Link between oil prices and rubber prices economics essay



Abstract

It goes without saying that in contemporary world rubber has become very popular material due to its eco-friendly technology. The environmental question has become more and more significant and it increases the popularity of natural rubber en mass. It should be noted that synthetic rubber, which is made from oil won its popularity much earlier than the natural rubber, due to its cheap price. It won't be a secret that the oil is used for manufacturing the synthetic rubber: " synthetic rubber, a replacement for natural rubber, depends on the price of crude oil" (CommodityOnline, 2010). This research would reveal what relationship exist between rubber market and what factors determine the price of the rubber and their correlation with the oil market prices. With the help of different research methodologies it was revealed that the natural rubber prices have direct dependence on the oil price due the fact that synthetic rubber is manufactured from the crude oil, thus it could hardly avoid the impact on the rubber market. This research uses Thailand as the major platform for investigation the rubber market. It would also reveal the methods of rubber manufacturing (as synthetic, as well as the natural) describing how the price is formed, which factors determine it and what are the major global impact provided on the rubber market Thailand

Introduction

As it was mentioned earlier the rubber (especially natural rubber) is becoming more and more popular due to increased disturbance about environmental problems and it is one of the most burning questions in the contemporary world. Factories and plant of Thailand nowadays are involved https://assignbuster.com/link-between-oil-prices-and-rubber-prices-economics-essay/

in production huge amounts of rubber (natural) and working on the suggestion effective solutions that will assist sustainability. But there also exist synthetic rubber, which also impacts the rubber market. That is why the hypothesis for this report would be the following statement.

The final rubber price is determined not only by the purchasing power, but by the commodity price, in particular oil

This research would contain several parts. Abstract, – briefly describing the research; introduction, providing hypothesis; methodology, revealing the means of research process; literature review, investigating the sources used for the research discussion, showing the peculiarities of the research process; results dealing with the findings of this report; and conclusion would provide summary of the report findings

Methodology

The theme was chosen because it is one of the most acute economical questions in Thailand, Asian region and the whole worlds, as the formation of the purchase powers involve the different region, but the price on the rubber is formed locally in Thailand. Speaking about the participants of the research it would be essential to note that there was made no significant division on evaluating on the manufacturing the rubber, which are to be implemented on the factories. Hence it should be noted that the economical aspects as well as details of manufacturing, as well as vision of contemporary investigators on this case provided significant impact on this research process of this investigation. According to the different investigators rubber, which is manufactured in Thailand is exported all over the world and is

considered to be quite valuable commodity: "Rubber is one part of life of the people of the South, related both to the culture and economy of the last 108 years. The monoculture production system has replaced a traditional system of rubber forests, where rubber used to be grown in amongst fruit orchards and natural forests known as a suan somrom or "integrated garden".

Rubber plantations have been promoted through the government's Welfare Fund for Rubber Plantations" (Sayamol Kaiyoorawong, p. 2).

The qualitative and quantitative methods alongside with the peer review of the other researches works became the basis of her investigation. It is essential that such a theme as evaluation how the oil price impacts the formation of the rubber price needs various issues of data collection that would help to illustrate the statistical data from different point of view.

Among the suggested ones there are could be observed:

Using available information. Academic literature peer review would help to make a historical observation of the set problem. How it was related to by the governmental forces and what were the results.

Observing. Observation of statistical data on governmental web sites and forums, alongside different statistical data provided on the criminal justice archives. Would provide evident statistics which either prove or confute the local data and would help to provide comparative analysis in different areas.

Every of this methods used for the data collection are very important for this research, as it would make certain contribution in the whole research process, characterizing local achievements and drawbacks on the background of the global ones and providing comparison of different factors https://assignbuster.com/link-between-oil-prices-and-rubber-prices-

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impact on the formation of the price. It would be essential to take into account the fact that there would be one single source, which requires critical examination

The suggested research design alongside with the applied methods made the bases of the research, held by the author. As the core materials used different statistical information and investigations that date back to the different stages of the question investigation. The author reviewed the problem from the different sides and this let the reader to get the full information about the observed case. The structural division and various ideas upon the discussed question make this report easy readable and well structured, presenting all the necessary information for those who are interested in this question.

Literature Review

Academic literary sources such as magazine articles and books benefit a lot to the understanding of the approaches used to investigate the economical situation on Thai rubber market, the globalization impact, local political factors (in particular Thai government activity), correlation between rubber and oil pricing and aspects of rubber manufacturing process. They benefited a lot to the understanding raised issue in the particular area and place, as from the historical perspective as rubber is valuable export commodity in Thailand for more than 100 years (Sayamol Kaiyoorawong, p. 2), as well within the contemporary economical situation. It would be important to note that there were used sources, that date back to the different historical periods and it helped to evaluate the raised social issue and observe the difference between the military and civilians in different historical

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perspectives. Economic Change in Thailand, 1850-1970 by James C. Ingram provided really important informative data dealing with the historical development of rubber manufacturing in Thailand, the formation of the industry and the formation of the price on natural rubber. The author made a significant stress on the fact that the rubber manufacturing is strongly important for the economical development of Thailand: " An estimate of the Department of Agriculture for 1937 put the area in fruits at 1, 900, 000 rai, mostly in the Central and Southern regions; and the area in vegetables at 105, 000 rai, mostly in the Central region. The third crop is rubber. Accurate statistics of acreage are difficult to obtain, but a recent estimate put the area in rubber as high as 2, 000, 000 rai in 1950. More will be said of the rubber industry when we discuss other exports. Rubber and rice are the only agricultural crops which are important exports, and rubber is a relative newcomer." (James C. Ingram, 1971, p. 51). It goes without saying that being so valuable commodity for the whole country rubber economical position is quite high, as rubber plants provide a number of workplaces in agricultural region of the country for more than 100 years and increasing during the last 20 years a lot.

It would be important to note that there was used information from non-academic sources, which tell more about the state of things in the most recent times, describing the current situation on the rubber market, examining the facts that impact formation of the price and discusses economical value of this commodity for the country, region and the whole world. The magazine and newspaper articles giver relevant informational data about rubber market, rubber production and examine the factors

impacting the price of the commodity globally and locally. Evaluating the rubber market and the process of manufacturing the investigators reveal close connection other commodity has to people, who have already become the participants of the manufacturing processes (as for synthetic as well as for the natural rubber). Political Decentralisation and the Resurgence of Regional Identities in Thailand by Patrick Jory, published in Australian Journal of Social Issues is one of the best illustrative examples how does the rubber manufacturing industry and the commodity itself impacted by the local Thai government, how the governmental changes could impact the rubber market, determining the price of the commodity. The article tells about participation of governmental and political institutions in the life of rubber industry and how this could affect the industry and the people working there: "One of the targets of the attack on the Democrats-led government was its support for the ailing rubber industry, a major industry in the Democrats' heartland of southern Thailand. So gradually, regionalism is beginning to influence alignments on the Thai political scene." (Patrick Jory, 1999, p. 337). The peculiar organization of rubber manufacturing attracts a number of investigators, as in the present day realities, numerous ecological catastrophes this eco-friendly material is winning more popularity. What is more important about the natural rubber manufacturing process is the fact that it is manufactured in eco-friendly ways. Thus is the sustainable waste recycling the natural rubber increase its domination over the synthetic analogue and is highly appreciated by the representatives of constructional industry, who promote sustainable solutions for bioclimatic architecture and it is actually not surprising. It should be noted that bioclimatic architecture and eco-design are not just a modern trend. People, who work at the https://assignbuster.com/link-between-oil-prices-and-rubber-priceseconomics-essay/

factories and use the tools that correspond to the norms of sustainable waste recycling ideas consider that the increased interest and quick development of sustainable vision within the different life aspects is the sharpening of the environmental question and awareness and understanding of the scrutinized situation by the different people. It should be noted that the idea of bioclimatic architecture is also supported by the government forces (such as European Commission), this also characterize design vision as a rapidly developed environmental solution. Thus the purchasing powers increase

The authors focus on the importance of such collaborative programs between manufacturers and constructional and design industries who deal with the eco-friendly solutions as the ecological situation in present day realities is really significant problem and it is possible to avoid the following situation described by the organization World Rainforest Movement, Sayamol Kaiyoorawong: "The promotion of the expansion of the rubber area by the Rubber Welfare Fund Office, an increasing price for rubber, and the strong global market demand for natural rubber for industrial processing into a variety of industrial rubber goods has led to the expansion of the rubber plantations area and an encroachment into the forests of the South and also into the woodlots of the North Eastern region which make up a large part of the natural forest of the East. Rubber is a non-native species which the government has promoted, and both the Royal Forest Department and the Forest Industry Organization aim to generate economic income to the organization from commercial plantations of rubber" (Sayamol Kaiyoorawong 2008). The society understand the core importance of the importance and

potential of rubber for development of Thailand, but the same time local newspapers and magazines consider that rubber price could hardly be significantly impacted by the local officials, government etc. The major countries, which determine the price on the commodity are those who export it from Thailand - Japan and the United States of America: "The international market, complete control over the supply of natural rubber in Thailand, Malaysia and Indonesia the hands of a few countries. The use of natural rubber big country the United States, Japan, not the production of natural rubber, demand depends entirely on imports, its natural rubber price support are also evident. China is also the world's second largest importer of natural rubber on international Jiaojia more direct influence" (Industry News, 2010). Thus impacting the rubber formation price exterior forces, which do not depend on the local factors, the same time include oil price in the formation of the price on natural rubber, as synthetic rubber is manufactured from oil and the average price on both commodities is formed accordingly: " Similarly, prices of crude oil would also leave its imprint on rubber prices. Prices of natural rubber and crude oil have a co-relation as synthetic rubber, a replacement for natural rubber, depends on the price of crude oil. Crude oil prices have risen to around \$90 a barrel, and are expected to remain firm as demand expands" (CommodityOnline, 2010)

Discussion

Manufacturing Process

As it was mentioned earlier natural rubber price increased due its eco friendly manufacturing. The major components of rubber either natural or synthetic caoutchouc, filled in with sulfur and other additives to make the https://assignbuster.com/link-between-oil-prices-and-rubber-prices-economics-essay/

rubber have certain qualities, which are necessary for further manufacturing. If you make a hole in heve a tree, then latex would be pouring from it and after the latex is dried in the sun then we get natural caoutchouc or rubber. What is interesting about rubber that syntactic rubber vail to the natural by its qualities but their cost is almost the same there exist different "recipes" of rubber and due to its natural qualities and ecology friendly manufacturing its further manufacturing process deals with different environment friendly solutions. HARBEC Plastics, Inc in their Every Day Is Earth Day at HARBEC (2009) claims that they have found effective technology that could assist in development of sustainable design solutions and benefit to the waste recycling: " Environmentally responsible manufacturers find ways to reduce their impact on the environment. Often a single solution will have a positive effect on several aspects. The goal is to manage manufacturing processes to conserve resources and prevent pollution" (HARBEC Plastics, Inc., 2009). Injection molding is a type of manufacturing process used for producing parts from both: as thermoplastic as well as thermosetting plastic materials. They are poured into a heated barrel, mixed, and forced into a mold cavity where they cool and hardens to the configuration of the mold cavity. After a product is designed, usually by an industrial designer or an engineer, the molds are made by a moldmaker (or toolmaker) from metal, usually either steel or aluminum. And finally by precision-machine method the features of the desired part are formed. Injection molding is widely used for manufacturing of different things: from the smallest component to entire body panels of cars, for example. Extrusion molding is a manufacturing process used to make pipes, hoses, drinking straws, curtain tracks, rods, and fibers. The machine is used to extrude materials and this method is very https://assignbuster.com/link-between-oil-prices-and-rubber-prices-

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similar to injection molding machine. A motor turns a screw, which pours granules of plastic through a heater. The granules melt into a liquid, which is forced through a die, forming a long 'tube like' shape. The shape of the die determines the shape of the tube. The extrusions are then cooled and form a solid shape. The tube may be printed upon and cut at equal intervals if necessary. The pieces may be rolled for storage or packed together. Shapes produced from extrusion could be T-sections, U-sections, square sections, Isections, L-sections and circular sections. One of the most famous products of extrusion molding is the fiber optic. Thus there is a huge row of sustainable materials, which are recyclable, and could benefit to the development of the sustainable design, for example - natural rubber. "The production of tin and rubber was undertaken because of the stimulus of a favorable world-market price and to satisfy an external demand. Virtually the entire output of tin and rubber has always been exported. Domestic consumption is a negligible part of the total product, and the small amount consumed is usually embodied in imported manufactured products rather than processed domestically" (James C. Ingram1971, p. 51).

Rubber Price Formation and Its Economical Value

Speaking about historical perspective of rubber price formation it should be noted that in the 19th century rubber was not the central exporting commodity in Thailand, but 100 years passed and the situation changed: "
Tin and teak have long been important export commodities, while rubber is a relative newcomer. Exports in 1850 were quite varied and no single product accounted for a very large part of the total. After 1850, rice and tin became the first products to dominate the export list. Teak became important in the https://assignbuster.com/link-between-oil-prices-and-rubber-prices-economics-essay/

latter part of the nineteenth century, while rubber has become a major export only in recent decades" (James C. Ingram, 1971, p. 93).

The twentieth century technological revolution let the manufacturers to develop synthetic rubber, which is made from the crude oil: " Natural Rubber and Synthetic in certain products can replace the use of each other, so when the supply of natural rubber price trend tension or high tide, Synthetic rubber consumption will rise, the market position of both the existence complementary. In addition, as Synthetic yes petrochemical products, oil prices will affect the price level. Synthetic rubber can be transformed into changes in the price level affect the demand for natural rubber, this is also not be ignored" (Industry News, 2011). As it was mentioned earlier both rubbers as synthetic as well as natural have almost the same price and oil impacts the formation of natural rubber price as its synthetic analogue and the same time competitor also impacts the overall rubber market. The observers note that every day could bring a record on the rubber price: " Another day, another record price for rubber. Two years ago south-east Asian producers were talking about grubbing up rubber trees in an attempt to bolster the price of latex. They didn't do it, and just as well - growing demand and tight supply have driven prices up into previously uncharted territory. On Wednesday, Thai rubber (RSS3) was up 5c at \$4. 95/kilo, more than four times its December 2008 price of \$1. 10/kg" (Tim Johnston, 2010). The price are growing tremendously for the recent years and Thialand, which is one the leaders in exporting rubber increase the prices due to the growing demands in commodity. The major rubber consumers (approximately 60%) need natural late for production of different vehicle tires. The global

popularity on the hybrid cars and the investigators consider that such a booming increase is the result of global interest towards the global commodities. The same time some investigators and economical analysts consider that that now formation of the price on rubber market seems to lose its traditional connection to the oil prices and now is formed due the connection to the other products (Tim Johnston, 2010). The same time analysts could not avoid ageing that the price still is also depending by the other traditional pressures. Returning again to the historical background, it would be important to note that rubber was exported to Japan and United States since the times of WWII: "In 1940-41 there was an increase in rubber exports through Bangkok to Japan and the United States. Japan alone took 12 percent and 50 percent of Thai rubber exports in 1940 and 1941. Since the war, direct shipments of both tin and rubber to the United States have greatly increased. In 1947 and 1948 about 75 percent of tin exports (metallic content) went to the United States, but in 1949 and 1950 the amount dropped to 41 percent and 29 percent" (James C. Ingram1971, p. 97). These exporting traditions could be observed even now. But in the present day realities, when the vast majority of manufacturing powers are removed from the well developed countries to the countries of the third world there was made a significant shift in the market demands. In particular the current boom in Chinese automotive market and even sluggish recovery in the western countries, the final consumers are still buying the new tires, which determine the development of the market. The statistical data tells us that Thailand is world's largest producer of the rubber exporting "10m tones a year" (Tim Johnston, 2010). Among the relevant factors that could impact the development of the industry is the weather. The first half of 2010 was https://assignbuster.com/link-between-oil-prices-and-rubber-priceseconomics-essay/

signified by significant dry in Thailand and it negatively reflected on the harvest, and in the second part of the year in major productive areas there was observed floods, which also could hardly avoid the impact. "Demand is growing faster than supply," said Chayo Trangadisaikul, the president of the Federation of Thai Industries Rubber-based Industries Club, but he says there is also a technical element. "Towards the end of the year, the statistics come out and they show we're not going to have enough rubber," he said." (Tim Johnston, 2010). The popularity of the synthetic rubber is undoubtedly resulted by these natural disasters, and it is a well known fact that price formation of the synthetic rubber directly depends on the price of oil. The results chapter would provide the foundlings made during the discussion.

Governmental Impact on Formation the Price

The investigators consider that even now the dependence on the oil price is still present, even the commodity is gaining such a correlation, becoming more and more independent. This occurs due the governmental programs, which are aimed on the development of the industry and expanding manufacturing powers. Thai government understand how important export commodity rubber is and for the recent years the governmental programs and changes provide only positive impact on the development of the industry, benefiting to the expanding not only in Thailand but in the whole region of South East Asia. As it was mentioned earlier expanding of the manufacturing powers does not lower the price as the recent powers are much lower than the customers need, thus governmental programs benefit not only to the infrastructure development, but also contributing a lot to the natural rubber popularity and ousting of the synthetic analogue. Some green https://assignbuster.com/link-between-oil-prices-and-rubber-prices-economics-essay/

activists consider that Thai government damage local environment, but it should be noted that governmental programs support planting of the trees for manufacturing purpose, again influencing on the formation of the rubber price

Results

As it was mentioned earlier the price formation depends on numerous factors. The following graph demonstrates rubber price in Singapore since 1960 to 2005

Rubber price, Singapore RSS 1 fob in bales, 1960 - 2005

And now it is increasing significantly. It goes without saying that such local factors as natural disasters, political reforms and changes of government in Thailand could hardly avoid impacting the formation of price and the economical value of the natural rubber. The major competitor – synthetic rubber, despite the number of disadvantages is still very popular too, as due to the mentioned negative impact (especially weather and natural conditions) the needed natural rubber is replaced by the synthetic analogue. But there is observed mutual dependence: "Natural rubber is particularly exposed to developments in the automotive industry, itself highly sensitive to economic rebound or recession. Also, and although technical requirements might constrain the ease of substituting SR for NR, the share of NR in rubber consumption is likely to be affected by the price of its synthetic rubber (SR) substitutes, which is in turn strongly influenced by development in oil prices. The higher oil prices are, the more attractive natural rubber is" (UNCTAD, 2010). The international analysts consider that such mutual dependence

have developed since the beginning of the 21st century and not the least role there played not only increase of oil price but the environmental issues raising and sharpening: "Thus, since the early 2000s, it appears that NR prices have been gaining additional support from high and rising oil prices, via synthetic rubber prices (which rose in response to the strength of feedstock prices). Besides changes at the fundamental level, currency movements may play a part in rubber price developments" (UNCTAD, 2010).

Conclusion

In the end it would be essential to return to the very beginning. The hypothesis set was to reveal whether The final rubber price is determined not only by the purchasing power, but by the commodity price, in particular oil or not. The different sources of the research argued that this connected in the recent times could be referred as doubtful. But still the vast majority of investigators recognize that the oil price impacts the formation of final rubber price, equally with natural and governmental factors. International analysts made quite an optimistic prognosis for the recent future for the commodity, stressing on the fact that the impact of oil price is lowering and possibly could be vanished soon, replaced by the more essential and traditional factors (local government and nature) as well as purchasing demands of the final customer