INSURANCE INDUSTRY AND NIGERIAN ECONOMY

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Abstract
This literature is an empirical investigation of the insurance industry and their impact on the Nigerian economy. The study period span from 2006 to 2015. The Ordinary least square method and granger causality test was used to analyze the data which were obtained from the Central Bank Statistical Bulletin and Nigerian Insurance commission report of various years. The insurance business in Nigeria on the whole seems to be performing its traditional role of financial intermediation. It is however recommended that more public awareness be created and flexible products should be developed to attract more clients. Furthermore, the insurance firms should try and harness the potentials in the rural areas.

Keywords: Financial Services, Insurance, Insurance Penetration, Insurance Density, Economy

A. Introduction
Insurance business is part of financial service industry in any modern economy. Its activity covers all facet of life and the industry can be classified into two broad sections of life and non-life insurance.

Insurance business has been subject to various classifications by various authorities in accordance to different criteria. In fact, classifications of insurance are conventional from experience, based on purpose and practice of different insurance. “Ideally the distinction is not due to any legal difference between particular kinds of insurance but may arise from varying request from the public which it is advisable for insurers as a matter of business in an attempt to meet public need” (Ivamy, 1979).

According to Oluoma (2010), insurance could be classified on the following four main bases namely (1) by the function it performs; (2) by the main classes of business (3) by statutory classification and (4) by its nature. Insurance of persons majorly focuses on human beings and the associated personal risks, becomes the bases and subject matter on which the insurance firm estimates premium to be paid.

These will thus, cover policies required to protect the policyholder or his dependants’ in the event of any loss of life, injury, loss of income arising from premature death, injury causing physical disability, old age and unemployment (Irukwu, 1991). Therefore, insurance of persons would include all items discussed under life insurance policy (e.g. individual life, group life and pensions) and some other items under non-life insurance (General business) that relate directly to the person like all various policies under personal accident and sickness insurance including health insurance (Oluoma, 2010).

B. Empirical Review
Life Assurance and Economic Growth
Szablicki (2002) conducted a cross-sectional analysis and a panel regression analysis with causality test between three different life assurance variables of income, socio-economic variables from the period 1960 to 1996. The analysis of the data was from 63 developed and developing countries and he is one of the few to find educational level as a significant variable. Furthermore the findings emphasize the importance of banking sector development and the results for the role of income level are in line with the results of previous works. The panel data regression mainly corroborate the results of cross-sectional estimation.

Webb, Grace and Skipper (2002) used a Solow-Swan model and incorporate both insurance and banking sector, with the insurance divided in two products life and property. The findings of this financial intermediating process was significant. When the result was separately analyzed, banking, and life sector where significant in explaining GDP growth but
property insurance remained insignificant in explaining GDP growth. It was also observed from the result that a combination of one insurance type and banking has the strongest impact on growth.

Concentrating on the Malaysian Life insurance market, Lim and Haberman (2003) interest on savings deposits and prices entered the equation with a positive sign and significantly impacted on the economy, the authors were puzzled by the positive sign of the interest rate. This could be in line with the findings of Webb et al (2002), that found that insurance and banking sector in their combined estimate, price elasticity was found to have a stronger coefficient than other variables.

Non-Life Insurance and Economic Growth

While analyzing data from 1970-1981, Beenstock, Dickinson and Khajuria (1988) applied pooled time series and cross-sectional analysis covering 12 countries. Premiums for property liability insurance (PLI) was regressed on gross national product (GNP), income and interest rate. Premium was found to correlate with interest rate and GNP. Further to this, Zou and Adams (2006) commented that property insurance may facilitate bank intermediation activity by partially collateralizing credit, which would reduce bank’s credit risk exposures thus promoting higher levels of lending.

At the same time, banking sector development will facilitate insurance sector development through a symbiotic relationship where a more efficient payment system improves financial intermediation process and services (Webb, Grace and Skipper, 2002). With respect to co-joint effort, the stock market activities can also help the insurance activity develop especially the life insurance companies which can promote stock market development by channeling the funds raised through life policies into contractual saving products in stocks and equities (Impavido, et al. 2003; USAID, 2006).

The cross sectional study carried out by Outreville (1990) on Life Insurance Premiums from 1983 to 1984 involving 55 developing countries revealed that it impacted GDP of these countries meaning insurance is a veritable channel for growth while other macroeconomic variables manifested weak support. The result is not different from an earlier findings by Beenstock et al (1988) which supported insurance income and financial development (M2/GDP) whereas other explanatory variables turned out to be insignificant. However the problem with the investigation was that most countries had insufficient demand of insurance services showing an unbalanced portfolio. Carrying out a study from 1980 to 1987, Browne and Kim (1993) analyzed life insurance consumption per capita for 45 countries. They regress cross-sectional data of various country variables, such as income or inflation rate. The outcome was that Income, dependency and social security expenses are positively signed, but inflation was negatively signed. Religious origin and background can affect insurance consumption and economic growth. For instance the religious origin – i.e. being a Muslim country was found to have negative connection to insurance consumption thus giving support to the works of Hofstede (1995, 2004) and Fukuyama (1995) in their reasoning that social-religious backing influences insurance demand.

Outreville (1996) investigated the correlation of life insurance premium to GDP and other factors for the year 1986 for 48 developing nations. This later result contradicted an earlier cross-sectional work Outreville (1990) showing that there was no significant relationship between real interest rate, financial development (M2/GDP) and economic growth. Income elasticity was the only variable found to yield similar result in other works such as (Beenstock et al, 1988, Outreville, 1990; Browne and Kim, 1993). Country indicators like rural population or education level cannot explain demand of insurance product.

Insurance Penetration and Growth

Beck and Webb (2002) Applying cross-country and time-series analysis, analyzed the relationship between life penetration, density and percentage of private savings to GDP, real interest rate, inflation volatility and other explanatory variables. Strong evidence was found for GDP, density, dependency ratio, inflation and banking sector development. The additional variables inflation, real interest rate, secondary enrolment and private savings were found to be significant. Park, Borde and Choi (2002) based their research on the nexus between
insurance penetration and GNP and some socio-economic factors adopted from Hofstede (1983).

The results from 92 analysis of cross-sectional data from 38 countries in 1997 was significant for GNP, Masculinity, socio-political instability and economic freedom. In the model all other variables lacked importance and masculinity was dropped after checking for heteroscedasticity of unknown form. Deregulation was found to be an influence variable that facilitated growth in the insurance business and this supported the expectations of Kong and Sigh (2005). Socio-political instability was also noted to be an indicator poverty instead of the need to secure.

Insurance Density and Growth

An econometric study conducted by Kugler and Ofoghi (2005) testing for cointegration and causality test, investigated the long-run relationship between insurance market size and economic growth in the United Kingdom from 1966 to 2003 for long-term insurance and another set of test from 1971 to 2003 for general insurance and a third test from 1991 to 1997 for marine-aviation transport insurance and reinsurance. Comparing the works of Ward and Zurbruegg (2000) who aggregated requisite variables (total written premiums) because of the possibility of cointegration, this study used disaggregated data for measure of market size. Their final estimation result revealed a long –run relationship between insurance market size and economic growth for all three components of the insurance markets. Results for the causality test showed causality from economic growth to insurance market size.

C. Methodology Sources of Data

The justification for the use of secondary data in this research is that; it is available at the (CBN statistical bulletin and NAICOM report) these sources are official, authentic and authorized national data hence its usage undoubtedly will be free of less bias and decisions finally reached will be upheld as a reflection of reality for the Nation.

Model Specification

the Relevant Models are-

GDPPC = a + ßLP + µ......................................................... (i)
GDPPC = a + ßNLP+ µ........................................................(ii)
GDPPC = a + ßID+ µ...........................................................(iii)
GDPPC = a + ßTIP+ µ.........................................................(iv)

where;
GDPPC = Gross domestic product per capita
a= Constant of the equation
ß= Coefficient of the independent variable
LP= life insurance penetration
NLP= Non-life insurance penetration
ID = Insurance Density
TIP=Total insurance penetration
µ= Error Term

D. Discussion of Results

Table 1 Regression Result for Hypothesis One

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>1361.771</td>
<td>2159.647</td>
<td>2.019669</td>
<td>0.0534</td>
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<tr>
<td>TIP</td>
<td>14.57013</td>
<td>5.711190</td>
<td>2.551154</td>
<td>0.0122</td>
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</table>
**Test of Hypothesis One**

H01: Life insurance penetration does not exert positive and significant impact on economic growth in Nigeria.

Table 1 shows the result and reveals that the model for our study is well fitted with an F-statistic= 41.72. The R-squared, which measures how fit of the model is, indicates that 88.8% of the variations observed by the predicted variable were explained by the independent variables. This was moderated by the Adjusted R-squared to 86.7%.

The result shows that LP is positive and significant and can impact greatly on the GDPPC of Nigerian (LP coefficient = 145.70, p = 0.012 < 0.05, t-value = 2.55). Decision: Based on the result above, the null is rejected and accept the alternate, thus, life-insurance penetration exerts positive influence and significantly impacted economic growth.

**Table 2: Regression Result for Hypothesis Two**

<table>
<thead>
<tr>
<th>Dependent Variable: GDPPC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Method: Least Squares</td>
</tr>
<tr>
<td>Date: 11/23/2017   Time: 15:44</td>
</tr>
<tr>
<td>Sample: 1990 2016</td>
</tr>
<tr>
<td>Included observations: 26</td>
</tr>
</tbody>
</table>

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<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
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<tr>
<td>C</td>
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<td>2.115669</td>
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<tr>
<td>NLIP</td>
<td>9.114342</td>
<td>11.67018</td>
<td>0.780994</td>
<td>0.0736</td>
</tr>
</tbody>
</table>

R-squared 0.854468, Mean dependent var 232.0876
Adjusted R-squared 0.826710, S.D. dependent var 156.2897
S.E. of regression 100.2567, Akaike info criterion 10.35143
Sum squared resid 214819.3, Schwarz criterion 11.62977
Log likelihood -157.7656, Hannan-Quinn criter. 11.54872
F-statistic 41.72003, Durbin-Watson stat 1.933620
Prob(F-statistic) 0.012240

Source: Eview Computation

**Test of Hypothesis Two**

H01: Non-life insurance penetration does not exert positive and significant impact on economic growth in Nigeria.

Table 2 shows the result of the model for our study is well fitted as F-statistic= 30.77 is significant. The R-square, which measures line of best fit indicated that the line fitted the model appropriately with value of 85.4% of the variations been observed that the predicted variable was properly explained by the predictor variables. This was moderated by the Adjusted R-squared to 82.7%.

The result shows that NLP has a positive and insignificant impact on the GDPPC of Nigerian (NLP coefficient = 9.11, p = 0.347 > 0.05, t-value = 0.78). Decision: From the analysis above the null was rejected while the alternate hypothesis was accepted indicating that non-life insurance penetration positively impacted on economic growth although it was not significant.
Table 3: Regression Result for Hypothesis Three
Dependent Variable: GDPPC
Method: Least Squares
Date: 11/23/2017   Time: 15:44
Sample: 1990 2016
Included observations: 26

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
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<td>2.019669</td>
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<tr>
<td>IP</td>
<td>12.42413</td>
<td>8.378956</td>
<td>1.482777</td>
<td>0.0789</td>
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R-squared            0.860168
Adjusted R-squared   0.833410
S.E. of regression   103.1293
Sum squared resid    110769.3
Log likelihood       -108.7480
F-statistic          25.14661
Prob(F-statistic)    0.078904

Source: Eview Computation

Test of Hypothesis Three
H03: Insurance penetration does not exert positive and significant and significant impact on economic growth in Nigeria.

Table 3 shows the result is significant given an F-statistic= 25.14. The R-square, which measures how good the line of best fit is in the model, indicated that 86.01% of the variations observed in the predicted variable were explained by the independent variables. This was moderated by the Adjusted R-squared to 83.34%.

The result shows that TIP had positive and non-significant impact on the GDPPC of Nigerian (IP coefficient = 12.42, p = 0.19 > 0.05,t-value = 1.48). Decision: From the analysis above the null was rejected and the alternative hypothesis accepted which indicates that total insurance penetration had positive impact on economic growth in Nigeria although it was not highly significant.

Table 4: Regression Result for Hypothesis Four
Dependent Variable: GDPPC
Method: Least Squares
Date: 11/23/2017   Time: 15:44
Sample: 1990 2016
Included observations: 26

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>4361.771</td>
<td>2159.647</td>
<td>2.019669</td>
<td>0.0534</td>
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<tr>
<td>ID</td>
<td>1.325184</td>
<td>0.121711</td>
<td>10.88795</td>
<td>0.0458</td>
</tr>
</tbody>
</table>

R-squared            0.974168
Adjusted R-squared   0.969010
S.E. of regression   107.2932
Sum squared resid    310819.4
Log likelihood       -101.9578
F-statistic          25.14661
Prob(F-statistic)    0.045845

Source: Eview Computation
Test of Hypothesis Four

Ho4: Insurance density does not exert positive and significant impact on economic growth in Nigeria

Table 4 shows the result reveals that the model for our study is well fitted F-statistic= 10.20. The R-square, which measures line of best fit the model, indicates that 97.4% of the variations observed in predicted variable were explained by the independent variables. This was moderated by the Adjusted R-squared to 96.9%.

The result shows that ID had a positive sign as the appriori expectation and significantly impacted on the GDPPC of Nigerian (ID coefficient = 1.325, p = 0.00 < 0.05, t-value = 10.88).

Decision: From the analysis above we reject the null and accept the alternate hypothesis which indicates that insurance density had a positive sign and also significantly impact on economic growth in Nigeria.

Implications Of Results

The implication of the result is discussed in line with the stated objectives of the study.

Objective One:

To assess the impact of life-insurance penetration on economic growth in Nigeria. Life insurance deals with risk and a saving medium for consumers. Its psychological and social roles cannot be underestimated in nation building. Insurance major function is to protect against financial loss and loss of human life. Indeed it is an averter of general risk as catastrophe.

Besides addressing the risk of death, it also covers disability, critical illness and superannuation. Life insurance is therefore developed around the concept of human life. Thus, as observed from the research findings as contained in the hypothesis that life insurance penetration exhibit a positive sign and exerts significant impact on economic growth as a result it is assumed that (i) life insurance companies have been well placed to invest in any asset with maturity ranging from short term securities to securities that last into perpetuity such as preferred shares and ordinary shares and other short term securities that are continually re-invested when they mature and secondly, life insurance firms facilitate long term investments rather than short term investments as in the case of non-life insurance companies. This study findings is in agreement with the works of Szablicki (2002)

Objective Two: to carry an impact assessment of non-life insurance penetration on economic growth in Nigeria. Non-life insurance is insurance businesses that are not life. Using Outreville (1990) and Beenstock et al (1988), this study adopted total non-life premium divided by gross domestic product as a measure of non-life insurance penetration. The result indicates a positive impact on economic growth using non-life insurance penetration as predictor variable although it was not significant thereby showing it corroborates with the works of Outreville (1990) and Beenstock et al (1988). This could have been induced by insurance consumption not affected by economic cycles or cyclical income variations may have induced the non-significance of non-life insurance penetration on economic growth in Nigeria. (Beenstock, Dickinson and Khajuria, 1988). Also the problems insufficient demand for non-life insurance is associated with the unbalanced portfolio of the insurer which may have induced its non-significance.

Objective Three: To evaluate the how total insurance penetration can aid economic activities leading to growth in the Nation. Since insurance activities are akin to activities of banks and capital market their services are likewise essential for stability and growth of the economy. To accept claims is liken to deposit mobilization and these pool of fund are channeled
to the economy in which profitable investment outlet are identified thus expanding the nation’s development stride.

The findings of this study indicates that total insurance penetration had positive impact on economic growth although it was not significant was in line with previous research conducted by Arena (2008), Holboer (1999). The non-significance could be attributed to the deregulation of the Nigerian economy and insurance activity not able to facilitate growth in the insurance industry.

Objective Four: To investigate the impact of insurance density on economic growth in Nigeria. Insurance density is measured as the total premium divided by population (defined as premium per capita). The premium income directly depicts the interest of the economy in insurance coverage, thus used to capture the level of insurance market activity in Nigeria. Theoretically Insurance market activity is expected to have a positive nexus with economic growth since the pool of fund by way of insurance premium is capable of rekindling growth in the economy. This is more so that a higher demand for premium translate to a higher growth. The study by Ward and Zurbruegg used aggregate variable in their estimation and found a long run relationship insurance development as measured proxied by market size and economic growth.

As revealed from this study insurance density had positive and significant and impact on economic growth and this is consistent with the works of Ward and Zurbruegg (2000).

E. Conclusion

Because of the need for financial intermediation in a developing nation, it is pertinent to not that there have been a rising need for funds in the three arms of finance which are banking, capital market and insurance. This rising trend in insurance service demand spurred the need to conduct this empirically tested research.

This informed the need to conduct an empirical survey of insurance market activity and economic growth in Nigeria. It is noteworthy to say that the insurance industry in Nigeria is highly underdeveloped, was worrisome but not totally surprised that the insurance density used as a proxy for insurance market activity did not show any significant and positive relationship with the real domestic product which was deployed as a measure of economic growth.

Thus, functions of insurance companies - providing means of risk management and performing mobilization and allocation of resources. Though predicted as important for economic growth could not be proved empirically. The major finding of this study is that insurance density (insurance premium per capita) did not show significant and positive relationship with economic growth within the period of study. This result contradict the theoretical expectations of Ward and Zurbruegg (2000).

While sound social, economic, legal and political environment provide fertile ground and support for a robust insurance markets, the key to insurance market development is investment in market infrastructure. It is this infrastructure that enables an effective marketplace to exits for the pooling, trading and management of many of society’s risks. Unfortunately, this infrastructure is lacking leaving the insurance business in Nigeria to remain ineffective and inefficient. Strengthening infrastructural and regulatory framework was the solution advocated and recommended to solve the problem of insurance business in Nigeria. We can also not downplay supervisory capacity of the industry as well as the provision of resources for oversight functions especially in the areas of market conduct thereby ensuring that claims are paid fairly and efficiently.

Insurance is a cornerstone in modern day financial services. Adding to its traditional role as risk manager, insurance marketing activity both as intermediary and provider of risk transfer and indemnification. It may promote growth by allowing different types of risk management by promoting long term savings encouraging the accumulation of capital, serving as a conduit pipe to channeling funds from policy holders to investment opportunities as well as mobilizing domestic savings into productive investment.

Insurance is an inevitable and indispensable part of modern economy that ensure the
safety of man and businesses, without it the financial system is incomplete. The theoretical framework should be properly thought in schools which will translate to realism when the students graduate the practicality of it will no more be in doubt. However, the level of insurance activity which should be a huge potential for growth has not been properly harnessed even though there is the ability to attain that level by the insurance market. Insurance by reducing uncertainty and volatility smoothen the economic cycle and reduce the impact of crisis situations on the micro and macro level. But, the demand for protection against losses of life, property caused by natural disaster, crime, violence, accidents, fire etc. are not so demanded in Nigeria.

It is against the backdrop that this study was undertaken to explore insurance business and its impact on the economic growth of Nigeria. The outcome of the tested hypotheses indicates that insurance business had positive impact on Nigerian economic growth. implying that the industry has assisted in influencing savings and investment decisions and hence long-run growth rates through lowering the costs of researching potential investments, exerting corporate governance, trading, diversification and management of risk, mobilization and pooling of savings, conducting exchanges of goods and services, and mitigating the negative consequences that random shocks can have on capital investment thereby enhancing the growth of the Nigerian economy.

Recommendations

The recommendation proffered in this study amongst others are that:
Life insurance is a way of dealing with risk and a saving medium for consumers. It also serve a psychological and social roles. More formally life insurance is meant to protect against financial losses and loss of human life. Developing a national insurance policy is good the whole nation because risks is bound to occur anywhere there are human endeavors and activities. Thus, we recommend that the government strengthen the institutional structure and enabling the existing government agencies like National Insurance Commission (NAICOM) and National Pension Commission (PENCOM). These institutions should strictly enforce the implementation of compulsory group life policy, Life Annuity and other cover under the Pension Reform Act, 2004 as amended. Also life assurance companies should be more innovative to doll out new attractive products especially within the medium to low income earners as the target which will enhance penetration and deepen of the market. It will also be essential to design affordable products that will optimize both investment returns to policy holders and financial protection to their dependants. This will assist in enhancing savings habit of Nigerians thereby increasing the amount of funds available for investment into the real sectors of the Nigerian economy.

The availability of insurance services is essential for the stability of the economy and can make the business participants accept aggravated risks. By accepting claims, insurance claims also have a pool of premiums which form reserve funds that can be used to expand the economy. Thus, this study recommends an increased level of diversification of the insurance products especially the non-life business. The insurers should introduce new non-life products and a modification of existing insurance products, thus availing customers the opportunity of choosing from a variety of products. There is also need insurance firms to take advantage of the potential gain that can evolve form non-life insurance products which should be made compulsory by law to subsequently have an upward review of their premium income which will hence deepen insurance penetration.

Insurance business has similar features as banks and capital market activities as they serve the needs of business enterprises and private individual household in the financial intermediation process. Their mode of operandus are somewhat different viewed from another dimension. The services rendered by the insurance gives room for stability of the economy as it serves as risk manager so that if businesses are hit by any catastrophe they immediately serve as cushion in this way there is speedy recovery in the economy whenever there is a downturn in business. Hence, this study recommends a facilitation of linkages between the three financial institutions in the country which consequently lead to a greater penetration of the insurance business in Nigeria.

This will include the healthy application of banc assurance which is mutually beneficial
for insurance companies and banks, mortgage protection, leasing, risk management services, among others. Also, NAICOM and the insurance industry should leverage on the micro-insurance programme to ensure that insurance is entrenched among the grass roots to increase insurance awareness, volume of business, and invariably increased premium income. Insurers should further engage in building and strengthening customer relationships to keep them coming back, provide value added services that are difficult for competitors to duplicate, improve their product development and service delivery processes, settle genuine claims promptly, increase their staff awareness of customer needs, train and effectively maintain an effective sales and marketing force.

Moreover, there should be cooperation of the industry operators and regulatory authorities to strictly enforce the implementation of the compulsory insurance products being driven under the auspices of Market Development and Restructuring Initiatives (MDRI) by NAICOM. This will no doubt generate billions of naira annually as premium income if effectively implemented. The Insurance industry in Nigeria has attained and recorded remarkable growth level since the consolidation exercise in 2007. There is great expectation that this phenomenon will be on the increase in the future when there is a stable political and macroeconomic environment as insurance fund could then provide a veritable source for enhancing the level of growth of the Nigerian economy.

Thus this study recommend that an insurance campaign must be taken far, deep and wide to be able to make headway in addition, the National Insurance Commission should strengthen regulatory framework so as to promote the listing of all insurance firms in the nation. This will enhance insurance density nationally.

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