CHAPTER 7

# SECURITIZATION

## LEARNING OUTCOMES

**After going through the chapter student shall be able to understand**

- Introduction
- Concept and Definition
- Benefits of Securitization
- Participants in Securitization
- Mechanism of Securitization
- Problems in Securitization
- Securitization Instruments
- Pricing of Securitization Instruments
- Risks in Securitization
- Tokenization
- Securitization in India

## 1. INTRODUCTION

Some companies or firms who are involved in making credit sale must have a huge balance of receivables in their Balance Sheet. Though they have a huge amount of receivables but still they may face liquidity crunch to run their business. One way to address this problem may be to adopt

the borrowing route, but this results in changing the debt equity ratio of the company which may not only be unacceptable to some stakeholders but may also put companies to financial risk which affects the future borrowing capacity of the company. To overcome this problem the term 'securitization' was coined.

## 2. Concept and Definition

The process of securitization typically involves the creation of pool of assets from the illiquid financial assets, such as receivables or loans which are marketable. In other words, it is the process of repackaging or rebundling of illiquid assets into marketable securities. These assets can be automobile loans, credit card receivables, residential mortgages or any other form of future receivables.

The reserve Bank of India defines Securitization as transactions where credit risks in assets are redistributed by repackaging them into tradable securities.

### Features of Securitization

The securitization has the following features:

(i) Creation of Financial Instruments – The process of securities can be viewed as process of creation of additional financial product of securities in market backed by collaterals.

(ii) Bundling and Unbundling – When all the assets are combined in one pool it is bundling and when these are broken into instruments of fixed denomination it is unbundling.

(iii) Tool of Risk Management – In case assets are securitized on non-recourse basis, then securitization process acts as a risk management tool as the risk of default is shifted from originator (of securities) to investor (in securities).

(iv) Structured Finance – In the process of securitization, financial instruments are tailor structured to meet the risk return trade off profile of the investor, and hence, these securitized instruments are considered as best examples of structured finance.

(v) Trenching – Portfolio of different receivable or loan or asset are split into several parts based on risk and return they carry called 'Tranche'. Each Trench carries a different level of risk and return.

(vi) Homogeneity – Under each tranche the securities issued are of homogenous nature and even meant for small investors who can afford to invest in small amounts.

## 3. BENEFITS OF SECURITIZATION

The benefits of securitization can be viewed from the angle of various parties involved as follows:

## 3.1 From the angle of originator

Originator (entity which sells assets collectively to Special Purpose Vehicle) achieves the following benefits from securitization.

(i) Off – Balance Sheet Financing: When loan/receivables are securitized it releases a portion of capital tied up in these assets resulting in off Balance Sheet financing leading to improved liquidity position which helps in expanding the business of the company.

(ii) More specialization in main business: By transferring the assets the entity could concentrate more on core business as servicing of loan is transferred to SPV. Further, in case of non-recourse arrangement even the burden of default is shifted.

(iii) Helps to improve financial ratios: Especially in case of Financial Institutions and Banks, it helps to manage Capital –To-Weighted Asset Ratio effectively.

(iv) Reduced borrowing Cost: Since securitized papers are rated due to credit enhancement and hence, they can be issued at reduced interest rate due to which the originator earns a spread, resulting in reduced cost of borrowings.

## 3.2 From the angle of investor

Following benefits accrues to the investors of securitized securities.

1. Diversification of Risk: Purchase of securities backed by different types of assets provides the diversification of portfolio resulting in reduction of risk.

2. Regulatory requirement: Acquisition of asset backed belonging to a particular industry say micro industry helps banks to meet regulatory requirement of investment in specific assets e.g., Priority Sector Lending (PSL) regulations of Reserve Bank of India (RBI).

3. Protection against default: In case of recourse arrangement, if there is any default by any third party then originator shall make good the loss amount. Moreover, there can be insurance arrangement for compensation for any such default.

# 4. PARTICIPANTS IN SECURITIZATION

Broadly, the participants in the process of securitization can be divided into two categories; one is Primary Participant and the other is Secondary Participant.

## 4.1 Primary Participants

Primary Participants are main parties to this process. The primary participants in the process of securitization are as follows:

**(a) Originator:** It is the initiator of deal or can be termed as securitizer. It is an entity which sells the assets lying in its books and receives the funds generated through the sale of such assets. The

originator transfers both legal as well as beneficial interest to the Special Purpose Vehicle (discussed later).

**(b) Special Purpose Vehicle:** Also, called SPV is created for the purpose of executing the deal. Since issuer originator transfers all rights in assets to SPV, it holds the legal title of these assets. It is created especially for the purpose of securitization only and normally could be in form of a company, a firm, a society or a trust.

The main objective of creating SPV is to remove and ring fence the asset from the Balance Sheet of Originator. Since, SPV makes an upfront payment to the originator, it holds the key position in the overall process of securitization. Further, it also issues the securities [called Asset Based Securities (ABS) or Mortgage Based Securities (MBS)] to the investors.

**(c) The Investors:** Investors are the buyers of securitized papers which may be an individual, an institutional investor such as mutual funds, provident funds, insurance companies, mutual funds, Financial Institutions etc.

Since, they are participating as investors in the pool of assets/receivable, they receive their money back in the form of interest and principal as per the terms agreed.

## 4.2 Secondary Participants

Besides the primary participants other parties involved into the securitization process are as follows:

**(a) Obligors:** They are the main root of the whole securitization process. They are the parties who owe money to the firm and are assets in the Balance Sheet of Originator. The amount due from the obligor is transferred to SPV and hence they form the basis of securitization process and their credit standing is of paramount importance in the whole process.

**(b) Rating Agency:** Since the securitization is based on the pools of assets rather than the originators, the assets have to be assessed in terms of its credit quality and credit support available. Rating agency assesses the following:

- Strength of the Cash Flow.
- Mechanism to ensure timely payment of interest and principle repayment.
- Credit quality of obligors.
- Liquidity support.
- Strength of legal framework.

Although rating agency is secondary to the process of securitization but it plays a vital role.

**(c) Receiving and Paying agent (RPA):** Also, called Servicer or Administrator, it collects the payment due from obligor(s) and passes it to SPV. It also follows up with defaulting obligor and if required initiate appropriate legal action against them. Generally, an originator or its affiliates acts as servicer.

**(d) Agent or Trustee:** Trustees are appointed to oversee that all parties to the deal perform in the true spirit of terms of agreement. Normally, it takes care of interest of investors who acquire the securities.

**(e) Credit Enhancer:** Since investors in securitized instruments are directly exposed to performance of the underlying securities and sometime may have limited or no recourse to the originator, they seek additional comfort in the form of credit enhancement. In other words, they require credit rating of issued securities which also empowers marketability of the securities.

Originator itself or a third party say a bank may provide this additional context called Credit Enhancer. While originator provides comfort in the form of over collateralization or cash collateral, the third party provides it in form of letter of credit or surety bonds.

**(f) Structurer:** It brings together the originator, investors, credit enhancers and other parties to the deal of securitization. Normally, these are investment bankers also called arranger of the deal. It ensures that deal meets all legal, regulatory, accounting and tax laws requirements.

# 5. MECHANISM OF SECURITIZATION

Let us discuss briefly the steps in securitization mechanism:

## 5.1 Creation of Pool of Assets

The process of securitization begins with creation of pool of assets by segregation of assets backed by similar type of mortgages (in the case of MBS) in terms of interest rate, risk, maturity and concentration units.

## 5.2 Transfer to SPV

Once assets have been pooled, they are transferred to Special Purpose Vehicle (SPV) especially created for this purpose.

## 5.3 Sale of Securitized Papers

SPV designs the instruments based on nature of interest, risk, tenure, pool of assets etc. These instruments can be Pass Through Security or Pay Through Certificates (PTC), (discussed later).

## 5.4 Administration of assets

The administration of assets in sub-contracted back to originator which collects principal and interest from underlying assets and transfer it to SPV, which works as a servicer/ conduit typically for an agreed fee.

## 5.5 Recourse to Originator

Performance of securitized papers depends on the performance of underlying assets and unless specified otherwise in case of default by debtors, receivables go back to originator from SPV.

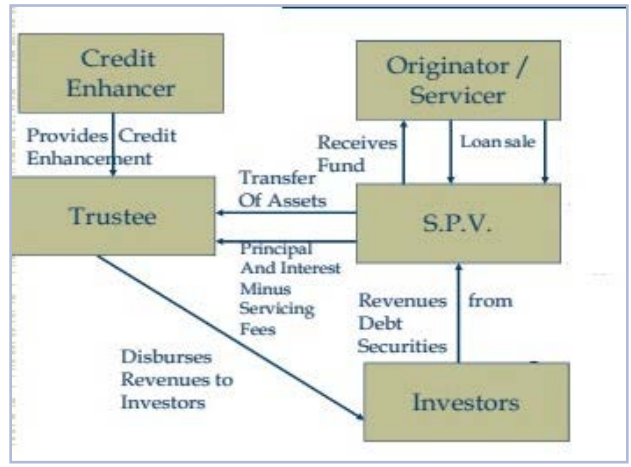
## 5.6 Repayment of funds

SPV will repay the funds to the investor in form of interest and principal that arises from the assets pooled.

## 5.7 Credit Rating to Instruments

Sometime before the sale of securitized instruments credit rating can be done to assess the risk of the issuer.

The mechanism of Securitization has been shown below in form of a diagram.




# 6. PROBLEMS IN SECURITIZATION

Following are main problems faced in growth of Securitization of instruments especially in Indian context:

## 6.1 Stamp Duty

Stamp Duty is one of the obstacle in India. Under Transfer of Property Act, 1882, a mortgage debt stamp duty which even goes upto 12% in some states of India and hence impedes the growth of securitization in India. It should be noted that since pass through certificate does not evidence any debt only able to receivable, they are exempted from stamp duty.

Moreover, in India, recognizing the special nature of securitized instruments in some states has reduced the stamp duty on them.

## 6.2 Taxation

Taxation is another area of concern in India. In the absence of any specific provision relating to securitized instruments in Income Tax Act, experts' opinion differ a lot. Some are of the opinion that SPV as a trustee is liable to be taxed in a representative capacity whereas others are of view that instead of SPV, investors will be taxed on their share of income. Clarity is also required on the issues of capital gain implications on passing payments to the investors.

## 6.3 Accounting

Accounting and reporting of securitized assets in the books of originator is another area of concern. Although securitization is slated to be an off-balance sheet instrument but in true sense receivables are removed from originator's balance sheet. Problem arises especially when assets are transferred without recourse.

## 6.4 Lack of standardization

Every originator follows his own format for documentation and administration and hence lack of standardization is another obstacle in the growth of securitization.

## 6.5 Inadequate Debt Market

Lack of existence of a well-developed debt market in India is another obstacle that hinders the growth of secondary market of securitized or asset backed securities.

## 6.6 Ineffective Foreclosure laws

For many years efforts are on for effective foreclosure but still foreclosure laws are not supportive to lending institutions and this makes securitized instruments especially mortgaged backed securities less attractive as lenders face difficulty in transfer of property in event of default by the borrower.

# 7. SECURITIZATION INSTRUMENTS

On the basis of different maturity characteristics, the securitized instruments can be divided into following three categories:

## 7.1 Pass Through Certificates (PTCs)

As the title suggests, originator (seller of the assets) transfers the entire receipt of cash in the form of interest or principal repayment from the assets sold. Thus, these securities represent direct claim of the investors on all the assets that has been securitized through SPV.

Since all cash flows are transferred, the investors carry proportional beneficial interest in the asset held in the trust by SPV.

It should be noted that since it is a direct route any prepayment of principal is also proportionately distributed among the securities holders. Further, due to these characteristics on completion of securitization by the final payment of assets, all the securities are terminated simultaneously.

Skewness of cash flows occurs in early stage if principals are repaid before the scheduled time.

## 7.2 Pay Through Security (PTS)

As mentioned earlier, since, in PTCs all cash flows are passed to the performance of the securitized assets. To overcome this limitation and limitation of single maturity there is another structure i.e. PTS.

In contrast to PTC in PTS, SPV debt securities are backed by the assets and hence it can restructure different tranches from varying maturities of receivables.

In other words, this structure permits desynchronization of servicing of securities issued from cash flow generating from the asset. Further, this structure also permits the SPV to reinvest surplus funds for short term as per their requirement.

While in Pass Through, all cash flows are passed on immediate basis, in PTS in case of early retirement of receivables the surplus cash can be used for short term yield. This structure also provides the freedom to issue several debt tranches with varying maturities.

## 7.3 Stripped Securities

Stripped Securities are created by dividing the cash flows associated with underlying securities into two or more new securities. Those two securities are as follows:

(i) Interest Only (IO) Securities

(ii) Principle Only (PO) Securities

As each investor receives a combination of principal and interest, it can be stripped into two portion of Interest and Principle.

Accordingly, the holder of IO securities receives only interest while PO security holder receives only principal. Being highly volatile in nature these securities are less preferred by investors.

In case yield to maturity in market rises, PO price tends to fall as borrower prefers to postpone the payment on cheaper loans. Whereas if interest rate in market falls, the borrower tends to repay the loans as they prefer to borrow fresh at lower rate of interest.

In contrast, value of IO's securities increases when interest rate goes up in the market as more interest is calculated on borrowings.

However, when interest rate due to prepayments of principals, IO's tends to fall.

Thus, from the above, it is clear that it is mainly perception of investors that determines the prices of IOs and POs

# 8. PRICING OF THE SECURITIZED INSTRUMENTS

Pricing of securitized instruments is an important aspect of securitization. While pricing the instruments, it is important that it should be acceptable to both originators as well as to the investors. On the same basis pricing of securities can be divided into following two categories:

## 8.1 From Originator's Angle

From originator's point of view, the instruments can be priced at a rate at which originator has to incur an outflow and if that outflow can be amortized over a period of time by investing the amount raised through securitization.

## 8.2 From Investor's Angle

From an investor's angle security price can be determined by discounting best estimate of expected future cash flows using rate of yield to maturity of a security of comparable security with respect to credit quality and average life of the securities. This yield can also be estimated by referring the yield curve available for marketable securities, though some adjustments is needed on account of spread points, because of credit quality of the securitized instruments.

# 9. RISKS IN SECURITIZATION

In a securitization transaction, investors are exposed to several risks at each stage of the transaction. The various types of risks in any securitization transaction are as follows:

## 9.1 Credit risk or Counterparty risk

It is the prime risk wherein investors are prone to the risk of bankruptcy and non-performance of the servicer.

## 9.2 Legal risks

Since in the Indian context it is a recently developed concept there is an absence of conclusive judicial precedent or explicit statutory provisions on securitization transactions. As a result, any dispute over the legal ownership of the assets is likely to result in uncertainty regarding investor pay-outs from the pool cash flow.

## 9.3 Market risks

Market risks represent risks external to the transaction and include market-related factors that impact the performance of the transaction. Some of these risks are as follows:

**(a) Macroeconomic risks:** The performance of the underlying loan contracts depends on macroeconomic factors, such as industry downturns or adverse price movements of the underlying

assets. For example, in the transportation industry a continuous decline in industrial production may lead to a downtrend in the use of services of the Commercial Vehicles (CVs) adversely impacting the cash flow of CVs operators. This in turn, may impact repayments on CV loans. Similarly, a fall in the prices of the CVs may increase chances of default as the borrower may wilfully default the loan and let the finance company repossess and sell the underlying vehicle instead of retaining it and continuing to pay instalments on time.

**(b) Prepayment risks:** A change in the market interest rate represents a difficult situation for investors because it is a combination of prepayment risk and volatile interest rates. With a reduction in interest rates generally prepayment of retail loans increases, resulting in reinvestment risk for investors because investors may receive their monies ahead of schedule and may not be able to reinvest the amount at the same yield.

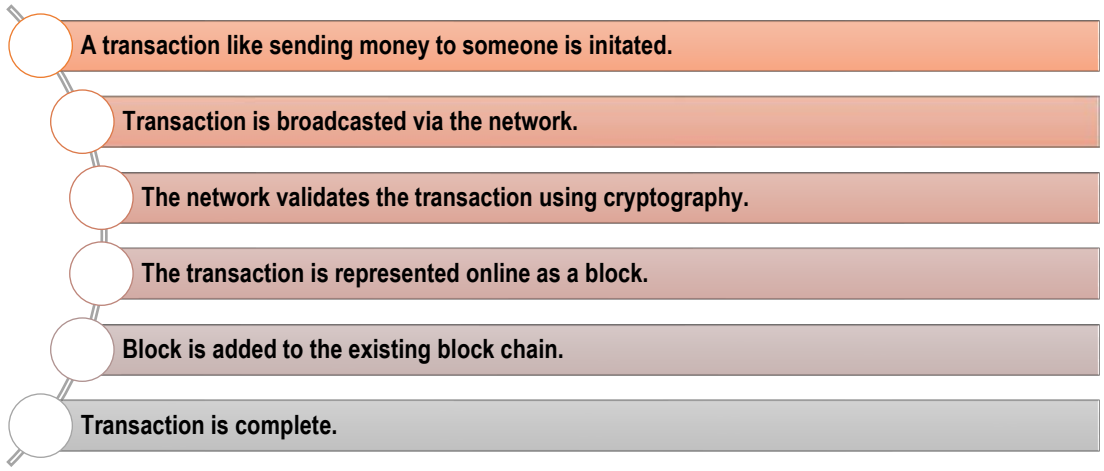
**(c) Interest rate risks:** This risk is prominent where the loans in the pool are based on a floating rate and investor pay-outs are based on a fixed rate or vice versa. It results in an interest rate mismatch and can lead to a situation where the pool cash inflow, even at 100% collection efficiency, is not sufficient to meet investor pay-outs. Interest rate swaps can be used to hedge this type of risk to some extent.

## 10. TOKENIZATION

Before we discuss the concept of Tokenization it is necessary to understand the concept of Blockchain.

Blockchain, sometimes referred to as Distributed Ledger Technology (DLT) is a shared, peer-to-peer, and decentralized open ledger of transactions system with no trusted third parties in between. This ledger database has every entry as permanent as it is an append-only database which cannot be changed or altered. All transactions are fully irreversible with any change in the transaction being recorded as a new transaction. The decentralised network refers to the network which is not controlled by any bank, corporation, or government. A block chain generally uses a chain of blocks, with each block representing the digital information stored in public database ("the chain").

A simple analogy for understanding blockchain technology is a Google Doc. When we create a document and share it with a group of people, the document is distributed instead of copied or transferred. This creates a decentralized distribution chain that gives everyone access to the document at the same time. No one is locked out awaiting changes from another party, while all modifications to the document are being recorded in real-time, making changes completely transparent. Following figure represents the working of any Blockchain transaction.




## 10.1 Applications of Blockchain

Some initiatives that are already existing in various fields like financial services, healthcare, government, travel industry, economic forecasts etc. are discussed below:

**(a) Financial Services:** Blockchain can be used to provide an automated trade lifecycle in terms of the transaction log of any transaction of asset or property - whether physical or digital such as laptops, smartphones, automobiles, real estate, etc. from one person to another.

**(b) Healthcare:** Blockchain provides secure sharing of data in healthcare industry by increasing the privacy, security, and interoperability of the data by eliminating the interference of third party and avoiding the overhead costs.

**(c) Government:** At the government front, there are instances where the technical decentralization is necessary but politically should be governed by governments like land registration, vehicle registration and management, e-voting etc. Blockchain improves the transparency and provides a better way to monitor and audit the transactions in these systems.

**(d) Travel Industry:** Blockchain can be applied in money transactions and in storing important documents like passports/other identification cards, reservations and managing travel insurance, loyalty, and rewards thus, changing the working of travel and hospitality industry.

**(e) Economic Forecasts:** Blockchain makes possible the financial and economic forecasts based on decentralized prediction markets, decentralized voting, and stock trading, thus enabling the organizations to plan and shape their businesses.

## 10.2 Risks associated with Blockchain

Some of the risk associated with the use blockchain technology are as follows:

**(i)** With the use of blockchain, organizations need to consider risks with a wider perspective as different members of a particular blockchain may have different risk appetite/risk tolerances that may further lead to conflict when monitoring controls are designed for a blockchain. There may be questions about who is responsible for managing risks if no one party is in-charge, and how proper accountability is to be achieved in a blockchain.

**(ii)** The reliability of financial transactions is dependent on the underlying technology and if this underlying consensus mechanism has been tampered with, it could render the financial information stored in the ledger to be inaccurate and unreliable.

**(iii)** In the absence of any central authority to administer and enforce protocol amendments, there could be a challenge in the development and maintenance of process control activities and in such case, users of public blockchains find difficult to obtain an understanding of the general IT controls implemented and the effectiveness of these controls.

**(iv)** As blockchain involves humongous data getting updated frequently, risk related to information overload could potentially challenge the level of monitoring required. Furthermore, to find competent people to design and perform effective monitoring controls may again prove to be difficult.

## 10.3 Meaning of Tokenization

Tokenization is a process of converting tangible and intangible assets into blockchain tokens. Digitally representing anything has recently acquired a lot of traction. It can be effective in conventional industries like real estate, artwork etc.

## 10.4 Tokenization and Securitization

Since tokenization of illiquid assets attempts to convert illiquid assets into a product that is liquid and tradable and hence to some extent it resembles the process of Securitization. Hence, following are some similarities between Tokenization and Securitization:

**(i) Liquidity: -** First and foremost both Securitization and Tokenization inject liquidity in the market for the assets which are otherwise illiquid assets.

**(ii) Diversification: -** Both help investors to diversify their portfolio thus managing risk and optimizing returns.

**(iii) Trading: -** Both are tradable hence helps to generate wealth.

**(iv) New Opportunities: -** Both provide opportunities for financial institutions and related agencies to earn income through collection of fees.

## 11. SECURITIZATION IN INDIA

It is the Citi Bank who pioneered the concept of securitization in India by bundling of auto loans into securitized instruments.

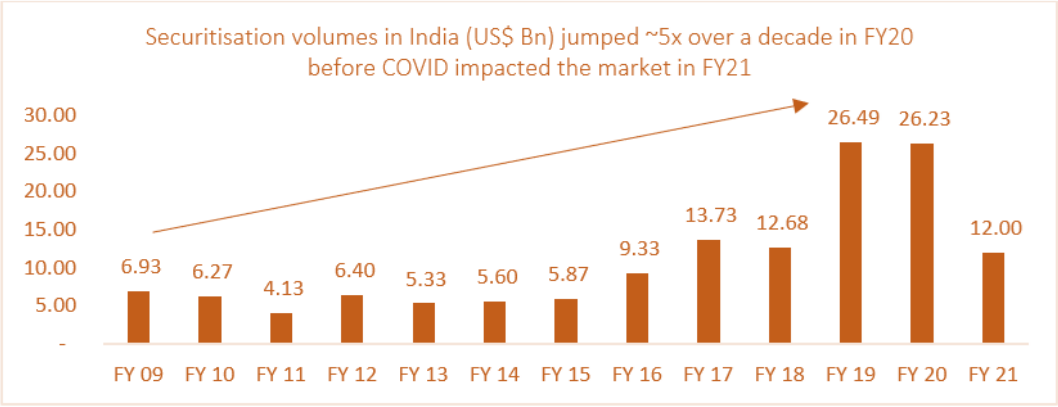
Thereafter many organizations securitized their receivables. Although it started with securitization of auto loans it moved to other types of receivables such as sales tax deferrals, aircraft receivable etc.

In order to encourage securitization, the Government has come out with Securitization and Reconstruction of Financial Assets and Enforcement of Security Interest (SARFAESI) Act, 2002, to tackle the menace of Non-Performing Assets (NPAs) without approaching the Court.

With growing sophistication of financial products in Indian Capital Market, securitization has occupied an important place.

As mentioned above, though, initially started with auto loan receivables, it has become an important source of funding for micro finance companies and NBFCs and even now a days commercial mortgage backed securities are also emerging.

The important highlight of the scenario of securitization in Indian Market is that it is dominated by a few players e.g. ICICI Bank, HDFC Bank, NHB etc.




CRISIL estimates that securitisation market volumes may reach near pre-pandemic highs of ₹ 1.9 trillion (touched in FY19 & FY20) once the macro-situation and interest rates stabilise. Securitisation may also become a key funding source for non-banks who are looking to grow their loan book and simultaneously it can also be an attractive investment avenue for banks looking to grow their retail assets.

In order to further enhance the investor base in securitized debts, SEBI has allowed FPIs to invest in securitized debt of unlisted companies upto a certain limit.

# TEST YOUR KNOWLEDGE

## Theoretical Questions

1. Differentiate between PTS and PTC.
2. What are the main problems faced in securitisation especially in Indian context?

# ANSWERS/ SOLUTIONS

## Answers to Theoretical Questions

**1.** Please refer paragraph 7.

**2.** Please refer paragraph 6.

# NOTES

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