Kreteks in Indonesia
August 2009

Kreteks dominate the tobacco market in Indonesia. In 2007, 92% of smokers prefer kreteks over conventional white cigarettes.¹ Local manufacturers have traditionally ruled the kretek market. However, over the last four years, transnational tobacco companies (TTCs) like Philip Morris International (PMI) and British American Tobacco (BAT) have aggressively invested in Indonesia’s emerging market by acquiring local kretek manufacturers (HM Sampoerna in 2005 and Bentoel Internasional Investama in 2009, respectively).

What are Kreteks?
Kreteks are clove-flavored cigarettes originally from Indonesia, but are sold internationally. They are either hand-rolled or machine-rolled and wrapped like conventional cigarettes in cornhusks or white, black or brown paper. Kreteks are manufactured both with and without filters.

- The tip of the rolling paper is often dipped in saccharine, an artificial sweetener.²
- Kreteks are made from as many as 20 to 30 different types of tobacco (60-80% of composition), cut up clove buds (20-40%) and special flavorings called “sauces”, which are unique to each brand.
  - Up to 100 different flavoring ingredients can be found in the “sauce.”² PT Djarum, for example, uses ingredients such as chocolate, dried fruit, and coffee in their recipe.³
  - Cloves provide kreteks with their distinctive flavor and smell. Cloves also contain eugenol which is an anesthetic that lessens the harshness of smoke.
- The majority of tobacco used in kreteks is domestically grown in Java, Sumatra, Bali, and Lombok.²

Different Types of Kreteks
Kreteks are so common in the Indonesian market that the term “cigarettes” usually refers to kreteks. Other manufactured cigarettes that do not contain clove buds and flavoring “sauces” are referred to as “white cigarettes.”

- **Rokok Klobot Kretek (KLB):** cornhusk paper that are made by hand.
- **Sigaret Kretek Tangan (SKT):** hand-rolled, filterless kretek.
- **Sigaret Kretek Tangan Filter (SKTF):** hand-rolled, filter-tipped kreteks.
- **Sigaret Kretek Mesin (SKM):** machine-rolled, filter kreteks that are often identical to white cigarettes in appearance.
- **Sigaret Kretek Mesin Mild (SKM mild):** machine-rolled kreteks that are marketed as containing lower levels of tar and nicotine.
- **Sigaret Putih Mesin (SPM):** white cigarettes.

Health Harms
No scientific studies have found that smoking kreteks is less harmful than smoking conventional white cigarettes.⁴ Kreteks contain tobacco and therefore have the same health risks as white cigarettes. Additionally, cloves and chemical additives in a kretek’s flavoring “sauce” have health risks.
• Daily cigarette smokers have the same physiological response to kreteks as they do to white cigarettes including increased heart rate, increased blood pressure, elevated levels of plasma nicotine and exhaled carbon monoxide.\(^5\)

• In machine-based tests, kreteks delivered more nicotine, carbon monoxide and tar than white cigarettes.\(^5\)

• Smoke inhaled from a kretek may contain three additional toxic chemical compounds: eugenol, anethole, and coumarin. Of 33 Indonesian kretek brands tested in 2007, all 33 brands contained eugenol, 13 brands contained anethole, and coumarin was detected found in 19 brands.\(^4\)
  - **Eugenol:**
    - Inhaled eugenol numbs pain receptors in the mouth and throat, which decreases the harshness of smoke,\(^6\) thereby making smoking initiation easier.\(^4\)
    - Eugenol, in high doses, has been classified as a possible human carcinogen and identified as being toxic to lung tissue.\(^7\)
    - When eugenol is inhaled, rather than ingested in food products, it is introduced into the body at levels much higher then daily recommended values.\(^4\)
    - In general, side effects associated with inhaling smoke containing eugenol include vomiting, sore throat, seizure, difficulty breathing, vomiting of blood, blood disorders, kidney failure and liver damage.\(^8\)

  - **Coumarin:**
    - Coumarin is a flavoring agent that is found in natural products like cinnamon, sweet grasses and vanilla grasses. Coumarin is a natural pesticide produced by plants and some synthetic derivatives are used commercially in rat poison as well as in blood thinners.\(^9\)
    - The flavoring “sauce” of a kretek is likely the source of coumarin because tobacco and clove buds lack significant amounts of coumarin.\(^4\)
    - In large doses, coumarin has been shown to have toxic effects on the nervous systems, heart blood vessels and liver of animals. It can also cause tumors in humans.\(^10\)
    - Coumarin has been banned as a flavoring agent in the United States since 1954.\(^10\)
    - In 2007, coumarin was detected in 19 out of 33 brands of Indonesian kreteks, including two brands (Jakarta Sigaret and Prima) acquired by BAT in its 2009 Bentoel takeover.\(^4\)

  - **Anethole:**
    - Anethole gives kreteks a sweet taste and a licorice-like order and is found in the flavoring “sauce.”
    - Anethole has been shown to be toxic to the liver. It has also been found to cause cancer and can mutate animal cells.\(^11\)

TTCs are fully aware of the additional dangers of kreteks. Over ten years ago, BAT sought to develop a kretek-like product in Indonesia containing levels of eugenol that exceeded international guidelines for eugenol uptake.\(^12\) At that time, the company chose not to bring the product to market fearing bad publicity from marketing a product in Indonesia that could not be marketed in other countries. However in 2009, BAT acquired Bentoel and its associated kretek brands. Following this acquisition, BAT’s top executives were asked about the dangers of kreteks, and responded that they had reviewed the previous evidence and unlike before were now able to “justify” the sale of kreteks.\(^13\)
The Kretek Market
Hand-rolled kreteks (SKT) have been made in Indonesia since the late 1800s. Kreteks exploded onto the market in the mid 1970s when machine-rolled kreteks (SKM) went into production effectively edging out white cigarettes (SPM) as the most popular tobacco product in the country.14

- Currently, the sale of machine-rolled kreteks is on the rise.15 In 2006, approximately 56% of all cigarettes were machine-rolled kreteks and an estimated 35% were hand-rolled kreteks.16
- The manufacturing of kreteks is dominated by local companies. However, TTC’s see the potential profits in kretek sales and are currently investing heavily in buying out local companies.

![Market Share of Machine-rolled Kreteks, 2008](chart)

**Market Share of Machine-rolled Kreteks, 2008**

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Gudang Garam 33%
HM Sampoerna 18%
Djarum 15%
Bentoel 5%
Nojorano 6%
Other 23%
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Note: White cigarette brands produced by BAT, PMI and Bentoel are not included and while some white cigarettes may be included in the “other” category, this is an accurate estimate of the market shares of machine-rolled kreteks.

- Kreteks are offered in packs of 10, 12, or 16 sticks and can be purchased individually making them much cheaper than white sticks which are sold in packs of 20.14
- Kreteks have mass appeal in Indonesia.
  - According to the present director of BAT Indonesian operations “smoking kreteks is an ingrained part of Indonesian culture,”18 a smoking culture that is dominated by men.
  - Kreteks are attractive to youth because of their sweeter taste and milder feeling. Kreteks are often referred to as “training cigarettes,”6 making it easier for new smokers to become addicted.
  - Kreteks using misleading terms such as “light” and “mild” are growing (17.2% market share in 2007).14 The most recognizable being A Mild with 14.6% of the market in 2008.17
- Kreteks are exported to countries including Malaysia, Hong Kong, the Middle East, Germany and United States. Djarum licenses the production of its products to a factory in Brazil that provides kreteks to the Latin American region.14
Production and Labor Practices
The production of kreteks is considered a “cottage industry” which means it can be done on a small scale and is very labor intensive. The small scale of production is unique in Indonesia, and the tobacco industry is one of the few left where small-scale, home based manufacturers compete with corporate giants.

- It is estimated that there are over 3,300 local cigarette manufacturers in Indonesia, the majority of which make kreteks.
- The kretek manufacturing industry employed over 260,000 Indonesians in 2006 due in large part to hand-rolled products.
  - Women are the main employees in hand-rolled kretek facilities and traditionally tobacco production in Indonesia has been considered women’s work.
    - Hand-rolled kreteks “are the main reason why the kretek industry is one of the largest employers of women in Indonesia today.”
    - Typically, a woman can produce 5000-8000 sticks a day. She is then paid on a piece rate basis.
- Most production of kreteks occurs in company owned factories but some rollers and packers still operate out of their homes and then return the product to the factories.
- The taxation of the tobacco industry favors smaller hand-rolling operations. Hand-rolled kreteks are taxed between 4-22% depending on the size of the production facility (smaller factories are taxed less) and machine rolled kreteks and cigarettes are taxed 26-40%.
- Due to the tax advantage for smaller operations, PMI’s HM Sampoerna contracts all of its hand-rolled products to 37 third-party operators (TPOs) that employ 62,000 workers.
  - “The TPO scheme is a pioneer in the development of labor intensive industries that do not require high technology, and thus is well placed to support the development in rural areas”- Yos A. Ginting, director of corporate affairs, 2008.
- 72% of the cloves produced in Indonesia are used in the kretek industry.
  - The government supports a smallholder clove intensification program (started in the 1960s) that provides cheap credit and technical advice to small-scale clove farmers; larger Kretek manufacturers like Sampoerna also provide technical advice.
- Tobacco, like cloves, is produced in Indonesia on a small scale. Family operated farms are made up of 2-3 hectares of land.
  - On a national level, tobacco farming and manufacturing contribute little to the total level of employment in Indonesia (1.07-1.23%). Even in East Java, where the tobacco sector is largest, only 0.5% of total arable land is used for tobacco farming and manufacturing provides only 2.9% of jobs.
Influence of the Kretek Industry

TTCs have a great deal of political and economic influence. The TTCs use their influence to stop or weaken tobacco control policies in countries around the world. In Indonesia, however, kretek manufacturers are often better positioned to aggressively market their products and sway political decisions surrounding tobacco control. Despite the strong positioning of local companies, the infiltration of TTCs into the kretek market in the last four years has allowed them to buy influence that they did not have before.

- Lobbying by the kretek industry is conducted, in part, by the Association of Cigarette Producers (GAPPRI). Membership includes three major kretek manufacturers, eight medium-size kretek manufacturers and more than 600 small scale kretek manufacturing companies in Indonesia (Sampoerna and Bentoel are members).
  - GAPPRI claims that it is protecting the interest of all people with a vested interest in the kretek industry including those who are directly and indirectly supported by the industry.
  - In reality, GAPPRI poses a serious threat to the health of Indonesians by actively blocking strong tobacco control legislation including Indonesia’s ratification of the Framework Convention on Tobacco Control (FCTC). In 2007, after a pivotal meeting of GAPPRI, Industry Minister Fami Idris told the press that “we [the Indonesian government] are reluctant to sign the Framework Convention on Tobacco Control because the cigarette industry is able to boost the agricultural sector and paper industry.”

- The white cigarette producers are represented by GAPRINDO made up of 12 member companies, including PMI and BAT.
  - GAPRINDO and GAPPRI have many of the same policy goals especially relating to health warnings, ingredient disclosure and advertising bans. They differ on taxation which currently favors kretek manufactures.

- The industry used many tactics to block the passing of a national bill on tobacco control in 2009 including bringing in farmers to protest the bill and paying the Indonesia Tobacco Farmers Association to lobby the House.
- In 2009, the industry financed election campaigns using cigarette packs branded with party logos.
- On a regional level, kretek giant Gudang Garam was recently involved in drafting smoke-free legislation in Kediri to weaken bans in public places to protect profits.
- In 1999, legislation was passed to regulate the amount of tar and nicotine in cigarettes. However, this legislation was eliminated in 2003 due to pressure from the industry.

Kreteks are the number one tobacco product in Indonesia and the clove-flavored cigarettes are sold all over the world. Kreteks are traditional to Indonesian culture and attract users because the eugenol in cloves numbs the throat. Kreteks, however, are not less harmful than conventional cigarettes.

Understanding how the kretek market works in Indonesia means better understanding tobacco use in the 5th largest market in the world. Currently, local companies dominate but TTCs are aggressively targeting the Indonesian market. Acquisitions by PMI and BAT have the potential to change the industry that already has a great deal of political and economic influence.

As evidenced above, the cigarette industry has succeeded in influencing government decisions that place a higher value on cigarette production than on the health of the people of Indonesia. Ratification of the FCTC will curb the influence of local and international tobacco companies and protect the health of all Indonesians.