Chapter IV

Appreciation and Depreciation of Indian Rupee against Select Foreign Currencies

#### **CHAPTER IV**

## ANALYSIS AND INTERPRETATION

## APPRECIATION AND DEPRECIATION OF INDIAN RUPEE AGAINST SELECT FOREIGN CURRENCIES

#### 4.1 INTRODUCTION

In an economy, exchange rate is one of the essential elements for the international trade transactions. Each country has its own currency to carry on the trade transactions. Currency rate is determined by the demand and supply of particular country currency in the international market. The exchange rate keeps fluctuating in all the time period. It is the rate of foreign currency in terms of domestic currency, the amount required in terms of domestic currency to buy one unit of foreign currency. During high inflation rates in the foreign countries there may be a need for paying more domestic currency to buy per unit of foreign currency and vice versa, in some cases the country pay less domestic currency to buy one unit of foreign currency. A change in the value of exchange rate is known as appreciation and depreciation.

Appreciation of the currency implies that the value of currency is increasing over the other currency. Depreciation of the currency denotes the value of currency decreasing. This chapter aims to study the appreciation and depreciation of exchange rate of previous month currency value to the current month currency value of Indian rupee against the select foreign currencies on Month on Month basis for the ten years. The four major currencies in India, such as, US dollar, Pound Sterling, Euro and Japanese Yen against Indian rupee have been taken to know which currency pair has shown appreciation and depreciation over the study period.

# 4.2 APPRECIATION AND DEPRECIATION OF INDIAN RUPEE AGAINST USD, GBP, EURO AND YEN

### **Percentage Change**

Percentage change has been calculated for the monthly average exchange rate of Indian rupee against the major currencies based on previous month over the current month. The formula given below is used to find the appreciation and depreciation of Indian rupee against major currencies. The per cent value has resulted in appreciation (+) of the currency and depreciation (-) of the exchange rate of the currency.

Exchange rate = 
$$\frac{(t-1)-t}{t} *100$$

t - 1 = Previous Month, t = Current Month

## Monthly average rates of Indian rupee against foreign currencies for the year 2007-08

Table 4.1 presents the appreciation and depreciation for the exchange rate of Indian rupee against select foreign currencies.

Table 4. 1

Monthly average rates of Indian rupee against foreign currencies for the year 2007-08

(Rs. per unit of foreign currency)

Year/ month	Moi	Monthly average rates of Indian rupee against foreign currencies										
2007-08	US Dollar	%	Pound Sterling	%	Euro	%	Japanese Yen	%				
April	42. 15	(3.00%)	83. 83	(3. 32%)	57. 01	(3. 24%)	35. 46	(4. 78%)				
May	40. 78	(3. 36%)	80. 89	(3. 63%)	55. 11	(3.44%)	33. 76	(5.00%)				
June	40. 77	(0.02%)	80. 98	(-0. 11%)	54. 71	(0.73%)	33. 25	(1.56%)				
July	40. 41	(0.89%)	82. 18	(-1.46%)	55. 43	(-1. 29%)	33. 20	(0. 15%)				
August	40. 81	(-0. 98%)	82. 12	(0.07%)	55. 64	(-0. 37%)	34. 96	(-5. 30%)				
September	40. 34	(1. 16%)	81. 37	(0. 92%)	56. 02	(-0. 68%)	35. 07	(-0. 34%)				
October	39. 51	(2. 10%)	80. 72	(0.79%)	56. 22	(-0. 35%)	34. 11	(2. 84%)				
November	39. 44	(0. 17%)	81.71	(-1. 19%)	57. 92	(-2. 93%)	35. 54	(-4. 02%)				
December	39. 44	(0)	79.77	(2. 43%)	57. 50	(0.73%)	35. 15	(1. 10%)				
January	39. 37	(0. 17%)	77. 54	(2. 87%)	57. 92	(-0.73%)	36. 45	(-3. 56%)				
February	39. 72	(-0.88%)	78. 04	(-0. 64%)	58. 59	(-1. 14%)	37. 08	(-1. 69%)				
March	40. 36	(-1.58%)	80. 86	(-3.48%)	62. 64	(-6. 46%)	40. 09	(-7. 51%)				
Average	40. 26	(12.4%)	80. 83	(6.0%)	57.06	(1.8%)	35. 55	(9.6%)				

Table 4.1 depicts the movement of monthly average exchange rate of Indian rupee against the major international currencies, namely, US dollar, Pound sterling, Japanese Yen and Euro for the year 2007-08. During the fiscal year 2007-08 among the emerging market economies there was a growth in the global developments of Indian economy due to high capital inflows in the external sector of the economy. The appreciation of Indian rupee against US dollar (12. 4%) was much higher compared to the other currencies.

During the year 2007-08, the value of Indian rupee against US dollar has been appreciated during the beginning of the study year from Rs.42.15 per US\$ in April 2007 to Rs. 40.41 per US\$ in July 2007 (3 per cent to 0.89 per cent) respectively. The Rupee appreciation against dollar was due to the effect of depreciation of US dollar against the world currencies in the currency market because of low interest rate in US economy, which have paved the investors to invest in India and other emerging economies. In the middle of the year, value of rupee has been depreciated to Rs.40.81 per US\$ in August 2007 by -0.98 per cent. The rupee appreciated against US \$ from Rs.40.34 to Rs.39.37 per US \$ i.e from 1.16 per cent to 0.17 per cent during September 2007 to January 2008. During the end of the study period there was a depreciation in the rupee per dollar from Rs.39.72 per US\$ to Rs.40.36 per US\$ by -1.58 per cent in March 2008. The average of Indian rupee against US \$ stood at Rs. 40.26 per US\$ and appreciated by 12.4 per cent due to large capital inflows and the weakening of US dollar in currency market.

The movement of Indian rupee against Pound sterling in the year 2007-08 reveals that Indian rupee has appreciated mostly against pound sterling. In the beginning of the year 2007-08, the value of Rupee has appreciated against Pound sterling from Rs.83.83 in April 2007 to Rs.80.89 in May 2007 i.e, from 3.32 per cent to 3.63 per cent in April - May 2007. From June - August 2007, the Rupee against Pound sterling has ranged from Rs.80 - Rs.82 per pound sterling and it was found that the currency value has been depreciated from -0.11 per cent to -1.46 per cent in July 2007. However in August 2007, it has been appreciated by 0.07 per cent. The monthly average of Indian rupee against Pound sterling has appreciated by 0.92 per cent in September 2007, 0.79 per cent in October 2007, 2.43 per cent in December 2007, while it was depreciated by -1.19 per cent in November 2007. At the end of the year 2007- 08 the rupee has ranged from Rs.77 - 80 per pound sterling. During January - March 2008, the rupee has been appreciated by

2.87 per cent in January 2008 and depreciated from -0.64 per cent to -3.48 per cent in February - March 2008. The average of Indian rupee against Pounds sterling stood at Rs. 80. 83 per Pound sterling and appreciated by 6 per cent.

In the year 2007-08 Indian rupee against Euro has been appreciated at the beginning of the study period between April - June 2007 with the value from Rs. 57 to Rs.54 per euro and appreciated from 3.24 per cent to 0.73 per cent. At the middle of the year, the trend of an Indian rupee against Euro was reversed. It tends to depreciate and the value has ranged from Rs.55 - 57 per euro and depreciated (-1.29 per cent to -0.35 per cent) in July - October 2007. It has remained stable at Rs.57 per Euro between November 2007 – January 2008 and then depreciated by -2.93 per cent in November 2007, -0.73 per cent in January 2008 and appreciated by 0.73 per cent in December 2007. At the end of the year 2007 - 08 rupee depreciated from Rs.58.59 per Euro to Rs.62.64 per euro from -1.14 per cent to - 6.46 per cent in February – March 2008. The average of Indian rupee against Euro stood at Rs.57.06 and appreciated by 1.8 per cent during the year 2007-08.

The movement of Indian rupee against Yen was fluctuating during the year 2007-08. The value of rupee was appreciated against Yen from Rs.35.46 per yen to Rs.33.20 per Yen in April - July 2007 from 4.78 per cent to 0.15 per cent. During August – September 2007, it was depreciated from Rs.34.96 per yen to Rs.35.07 per Yen (-5.30 per cent to - 0.34 per cent) respectively. The rupee against Yen stood at Rs.34.11 and found to be appreciated at by 2.84 per cent in the month of October 2008. During November 2007 - March 2008 rupee against Yen has ranged from Rs.35 - 40. The currency rate was depreciated by - 4.02 per cent in November 2007 and it was found to appreciated from 1.10 per cent to 3.56 per cent between December 2007- January 2008. During February - March 2008 exchange rate has been depreciated from -1.69 per cent to -7.51 per cent

In the year 2007-08 Indian rupee has a high appreciation against US dollar by 12.4 per cent and low appreciation has been found against Euro by 1.8 per cent.

#### Monthly average rates of Indian rupee against foreign currencies for the year 2008-09

Table 4. 2 shows the appreciation and depreciation for the exchange rate of Indian rupee against select foreign currencies

Table 4.2

Monthly average rates of Indian rupee against foreign currencies for the year 2008-09

(Rs. per unit of foreign currency)

Year/month	]	Monthly a	verage rat	es of India	n rupee aga	inst foreig	n currencies	S
2008-09	US Dollar	%	Pound Sterling	%	Euro	%	Japanese Yen	%
April	40. 03	(0. 82%)	79. 25	(2.03%)	63.00	(-0. 57%)	38. 93	(2. 97%)
May	42. 13	(-4. 98%)	82. 76	(-4. 24%)	65. 53	(-3. 86%)	40. 41	(-3. 66%)
June	42. 82	(-1.61%)	84. 13	(-1. 62%)	66. 61	(-1. 62%)	40.05	(0. 89%)
July	42. 84	(-0.04%)	85. 17	(-1. 20%)	67.57	(-1. 42%)	40. 14	(-0. 22%)
August	42. 94	(-0. 23%)	81. 33	(4. 70%)	64. 47	(4. 82%)	39. 34	(2. 03%)
September	45. 56	(-5. 75%)	82. 09	(-0. 93%)	65. 55	(-1. 64%)	42. 74	(-7. 95%)
October	48. 64	(-6. 33%)	82. 56	(-0. 56%)	64. 81	(1. 12%)	48. 59	(-12. 03%)
November	49.00	(-0. 73%)	75. 25	(9. 69%)	62. 36	(3.93%)	50. 49	(-3. 76%)
December	48. 64	(-0. 73%)	72. 61	(3. 63%)	65. 70	(-5. 09%)	53. 34	(-5. 34%)
January	48. 83	(-0. 39%)	70. 75	(2. 63%)	65. 09	(0.94%)	54. 01	(-1. 24%)
February	49. 22	(-0. 79%)	70. 91	(-0. 22%)	62. 97	(3.36%)	53.38	(1. 18%)
March	51. 23	(-3. 92%)	72. 92	(-2. 75%)	66. 91	(-5. 88%)	52. 51	(1.66%)
Average	45. 99	(-12.4%)	78. 29	(3.2%)	64. 98	(-12. 2%)	46. 22	(-23.5%)

Source: Handbook of statistics on the Indian Economy, RBI

Table 4.2 portrays the movements of monthly average of exchange rate of Indian rupee against the major international currencies, namely, US dollar, Pound sterling, Japanese Yen and Euro for the year 2008-09. There was a global recession in the economy which has created a great impact on the currency market.

The movement of Indian rupee against US dollar in the year 2008-09 has indicated diminishing trend. In April 2008, the value of rupee against US dollar stood at Rs.40.03 per US\$ and the rupee has depreciated against US dollar in May – June 2008 from Rs.42.13 per US\$ to Rs.42.82 per US\$ i.e, from -4.98 per cent to -1.61 per cent, but the value of rupee remained almost stable at Rs.42 per US\$ during July - August 2008. Due to financial crisis in September 2008, the value of rupee depreciated sharply against dollar at Rs.45.56 per US\$ in September 2008 to 48.64 per US\$ in October 2008 (-5.75 per

cent to - 6.33 per cent) respectively. The movement of Indian rupee has shown a narrow range from Rs.49 per US\$ to Rs. 51.23 per US\$ during November 2008 - March 2009, depreciated from -0.73 per cent to -3.92 per cent at the end of the study period. The average of rupee against US\$ stood at Rs. 45.99 per US\$ and depreciated by -12.4 per cent.

The movement of Indian rupee against Pound sterling in the year 2008-09 has ranged from Rs. 79 - 85 per Pound sterling during April - July 2008 and rupee depreciated against Pound sterling from -4.24 per cent to -1.20 per cent in May – July 2008 except in the month of April 2008 where it has appreciated by 2.03 per cent. It stood at Rs.81.33 per Pound sterling in August 2008 and has appreciated by 4.70 per cent. During the month of September - October 2008, it stood stable at Rs.82 per pound sterling and depreciated from -0.93 to -0.56 per cent. From November 2008 - January 2009 the value of rupee against pound sterling was appreciated from Rs.75.25 to Rs.70.75 (9.69 per cent to 2.63 per cent) respectively. At the end of the study period, it has been depreciated from Rs.70 to Rs.72 during February- March 2009, depreciated from -0.22 per cent to - 2.75 per cent. The average stood at Rs.78.29 per pound sterling which appreciated by 3 per cent.

The movement of Indian rupee against euro was depreciated at the beginning of the study period from Rs.63 to Rs.67 per euro in April – July 2009 i.e, from -0.57 per cent to -1.42 per cent. The value of rupee against euro appreciated by Rs.64.47 per Euro by 4.82 per cent in August 2008 and depreciated by 1.64 per cent in September 2008. There was a appreciation in the value of Rupee against euro from Rs.64 to Rs.62 during October - November 2008, from 1.12 per cent to 3.93 per cent. At the end of the period, the value of rupee against euro was appreciated from Rs.65.70 per euro to Rs.62.97 per euro in December 2008 - February 2009 i.e, from -5.09 per cent to 3.36 per cent and has depreciated at Rs.66.91 per euro in March 2009 by -5.88 per cent. The average stood at Rs.64.98 per euro and depreciated by -12.2 per cent.

In the year 2008-09, the value of Indian rupee against Yen has ranged from Rs.38.93 per yen in April 2008 to Rs.40.14 per yen in July 2008. It was appreciated by 2.97 per cent and 0.89 per cent in April and June 2008 and depreciated by - 3.66 per cent and 0.22 per cent in the months of May and July 2008. It stood at Rs.39.34 per Euro in

August 2008, appreciated by 2.03 per cent. From September 2008 - January 2009, the value of Rupee against Euro depreciated from Rs.42.74 - Rs.54.01 per euro i.e from -7.95 per cent to 1.24 per cent. At the end of the year, rupee appreciated from Rs.53.38 to Rs.52.51 per Euro during February- March 2009, from 1.18 per cent to 1.66 per cent. The average stood at Rs.46.22 per euro and depreciated by - 23.5 per cent.

In the year 2008-09 Indian rupee has a high depreciation against Yen at -23.5 per cent and low depreciation against US dollar by -12.4 per cent, and appreciated by 3.2 per cent against Pound sterling.

## Monthly average rates of Indian rupee against foreign currencies for the year 2009-10

The appreciation and depreciation for the exchange rate of Indian rupee against select foreign currencies are elucidated in the table 4.3

Table 4.3

Monthly average rates of Indian rupee against foreign currencies for the year 2009-10

(Rs. per unit of foreign currency)

Year/month	N	Monthly av	erage rate	s of Indian	rupee a	gainst fore	ign currenc	ies
2009-10	US Dollar	%	Pound Sterling	%	Euro	0/0	Japanese Yen	%
April	50.06	(2. 34%)	73. 61	(-0. 94%)	65. 85	(1. 60%)	50. 82	(3. 32%)
May	48. 53	(3. 15%)	74. 83	(-1. 62%)	66. 19	(-0.51%)	50. 23	(1. 17%)
June	47. 77	(1. 59%)	78. 18	(-4. 28%)	67. 00	(-1. 20%)	49. 48	(1. 52%)
July	48. 47	(-1. 44%)	79. 34	(-1. 46%)	68. 25	(-1. 83%)	51. 33	(-3. 60%)
August	48. 34	(0. 27%)	79. 95	(-0. 76%)	68. 95	(-1. 01%)	50. 96	(0.72%)
September	48. 44	(-0. 20%)	79. 36	(0.75%)	70. 47	(-2. 15%)	52. 88	(-3. 62%)
October	46. 72	(3. 68%)	75. 73	(4. 78%)	69. 29	(1.70%)	51.76	(2. 15%)
November	46. 57	(0. 32%)	77. 36	(-2. 09%)	69. 52	(-0. 34%)	52. 28	(-0. 98%)
December	46. 63	(-0. 12%)	75. 78	(2. 07%)	68. 18	(1. 97%)	52. 04	(0. 44%)
January	45. 96	(1. 45%)	74. 31	(1. 97%)	65. 71	(3.75%)	50. 31	(3. 44%)
February	46. 33	(-0. 79%)	72. 48	(2. 53%)	63. 42	(3. 62%)	51. 31	(-1. 94%)
March	45. 49	(1. 85%)	68. 47	(5. 86%)	61.76	(2. 67%)	50. 21	(2. 19%)
Average	47. 44	(-3. 06%)	75. 78	(3. 33%)	67. 04	(-2. 98%)	51. 13	(-9. 72%)

Table 4.3 reveals the movements of monthly average of exchange rate of Indian rupee against the major international currencies, such as, US dollar, Pound sterling, Japanese Yen and Euro for the year 2009-10.

In the year 2009-10 there was a recovery after the global recession and the returns of foreign investment inflows in the year 2009 which has made the value of rupee strong against US \$. In April - June 2009 the value of Indian rupee against US\$ appreciated from Rs.50.06 per US\$ to Rs.47.77 per US\$ i.e, from 2.34 per cent to 1.59 per cent. The exchange rate has been fluctuating from July 2009 – March 2010. The value of exchange rate remained stable at Rs.48 per US\$ between July - September 2009 and it was found to be depreciated by -1.44 per cent in July 2009 and depreciated by 0.20 per cent in September 2009 while it has been appreciated by 0.27 per cent in August 2009. The Rupee value stood stable at Rs.46 per US\$ between October - December 2009, it appreciated from 3.68 per cent to 0.32 per cent during October - November 2009, depreciated by 0.12 per cent in December 2009. At the end of the year the value has fluctuated from Rs.45 – Rs.46 per US\$, appreciated by 1.45 per cent in January 2010 and 1.85 per cent in March 2010 while it depreciated by -0.79 per cent in February 2010. The average of exchange rate of Indian rupee against US dollar stood at Rs.47.44 per US dollar depreciated by -3.06 per cent.

The movement of Indian rupee against Pound sterling in year 2009-10 has ranged from Rs.73 - 78 per pound sterling during the period April - June 2009. It has depreciated from -0.94 per cent to -4.28 per cent in June 2009. It remained stable during July - September 2009 at Rs.79 per Pound sterling and found depreciated by -1.46 per cent in July 2009, -0.76 per cent in August 2009, and appreciated by 0.75 per cent in September 2009. The rupee against Pound sterling depreciated from Rs.75.73 to Rs.77.36 from 4.78 per cent in October 2009 to -2.09 per cent in November 2009. At the end of the study period there was appreciation in the value of rupee against pound sterling, during December 2009 to March 2010 from Rs.75.78 to Rs.68.47 i.e, from 2.07 per cent to 5.86 per cent in March 2010. The average of Pound sterling during the year 2009-10 stood at Rs.75.78 per Pound sterling appreciated by 3.33 per cent.

In the year 2009-10 the exchange rate of Indian rupee against euro stood at Rs.65.85 per Euro in April 2009, appreciated by 1.60 per cent. From May - September 2009 the value of Indian rupee against Euro has depreciated from Rs.66.19 to Rs.70.47 per Euro (-0.51 per cent to -2.15 per cent) respectively. It remained stable at Rs.69 per euro during October- November 2009 and appreciated by 1.70 per cent in October 2009 and depreciated lower by -0.34 per cent in the month of November 2009. The value of rupee against euro was appreciated at the end of the year 2009-10 from Rs.68.18 per Euro to Rs.61.76 per Euro during December 2009 to March 2010 from 1.97 per cent to 2.67 per cent. The average of Euro during the year 2009 - 10 stood at Rs.67.04 per Euro depreciated by -2.98 per cent.

The movement of exchange rate of Indian rupee against Yen was appreciated in the beginning of the year from Rs.50.82 per Yen to Rs.49.48 per yen (3.32 per cent to 1.52 per cent) in April – June 2010. It stood at Rs.51.33 per yen in July 2009, depreciated by -3.60 per cent. It has been ranged from Rs.50 -52 per Yen in the months from August – December 2009. Rupee appreciated by 0.72 per cent in August 2009 and 2.15 in October 2009, 0.44 per cent in December 2009 and depreciated by -3.62 per cent in September 2009 and -0.98 per cent in November 2009. At the end of the year it was depreciated at Rs.51.31 per Yen by -1.94 per cent in February 2010. In the month of January and March 2010 the value of rupee against Yen remained stable at Rs.50 per Yen appreciated by 3.44 per cent and 2.19 per cent in March 2010. The average of Indian rupee against Yen stood at Rs.51.13 per Yen depreciated by -9.72 per cent.

In the fiscal year 2009-10 the average exchange rate of Indian rupee was depreciated higherly against Yen at - 9.72 per cent and lowerly against US dollar by -3.06 per cent, and appreciated by 3.33 per cent against Pound sterling.

#### Monthly average rates of Indian rupee against foreign currencies for the year 2010-11

Table 4.4 portrays the appreciation and depreciation for the exchange rate of Indian rupee against select foreign currencies

Table 4.4

Monthly average rates of Indian rupee against foreign currencies for the year 2010-11

(Rs. per unit of foreign currency)

Year/month	Monthly average rates of Indian rupee against foreign currencies								
2010-11	US Dollar	%	Pound Sterling	%	Euro	%	Japanese Yen	%	
April	44. 49	(2. 25%)	68. 23	(0. 34%)	59. 66	(3.52%)	47. 62	(5.43%)	
May	45. 81	(-2. 88%)	67. 22	(1.50%)	57. 66	(3.46%)	49. 68	(-4. 14%)	
June	46. 56	(-1.61%)	68. 69	(-2. 14%)	56. 90	(1.33%)	51. 24	(3. 14%)	
July	46. 83	(-0. 57%)	71. 52	(-3. 95%)	59. 76	(-4. 78%)	53.44	(4. 29%)	
August	46. 56	(0.57%)	72. 97	(-1.98%	60. 13	(-0. 61%)	54. 50	(1.98%)	
September	46.06	(1.08%)	71. 68	(1.79%)	60.08	(0.08%)	54. 53	(0.05%)	
October	44. 41	(3.71%)	70. 38	(1. 84%)	61.71	(-2. 64%)	54. 28	(-0.45%)	
November	45. 01	(-1. 33%)	71. 84	(-2. 03%)	61.49	(0.35%)	54. 59	(0.57%)	
December	45. 15	(-0.31%)	70.46	(1.95%)	59. 68	(3.03%)	54. 24	(-0. 64%)	
January	45. 39	(-0.53%)	71. 53	(-1.49%)	60. 54	(-1.42%)	54.96	(1.32%)	
February	45. 43	(-0.08%)	73. 29	(-2. 40%)	62. 09	(-2.49%)	55.05	(0.16%)	
March	44. 99	(0.97%)	72. 70	(0.81%)	63. 03	(-1.49%)	55. 02	(-0.05%)	
Average	45. 55	(4. 13%)	70. 87	(6. 92%)	60. 22	(11. 32%)	53. 26	(-3.99%)	

Source: Handbook of statistics on the Indian Economy, RBI

Table 4.4 predicts the movements of monthly average of exchange rate of Indian rupee against the major international currencies - US dollar, Pound sterling, Japanese Yen and Euro for the year 2010-11.

The value of exchange rate of Indian rupee against US dollar depreciated at the beginning of the study period from Rs.44.49 per US\$ to Rs. 46.83 per US\$ in April - July 2010 from 2.25 per cent to -0.57 per cent. Rupee strengthened against dollar during that period. There was appreciation in the value of rupee over the month on month basis where it has ranged from Rs.46.56 per US\$ in August 2010 to Rs.44.41 per US\$ during October 2010 it has appreciated by 3.71 per cent. From November 2010 – February 2011 it stood stable at Rs.45 per US\$ and depreciated from -1.33 per cent to - 0.08 per cent in February 2011. At the end of the year during March 2011 it was appreciated to Rs.44.99,

by 0.97 per cent. The average of exchange rate of Indian rupee against US dollar stood at Rs.45.55 per US dollar appreciated by 4.13 per cent.

In the year 2010-11 the exchange rate of Indian rupee against pound sterling was appreciated in the beginning of the year between April - May 2010 from Rs.68.23 to Rs.67.22 per Pound sterling from 0.34 per cent to 1.50 per cent. It depreciated from Rs.68.69 per Pound sterling to Rs.72.97 per Pound sterling between June – August 2010 by (-2.14 per cent to -1.98 per cent) respectively. The value of Indian rupee against pound sterling found to be appreciated to Rs.71.68 in the month of September 2010 by 1.79 per cent. The value of rupee against Pound sterling ranged from Rs.70 – 73 per Pound sterling between October 2010 - February 2011 and it was appreciated in the months of October 2010 and December 2010 by 1.84 per cent and 1.95 per cent respectively. It depreciated by -2.03 per cent in November 2010, -1.49 per cent in January 2011 and by -2.40 per cent in February 2011. It stood at Rs.72.70 per Pound sterling in March 2011 and appreciated by 0.81 per cent. The average of Indian rupee against Pound sterling stood at Rs.70.87 per Pound sterling appreciated by 6.92 per cent.

In the beginning of the year 2010-11 the movement of exchange rate of Indian rupee against Euro was appreciated from Rs.59.66 per euro to Rs.56.90 per euro between April – June 2010 from 3.52 per cent to 1.33 per cent. It ranged from Rs.59-61 per euro between July – November 2010 and it was found that rupee depreciated in July - August from -4.78 per cent to -0.61 per cent and - 2.64 per cent in October 2010. In the months of September and November it was appreciated against euro at 0.08 and 0.35 per cent. It stood at Rs.59.68 per euro in December 2010, appreciated by 3.03 per cent. At the end of the year the value of Rupee against Euro depreciated from Rs.60 to Rs.63 per Euro between January - March 2011(-1.42 per cent to -1.49 per cent). The average of Indian rupee against euro stood at Rs.60.22 per Euro appreciated by 11.32 per cent.

In the year 2010-11 the value of Indian rupee against Yen was appreciated in April 2010 by 5.43 per cent. It ranged from Rs.49 – 53 per Yen between May – July 2010 and it was depreciated from 5.43 per cent to -4.14 per cent in May 2010 and appreciated from 3.14 per cent to 4.29 per cent in June - July 2010. The Indian rupee against Yen remained stable at Rs.54 per Yen from August 2010 – January 2011 it appreciated from

1.98 per cent to 0.05 per cent between August - September 2010, depreciated by -0.45 per cent in October 2010, appreciated by 0.57 per cent in November 2010, depreciated by -0.64 per cent in December 2010, appreciated by 1.32 per cent in January 2011. It stood stable at Rs.55 during February – March 2011 was appreciated by 0.16 per cent in February 2011, depreciated by -0.05 per cent in March 2011. The average of Indian rupee against Yen stood at Rs.53.26 depreciated by -3.99 per cent.

In the year 2010-11 the average exchange rate of Indian rupee was appreciated higherly against Euro by 11.32 per cent, and lowerly against US dollar by 4.13 per cent, and depreciated by - 3.99 per cent against Yen.

## Monthly average rates of Indian rupee against foreign currencies for the year 2011-12

The appreciation and depreciation for the exchange rate of Indian rupee against select foreign currencies are given in table 4.5

Table 4.5

Monthly average rates of Indian rupee against foreign currencies for the year 2011-12

(Rs. per unit of foreign currency)

Year/month	Me	Monthly average rates of Indian rupee against foreign currencies									
2011-12	US Dollar	%	Pound Sterling	%	Euro	%	Japanese Yen	%			
April	44. 37	(1.39%)	72. 72	(-0.02%)	64. 25	(-1. 89%)	53. 34	(3. 15%)			
May	44. 9	(-1. 18%)	73.43	(-0.97%)	64.48	(-0. 35%)	55. 34	(-3. 61%)			
June	44. 85	(0.11%)	72. 78	(0.89%)	64. 53	(-0.07%)	55. 67	(-0. 59%)			
July	44. 41	(0.99%)	71.64	(1.59%)	63.46	(1.68%)	55. 93	(-0.46%)			
August	45. 27	(-1.89%)	74. 10	(-3. 31%)	64. 93	(-2. 26%)	58. 67	(-4. 67%)			
September	47. 63	(-4. 95%)	75. 13	(-1. 37%)	65.49	(-0. 86%)	62. 05	(-5. 44%)			
October	49. 25	(-3. 28%)	77. 49	(-3.04%)	67.47	(-2. 93%)	64. 11	(-3. 31%)			
November	50. 85	(-3. 15%)	80. 27	(-3.46%)	68. 90	(-2. 07%)	65. 62	(-2. 30%)			
December	52. 67	(-3.45%)	82. 13	(-2. 26%)	69.33	(-0. 62%)	67. 67	(-3. 02%)			
January	51. 33	(2. 61%)	79. 60	(3. 17%)	66. 20	(4. 72%)	66. 77	(1. 34%)			
February	49. 16	(4.41%)	77. 68	(2.47%)	65. 10	(1.66%)	62. 74	(6. 42%)			
March	50. 32	(-2. 31%)	79. 65	(-2.47%)	66. 53	(-2. 14%)	61.02	(2. 82%)			
Average	47. 91	(-4. 92%)	76. 38	(-7. 21%)	65. 88	(-8. 59%)	60. 74	(-12. 31%)			

Table 4.5 reveals the movements of monthly average of exchange rate of Indian rupee against the major international currencies- US dollar, Pound sterling, Japanese Yen.

In the fiscal year 2011-12 Indian rupee has paved the way to two phases. At the beginning of the period the value of rupee has remained stable at Rs.44 per US\$ in April – July 2011 it has been appreciated by 1.39 per cent in April 2011, depreciated by -1.18 per cent in May 2011 and appreciated from 0.11 per cent to 0.99 per cent in July 2011. After August 2011 the trend has been reversed. Indian rupee has been depreciated due to slowdown of foreign capital inflows from Rs.45.27 per US\$ to Rs.52.67 per US\$ in August - December 2011, i.e from -1.89 per cent to -3.45 per cent. After the RBI measures, there was increase in the inflows and the value of rupee tend to appreciate from Rs.51.33 per US\$ to Rs.49.16 per US\$ in January – February 2012 from 2.61 per cent to 4.41 per cent and depreciated by -2.31 per cent in March 2012. The average of Indian rupee against US dollar stood at Rs.47.91 depreciated by - 4.92 per cent.

In the year 2011-12 the value of Rupee against Pound sterling was depreciated in the beginning of the year between April – May 2011 from Rs.72 to Rs.73 per Pound sterling from -0.02 per cent to -0.97 per cent. It was appreciated in the next months of June – July 2011 from Rs.72 to Rs.71 per Pound sterling from 0.89 per cent to 1.59 per cent. The value of Indian rupee against Pound sterling has ranged from Rs.74 –82 per Pound sterling between August - December 2011 depreciated from -3.31 per cent to 2.26 per cent. It was appreciated in the month of January at Rs.79.60 appreciated by 3.17 per cent and depreciated from Rs.77.68 to Rs.79.65 per pound sterling by -2.47 in March 2012. The average of Indian rupee against Pound sterling stood at Rs.65.88 per Pound sterling depreciated by - 8.59 per cent.

The movement of Indian rupee against Euro during the year 2011-12 remained stable at Rs.64 per Euro from April – June 2011 and depreciated from -1.89 per cent to -0.07 per cent. The value of Indian rupee against Euro has generally ranged from Rs.63 – Rs.69 per Euro between July – December 2011 appreciated by 1.68 per cent in July 2011 and depreciated from -2.26 per cent in August 2011 to -0.62 per cent in December 2011. It was appreciated from Rs.66.20 to Rs.65.10 in January – February 2012, from 4.72 per cent to 1.66 per cent. At the end of the year it stood at Rs.66.53 per Euro and depreciated by -2.14 per cent in March 2012. The average of Indian rupee against euro stood at Rs.65.88 per Euro depreciated by - 8.59 per cent.

In the fiscal year 2011- 12 the value of rupee against Yen stood at Rs.53.34 was appreciated by 3.15 per cent in April 2011. It stood stable at Rs.55 per Yen from May – July 2011 and depreciated from -3.61 per cent in May 2011 to 0.46 per cent July 2011. It ranged from Rs.58 - 67 per Yen between August –December 2011 and depreciated from -4.67 per cent to -3.02 per cent respectively. At the end of the year the value of rupee against Yen was appreciated from Rs.66.77 to Rs.61.02 per Yen from 1.34 per cent to 2.82 per cent between January –March 2012. The average of Indian rupee against Yen stood at Rs 60.74 per yen depreciated by -12.31 per cent.

In the year 2011-12 the average exchange rate of Indian rupee was depreciated higherly against Yen by -12.31 per cent and lowerly by -4.92 per cent against US dollar.

## Monthly average rates of Indian rupee against foreign currencies for the year 2012-13

Table 4.6 depicts the appreciation and depreciation for the exchange rate of Indian rupee against select foreign currencies.

Table 4.6

Monthly average rates of Indian rupee against foreign currencies for the year 2012-13

(Rs. per unit of foreign currency)

Year/month		Monthly a	verage rate	s of Indian	rupee a	gainst forei	gn currencies	
2012-13	US Dollar	%	Pound Sterling	%	Euro	%	Japanese Yen	%
April	51. 81	(-2. 87%)	82.96	(-3. 98%)	68. 18	(-2. 42%)	63. 82	(-4. 38%)
May	54. 47	(-4. 88%)	86.72	(-4. 33%)	69.69	(-2. 16%)	68. 32	(-6. 58%)
June	56. 03	(-2.78%)	87. 13	(-0.47%)	70.30	(-0. 87%)	70. 67	(-3. 32%)
July	55. 49	(0.97%)	86. 51	(0.71%)	68. 25	(3.00%)	70. 28	(0.55%)
August	55. 55	(-0. 10%)	87. 24	(-0. 84%)	68. 87	(-0. 90%)	70. 68	(-0.56%)
September	54. 60	(1.73%)	87. 86	(-0.71%)	70. 12	(-1. 78%)	69. 90	(1.11%)
October	53. 02	(2. 98%)	85. 21	(3. 10%)	68.75	(1. 99%)	67. 23	(3.97%)
November	54. 77	(-3. 19%)	87. 53	(-2. 65%)	70.36	(-2. 28%)	67. 60	(-0.55%)
December	54. 64	(0. 23%)	88. 19	(-0.75%)	71.66	(-1.81%)	65. 28	(-1.81%)
January	54. 31	(0.61%)	86. 88	(1.50%)	72. 21	(-0.76%)	61. 18	(6.70%)
February	53.77	(1.00%)	83.35	(4. 24%)	71.87	(0.47%)	57. 80	(5. 84%)
March	54. 40	(-1. 16%)	82. 01	(1. 63%)	70. 59	(1.81%)	57. 44	(0.62%)
Average	54. 40	(-11. 92%)	85.96	(-11. 14%)	70.07	(-5. 96%)	65. 85	(-7. 75%)

Table 4.6 portrays the movements of monthly average of exchange rate of Indian rupee against the major international currencies- US dollar, Pound sterling, Japanese Yen.

During the year 2012 -13 the value of rupee has been fluctuating. Indian rupee against dollar was depreciated from Rs.51.81 to Rs.56.03 per US dollar in April to June 2012 i.e, from -2.87 per cent to -2.78 per cent. It remained in the range of Rs.55 per US\$ in the month of July- August 2012 appreciated by 0.97 per cent in July 2012 and depreciated by -0.10 per cent in August 2012. In the months of September – October 2012 the value of Indian rupee against US dollar was appreciated from Rs.54.60 to Rs.53.02 per US dollar from 1.73 per cent to 2.98 per cent. It stood stable at Rs.54 per US\$ between November 2012 – January 2013 depreciated by -3.19 per cent in November 2012, appreciated from 0.23 per cent in December 2012 to 0.61 per cent in January 2013. At the end of the study period Indian rupee stood at Rs.53.77 and depreciated from 1.00 per cent in February 2013 to -1.16 per cent during March 2013. The average of Indian rupee against US dollar stood at Rs.54.40 depreciated by -11.92 per cent.

In the fiscal year 2012-13 Indian rupee against Pound sterling has undergone ups and down in the year. The exchange rate was depreciated from Rs.82.96 to Rs.87.13 per Pound sterling during April 2012 - June 2012 (-2.87 per cent to -0.47 per cent). In the month of July 2012 it stood at Rs.86.51 and appreciated by 0.71 per cent. It remained stable at Rs.87 per Pound sterling from August – September 2012, depreciated from -0.84 per cent to -0.71 per cent. It ranged from Rs.85 – 88 per Pound sterling between October – December 2012 and depreciated from 3.10 per cent to -0.75 per cent in December 2012. From January - March 2013 the value of rupee against Pound sterling was appreciated from Rs.86.88 to Rs.82.01 per pound sterling by 1.63 per cent. The average of Indian rupee against Pound sterling stood at Rs.85.96 depreciated by -11.14 per cent.

In the year 2012-13 the movement of exchange rate of Indian rupee against Euro was depreciated from Rs.68.18 per euro to Rs.70.30 per euro from April – June 2012 by 0.87 per cent. The value of Rupee against Euro remained stable at Rs.68 in July – August 2012 and depreciated from 3 per cent to -0.90 per cent. It depreciated in the month of September 2012 at Rs.70.12 by -1.78 per cent and appreciated by 1.99 per cent in October 2012 stood at Rs.68.75 per cent. From Rs.70.36 per Euro in November 2012 it

depreciated to Rs.72.21 in January 2013 by -0.76 per cent. At the end of the year the exchange rate of Indian rupee against Euro appreciated from Rs.71.87 per euro to Rs.70.59 per Euro in March 2013 by 1.81 per cent. The average of Indian rupee against Euro stood at Rs.70.07 per Euro depreciated by -5.96 per cent.

The movement of Indian rupee against yen in the year 2012-13 has ranged from Rs.63 – 70 per Yen between April – August 2012 and depreciated by -0.56 per cent. In September 2012 it appreciated to Rs.69.90 per yen by 1.11 per cent. It remained stable at Rs.67 in the month of October- November 2012 and depreciated by -0.55 per cent in November 2012. The value of Indian rupee against yen was appreciated between December 2012 – January 2013 from Rs.65.28 to Rs.61.18 per Yen by 6.70 per cent. At the end of the year it remained stable at Rs.57 and appreciated by 0.62 in March 2013. The average of Indian rupee against Yen stood at Rs.65.85 per Yen depreciated by -7.75 per cent.

In the year 2012-13 the average exchange rate of Indian rupee was found depreciated highly against US dollar by -11.92 per cent and lowerly by -5.96 per cent against euro.

#### Monthly average rates of Indian rupee against foreign currencies for the year 2013-14

Table 4.7 presents the appreciation and depreciation for the exchange rate of Indian rupee against select foreign currencies

Table 4.7

Monthly average rates of Indian rupee against foreign currencies for the year 2013-14

(Rs. per unit of foreign currency)

Year/month	N	Monthly average rates of Indian rupee against foreign currencies									
2013-14	US Dollar	%	Pound Sterling	%	Euro	%	Japanese Yen	%			
April	54. 37	(0.05%)	83. 20	(-1. 43%)	70. 76	(-0. 24%)	55. 70	(3. 12%)			
May	55. 01	(-1. 16%)	84. 10	(-1. 07%)	71. 38	(-0. 87%)	54. 51	(2. 18%)			
June	58. 39	(-5. 78%)	90. 47	(-7. 04%)	77. 06	(-7. 37%)	59. 99	(-9. 13%)			
July	59. 77	(-2. 31%)	90. 77	(-0. 33%)	78. 20	(-1. 45%)	60.00	(-0. 02%)			
August	63. 2	(-5. 42%)	97. 86	(7. 81%)	84. 18	(7. 64%)	64. 57	(-7. 07%)			
September	63. 75	(-0. 86%)	101.09	(3. 30%)	85. 11	(-1. 10%)	64. 26	(0. 48%)			
October	61. 61	(3. 47%)	99. 20	(-1. 86%)	84. 10	(1. 20%)	62. 99	(2. 01%)			
November	62. 63	(-1. 63%)	100. 87	(1. 68%)	84. 53	(-1. 63%)	62. 62	(0. 59%)			
December	61. 91	(1. 16%)	101. 39	(-0. 51%)	84. 81	(-0. 33%)	59. 83	(4. 66%)			
January	62. 07	(-0. 25%)	102. 29	(-0. 88%)	84. 59	(0. 26%)	59. 66	(0. 28%)			
February	62. 25	(-0. 28%)	102. 97	(-0. 66%)	84. 96	(-0. 43%)	61. 01	(-2. 21%)			
March	61. 01	(2. 03%)	101.40	(1.55%)	84. 36	(0.71%)	59. 64	(2. 29%)			
Average	60. 49	(-10. 07%)	98. 56	(-2. 29%)	81. 17	(-13. 67%)	60. 39	(9. 02%)			

Source: Handbook of statistics on the Indian Economy, RBI

Table 4.7 shows the movements of monthly average of exchange rate of Indian rupee against the major international currencies- US dollar, Pound sterling, Japanese Yen.

In the year 2013-14 the rupee against dollar stood at Rs.54.37 per US\$ in April 2013 and appreciated by 0.05 per cent. The rupee tends to depreciate during May – September 2012 from Rs.55.01 to Rs.63.75 per US\$ (i.e.) from -1.16 per cent to -0.86 per cent, which accounted for large depreciation of 5 per cent in the months of June and August. There was appreciation in the value of rupee during the months of October 2013 at Rs.61.61 per

US\$ by 3.47 per cent and December 2013 by 1.16 per cent, depreciated by -1.63 per cent in November 2013. It remained stable at Rs.62 per US\$ and depreciated in the month of January- February 2014 from -0.25 per cent to -0.28 per cent and it stood at Rs.61.01 per US\$ appreciated by 2.03 per cent in March 2014. The average of Indian rupee against US dollar stood at Rs.60.49 per US\$ and depreciated by -10.07 per cent.

In the year 2013 -14 the exchange rate of Indian rupee against Pound sterling ranged from Rs.83 – Rs. 90 per pound sterling between April – July 2013 and depreciated by -0.33 per cent in July 2013. The rupee has appreciated from Rs.97.86 to Rs.101.09 per pound sterling in August – September 2013 by 3.30 per cent. It ranged from Rs.99 -102 between October 2013 – February 2014 and depreciated by -1.86 per cent in October 2013 and appreciated by 1.68 per cent in November 2013. The exchange rate has depreciated from - 0.51 per cent to -0.66 per cent in February 2014. It stood at Rs.101.40 in March 2014, appreciated by 1.55 per cent. The average of Indian rupee against Pound sterling stood at Rs.98.56 per Pound sterling depreciated by 2.29 per cent.

The movement of Indian rupee against Euro has been depreciated in the year 2013-14. It ranged from Rs.70-78 per euro between April – July 2013 and depreciated by -1.45 per cent in July 2013. It stood at Rs.84.18 per euro in August 2013 appreciated by 7.64 per cent and it depreciated by -1.1 per cent in September 2013. It remained stable at Rs. 84 per euro from October 2013 to March 2014. The rupee have appreciated in October 2013 by 1.20 per cent and it depreciated in November 2013 by -1.63 per cent, in December 2013 by -0.33 per cent and in February 2014 by 0.43 per cent and appreciated in the months of January by 0.26 per cent and in March 2014 by 0.71 per cent. The average of Indian rupee against Euro stood at Rs.81.17 per US\$ and depreciated by -13.67 per cent.

In the year 2013-14 the exchange rate of Indian rupee against Yen has ranged from Rs.55- 60 per Yen between April –July 2013. It appreciated from 3.12 per cent to 2.18 per cent from April – May 2013, depreciated from -9.13 per cent to -0.02 per cent in June –July 2013. It remained stable at Rs.64 per Yen during August - September 2013 appreciated from 7.07 per cent to 0.48 per cent in September 2013. It also remained stable at Rs.62 per yen between October- November 2013, appreciated by 0.59 per cent. It stood stable at Rs.59 per yen between December 2013 - January 2014 and has appreciated by

0.28 per cent. At the end of the year it depreciated by -2.21 per cent in February 2014 and stood at Rs.59.64 per yen in March 2014, appreciated by 2.29 per cent. The average of Indian rupee against Yen stood at Rs.60.39 per Yen appreciated by 9.02 per cent.

In the year 2013-14 the average exchange rate of Indian rupee was found depreciated higherly against Euro by -13.67 per cent and lowerly against Pound sterling by -2.29 per cent, appreciated in Yen by 9.02 per cent

## Monthly average rates of Indian rupee against foreign currencies for the year 2014-15

The appreciation and depreciation for the exchange rate of Indian rupee against select foreign currencies are given in table 4.8

Table 4.8

Monthly average rates of Indian rupee against foreign currencies for the year 2014-15

(Rs. per unit of foreign currency)

Year/month	N	Monthly av	erage rates	of Indian r	upee ag	ainst foreig	n currencies	
2014-15	US Dollar	%	Pound Sterling	%	Euro	%	Japanese Yen	%
April	60. 35	(1.09%)	101.07	(0. 32%)	83. 34	(1. 22%)	58. 85	(1.34%)
May	59. 30	(1.77%)	99. 93	(1. 14%)	81. 48	(2. 28%)	58. 27	(0.99%)
June	59.73	(-0. 72%)	100. 98	(-1.03%)	81. 24	(0. 29%)	58. 53	(-0. 44%)
July	60.05	(-0. 53%)	102.62	(-1. 59%)	81. 39	(-0. 18%)	59.06	(-0.89%)
August	60. 89	(-1. 38%)	101.80	(0.80%)	81. 14	(0.30%)	59. 16	(-0. 16%)
September	60. 86	(0.04%)	99. 31	(2.50%)	78. 60	(3. 23%)	56. 76	(4. 22%)
October	61.34	(-0. 78%)	98. 71	(0.60%)	77. 91	(0.88%)	56. 86	(-0. 17%)
November	61.70	(-0.58%)	97. 28	(1.46%)	76. 98	(1.20%)	53. 04	(7. 20%)
December	62.75	(-1. 67%)	98. 11	(-0. 85%)	77. 35	(-0. 48%)	52. 59	(0.85%)
January	62. 22	(0. 85%)	94. 48	(3. 84%)	72. 68	(6.42%)	52. 52	(0.13%)
February	62. 03	(0.30%)	95. 00	(-0.55%)	70. 46	(3. 15%)	52. 32	(0.38%)
March	62. 44	(-0.66%)	93. 52	(1.58%)	67. 63	(4. 18%)	51. 89	(0.82%)
Average	61. 13	(-1.04%)	98. 56	(-2. 29%)	77. 51	(4.71%)	55. 82	(8. 20%)

Table 4.8 depicts the movements of monthly average of exchange rate of Indian rupee against the major international currencies- US dollar, Pound sterling, Japanese Yen.

In the year 2014-15 the value of rupee appreciated at the beginning of the year during April - May 2014 from Rs.60.35 to Rs.59.30 per US\$ appreciated by 1.77 per cent and it marked depreciation in June by -0.72 per cent. It remained stable at Rs.60 per US\$ between July- September 2014, it depreciated from -0.53 per cent to -1.38 per cent in August 2014 and appreciated by 0.04 percent in September 2014. It stood at Rs.61 per US\$ from October-November 2014 depreciated by -0.58 per cent. It remained steady at Rs.62 during December 2014 to March 2015. There was appreciation in the value of rupee from January – February 2015 by 0.30 percent and depreciated by -0.66 per cent in March 2015. The average of Indian rupee against US\$ stood at Rs.61.13 per US\$ depreciated by -1.04 per cent.

The movement of Indian rupee against pound sterling during the year 2014-15 has showed fluctuating trend. It stood at Rs.101.07 per Pound sterling during April 2014 and appreciated by 0.32 per cent. In May 2014 the value of rupee against Pound sterling has depreciated from Rs.99 per Pound sterling to Rs.102.62 per Pound sterling in July 2014. It depreciated by -1.59 per cent. The value of rupee against pound sterling appreciated from Rs.101.80 per pounds to Rs.97.28 per pounds sterling in November 2014 and appreciated from 0.80 per cent to 1.46 per cent. It depreciated in the next month by -0.85 per cent. The Rupee against Pound sterling has been fluctuating at the end of the year 2014-15 it appreciated by 3.84 per cent in January 2015 and depreciated by -0.55 per cent in February 2015, it appreciated in March 2015 at Rs.93.52 per Pound sterling by 1.58 per cent lower than the previous month. The average of Indian rupee against pound sterling stood at Rs.98.56 per pound sterling depreciated by -2.29 per cent.

Due to weak economic outlook in the Europe economy and Japan the value of Indian Rupee against Euro and Yen have appreciated majorly after September 2014. It stood at Rs 83.34 in April 2014. The value of rupee against euro remained stable at Rs.81 per euro between May –August 2014 and it appreciated by 2.28 per cent in May 2014, 0.29 per cent in June 2014, 0.30 per cent in August 2014 except in July 2014, where it depreciated by (-0.18) per cent. After September 2014 the value of rupee against euro has been appreciated, from Rs.78.60 per euro in September 2014 it appreciated to

Rs.76.98 per euro in October 2014 by 1.20. It stood at Rs.77.35 depreciated by -0.48 per cent in November 2014. It appreciated from Rs.72.68 per euro to Rs.67.63 between January – March 2015 it appreciated from 6.42 per cent to 4.18 per cent which is lower than the previous month. The average of Indian rupee against euro stood at Rs.77.51 per euro appreciated by 4.71 per cent.

In the fiscal year 2014-15 the value of Rupee against Yen remained stable at Rs.58 in the beginning period from April –June 2014 appreciated by 1.34 per cent in April 2014, 0.99 per cent in May 2014 and depreciated by -0.44 per cent in June 2014. It remained stable with the value of Rs.59 between July – August 2014 and depreciated from (-0.89) per cent in July 2014 to (-0.16) per cent in August 2014. From Rs.56.76 per yen in September 2014 it has been appreciated to Rs.53.04 per yen in November 2014. It appreciated by 4.22 per cent in September 2014, 7.20 per cent in November 2014 and depreciated by -0.17 per cent in October 2014. It remained stable between December 2014 – February 2015 by Rs.52 per yen and appreciated by 0.38 per cent. The value of Indian rupee against Yen stood at Rs.51.89 per Yen in March 2015 and appreciated by 0.82 per cent. The average of Indian rupee against Yen stood at Rs.55.82 per yen appreciated by 8.20 per cent

In the year 2014-15 the average exchange rate of Indian rupee was found depreciated higherly against Pound sterling by -2.29 per cent, and lowerly against US dollar by -1.04 per cent and appreciated against Yen higherly by 8.20 per cent and lowerly by euro by 4.71 per cent.

## Monthly average rates of Indian rupee against foreign currencies for the year 2015 -16

Table 4.9 portrays the appreciation and depreciation for the exchange rate of Indian rupee against select foreign currencies.

Table 4.9

Monthly average rates of Indian rupee against foreign currencies for the year 2015 - 16

(Rs. per unit of foreign currency)

Year/month	M	onthly av	erage rate	s of Indiar	rupee ag	gainst fore	ign currenc	cies
2015-16	US Dollar	0/0	Pound Sterling	%	Euro	%	Japanese Yen	%
April	62.75	(-0.49%)	93.90	(-0.40%)	67.79	(-0.23%)	52.53	(-1.21%)
May	63.80	(-1.65%)	98.82	(-4.97%)	71.21	(-4.80%)	52.82	(-0.54%)
June	63.86	(-0.09%)	99.36	(-0.54%)	71.58	(-0.51%)	51.64	(2.28%)
July	63.63	(0.36%)	99.07	(0.29%)	70.02	(-2.22%)	51.61	(0.05%)
August	65.07	(-2.21%)	101.48	(-2.37%)	72.51	(-3.43%)	52.86	(-2.36%)
September	66.21	(-1.72%)	101.60	(-0.11%)	74.39	(-2.52%)	55.14	(-4.13%)
October	65.05	(1.78%)	99.75	(1.85%)	73.06	(1.82%)	54.19	(1.75%)
November	66.12	(-1.61%)	100.61	(-0.85%)	71.09	(2.77%)	54.00	(0.35%)
December	66.59	(-0.71%)	99.93	(0.68%)	72.45	(-1.87%)	54.67	(-1.22%)
January	67.25	(-0.98%)	97.11	(2.90%)	73.07	(-0.85%)	56.86	(-3.85%)
February	68.23	(-1.43%)	97.65	(-0.55%)	75.76	(-3.55%)	59.40	(-4.27%)
March	67.02	(1.81%)	95.37	(2.39%)	74.48	(1.72%)	59.33	(0.11%)
Average	65.46	(-6.61%)	98.72	(-0.15%)	72.28	(7.23%)	54.58	(2.25%)

Source: Handbook of statistics on the Indian Economy, RBI.

Table 4.9 reveals the movements of monthly average of exchange rate of Indian rupee against the major international currencies- US dollar, Pound sterling, Japanese Yen.

In the fiscal year 2015-16 the rupee against dollar was depreciated from Rs.62.75 per US\$ to Rs.63.86 per US\$ in April – June 2015 (-0.49 per cent to - 0.09 per cent). It stood at Rs.63.63 per US\$ in July 2015 appreciated by 0.36 per cent. The value of rupee ranged from Rs.65-68 per US\$ from August 2015 - February2016 and it resulted in continuous depreciation from -2.21 per cent to -1.72 per cent in September 2015, -1.61 per cent in November 2015, -0.71 per cent in December 2015, -0.98 per cent in January 2016, -1.43 per cent in February 2016 except in the month of October 2015 where it appreciated by 1.78 per cent. At the end of the year it stood at Rs.67.02 appreciated by 1.81 per cent during March 2016. The average of Indian rupee against US dollar stood at Rs.65.46 per US\$ depreciated by -6.61 per cent.

The movement of Indian rupee against Pound sterling has resulted in fluctuating trend during the year 2015-16. It ranged from Rs.93 – 101 between April - September 2015. Rupee has depreciated by -0.40 per cent in April 2015, - 4.97 per cent in May 2015, - 0.54 per cent in June 2015, -2.37 per cent in August 2015, - 0.11 per cent in September 2015 except in July 2015 it has been appreciated by 0.29 per cent. It stood at Rs.99.75 per pound sterling appreciated by 1.85 per cent in October 2015 and depreciated to - 0.85 per cent in November 2015, appreciated by 0.68 per cent in December 2015. It remained stable at Rs.97 per pound sterling between January – February 2016 and appreciated by 2.90 per cent in January 2015 and depreciated by -0.55 per cent in February 2016. It stood at Rs.95.37 per Pound sterling in March 2016, appreciated by 2.39 per cent. The average of Indian rupee against Pound sterling stood at Rs.98.72 per Pound sterling depreciated by -0.15 per cent.

In the year 2015-16 the monthly average of exchange rate of Indian rupee against Euro has been depreciated in the beginning of the year. It stood at Rs.67.79 per euro in April 2015 and depreciated by -0.23 per cent. It remained stable at Rs.71 per euro between May – June 2015 and depreciated from -4.80 per cent to -0.51 per cent. It ranged from Rs.70 to Rs.75 per euro between July 2015 – February 2016 and the rupee depreciated from -2.22 per cent in July 2015 to -2.52 per cent in September 2015. Rupee appreciated against Euro to 1.82 per cent in October 2015 and 2.77 per cent in November 2015. From December 2015 to February 2016 the value of Rupee depreciated from -1.87 per cent to -3.55 per cent. It stood at Rs.74.48 in March 2016 appreciated by 1.72 per cent. The average of Indian rupee against Euro stood at Rs.72.28 per euro appreciated by 7.23 per cent.

The movement of Indian rupee against Yen has remained stable in the year 2015-16. It stood at Rs.52 per yen in the beginning of the year from April-May 2015 and depreciated by -1.21 per cent in April 2015, -0.54 per cent in May 2015. The Rupee against Yen was appreciated in the months of June – July 2015 by 2.28 per cent to 0.05 per cent. It ranged from Rs.52 - 56 per yen between August 2015 –January 2016 and depreciated by -2.36 percent in August 2015, -4.13 per cent in September 2015, -1.22 per cent in December 2015, -3.85 per cent in January 2015 except in October 2015 and November 2015 where it appreciated by 1.75 per cent and 0.35 per cent. It remained stable

at Rs.59 per yen from February –March 2016 appreciated by 0.11 per cent. The average of Indian rupee against Yen stood at Rs.54.58 per yen appreciated by 2.25 per cent.

In the year 2015-16 Indian rupee was found depreciated higherly against US dollar by -6.61 per cent and lowerly by Pound sterling at -0.15 per cent and appreciated higherly against euro by 7.23 per cent and lowerly against Yen by 2.25 per cent

## Monthly average rates of Indian rupee against foreign currencies for the year 2016-17

Table 4.10 presents the appreciation and depreciation for the exchange rate of Indian rupee against foreign currencies

Table 4.10

Monthly average rates of Indian rupee against foreign currencies for the year 2016-17

(Rs. per unit of foreign currency)

Year/month	Moveme	nt of montl	nly averag	ge rates of 1	Indian r	upee again	st foreign	currencies
2016-17	US Dollar	%	Pound Sterling	%	Euro	%	Japanese Yen	%
April	66.46	(0.84%)	95.27	(0.10%)	75.40	(-1.22%)	60.69	(-2.24%)
May	66.90	(-0.65%)	97.24	(-2.03%)	75.69	(-0.38%)	61.48	(-1.28%)
June	67.29	(-0.58%)	95.55	(1.76%)	75.57	(0.16%)	63.88	(-3.75%)
July	67.20	(0.13%)	88.51	(7.95%)	74.35	(1.64%)	64.49	(-0.95%)
August	66.93	(0.40%)	87.79	(0.82%)	75.00	(-0.87%)	66.06	(-2.37%)
September	66.73	(0.29%)	87.71	(0.09%)	74.82	(0.24%)	65.48	(0.88%)
October	66.74	(-0.01%)	82.51	(6.30%)	73.60	(1.65%)	64.37	(1.72%)
November	67.62	(-1.30%)	83.99	(-1.76%)	73.10	(0.68%)	62.57	(2.87%)
December	67.90	(-0.41%)	84.73	(-0.88%)	71.59	(2.10%)	58.53	(6.90%)
January	68.08	(-0.26%)	83.86	(1.03%)	72.32	(-1.00%)	59.18	(-1.09%)
February	67.07	(1.50%)	83.81	(0.06%)	71.46	(1.20%)	59.34	(-0.27%)
March	65.87	(1.82%)	81.24	(3.16%)	70.34	(1.59%)	58.29	(1.80%)
Average	67.06	(-2.38%)	87.68	(12.58%)	73.60	(-1.79%)	62.03	(-11.99%)

Table 4.10 portrays the movements of monthly average of exchange rate of Indian rupee against the major international currencies- US dollar, Pound sterling, Japanese Yen, Euro.

At the end of the study period during 2016-17 the value of rupee stood at Rs.66.46 per US\$ in April 2016. It depreciated for the month May - June 2016 from Rs.66.90 to Rs.67.29 per US\$ (-0.65 per cent to -0.58 per cent). The Rupee against dollar was appreciated during July- September 2016 from Rs.67.20 per US\$ to Rs.66.73 per US\$, i.e from 0.13 per cent to 0.29 per cent and later it depreciated for the next months during October 2016 - January 2017 from Rs.66.74 per US\$ to Rs.68.08 per US\$ from -0.01 per cent to -0.26 per cent. At the end of the year the rupee has moved from Rs.67.07 to Rs.65.87 in March 2017, appreciated from 1.50 per cent to 1.82 per cent. The average of Indian rupee against US dollar stood at Rs.67.06 per US dollar depreciated by -2.38 per cent.

The movement of Indian rupee against Pound sterling in the year 2016-17 stood at Rs.95.27 per pound sterling, appreciated by 0.10 per cent. It has depreciated in May 2016 by -2.03 per cent. The value of Indian rupee has appreciated from Rs.95.55 to Rs.88.51 per pound sterling during June - July 2016, appreciated (1.76 per cent to 7.95 per cent) in July 2016. It remained stable at Rs.87 per between August — September 2016 and appreciated from 0.82 per cent to 0.09 per cent. The value of rupee against pound sterling has ranged from Rs. 82 — 84 per pounds during October - December 2016, depreciated from 6.30 per cent to -0.88 per cent in December 2016. It remained stable at Rs.83 per pounds sterling from January — February 2017 appreciated from 1.03 per cent to 0.06 per cent. It stood at Rs.81.24 per pound sterling in March 2017 and appreciated by 3.16 per cent. The average of Indian rupee against pound sterling stood at Rs.87.68 per pound sterling appreciated by 12.58 per cent.

In the year 2016-17 the average exchange rate of Indian rupee against Euro stood stable at Rs.75 per Euro during April – June 2016 and appreciated from -1.22 per cent to 0.16 per cent. From Rs.74.35 per Euro it depreciated to Rs.75 per Euro during July – August 2016 from 1.64 per cent to -0.87 per cent. The value of rupee against euro was appreciated by 0.24 per cent in September 2016. It remained stable at Rs.73 per euro during October – November 2016, (1.65 per cent to 2.10 per cent) in December 2016.

From Rs.72.32 per euro it has been appreciated to Rs.71.46 per euro during January – February 2017 from -1.00 per cent to 1.20 per cent. It stood at Rs.70.34 per euro and appreciated by 1.59 per cent in March 2017. The average of Indian rupee against Euro stood at Rs.73.60 per Euro and depreciated by -1.79 per cent.

The movement of exchange rate of Indian rupee against Yen has depreciated from Rs.60.69 per yen to Rs.66.06 per yen during April – August 2016 i.e, from -2.24 per cent -2.37 per cent. In the middle of the year in the month of September 2016 from Rs.65.48 it has appreciated to Rs.62.57 per yen in November 2016 (0.88 per cent to 2.87 per cent) respectively. It stood at Rs.58.53 per yen in December 2016 appreciated by 6.90 per cent. It remained stable at Rs.59 per yen during January – February 2017 and depreciated from -1.09 per cent to -0.27 per cent in February 2016. It stood at Rs.58.29 per Yen and appreciated by 1.80 per cent in March 2017. The average of Indian rupee against Yen stood at Rs.62.03 per Yen and depreciated by -11.99 per cent.

In the year 2016-17 the average exchange rate of Indian rupee was found depreciated higherly against Yen by -11.99 per cent where as it depreciated lowerly against euro by -1.79 per cent and appreciated by Pound sterling by 12.58 per cent.

## 4.3 CONCLUSION

Based on the average exchange rate of Indian rupee, it could be concluded how Indian rupee has been appreciated and depreciated against the select foreign currencies. Indian rupee has appreciated during 2007-08 and after 2008 due to global financial crisis it has impacted the widened trade deficit and increase in imports in the Indian economy. Increase in imports has created demand for the foreign currency. So this has made the rupee depreciated against the foreign currencies. After the year 2009-10 Indian rupee has depreciated mostly against the currencies. Despite RBI intervention in the foreign exchange market, there has been an existence of volatility in the currency. Taking a cue of movements of exchange rate, among the major international currencies, it is understood that Indian rupee has strongly depreciated against US dollar during the study period.