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Seasonality in Participatory Notes Investments in India: A Cautionary Trend

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Abstract:
In the recent years, the issue on ballooning investments by foreign investors into Indian markets through non-normal routes has been discussed but with less result-orientation. The issue on governance and need for reforms on participatory notes (PNs) has been raised by financial markets and also has been a point of discussion among practitioners and policy makers. The support from financial markets have been wary and negative to any discussion on participatory notes. Thus, any decisions from the government and the regulatory bodies have been casted away for further reconsiderations. The recently published report by Special investigation team (SIT) on PNs cautioned the regulators on misuse of the investments. According to the report, not following stricter know your client (KYC) norms in case of PNs might have led to rapid growth in investments by "unknown beneficial owners" which itself is a cautionary trend. This growth in investments by foreign investors through registered Foreign Institutional Investors (FIIs) is believed to follow systematic patterns but has not be dealt with. Thus, considering this backdrop, study was conducted to find out, if there existed any patterns in the investments cycle of foreign investors. The monthly data on total value of investments in equities, debt instruments and derivatives (including or excluding) in the form of PNs were collected for the period 2003-2015. The ratio-to-moving average method was considered in the study to develop seasonal index. From the analysis, we conclude that, significant seasonal patterns exists in the investments done in the form of PNs by the foreign investors. June and September months were found to have on average, the lowest and highest investments respectively for the study period. The pattern found appears not to be random in nature, and results obtained point towards presence of seasonality in investments.

Keywords: *Participatory Notes, Seasonality, FIIs, Investments, SEBI,*

1. Introduction

The perplexing problem faced today by financial markets and regulators, is in answering the question on, whether Indian financial markets are in dire need of investments? Or foreign investments in need for right markets mainly Indian financial markets. In the recent years, the issue on governance and need for reforms on participatory notes has been raised in academic circles. The response of the regulators in this matter seems though imminent and action oriented, the support from financial markets have been wary and negative. Government in this regard seems to have played the role of sentimentalist by arresting the negativity in the markets by its announcement of making no change to the regulations and reforms by going to its earlier stance of "no change" to stop the markets from becoming selling frenzy. Is it not too late for bold reforms and corrective actions?

In general, participatory notes (PN) are derivative instruments which are issued by SEBI registered Foreign Institutional Investors (FIIs) or its sub-accounts or one of its associates, against underlying Indian securities which may be equities, debt instruments, derivatives or even index. The underlying security can also be a portfolio with Indian securities forming a smaller or larger proportion. But, recently only in year 2014, the Indian financial market regulator, Securities and Exchange Board of India (SEBI) clearly categorized and defined PNs under the category "offshore Derivative Instrument (ODIs)" under section 2(1)(j) of the new regulation for Foreign Portfolio Investors. Surprisingly, this issue has been addressed only in the recent year considering the quantity of investments invested into the Indian markets through this route, compared to just a decade ago as observed in Figure 1 and Figure 2 respectively. As observed in Figure 1, the assets under the custody of FIIs (AUC) has increased by more than 23 times as on June 2015 when compared to the assets under custody as on September, 2003. This though helps explain the Indian success story or bull run in Indian stock markets compared to its bourses (the impact of banking and financial crisis of 2008 had a negative impact on the investments but we see recovery from mid 2009), but, the diaspora with respect to PNs can only be understood by looking at figure 2.

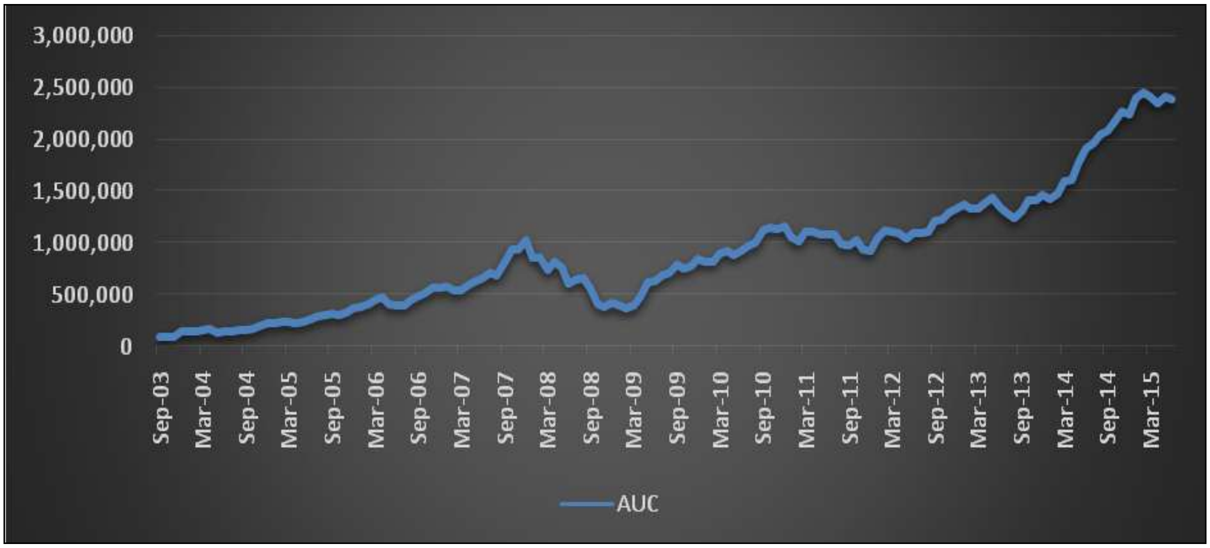

Figure 1: Assets under the custody (AUC) of FIIs as per the records filed by custodians
Source: www. sebi.gov.in (compiled by author)

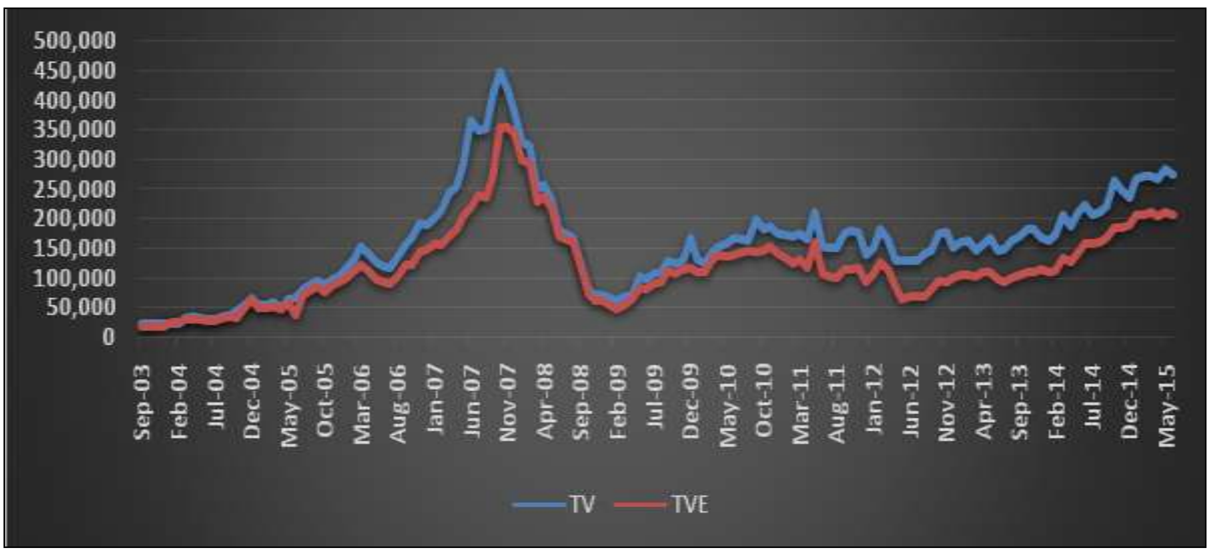

Figure 2: Total Value of PNs on equity, debt and derivatives (TV) and excluding derivatives (TVE)
Source: www.sebi.gov.in (compiled by author)

As observed in Figure 2, the total value of PNs on equity, debt and debentures (TV) has been compared with the total value of the PNs on equity and debt excluding debentures (TVE). The growth in TV and TVE as on June 2015, is more than 11 times its total value in September, 2003. The total value of PNs investments in equity, debt and derivatives surpassed 2,75,000 crores in June, 2015 from the total value of around 23,000 crores in September, 2003. We can also observe that, the total value of PNs investments in derivatives has been steadily widening from its 2008 levels. The total value of PNs on derivatives can be observed to be around 5,198 crores in September, 2003 and is now at its all time high of 66,000 crores. In figure 3, the TV (% of AUC) and TVE (% of AUC) is plotted for the years 2003 to 2015. As observed, the percentage of total value of investments by PNs with respect to assets under custody of FIIs has remained in the band of 10 percent to 11 percent respectively from year 2008 onwards. But, what seems to be a concern for the investors in the recent years is the underlying policies which govern the investments especially in case of PNs.

Figure 3: The percentage of total value invested by PNs as a percentage of AUC
Source: www. sebi.gov.in (compiled by author)

1.1. Policy Governing Participatory Notes

Participatory notes as defined under the new regulations of Foreign Portfolio investors, is an investment made against the securities owned by the FIIs issuing PNs without actually owning them. In specific, PNs or ODIs are issued by selected foreign portfolio investors against securities held by it that are listed or proposed to be listed on any recognized stock exchange in India. Thus, the PNs would garner higher returns if the investments done in the underlying securities owned by the FIIs are profitable. Thus, one can relate participatory notes functioning to a fund of fund scheme which forfeits the freedom of choosing investments to other fund. According to many analysts, the sudden spurt in interest of foreign investors in PNs can be attributed to government restrictions with respect to disclosure norms (such as meeting strict eligibility criteria's for registration as FII) and investment limit. Thus, by choosing to invest as PNs, the foreign investors would be relieved of the hassles and restrictions and can participate in the Indian success story by staying as anonymous investor. So, the point fearlessly argued among investors is with respect to the discrimination by Indian regulators and government in disclosure norms (strict KYC norms) with respect to Indian investors and foreign investors investing through participatory notes. Though existing KYC norms have been stringently applied in case of Indian investors and foreign investors (who want to invest directly into the Indian securities) to ensure transparency in the transactions, the same norms seems, not applicable for PNs investors.

Thus, in case of Indian context, the participatory notes have the benefit with respect to following aspects namely;

1. Lesser stringent disclosure norms which ensures anonymity with respect to transactions and source and the money and use of money.
2. Lower financing and transactions costs as they are indirectly involved in the process and do not go through the hassles of regulatory process.
3. Choice of investing for PNs is not only in underlying equity based securities, but also into debt based securities, derivatives and even indexes.
4. The PNs can also be considered as hedging tools by the foreign investors who can also be registered FIIs and have taken a long positions in Indian securities. But, setting an opposite position as a PNs, one can limit the losses and stay hedged for more than three months which is normally the period offered for the derivatives at National stock exchange (NSE).

1.2. Policy Reforms Undertaken

As mentioned before, participatory notes are issued and traded by FIIs overseas and do not directly come under the jurisdiction of Indian regulators. Thus, Indian regulations do not apply directly, but steps have been taken indirectly to regulate the FIIs who issue these PNs instead and are given permission to invest in the Indian securities. Thus, Indian regulators have undertaken the following policy measures in the following chronological order.

1. In 2001, SEBI issued a circular in October, which would require registered FIIs to report information on investments by PNs on a monthly basis, which would comprise of name, constitution of PNs, their location, nature of underlying securities etc. But, there were no strict regulations until 2003.

2. In 2004, the regulation 15(A) of the SEBI regulations, 1995 was inserted with the objective of tightening regulations in cased of PNs. According to the regulation, PNs can be issued by only those FIIs/entities who are at least regulated by relevant regulatory authority in the countries of their incorporation and are subject to compliance of "know your client" norms. According to the regulation, even the transfer of the PNs has to be done to a regulated entity. Importantly, the registered FIIs should report the issued and outstanding PNs to SEBI in the prescribed format which is also reported in www.sebi.gov.in on a monthly basis.

3. Under regulation 20(A) of the SEBI (FII) regulations, the regulator can ask for any information on investments done to FIIs as and when required.
4. FIIs cannot issue PNs to Non-resident Indians (NRIs) and those issuing PNs should ensure giving an undertaking to the effect.
5. According to SEBI, Qualified institutional investors should not issue PNs
6. In the recent circular dated 7th January, 2014, PNs or ODIs are now regulated under SEBI Foreign Portfolio Investors Regulations 2014.
7. According to the regulations dated 24th November, 2014, SEBI has listed the following regulations with immediate effect
   a. The Non-institutional foreign investors (category III FPIs) cannot issue ODIs
   b. The investment limit applicable to foreign portfolio investors would take into account their exposure to ODIs also aggregately.
   c. In order to ensure integrity of the financial system, it was also decided that PNs will be issued to only foreign investors who are otherwise eligible as FPIs and belong to FATF compliant countries. The Financial Action Task Force (FATF) is an inter-governmental body established in 1989 by the Ministers of its Member jurisdictions. The objectives of the FATF are to set standards and promote effective implementation of legal, regulatory and operational measures for combating money laundering, terrorist financing and other related threats to the integrity of the international financial system. The FATF has developed a series ofRecommendations that are recognised as the international standard for combating of money laundering and the financing of terrorism and proliferation of weapons of mass destruction. They form the basis for a co-ordinated response to these threats to the integrity of the financial system and helps ensure a level playing field. First issued in 1990, the FATF Recommendations were revised in 1996, 2001, and 2003 and most recently in 2012 to ensure that they remain up to date and relevant, and they are intended to be of universal application. To achieve global implementation of the FATF Recommendations, the FATF relies on a strong global network of FATF-Style Regional Bodies (FSRBs), in addition to its own 36 members. The eight FSRBs have an essential role in promoting the effective implementation of the FATF Recommendations by their membership and in providing expertise and input in FATF policy-making. Over 180 jurisdictions around the world have committed to the FATF recommendations through the global network of FSRBs and FATF memberships. (Source: www.fatf-gafi.org). Similar to FATF, other organizations which also aim in addressing money laundering are

1. APG: Asia/Pacific Group on Money Laundering
2. CFATF: Caribbean Financial Action Task Force
3. EAG: Eurasian Group
4. ESAAMLG: Eastern and Southern Africa Anti-Money Laundering Group
5. GAFISUD: Financial Action Task Force on Money Laundering in South America
6. GIABA: Inter Governmental Action Group against Money Laundering in West Africa
7. MENAFATF: Middle East and North Africa Financial Action Task Force
8. MONEYVAL: Council of Europe Committee of Experts on the Evaluation of Anti-Money Laundering Measures and the Financing of Terrorism

1.3. Recent Concerns Highlighted by SIT on Black Money with respect to PNs

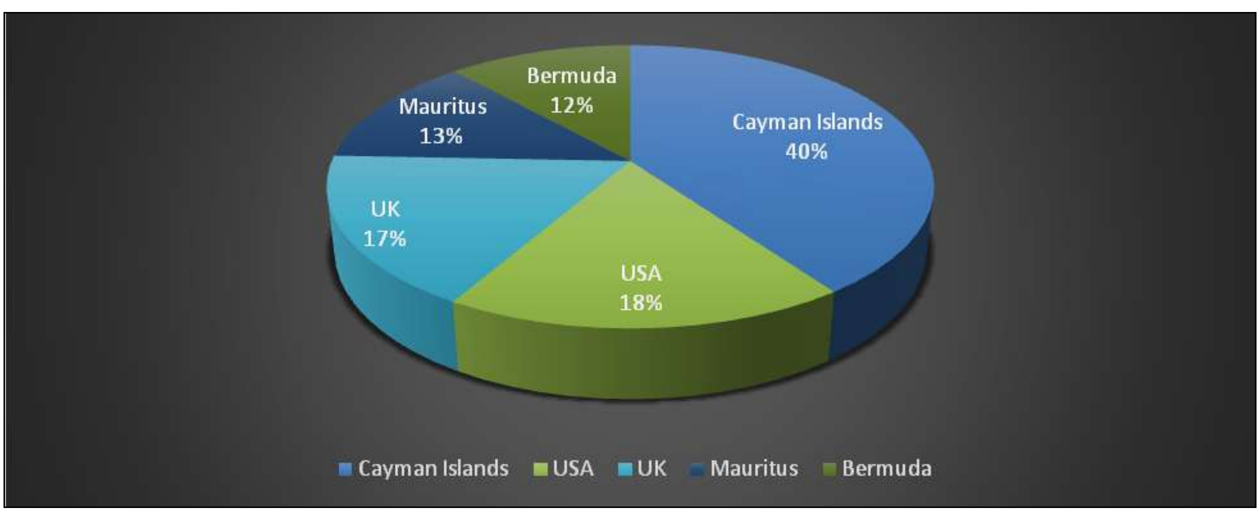

Figure 4: Top five locations of end beneficial owner of ODIs
Source: Press Information bureau, Government of India (24th July, 2015)
(http://pib.nic.in/newsite/PrintRelease.aspx?relid=123677)

The Special Investigation Team (SIT) on Black Money mentioned briefed in its Third SIT Report (Reference p. 79-81 of Third Report, as given in PIB release dated 24 July 2015) that, “PNs can be unaccounted wealth camouflaged under the guise of foreign investment”. The report appreciated the effort of SEBI in taking appropriate steps to ensure that PNs are not used as black money or

terrorist funding. The report also mentions that the details sort by SEBI, do not capture the ultimate beneficial owner of these instruments. As per the report, "SEBI has informed that the outstanding value of Offshore Derivative Instruments (ODIs) at the end of February 2015 stood at Rs. 2.715 lakh crores. SEBI has further informed that the top five locations of end Beneficial owner of ODIs were Cayman Islands, USA, UK, Mauritius and Bermuda contributing to 31.31%, 14.20 %, 13.49 %, 9.91 % and 9.10 % respectively of total ODIs outstanding.
The report goes on to mention that, the major chunk of outstanding ODIs invested in India are from Cayman Islands i.e. 31.31 %. This translates to roughly Rs. 85,006 Crores. Considering its population, it seems doubtful to have invested Rs. 85,000 crores, which raises the red flag.
The following three main recommendations were made in the report by SIT which are as follows;

1. It is clear that obtaining information on "beneficial ownership" of P notes is of crucial importance to prevent their misuse. SEBI needs to examine the issue raised above and come up with regulations where the "final beneficial owner" of P notes/ODIs are known.
2. The information of "beneficial owner" with SEBI should be in form of individual whose KYC information is known to SEBI. In no case should the KYC information end with name of a company. In case a company is the holder of P notes/ODIs, SEBI should have information of its promoters/directors who exercise effective control over the company. In case of Companies/Trusts represented by service providers like lawyers/accountants SEBI should have information on the real owners/effective controllers of those Companies/Trusts. not end with name
3. P notes are transferable in nature. This makes tracing the "true beneficial owner" of P notes even more difficult since layering of transactions can be made so complex so as to make it impossible to track the "true beneficial owner". SEBI needs to examine if this provision of allowing transferring of P notes is in any way beneficial for easing foreign investment. Any investor wanting to invest through P notes can always invest afresh through a Foreign Portfolio Investor (FPI) instead of buying from a P note holder. (Source: PIB Release dated 24 July 2015)

2. Problem Statement

We can observe that, there exists more doubts and concerns among regulators on the misuse of participatory notes and efforts are underway not swiftly to take corrective actions in this regard. Most studies have looked into PNs investments from an administrative and regulatory framework, but, none have looked into the patterns in investments over the years. Thus, the need was felt to study, if there existed any seasonal patterns in the investments done by investors in PNs considering the data available from 2003-2015. If there exists patterns, the analysis can be help the regulators to take more specific actions which is the need of the hour.

3. Objectives of the Study

1. To examine if there is any seasonal patterns in the investments done be foreign investors in the form of PNs
2. To suggest measures which can be considered by SEBI in regulating misuse of PNs in financial markets.

4. Hypothesis of the Study

- H_o: There exists no significant patterns in PNs investments in Indian stock markets.
- H_1: There exists significant patterns in PNs investments in Indian stock markets.

5. Data Collection and Data Methodology

5.1. Data Collection

For the study, the data on the total value of PNs on equity, debt and debentures (TV), the total value of the PNs on equity and debt excluding debentures (TVE), the assets under custody of FIIs (AUC), TV as a percentage of AUC (TV%) and TVE as a percentage of AUC (TVE%) was collected on a monthly basis for the period September, 2003- June, 2015. The data for the study was collected from http://www.sebi.gov.in/cms/sebi_data/commondocs/ODI2003_h.html.

5.2. Data Methodology

We know that, in time series analysis, besides secular trend and cyclical variation, we would also look into seasonal variations. Seasonal variation is defined as repetitive and predictable movement around the trend line in one year or less. Thus, in order to identify seasonal variations, for the study, monthly data was considered. In order to measure seasonal variations, ratio-to-moving average method was followed. This technique provides an index that describes the degree of seasonal variations. The index is based on a mean of 100, with the degree of seasonality measured by variations away from the base (R.Levin and D.Rubin (1998)).
The steps followed to compute seasonal index is given as follows;

1. Calculate 2-monthly moving total for the time series considered from 2003 to 2015
2. The 2-monthly moving average is calculated by dividing each of the 2-monthly totals by 2.
3. The 2-monthly moving average is centered
4. The percentage of the actual value to the centered moving average for each month in the time series is calculated.
5. The actual to moving average percentages calculated in step-4 are arranged by months. Thus, modified mean for each month is calculated by discarding the highest and lowest values for each month and averaging the remaining values. (Thus,

eliminating the highest and lowest values, we can reduce the extreme cyclical and irregular variations and further smoothen the cyclical and irregular components)

6. Since the index has to be based on a mean of 100, with degree of seasonality measured by variations away from the mean, each month is multiplied by an adjusting constant which is obtained by dividing the desired sum of the indices by actual sum.

Thus, seasonal index would help in identifying seasonal variations in the time series.

5.3 Data Analysis and Interpretation

In order to find out, whether there is presence of any repetitive and predictable movements in the investments done in the form of participatory notes around the trend on a monthly basis for the period 2003 to 2015, *ratio-to-moving average* method was followed. The method was followed for TV and TVE time series. As mentioned in the methodology, monthly time series was considered for the study. After following the steps from 1 to 4, the trimmed average (modified means) for each months were calculated and arranged as shown in Table-1 and Table-2 respectively for TV and TVE respectively.

	jan	feb	mar	apr	may	jun	jul	aug	sep	oct	nov	dec
2003										102.4819	103.5716	107.696
2004	99.52062	100.3794	104.771			96.6626	101.605		101.7423			
2005	89.55879	99.9009	103.674	92.27378	112.0957	101.9715		103.868	104.204	95.68913	105.3673	103.2416
2006	105.9349	106.3864	107.4706	95.52555	94.83097	97.1467	99.25524	106.9947	106.4632	103.9756	106.5588	99.43699
2007	103.1944	103.1538	105.9244	102.8129	106.4146		97.58781	100.4915	107.1214	104.8901	96.34868	95.39256
2008	92.91735	98.78169		101.5495	95.17603	87.09785	98.53489					100.2389
2009	95.98343		106.5165	102.0239		97.22629	105.072	100.9191	107.8282	98.21622	102.1091	112.9579
2010		96.96972	107.7485	103.1075	101.7778	102.4666	99.32078	99.36492		95.07263	101.6926	96.49885
2011	99.68606	99.16668	101.0084	97.46648	111.8511		99.0527	100.6191	107.0221	101.3259	99.73067	
2012	104.5568		95.03729		99.56857	100.3695	99.89786	104.4689	101.6961	109.0653	100.3799	92.05311
2013	103.5294	100.6532	94.75744	103.1665	103.2792	93.42382	100.2097	105.3363	101.8862	103.5796	99.82975	95.53282
2014	98.72535	102.7939		94.89959	106.0753	102.8689		100.7659	102.511	108.8678	96.8022	97.42059
2015		100.689	100.0599	99.27626	103.0123	98.324						
trimmed sum	993.6071	1008.875	1026.968	992.1018	1034.082	977.5577	900.536	922.8283	940.4744	1023.164	1012.39	1000.469
trimmed mean	99.36071	100.8875	102.6968	99.21018	103.4082	97.75577	100.0596	102.5365	104.4972	102.3164	101.239	100.0469
count	10	10	10	10	10	10	9	9	9	10	10	10

Table 1: Trimmed means calculated arranged by months respectively (In case of TV)
Source: Author

YEARS/ MONTH	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2003										101.9243	104.8302	109.2842
2004	105.1527	100.0175	107.7735	101.8869	98.17945	96.91913	101.9798	104.9524	103.6898	98.68944		
2005		99.97626	102.7864	94.20372	111.2241			103.3851	104.9455	94.33801	106.478	102.5896
2006	104.8665	105.3124	103.726	96.46519	92.56022	98.09748	98.65521		107.8916	100.4446	107.6416	102.0848
2007	102.8711	99.00696	104.4919	103.4488	105.7622	103.1663	104.8783	98.96499	106.7994		100.1219	98.78124
2008	92.56713	99.20552		102.2458	95.95697	87.31107	98.73272					100.1351
2009	93.1763		106.3791		113.4288	98.91826	105.3653	101.168	109.5161	97.86494	103.4404	100.6586
2010	96.8611	99.76692		102.8723	98.56148	100.8958	101.9285	101.0726	99.28634	100.94	102.2462	95.60173
2011	97.45024	96.74193	102.6092	94.08422		80.07439	97.77487	98.77094	106.8857	100.5022	100.4517	
2012			94.55845			103.0009	99.38784	99.83446		107.3951	99.53837	103.5696
2013	102.0446	99.69124	99.5088	103.3642	99.7383	94.71156		103.7607	102.0613	102.4362	99.87467	101.5938
2014	98.44154	100.8675	108.909	96.88971	106.461		99.92772	101.056	102.0121	105.1221	100.1454	100.9417
2015	104.5541	99.91947	100.7518	98.7485	101.6182	98.91284						
TRIMMED SUM	**997.99**	**1000.51**	**1031.49**	**994.21**	**1023.49**	**962.01**	**908.63**	**912.97**	**943.09**	**1009.66**	**1024.77**	**1015.24**
COUNT	**10.00**	**10.00**	**10.00**	**10.00**	**10.00**	**10.00**	**9.00**	**9.00**	**9.00**	**10.00**	**10.00**	**10.00**
TRIMMED MEAN	**99.80**	**100.05**	**103.15**	**99.42**	**102.35**	**96.20**	**100.96**	**101.44**	**104.79**	**100.97**	**102.48**	**101.52**

Table 2: Trimmed means calculated arranged by months respectively (In case of TVE)
Source: Author

As a final step, the trimmed mean obtained in 5th step is adjusted by a constant which is obtained by dividing the desired sum of the indices (*since 12 months were considered, total of 1200 was considered)* by the actual sum obtained. The actual sum obtained in case of TV and TVE was 1214.015 and 1213.12 respectively. Thus, the adjusting constant in case of TV and TVE was calculated to be 0.98846 and 0.99 respectively. Thus, the seasonal index calculated using ratio-to-moving average method for the monthly time series for TV and TVE respectively is shown in Figure 5 and Figure 6 respectively.

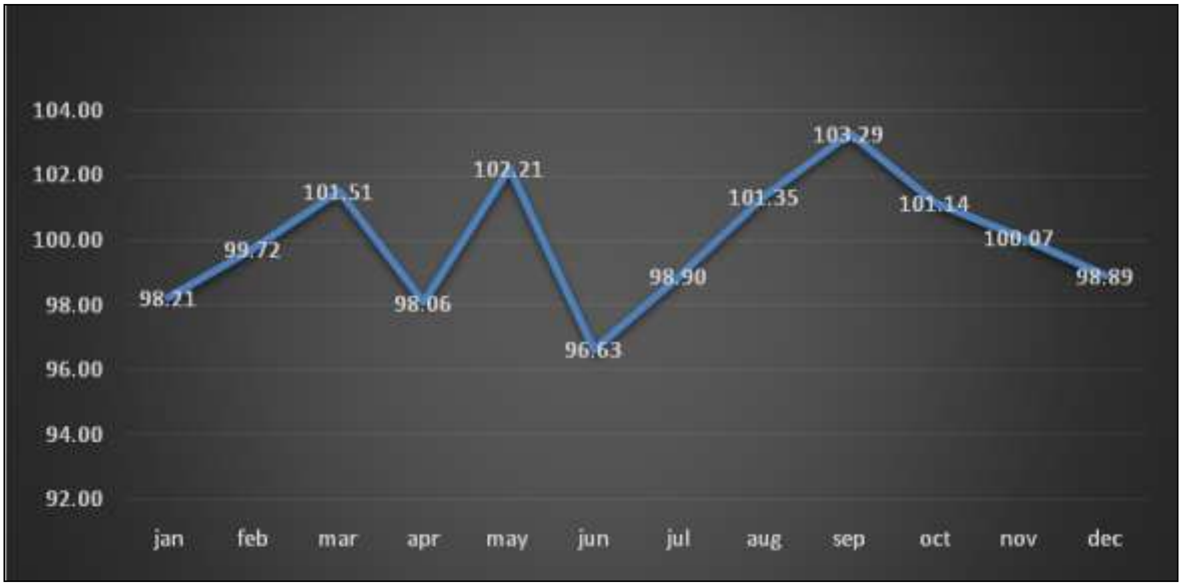

Figure 5: Monthly seasonal index values obtained for TV for the period 2003-2015
Source: Authors

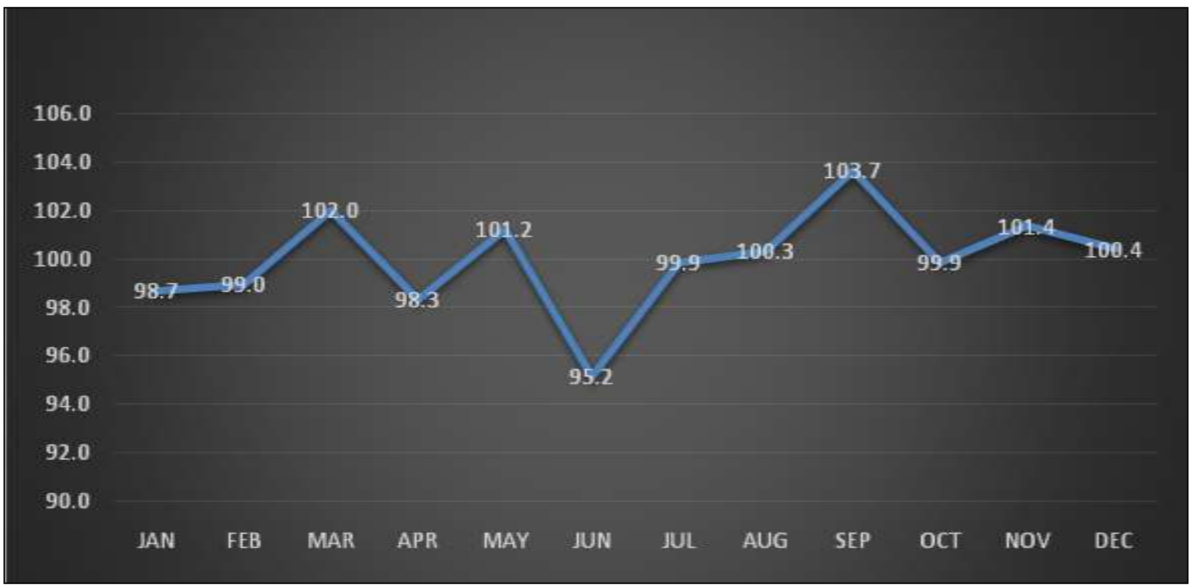

Figure 6: Monthly seasonal index values for TVE for the period 2003-2015
Source: Authors

As observed from Figure-5 and Figure-6 respectively, we can infer that, significant repetitive and predictable movements can observed around the trend line of 100 in case of TV and TVE. Thus, looking at the charts, we can establish the pattern for the last twelve years and can forecast the patterns into the future. As observed the months namely, March, May and September months show above average trends. September month is found to be month with highest investments in case of both TV and TVE. December, April and June effect definitely can be observed in the patterns. April and June months are found to have significantly lower average returns. We can also notice that, the investments follow a cyclical pattern, with beginning of the year being bullish until March and turn bearish in June month. The same pattern continues until September followed by lower returns towards December.

6. Conclusion

The study was mainly conducted to examine whether there existed any patterns in the investments done by foreign investors through participatory notes for the period 2003-2015. In the recent years there has been several policy measures taken by SEBI to know the beneficial owners of participatory notes and in this regard several steps were also undertaken. The study considered to look not into the policy aspects but, wanted to understand if there existed seasonal patterns in the investments. From the analysis, we can conclude that, significant variations in the monthly average investments exists with September month having the highest returns followed by June month having the lowest returns. Definitely cyclical trend exists in the pattern of investments and is observed to be non-random in nature.

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