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**INDIAN CURRENCY, EXCHANGE RATE REGIME AND POLICY: A
RETROSPECTIVE VIEW**

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Abstract

The evolution of the currency depicts the dynamism of the socio-cultural scenario prevailing in India for centuries. Since ancient times, India had different rulers which has been reflected in the varied coinage and paper currency issued. The silver rupee coin was the legal tender in India during the 6th century BC. The variety of the inscriptions, shapes, motifs and designs of the coins were in concurrence with the dynasties and with their culture. During the British rule, the series of coins and notes introduced were similar to their inland currency. British currency continued to circulate until India got independence and issued coins and notes in different series. Along with the currency even the exchange rate regime followed by India has undergone many changes from peg to sterling to current managed floating system. Various measures were also undertaken to extricate the economy from difficult situations. For over two decades, the managed floating exchange rate arrangement has proved to be successful for the effective management of external balance in India.

Key Words: Rupee, Coinage, Paper Currency, Managed Floating, RBI

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INDIAN CURRENCY, EXCHANGE RATE REGIME AND POLICY: A RETROSPECTIVE VIEW *

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1. INTRODUCTION:

A currency is said to be an intrinsic element of the cultural heritage of any country. It reflects the socio-economic scenario. India was one of the earliest issuers of coins in the world and is considered as a centre for many monetary experiments undertaken in the past. Since ancient times, India has been ruled by many emperors and dynasties and this is one of the prominent reasons behind India's diversity in traditions, culture and ethics. This diversification has been reflected in the various media of exchange used in India over the period of time. India's currency has evolved over the years. This evolution of the coinage and paper currency in India has experienced changes from time to time. The coins in India had motifs from Indian culture, emperors and communities which prevailed in India and the paper currency bore the portraits of different rulers as well as symbols from religions and cultures.

The Indian currency is the rupee. The origin of the rupee goes back to circa 6th century BC when India started issuing coins along with the Chinese Wen and Lydian Staters. The origin of the rupee is found in the word 'Rup' or 'Rupa' which means silver in the Indo-Aryan language. The Sanskrit word 'Rupyakam' means a coin of silver or wrought of silver. The term also means something provided with an image, a coin. From 1540 to 1545 AD, Rupiya was a coin of silver introduced by the Pashtun (Afghan) emperor Sher Shah Suri in his brief rule of northern India. Later, the Mughal emperors standardized this coinage across the sub-continent of India in order to consolidate the

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monetary systems. The rupee is abbreviated as Re. for a single unit and Rs. for more than one unit. Recently, in 2010, the Indian rupee symbol ‘₹’ has been introduced by the Government of India as an indicator of the growing worldwide economic position of the country.

The rupee is a common name for the monetary unit of account in India, Sri Lanka, Nepal, Pakistan, Mauritius, Seychelles, Indonesia, Maldives, Myanmar and Afghanistan as most of these countries have similar traditions. In most parts of India the rupee is known as rupaya, rupaye or other terms derived from the Sanskrit rupya meaning silver. However, in Bengali the rupee is called Taka. The large denominations of rupee are counted in hundred, thousand, lakh and crore.

This paper is divided in the following Sections. Section Two gives details of the coinage in India. Section Three deals with the evolution of paper currency in India. The evolution of India’s exchange rate regime has been reviewed in Section Four. Section Five concludes the paper.

2. COINAGE IN INDIA:

Historically, Indian coins have played a crucial role in documenting political and economic changes over time. A secretly hidden stock of coins were found in India which threw light on the Indian trade patterns in ancient, medieval and late pre-colonial times. The first documented coinage began with an introduction of 'punch marked' coins which were issued between the 7th and 6th century BC and the 1st century AD. These silver coins were called 'punch marked' because of their manufacturing technique. In 2nd century BC and 2nd century AD unique coins of the Indo-Greeks, the Saka-Pahlavas and the Kulshans were in circulation. These coins were moulded in silver with the portraits of Greek gods and goddesses. The Saka coinage of Western Kshatrapas was the earliest among the coins. The essential cultural feature of Saks-Pahlavas has been revealed from their art of coinage. They merely copied the Indo–Greek technique in the art without adding their own innovations. The copper and silver coins bore the essence of Indo-Greek style and

were used for monetary transactions. The Greek legends were extensively used in the coins. The Indian Republic has been following the Saka era as its official calendar. The Kushan gold coins had portraits of Siva, Buddha and Kartikeya. The coins of Satavahana, who ruled India during 270 BC to 30 BC, were predominantly of copper, lead and silver. These coins had motifs of elephants, lions, bulls, horses etc. The silver coins of Satavahanas also carried portraits and bilingual legends. Between 1st and 4th century AD the coins of Western Kshatras generally had legends in Greek and Brahmi. The Gupta coinage during 4th to 6th centuries AD had the king's portrait on one side and a deity on the reverse of the coin. The Harsha, Kalachuri and early medieval Rajputs in 6th to 12th centuries AD did not make any change in the prevailing coinage. It only revived when Gangeyadeva, a Kalachuri issued a coin with an inscription of seated goddess Lakshmi. The coins of the Vijayanagar empire period during 14th to 16th century AD had decorative features (RBI, 2011a).

During the 12th century the Sultan of Delhi (1206 to 1526 AD) issued new coins with calligraphy. The unit of account was 'Tanka' and 'Jittals' which were the coins of smaller denominations. The coins issued by the Tughlaqs (1320 to 1412 AD) had superior designs. Muhammad Bin Tughlaq experimented with coins and even with the paper currency which was inspired by the Chinese paper currency. However, his experiments did not gain much popularity. The prolonged Mughal era in India started at around 1526 AD which brought uniformity in the coinage throughout the empire. The emperor Sher Shah Suri issued silver coins termed as 'Rupiya' weighing 175 grains troy, gold coins 'Mohur' weighing 169 grains troy and copper coins called 'Dam' within his empire. The Mughal coins were unique as they had floral designs, zodiacal signs and calligraphy on the sides of the coins. After the death of Aurangzeb, the Mughal empire started declining and the East India Company started ruling India. In 1858 the British government took over the rule from the East India Company. The rulers in different empires co-operated with the British and replaced Mughal coins with the coins of the British rulers. The Mewar coins inscribed the word 'dosti London' *i.e.*, friends of London on their coins. The British government later started minting their own series of coins. The Marathas, the province of Awadh, the kingdom of Mysore, the princely state of

Hyderabad and Sikhs had their own coinage. Shivaji, the king of the Marathas, issued coins in 1664 AD as soon as he was titled as the Raja of the Maratha kingdom. Within the kingdom three types of coins were circulated *viz.*, the Hali Sicca, the Ankushi rupee and the Chandori rupee. The Province of Awadh had a gold ashrafi, silver rupee and copper fulus. In the kingdom of Mysore, Haider Ali issued coins of the pagoda carrying motifs and iconographic forms of the Vijaynagar period. Tipu Sultan, the successor of Haider Ali, introduced innovations and varieties in coins with pagodas and mohurs. After his defeat in the battle of Srirangapatnam, the British took over the province and continued to issue coins of Mughal standards. Guru Nanak, the founder of the Sikh community, issued coins from Amritsar without the name of the Mughal emperor at around 1777 AD. This was called the Nanak Shahi. The coins had the name of Guru Gobind Singh, the last guru of the Sikhs. However, even this empire was merged to British empire in 1849. In Hyderabad the state coins of Nizams were issued in the name of the Mughal emperor till 1858. After that Hali Siccas were circulated with the stamp of Charminar on one side of the coin. These coins conformed to the British coins in the denominations and metals (RBI, 2011a).

Since the East India Company started ruling India, it adopted the coins circulated in the various provinces of India. India was broadly divided in Western India (Bombay and Surat), South India (Madras) and Eastern Province of Bengal (Calcutta). The British minted coins as per their local acceptability and in lines with the circulated coins. The coins of Bengal were initially developed in Mughal style. Madras had coins as per south Indian designs and traditions. In Western India coins were developed on Mughal as well as British patterns. Later, in 1717 AD, emperor Farrukh Siyar permitted the British to coin Mughal money in the Bombay Mint. The British gold coins were termed 'Carolina', silver coins 'Anglina', copper coins 'Cupperoon' and tin coins 'Tinny'. By early 1830, the British started ruling India. The Coinage Act of 1835 provided uniform coinage throughout India. The coins had the effigy of William IV on one side and the face value on the other. After 1840 coins bore the portrait of Queen Victoria. The first coinage under the crown was issued in 1862. A new Indian Coinage Act was passed in 1906. In 1911 King George V introduced a 'pig rupee' with the portrait of the king wearing a chain of

Indian elephants which was misunderstood as pigs. The Muslim population took objection. So they were redesigned. Initially, the rupee was basically a silver coin. However, after World War II coins were minted in cupro-nickel. From 1940 the standard rupee was replaced by a quaternary silver alloy.

After independence the Frozen series (1947 to 1950) was introduced during the transition period of establishing the Indian republic. Coins completely made up of pure nickel were issued. As per this series Re.1 was equal to 16 annas, 1 anna was equal to 4 pice and 1 pice to 3 pies. The Anna series, introduced on August 15, 1950, was the first coinage of the Republic of India. The king's portrait was replaced by the Lion Capital of Asoka. The one rupee coin had the motif of the tiger which was a symbol of progress and prosperity. Other coins had motifs of Indian culture and traditions. Initially the rupee was divided into 16 annas, 64 paise and 192 pies. However, the 1955 Indian Coinage (Amendment) Act with effect from April 1, 1957 introduced the Decimal series. The rupee was then divided in 100 naya (new) paise. After 1964 the term naya was dropped. With high inflation in 1960s the Aluminium series was introduced. The small denomination coins made of bronze, nickel-brass, cupro-nickel and aluminium-bronze were minted in aluminium. The new hexagonal coin of 3 paisa and 20 paisa were introduced which did not gain much popularity. In 1970s there was gradual discontinuance of 1, 2, and 3 paisa coins. In 1988 stainless steel coins of 10, 25 and 50 paisa were introduced. In 1992, Re.1, Rs.2 and Rs.5 cupro-nickel coins were introduced. In 2006, due to soaring inflation and loss of buying power of the small denomination coins, the Reserve Bank of India (RBI) launched a new Rs.10 coin. The face of the coin was divided into three portions with the centre portion bearing the Lion Capitol of Asoka Pillar with Satyameva Jayate. The new Rs.10 coin is legal tender as provided in the Indian Coinage Act 1906, a RBI press release said (RBI, 2011b). In July 2011 due to higher inflation rates and minimal usage the RBI has demonetized coins of 10, 20 and 25 paisa.

On March 5, 2009 the Indian government announced a contest to create a symbol for the rupee. Five symbols were shortlisted and on July 15, 2010 the Indian Government

adopted a rupee symbol ‘₹’ created by Mr. Udaya Kumar. The symbol is derived from the devnagari script with an additional horizontal line. The parallel lines at the top with white space between them make an allusion to the tricolour and also depict an equality sign which symbolizes the desire of the country to reduce economic disparity. The Finance Minister of the Government of India said that ‘this symbol would reflect and capture Indian ethos and culture’. The Indian government decided to adopt the symbol within six months in the country and globally within 18 to 24 months. In September 2011 the RBI has issued new Re.1 and Rs.2 coins with the rupee symbol.

3. PAPER CURRENCY:

In the late 18th century paper money was introduced in India against the backdrop of intense political turmoil and uncertainty in the wake of the collapse of the Mughal empire and the advent of the colonial powers. During the World War I the entire world faced an acute shortage of silver. The substitution of silver by some cheaper material for the currency was essential. This led to the introduction of paper currency. Earlier paper currency in India was issued by the Bank of Hindustan (1770 to 1832). The General Bank of Bengal and Bihar (1773 to 1775) which was established by Warren Hastings also issued paper currency along with the Bengal Bank (1784 to 1791). The Bank of Bombay issued notes with the vignettes of the Town Hall, statues of Mountstuart Elphinstone and John Malcolm. The Bank of Madras circulated notes bearing the vignette of Sir Thomas Munroe, the Governor of Madras (RBI, 2011c). The following three series of paper currency were introduced by the Bank of Bengal.

1. *Unifaced series*: The early notes of the Bank of Bengal were printed only on one side and were issued as one gold mohur and in denominations of Rs. 100, Rs. 250, Rs. 500, etc.
2. *Commerce series*: Under this series the notes had a vignette representing an allegorical female figure personifying 'commerce'. The notes were printed on both sides. On the obverse the name of the bank and the denominations were printed in

three scripts *viz.*, Urdu, Bengali and Devanagari. On the reverse of such notes a cartouche with ornamentation carrying the name of the Bank was printed.

3. *Britannia series*: By the late 19th century, the motif 'commerce' was replaced by 'Britannia'. The new banknotes had more features to prevent forgery.

The Paper Currency Act of 1861 gave the British dominated Government of India power to issue currency notes in India. The Presidency Banks were appointed to promote the circulation of currency notes. This act empowered the Presidency Bank to enter into agreements with the Secretary of States for becoming agents for the issue, payments and exchange of promissory notes of the Government of India. There was a problem of redemption of these notes as India had a vast geographical distribution. This led to the establishment of Currency Circles where these notes were considered as legal tender. The management of paper currency was entrusted to mint masters, the accountant generals and the controller of currency. The British introduced various series of currency notes in India as follows:

- 1) *Victoria Portrait Series*: The British rulers issued currency notes in the denominations of Rs.10, Rs.20, Rs.50, Rs.100 and Rs.1000. As per this series, notes were uniface carrying two languages and were printed on hand moulded paper. The security features included the watermark of Government of India rupees, the printed signature and the registration of the notes. This series was withdrawn from circulation in 1867 with the issuance of the new underprint series.
- 2) *Underprint Series*: It was introduced in 1867. The currency notes were printed on the moulded paper. The unique feature of this series is that the notes carried a language panel in which the denomination of the note was written in different languages. Earlier the notes carried four language panels called as Green Series. Later, the number was increased to eight languages known as Red series. Initially, notes were legally encashable only in the Currency Circle in which they were issued. However, between 1903 and 1911, the notes of denominations of Rs.5, Rs.10, Rs.50 and Rs.100 were legally encashable outside the Currency Circle of Issue. The security features

consisted of wavy line watermark, the manufacturer's code in watermark, guilloche patterns and a coloured under print. This series was withdrawn in 1923 with the introduction of King's Portrait series.

- 3) King's Portrait Series: This came in effect in 1923. These notes first carried the portrait of King George V. A Re.1 note was introduced on 30th November, 1917 followed by the exotic Rs.2 note and eight annas. The issuance of these notes was discontinued on 1st January, 1926 on cost benefit considerations. With the establishment of the Currency Note Press at Nasik in 1928, currency notes began progressively to be printed in India. By 1932 the Nasik Press was printing the entire spectrum of Indian currency notes. The improved security features were changed with watermarks, intricate portrait designs and multi-coloured printing (RBI 2011d).

The Reserve Bank of India was inaugurated on April 1, 1935 with its central office in Calcutta. Section 22 of the Reserve Bank of India Act, 1934 empowered the bank to issue currency notes. The RBI first issued a Rs.5 note bearing the portrait of George VI in 1938. This was followed by Rs.10 in February, Rs.100 in March and Rs.1000 and Rs.10,000 in June 1938. The issued notes were signed by the second Governor Sir James Taylor. In August 1940, the Re.1 note was re-introduced as a war time measure with a statue of a one rupee coin. The George VI series continued to remain in circulation as a frozen series until the introduction of post-independence currency notes in 1950. After independence, in 1949, a Re.1 note with a new design and features was introduced. The Lion Capital of Asoka was chosen as a symbol of the Indian Republic and was printed on the new post-independence notes. In 1953 Hindi was prominently displayed on the new currency notes. The economic crisis of 1966 led to reduction in the size of notes in 1967. In 1969 a commemorative design series in honour of the birth centenary celebrations of Mahatma Gandhi was issued depicting a seated Gandhi with the Sevagram Ashram as the backdrop on the Rs.100 note. The bank introduced Rs.20 denomination notes in 1972 and Rs.50 in 1975. In 1978 high denomination notes of Rs.10,000 were demonetized and were withdrawn from circulation. During this period, new currency notes were issued with the motifs

emphasizing Science and Technology. On the Rs.2 note the portrait of Aryabhata was printed whereas on the Re.1 note an oil rig and on the Rs.5 note a farm mechanism was displayed. The notes of Rs.10 and Rs.20 carried the Indian motifs such as the Peacock and the Konark Wheel. A Rs.500 note was introduced in October 1987 with the portrait of Mahatma Gandhi. The watermark on all notes continued to be the Lion Capital of Asoka Pillar.

Later, in 1996, the Mahatma Gandhi series was introduced which is still under circulation in the Indian Republic. All currency notes under this series carried the portrait of Mahatma Gandhi. So far the RBI has issued notes in the denomination of Rs.5, Rs.10, Rs.20, Rs.50, Rs.100, Rs.500 and Rs.1000. These notes contain very distinct and easily recognizable security features to facilitate the detection of genuine notes *viz-à-viz.*, forgeries. The watermark was also replaced with the image of Mahatma Gandhi. The prominent new features on this new series included a watermark, windowed security thread, latent image and intaglio feature for the visually handicapped. The notes contain a watermark with a light and shade effect and multi-directional lines in the watermark window. The security thread is a readable, windowed security thread which is alternatively visible on the obverse with the inscriptions 'Bharat' written in Hindi and RBI and is totally embedded on the reverse. It appears to the left of the Mahatma's portrait. A latent image shows the respective denominational value in number and is visible only when the note is held horizontally at the eye level. The currency notes also contain an intaglio feature as per which the portrait of Mahatma Gandhi, the RBI seal, the guarantee and promise clause, the Asoka pillar emblem and the signature of the RBI governor are printed in raised prints. In October 2000, a Rs. 1000 note was introduced in this series. It contains a readable, windowed security thread alternatively visible on the obverse with the inscriptions of 'Bharat' in Hindi, RBI and a number 1000. A new security feature of optically visible ink was introduced in November 2000 and was incorporated in Rs.1000 and Rs.500 notes with revised colour scheme. The number 1000 and 500 on the obverse of Rs.1000 and Rs.500 notes respectively is printed in optically visible ink *viz.*, colour shifting ink. The colour appears green when the note is held flat but would change to blue when the note is held at an angle (RBI, 2011e).

A separate series of notes was issued by the Indian Government and the RBI in the 1950s for the Gulf countries *viz.*, Kuwait, Bahrain, Qatar, and the Trucial States (now the United Arab Emirates). These notes had a contemporary design but were different in colours and carried the prefix Z. The notes were issued in the denominations of Re.1, Rs.10 and Rs.100. These notes were redeemable only at the Bombay office of issue. As the Gulf States introduced their own currency, these notes were withdrawn from circulation in the year 1959 (RBI, 2011f).

4. THE EVOLUTION OF INDIA'S EXCHANGE RATE REGIME:

Though the history of Indian currency and its exchange rate regime is complicated it is noteworthy that India has experienced many changes in its currency and exchange rate regimes over a period of time. The colonial rule over India had a strong influence on the exchange rate management which was undertaken by the British rulers. Many rules and regulations followed by the U.K. while managing their exchange rate were also applied to the Indian economy. Thus, sterling exerted a strong influence on the rupee exchange rate. Before the East India Company started ruling India, it was ruled by many Mughal emperors. Each empire had its own medium of exchange. In 1806, the Directors of the East India Company approved the introduction of a uniform currency in India. However, a silver rupee of 180 grains troy, $11/12^{\text{th}}$ fine was declared as sole legal tender throughout British ruled India in 1835 when Act XVII was passed. India was put on a monometallic standard (only one metal 'silver' as a legal tender). The exchange value of gold coins was decided as Rs.15. Though gold coins and currency notes were in circulation the silver rupee was the only legal tender. In 1860, Mr. James Wilson introduced a Paper Currency Bill and the Paper Currency Act of 1861 came into effect. According to this Act, the sole right to issue paper currency was assigned to the government and it was then considered a medium of exchange. This allowed exchange of gold for currency notes (RBI, 1970).

The price of silver declined sharply during the next 20 years, especially between 1874 and 1893 and ultimately the credibility of silver as a medium of exchange was in question. As a result many countries accepted the gold standard and the exchange rate of rupee fell from 1 shilling 10.351 pence (1s 10.351d) sterling per rupee to 1s 2.985d sterling per rupee in 1892-93. Therefore, the exchange parity between gold and the rupee had to be decided. As per the recommendations of the Herschell Committee, the exchange rate between gold and rupee was fixed at 1s 4d per rupee. The Indian Coinage Act, 1870 and the Indian Paper Currency Act, 1882 were amended and the gold exchange standard was introduced in India in 1893, under which the gold standard of 7.53344 grains of fine gold corresponded to 1s 4d sterling per rupee. Later, on the recommendations of the Fooler Committee the gold standard was adopted in India in 1898 and the prevailing exchange rate of 1s 4d sterling per rupee was fixed. In 1906 a branch of gold reserves was established in India called as the 'silver branch'. During the 19th century, after the Franco-Prussian war in 1870, Germany, France, the U.S. and some other industrialized countries joined the gold standard. Other countries such as the U.K., Japan and India remained on the silver standard. The discovery of vast quantities of silver in the U.S. and European colonies reduced the value of silver and thus the value of the rupee decreased as the rupee was a silver-based currency. The standard currency of India was not as valuable as the other currencies in the world. This event was known as the fall of the rupee. Thus, in December 1919, the rupee exchange rate was increased to 2s 4d sterling per rupee. Then various measures were undertaken along with devaluation to curb the use of silver which gave birth to one rupee notes and nickel coins. With an improvement in the overall global conditions in 1923, the rupee exchange rate again came back to 1s 4d gold per rupee or 1s 6d sterling per rupee. The U.K. returned to the gold standard in April 1925 and the exchange rate of the rupee was fixed at 1s 6d which was then on the sterling cum gold basis. In 1927, the Currency Act of 1927 was passed on the recommendations of the Hilton Young Commission and this Act established the gold bullion cum sterling exchange standard in India (RBI, 1970).

The great depression of 1929 impacted on India. The worldwide inflation had put pressure on the foreign exchange reserves of India. In addition, the Indian National

Congress had launched a movement against the British. These political and economic conditions pressurised the rupee to depreciate. In September 1931, the U.K. abandoned the gold standard and introduced stringent exchange controls on the sterling. As the Indian rupee was closely linked to sterling, the government sold sterling in the foreign exchange market to maintain the exchange rate. As a result, the obligation of selling gold or sterling which was imposed by the Currency Act of 1927 was abandoned and the rupee-sterling link was fixed at 1s 6d. At this fixed rate, whenever sterling depreciated, the rupee also depreciated in terms of gold. However, the price of gold in India was much lower than that prevailing abroad and therefore, there was an opinion that the rupee was undervalued in terms of gold at 1s 6d sterling per rupee.

After this period, during 1935 to 1937, India's overall balance of payments position improved to some extent as the foreign exchange reserves increased from Rs.61 crores in 1935 to Rs.108 crores in April 1937. In June 1938, the Central European Crisis erupted, due to which the exchange rate of the rupee fell to 1s 5 $\frac{49}{64}$ d. After the outbreak of World War II the exchange rate decreased to 1s 5 $\frac{31}{32}$ d and after that remained stable for quite some time. India had enough sterling reserves in the war period as the RBI purchased sterling from the scheduled banks throughout the world resulting in an improvement in the rupee-sterling ratio to 1s 6d in November 1939. In 1945-46 India became a member of the sterling area and participated in the Empire \$ pool. India followed the U.K. pattern of exchange controls. With the establishment of the IMF at the Bretton Woods conference in 1944, India became a member of the IMF. In the post-war period, the various banks were given the responsibility of maintaining the exchange value of the rupee. The rupee-sterling link was ensured through an obligation to selling and buying sterling for rupees on demand without limit at a fixed rate. To enable banks to trade at a fixed rate in spite of fluctuations, the RBI bought and sold sterling for unlimited amounts and facilitated cover for foreign exchange transactions with the London Control at a fixed exchange rate.

4.1 Foreign Exchange Regulation Act (FERA), 1947:

In 1946 the Foreign Exchange Regulation Bill was drafted by Mr. Cayley, Deputy Governor for the control of foreign exchange in India. This bill was passed in parliament in February 1947 and then the Foreign Exchange Regulation Act (FERA) came into effect (RBI, 2005b). This Act empowered the monetary authorities

1. To control and regulate foreign exchange transactions within certain statutory limitations.
2. To control internal supplies of money.

The main objective of the Act was to establish a system that would enable India to carry out obligation to the members of the IMF and manage foreign exchange resources. This Act also enabled the monetary authorities to

1. Put restrictions on the rates at which transactions in foreign exchange could occur.
2. Prohibit creation of trusts in favour of non-resident beneficiaries.
3. Regulate transfer of money or securities to NRIs.

This Act empowered the RBI and the Central Government to control and regulate the dealings in foreign exchange and payments outside India, export and import of currency notes and bullion, transfer of securities between residents and NRIs, acquisition of foreign securities.

4.2 Devaluation of September 1949:

According to the Bretton Woods agreement, the par value of each currency was to be expressed in terms of either gold or the U.S. \$. India being the one of the founding members of the IMF, the external value of the rupee was determined by its par value compared with the par values of currencies of the other member countries. Therefore, in order to maintain the rupee–sterling link, the par value of the rupee had to be altered when sterling depreciated or appreciated irrespective of the situational requirement. The sterling was devalued in 1949 as a result of a general view of the U.S. and the IMF that the exchange rate adjustment was necessary and due to a substantial loss in the sterling area's gold and \$ reserves. Partly under the influence of speculative forces, the U.K.

ultimately devalued sterling from \$4.03 per sterling to \$2.80 per sterling. The countries of the sterling area mainly comprised of the British colonies which had close historical, economic and political ties with the U.K. and the value of whose currencies were based on the sterling. The objective of this arrangement was to produce a central pool of non-sterling area currencies to be owned and operated by the U.K. for the use of the members of the sterling area. Because of this the devaluation of sterling by the U.K. was followed by other countries of the sterling area. However, it became difficult for India to avoid similar actions without affecting the domestic economy. India's foreign currency assets had to be kept almost entirely in sterling as India was a member of the sterling area (RBI, 2005b). India's trade was also largely with the countries of the sterling area and the price level being already high, it was clear that the rupee could not be allowed to appreciate against sterling without undermining India's competitiveness. Nevertheless in the foreign exchange market strong expectations about the devaluation of rupee were prevailing. These expectations could have acted as a powerful psychological barrier to any transactions at the old exchange rate and foreign trade might have come to a standstill. Thus, there was no option but for India to follow a suit of other countries of the sterling area and devalue the rupee as a defensive measure. As a result, the Government of India proposed to the IMF to devalue the rupee with some proportion to the devaluation of sterling and in September 1949 the rupee was devalued by 30.5 percent against sterling. Thus, the exchange rate of rupee against sterling changed from Re.1 = 21 cents to Re.1 = 30.2250 cents. The new par value in grams of fine gold per rupee was 0.186621 *i.e.*, Rs. 166.6666 per fine ounce of gold. On September 22, 1949 these new exchange rates became effective. The exchange rate between sterling and rupee remained unchanged at 1s 6d per rupee. This devaluation resulted in the improvement of the country's balance of payments position and the \$ sector.

In the late 1950s the possibility of change in the par value of the rupee was re-considered with the context of the devaluation of sterling and prolonged instability. In 1951 India experienced a major hike in the exports of primary products mainly because of the Korean War and intensification of domestic inflationary pressure. This led to discussions about the revaluation of the rupee with respect to sterling which was declined

by the government. Of course, these discussions about revaluation fizzled out soon after the Korean War. In June 1958, there was some nervousness in the foreign exchange market about the rupee. People from the Gulf were converting rupees into sterling to buy gold and this decreased the sterling reserves of India. The increased demand for sterling from the Gulf countries compelled India to withdraw the Indian rupees which were circulating in the Persian Gulf. The currency arrangements in the Gulf were threatening the effectiveness of exchange control measures. Thus, the need was felt to restrict rupee outflow from India to the Gulf. As a result, the RBI issued special rupee notes in the Gulf countries which were distinguishable from those circulated in India. The Government and the RBI adopted this change from April 1959. These new currency notes with changed legend and printed in distinctive colours were circulated in the region in May 1959. Soon after that the Gulf countries introduced their own currencies (Balchandran, 1998).

4.3 Devaluation of 1966:

From the second five year plan, India encountered a very precarious situation with the balance of payments due to the heavy industrialization policy and huge reliance on import substitution. The potential of foreign trade as an engine of growth went unnoticed. In 1956-57 a substantial increase in the current account deficit led to the imposition of stringent controls on foreign trade and payments. The war with China in 1962, war with Pakistan in 1965 and severe droughts added to the problems faced by the government. The Economic Survey of 1965-66 stated that the devaluation was necessary because the balance of payments was in a critical situation. This was denied by the then Finance Minister. With this background, an Indian delegation comprising of Smt. Indira Gandhi and other members met IMF officials and decided to devalue the rupee in June 1966. The union cabinet approved the devaluation of the rupee by 36.5 percent, from 0.186621 gram of fine gold to 0.118489 gram. The rupee exchange rate of the U.S. \$ and sterling was altered respectively from Rs.4.76 to Rs.7.50 per U.S. \$ and from Rs.13.33 to Rs.21 per sterling. This devaluation was accompanied by the levy of export duties on dozens of commodities, scrapping import entitlement schemes and tax credit certificates for exports. The devaluation of 1966 did not immediately achieve its objective because

adjustments in relative prices, costs and patterns of investment required by the devaluation were aggravated by severe droughts. It also failed to correct the external payment position and the foreign exchange reserves decreased due to decline in exports, increase in debt service payments, reduction in external aid inflows, sharp decline in U.S. aid and the delay of India's receipts of 5th and 6th IDA credits. In mid-1967 the U.K. faced persistent problems in the balance of payments. Due to sharp deterioration in the current account, sterling was devalued by 14.5 percent from \$2.80 to \$2.40 per sterling. However, India did not respond to this change in spite of suffering a huge loss in sterling holdings (RBI, 2005a).

With the failure of the Bretton Woods system and persistent deficits in the balance of payments of the U.S. in 1971, many countries adopted a flexible exchange rate regime. However, India's finance minister on August 22, 1971 announced no change in the gold parity and the rupee exchange rate was kept fixed to Rs.7.50 per U.S. \$. To take advantage of the depreciation of the U.S. \$ the rupee was pegged to the U.S. \$ rather than sterling.

After the Smithsonian agreement, India had to decide upon the reserve currency on which it would peg the rupee. The U.S. \$ was devalued by 7.9 percent and the \$-sterling parity was altered from \$2.40 to \$2.60 per sterling. As a result, the Government of India decided to delink the rupee from the U.S. \$ and established a central rate in terms of sterling based on the London Quotations. A new rupee-sterling link was established at Rs. 18.9677 against the old rate of Rs.18, entailing the devaluation of the rupee against sterling by 5.38 percent. The \$-rupee exchange rate was also altered from Rs.7.50 to Rs.7.27 per dollar, indicating revaluation of the rupee by 2.95 percent against the U.S. \$. India was managing the exchange rate within the ± 2.25 percent band on either side of the central rate.

During the period from 1950 to 1973 the rupee was linked to sterling. However, there were many uncertainties in the balance of payments situation. India imported large quantities of goods and foodgrains. The balance of payments reported a huge deficit due

to repeated droughts, wars and oil shocks. The emphasis was given to the utilization of domestic savings for domestic investment and initializing the development planning through the Five Year Plans. As there was a tremendous concern regarding the persistent capital outflows, the Government of India decided to undertake some firm steps to stem the outflows. Against this backdrop, in 1971 the Public Accounts Committee and the Law Commission recommended revising the FERA, 1947 for conserving the foreign exchange rather than regulating entry of foreign capital. Thus, in 1973, FERA was enacted with the objective of introducing the necessary changes for effective implementation of the Government policy. This enactment improved the position of the balance of payments to a certain extent (RBI, 2005b).

4.4. Introduction of Basket Peg Arrangement:

After the collapse of the Bretton Woods system in 1973, sterling was floated against the major international currencies. However, the Bank of England reassured the parity between rupee and sterling at the prevailing exchange rate of Rs.18.9677 per sterling. The Jamaica agreement legalized the floating exchange rate system throughout the world. However, the RBI's response to the Jamaica agreement was negative as it stated that the system was made flexible but unpredictable. Even after floating sterling, it remained the weakest currency among the major international currencies. The U.K. economy was facing severe recession, a high rate of inflation and unmanageable deficit in the balance of payments. By December 1975, sterling depreciated by around 30 percent from the Smithsonian agreement agreed rate. Further, till the end of June 1976 sterling depreciated overall by 38.8 percent. As rupee was linked to sterling, the exchange rate of the rupee also depreciated in line with sterling from time to time. The rupee-sterling link was justifiable as long as the exchange rate of sterling was stable in the foreign exchange market. With the liquidity crisis in the U.K. it became essential to re-consider the rupee-sterling link. There was a general view that the rupee value should be fixed independently and it should be delinked from sterling because sterling's status of a reserve currency had declined to a greater extent. India's trade with the U.K. also declined gradually and other sterling area countries either switched to the U.S. \$ or other currencies or adopted a

currency basket arrangement. However, the sudden change in the exchange rate arrangement was not viable as India's domestic interbank market was not developed to the extent that the rupee could have been floated independently.

During this period the rupee depreciated by overall 23 percent and hampered the competitiveness of India. Therefore, on September 24, 1975 the Finance Ministry decided to delink the rupee from sterling and thus, the rupee was pegged to an undisclosed basket of currencies with ± 2.25 percent band on the either side of a par value. Under this arrangement, the exchange value of the rupee was determined with reference to the daily movements of selected number of currencies of the countries which were the major trading partners of India. It was anticipated that the basket included the U.S. \$, Sterling, Deutsch Mark, French Franc and Japanese Yen and weights were assigned on the basis of the share of the country in India's foreign trade. Although the peg was shifted to a secret multi-currency basket, sterling remained an intervention currency. From June 1975 to June 1976 the rupee was revalued six times with respect to sterling to the extent of 12.6 percent. These revaluations were undertaken to keep the exchange value of the rupee stable *vis-à-vis* other currencies. Continuous fluctuations in the exchange rate of currencies called for several revisions in the rupee-sterling exchange rate. It was difficult to maintain the exchange value of the rupee with respect to a basket of currencies within a band of ± 2.25 percent on either side of the base value of Rs.18.3084 which was adopted when the basket was introduced. Thus, on January 30, 1979 it was decided that the exchange rate would be maintained within a wider band of ± 5 percent on either side allowing for a total band of 10 percent. The IMF in its de facto classification of the exchange rate arrangement of the member countries categorized the Indian exchange rate arrangement as a managed floating exchange rate system. This meant in practice that authorities had the flexibility to operate a multi-currency peg in a discretionary manner and not be guided or driven by mechanical parity adjustment of rate for rupee against its intervention currency *viz.*, sterling (RBI, 2005a).

From 1979 to 1991 the exchange rate of the rupee continued to be fixed in terms of a weighted basket of currencies of the countries which were India's major trading

partners. The sterling remained an intervention currency for this period though there were debates whether to switch over to the U.S. \$ as an intervention currency or to adopt both, sterling and the U.S. \$ as intervention currencies through the amendment of Section 40 of the RBI Act, 1935. The major objective of exchange rate policy was to promote the competitiveness of the Indian exports in the world market through adjustments in the exchange rate. The exchange rate of the rupee with respect to sterling was adjusted from time to time in line with the exchange rate movements of currencies in the basket. For instance, during 1988-89 the rupee-sterling rate was adjusted around 200 times (GOI, 2011). These changes in the exchange rate occurred frequently due to developments in the exchange rate of major international currencies included in the basket.

4.5 The Balance of Payments Crisis of 1991:

The Gulf Crisis of 1990-91 and war between Kuwait and Iraq led to a sharp increase in the oil prices. This adversely affected the balance of payments of the developing countries including India. The foreign exchange reserves declined sharply leading to destabilizing expectations about the future exchange rate of the rupee in the foreign exchange market. A relatively high rate of inflation in the country reduced the competitiveness of the economy. The balance of payments deteriorated to an extent that in July 1991 India was at a near-default situation. As a result, a two-step adjustment process was undertaken by the RBI and the rupee was devalued by about 18-19 percent *vis-à-vis* basket of currencies in two steps. On July 1, 1991 rupee was devalued by 8-9 percent and on July 3, 1991 the rupee was further devalued by 10-11 percent against major currencies. The exchange rate adjustment was undertaken with the view of an improvement in the external position, to stem the capital outflow resulting from adverse expectations and to encourage the production of tradeables. A downward adjustment was necessary to restore export competitiveness, to reduce trade and current account deficits, to nullify adverse expectations in the international market and to restore international confidence on the Indian economy.

To overcome this crisis situation, in 1992 a High Level Committee on Balance of Payments was formed under the chairmanship of C. Rangarajan for recommending reforms in the external sector. As per the recommendations of this Committee, in March 1992, the Liberalized Exchange Rate Management System (LERMS) was adopted involving a dual exchange rate mechanism along with the other measures of liberalization in the areas of trade, industry and foreign investment. As per LERMS, 40 percent of foreign exchange earnings of exports of goods and services should be surrendered at the official exchange rate. The remaining 60 percent should be sold at the market exchange rate. This promoted exports and increased the foreign exchange reserves. Later, in March 1993, a unified market-determined exchange rate was introduced. As per this, the entire foreign exchange earnings were converted at the market exchange rate. The FERA was amended and the rupee was floated against the major currencies as per the managed floating exchange rate regime. The U.S. \$ was adopted as an intervention currency. This move substantially increased foreign exchange reserves and improved the balance of payments position of India (RBI, 2005b).

Since March 1993 India has adopted a managed floating exchange rate regime without any pre-determined rate or band. The exchange rate policy is guided by the broad principles of careful monitoring and management of the exchange rates with flexibility, while allowing the underlying demand and supply conditions to determine its movement over a period in an orderly manner. Subject to this predominant objective, the RBI's intervention in the foreign exchange market is guided by the goals of reducing excess volatility, preventing the emergence of destabilizing speculative activities, maintaining adequate level of reserves and developing an orderly foreign exchange market (GOI, 2011, P. 145). India accepted the IMF obligation under Article VIII of the IMF. The Finance Minister introduced full convertibility of the rupee on the current account in 1994 to encourage exports. Through this convertibility foreign exchange earnings were exchanged fully at the prevailing market exchange rate and the system introduced by LERMS was abolished. This led to the spectacular rise in foreign exchange reserves, increase in exports and an improvement in the balance of payments. To review the developments in the foreign exchange market in India the Sodhani Committee was

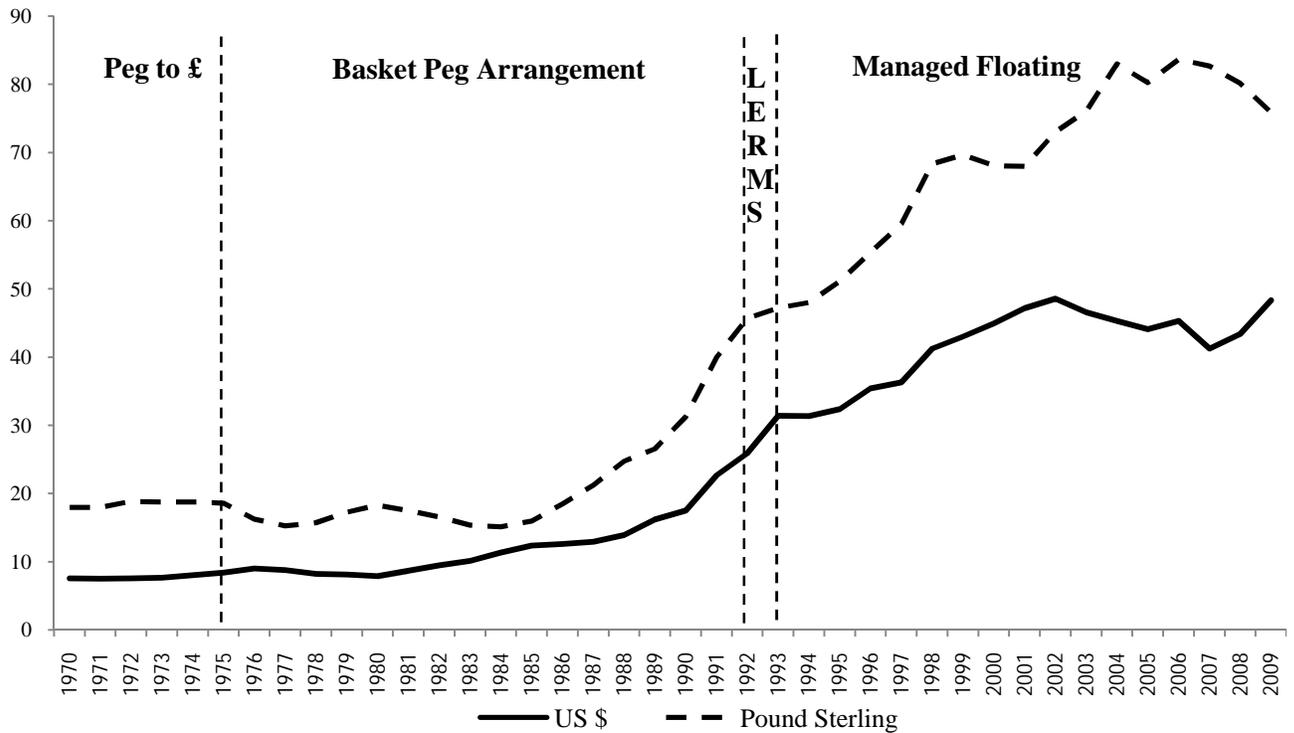


Figure 1: The Distribution of the Exchange Rate Regime of India.

appointed in November 1994. This Committee submitted its report in June 1995. The Committee made several recommendations to develop, deepen and widen the foreign exchange market in India, ensure risk management, increase the efficiency in the market by removing restrictions, introducing new products and tightening internal foreign exchange controls.

The figure above shows the overall distribution of the exchange rate regime adopted by the Indian economy. The annual data of the exchange rate of the rupee with respect to the U.S. \$ and sterling for the period from 1970 to 2009 has been considered. Uptil 1975 India's rupee was pegged to sterling. After continuous devaluations of sterling rupee was delinked from sterling and was pegged to an undisclosed basket of currencies. This arrangement continued till the severe balance of payments crisis faced by India in 1991. India adopted LERMS for one year. Since March 1993 the official de facto exchange rate regime of the Indian economy is managed floating.

From the period 1991 to 1993 the exchange rate of rupee *vis-à-vis* the U.S. \$ was devalued significantly from Rs.22.69 per U.S. \$ to Rs.31.37 per U.S. \$. However, the trends were not smooth. In the regime of introducing full-fledged free market rates, the monthly exchange rate of rupee was devalued from Rs.29.46 in March 1992 to Rs.31.53 per U.S. \$ in March 1993 indicating a depreciation of 5.4 percent.

The period immediately following the floating of the rupee, 1993-95, is a period of relative calm in terms of the exchange rate movements. There was extensive management on the part of the central bank with the nominal exchange rate being held almost constant between Rs.31.23 and Rs.31.81 per U.S. \$, despite a widening inflation differential between domestic and the U.S. prices. The main source of disturbance during the period from March 1993 to August 1995 was heavy capital inflows leading to an appreciation of the real exchange rate, which was countered by intervening purchases by the RBI. Further depreciation of 3.7 percent in January 1996 again prompted intervention (sales) by the RBI and appears to have been successful (RBI, 2006).

Since September 1995, the rupee was volatile due to speculative attacks, a high rate of inflation, portfolio capital inflows by FIIs and NRIs, import liberalization policies and the fear of withholding of foreign exchange earnings of exporters due to anticipation of future devaluation. These factors led to large fluctuations in the exchange rate and the RBI had to intervene periodically in the foreign exchange market in order to maintain stability. In 1998 the rupee came under tremendous pressure due to the contagion effect of the East Asian crisis. However, periodic interventions by the RBI in the foreign exchange market prevented speculative attacks on the rupee and eased pressure on the rupee to devalue.

4.6 Committee on Capital Account Convertibility:

The Committee on Capital Account Convertibility chaired by S. S. Tarapore recommended the phased removal of restrictions on capital account transactions in 1997 (RBI, 1997). According to this Committee, full convertibility of the rupee on current and

capital account was necessary for the higher integration of the Indian economy with the world. The Committee proposed benefits of capital account convertibility as follows:

- 1) It will attract large funds to supplement domestic resources and will promote economic growth.
- 2) It will improve access to international financial markets and will reduce the cost of capital.
- 3) It will improve the financial system domestically in the context of global competition.

The Committee recommended that the government should adopt capital account convertibility in a phased manner within a three year period of 1998 to 2000. The committee indicated three pre-conditions of fiscal consolidation, a mandated inflation target and strengthening of the financial system. However, the period was very short to fulfil these requirements before adopting convertibility was very short. Thus, government failed to introduce full convertibility of the rupee on the capital account.

4.7 Foreign Exchange Management Act (1999):

With the liberalization of the Indian economy in 1991 the necessity to enact FERA was felt which was more stringent for foreign exchange rules. Thus, in 1999, the Foreign Exchange Regulation Act (FERA) was replaced by the Foreign Exchange Management Act (FEMA). The FEMA was passed to facilitate international trade and payments and to develop the foreign exchange market in India. It simplified the strict exchange controls suggested by FERA. Under FEMA more focus was given to foreign exchange and foreign securities. It was essential to relax the restrictions on trade so that many foreign investors and Non-Resident Indians (NRIs) would invest and trade in India (RBI, 2005a). After this amendment, the economy progressed extensively and even the exchange rate of the rupee remained more or less stable.

During the global financial crisis of 2008, India was affected through various financial channels. After the failure of Lehman Brothers, the exchange rate of the rupee depreciated sharply to Rs.50 per U.S. \$ with high volatility. The monthly average

exchange rate of the rupee for March 2009 was Rs.51.23 per U.S. \$. Therefore, the RBI intervened in the foreign exchange market. It sold foreign exchange to control the money supply in the economy. The substantial part of fluctuations in the rupee was a reflection of movement of the U.S. \$ against the major international currencies. As a result of increased volatility, foreign exchange flowed out and this further tightened the liquidity situation in the economy. To facilitate the transactions and to improve the liquidity position, the RBI undertook a monetary expansion by decreasing the key rates. Through its activities the exchange rate was stabilized again in 2009. The rupee appreciated to Rs.46.63 per U.S. \$ in December 2009 as a result of increased FII flows, continued inflows of FDI and NRI deposits. Investors gained confidence in the Indian economy due to better macroeconomic performance and weakening of the U.S. \$ in the international financial market. Additionally, the outcome of the general elections generated expectations of political stability. Thus, the rupee exhibited significant strength during this period and lay between the range of Rs.46 to Rs.47 per U.S. \$. Later in 2010, the growth in exports, continued capital inflows and further weakening of the U.S. \$ exerted appreciating pressure on the rupee and it further appreciated to Rs.45.49 per U.S. \$ by March 2010 and to Rs.44.81 per U.S. \$ in December 2010, indicating the overall appreciation of 0.7 percent against the U.S. \$. However, the rupee also depreciated by 2.5 percent against sterling and by 12.1 percent against the Japanese yen whereas it appreciated by 1.2 percent against the euro (GOI, 2011).

In the year 2011, the rupee was quite stable and was appreciating till July 2011 with the exchange rate of Rs.44.42 per U.S. \$. However, since August 2011, the depreciating trend of the rupee began against the backdrop of the Euro crisis. Since August 2011 the rupee has depreciated against the U.S. \$ by about 18 percent. On November 22, 2011 the rupee had reached a 32-month low of Rs.52.70 per U.S. \$. The rupee depreciated sharply because of high domestic inflation, appreciation of the U.S. \$ against the major international currencies, steep depreciation of the euro and FII outflows experienced by the economy. Meanwhile, the RBI did not intervene in the foreign exchange market as it lacked the capacity to intervene in a market which was highly volatile on a daily basis. The RBI supported this action as the market is still unstable and

Table 1: Historical Perspective on India's Exchange Rate Regime

Year	Type of Change
1893	The gold exchange standard was introduced. The exchange rate was fixed to 7.53344 grains of fine gold or 1s 4d sterling per rupee.
1927	The Currency Act of 1927 was passed. It established gold bullion cum sterling exchange standard in India.
1931	The U.K. abandoned the gold standard. The Indian Rupee was pegged to the sterling at the exchange rate of Re. 1= 1s 6d (or £ 1 = Rs. 13.33). A de facto sterling standard for the rupee was established.
1935	The Reserve Bank of India was established.
1946	India became a member of the IMF. The par value of the rupee was fixed at Re. 1= 0.0086357 ounce of fine gold, retaining the rupee sterling peg at Re. 1= 1s 6d.
1947	The Foreign Exchange Regulation Act (FERA) was passed.
1949	Following sterling devaluation from \$ 4.03 to \$ 2.80 (30.5 percent) in September, the rupee was devalued to the same extent as sterling thereby retaining the rupee-sterling rate at Re. 1= 1s 6d, but the gold value of the rupee was reduced to Re. 1 = 0.186621 gm and the rupee-dollar rate devalued to \$ 1= Rs. 4.7619.
1966	The rupee was devalued by 36.5 per cent on June 6 against sterling <i>i.e.</i> , £ 1 = Rs. 13.33 to Rs. 21.00. The corresponding devaluation with respect to the U.S. dollar was from \$ 1= Rs. 4.7619 to Rs. 7.50 and the gold parity from Re. 1= 0.186621 gm to 0.118489 gm.
1971	The Bretton Woods system broke down in August. The rupee was pegged to the U.S. dollar at \$ 1= Rs. 7.50 but re-pegged to the sterling at £ 1 = Rs. 18.9677 in December, with a margin of 2.25 per cent on either side.
1975	The rupee was delinked from sterling and pegged to an undisclosed currency basket on September 25 with the prevailing margin of \pm 2.25 percent on either side. The rupee sterling rate served as the intervention fixed at the time at £ 1 = Rs. 18.3084.
1979	The margin around the basket related parity was broadened to \pm 5 percent on January 30, thus giving a 10 per cent band.
1991	The rupee was devalued by 18 per cent through the rupee-sterling rate.
1992	The Liberalized Exchange Rate Management System (LERMS) was introduced under which 40 per cent of the proceeds under exports and inward remittances are purchased at the official rate of exchange by the Reserve Bank for official use. The remainder of the receipts and other payments are converted at the market rate of exchange. Permissible receipts and payments on capital account are transacted at market rates (except in the case of official transactions like the IMF). The US dollar became the intervention currency with effect from March 4.
1993	India adopted a managed floating exchange rate regime without any predetermined rate or band. A market-related exchange rate was introduced from March 1.
1994	The rupee was made fully convertible on the current account.
1997	The Tarapore Committee on capital account convertibility recommended phased removal of restrictions.
1998	The contagion effect of East Asian Crisis was managed successfully by the RBI through periodic interventions in the foreign exchange market.
1999	FERA was replaced by the Foreign Exchange Management Act (FEMA) to develop the foreign exchange market in India.
2008	The Global Financial Crisis affected India through financial channels. The rupee depreciated sharply to Rs. 50/\$. The RBI effectively intervened in the foreign exchange market and volatility was curbed.
2011	On November 22 the rupee experienced a 32 month low rate of Rs. 52.70 due to the emergence of the euro crisis. RBI has not intervened in the foreign exchange market yet.

Source: Compiled from Jadhav (2005, P. 21) and GOI (2011).

it will decide the course of action once the impact of the euro crisis on the foreign exchange market reduces and the market stabilizes. The daily exchange rate of the rupee ranges between Rs.50 to Rs.53 per U.S. \$. Table 1 outlines the major changes in the rupee exchange rate over the years

As far as the analysis of the exchange rate regime is concerned, it is observed that the exchange rate regime declared to the IMF by the member countries differs from the regime *i.e.*, actually adopted by them. This has been analysed by several authors for different countries at different time periods. According to Levy-Yayeti (2005) the Emerging Market Economies change their regime when they face some crisis situation in the foreign exchange market. The countries manage their exchange rate according to the declared regime during tranquil periods. However, they may be tempted to change their course of action once the exchange rate is under stress. Though India is following managed floating a exchange rate regime studies reveal that India's exchange rate regime is a de facto peg to the U.S. \$. Calvo and Reinhart (2002) formed a matrix of currency flexibility depending on the volatility of exchange rate, the volatility of the foreign exchange reserves and interest rate volatility. Their analysis revealed that the Indian exchange rate had a very low flexibility and remained quite stable during 1979 to 1999. The analysis of Reinhart and Rogoff (2002) has classified the exchange rate regime of India as a peg to the U.S. \$. Using the monthly absolute percentage change in the exchange rate they computed the probability of exchange rate changes. If the probability is 80 percent or more then the country follows a de facto peg. According to this analysis they found that India has a de facto peg to the U.S. \$. Cavoli and Rajan (2006) using standard OLS techniques found that the U.S. \$ exerts a strong influence on the exchange rate of the rupee rather than other major international currencies. This result is supported by Zeileis (2010), who have also found evidence of a de facto pegging of the rupee to the U.S. \$ rather than a managed floating exchange rate regime. The following Table gives the de facto classification of exchange rate regime of India.

Table 2: India's De Facto Exchange Rate Regime Classification.

Date	Classification	Comments
August 1914–March 22, 1927	Peg to Pound Sterling	Convertibility into sterling is suspended.
March 22, 1927–September 24, 1931	Peg	The Gold Standard.
September 24, 1931–September 3, 1939	Peg to Pound Sterling	Suspension of Gold Standard adherence to Sterling Area.
September 3, 1939–October 1941	Peg to Pound Sterling	Capital controls are introduced.
November 1941–October 1943	Peg to Pound Sterling/Freely falling	-
November 1943–October 1, 1965	Peg to Pound Sterling	-
October 1, 1965–June 6, 1966	De facto band around Pound Sterling/Parallel Market	There are multiple exchange rates. Band width is +/- 5%.
June 6, 1966–August 23, 1971	Peg to Pound Sterling	-
August 23, 1971–December 20, 1971	Peg to US Dollar	-
December 20, 1971–September 25, 1975	Peg to Pound Sterling	-
September 25, 1975–February 1979	De facto crawling band around Pound Sterling	Band width is +/- 2%. Officially pegged to a basket of currencies.
March 1979–July 1979	Managed floating	-
August 1979–July 1989	De facto crawling band around US dollar.	Band width is +/- 2%. Officially pegged to a basket of currencies.
August 1989–July 1991	De facto crawling peg to US dollar	-
August 1991–June 1995	De facto peg to US dollar	Devaluation on March 1993. Parallel market premia rose to 27% in February.
July 1995–December 2001	De facto crawling peg to US dollar	The parallel market premium has been consistently in single digits.

Source: Reinhart and Rogoff (2002, P. 74).

5. CONCLUSIONS:

India has a very rich historical background as far as its currency is concerned. It was the first to issue coins throughout the world. A silver coin called rupee was legal tender for exchange in ancient India. Depending upon the ruler of the empire, the inscriptions on the coins also varied. One side of the coin had various motifs, stamps and portraits of god or the rulers of that empire while on other side was the value of the coin. The coins were also minted in various metals depending upon the availability and the intrinsic value of that particular metal. The paper currency had pictures of different

monuments or eminent personalities of that time. The paper currency had pictures of different monuments or eminent personalities of that time. As India was ruled by many emperors, the notes issued by them had their own symbols. The British rulers issued their own series of notes bearing the portraits of King George V and later bearing the portrait of Queen Victoria. After independence India started issuing its own series of coins and paper currency. Earlier the coins were minted in cupro-nickel which was later replaced by aluminium and steel due to high inflation in the 1960s. Even now the RBI has been experimenting with coins of different designs and metals. The paper currency of the Republic of India has evolved with respect to paper, size, designs and security features.

As far as the exchange rate regime of India is concerned, India has experienced many changes in its monetary arrangements. Under the British rule the rupee was pegged to sterling and the exchange rate was decided in the international market. With wide fluctuations in sterling, the arrangement of pegging the rupee to the basket of currencies was introduced and lasted till 1991. Currently India has adopted a managed floating exchange rate system as per which the exchange rate of the rupee is decided by market forces and the RBI keeps a close watch on the fluctuations of the rupee exchange rate. Depending upon the requirement the RBI intervenes in the foreign exchange market to keep the exchange rate of the rupee stable. Though the current exchange rate arrangement is managed floating, India may experiment with some other form of monetary arrangement depending upon the surveillance of the current arrangement in crisis situations.

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