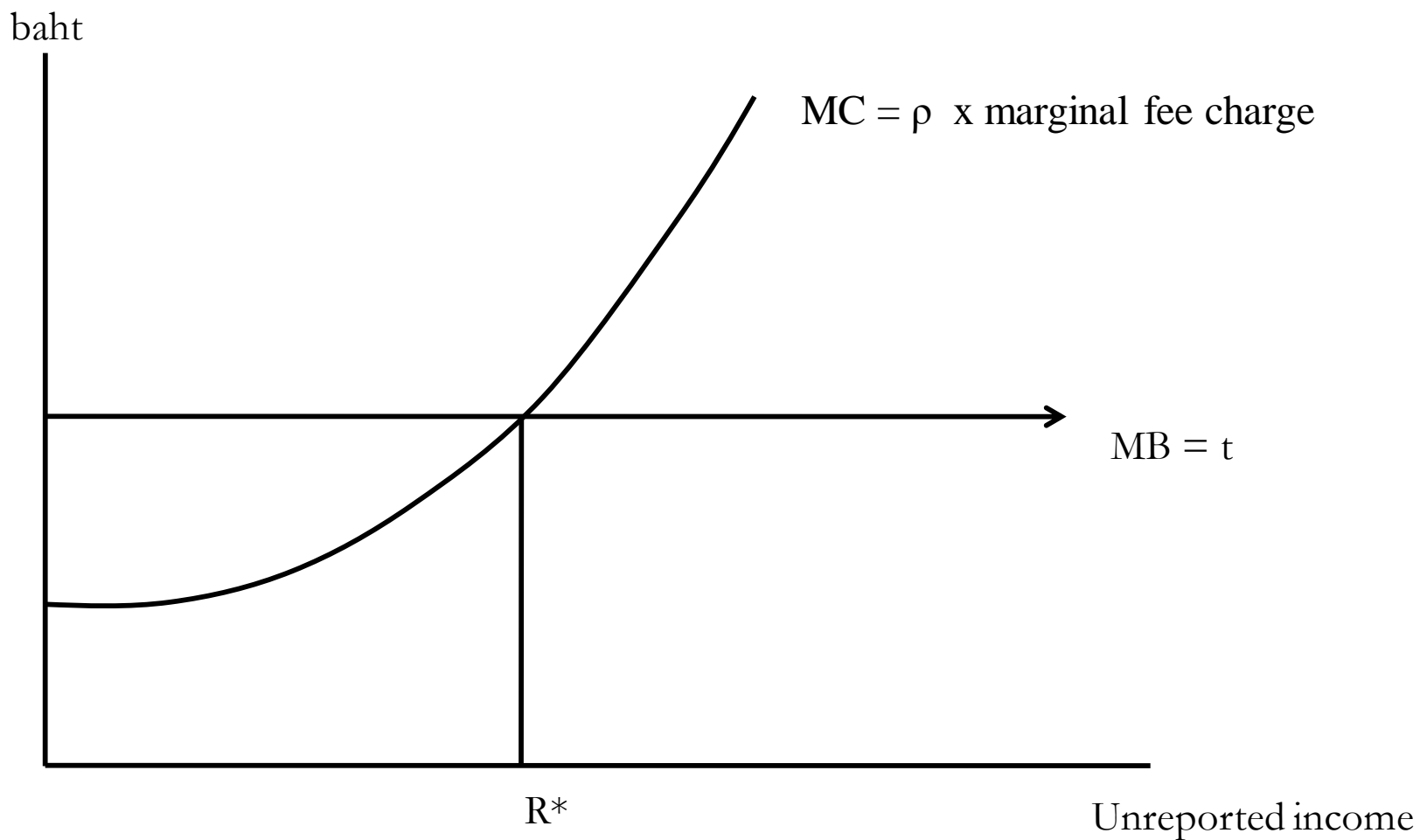
Positive Analysis of Tax Evasion

- The incentive to engage in tax evasion is the return after the successful tax evasion, though tax evaders will be punished if they get caught.
- Thus tax evaders will compare their costs if they get caught and the benefits that they will get if not caught.
- EX: Suppose that the marginal income tax rate (t) is 0.3.
→ Every baht of tax evasion can get benefit equals to 0.3 baht because it will reduce tax liabilities of tax payer by that much.

Positive Analysis of Tax Evasion

- On the other hand, tax officers do not know the real size of tax payers' income. They will randomly check on tax payers. There are probability that they will catch some tax evaders.
- The probability that tax evaders will be caught = ρ .
- The fee = R .
- Tax payers will compare between cost and benefit or tax evasion.

Positive Analysis of Tax Evasion)



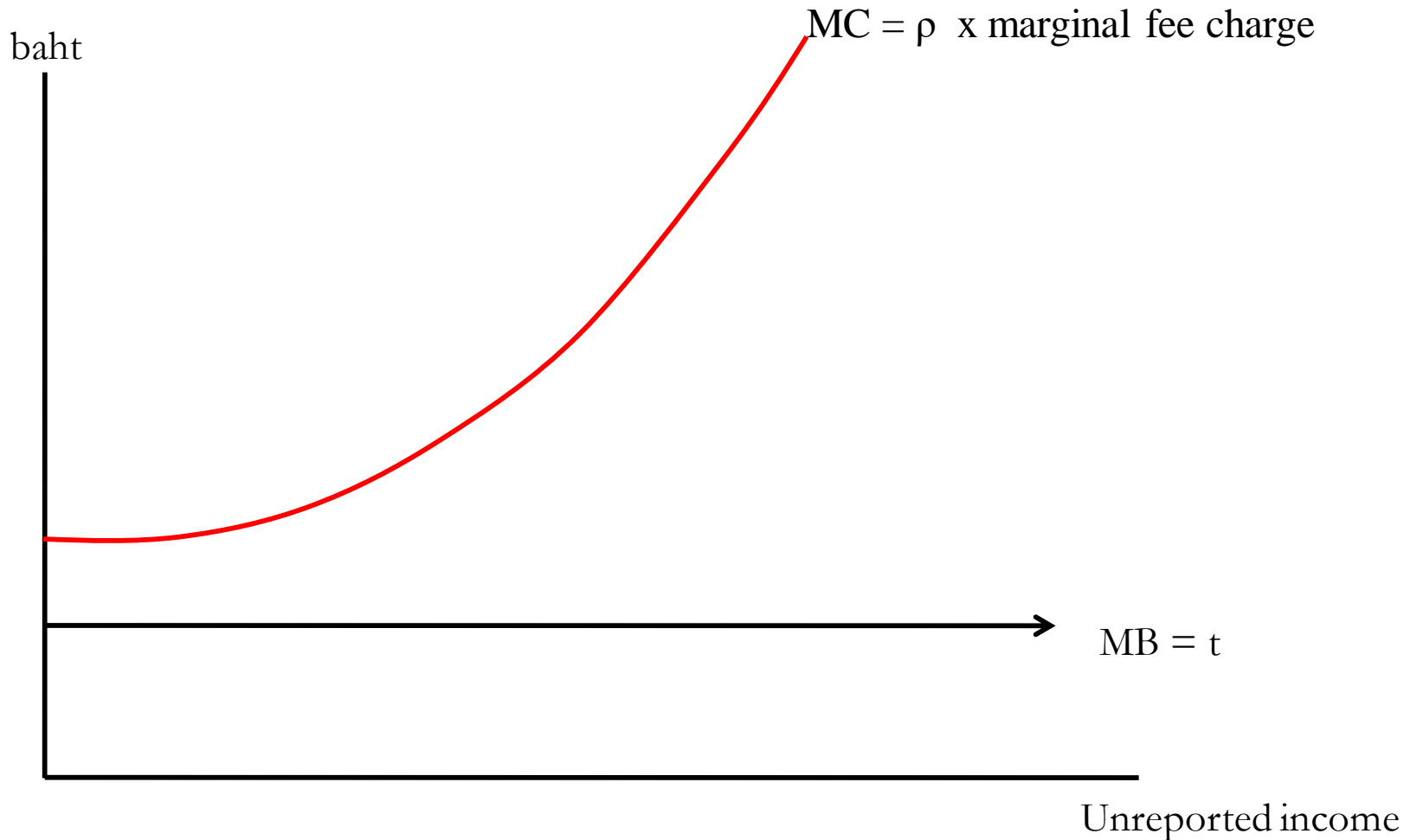
Positive Analysis of Tax Evasion

- If tax evaders know the size of tax evasion's costs (the probability of getting caught and fee charge) and the benefit in the form of non-taxed income (which will be increased with the size of the unreported income.)
- Condition for tax evasion: $MB = MC$
- If increasing the cost of tax evasion by increasing ρ and fee charge, $\rightarrow \uparrow$ MC of tax evasion.

Positive Analysis of Tax Evasion

- If tax evaders know the size of cost of tax evasion (ρ and R) and the benefit in the form of non-taxed income. \rightarrow They will be able to make decision of their tax evasion.
- $MB = t$
- If the cost of tax evasion \uparrow ($\uparrow \rho$ and $\uparrow R$) \rightarrow \uparrow MC of tax evasion.

Positive Analysis of Tax Evasion



No incentive for tax evasion because of the increasing in ρ and high marginal fee charge.

Positive Analysis of Tax Evasion

- The appropriate tax design:

- Increase cost of tax evasion.

At the same time

- Reduce the benefit of tax evasion. → reduce tax rate → not worthwhile to evade the tax.

- Some issues of concern:

- Public beliefs about tax evasion: → Cost of tax evasion. → People believe that tax evaders are not criminal.
- Risk Aversion: → don't want to evade tax.
- Changing work choices: EX: If the personal income tax rate is high, people may evade tax (choose the job that can evade tax easily such as underground economy). → Some jobs do not show their real income.

Normative Analysis of Tax Evasion

- Interested in the reasons for tax evasion and create underground economy.
→ reduce the excess burden from imposing tax.
- Underground economy → ↑ social welfare.
- EX: Workers who work for underground economy may have a higher tax elasticity than those who work in the regular sector.
- If the objective is to solve tax evasion problem, to reduce tax evasion with a lowest cost, → ↑ cost of tax evasion and the probability of getting caught and ↓ benefit of tax evasion which need a lot of resources to solve this problem.
- Have to consider the cost and benefit of monitoring tax evasion.

Causes of tax evasion and tax avoidance

$$Y_d = Y - t(Y)$$

Causes:

1. High tax rate

high $t \rightarrow$ income after tax $\downarrow \rightarrow \uparrow$ the unwillingness to pay tax. \rightarrow try to avoid or evade tax.

high $t \rightarrow$ worthwhile to evade tax.

2. The probability of getting caught

Tax evasion → government loses their revenue and unfair to tax payers → government needs to monitor and stop tax evasion behavior.

Audit rate depends on budget for auditing, the number of officers, the numbers of cases and the auditing process.

3. Low punishment

Fee and surcharge.

Jail-time.

Low punishment → not afraid.

High punishment → too severe punishment.

4. Tax loopholes

→ Tax payers are easily avoiding tax.

→ Tax avoidance expense: If the expense $<$ the value of tax payment that they can save money.

How to prevent tax evasion and tax avoidance?

- Before paying tax measures:
 - Increase the cost of tax evasion and tax avoidance or make it harder to do so.
 - Reduce the cost of willing to pay taxes.
 - Reduce the benefit of tax evasion and tax avoidance.
 - Make it not worthwhile to avoid or evade taxes.



1. Reduce the cost of paying tax

Compliance cost is the costs of paying tax legally:

- The cost of tax collection offices.
- The cost of tax payers.

2. The transparency of tax payment.

Tax auditing and prevention of tax evasion and tax avoidance

1. Account auditing
 - 1.1 Random audits
 - 1.2 Specific audits
2. Merchandise auditing

How to solve tax evasion and tax avoidance problems?

- Determine a proper tax rate (not too high).
- Wider tax base that covers most people and most goods and services.
- Benefit principle
- Ability to pay principle
- Reform tax laws
- Enforce law and fairness
- Need to have good data base of each taxpayers