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LETTER OF DUTY AFFIRMATION
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To Whom It May Concern,

The Undersigned below, Dean of Faculty of Economics and Business Soegijapranata Catholic University, Semarang, Indonesia hereby assigns :

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Activity : Presenting Paper in The 4th ICBE 2019 Faculty of Economics, Universitas Andalas, entitled : *The Influence of Excise Tariff of Tobacco Products towards Cigarettes Industry in Indonesia : Elasticity Approach*
Time and Place : 11st - 12nd November, 2019 at Universitas Andalas, Padang.

This letter is issued for whatever it might deem useful to her.

Semarang, 07 November, 2019

Dean,



Dr. OCTAVIANUS D. HARTOMO, M.Si.,Akt.
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The Influence of Excise Tariff of Tobacco Products towards Cigarettes Industry in Indonesia: Elasticity Approach¹

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Abstract.

The cigarette industry was a national strategic sector that made a significant contribution to the economy, mainly government revenue. On the other hand, the cigarette industry had a big challenge from the health side. All this time, the government used excise tariffs as one of the ways to control the growth of production. This policy had an impact on the economy and of course, on the cigarette industry itself. This study was aimed to analyze the impacts of cigarette excise through the elasticity approach. Secondary data from 2011 and primary data that got from the focus group discussion was used on the analysis. The result showed that the increase of cigarette excise tariff was intended not only to reduce smoking prevalence but also to meet the target of the government budget. The continuous increase of cigarette excise was indicated to bring impacts on medium and small-scale factories that were supposed to be supported by the government.

Keywords: Cigarette industry, excise tariff, economic impact, government revenue

1 Introduction

The cigarette industry in Indonesia is an industry that has a relatively large sector from upstream to downstream. The cigarette industry is a national strategic sector that makes a significant contribution, and it has big impacts on social, economic, political, and cultural lives, and on the development of the nation all this time. The cigarette industry in Indonesia is not only spread in Java island, but also many provinces in Indonesia. The development of the cigarette industry is determined not only from the increasing number of large and medium cigarette companies but also from the growth of the cigarette home industry, especially in Lombok (Radjab, 2013, p. 39).

¹ This paper is a part of a research of an Analysis of the Impact of Change of Excise Tariff Structure of Tobacco Products Funded by the Ministry of Industry of the Republic of Indonesia.

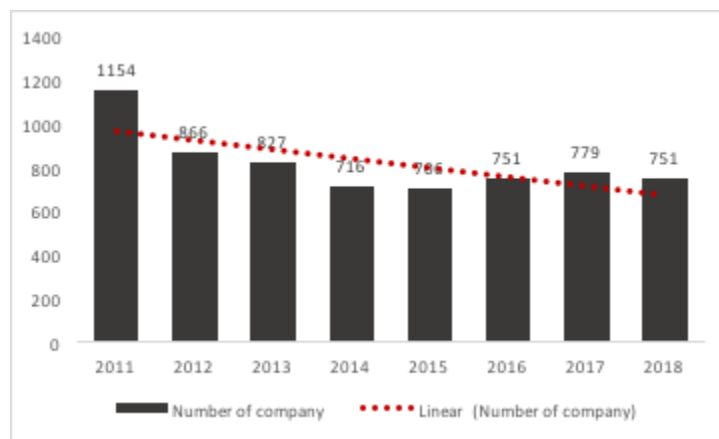
Table 1. Ten Biggest Cigarettes Markets in 2017

Country	Total (Billions of sticks)
China	2,368.9
Indonesia	308.2
Russia	258.7
Japan	151.4
Turkey	106.2
Egypt	93.1
Bangladesh	88.9
India	81.3
Jerman	79.0

Source: International Euromonitor, 2018
 Note: outside hand clove

Until now, Indonesia is still the ten biggest cigarette market in the world. In 2017, the Cigarette market in Indonesia reached 308,2 billion sticks. Indonesia ranked second after China with 2.368,9 billion sticks.

However, in 2012 - 2017, the data showed that the number of the trend of cigarette companies in Indonesia had decreased. The most significant decrease happened in 2012, where the number of cigarette factories fell by 60,63 percentage. This condition remained the same so that if there were 1.000 cigarette factories in 2012, there were only 487 cigarette factories in 2017. The number had decreased by 51,3 percentage. This condition shows that around half of the total number of cigarette factories in Indonesia is closed in the last period of 5 years (Ministry of Industry, 2019).



Source: Ministry of Industry, 2019

Figure 1. Development of Number of Cigarette Company

The cigarette industry is a significant contributor to the Gross Domestic Product. The biggest contribution of the cigarettes industry for the economy in Indonesia is from the excise. The cigarette excise is the third biggest tax revenue in Indonesia after Income Tax and Value

Added Tax. In 2017, the Ministry of Finance established an excise acquisition target of 157 trillion Rupiah. From this target, 95 percent of it came from the cigarettes industry, which was 149,9 trillion Rupiah. In 2018, the cigarette tax revenue target was 148.23 trillion, while the realization was 152.90 trillion or 103.31 percent.

All this time, the government uses excise as one of the ways to control the growth of cigarette production. As we know, the policy to manage the cigarette industry is related to various interests. Based on the health side reason, the government needs to control the tobacco product, and the excise tax becomes one of the controllers. In September 2019, the government again increased the cigarette excise tax by 23%, so that the retail price of cigarettes also increased to reach 35%. On the contrary, the cigarette industry has extensive linkage among sectors, absorbs many employees, and becomes the support of the Government Budget. For those reasons, the policy of excise tariff needs to be reviewed comprehensively.

The establishment of cigarette excise has positive and negative impacts on the economy. The positive impact is the possibility of government revenue increase. However, there may other problems occur, they are (i) the annual growth of cigarettes excise will become a burden, particularly for Small and Medium cigarettes industries, so that many companies eventually close their businesses, (ii) the reduction of the number of cigarettes companies will give a significant influence in upstream and downstream sectors of cigarette industry and (iii) the decline of the number of cigarettes companies will have impacts on the reduction of the number of companies that purchase cigarettes excise bands, so that it will eventually reduce the government revenues.

Generally, this study is aimed to analyze the impacts of cigarette excise on the economy in Indonesia. In detail, this research describes and analyzes changes related to cigarette excise toward the absorption of employees, government revenues, and the performance of the cigarettes industry itself.

2 Literature Review

Indonesian cigarette industries produce eight kinds of cigarettes (PMK No. 146/PMK.010/2017) (i) Machine-Rolled Clove Cigarettes, is a cigarette that is mixed with clove during the production process, (ii) Machine-Rolled white Cigarettes is a cigarette that is not mixed with clove, aloeswood, and incense during the production process, (iii) Hand-Rolled Clove Cigarettes is a cigarette that is mixed with clove during the production process, (iv) Hand-Rolled filtered Clove Cigarettes is a cigarette that is mixed with clove during the production process, and it also has a filter, (v) Machine-Rolled white Cigarettes is a cigarette that is not mixed with clove, and incense in the production process, (vi) Hand-Rolled filtered white Cigarettes is a cigarette that is not mixed with clove, and incense in the production process and it also has a filter, (vii) Kelembak Kemenyan cigarette is a cigarette that is mixed with aloeswood, and/or original and artificial incense in the production process, and (viii) Cerutu or cigar is a tobacco product that is produced in sheets of tobacco leaves that are sliced or not, that is rolled up. In Indonesia, kretek cigarette (hand-rolled clove cigarette) is a heritage cigarette that cannot be found in other countries.

The cigarette industry widely develops in Indonesia, even though it begins to reduce in recent years. The reduction in the number of cigarette factories in Indonesia is caused by excise tariff that is getting higher and higher. It is also caused by continual health propaganda which makes people aware that smoking is dangerous.

Excise is one of the ways for the government to control the growth of cigarette production in Indonesia. It is due to the reason that the Indonesian government has not meditated the world

anti-tobacco deal until now. Besides applied as a controller, the excise, becomes a way to increase government revenues. According to Buchanan and Flowers (1975), the objective of tax imposition was to gain government revenues to fund the procurement of goods and services provided by the government. The philosophy of tax collection was (i) The tax collection should be fair, (ii) The tax collection should not disrupt the economy and cause the economic sluggishness, (iii) The tax collection should be efficient, and (iv) The system of tax collection should be simple so that it will facilitate in supporting people to fulfill their tax obligation.

In Indonesia, excise was regulated in Regulation No. 39 in the year 2007. The excise was the government levies imposed on certain goods that have applied characteristics. The characteristics of products subject to excise were as follows (i) The consumption of goods subject to excise should be controlled, (ii) The circulation of goods subject to excise should be monitored, (iii) The usage of products subject to excise could cause adverse effects for society and environment, and (iv) The utilization of goods subject to excise needed imposition of government levies for justice and balance.

Several previous kinds of research about the impacts of cigarettes excise imposition showed an ambiguous result. Some stated that the excise imposition on cigarettes would be able to increase the government revenue and decreased smoking prevalence; however, some other stated differently. Cnossen (2005) said that in several countries, the excise imposition could be conducted to (i) increase income, (ii) compensate the cost of externalities, and to (iii) control consumption. Excise was a budgetary instrument that becomes one of the sources of government income. The excise was needed to be imposed because it was useful to overcome the occurred externalities from economic agents. Externalities would cause markets unable to achieve efficiency. Excise was used as a controlling tool of consumption towards commodities that were considered harmful. Controlling was performed to increase excise tax as high as possible.

Some researchers had conducted researches about reducing the potential of cigarette consumption as a result of excise. By applying elasticity, Lewit, and Coate (1982) determined that the elasticity of cigarettes demands is -0.42. It meant that if the price were increased by 1 percent, the cigarette demands would reduce by 0.42 percent. A similar range of elasticity was obtained in China for -0.4 to -0.7 (Hoo and Mao, 2002). This condition confirmed that the increase in cigarette excise reflected in the rise in cigarette prices would reduce cigarette consumption. It became one of the objectives of excise imposition.

In 2016, Hoo and Mao conducted another research about cigarettes in China. They determined that the price elasticity in the short term was -0.35, and the one, in the long run, was -0.66. It meant that the effect of excise increased in a long time would be able to reduce the consumption of cigarettes more than the one in the short term. Hoo and Mao (2016) also observed price elasticity, participation elasticity, or quit smoking. The 25 percent increase in excise would increase the cigarette price by 10 percent. By having the price elasticity for -0.54, the participation elasticity would be detrimental, between -1.8 to -2.7. It meant that the increase in cigarette prices for 1 percent would reduce cigarette consumption from 1.8 to 2.7 percent. Hoo and Mao (2016) also determined that the increase of cigarette excise, though it reduced the cigarette demands, still increased the tax revenue. Hoo and Mao (2016) admitted that there were loss of farmer's income, admission of cigarettes industry employees, and loss of regional government income. However, the loss was still lower than the benefit gained by the central government from the tax acquisition.

Hidayat and Thabrany (2008) found that the increase in cigarette excise would not immediately reduce cigarette consumption. Theoretically, also stated in their study, the elasticity of cigarette prices in developing countries was usually higher than in developed countries.

However, it did not happen in Indonesia. That research determined that the elasticity of revenues was not significant. Furthermore, there were myopic behaviors of smokers in Indonesia.

Chiou and Muehlegger (2014) showed that an increase in tax would shift the consumption of cigarettes into a lower price in the short term. This condition was due to a reason that smokers wanted to keep smoking. In the long run, smokers would adapt so that they inclined to switch to cigarettes containing higher tar, nicotine, and carbon monoxide. This finding showed that the objective of excise increase, that is, to improve the level of health, is not accomplished.

3 Methodology

Analyzing the impacts of the excise of tobacco products or cigarette tax should be based on the idea that the consumption pattern of cigarettes was specific, unlike the consumption pattern of other products of food and beverage. Besides, an increase in cigarette excise tariff or cigarette tax tended to be shifted on customers so that the price will increase proportionally.

Various studies and literature showed that the consumption pattern of cigarettes was inelasticity. It meant that even though the price increases, consumption would never decrease. If it reduced, the percentage of consumption reduction would be lower than the rate of price reduction. Thus, if there were an increase in cigarette prices, customers would switch to cheaper cigarettes or even illegal or self-made ones.

This research was a quantitative and descriptive study. The data was collected from secondary data and focus group discussions with various parties related to get a better insight regarding with problems of cigarette industries in Indonesia. The analysis used is as follows:

1. Descriptive analysis was needed to determine the data movement patterns. The data were data of excise/tax, data of legal and illegal cigarette productions, data of government revenues on tobacco product excise, and some other data which were directly or indirectly related.
2. Elasticity analysis was, in principle, used to measure the impacts of excise increase toward several factors, they were legal cigarette production, illegal cigarette production, government revenues on tobacco product excise, and employee absorption.

In general, the formula of elasticity was as follows:

$$\epsilon_{xy} = (\Delta x / \Delta y) \cdot (y/x) \quad \dots 1)$$

Note:

- y: excise
- x: legal cigarette production, government revenues on tobacco product excise, employee absorption.

4 Analysis and Discussion

Cigarette industry was a labor-intensive industry where the majority of production workers were women, while non-production workers are men. Since 2009, the number of production workers had decreased because of two things; the first was that many small cigarette industries were closed, and the second, most of the cigarette industry with a rolled model that absorbed much labor, began to switch to using machines.

Table 2. The number of workers in the hand-rolled clove cigarette industry

Year	Number of worker	Change of worker number (%)
2011	196,187	0.39
2012	187,791	-4.28
2013	187,854	0.03
2014	153,958	-18.04
2015	146,708	-4.71
2016	146,500	-0.14
2017	140,354	-4.20

Source: GAPPRI, 2018

Most of the workers who work in the cigarette industry are workers at the Hand Clove Cigarette company. In 2013 the number of workers in the hand-rolled clove cigarette company reached 85.96 percent of the total hand-rolled clove cigarette workforce. This percentage continued to decline from year to year so that in 2017 only reached 70.13 percent of the total hand-rolled clove cigarette workers. The total workforce of the hand-rolled clove cigarette industry experienced a downward trend in the last five years of around -6.09%; this was because many hand-rolled clove cigarette industries had closed.

Cigarettes were an industry that has a contribution to tax revenue which is much higher than in other sectors. Based on data from Ernest and Young (2018), several most significant contributions of tax revenue were as follows:

Table 3. Contribution of Tax Revenue based on Types of Industry (2016)

Type of industry	Size of Industry (Trillion Rupiah)	Tax Contribution from the size of the industry (%)	Tax contribution (trillion rupiahs)
BUMN	1.754	9.50	167
Construction	1.636	4.70	77
Mining	894	8.30	74
Financial service	521	26.20	136
ICT	449	9.60	43
Cigarettes	326	61.40	200

Source: Ernst and Young, 2018

Table 3 above demonstrates that cigarettes give a higher contribution to tax revenue than Financial Service, BUMN (Government-Owned Enterprises), or other sectors. The cigarette industry, with a size of 326 trillion rupiahs, contributes 61.40% of tax from 200 trillion rupiahs, the total value of the cigarettes industry. One of the interesting comparisons is with BUMN, which has an industrial size of 1,754 trillion rupiahs. BUMN only contributes 9.50 percent of its industrial size in the tax of 167 trillion rupiahs. The cigarette industry is also a sector that averagely contributes to 10,5 percent for tax revenue in Indonesia starting from 2013 – 2017. It has a high growth of revenue, even though the cigarette industry volume experiences a reduction.

On average, tobacco consumption from 2011-2018 increased by 0.27 percent. The most significant increase occurred in machine-rolled clove cigarettes at 3.63 percent, while other

types of cigarettes decreased on average during 2011-2018. The decline in machine white cigarettes was 3.29 percent while the consumption of tobacco for hand-rolled cigarettes decreased by 4.17 percent (Director General of Customs and Excise, Ministry of Finance, 2019).

The most noticeable dynamic in the cigarette industry was the decline in the vast number of cigarette companies. Starting from 2011 until now the number of cigarette companies had continued to decline. Closed cigarette factories were mostly small and medium cigarette factories. The closure of the cigarette factory was a result of the dynamics of regulations that were not in favor of the cigarette industry, especially small and medium cigarette factories. The impact of the decline in the number of cigarette factories was on the emergence of unemployment because most of the small cigarette factories were cigarette factories that did not use machines, and also the decline in the welfare of farmers' households because they were suppliers of small cigarette factories.

Based on data from Ernst and Young (2018), the cigarette market in Indonesia reached sales of 326 trillion rupiahs and had an increase compared to the sales in 2012 for 218 trillion rupiahs. The increase in sales from 2012 to 2017 was 49.54 percent. It was followed by an increase in cigarette excise revenue for 64.44 percent from 90 trillion rupiahs in 2012 to 48 trillion in 2017 rupiah. It showed that the contribution of the cigarette industry on tax revenue in Indonesia was significant. The cigarette industry contributed 10% of tax revenue and 9% of the APBN (state budget).

Tabel 4. The contribution of cigarette excise to the tax and state budget revenue

Year	Excise Tax (Billions)	growth (%)	Cigarette tax (Milyar)	Growth (%)	Excise + Tax (Milyar)	Growth (%)
2011	73,252		12,504		85,756	
2012	90,548	23.6	15,213	21.7	105,761	23.3
2013	103,568	14.4	17,009	11.8	120,577	14.0
2014	112,544	8.7	18,783	10.4	131,327	8.9
2015	139,562	24.0	22,886	21.8	162,448	23.7
2016	137,957	-1.2	20,290	-11.3	158,247	-2.6
2017	147,719	7.1	26,899	32.6	174,618	10.3
2018	152,941	3.5	28,792	7.0	181,734	4.1
AVERAGE		11.4		13.4		11.7

Source: Director General of Customs and Excise, Ministry of Finance, 2019

Since 2015, cigarette excise tariffs had increased twice higher than the inflation level. This study found that tax revenue experienced a slowdown in increase compared to the previous year. It indicated that tax increase encouraged a reduction in production. One of the ways to analyze the impacts of structural change of cigarettes tariff was by applying elasticity. Elasticity analysis was an analysis of the alteration sensitivity of one variable due to another variable's change. In the business case, analysis became very important when a businessperson started to take a policy of whether he/she would increase the price or not. For very elastic demands, the increasing price would be followed by a higher percentage of demand reduction. As a result, if the price increased by 10%, the elasticity of products would be higher than one so that it would be followed by a reduction of demand for more than 10%. Consequently, total revenue after increasing the price would decrease — Vice versa with the inelasticity of demands.

The result of the data calculation showed the following condition.

Tabel 5. Elasticity due to cigarette excise

Year	State Revenue Elasticity	Production Elasticity	SKM Elasticity	SPM Elasticity	SKT Elasticity	Employment Elasticity	SKT employment Elasticity	Illicit cigarette Elasticity	Firm Elasticity
2011	1.58	0.87	1.52	0.34	-0.09			0.87	
2012	4.00	0.43	0.42	-0.36	2.17	1.14	1.23	6.63	-10.35
2013	1.55	0.66	1.10	0.00	0.35	1.27	2.17	0.66	-2.15
2014	0.92	-0.04	0.44	-1.09	0.01	-0.20	-1.48	4.16	-1.34
2015	1.68	0.07	0.25	-0.39	-1.13	-0.20	-0.35	0.07	-1.01
2016	-0.10	-0.18	-0.28	-0.02	-0.35	-0.23	-0.40	0.15	0.00
2017	0.72	-0.16	0.07	-0.55	-1.28	-0.43	-0.58	-0.16	-1.90

Notes:

- SKM = Machine-rolled clove cigarette
- SPM = Machine-rolled white cigarette
- SKT = Hand-rolled clove cigarette

Source: Ministry of Industry, GAPPRI, the Directorate General of Customs and Excise, processed data

Data in table 5 shows that the elasticity of government revenue on cigarette excise in Indonesia is previously quite high, higher than 1. In 2012, it even reached 4. It meant that the increase of the excise tariff of tobacco products would be followed by the government revenue that was quite significant, where the increasing percentage of income was higher than the rising proportion of the tariff. It meant that to increase the excise tariff of tobacco products was very useful to improve the revenues; however, as time goes by, the elasticity, decreases to less than 1. In 2016, it reached negative, that was -0.1. It meant that the increase of the excise tariff of tobacco products into 1 percent would decrease the government revenue into 0.1 percent. This elasticity gave a sign that the tariff increase was no longer sufficient to increase the revenues.

On the production side, there was a phenomenon that was quite interesting. Initially, excise elasticity towards cigarette production was positive. It meant that the increase in price did not discourage people's interest in buying legal cigarettes. This phenomenon usually happened since the market expansion, or WTP (Willingness to Pay) and ATP (Ability to Pay) of customers on legal cigarettes was still quite high. Unfortunately, starting from 2016 to 2017, the elasticity of legal cigarette production towards the change of cigarette excise tariff became negative.

Table 5 demonstrate that the production elasticity on the excise tariff of tobacco products kept decreasing starting from 2013, and it turned out to be negative in 2016. In 2016, the production elasticity was -0.18, and it fell to be -0.16 in 2017. This elasticity showed that the increase of the excise tariff of tobacco products in the amount of 1 percent would decrease the production volume of the tobacco products industry for 0.18 percent and 0.16 percent. It showed that there was a symptom that the increase of the excise tariff of tobacco products was followed by the decrease of production with a higher percentage. This decrease would have side effects that were quite significant.

The elasticity of Hand-Rolled Clove Cigarettes had been negative in 2011, but then it became positive. however, it started to be negative again in 2015. The interesting phenomenon of Hand-Rolled Clove Cigarettes happened in 2012. The production elasticity of Hand-Rolled Clove Cigarettes was 2.17 percent. However, in the next period, the number of elasticity had

decreased. The indication shown is that the reduction of Hand-Rolled Clove Cigarette production is much higher compared to Machine-Rolled Clove Cigarettes and Machine-Rolled White Cigarettes. Since Hand-Rolled Clove Cigarettes was a factory that absorbed many employees and had significant Local Content, the further impact occurred would be a considerable reduction of employees. This condition would disturb economic stability extensively.

Besides legal cigarettes, another impact that needed to be aware of was related to the production of illegal cigarettes. The increase of the excise tariff tended to encourage the rise in price. Based on some previous researches, it was estimated that there was a shift of customers' preferences to the lower price of a cigarette. This change of choice had the potential of reducing government revenues and increasing the number of illegal cigarettes, even though the level of consumption did not change.

The cigarette was one of the commodities that are prone to tax/excise fraud. On the other hand, the effectiveness of cigarette excise/tax as a social and health instrument in society was still questionable and arguable from various perspectives since there were some results of previous researches that were still ambiguous. Illegal cigarettes experienced an increase due to higher imposition of excise. The surveillance of illicit cigarettes should always accompany the rise of excise.

Research of the Center for Economics & Public Policy Studies (2012) showed that 11.6 percent of the world's cigarette consumption was illegal cigarettes that caused a loss of 22.9 billion dollars. Illegal cigarettes had more percentages in countries with low revenues. According to Joosens et al. (2009), there were around 16.8 percent of illicit cigarettes in countries with low incomes, while there was around 11.8 percent of them in countries with average revenues. If illegal cigarettes were deprived, the government would earn much higher revenues. In Indonesia, the estimation of loss caused by illegal excise is around 0.5 to 0.7 percent of the excise revenue target of cigarettes (Center for Economics & Public Policy Studies, 2012).

Based on the processed data, it could be seen that the increase of excise would tend to increase the illegal cigarettes. In 2016, the addition of an excise tariff of one percent would increase the number of illicit cigarettes of 0.15 percent. In 2017, the elasticity of illegal cigarettes was negative. However, this condition could not be determined as a situation where the increase of excise tariff will decrease the number of illicit cigarettes. This elasticity was based on the percentage of illegal compared to legal cigarettes. If the number of legal cigarettes decreased, legal cigarettes would also do.

Another interesting function of elasticity was to measure the change of employees worked in cigarette factories as a result of the shift in excise tariff of 1 percent. Based on the result of data analysis, it was able to be seen that the elasticity of employees had been negative since 2014. It showed that the increase in the excise tariff of 1 percent would reduce the number of employees in the cigarette industry. The reduction of employees in the cigarette industry factories was much more significant than the one in the cigarette industry as a whole. In 2016, the increase of excise tariff of 1 percent was going to decrease the number of employees of the cigarette industry for 0.23 percent and Hand-Rolled Clove Cigarettes for 0.4 percent. This reduction had continued until 2017. The increase of the excise tariff of 1 percent would decrease the number of employees of the cigarette industry for 0.43 percent and Hand-Rolled Clove Cigarettes for 0.58 percent. This condition was not a favorable condition for industries, unemployment, and households' income for factories' employees.

The last elasticity was the elasticity of the number of companies. Based on the data, the company elasticity was negative. It demonstrated that the increase of excise tariff of 1 percent decreased the number of companies to 1.90 percent in 2017. If this condition happened, it would

be apparent that the closing of companies would imply the occurrence of the termination of the employment that leads to unemployment.

Significant impacts for small-scale cigarette factories were strengthened by the results of FGD (Focus Group Discussion). By having an increase in cigarette excise tariffs, small entrepreneurs were not necessarily able to shift customer's tariffs in the form of a price increase since the brands that they hold are not generally well-known. New tariff and layer increase made small entrepreneurs needed to compete with large entrepreneurs directly. Small entrepreneurs should compete using their unpopular brands, while most large entrepreneurs had had their famous ones. As a result, there was a big possibility that micro, small, and even medium enterprises would be bankrupt. So, there would be only large entrepreneurs in this industry. This condition led to the realization of the market structure of oligopoly or even monopoly. This change of structure would bring consequences, like welfare loss.

As cigarette demands and consumptions were inelastic, there was a possibility of the occurrence of the structure change. It would have a significant influence on industrial and economical workflows extensively. It would especially influence costumes, medium, and small cigarette industry, employees, and tobacco and clove farmers. Besides the occurrence of impacts, there was also a potential of entry of imported cigarettes from ASEAN and China due to an effect of China-ASEAN Free Trade Area (CHAFTA) ratification, that was when import tariff from ASEAN and China was omitted.

5 CONCLUSION

The cigarette industry was an industry that had a long history in Indonesia. It was considered not only from the industry side, but also from the perspectives of tobacco and clove agriculture, the involvement of thousands of employees, sources of income for many households, and sources of significant government revenues which support various facilities provided for the society. The increase of cigarette excise tariff in the last six years had exceeded 100% of the inflation number. It showed that the tariff increase of cigarette excise was intended not only to reduce smoking prevalence but also to meet the target of government budget eroded by inflation. The results of the analysis showed that the tariff increase of cigarette excise if it was continued, was indicated to bring impacts on medium and small-scale factories which were supposed to be supported by the government. The elasticity showed that the tariff increase of cigarette excise of one percent tends to decrease government revenues, cigarette production, absorption of employees, and several companies. The elasticity of cigarette excise tariff towards production and employee absorption of Hand-Rolled Clove Cigarettes tended to be more elastic compared to other types of the cigarette industry. This condition showed that Hand-Rolled Clove Cigarettes was a cigarette factory that had the most impacts. The impacts that occurred need to be further considered by the government to maintain the economy extensively.

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**The 4th International Conference on
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The 4th ICBE

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Times	Activities	PIC	Venue
08.00 - 09.00	Registration	OC, Students	
09.00 - 09.30	Opening Ceremoni: a. National Anthem b. Prayer c. Traditional Dance d. Forework from Chair of Conference e. Welcoming Remark from The Dean of Faculty of Economics f. Opening Speech from Rector of Universitas Andalas	MC, OC, Dancer	Ballroom
09.30 - 09.45	Coffee Break	OC	Ballroom
09.45 – 10.30	Keynote Speech: Prof. Dr. Haim Hilman Bin Abdullah: <i>“The Role of Business Education in Digital Economy”</i>	MC, OC	Ballroom
10.30 – 12.30	Parallel Session: 1. Irfa Ampri, Ak., CA., MA., Ph.D: <i>“The Impact of Billateral and International Cooperation on Economic Growth in Emerging Market”</i> 2. Teuku Parvinanda: <i>“The Utilization of Technology to Develop Digital Economy”</i> . 3. Endrizal Ridwan, ME, Ph.D: <i>“Online Motorcycle Taxi and Home Economy”</i> .	MC, OC Moderator: Sari Lenggogeni	Ballroom
12.30 – 13.30	Lunch		Ballroom
13.30 – 15.00	Parallel Session 1 (4 room)	OC, Track Chair	Parallel room
15.00 – 16.30	Parallel Session 2 (4 room)	OC, Track Chair	Parallel room
17.00-17.30	Awarding dan Closing Ceremony - Best Paper Award - Closing Speech: The Dean of Faculty of Economics		Anai Room
18.00-20.00	Dinner		Restaurant

