

Analysis of Gold Pawn in Indonesia: A Comparative Study Between DSN-MUI and AAOIFI

Izzatul Muna

Istanbul Sabahattin Zaim University
muna.izzatul@std.izu.edu.tr

Abstract:

The development of Sharia-based products in Indonesia has been increasingly rife; one of the most growing is rahn/Islamic pawn. A pawn contract is a type of tabarru'/voluntary contract that does not generate profit. However, many Islamic financial institutions offer pawn products, especially gold pawn products. This research aims to analyze the comparison between the AAOIFI and DSN-MUI in the provisions regarding gold pawn contracts. This research is a type of literature study using a descriptive qualitative approach. The research found that there are similarities and differences between AAOIFI and DSN-MUI in the provisions regarding gold pawn contracts. The most salient difference is that the Fatwa of DSN-MUI allows the Islamic financial institutions as the mortgagee to charge the mortgagor some fees for safe-keeping and maintenance of the mortgaged asset through an ijarah contract, which makes the gold pawn contract profitable for the mortgagee. Unlike the AAOIFI Shariah Standard, which does not give the mortgagee a chance to obtain profit from this contract.

Keyword: *Rahn, Gold Pawn, AAOIFI, DSN-MUI*

Introduction

The development of Sharia-based products in Indonesia has been increasingly rife; one of the most growing is rahn/Islamic pawn. Currently, Islamic pawns have become a promising product in many Islamic financial institutions; even a state-owned company, namely Pegadaian, has opened a Sharia branch with the name 'Pegadaian Syariah'. It is interesting to study the pawn phenomenon in Indonesia that basically, a pawn contract is a 'tabarru' (voluntary) contract that does not generate profit. However, many Islamic financial institutions in Indonesia offer pawn products so they can provide enough profits. One of the Islamic pawn contracts that attract the attention of the Indonesian public is a gold pawn. In this paper, the researcher tries to analyze gold pawn contracts from the perspective of AAOIFI Sharia

Standards compared with the Fatwa of DSN-MUI.

The Accounting and Auditing Organization for Islamic Financial Institutions (AAOIFI), established in 1991 and based in Bahrain, is an Islamic international autonomous non-profit corporate body that prepares accounting, auditing, governance, ethics, and Shariah standards for Islamic financial institutions and the industry. Its standards are currently followed by all the leading Islamic financial institutions across the world and have introduced a progressive degree of harmonization of international Islamic finance practices. Forty-five countries are presently members of AAOIFI.

The National Sharia Council-Indonesian Ulema Council was formed in 1999 to realize the aspirations of Muslims regarding economic issues and encourage the application of Islamic teachings in the economic and financial sector carried out in accordance with the guidance of Islamic law. The formation of the DSN-MUI is a measure of efficiency and coordination of scholars to respond to issues related to economic and financial problems (DSN-MUI).

The legal basis for gold pawn practices in Indonesia has been regulated in the Fatwa of DSN-MUI No. 25/2002 Concerning Pawn, the Fatwa of DSN-MUI No. 26 concerning Gold Pawn, and provisions of the Financial Services Authority (OJK) in 2015, which issued OJK Circular Letter No. 36/SEOJK.03/2015 concerning products and activities of Islamic banks and Sharia business entities. Specifically, loan-financing products through gold pawns are not intended for investment purposes. Gold pawns are not investment products but are made for those who are currently in financial trouble. Hence, pawn gold is meant to provide solutions to people who need financing.

According to AAOIFI Standard, to mortgage (to pawn) means to make a financial asset tied to a debt so that the asset or its value is used for repayment of the debt in case of default. According to the Indonesian Civil Law, article 1150, the pawn is defined as a right obtained by the creditor on a movable asset handed over to him by the debtor. The debtor gives authority to the creditor to use the movable asset that has been handed over to pay off the debt if the debtor cannot fulfill the obligations at maturity.

In practice, especially in Indonesia, a gold pawn in Islamic banks is almost the same as in conventional banks. The difference is that conventional pawns impose the interest on the loan, while Islamic banks use a *marhun* fee or fee of maintenance of the asset used as a mortgage or collateral. In gold pawn (*rahn*) there are three

contracts, namely: qardh, rahn, and ijarah. Qardh means giving a loan to other people that can be billed or requested back without expecting anything in return. Meanwhile, Rahn functions as collateral on the loan of those who are in debt (the mortgagor). However, renting of marhun (the mortgaged asset) maintenance services can be done with an ijarah contract. Ijarah is a contract for the transfer of usufructuary rights over goods and services through payment of rent (ujrah), without being followed by a transfer of ownership of the goods.

The implementation of gold pawn financing is when a customer guarantees a mortgaged asset in the form of gold to an Islamic bank to obtain financing. Then the Islamic bank and the customer agree on a pawn contract. This contract includes the loan amount, the charging of safekeeping service fees and administration fees, and the maturity of repayment of financing is 120 days (4 months). Islamic banks provide financing or services needed by customers according to agreements through qardh, rahn, and ijarah contracts.

Customers redeem the mortgaged asset after the due date of the contract. Otherwise, if the customers cannot repay the loan at the due date, then it can be extended one time, and so on. If the customer cannot repay the loan and does not extend the pawn contract, the bank can conduct an auction by selling the mortgaged asset to repay the loan. This paper focused on the analysis of the implementation of pawn contracts in Islamic financial institutions through the accepted legal basis in Indonesia, namely the fatwa of DSN on pawn contracts. This paper did not compare the fatwa of a pawn in Indonesia with the fatwa of a pawn in another country. This paper focused on comparing the provisions issued by a state-level institution, which is DSN-MUI with that by a multi-state institution, namely AAOIFI, where its standards are followed by many countries and jurisdictions either fully, partially, or as guidance. As far as he observed, no research compares the provisions of DSN-MUI and AAOIFI, especially in the gold pawn issue. Hence, the researcher will try to fill this literature gap.

This research will focus on the comparison of the provisions regarding gold pawns in the perspective of AAOIFI and that of DSN-MUI, to view the extent of accordance of the provisions from both institutions. The problem statements of this research are to describe the provision of AAOIFI and DSN-MUI regarding gold pawns, and to analyze the comparison between the provision of AAOIFI and DSN-MUI regarding gold pawns.

Literature Review

Definition of Pawn/Mortgage

Pawn transaction in Islamic jurisprudence is called Rahn, which in Arabic etymology means al-thubut wa al-dawam (fixed and eternal). Technically, pawn means to make an object having economic value as a trust for the repayment of debts so enabling the mortgagee (murtahin) to get all or part of the debts from the object. Based on the term of Indonesian Positive Law, Rahn is defined as an asset that is used as collateral for a debt so that it can be paid by the value of that asset, in case the debtor fails to pay off his debt.

According to the Indonesian Civil Law item 1150, pawn is defined as a right that the creditor obtains over a movable asset handed over to him by the debtor as collateral for the debtor's debt, which authorizes the creditor to take the loan repayment through that asset by preceding other creditors, except selling expenses, as the implementation of a decision on claims regarding possession, and except expenses for maintaining the asset incurred after being handed over.

Meanwhile, according to the Compilation of Islamic Economic Law, Rahn is possession of the debtor's property by the lender/creditor as collateral. Gold pawn is defined as handing of authority over property or valuable goods in the form of gold from a customer (rahin) to the bank (murtahin) to be managed with rahn principle, as collateral (marhun) for the loan (marhun bih) given to the customer. Sharia pawnshops hold Islamic gold pawns in Indonesia and Sharia commercial banks or Sharia business institutions.

Legal Basis of Pawn/Mortgage

Regarding the permissibility of pawn transactions, the majority of fiqh scholars believe that it is permissible, and they have never disagreed on this matter. Pawn, according to them, is prescribed when not traveling or when traveling, based on the actions of the Prophet Muhammad SAW in the hadith, which explains that the Prophet SAW pawned his armor to get food from a Jew. The Muslim community has also agreed (ijma') regarding the permissibility of Rahn. In the reality of community life, rahn is very common, because borrowing money using collateral will make it easier to repay debts.

Rahn in the Compilation of Islamic Economic Law has been

regulated in articles 329-369. Likewise, the rules of Islamic gold pawns refer to Fatwa of DSN-MUI No. 25/2002 concerning Rahn and Fatwa No. 26/2002 concerning Gold Rahn. Positive law and the Fatwa of DSN-MUI are the references relating to Islamic pawn, which state as follows:

- a. Indonesian Law No. 21/2008 Concerning Islamic Banking
- b. Article 36 Bank Indonesia Regulation No. 6/24/PBI/2004
- c. Indonesian Bank Regulation No. 9/19/PBI/2007
- d. DSN-MUI No. 25/DSN-MUI/III/2002 Concerning *Rahn*
- e. DSN-MUI No. 26/DSN-MUI/III/2002 Concerning Gold Rahn

The positive legal basis of pawn is explained in Article 19 paragraph (1) of Law no. 21 of 2008 concerning Islamic Banking, that the activities of Islamic Commercial Banks include carrying out other activities commonly carried out in the banking sector and the social sector if they do not conflict with sharia principles and comply with the provisions of Indonesian laws and regulations. In addition, relating to pawnshop, it is explained in the Government Regulation of the Republic of Indonesia No. 51 of 2011 regarding the transformation of a 'Pegadaian' public company legal entity into a limited liability company.

Pillars and Conditions of Pawn Contracts

According to the majority of fiqh scholars, there are four pillars of Rahn, the first is shigah (expression of offer and acceptance). Second, rahin (who mortgages/pawns) and murtahin (who receives the mortgaged asset). Third, marhun (the assets used as collateral). Fourth, marhun bih (the debt). In every contract, the elements and pillars must meet the requirements.

The conditions for the parties to the contract are the same as conditions in other agreements, which are that the parties must be sanity, mature, and not under force or coercion. Article 330 of Compilation of Islamic Economic Law states that the parties who conduct a pawn contract must be legally competent. Legal competence here means sanity, maturity, or puberty, and not under coercion.

The conditions that must be met in these pillars are as follows.

a. *Sighah* (expression of offer and acceptance).

According to *Hanafiyah* scholars, the pawn cannot be related to certain conditions or be related to the future because a pawn contract is the same as a sale contract. Meanwhile, according to scholars of *Malikiyah*, *Shafi'iyah*, and *Hanabilah*, if the condition is a condition that supports the running of the contract, then the condition is valid, but if the condition is contrary to the *rahn* contract, then the condition is invalid.

b. *Rahin* and *Murtahin* (the mortgagor and the mortgagee)

The condition for a person who is in a contract is that they must be legally capable; according to the majority of scholars, legally capable is one who is mature and sane. Meanwhile, according to *Hanafiyah* scholars, both parties are optional to be mature but sufficiently sound-minded.

c. *Marhun* (the assets used as mortgage or collateral).

The assets that are used as collateral according to *fiqh* scholars are required as follows:

1. The mortgaged asset may be sold and the value is in accordance with the amount of the debt, on condition that it has passed the maturity date agreed in the contract.
2. The mortgaged asset must have a beneficial value.
3. The mortgaged asset must be clear and specific.
4. The mortgaged asset is the legal property of the person who mortgages it.
5. The mortgaged asset does not belong to another person (still in dispute).
6. The mortgaged asset may be handed over either the object or the certificate of ownership. In addition to the conditions above, there is one more condition that absolutely must be met: the mortgaged asset must be durable and not easily damaged, such as gold, silver, precious metals, vehicles, and the like.

d. *Marhun bih* (debt)

The conditions of the debt borne by the debtor are:

1. The debtor is obliged to return the number of money/goods that are his responsibility.
2. The debt may be paid with collateral.
3. The amount of the debt must be clear.

Implementation of Pawn Contracts in Islamic Financial Institutions

In Indonesia, *rahn*, which is also called Islamic pawn, is a product made as an alternative to conventional pawns, especially to help the community/customers fulfill their urgent needs in daily lives. In the practice of Islamic banks, the bank does not derive any benefits from the *rahn* contract except maintenance and security fees for the mortgaged assets. The *Rahn* contract can also be applied to fulfill a bank's request for additional guarantees for providing financing facilities to customers.

The *Rahn* contract is used in banks in the following two cases:

1. As a complementary product of another contract

Rahn is used as the complementary product, which means as the additional agreement for another product such as the bay' *murabahah* financing contract. The bank can keep the customer's assets as a consequence of the contract.

2. As an independent product

In some Islamic countries, such as Malaysia, the *Rahn* contract has been used as an alternative to the conventional pawn. The difference between both is that in Islamic pawn, the bank charges some amount of fee for safekeeping, maintenance, preservation, and estimation of the mortgaged asset. The main difference between a *rahn* fee and pawn interest is the nature of the interest which can be accumulated and multiplied, whereas the *rahn* fee is only once and is set in advance.

Methodology

This research is a type of literature study that looks for theoretical references that are relevant to the cases or problems found. The theoretical references are obtained utilizing the research of literature studies and then used as the foundation and main tool for analyzing the data. The approach used in this research is a qualitative research approach. The descriptive analysis method is carried out by describing the facts which are then followed by analysis, not limited to describing, but also providing understanding and explanation of the problems found. After the data has been collected, the researcher clarifies it according to each problem and then analyzes it qualitatively.

Analysis and Discussion

After reviewing the AAOIFI Sharia Standard and Fatwa of DSN-MUI regarding the pawn issue, the researcher found that there are similarities as well as differences in several respects. Especially in terms of gold pawns, AAOIFI has not issued a standard specifically discussing gold pawns, but the provisions regarding pawn contracts through gold are included in the standard of pawns in general, namely Sharia Standard No. 39 on Mortgage and its Contemporary Applications. Meanwhile, the DSN-MUI has issued a fatwa discussing pawns in general and a fatwa on gold pawns in particular. In this section, will first be explained the perspective of AAOIFI Standard No. 39/2017, followed by the perspective of Fatwa of DSN-MUI No. 25/2002 on Rahn and Fatwa No. 26/2002 on Gold Rahn, then a comprehensive comparison will be carried out and conclusions will be drawn.

Gold Pawn in the Perspective of AAOIFI Standard No. 39

In terms of the mortgaged asset type, it can be found in the item 3/2/2 stating that:

“In principle, the mortgaged asset should be tangible, yet the asset can be a debt, a cash amount, a fungible asset, or a consumable commodity. Perishable objects can also be mortgaged as they can be sold and replaced by their value. Moreover, the mortgaged asset can also be a share of common property which can be identified and sold separately.”

Hence, gold, which is included in the category of tangible assets, is implicitly permissible to be used as a mortgaged asset. In case the mortgage asset is damaged in the hands of the mortgagee, it can be found in item 3/2/4 which states:

“When the mortgaged asset perishes in the hands of the mortgagee, the notary, or the agent, for a reason other than transgression or negligence, no responsibility shall rest with him and the debt shall remain valid”.

Here, it can be concluded that if the damage is due to transgression or negligence of the mortgagee, he shall be held responsible for compensation. In contrast, if the damage is not due to it, the mortgagee shall not be liable for compensation. In terms of utilizing the mortgaged asset, it can be found in item 3/2/9, which states:

“The mortgagor can benefit from the mortgaged asset on permission of the mortgagee, whereas the mortgagee has no right to enjoy free of charge benefit from it. However, on permission of the mortgagor, the mortgagee can utilize the asset with the normal pay for similar assets.”

The difference here is that the mortgagor is not charged for utilizing the mortgaged asset, while the mortgagee, when he receives permission from the mortgagor to use the mortgaged asset, is set for utilizing it. In terms of maintenance of the mortgaged asset, item 3/2/10 states:

“The mortgagor should bear all actual expenses relating to the reparation of the mortgaged asset and its preservation against decay, The mortgagee should bear all the expenses relating to safekeeping, documentation, and selling of the mortgaged asset, except when the two parties agree that the mortgagor should bear such expenses”.

Based on this item, there are two different conditions regarding the responsibility of maintenance of the mortgaged asset, one of which emphasizes the mortgagor to bear the expenses, and the other one emphasizes the mortgagee to bear.

Gold Pawn in the Perspective of Fatwa of DSN-MUI

DSN-MUI issued two fatwas in 2002; the first is Fatwa No. 25 concerning pawn contracts in general, and the second one is Fatwa No. 26, which specifically discusses gold pawns. Based on Fatwa No. 25 item 1, gold is explicitly permissible to be used as a mortgaged asset. In case the mortgaged asset is damaged, there is no specific explanation of that in either of the two fatwas. In terms of utilization of the mortgaged asset, fatwa No. 25 item 2/2 states:

“The mortgaged asset and its benefit is the right of the mortgagor. In principle, the mortgaged asset cannot be utilized by the mortgagee except on permission of the mortgagor without reducing the value of the asset, and the utilization is just meant as compensation for expenses of maintenance”.

Hence, it can be concluded that the mortgagee, although he has the right to keep the mortgaged asset, however, he has no right to utilize it except with the permission of the mortgagor. In terms of maintenance of the mortgaged asset, it can be found in Fatwa No. 25 item 2/3 stating:

“The maintenance and safekeeping of the mortgaged asset is in principle the obligation of the mortgagor, however, it can also be carried out by the mortgagee, while the expenses of maintenance and safekeeping remain the obligation of the mortgagor.”

From this item, all expenses used for the reparation of assets can be included in the category of maintenance. However, there is only a specific explanation regarding expenses of safekeeping and the like, such as expenses of documentation and selling of the mortgaged asset. Based on this item, there is no difference between expenses relating to safekeeping and expenses relating to reparation, documentation, and sale of the mortgaged asset, unlike in AAOIFI Standard. In terms of expense amount, Fatwa No. 25 item 2/4 clearly states:

“The expense of maintenance and safekeeping of the mortgaged asset cannot be determined based on the amount of the loan.”

and Fatwa No. 26 item 1/3 states:

“The amount of fee and expenses of safekeeping (of the mortgaged asset) is based on the actual necessary expenses.”

Hence, the expense amount is determined by the estimated value for maintaining the mortgaged asset, not by the amount of the loan. This means, for example, if two mortgagors mortgage gold with the same estimated value but differ in the loan amount they request, then they will be charged with the same amount. The provision to charge a fee or expense to the mortgagor is stipulated based on Fatwa No. 26 item 1/4, which states:

“The fee of safekeeping of the mortgaged asset is carried out based on Ijarah/Lease contract.”

The contract of ijarah here means the mortgagor who mortgages the mortgaged asset is considered muhajir, while the mortgagee who keeps the mortgaged asset is considered ajiir. Therefore, the ajiir will be given a fee for the service of maintaining the asset of the mu’ajjir. Based on the fatwa of DSN-MUI mentioned above, there is a chance for the mortgagee to charge some amounts of fees to the mortgagor under the name ijarah contract, which makes the gold pawn contract profitable for the mortgagee.

Unlike in the AAOIFI Standard, where the mortgagor is only charged for expenses of reparation and the likes, and the mortgagee should bear all expenses relating to safekeeping, documentation, and selling of the mortgaged asset, which does not give the mortgagee a chance to obtain profit from this contract. Given that the mortgagee in the pawn contract is the loan giver or the creditor, and the mortgagor is the debtor, charging some fees to the debtor will make this contract closer to the usury.

Table 1
Comparison between AAOIFI and DSN-MUI Provisions on Gold Pawn

	Category	AAOIFI Standards	Fatwa of DSN-MUI
1	Permissibility of gold pawn contract	Permissible	Permissible
2	Provision of permissibility	Implicitly mentioned	Explicitly mentioned

3	In case of mortgaged asset damage in the hands of the mortgagee,	The mortgagee is responsible if the damage is due to his negligence	Not specified
4	Right to utilize the mortgaged asset	The mortgagor has the right to utilize without any charge, the mortgagee has the right to utilize with a charge	The mortgagor has the right to use it with charge, and the mortgagee (on the mortgagor's permission) has the right to utilize it as compensation for maintenance service
5	Maintenance responsibility	The mortgagor bears expenses of reparation and preservation, the mortgagee takes expenses of safekeeping, documentation, and selling	The mortgagor pays all expenses of maintenance and safekeeping, while the mortgagee does not bear any expense
6	Determination of maintenance fee	Not specified	Based on the estimated value for maintaining the mortgaged asset, not based on the debt amount
7	Contract type of maintenance fee	Not specified	Ijarah contract

8	Possibility of financing through gold pawn contract	No	Yes
---	--	----	-----

In the fatwa of DSN-MUI, the responsibility for the safekeeping and maintenance of mortgaged assets is prioritized to be borne by the mortgagor. Meanwhile, in the AAOIFI Standards, the responsibility for the maintenance and care of the mortgaged asset is borne by the mortgagee. Islamic financial institutions in Indonesia can charge some fees and get benefits through ijarah contracts by safekeeping the gold as a mortgaged asset. Furthermore, applying a combination of Rahn/pawn contract and the ijarah contract in a contract agreement is still considered controversial, for it is contrary to the rule that prohibits two contracts in one contract.

Conclusion

Based on the discussion presented previously, there are similarities between the AAOIFI Sharia Standards and the Fatwa of DSN-MUI in the provisions regarding gold pawn contracts, as well as differences in some respects. The most salient difference is that the Fatwa of DSN-MUI allows Islamic financial institutions in Indonesia to charge fees to the debtor for safekeeping and maintenance. This fee is charged through an ijarah contract, which makes the gold pawn contract profitable for the mortgagee.

Unlike the AAOIFI Standard, which does not give the mortgagee a chance to obtain profit from this contract. Given that the mortgagee in the pawn contract is the loan giver or the creditor and the mortgagor is the debtor, charging some fees to the debtor will lead this contract closer to the usury. Furthermore, applying a combination of the Rahn contract and Ijarah contract in a contract agreement is still considered controversial, for it is contrary to the rule that prohibits two contracts in one contract.

References

AAOIFI Sharia Standards No. 39 Mortgage and Its Contemporary Application
Fatwa DSN-MUI No. 25/2002 about Rahn

Fatwa DSN-MUI No. 26/2002 about Gold Rahn

Arrum Mahmudahningtyas. "Analisis Kesyariahan Transaksi Rahn Emas (Studi Pada Pegadaian Syariah Cabang Landungsari Malang)", Jurnal Ilmiah, Malang: Universitas Brawijaya, 2015.

Anesa Arispen, dkk. "Analisis Fatwa DSN-MUI terhadap Penentuan Biaya Ijarah dalam Sistem Gadai Syariah di Pegadaian Syariah Situsaeur Bandung", Prosiding Keuangan dan Perbankan Syariah, Vol. 2, No. 1, Tahun 2016.

Anggia Jancynthia Nurizki Wardani. "Kesesuaian Produk Gadai Emas Berdasarkan Fatwa DSN-MUI Di Bank Syariah Mandiri Surabaya", JESTT, Vol. 2 No. 12, Desember 2015.

Ayu Siti Rochmah, "Implementasi Pengenaan Biaya Ijarah Pada Produk Gadai (Rahn) Emas Di Cabang Pegadaian Syariah Solo Baru", Skripsi, Surakarta: Institut Agama Islam Negeri (IAIN) Surakarta, 2018.

Agus Triyanta, "Fatwa dalam Keuangan Syariah: Kekuatan Mengikat dan Kemungkinannya untuk Digugat Melalui Judicial Review", Jurnal Hukum IUS QUIA IUSTUM, No. 1, Vol. 21, Januari 2014.

Atiqoh Prakasi, "Pelaksanaan Gadai Emas Di Bank Mega Syariah". Skripsi S-1 Fakultas Hukum, Universitas Indonesia, 2012.

Cahyusha Desmutya Herfika, "Analisis Komparasi Mekanisme Produk Kredit Pada Pegadaian Konvensional Dan Pembiayaan Pada Pegadaian Syariah (Studi Kasus pada PT Pegadaian di Nganjuk dan Kediri)", Jurnal Ilmiah, Malang: Universitas Brawijaya, 2013.

M. Zainuddin Alanshori, "Analisis Fatwa DSN-MUI Nomor 25/III/2002 Terhadap Penetapan Ujrah Dalam Akad Rahn Di BMT UGT Sidogiri Cabang Waru Sidoarjo", J E S, Vol. 2, No. 1, September 2017.

Nurvianti, Tiara. "Implementasi Gadai Emas Pada Bank Syariah Mandiri Kantor Cabang Pembantu Kedaton Bandar Lampung Berdasarkan Fatwa DSN-MUI No.25/DSN-MUI/III/2002", Skripsi S1, Bandar Lampung: Institut Agama Islam Negeri (IAIN) Metro, 2020.

Siti Rochmah, Ayu. "Implementasi Pengenaan Biaya Ijarah Pada Produk Gadai (Rahn) Emas Di Cabang Pegadaian Syariah Solo Baru", Skripsi S1, Surakarta: Institut Agama Islam Negeri

(IAIN) Surakarta, 2018.

Anggia Jancynthia Nurizki Wardani, "Kesesuaian Produk Gadai Emas Berdasarkan Fatwa DSN-MUI Di Bank Syariah Mandiri Surabaya", JESTT, Vol. 2 No. 12, Desember 2015.

<https://dsnemui.or.id/>

<https://aaoifi.com/>