

# The Contribution of Insurance Sector in Sudan Economy ( 2007- 2019 AD)

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## Abstract

This study aims at investigating the contribution of insurance sector in Sudan economy during the period 2007- 2019. The study problem focuses on role of insurance sector as facilitator for all other sectors, so should achieve a reasonable enhance to support the economic development. The study tries to explore the contribution of insurance sector by calculating some indicators. The significance of study is to assure the relative enhancing that happened in insurance sector during the study period. The objective of this study explores the contribution of insurance sector in Sudanese economy by using the scientific method. The study sets hypothesis which relative enhance in some of insurance market indicators that refer to increase contribution of insurance sector in economy. The methodology of study is a simplified qualitative method that is some insurance sector indicators. The study reached to main finding that there is relative enhance in contribution of insurance market in Sudan economy. In addition, to that very important findings are: the penetration rates achieved relative progress especially during the period 2017- 2019, insurance density ratio accomplished continuous increasing that refers to increase an insurance consumption per capita, the average of commitment rate was 81.9%, the average of net underwriting proximately was two that means the net premiums equivalent to two times of net claims, and the average of retention rate was 61.6%. The main recommendations of study are; the government

ought to constitute regulations component of the capital insurance companies increasing in order to improve financial state, National Insurance Regulatory Authority should makes effective efforts to rise the community's awareness toward importance of insurance through all possible means, the Insurance Sharia Board ought to issue enforcing disciplines the insurance companies to pay compensation, and the insurance companies should make organizing efforts to encourage the underwriting.

**Keywords:** Insurance sector in Sudan, financial indicators of insurance market.

### مساهمة قطاع التأمين في الاقتصاد السوداني

(2007-2019م)

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**المستخلص:**

تهدف هذه الدراسة إلى التحقق من مساهمة قطاع التأمين في اقتصاد السودان خلال الفترة 2007- 2019م. ركزت مشكلة الدراسة في دور قطاع التأمين كميسر للقطاعات الأخرى، لذا يجب انجاز تحسن معقول لدعم التنمية الاقتصادية. تحاول الدراسة استكشاف مساهمة قطاع التأمين بحساب بعض المؤشرات. أهمية الدراسة تأكيد التحسن النسبي الذي حدث في قطاع التأمين خلال فترة الدراسة. هدف هذه الدراسة إلى كشف مساهمة قطاع التأمين في الاقتصاد السوداني باستخدام أسلوب علمي. وضعت الدراسة فرضية مفادها التحسن النسبي في بعض من مؤشرات سوق التأمين مشيرة إلى زيادة مساهمة قطاع التأمين في الاقتصاد. اعتمدت هذه الدراسة منهجية الأسلوب الوصفي المبسط من خلال بعض مؤشرات قطاع التأمين. توصلت الدراسة إلى نتيجة رئيسة تبرز التحسن النسبي في مساهمة سوق التأمين في اقتصاد السودان. إضافة إلى نتائج مهمة جدا هي: معدلات التغلغل (النفاذية) حققت تقدم نسبي خاصة خلال الفترة 2017- 2019م، ونسبة الكثافة حققت زيادة مستمرة مما يشير إلى زيادة استهلاك التأمين للفرد، ومتوسط معدل الالتزام 81.9%، ومتوسط صافي الاكتتاب تقريبا 2 مما يعني أن صافي الإقساط ضعفي صافي المطالبات، ومتوسط معدل الاحتفاظ 61.6%. التوصيات الرئيسة للدراسة هي: ينبغي على الدولة سن قوانين تتضمن زيادة رأس مال شركات التأمين لتحسين المركز المالي، وينبغي على جهاز الإشراف على التأمين عمل جهود فعالة لرفع الوعي المجتمعي تجاه أهمية التأمين من خلال كل الوسائل الممكنة، وينبغي على الهيئة الشرعية للتأمين إصدار ضوابط ملزمة لشركات التأمين لدفع التعويضات، كما ينبغي على شركات التأمين عمل جهود منظمة لتشجيع الاكتتاب.

**الكلمات المفتاحية:** قطاع التأمين في السودان، المؤشرات المالية لسوق التأمين.

## **Introduction:**

Insurance is procedures to avoid the risk by transferring it to specialist companies that cover various categories of insurance to secure their clients. The insurance is the oldest dealing among merchants especially in marine.

In Sudan, the insurance sector is introduced recently comparing to banking or other services sectors. The existence of insurance sector is regarded as essential facilitator as requirement to achieve the progress in economies. The insurance sector is a part of the financial institutions, has specific field of working in protection the insured parts from the risk that might be faced them.

The insurance is considered an effective way to cope with risk and to give the businessmen daring to increase their investments, to keep their survive, and later on to give them ability to develop at any economic fields.

## **Study problem:**

The insurance sector is essential facilitator for all other productive sectors within the economy, and should achieve reasonable enhance to support the economic activities. So the study attempts to investigate the contribution of insurance sector in Sudan economy during the study period 2007- 2019. The study tries to display the contribution of insurance through calculating some indicators.

## **Study significance:**

Pay the decision makers attention to importance of insurance sector as a corn stone to all economic activities. Furthermore; to assure the enhancing that happened in insurance sector in Sudan during the study period.

On the other hand, this study is to enrich the library in studies of Sudan economy.

## **Study objective:**

Using scientific method to explore the contribution of insurance sector in Sudan economy by calculating of some insurance indicators.

### **Study hypothesis:**

There are relative enhance in some of insurance market indicators that refer to increase contribution of insurance sector in Sudan economy.

### **Study limitation:**

Place limitation: insurance sector in Sudan.

Time limitation: during the period 2007- 2019.

### **Study methodology:**

The study uses simplified qualitative method that is some insurance indicators to prove the study hypothesis.

### **Literature Review**

#### **- The first study:**

Tarafa Shraiki, Rafed Mohammed, "Role of Insurance Sector in The Economic Activity.

This paper aimed to illustrate the important role of insurance in the economic activity, and its position in national economies around the world. This study tries to define some aspects in insurance, which affect the economic activity, especially in industry and agriculture sectors, in addition to show the illustration of the insurance position in the economies of some countries, and the involvement of this sector's development with the general economic evolution in these countries.

#### **- The second study:** Nour Shedhan Adawi, "The Insurance Sector in Iraq- The Abilities and Challenges".

The paper aimed at investigating the contribution and challenges of insurance sector in Iraq by displaying the investments of local insurance companies, and their return of investment. Also the contribution of local and foreign companies in the insurance sector.

#### **- The third study:** Mirela Cristea, Silviu Carstina, "The Relationship between Insurance and Economic Growth in Romania Compared to the Main Results in Europe – A Theoretical and Empirical Analysis".

The purpose of this paper is to establish the correlation be-

tween insurance and economic growth in Romania by taking into consideration the share of gross premium written to GDP (insurance penetration) and the average value of the insurance premium paid by an inhabitant across one year (insurance density) as insurance indicators. The methodology of this research is statistical method.

The paper stated that the weight of insurance to the GDP of every country being over 10% in some European Countries (such as the Netherlands, The United Kingdom and Finland).

- **The fourth study:** Rabindra Ghimire,” Contribution of Insurance Industries in Economic Development of Nepal”.

The paper discusses the role of insurance industries in economic development of Nepal and analyzes its contribution in the economy.

The findings of this paper are: insurance address the requirement of medium and high income class people, but large portion of low income and poor people are excluded from the insurance services, Nepal recently has introduced crop and livestock insurance schemes, government provides 50 percent premium subsidiary to clients who purchase the agriculture insurance policy, and the paper concludes that insurance has played positive role in economic development of Nepal.

- **The fifth study:** Sami Ahmed Margani (2017), “An Analytical Study of the Reality of the Sudanese Insurance Market Performance (2011-2015).

The paper is aimed to identify the reality of performance of the Sudanese insurance market and the development and contribution of the Sudanese insurance sector in the economic development in the Sudan. The paper findings are that, the insurance market of Sudan suffers from several organizational and technical problems, the most prominent one is that the market of the Sudanese insurance occupies very late rank in the contribution rate of total insurance premiums to GDP compared with the insurance sector in

Arab World. Addition to the imbalance of a capacity of the size of the market where controlled by one company which is equivalent of almost 40 percent of the market portion. The study recommended that the application of effective plans to raise the awareness of the insurance handling in society and the integration of small insurance companies with some of them to strengthen their equity capital and to support the balance of the market.

### **The comparison:**

The differentiation of this paper comparing with the previous studies are to update of study period. Also focused on insurance sector in Sudan, and covered its contribution in Sudan economy by some indicators.

## **1. The theoretical frame work of insurance**

### **1.1 The definition and the concept of insurance**

insurance is a system for reducing financial risk by transferring from a policyholder to insurer. The social aspect of insurance involves the collective bearing of losses through contributions by all members of a group to pay for losses suffered by some group members who as a part of a pool, paid premiums that created the fund from which the claims are paid. The role of insurance in modern economy is multifold. International trade, development industry and infrastructure all are possible due to the insurance<sup>(1)</sup>.

Another definition sets by the Commission on Insurance Terminology of the American Risk and Insurance Association has defined insurance as follows; Insurance is the pooling of fortuitous losses by transfer of such risks to insurers, who agree to indemnify insured for such losses, to provide others pecuniary benefits on their occurrence, or to render services connected with the risk<sup>(2)</sup>.

Everyday many individuals, organizations, governments, and businesses buy insurance to transfer the risk of facing an uncertain loss in exchange for paying a certain premium. This mechanism has been used for centuries, reducing the uncertainty of financial loss by spreading risk across a large number of the insured<sup>(3)</sup>.

## 1.2 The importance of insurance

The importance of insurance, like other financial institutions such as banking and the stock market, is vital for the sustainable economic growth of any country. The risk is inherent in every human activity ranging from social life to economic activities<sup>(4)</sup>.

The insurance is a vital sector to accomplish the economic growth through its contribution in economy directly and also indirect by providing secure position for other sectors to work effectively. all sectors employ under protection of insurance against various risks. The risk can be divided into many types related to types of insurance policy such as fire insurance, theft, marine, aviation,... etc. Also floods, earthquakes, drought, and other hazards –related climate.

Insurance works as a protector to the supply chain by which it continues to provide the markets with sustained production, so the markets and also the investments have employed efficiently, therefore the entire economy.

Insurance reduces the need for “rainy day funds.” Rather than having to set aside a relatively large amount of money to pay for unexpected losses, consumers and businesses can buy insurance for a relatively small premium, thereby putting more working capital into the economy, producing and consuming more goods and services to create a higher standard of living<sup>(5)</sup>.

Insurance companies are considered as financial intermediaries for several reasons. The first reason is that they receive funds from their clients for further investment. Many people use insurance companies as institutions in which they invest most of their savings. Another reason why these institutions can be found as financial intermediaries is that these institutions place invested assets of its clients in a series of investments that will make them some money. So, they take resources from one sector and invest them in another sector<sup>(6)</sup>.

Insurance is an instrument of social policy. By providing significant social benefits, such as compensation for injuries at work and



rebuilding property after catastrophes, insurance contributes to the rebuilding of people's livelihoods as well as to the economy as a whole<sup>(7)</sup>. Securing the insurers is a commitment of insurance companies by providing him the compensation to cover the damages which occurred due to various types of risks, and the beneficiaries are all populace, even if those persons who didn't insure actually at insurance companies, because the advantages of insurance reflect on social and economic environment.

While insurance does not directly prevent losses, well-structured contracts can provide incentives for loss reduction<sup>(8)</sup>. In addition to reducing direct and indirect losses, insurance provides economic security. For businesses, insurance removes risks from balance sheets, meaning that higher-profit and higher-risk activities can be pursued. For governments, insurance assures timely assistance and recovery, which can attract more investment to the country<sup>(9)</sup>.

The importance of insurance cannot be denied because of its economic outlook, for instance, insurance spending is 6.23% of World's GDP, More precisely, insurance spending for developed countries is around 8–11% whereas it is 2–4% for developing countries, However, statistics revealed a significant reduction, from 88–67%, in the share of developed countries premium since 2005 and an upward shift in insurance premiums for emerging and developing countries<sup>(10)</sup>.

insurance companies facilitate trade and commerce at both the domestic and international level. Moreover, insurance also facilitates innovation by offering to underwrite new risk especially in new growth areas<sup>(11)</sup>.

The key role of insurance companies is the enhancement of risk management through effective risk pricing, transformation and pooling<sup>(12)</sup>.

Theory and evidence from existing insurance markets suggests that a “riskier and more uncertain world would be associated with an increase in insurance demand, at least until some local threshold were reached where the affordability of insurance or the insurability of risk were threatened”<sup>(13)</sup>.



## **2. The insurance in Sudan**

### **2.1 History of insurance**

The majority of researches have agreed that insurance starts with marine insurance. The merchants believed of risk distribution that appear in English proverb said do not put all eggs in one basket. So the insurance represents as a collective of group which face the same risk, so they can share the losses if the risk happened.

The insurance started more organized in Europe in fourteen century. The first law of insurance is regulated in Spain and Portugal about the Marine Insurance in fifteen century, and the most pioneer is the Barcelona four Acts in 1436, 1458, 1461, 1448. and the first Marine Insurance Company was established in Paris in 1668, then many insurance laws were regulated, the first law in comprehensive insurance was emerged under English law in 1601<sup>(14)</sup>.

Insurance sector is a part of the financial economy, which contains of many companies. The main objective of insurance companies is to transfer and mitigate the risks of other whatever is, individual or institutions.

In the late 1680s, Mr. Edward Lloyd opened a coffee house that became a popular haunt of ship owners, merchants, and ships' captains and thereby a reliable source of the latest shipping news<sup>(15)</sup>. Now Lloyd's of London is one of greatest insurance company in the world and regarded as an insurance market leader.

### **2.2 The insurance sector in Sudan**

The insurance has created in Sudan since Sudan's British colonial by foreign agents most of them were British, their number were 36 agent in 1960<sup>(16)</sup>. In the same year, Insurance is regulated with Insurance supervisory office in Finical Ministry. Sudanese government issued the insurance Act in 1962, and Insurance Supervisory Authority was created under Act No.4(a)<sup>(17)</sup>. This form of insurance practice continued until 1970 when all foreign companies were prohibited from operating and consequently national insurance companies entered the insurance market. The first insurance company was the Sudanese Motor Insurance Company

(Later Khartoum Insurance Company) which established in 1952 to cover motors risks. The government started to control and regulates insurance sector by issuing the first insurance Act in 1960<sup>(18)</sup>.

The number of insurance and re-insurance companies decreased from 17 in 2002 to 15 in 2003<sup>(19)</sup>. One company works as re-insurance company. The number of insurance companies remained fifteen in 2007, these companies invest their resources in providing insurance services certificates, deposits addition to work in estates field<sup>(20)</sup>. In 2007, the Central Bank of Sudan (CBOS) created an independent Microfinance Unit (MFU) to take the responsibility of regulating and promoting the microfinance sector. In 2008, the MFU embarked on an experimental wholesale project with nine commercial banks. Since the beginning of the microfinance experimental project in 2008 several trials have been made to create links between microfinance providers and insurance companies in order to provide insurance for microfinance providers' loan portfolio or insurance coverage for individual clients<sup>(21)</sup>. In 2008, nine banks (including the Family Bank) and one social fund (Social Development Fund- Khartoum) have participated in an experimental wholesale microfinance program launched by the Microfinance Unit of the Central Bank of Sudan. Initially, the funds allocated for the program amounted to SDG 120 million (about US \$20 million using the current official exchange rate which is around 6 SDG per 1 Islamic insurance products for microfinance clients<sup>(22)</sup>. However, Shiekan Insurance Company is taking a major role in this respect. Some insurance companies can insure the whole bank loan portfolio, e.g. Albaraka Insurance Company insures the full loan portfolio<sup>(23)</sup>.

The Insurance's Law that issued in 1960; was canceled in 1992. And it replaced with Islamic cooperative insurance that canceled the commercial insurance, also established the Sharia board to issue Sharia' Law insurance and to regulate and monitor the insurance companies activities and keep them in fitting to Sharia' law.

There were about 15 companies has worked in local insurance

market, although Sheikan company dominated on market with portion which is equivalent of almost 40 percent of the market.

Disaster insurance is practically non-existent in least developed countries, like Sudan, where the victims absorbed over 80% of the losses from the severe flooding in 1998, and the state covered the rest with outside assistance. Outside donor aid and financial assistance are volatile, and with the exception of highly publicized disasters (e.g., the 2004 Indian Ocean Tsunami), aid is usually only a small fraction of what is needed. Humanitarian assistance reported by the Organization for Economic Cooperation and Development (OECD) Development Aid Committee in the 1990's was less than 10% of disaster losses in recipient countries. Post-disaster arrangements are not only often insufficient for meeting needs for relief and reconstruction, but they tend to be ad hoc and inefficient<sup>(24)</sup>. So Sudan government should encourage the disaster insurance among all populations in order to mitigate these semi-annual natural risk. In spite governments have responsibility for any crises, it avoid the stress that the public budget can face by reducing financial burdens of this hazard. Also reducing the losses of citizens asset through providing them affordable coverage to low-income clients, and play as a vital role to achieve the economic and social development.

#### **1.1.1.1 The insurance operations during the period (2007-2019)**

##### **1. The direct gross insurance premiums:**

##### **chart No.1**

##### **Direct gross insurance premiums**

**Source:** Prepared by the researcher depending on data that collected from annual reports of Central Bank of Sudan.

The chart No.1 shows that the direct gross insurance premiums achieved continues increasing during the period (2007-2019). The sharp increasing was begin from 2016.

## 2. The gross insurance claims:

### chart No.2

#### Gross insurance claims

**Source:** Prepared by the researcher depending on data that collected from National Insurance Regulatory Authority.

Claims considered as compensation for risk occurred that paid from insured companies, that help people to continue in working and to grantee the ability of organizations to survive.

The chart No.2 shows the gross insurance claims that achieved continues increasing during the period (2007-2019), with sharp increasing from 2016. The increasing of gross claims is due to increase in gross premium. That's reflects that the underwriting in insurance documents was increased during the study period. Furthermore it means; the Sudanese society became more awareness to importance of insurance.

### chart No.3

#### Direct gross premiums and gross claims

in Sudan during the period 2007- 2019

**Source:** Prepared by the researcher depending on data that collected from annual reports of Central Bank of Sudan and National Insurance Regulatory Authority.

Chart No.3 shows that both the gross premium and gross claims have the same general trend. The gross premium curve is above of gross claims curve, and this is the normal satiation to keep the survival ability of insurance market.

## 2.3 The categories of insurance

Insurance companies aim to protect individuals or organizations from financial losses arising from occurrence of potential expected hazards in the future, and not related to the insured, the insurance company will compensate the insured for losses resulting from the occurrence of the insured hazard. Insurance includes the properties, marine, aviation, energy, cars, in addition to medical insurance and engineering besides insuring miscellaneous accidents and other types of insurance<sup>(25)</sup>. In Sudan, insurance is divided into

main two category which are Public Insurances and Takafel.

There are various categories of insurance; they are:

1. **Marine and Aviation insurance:** Marine insurance provides protection against loss of marine perils. The marine perils are collision with rock, or ship attacks by enemies, fire and capture by pirates etc. These perils cause damage, destruction or disappearance of the ship and cargo and non-payment of freight. So marine insurance insures ship (Hull), cargo and freight<sup>(26)</sup>.
2. **Aviation insurance:** Aviation insurance insures against hull, spares, deductible, hull wear and liability risks<sup>(27)</sup>.
3. **Motor insurance:** Motor insurance cover the accidents damages. It divided into two types; are: the first one is third party motor insurance which cover the third party losses by accidents even if damages or death, but don't cover the vehicle itself or its owner. Third-party motor insurance may be required by law<sup>(28)</sup>, so called the compulsory insurance. The second type is Comprehensive insurance which cover any damages of accident convey vehicle itself and owner addition to the third party.
4. **Properties and liability insurance:** property insurance indemnifies property owners against the loss or damage of real or personal property caused by various perils, such as fire, lightning, windstorm, or tornado. Liability insurance covers the insured's legal liability arising out of property damage or bodily injury to others; legal defense costs are also paid<sup>(29)</sup>.
5. **Fire insurance:** Fire insurance Protects your building used for business or as dwelling house and the contents of your premises such as machinery, equipment, stock, furniture, etc against damage caused by fire and /or lightening<sup>(30)</sup>.
6. **Health insurance:** Health insurance covers portion cost of medical treatments for healthcare. It is provided as subsidies by government for law-income citizens through social care department of Financial Ministry or Duwan Alzka. Health

insurance is compulsory for employees of public sector.

7. **Agriculture and Livestock insurance:** agricultural insurance covers the crop from growing to harvest against any loss that occur without careless of farmers. Shiekan Insurance Co. is the main company that works in this form of insurance focuses on Livestock, because the agricultural sector involves many natural hazards and obstacles.

8. **Takafel Insurance:** Takafel Insurance is the Islamic form of life insurance that depending on a large group supporting each other's through establishing mutual fund. The compensation is to provide for death, disability, certain period.

### 3. The contribution of insurance sector in Sudan

There are many indicators to show what is the contribution of insurance sector in Sudan. So this paper used some of them, such as insurance penetration and insurance density.

#### 3.1 Insurance penetration`

There are a positive relationship between gross national income and insurance penetration, as measured by direct gross insurance premiums as a percentage of GDP<sup>(31)</sup>. The relationship holds for European countries as it does for other OECD members such as the US, Canada, Japan and Australia. Ireland and Luxembourg are outliers because of their large international insurance sectors. Norway is an outlier displaying exceptionally low insurance penetration<sup>(32)</sup>.

**Table No.1**

**Insurance penetration rate  
in Sudan during the period 2007-2019**

Year	Insurance penetration rate
2007	0.47
2008	0.49
2009	0.49
2010	0.48
2011	0.49

Year	Insurance penetration rate
2012	0.57
2013	0.54
2014	0.41
2015	0.36
2016	0.46
2017	0.68
2018	0.69
2019	0.64

**Source:** prepared by researcher depending on insurance market data.

Insurance penetration is calculated as the ratio of total insurance premiums – or premiums at the market level – to the country's GDP<sup>(33)</sup>. The gross domestic product is nominal value also the gross premium, and the figures are used to obtain the penetration rate as percentage so there isn't problem to depend on nominal value with local currency. Any use of the indicator over time should be based on local currency in order to avoid large changes related to exchange rate fluctuations<sup>(34)</sup>.

According to table No.1, insurance penetration recorded increase during the study period. The difference was 0.17% between the rate in year 2019 and 2007. The high rate was 0.69% in 2018, and the low rate was 0.36% in 2015. Sudan insurance penetration ranked in the last order of Arabian countries in 2013 and 2014<sup>(35)</sup>.

In spite of, Insurance penetration was continuing to increase during the study period, there was a decrease during the 2014-2016. Regardless insignificant decrease in 2010 and 2019. The whole situation of insurance sector is to reflect relative progress during the study period based on penetration rate, especially during the period 2017- 2019 with rates 0.68, 0.69, 0.64 % respectively.

### 1.2 Insurance density ratio

Insurance density is calculated as the ratio of total insurance premiums to total population and can be used as a proxy for per capita consumption of insurance<sup>(36)</sup>.



**Table No.2****Insurance density ratio  
in Sudan during the period 2007-2019**

Year	Insurance density ratio
2007	15.6
2008	18.3
2009	19.6
2010	22.3
2011	25.3
2012	34.9
2013	44.1
2014	48.2
2015	54.7
2016	76.7
2017	129.2
2018	201.4
2019	292.2

**Source:** prepared by researcher depending on insurance market data.

Table No.2 shows that the insurance density achieved sharp and continuous increasing from 15.6 in 2007 to 292.2 in 2019. The increasing is 276.6 between the first year of study period and the last one that refers to increase the consumption of insurance per capita.

**chart No.4****The insurance density ratio**

in Sudan during the period 2007- 2019

**Source:** Prepared by the researcher.

There are two commonly-used indicators of the importance of insurance in the national economy (or alternatively, the level of insurance protection) – insurance density and insurance penetration<sup>(37)</sup>. Chart No.4 shows that the insurance density ratio recorded continuous and high performance, so that reflect the development of insurance sector, therefore increasing its contribution in economy.

### 1.3 Commitment

Commitment is calculated as the ratio of paid claims to gross claims. It refers to commitment of insurance companies to pay compensations to insurers who faced risks.

**Table No.3**  
**commitment rate**  
**in Sudan during the period 2007-2019**

Year	Commitment rate
2007	83.8
2008	71.2
2009	82.2
2010	83.1
2011	92.3
2012	80
2013	76.6
2014	80.3
2015	83.5
2016	86.3
2017	78.9
2018	86.8
2019	80.1

**Source:** prepared by researcher depending on insurance market data.

Table No.3 shows that, the commitment of insurance companies is relatively high; in majority of study years were more than 80%, only in 2009 is 71.2% that due to influence of the global crisis also in 2013 there is some decrease. That is known, the period from 2011 was under the affection of the secession of South Sudan.

#### 1.4 Net underwriting

Net underwriting can calculate as a ratio between net premium and net claims. Net underwriting refers to gained income of the insurance underwriting.

**Table No.4**

**Net underwriting in Sudan during the period 2007-2019**

Year	Net underwriting ratio
2007	1.6
2008	1.7
2009	1.7
2010	1.8
2011	1.9
2012	1.9
2013	1.4
2014	1.8
2015	2.1
2016	2.5
2017	2.2
2018	2.1
2019	2.1

**Source:** prepared by researcher depending on insurance market data.

The No.4 shows the net underwriting ratio, that to involve the earned income from net premium. the net underwriting ratio is between the rang 1.4 -2.5 during the study period. According to table.4 net premiums is greater than net claims in minimum about one and half times, and in maximum two and half times.

#### 1.5 Retention rate

Retention rate calculate as net written premiums to gross premiums written percent. Retention rate is a percentage refers to keeping the risk under the responsibility of local insurance market after cutting the reinsurance responsibility.

**Table No.5****Retention rate in Sudan during the period 2007-2019**

Year	Retention rate
2007	67.7
2008	63.9
2009	65.8
2010	61.5
2011	57.5
2012	57.1
2013	53.4
2014	63.7
2015	65.5
2016	66.2
2017	60.2
2018	58.2
2019	59.8

**Source:** prepared by researcher depending on insurance market data.

The rang of Retention rate was 53.4- 67.7%. So the local insurance market kept responsibility against risks about more than 50%, in average was 62%. About 38% transferred to international insurance marker as a reinsurance.

### 3.6 Discussion of hypothesis

The study based on main hypothesis is that; there are relative enhance in some of insurance market indicators that refers to increase the contribution of insurance sector in Sudan economy.

To accept or reject this hypothesis should prove the results of five indicators that used to analyze the data of insurance market in Sudan during the period 2007- 2019.

#### 1.1.1 Penetration rate

The penetration rate continued to increase during the study period, regardless the slight decrease in some years. The high rate was 0.69% in 2018. Furthermore the high rates were 0.68, 0.69, 0.64 % during the period 2017- 2019 respectively.

In general the penetration rates refer to achieve a relative progress during the study period, so the hypothesis is accepted according to penetration rate.

#### **1.1.2 Insurance density ratio**

Insurance density ratio recorded continuous increasing during the study period, especially during 2017- 2019. The performance of insurance density refers to increase the awareness of individuals toward insurance that appeared in increasing the consumption per capita. According to this, the hypothesis accepted.

#### **1.1.3 Commitment**

The commitment rate represents the payments of local insurance market for compensation, higher of this rate reflects strong financial market situation. The average of commitment rate was 81.9% during the study period, therefore the hypothesis is accepted.

#### **1.1.4 Net underwriting**

The average of net underwriting proximately was two, that means the net premiums equivalent to two times of net claims during the study period. So the hypothesis is accepted.

### **3.6.5 Retention rate**

The average of retention rate was 61.6% that means the responsibility of local insurance market for compensation was more than 60%. The financial situation of local insurance market was more than median, that is not totally bad if there is progress in entire market condition. So the hypothesis is accepted.

According to these five indicators discussion, the study accepted the hypothesis.

## **4. study conclusion**

### **4.1 Findings**

#### **4.1.1 The main finding**

There are relative enhance in contribution of insurance market in Sudan economy.

#### **4.1.2 Other related findings**

1. The penetration rates achieved relative progress, especially

during the period 2017- 2019. The progress of penetration rates represent that the insurance market began to enhance.

2. The continuous increasing in insurance density ratio refers to increase an insurance consumption per capita that prove the ability of insurance marker to improve.

3. The average of commitment rate was 81.9%.

4. Regardless the miscellaneous costs of insurance, The average of net underwriting proximately was two, that means the net premiums equivalent to two times of net claims.

5. The average of retention rate was 61.6%.

#### 4.2 Recommendations

- The government ought to issue law includes rise the capital of insurance companies in order to improve its finical position.
- National insurance regulatory authority should make effective efforts to rise the society awareness toward importance of insurance through all possible means.
- the Sharia board ought to enforce the insurance companies to discipline toward compensation reimbursable.
- The insurance companies should make organized efforts to encourage the underwriting.

#### 4.3 Conclusion

The modern economies throughout its journey to accomplish the development depend on insurance market by which can protect all activities, investment, and institutions. The insurance market help to survive then enhance productive sectors.

Sudan as a developing countries has faced with many obstacles in all sectors, either the insurance sector. This study analyzed the insurance market data by using five indicators that appeared relative progress.

The indicators achieved relative progress that require to more efforts to rise the performance of insurance market. This only sign that the insurance market owns the ability to improve.

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