

Economics IA Example: Cigarette Excise

Microeconomics commentary | Efficiency | Indonesia cigarette tax

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Coverage

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- Negative externalities of cigarette consumption
- Excise tax intervention and inelastic demand
- Evaluation of revenue, black-market risk and alternatives

Commentary 1

Title of the article: Indonesia all set to hike cigarette excise in 2022

Source of the article: The Star

<https://www.thestar.com.my/aseanplus/aseanplus-news/2021/12/16/indonesia-all-set-to-hike-cigarette-excise-in-2022>

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Key concept being used: Efficiency

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Indonesia all set to hike cigarette excise in 2022

<https://www.thestar.com.my/aseanplus/aseanplus-news/2021/12/16/indonesia-all-set-to-hike-cigarette-excise-in-2022>

Thursday, 16 Dec 2021

JAKARTA (The Jakarta Post/Asia News Network): **The Finance Ministry is set to raise cigarette excises by up to 12 per cent next year to increase state revenue and bring down smoking, especially among children.**

The ministry said on Monday (Dec 13) it would raise excises by an average of 12 per cent in 2022 from this year for machine-made clove cigarettes (SKM) and white cigarettes (SPM).

For hand-rolled cigarettes (SKT), which are produced through labour-intensive processes, the government will cap the hike at 4.5 per cent.

"Excise tax is an instrument to control [consumption] in line with the excise tax law," Finance Minister Sri Mulyani Indrawati said in a press briefing on Monday.

The government has been raising tobacco excises every year since 2014 as part of its efforts to reduce smoking among children and teens between 10 and 18 years old to 8.7 per cent by 2024. The excise was raised 12.5 per cent this year.

The latest increase is expected to bring down smoking prevalence to 8.83 per cent in 2022 from an estimated 9 per cent this year, according to Sri Mulyani.

The government also raised the price floor for cigarettes across all categories, resulting in much higher retail prices. The price floor for the SPM I category, for example, will be up by 12.01 per cent annually to Rp 40,100 (US\$2.8) for a 20-cigarette pack in 2022.

For the top-selling brands of cigarettes, the retail price will be Rp 38,100 for a 20-pack, making it the third-highest in the region, after Singapore and Malaysia.

Sri Mulyani said the latest excise tax hike was estimated to lead to a 3 per cent fall in production to 310.4 million cigarettes in 2022 but still bring in Rp 193.5 trillion in state

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revenue, roughly 10 per cent of the total.

Anticipating the latest hike, the Cigarette Manufacturer Association (Gappri) – a tobacco lobby – sent a letter to President Joko "Jokowi" Widodo on Aug 9 asking the government not to raise the excise next year, kontan.co.id reported.

Gappri chairman Henry Najoan said the tobacco industry had been hit hard in 2021 by the previous excise hike, falling cigarette consumption amid a waning purchasing power and rising competition from illegal cigarettes.

"Gappri expects production to decrease 15 per cent this year. This negative production trend will worsen the condition of the national tobacco industry and affect state revenue," he said.

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Indonesia all set to hike cigarette excise in 2022

The article discusses the increase in cigarette excise. For more details, the government raises the taxation “up to 12 percent” in 2022 to “increase state revenue and “bring down smoking, especially among children”. The **taxation** is introduced in this article to disincentivize the **over-consumption** of cigarettes - a **demerit good** affecting public health and unfavorable to consume. By making economic choices, the Indonesian government is attempting to achieve allocative **efficiency**. A rise in the taxation could correct the market failure arising from excessive smoking cigarettes. Smoking cigarettes creates **negative externalities** to society, negatively affecting third parties consumed. When people consume cigarettes in a free market, they will maximize the private benefit and consume at the level marginal social cost equals marginal private benefit, but when people **over-consume** cigarettes by smoking, it will create **external costs** for the third parties, this could be referred to passive smoking.

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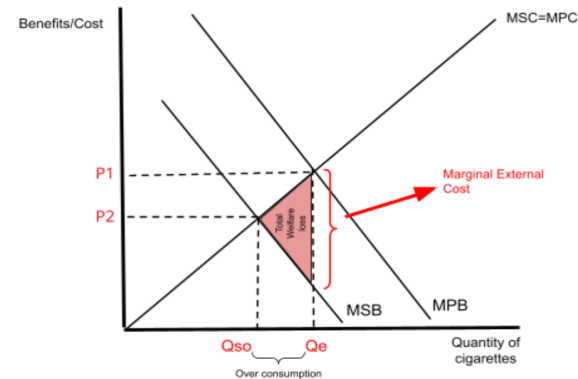
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DIAGRAM SHOWING THE NEGATIVE EXTERNALITIES OF CIGARETTES

CONSUMPTION



The graph illustrates the problem of **negative externalities**, when $MSB < MPB$. Assuming there is no government intervention, the free market equilibrium quantity at Q_e and P_1 occurs at the point where the **marginal private benefit** of smoking cigarettes (MPB) intersects with the **marginal social cost** (MSC). However, each time cigarettes are consumed, there will be a **marginal external cost** created that affects public health. It means that smoking people will over-consume the good at Q_e and P_1 , and the cigarettes being sold are more than what is optimal. The **socially optimal level of output** is at Q_{so} , when all negative externalities have been internalized and there are no more negative externalities thus no more market failure, when $MSC = MSB$. Due to that reason, there is the over-consumption at Q_{so} to Q_e , as the **marginal social benefit** (MSB) is less than MPB. Thus, it is an **allocative inefficiency** due to an

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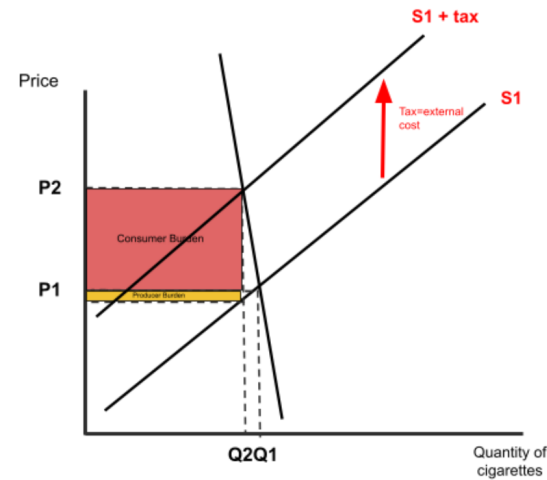
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over-allocation of resources in the market. There would be an existence of **welfare loss**, represented by the red shaded triangle. This represents the cost of consuming cigarettes in society. Therefore, causing market failure.

The quantity should be provided, to achieve **allocative efficiency**, is where $MSC=MSB$ at Q_{so} . In order to reduce the market failure, the Indonesian government has announced a policy to “increase state revenue and bring down smoking”. Taxation seems to be one of the policies. **Taxation** is the fee imposed by the government on producers and consumers.

DIAGRAM SHOWING TAX INTERVENTION ON CIGARETTES AND INELASTIC

DEMAND OF CIGARETTES



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In 2022, an increase in 12 percent of tax on cigarettes will have an effect on “control [consumption]”. The policy of taxation is imposed with the purpose of fixing negative externalities of cigarettes consumption and allocative efficiency. A taxation policy of 12 percent results in an upward shifting of the S1 curve, represented by S1+tax. It will lead to a contraction along the demand curve, creating a new equilibrium at P2 and Q2. According to the law of demand, as the price increases from P1 to P2, the quantity demanded will decrease from Q1 to Q2.

Tax burdens might incentivize producers to decrease the supply of this demerit good because of an increase in production cost. An increase of 12 percent of tax on cigarettes was projected to lead to “a 3 per cent fall in production to 310.4 million cigarettes in 2022”. The tax imposed should be equal to the external cost to the society, therefore, it will lead to **allocative efficiency**. However, as cigarettes are addictive goods, producers might pass on the **incidence of tax** or **burden of tax** to the consumers, represented as the red and yellow shaded areas on the diagram.

In the short term, the government intervention of tax would work to a certain degree. An increase in the price of cigarettes would disincentivize the consumer's consumption of cigarettes, as the price increases, consumers should reduce or eliminate their consumption of cigarettes. Due to the inelasticity of the demand curve as cigarettes are addictive goods, the demand of consumers would decrease less than proportionately, hence the taxation may not work properly in the long term.

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The goal of the government's policy is to "increase state revenue" and "bring down smoking". The external cost is now paid by producers and consumers and the tax internalized the negative externalities, thus, this will lead the Indonesian government from **allocative inefficiency** to **efficiency**. The demand for cigarettes is **inelastic** as the good is addictive, only large price increases will stretch demand. However, excessive use of taxation would cause more problems. If the price is too high, people would start to look at other sources of supply. It might lead to consumption in the **black market**, which is illegal and leads to **government failure**. There is an alternative policy that would be used instead, which is subsidies. **Subsidizing** on educating people about the dangers of smoke to public health or also funding a negative advertising campaign to decrease the quantity demanded of cigarettes.

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