

# The Uncertainty of Essential Oil as a Cosmetic Product Market: A Market Sociology Perspective

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## ABSTRAK

*Minyak atsiri sebagai produk kosmetik diyakini sebagai salah satu komoditas yang paling banyak diminati, apalagi back to nature menjadi tren yang sedang menjadi tren utama saat ini. Namun, pasar minyak atsiri sendiri menghadapi masa depan yang tidak pasti. Masalah ketidakpastian di pasar ini terlihat dari harga yang fluktuatif dan kesulitan dalam menilai produk. Studi-studi sebelumnya lebih banyak melihat masalah ini dari sisi penawaran dan dapat disimpulkan bahwa kurangnya data dan informasi tentang permintaan pasar minyak atsiri. Oleh karena itu tujuan dari penelitian ini adalah untuk menganalisis ketidakpastian pasar minyak atsiri sebagai produk kosmetik. Kajian ini mencoba menjawab permasalahan sentral awal sosiologi pasar, konstitusi permintaan. Selanjutnya konstitusi permintaan akan membahas masalah penilaian harga dan kualitas komoditas ini. Penelitian kepustakaan digunakan oleh penulis dalam artikel ini. Temuan menunjukkan bahwa masalah ketidakpastian dalam konstitusi permintaan dapat dilihat pada harga minyak atsiri yang berfluktuasi dan kesulitan yang dihadapi oleh para ahli dan non-ahli dalam menilai kualitas minyak atsiri. Alasan kesulitannya adalah komoditas hanya dinilai dari kualitas materialnya. Studi sebelumnya tentang kosmetik dan Obat Herbal Tradisional Indonesia (Jamu) dan beberapa dokumen laporan minyak atsiri, akan memperbesar sisi permintaan pasar minyak atsiri ini.*

## ABSTRACT

Essential oil as a cosmetic product is believed to be one of the highest-demand commodities, especially when the back to nature is the current leading trend. However, the essential oil market itself faced an uncertain future. The uncertainty problem in this market can be seen from the fluctuating prices and difficulties in assessing the product. The previous studies mostly saw this problem from the supply side and it can be concluded that there is lack of data and information about the market demand for essential oils. Therefore the aim of this study is to analyze the uncertainty of essential oil as a cosmetic product market. This study tried to answer the central initial problem of market sociology, the constitution of demand. Furthermore, the constitution of demand will discuss about the problem of price and quality assessment of this commodity. Library research was used by the author in this article. The findings shows that the uncertainty problem in the constitution of demand can be seen in the fluctuating price of essential oils and the difficulties faced by experts and non-experts assessing the quality of essential oils. The reason for its difficulties is that the commodities are only assessed from their material qualities. Previous studies about cosmetic and Indonesian Traditional Herbal Medicine (Jamu) and several documents of essential oil reports, will enlarge the constitution of demand side of this essential oil market.

## 1. INTRODUCTION

The occurrence of the Covid-19 pandemic has changed the beauty industry. Covid-19 pandemic has also influenced the habits of consumers of beauty products in buying cosmetic products. This is evidenced by the increasing demand for health and beauty products during the Covid-19 pandemic (Al-Samydai et al., 2020; Liang et al., 2022; Putra & Kasmiarno, 2020). The reason for the increasing demand for beauty products based on natural ingredients is that consumers see natural products as healthier choices rather than synthetic products and their minimal use causes side effects (Junardi, 2020; Sugihamretha, 2020). The cosmetic and herbal medicine industry is inclusive and multiplayer so that it

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can become a new spearhead for the manufacturing sector and the national economy. In the next few years, products based on natural ingredients are believed to be the key to the growth of the beauty industry (Nurfitriana, 2020; Yusuf, 2020). This trend toward natural ingredients-based beauty products is also known as the back to nature trend. Markets are arenas of social interaction. Markets provide a social structure and institutional order for the voluntary exchange of rights in goods and services, which allow actors to evaluate, purchase, and sell these rights (Beckert, 2009; Naseem et al., 2015; Topolšek et al., 2020). The central initial problem of market sociology refers to the constitution of demand. One of the main discussions in market demand is about uncertainty. Uncertainty problem in the market explains how actors in capitalist society cope with uncertain futures. Uncertainty in the market is caused by the relentless tide of product, process, and policy innovations that drive economic growth were partly designed by entrepreneurs and policy-makers. The constant changes in the preferences and beliefs of consumers that affect market prices are consciously shaped by economic actors (Beckert, 2019; Cahyani et al., 2021; Pappu et al., 2005). By defining uncertainty, we can know how economic actors make decisions and coordinate actions with other actors. Therefore, individual decision-making and actor preferences are considered as the value problem and focus on the demand side of markets.

The study about uncertainty started with the problem of knowledge in markets. This knowledge problem is announced in the context of the market from the Lemons model. In the Lemons market, product quality can be determined objectively because it is intrinsic to the object; therefore, uncertainty is an information problem. Asymmetric distribution of information regarding the inherent quality of the product leads to market failure because buyers are only willing to pay for average quality, causing sellers to withdraw above-average-quality products from the market (Beckert et al., 2017; Mandal, 2020; Prathap & C.C., 2020). When uncertainty is centralized in asymmetric information problems, the consumer was assumed to lack knowledge. However, the problem of uncertainty does not stem from asymmetric information, but from a lack of clarity as to what qualifies as quality. The reason why uncertainty does not stem from asymmetric information is that the asymmetric information only answers the authenticity problem, but does not answer the price problem (Guo et al., 2018; Papadopoulos et al., 2017; Wongtada et al., 2012). An example of this argument can be seen in the art market. Assessment problem is not only faced by those who already had full information about the field but it is also faced by those who are non-specialists in the field. If they were given multiple goods with similar qualities, they would have trouble "forming clear subjective values for goods in the market". If quality is only understood from the materiality of the object, neither sellers nor purchasers can infer prices from inspecting intrinsic characteristics and comparing them to those of similar products (Dewi et al., 2019; Dokukina & Petrovskaya, 2020). Nevertheless, some products sold in such markets fetch very high prices, and there would be large price differences between products that may look similar in terms of their material characteristics. Aside from large price differences, if material quality is the only way to determine value, uncertainty in these markets would be so excessive that demand would be random and low. The sociological question of this matter is, "How do actors reduce uncertainty?"

Uncertainty will be reduced only when potential purchasers are in a position to distinguish between the values of goods, and sellers can reliably demonstrate the value of their goods. Previous study state goods, and services can be grouped into three categories, (1) Goods whose quality is determined by the quality of the product material; (2) Goods that are determined intersubjectively among market participants; and (3) Goods whose quality is partly determined byproduct material, and partly by intersubjective meaning (Haris et al., 2021). Actors do not have the calculative bases for optimizing their utility functions in the face of bounded rationality, social interdependence, and new action situations. As the result, uncertainty leads actors to resort to socially anchored scripts or "conventions" that serve as a "collectively recognized reference" (Beckert, 2009; Nuseir & Elrefae, 2022). Hence, individual decision-making must be understood within its social contexts. Those social contexts or social devices are in a form of rules, social norms, conventions, institutions, social structures, and power relations. The uncertainty of value attribution is additionally reduced when products facilitate status assignments. In this case, the value of goods arises from the social recognition stemming from their possession, which provides "status" to the owner. The capability of goods to signal social status, however, is also an instrument for differentiating the value of heterogeneous products within a market. Based on those, this study aims to analyze the uncertainty of essential oil as a cosmetic product market. This study tried to answer the central initial problem of market sociology, the constitution of demand.

## 2. METHODS

In this study, the author used a qualitative approach by collecting data from reliable sources including national and international journals, websites, books, and media articles. The research object

focuses on the behavior of consumers in the essential oils market. The data collection method is library research. Literature study is all the efforts made by the author to collect information relevant to the topic or problem that will be or is being written (Lichtman, 2013). This information can be obtained from scientific books, research reports, scientific essays, theses and dissertations, regulations, yearbooks, encyclopedias, and other written sources both printed and electronic. Data collection is done by using documentation techniques, namely by reading, reviewing, studying, and noting the essence of the literature. This writing is descriptive in nature and describes systematically.

### 3. RESULTS AND DISCUSSIONS

#### Results

##### *Price Fluctuations and Essential Oils Quality Assessment*

Three main factors of volatile oil prices in Indonesia, including fundamental, technical, and political factors. Fundamental factors are factors that have a long-lasting impact on oil prices themselves. Fundamental factors consist of supply and demand, price fluctuations in the global market, and essential oil marketing patterns (Alighiri et al., 2018; Widiaswanti et al., 2019). Indonesia's essential oil prices are influenced by world essential oil prices, resulting in the cultivation of essential oils at risk of experiencing losses. The second factor is technical. Technical factors are short-term impacts on market dynamics. One example of a technical factor is the production capacity of a refinery. The third factor, namely politics, has a moderate impact on market dynamics. Political factors include government support in providing and conveying information on essential oil prices through relevant agencies. Essential oil marketing constraints are caused by low quality due to the type of essential oil business which is generally in the form of a small business with simple capital and technology and the production of raw material quality is not good. In addition, the abundant sources of essential oil raw materials have not been maximized by the essential oil processing industry players (Alighiri et al., 2017; Diop et al., 2017; Sritabutra et al., 2011). In addition, in the marketing of essential oils, the trade supply chain is considered quite complicated. This is because essential oil processing businesses still have difficulty supplying directly to exporters or end-users. The second problem is the process of assessing the quality of essential oils.

The content of essential oils is also influenced by environmental conditions. For example, air temperature, humidity, mineral composition, and water content in the growing place. In general, essential oil quality checks are carried out materially, both in terms of physics (specific gravity, optical rotation, solubility in liquid alcohol, and refractive index) as well as chemical inspections (conducted to determine the overall content of essential oils usually using a tool called *Gas Chromatography-Mass Spectrometry*). However, checking the quality of essential oils can also be seen from the material side (color and smell) which is called organoleptic (without tools). However, this is difficult to do. So the method commonly used is a laboratory examination. These tools are only owned by laboratories or industries that are large enough. From the examination carried out, the measurement results will be obtained in the form of "spectra". Through these spectra, an expert can find out what content is in essential oils. Essential oils belong to a group of substances that are very often subject to adulteration. They are used as a strong marketing advantage in the sale and promotion of various beauty and personal care products but the price of natural oils is always higher than synthetic oils. Some oils sold on the Internet are labeled as "pure", "natural" or "100% natural". According to the ISO/TC 54 standard, essential oils generally have to be natural and pure, so such labeling is unnecessary and does not guarantee good oil quality. According to previous study due to the high demand for essential oils, the methods commonly used are counterfeiting the addition of synthetic raw materials, and giving excessive labeling claims (Sarkic, A., dan Stappen, 2018).

##### *Consumer Characteristic and Essential Oil Quality Assessment*

Demand for essential oils comes from the food and beverage market (35%), fragrances, cosmetics, and aromatherapy (29%), households (16%), and pharmaceuticals (15%) (Amer & Mehlhorn, 2006; Soonwera & Phasomkusolsil, 2015). The global essential oil market is also being driven by the growing demand for natural and organic hygiene products due to increased attention to health issues among consumers. Where consumers are becoming more concerned about their health. Awareness amongst consumers is growing about the effects their purchasing behavior has on social conditions in production countries, including a growing interest in the source of ingredients. Consumers, however, do not always demand these certifications. There is a growing demand to go beyond certifications, to explain to consumers what true, local benefits the products they buy generate (Pappu et al., 2005; Sasmita & Suki, 2015). Essential oils are often used to improve women's physical and emotional well-being. Previous study essential oils are believed to relieve pain, improve sleep and mood, treat depression, and also

function as antioxidants (Mazlan & Diah, 2019). The combination of massage and counseling makes aromatherapy one of the most actively developing forms of alternative healing. In Indonesia itself, essential oil, especially aromatherapy is a crucial product for the wellness industry. Although essential oils are rich in benefits and are on-demand, the problem commonly experienced by consumers in this market is the difficulty in pricing and the assessment process for essential oil products. Difficulties in the assessment process are also reflected in previous research which states that problems regarding domestic essential oil marketing are still buyer-market (the price is determined by the buyer) due to the weak bargaining position of entrepreneurs (Alighiri et al., 2017). Moreover, knowledge-wise, consumers are often unaware that essential oils need to be protected from light in tightly closed and fully stocked containers. However, it should be taken into account that essential oils and their components can cause allergic reactions and symptoms (Soonwera & Phasomkusolsil, 2015; Turek, C., dan Stintzing, 2013).

Sales of essential oils are correlated with consumer knowledge. The more consumers understand the use of essential oils, the greater the demand and sales growth. Aromatherapy as one of the essential oil products is a market that relies on professional (aromatherapist) and personal use (individual consumers) for its retail purchases (Gbolade & Lockwood, 2008; Sritabutra et al., 2011). This is evidenced by a survey as many as 62% of professional therapists develop their products for resale in addition to their professional use. Previous study state all aromatherapists are self-employed, running their small practices, but many also play a role in the education (40%) and retail/wholesale (26%), which divide the market into one consisting of many small operators (Barbieri & Borsotto, 2018). Situation in Indonesia itself, this essential oil market is a niche market and in general, the users come from the upper social class.

## Discussion

Uncertainty problem in the market explains how actors in capitalist society cope with uncertain futures. According to Beckert, goods, and services can be grouped into three categories, (1) Goods whose quality is determined by the quality of the product material; (2) Goods that are determined intersubjectively among market participants; and (3) Goods whose quality is partly determined by product material, and partly by intersubjective meaning. From this concept and our findings, this essential oils product in Indonesia is a kind of good whose quality is determined by the quality of the product material. This can be seen from the previous studies on the assessing quality of essential oils by seeing their physical or material perspective, namely sensory analysis, physical analysis, and chemical analysis (Sarkic, A., dan Stappen, 2018; Sritabutra & Soonwera, 2013). The quality of the object cannot be understood, then the seller and the buyer will find it difficult to only determine the price of the intrinsic characteristics and compare it with similar products. As a result, there will be quite a large price difference between products of similar material characteristics and the market for these products will fail.

Apart from being seen from the price and difficulty of the product quality assessment process, uncertainty in the market is also reflected in the supply side of opportunity-seeking behavior. Essential oils belong to a group of substances that are very often subject to adulteration. This is because the price of natural oil is always higher than synthetic oil. As a result, the ways used by essential volatile producers are by adding cheap synthetic compounds and giving exaggerated claims on the internet such as being labeled as "pure", "natural" or "100% natural" (Mazlan & Diah, 2019; Sato et al., 1996). The impact of opportunity-seeking behavior from the supply side of course also has an impact on the demand side. In the case of the essential oil market consumption, according to previous research consumers of essential oils often do not know information about oxidative and polymerization processes that can lead to reduced quality of essential oils (Turek, C., dan Stintzing, 2013). As a result, buyers are only willing to pay for average quality, causing sellers to withdraw products of above average quality from the market.

Assessment problem is not only faced by those who already had full information about the field but it is also faced by those who are non-specialists in the field. If they were given multiple goods with similar qualities, they would have trouble "forming clear subjective values for goods in the market". Previous study explains in his article that in uncertain conditions, buyers do not know whether they might not be able to purchase the product more cheaply or in better quality elsewhere, or whether the purchase of another product will turn out to be more profitable (Beckert, 2009).

In this market, most customers also faced this condition. The sociological question of this matter is, "How do actors reduce uncertainty in this essential market?". The implications of the research provide an overview related to aspects that influence consumer decisions in buying essential oils as cosmetic products including gender, age, social class, belief in the efficacy of the product, proximity to the seller, tradition, income, price, brand, cosmetic quality and curiosity. The value of goods arises from the social recognition that comes from their ownership, which gives "status" to the owner. In this market, essential oil users come from the upper social class. However, this research is only limited to literature reviews so that it only utilizes research that has already been done and does not directly use it. Therefore, future

research is expected to be able to deepen and broaden research related to in essential oil markets by using methods that go directly to the field.

#### 4. CONCLUSION

Uncertainty in Essential Oils Markets can be seen in fluctuating prices and difficulties in assessing its quality. The reason why this market faced an uncertain condition, is because essential oils product in Indonesia is quality is mostly determined by the quality of the product material. To reduce uncertainty in this market, the regulators need to make guidelines as to what the words “natural” and “organic” mean, and these words may therefore be used to describe any product. Second, to reduce uncertainty from the constitution of demand, the regulators and suppliers can educate the consumers about how to assess the quality of essential oils through ads and online reviews. For a better understanding of this market, further research that explains the user experience using essential oils needs to be explored.

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