THE INFLUENCE OF REINSURANCE RATE, LOAN INTEREST RATE AND BANK'S FEE BASED INCOME AGAINST THE PREMIUM RATE ON CREDIT LIFE INSURANCE (CASE STUDY: CREDIT LIFE INSURANCE'S POLICY HOLDER OF PT INDOSURYA LIFE IN 2018)

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Abstract: This research has purposes to learn further about the impact of reinsurance rates, loan interest and fee-based income towards premium rates on credit life insurance. The unit of analysis was 50 credit life insurance policy holders at PT Indosurya Life throughout 2018. The independent variables that used in this research are reinsurance rates, loan interest and fee based income. While the dependent variable is premium rate on credit life insurance. The sample collected method was taken by saturated sampling. Researchers took the entire population as a sample where the number of samples used were 50 policy holders from credit life insurance which used premium rates and types of effective loan interest for 40 years of age with 5 years of insurance period. The analytical method used was multiple regression analysis and hypothesis test which is done by t-test. And according to the rdata analysis result, loan interest and fee-based income had a positive and significant affect towards credit life insurance's premium rates. Meanwhile, the reinsurance rate variable did not related to credit life insurance's premium rate. It is very recommended to PT Indosurya Life to increase the premium rate on its credit life insurance, so that will increase its Fee Based Income aswell.

Keywords: Loan Interest, Fee Based Income, Reinsurance Rates, Credit Life Insurance's Premium Rates.

INTRODUCTION

According to Djaelani (2014) who stated that the number of non-bank financial industry players, especially insurance companies has a low percentage of 15% compared to other companies such as financial institutions that reach 29% and retirement funds around 28% and non-bank financial industry support services at 27%, as it shown in Figure 1 below:

Figure 1.
The Number of Non-Bank Financial Industry Players

From Figure 1 above, it could be seen that the number of insurance industry players is low, so it needs to be investigated further. Insurance has a primary function as a form of risk management through risk transfer mechanism (Wuwungan et al., 2015). One of life insurance products is credit life insurance. In credit life insurance, the obligate of the insurance company is to bear the burden of risk transferred by the bank to the insurance company in the form of returning the loan issued by the bank if the debtor dies. (Riaman et al., 2013). In addition to banks, the insurance companies usually work with other creditors such as Rural Banks (BPR), Multifinance Companies and Cooperatives. Therefore, in credit life insurance there are three parties which involved, such as the insurance company as the insurer, the creditor as policy holder and the debtor as the insured.

In return for transferring the risk of loss, life insurance companies require an insurance premiums to its continuity on their business. The amount of premium greatly affects by the losses or risks borne by the company. Therefore, the correct calculation assumptions and the factors which determine the amount of the premium are very important in revealing the premium rate. In discovering the premium rate, efforts need to be made to create an ideal amount which is based on the actual situation, such as rate which could earned income to the company in order to compensate for losses that occur and provide benefits for the company's survival. (Iskandar et al., 2011).

Loan interest rate is a factor which could determines the movement of credit values where the greater the loan interest, the greater total loan that need to be paid by the customer which affects the profitability of the creditor (Dewi et al., 2016) so it will have an impact to the amount of credit life insurance premiums that charged to the customer. Research on interest rates on insurance premium rates has been carried out by several researchers, including (Juliantari et al., 2017; Muslim et al., 2013) which revealing if the interest rates will affect the life insurance premiums. Meanwhile, other researchers (Pradipta et al., 2013; Nelfita et al., 2016; Ilhama & Abdullah, 2018) were described that interest rates have no impact towards insurance premiums.

In credit life insurance business activities, Bank acts as a channel that providing an insurance product services from the insurance company which partnered with the bank itself. In addition to

benefiting insurance companies in terms of product distribution, this collaboration will also benefits banks because they could increase bank revenues through its service or fee-based income. Fee based income is obtained from services provided to customers in the form of commissions. One of them is the marketing of insurance products. Through this credit life insurance cooperation agreement, The banks will receive commissions received from product marketing services and transactions charged to customers in connection with the insurance products and services that they served. The research on fee-based income or commissions in insurance premium rates has been carried out by several researchers, including (Simanjuntak, 2016) who explaining that fees affect the calculation of life insurance premiums. Meanwhile, other researchers (Putri, 2017; Soedibjo & Fitriati, 2009) revealed that fees did not affect the determination of insurance premium rates.

This research has attempts to analyzed the impact of loan interest rates, fee-based income and reinsurance rates on credit life insurance premium rates. The analysis unit that used in this research is the premium rate for credit life insurance that issued from PT Indosurya Life throughout 2018. According to the data from the Indonesian Life Insurance Association (2018), there is only 6.6 percent of Indonesia's population has a life insurance policy. This shows that the potential for life insurance in the future is still very large because there is still 93.4 percent of the market that has not been touched (Djaelani (2014). Thus, things related to life insurance are interesting things to put as an research.

LITERATURE REVIEW
Insurance Premium Rates

According to Iskandar et al. (2011) the Insurance premium is a sum of money that need to be paid by the insured or policy holder, in return for insurance coverage that provided accordingly to the policy provisions. Diverse to the premiums, the premium rates are premiums for certain units of value, for example per 1000 sum insured. So to calculate the premium paid could be done by:

$$Premiums = \frac{Premium\ Rates}{1000} \times Sum\ Assured$$

Life insurance premium rates are based on three main elements, namely mortality rate, interest rate and costs. In determining the life insurance premium, the present value equation of the benefits to be paid in the future equals the present value of the premiums to be received (Iskandar, et al.2011)

The elements which could determining Life Insurance Premium Rates.

According to Iskandar, et al. (2011) Life insurance premium rates are based on the main elements, namely mortality rate, interest and costs.

1) Mortality Rate

   To reveal the amount of premium, the insurance company should be able to calculate how many insured will die in one year among a large number of people. This figure is obtained from several years of observations using the data from life insurance industry. This data then

compiled in a table known as the mortality table which contained of mortality rate for each ages (Iskandar et al., 2011).

2) Interest Rate

In life insurance, the proceeds of accumulating funds are immediately re-interested so the interest earned at the end of the first year will combined with the principal to become a new principal, to be re-interested and so on. This way is so called the compound interest. The greater the interest rate or investment return that expected by the insurance company, the cheaper the premium charged to the insured or policyholder and conversely (Iskandar et al., 2011).

3) Cost Burden

The whole operational costs of a life insurance company could be grouped into 3 categories of costs, namely initial costs, collection costs and administrative costs. In principle, all operational costs are borne by the policyholder. The premium paid by the insured or the policy holder were included in the operational cost component. Initial costs are costs incurred in the first year of policy issuance such as policy closing commission fees, underwriting costs, advertising costs and policy issuance costs. This includes the bank's fee-based income which is one component from the policy closing commission fee. Collection costs are expenses which incurred to collect premiums, while administrative costs or policy maintenance costs are costs incurred regularly during the insurance period. (Iskandar et al., 2011).

4) Reinsurance

To avoid the large of losses, the insurance company need to reduce the loss by transferring the risk to another insurance company, meaning that the other insurance company will accepts its responsibility to pay all or part of the claim if the risk occurs and in accordance with the premium that received. This other insurance company is known as reinsurance (Iskandar, et al, 2011).

5) Reinsurance Premium

In return for the transfer part of the risk of loss, the insurance company need to pay a reinsurance premium in accordance with the reinsured portion to the reinsurer. Similar to the premium rate, the reinsurance rate is the unit value of the reinsurance premium for a portion of the sum insured. Reinsurance rates are obtained through a treaty (agreement) which has been agreed between the insurance company and the reinsurer.

6) The elements of Reinsurance Rates

The determination of reinsurance rates need to be structured to cover the risk transferred by the insurance company to the reinsurer and cover the reinsurer's costs. The term of reinsurance premium payment also needs to be considered because the investment income will contribute to the reinsurer's profitability. Reinsurance costs are different from the costs set by the insurance company, reinsurance costs could be divided into 3 types (Clark, 2014):

a) Premium fees on vary

1. Insurance company commission
2. Broker fees (if any)

3. Tax fee (if any)
   b) Fixed cost
   1. Overhead cost (salaries and operations)
   2. Underwriting audit fees and claims
   c) Loss costs vary
   1. Loss adjustment costs not allocated by reinsurers
   2. These fees are vary according to the type of reinsurance contract. The amount of this fee can be estimated through the claims department

Credit

Based on Law no. 10 of 1998, Credit is the provision of money or an equivalent claim according to the agreement or loan agreement between a bank and another party which requires the borrower to repay the debt after a certain period of time with interest. According to Kasmir (2016) relates credit is the provision of money or claims that could be equated with it, according to this agreement between the bank and another party which requires the party for being financed to return the money or bill after a certain period of time in return or profit sharing.

Credit Links Banking Institutions

1) Commercial banks

   According to Law no. 10 of 1998, commercial bank is a bank that carries out business activities conventionally and based on sharia principles which in its activities provides services in payment traffic. In Article 6 of the Law, it is regulated that the activities that may be carried out by Commercial Banks include:
   a) Collecting funds from the public in the form of deposits in shape of demand deposits, time deposits, certificates of deposit, savings, and/or other equivalent forms
   b) Give credit.
   c) Issue a debt acknowledgment letter
   d) Buy, sell, or guarantee at its own risk or interest and on the orders of its customers.
   e) Transferring money either for its own benefit or for the benefit of customers.

2) Rural Bank (BPR)

   Based on Law no. 10 of 1998, what is meant by Rural Banks are banks that carry out business activities conventionally or based on sharia principles which in their activities do not provide services in payment traffic. The business activities that can be carried out by BPR are:
   a) Collecting funds from the public in the form of deposits such as time deposits, savings and/or other equivalent forms.
   b) Give credit.
   c) Provide financing and placement of funds based on sharia principles according to the provisions that stipulated by Bank Indonesia.
   d) Putting the funds in the form of Bank Indonesia Certificates, time deposits, certificates of deposit and/or savings accounts with other banks.

Interest Rates and Loan Interest

The interest rate is the price of the loan. The interest rate is written as a percentage of principal per unit of time. Interest is a measure of the price of resources used by debtors that need to be paid to creditors. In banking activities, there are two kinds of interest rates which banks provide to their customers, namely (Kasmir, 2016):

1) Deposit Interest Rate

Deposit Interest Rate is the interest which given as an incentive or remuneration to customers who save their money in the bank. This deposit interest were included the purchase price that need to be paid by the bank to the customer who owns the deposit.

2) Loan Interest Rate

Is the interest which given to borrowers or the price that need to be paid by lending customers to the bank.

Factors which affect the highest of interest rates

The main factors which has impact towards finding amount of interest rates are broadly as follows (Kasmir, 2016):

1) If the bank is short of funds, while the loan application is increasing, what the bank does so the funds could be fulfilled quickly to increase the deposit interest rate.

2) Government policy, in the sense that both deposit and loan interest rates may not exceed those set by the government.

3) The profit target that the Bank expected

4) Term, the longer the term of the loan, the higher the interest.

5) The quality of the guarantee, the more liquid the guarantee is given, the lower credit interest charged.

6) Company reputation.

7) Competitive products.

Types of loan interest

Based on the definition of credit, the money that must be returned by the debtor to the creditor at the time of repayment is subject to profit sharing or interest. The amount of interest depends on the size of the loan principal, the length of the loan and the interest rate (Iskandar et al., 2011). Loan interest is divided into three types, namely:

1) Effective Interest is interest whose portion is calculated based on the remaining debt balance, the installments decrease in line with the decrease in interest

2) Annuity interest is interest whose portion is calculated based on the remaining debt balance, the value of the monthly installments remains/does not change

3) Flat Interest is an interest rate which calculation are refers to the initial loan.

BPR and Commercial Bank Loan Interest

In applying for credit or loans at BPR, the debtor will be charged a higher loan interest rate than commercial banks. This is due to the following

1) Loans Distributed to the MSME Sector

    BPR delivered its major of loans to Small and Medium Enterprises (SME) sector with relatively higher loan interest rates compared to commercial banks. So the deposit funds will be a higher interest rate.

2) Not regulated by Bank Indonesia

    There is no regulation from Bank Indonesia (BI) which explicitly regulates the determination of interest rates. Due to the absence of this rule, banks could provide high interest rates and often above the benchmark interest rate from Bank Indonesia (BI), including BPRs.

3) A higher cost structure or cost fund (Kasmir, 2016).

Fee Based Income

Fee based income is the profit obtained from transactions provided in other bank services or other than spread based (Kasmir, 2016). In PSAK No.31 Chapter I A.03 it is explained that in its operations, banks that invest in earning assets such as loans and securities were also given commitments and other services which are classified as "fee based operations", or "off balance sheets activities".

The Elements of Fee Based Income

Because fee-based income is non-interest operating income, the elements of operating income are included (Lapoliwa & Kuswandi, 2007):

1) Earnings on commissions and fees

    Credit provision is a source of bank income that will be received and recognized as income when the loan is approved by the bank. Meanwhile, the Commission is a bank's income which is being activated recently. This commission is a calculated burden on bank customers who use bank services. Commissions can also be recorded directly as income when the bank sells other banking services to its customers, such as insurance services.

2) Income from foreign exchange or foreign exchange transactions

    Foreign exchange transaction income is an income which arising from foreign exchange transactions that often comes from foreign exchange gap. This exchange gap will be included in the income statement in the income statement.

3) Other operational income. Other operational income is the receipt of dividends from subsidiaries or investment in shares, profit and loss from the sale of capital market securities and others.

Previous Research

Table 1.
Resume of Previous Research

No	Name	Variable				Analysis Tools	Result
		X_1	X_2	X_3	Y		
1	Homan (2015)	✓			✓	Excess wind procedure	Has a positive and significant impact
2	Meier & Outreville (2013)	✓			✓	Multiple linear regression	Has a negative and significant impact
3	Muslim et al. (2013)		✓		✓	Analysis of the maximum likelihood estimation method	Has a positive impact
4	Ilhama & Abdullah (2018)		✓		✓	Examine the criteria through chow test, and the hausman test	Has a negative and no significant impact
5	Pradipta et al. (2013)		✓		✓	Multiple linear regression	Has a negative and significant impact
6	Nelfita et al. (2016)		✓		✓	Simple linear regression analysis	Has a negative and significant impact
7	Damaris (2017)		✓		✓	Correlation Analysis	Has a positive and significant impact
8	Putri (2017)			✓	✓	Multiple linear regression	No impact
9	Soedibjo & Fitriati (2009)			✓	✓	Profit test model approach	Has a negative and significant impact

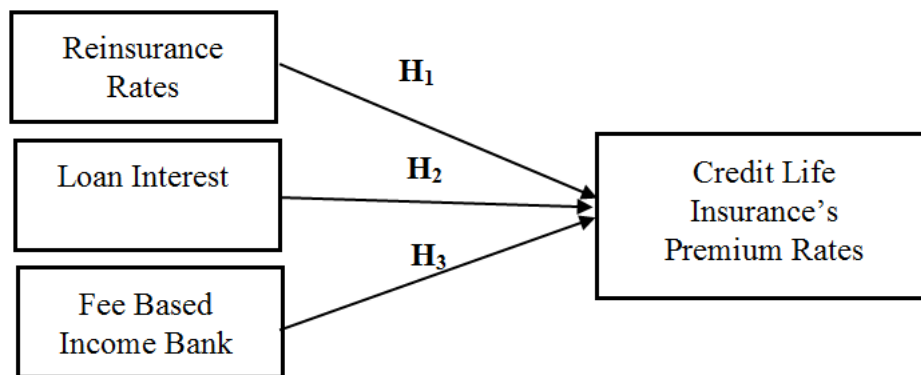*X_1= Reinsurance Rate*

X_2= Loan Interest Rate

X_3= Fee Based Income Bank

X_4= Credit Life Insurance Premium Rate

Theoretical Framework

    According to the theoretical research which mentioned above and strengthened by previous research, it is suspected that the factors that affect premium rates on credit life insurance namely loan interest, bank's fee-based income and reinsurance rates. Then the theoretical framework which could be drawn as follows:

Figure 2.
Theoretical Framework

Hypothesis Formulation

The hypothesis is an initial assumption that is still temporary compiled by the researcher that need be prove to be true after the empirical data is obtained.

1) **Reinsurance Rates Against Credit Life Insurance Premium Rates**

To avoid large losses, the insurance company can reduce the loss by transferring the risk to another insurance company, meaning that the other insurance company accepts the responsibility to pay all or part of the claim if the risk occurs or in accordance with the premium it receives. This other insurance company is known as reinsurance (Iskandar et al., 2011). In return for the transfer of part of the risk of loss, the insurance company must also pay a reinsurance premium in accordance with the reinsured portion to the reinsurer. Similar to the premium rate, the reinsurance rate is the unit value of reinsurance premium for a portion of the sum insured. Reinsurance rates are obtained through a treaty (agreement) that has been agreed between the insurance company and the reinsurer. According to the Homan research (2015) which revealed that reinsurance costs have a positive and significant effect on insurance premiums.

H1: Reinsurance rates have a positive and significant impact on credit life insurance's premiums.

2) **Loan Interest against Credit Life Insurance's Premium Rates**

If we apply for credit at a bank, then we will be charged interest. The amount of interest depends on the amount of the loan principal, the length of the loan and the interest rate. At the beginning of the credit period, the monthly installments are dominated by debt interest installments. With the passage of time, the monthly installments will be dominated by the principal installments, while the interest payments on the debts will decrease. The principal debt will decrease over time. Meaning that the amount of sum insured needed if the insured dies will decrease according to the decreasing principal amount of the debt. (Iskandar et al., 2011). Based on research from Muslim et al. (2013) the interest rate has impact towards credit life insurance's premiums.

H2: Loan interest rate has a positive and significant impact on credit life insurance's premium rate.

3) **Fee Based Income towards Credit Life Insurance's Premium Rates**

According to Kasmir (2014) Fee based income is the profit obtained from transactions provided in other bank services or other than spread based. PSAK No. 31 (2004:31.17) states that fee-based income is prepared as part of "other income and expenses", one of that is fees and commissions. This commission is a calculated costs on bank customers who use bank services. Other commissions are also recorded directly as income when the bank sells other banking services to its customers. Commission is the bank's income which is being activated recently. In the credit life insurance treaty agreement, the bank receives commissions from product marketing and banking service transactions, which are charged to customers in connection with the insurance products and services that they enjoyed. According to research by Lubis (2016) revealed that Fee which is an element of operational costs has a significant positive affect on insurance premiums paid by participants.

H3: Fee based income has a positive and significant impact on credit life insurance's premium rates

RESEARCH METHODS

This research is classified as quantitative associative research. The independent variables used are reinsurance rates, loan interest, and fee-based income. While the dependent variable is the rate of credit life insurance premiums. The population used in this research were policyholders who covered insurance at PT Indosurya Life throughout 2018. The sample selection through saturated sampling method where the researcher took the entire population as a sample with these following criteria: 1) AJK premium rates with interest types effective loan and 2) AJK premium rate for 45 years old with 5 years insurance period. The data was obtained from the division where the author works, namely the actuarial division of PT Indosurya Life.

Below is a table which shows the operational definition of each variable used in this research, both as the dependent variable and independent variable.

Table 2.
Operationalization of Variables

Variable	Variable Concept	Indicator	Scale
AJK Premium Rates (TRF)	The rate for calculating the amount of insurance premium that the policyholder have to pay to the insurance company for the sum insured.	- Mortality - Actuarial interest - Initial fee - Collection fee - Administrative costs - Ratio	Ratio
Reinsurance Rates (RS)	Rate to calculate the amount of reinsurance premium that insurance company need to pay to the reinsurance company for a	- Commission - Overhead cost - Underwriting audit fees & claims - Life insurance industry history - Ratio	Ratio

		portion of the sum insured being reinsured.	
Loan Interest (BP)	Fees which determined by the creditor to the debtor for a loan.	- Central bank policy - Bank fund requirement - Bank profit target - Time period - Quality guarantee - Competition - Ratio	Ratio
Fee Based Income Bank (FB)	Commissions received by banks for selling insurance products.	- Fees and commissions - Income from foreign exchange or foreign exchange transactions - Other bank income - Ratio	Ratio

Data analysis in this research used multiple linear regression analysis. Test the significance of the effect from each of independent variable on dependent variable through the t-test (t-test), while analyzed the feasibility of the model by the F-test (F-test). The examine to measure the contribution of independent variable to the dependent variable used the coefficient of determination, namely R Square. The software used in this research is IBM SPSS.

The multiple linear regression model proposed in this research are:

$$TRF = \alpha + \beta_1 RS + \beta_2 BP + \beta_3 FB + e$$

Whereas:
TRF   = Credit Life Insurance Premium Rate
BP   = Loan Interest
FB   = Fee Based Income
RS   = Reinsurance Rate
α   = Constant
β_1, β_2, β_3 = Regression coefficient of each BP, FB, RS
e   = Standard error

FINDINGS AND DISCUSSION
The results from descriptive statistics from the analyzed data are shown in the table below:

Table 3.
Descriptive Statistics

|	TRF (‰)	RS (‰)	BP (%)	FB (%)
Average	11.98	1.77	24.62	21.65
Median	11.88	1.71	24.5	22.5
Maximum	16.68	2.07	36.00	35.00
Minimum	9.17	1.52	11	7.5
Std. Dev.	1.51249	0.12083	5.91398	5.61544
Observations	50	50	50	50

Source: Data of Research

Based on the table above, it is found that the lowest AJK premium rate is 9.17‰ while the highest value is 16.68‰ with an average of 11.98, and the standard deviation is 1.51249 The lowest reinsurance rate value is 1.52‰ while the highest value is 2.07‰ with an average of 1.77, and the standard deviation is 0.12083. The lowest loan interest rate is 11% while the highest value is 36% with an average of 24.62% and a standard deviation of 5.91398. The lowest Bank Fee Based Income value is 7.50% while the highest value is 35% with an average of 21.65% and a standard deviation of 5.61544.

Classic Assumption Test

Classical assumption test in this research were includes normality test, autocorrelation test, heteroscedasticity test and multicollinearity test.

Normality Test

The normality test used to ensure that the residual data formed from the regression model has a normal distribution. The image below shows the results of the normality test
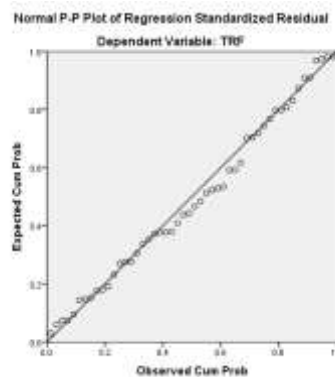
Figure 3.
Normality Test

The distribution of points from the Normal P-P Plot image above is relatively close to a straight line, so it could be said that the residual data is normally distributed.

Autocorrelation Test

Autocorrelation test used to determine whether there is a correlation between the confounding factors with one another. This Autocorrelation test was done through Durbin-Watson coefficient.

Table 4.
Autocorrelation Test

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.802[a]	.644	.621	.93157	1.908

Source: Data of Research

The data tested has no autocorrelation if dU < DW < 4-dU, according to the number of samples (n) = 50, independent variable (k) = 3, then obtained 1.6739 < 2.065 < 2.3261, so it could be said that the data tested was free from autocorrelation.

Heteroscedasticity Test

The results from Heteroscedasticity test could be seen through the scatterplot image below.
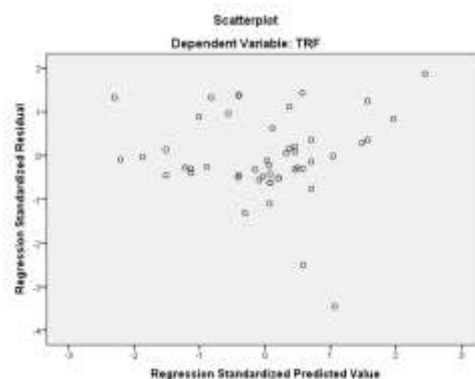
Figure 4.
Heteroscedasticity Test

From the scatterplot image above, it could be seen that the distribution of points did not form a certain pattern/flow and the points were spread out. So it could be said that there is no heteroscedasticity occured in this research model.

Multicollinearity Test

Below is a table of multicollinearity test results.

Table 5.
Multicollinearity Test

Collinearity Statistics	
Tolerance	VIF
.975	1.026
.988	1.012
.987	1.014

Source: Data of Research

The VIF values for the RS reinsurance rates, BP loan interest, and FB Bank Fee Based Income variables are 1.026, respectively; 1.012; 1.014, and the tolerance is 0.975; 0.988; 0.987.

The VIF value of the three variables is not greater than 10 or 5, so it could be said that there is no multicollinearity occured in these three independent variables.

Multiple Linear Regression Analysis

According to Ghozali (2018) is a model feasibility test which is regression coefficient test used to see whether the model has significance to be used as an analytical tool. The results from the Model Feasibility Test (Test F) are presented in table 6.

Table 6.
F-Test

Model		Sum of Squares	df	Mean Square	F	Sig.
	Regression	72.174	3	24.058	27.722	.000[b]
1	Residual	39.920	46	.868		
	Total	112.094	49			

Source: Data of Research

Based on Table 5 above, the value of prob. F Count (sig.) is 0.000 where the value is less than 0.05. So it can be said that the model used in this research are feasible to explain the impact of reinsurance rate (RS), loan interest (BP) and Bank's Fee Based Income (FB) variables towards the credit life insurance rate (TRF) variable.

Table 7.
Coefficient of Determination

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.802[a]	.644	.621	.93157	1.908

Source: Data of Research

Based on table 7 above, the R Square value result is 0.644 which shows that the proportion of the impact of reinsurance rates, loan interest, and fee based income on credit life insurance premium rates is 64.40% while the remaining 35.60% is determined by other variables which is not in the regression model.

Table 8.
t-Test

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
	(Constant)	5.930	2.211		2.682	.010
1	RS	.135	1.104	.011	.122	.093
	BP	.051	.023	.201	2.267	.028
	FB	.210	.024	.779	8.796	.000

Source: Data of Research

The first hypothesis testing states that reinsurance rates had a positive and significant affect on credit life insurance's premium rates. Referring to the results from the analysis in table 8, the probability value (Sig.) for the Reinsurance Rate (RS) variable is 0.093. This value is higher than the significance value (5%). Meaning that it could be conclude that reinsurance rates had no

significant affect on credit life insurance premium rates. So the results of this research was rejected the hypothesis 1 (H1). The main difference between reinsurance and insurance is that reinsurance programs are generally designed according to the request of the insurance company. Each contract should be priced separately to meet specific needs and level of reinsured risk (Clark, 2014). The reinsurance rate is obtained by the insurance company through a treaty agreement where the agreement is made before the insurance company enters into a business agreement with the prospective policyholder. In calculating the cash flow of insurance companies, reinsurance premiums are also not included in the cash flow component, this is because it has a small effect on insurance companies. Based on the foregoing, this is what causes reinsurance rates to have no affect on credit life insurance premium rates.

The research results from the affect of reinsurance rates on credit life insurance premium rates are different from the results of research by Homan (2015) which said that reinsurance costs had a positive and significant affect on insurance premium rates. This research were also different from the research by Meier & Outreville (2013) which revealed that reinsurance rates had a negative affect on the volume of insurance premiums.

This research proposes the second hypothesis, namely the loan interest rate had a positive and significant affect on credit life insurance premium rate. The results of the analysis in table 8, the probability value (Sig.) for the loan interest variable (BP) is 0.022. This value is lower than the significance value (5%) explaining that H2 was accepted. The BP coefficient value above was 0.052. It means that loan interest had a positive and significant affect on the determination of credit life insurance's premium rates. Loan interest rate is a factor that reveal the movement of credit values where the greater the loan interest, the greater the total loan that should be paid by customer which affects the profitability of the creditor (Dewi et al., 2016). In actuarial calculations, the interest which taken into consideration in finding out the premium rate is the actuarial interest which indicates the assumption of the company's investment return target. However, in calculating the AJK rate, there is an additional type of interest, namely loan interest. This Loan interest has an affect on decreasing the debtor's loan balance which is the sum assured in credit life insurance.

The results of this research are supported by Muslim et al. (2013), and Damaris (2017) who concluded that interest rates had a positive and significant affect on insurance premiums. However, it is inversely proportional to research conducted by Pradipta et al., (2013), and Nelfita, et al(2016) which revealed that interest rates had a negative and significant effect on insurance premium rates. Ilhama & Abdullah (2018)also concludes that level has a negative and insignificant affect on insurance premium rates.

This research proposes the third hypothesis, namely fee based income had a positive and significant affect on credit life insurance's premium rates. The probability value (Sig.) for the Fee Based Income Bank (FB) variable is 0.000. This value is lower than the significance value (5%) explaining that H3 was accepted. The BP coefficient value above was 0.212. Meaning that it could be concluded that loan interest had a positive and significant affect on the determination of credit life insurance's premium rates. In the credit life insurance cooperation agreement, the bank earns a commission (fee based income) from the premiums obtained by the insurance company. Also,

insurance companies will later benefit from increasing their premium income through bank distribution channels to reach their customers or the insured (Simanjuntak, 2016). In the Credit Life Insurance business, the bank acts as a distribution channel in marketing the products owned by the insurance company so that for this service the bank is entitled to a commission on the sale of the insurance company's products. The sales commission is included in the component of the bank's fee-based income.

The results from this research on the effect of fee-based income on credit life insurance's premium rates are supported by Lubis (2016) who were concludes that commissions have a positive and significant impact on the calculation of life insurance premiums. However, it is different from the research by Putri (2017) which revealed that fee-based income had no impact on credit life insurance premiums and Soedibjo & Fitrianti (2009) who interpreted that bank fees had a negative and significant affect on life insurance premiums.

Multiple Linear Regression Equation

According to the results of the research above, multiple linear regression analysis was carried out to find out the impact caused by independent variable on the dependent variable which resulting in these following equation:

$$TRF = 5,930 + 0,135RS + 0,051BP + 0,210FB + e$$

CONCLUSION AND RECOMMENDATION

According to the research results that has been done, the following conclusions that could be drawn, namely (1) Loan Interest (BP) had a positive and significant affect on credit life insurance's premium rates; (2) Fee Based Income (FB) had a positive and significant affect on credit life insurance's premium rates; and (3) reinsurance rates (RS) had no affect on credit life insurance's premium rates. And It is recommended to PT Indosurya Life that to increase the credit life insurance premium rate, so it will increase the Fee Based Income.

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