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Central Bank Communication: The Practice in Nepal Rastra Bank and Impact on Inflation

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ABSTRACT

A central bank's communication helps manage expectations. This will contribute to make monetary policy more effective and thus enhance its impact. The paper looks at the practice in Nepal Rastra Bank in terms of communication release and its impact on annual inflation; the prior reflects the commencement of the annual release of monetary policy initiated in year 2002. However, empirical results find that this has not had any significant additional impact on annual inflation and suggests that greater clarity in monetary policy communication has not contributed statistically to affect annual inflation.

JEL Classification: E58

Key Words: Central Bank Communication, inflation, communication policy, Nepal Rastra Bank

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Remarks: the views expressed are personal and do not reflect those of associated institution.

I. INTRODUCTION

The importance of communication to manage expectation and contribute towards enhancing the impact of monetary policy, is based on the assumption that in the short run there are distortions and market imperfections (Blinder, 2009).Ehrmann and Fratzscher (2005) show in their paper that central bank communication is a key determinant of the market's ability to anticipate monetary policy decisions on the future path of interest rates. Greater clarity in central bank communication brings transparency and contributes to predictability of monetary policy. Thus, there is focus on the importance of expectations (Woodford, 2005).This assumption holds more validity in a developed versus a developing economy where respective financial sector is at a nascent stage (Reddy, 2009).¹ This paper focuses on the experience of the Nepal Rastra Bank (NRB), the Central Bank of the Federal Democratic Republic of Nepal, with its formal communication strategy initiated from 2002 and its impact on annual inflation.

The financial sector in Nepal commenced formally in 1937² with the founding of Nepal Bank Limited. The NRB was subsequently established in 1956 under the NRB Act of 1955. In the period prior to NRB establishment, Nepal experienced a de facto dual currency system with the Nepalese Rupee (NPR) circulating side by side with the Indian Rupee (INR). However this was brought to an end in early 1960's by various steps, mainly the introduction of the *Act to Increase Nepalese Currency Circulation 1957* which declared the NPR as the only legal tender in the country and also in April 1960 by introduction of the exchange rate policy of the NPR-INR; this had pegged the bilateral exchange rate and had introduced the system of unlimited convertibility of the INR through the NRB. The NPR-INR exchange rate experienced seven changes since its initiation with the last being in February 1, 1993.³This exchange rate has been an anchor to inflation expectation and can be described as an informal but transparent communication policy. The performance of the bilateral exchange rate is portrayed figuratively in the graph given below:

¹ For example of this see Reddy (2009) with the Communication Policy of Reserve Bank of India is placed on its website.

² As stated on their website Kartik 30, 1994 (November 15, 1937) is the date of inauguration.

³ The seven changes occurred on: (1) on June 6, 1966; (2) on December 8, 1967; (3) on December 22, 1971; (4) on March 23, 1978; (5) on November 30, 1985; (6) on July 1, 1991; (7) February 12, 1993 (NRB)



Figure 1: Movement of NPR/INR exchange rate

With domestic, economic and financial liberalization in the early 1990's, there was a significant growth of banks and financial institutions (BFIs).But this was limited to institutions of indirect methods of financing. This changed with the establishment of the Nepal Stock Exchange (NSE; also reflected in the daily publishing of Nepal Stock Exchange index) on 13th January 1994. NSE acted as a tradable investment vehicle and broadened the mechanism of financing through direct financing. Nepal also liberalized external trade by liberalizing the current account and accepting Article VII of the IMF's Articles of Association (on May 30, 1994).

Taking these developments of the financial sector into consideration, the Government of Nepal updated and enacted NRB Act of 2002 (on 30th January 2002), with one contribution being the need for transparency and communication to manage market expectation. In contrast to the earlier NRB Act of 1955, the current NRB Act of 2002 has a specific provision (Article 93)⁴ for reporting on monetary policy on an annual basis. This was initiated with its seminal issuance in FY 2002/2003; thus 2002 is taken as reflective of the initiation of NRB's formal communication policy.⁵

⁴ This article (NRB, 2002, 93) is entitled "Report on Monetary Policy" and elaborated, as "The Bank shall publish the report on monetary policy each year for the information of general public. The said report to be published in such a manner shall contain the following matters:-

⁽a) Comprehensive review and evaluation of the monetary policy introduced and followed by the Bank in the preceding year;

⁽b) Justification and analysis of the monetary policy that the Bank is going to introduce in the following year:-"

⁵ See Annex 1 for list of release dates.

As dissemination of information to the public at more frequent intervals is felt necessary to stabilize their expectations, the Bank also publishes mid-term review of monetary policy as well as a monthly current macroeconomic situation (whose provision of data includes that on money supply, prices and the country's balance of payments). There is also a designated NRB spokesperson for clarifying any bank specific action as well as provision by Publication Directive, 2068 (July 20, 2011) to make systematic delivery of statistics/publication through a one-window system. Recently information officers were appointed as per requirement of Information Act, 2064 (roughly 2006). NRB Spokesperson is automatically designated as the Information Officer for the bank's Baluwatar office while the bank's Board Secretary is designated as the Assistant Spokesperson.⁶

These activities suggest that in line with the developments of the financial sector, NRB's communication policy has become more systematic, reflected in the initiation of annual release of monetary policy since 2002. The research question is thus, has the annual release of monetary policy from 2002 had a significant impact on inflation in the short term?

The study focuses on assessing the effect of central bank communication on inflation, which is not a new method of modeling and estimating inflation dynamics in Nepal. The paper is thus based on standard methodology in this regard.

II. METHODOLOGY

Based on the above discussion a standard empirical assessment will be used. Since this paper does not aim to examine the long-term factors determining inflation in Nepal, the question is tested through a simple linear regression as expressed below for testing of a policy structural break in year 2002. The variables are taken from theory of inflation as well as some past studies of inflation determinants in Nepal. For example, Paudyal (2014) shows in his paper that broad money supply and Indian prices affect inflation in Nepal, in both short as well as long term. Also, Nepal Rastra Bank in its special publication paper (NRB, 2007) reports that in the short term, inflation in Nepal is affected by both narrow money supply and Indian inflation while in the long term, price level in Nepal is determined only by price level in India.⁷ Similarly, Neupane (1992) finds in his paper that one-year lagged narrow money supply affects inflation in Nepal.

⁶ This has also been supplemented by inclusion of Assistant Information Officer who is the chief (Deputy Director) of Public Relations Division in NRB's Office of the Governor

⁷ Maskay and Subedi (2008) state in their paper that Indian prices contribute to understanding price dynamics in Nepal and the appropriate index for comparison with Nepalese CPI is the Indian CPI industrial worker's index.

The variables affecting domestic annual inflation suggested by the above studies and used in this paper are thus money supply and Indian inflation while control variables are financial development (FD) and openness of the domestic economy to external trade (i.e. degree of integration with the external economy). This representation is provided below:

$$NEPAL_{inf} = FD + OPEN + INDIA_{inf} + M2 + DUMMY_{MP}$$
(1)

- *NEPALinf* is the annual CPI inflation for Nepal for the Nepali fiscal year
- FD is Financial Development. In the academic literature there are different alternative indicators for FD, however the three main ones are:
 - LIQLIAB The sum total of currency plus demand and interest-bearing liabilities of commercial bank and non-banks divided by nominal GDP;
 - COMMBANK The total asset of commercial banks divided by sum of commercial banks and central bank assets.
 - BANKCRED The ratio of total credit of commercial banks and other deposit taking banks to the private sector by nominal GDP.
- OPEN is the proportion of national income from external economic interaction. This is taken as the ratio of total international trade (imports plus exports) to nominal GDP,
- *INDIA_{inf}* is the annual CPI inflation for India, which has been modified to reflect the Nepali fiscal year; this calculation is provided in Annex 2
- M2 is the money supply. This is reflected by growth of broad money.
- DUMMY_{MP} reflects the introduction of NRB Act on January 30, 2002; it is 0 for 1993/94-2002/03 and 1 for 2003/04 2014/15

The expectation is that the dummy will be significantly different from zero reflecting that NRB's communication policy has had a significant effect on annual domestic inflation.

III. DATA, EMPIRICAL EXERCISE AND RESULTS

Data: The sources of data for the exercises are from Government of Nepal, Ministry of Finance and Nepal Rastra Bank.

The span of annual data is for 1992/93 - 2014/15. The starting year, 1992/93, reflects initiation of economic liberalization, while the end year 2014/15 reflects latest actual data, at time of writing. The raw data and its manipulation(dependent variable and six independent

Table 1: Summary Statistics							
Variables	Nepal _{inf}	Liqliab	Bankcred	Commbank			
Average	0.0735	0.4151	0.3255	0.6795			
Std. dev	0.0281	0.0842	0.0918	0.0441			
Median	0.0809	0.4259	0.3143	0.6913			
Variables	Open	India _{inf}	M2				
Average	0.3688	0.0722	0.17244				
Std. dev	0.0276	0.0259	0.060425				
Median	0.3578	0.0778	0.162179				

variables) as per equation 1 above, are provided in Annex 3 with derived variables in Annex 4 and their summary statistics, provided in the table below:

For undergoing empirical exercise the following prior steps are taken sequentially: first, time series analysis is performed on each of the time series; second, general to specific stepwise regression; lastly test for structural break on the final equation.

Time Series Analysis: Assessment of the properties of each of the time series is necessary to determine if they are integrated since this will contribute towards making the regression results biased. As a first step in this regard, the time series are eyeballed to ascertain whether they exhibit any trend – i.e. memory. These prior mentioned seven time series are shown in the figure given below:



Based on this impression from "eyeballing", it is felt that the dependent variable and two independent variables open and Indian inflation,(i.e. NEPALinf, OPEN and INDIAinf) are stationary. However other variables such as M2 and some variations of FD suggest some trend. To ascertain this more formally, tests of unit root are undertaken on these variables (in both level and growths)with the results given in the table below:

Table 2: Test of integration (in levels and growth)									
X7	NEPALinf		LIQLIAB		BANKCRI	ED			
Variables	L	G	L	G	L	G			
Elliott-Rothenberg-Stock-DF									
(ERS-DF)_GLS test critical	-2.6857	-2.6924	-3.77.	-3.77.	-3.77.	-3.77.			
value at 1%, 5% and 10%	-1.9591,	-1.9602,	-3.19,	-3.19,	-3.19,	-3.19,			
(Ho: Series has a unit root)	-1.6075	-1.6071	-2.89	-2.89	-2.89	-2.89			
ERS-DF GLS test statistic	-2 3573**	-5 5809***	-2.09	-4 34***	-2.7377	-4 3 77***			
Kiwiatkowski-Phillips-Schmidt-	2.0070	0.0007	2.05						
Shin (KPSS) test critical value	0 7300	0 7300	0.216	0.216	0.216	0.216			
at 1%, 5% and 10% (Ho: Series	0.7590,	0.7590,	0.210,	0.210,	0.210,	0.210,			
is stationary)	0.3470	0.3470	0.119	0.119	0.119	0.119			
KPSS test statistic	0.2106	0.3042	0.1407*	0.2911	0.1033	0.1220*			
	(COMMBANK		OPEN		INDIAinf			
Variables	L	G	L	G	L	G			
ERS-DF_GLS test critical value	-3 77	-3 77	-2.6743	-4 9880	-2.6797	-2.6857			
at 1%, 5% and 10%	-3.19.	-3.19.	-1.9572.	-1.9591.	-1.9581.	-1.9591.			
(Ho: Series has a unit root)	-2.89	-2.89	-1.6082	-1.6075	-1.6078	-1.6075			
ERS-DF_GLS test statistic	-1.2958	-9.0768***	-2.6541**	- 4.9880***	-1.6821*	-4.5306***			
KPSS test critical value at 1%,	0.216,	0.216,	0.7390,	0.7390,	0.7390,	0.7390,			
5% and 10% (Ho: Series is	0.146,	0.146,	0.4630,	0.4630,	0.4630,	0.4630,			
stationary)	0.119	0.119	0.3470	0.3470	0.3470	0.3470			
KPSS test statistic	0.1769**	0.0637	0.2779	0.4773**	0.1199	0.1457			
Variables		_	M2		T				
			L		G				
ERS-DF_GLS test critical value a (Ho: Series has a unit root)	1 10%	-2.6797, -1.9580, -1.6078		-2.6857, -1.9591, -1.6075					
ERS-DF_GLS test statistic	-3.004***		-6.0511*	**					
		0.7390,		0.7390,					
KPSS test critical value at 1%, 5%	and 10% (F	10: Series is	0.4630,		0.4630,	0.4630,			
stationary)			0.3470		0.34/0				
Source: Authors calculations and	a views out	111	0.2030		0.5000*				

These results confirm the eyeballing test that time series of NEPALinf, OPEN, INDIAinf and M2 are stationary. The unit root test also indicate that time series in growths of LIQLIAB and COMMBANK are stationary. However results of time series test on BANKCRED are mixed. Given the later uncertain results, the variable will be tested in both levels and growth.

General to specific step-wise regression: From the general equation provided in (1) with dependent variable NEPALinf and given the variations discussed above there are conceptually four permutations for having empirical estimation; these are represented below:

Table 3: General to Specific Step wise Regression										
	Financial Development									
	GLIQLIAB	BANKCREDIT	GBANKCREDIT	GCOMMBANK	OPEN	INDIAinf	M2	DUMMY _{MP}		
Ι	×				×	×	×	×		
Π		×			×	×	×	×		
III			×		×	×	×	×		
IV				×	×	×	×	×		

These four equations are now empirically estimated using Ordinary Least Squares with the regression results provided below:

Table 4: Regression Results (Dependent variable = NEPALinf)								
	Ι	II	III	IV				
	Value	Value	Value	Value				
Constant	0.0847	0.0195	0.0189	0.0740				
Prob	(0.3933)	(0.8169)	(0.8325)	(0.4479)				
Growth_GLIQLIAB	-0.2006							
Prob	(0.7271)							
BANKCRED		0.0662						
Prob		(0.5832)						
Growth_BANKCRED			-0.0322					
Prob			(0.6825)					
Growth_COMMBANK				0.0985				
Prob				(0.6926)				
OPEN	-0.2006	-0.0664	-0.0211	-0.1784				
Prob	(0.4402)	(0.7700)	(0.9279)	(0.4840)				
INDIAinf	0.5160**	0.5096*	0.5028*	0.4991*				
Prob	(0.0463)	(0.0544)	(0.0777)	(0.0578)				
M2	0.1540	0.1364	0.1560	0.1570				
Prob	(0.1509)	(0.2104)	(0.1561)	(0.1474)				
DUMMYMP	-0.0042	-0.0070	0.0019	-0.0010				
Prob	(0.7515)	(0.7560)	(0.8898)	(0.9383)				
Diagnostic statistics								
R-squared	0.5308	0.5002	0.4873	0.5320				
Durbin-Watson (d)	2.2513	2.1619	2.1685	2.3326				
(4-d)	1.7487	1.8381	1.8315	1.6674				
F-statistic	3.1674**	3.002**	2.6608*	3.1826**				
Prob	(0.0405)	(0.0449)	(0.0682)	(0.0399)				
*, ** and *** denote statistical significance at 10%, 5% and 1% respectively; probability of the t-statistics are in parenthesis dL and dU at $5\% = 0.895$ and 1.920 dL and dU at $1\% = 0.600$ and 1.674								
uL and uU at 1% = 0.099 and 1.0/4								

This equation is now reduced step wise based on significance test (of the variables, using hypothesis testing, that they are not significantly different from zero) and regression diagnostics. Based on both criteria, results suggest that Indian inflation is the only consistently significant contributor to Nepalese inflation, with the other variables being consistently insignificant (or not significantly different from zero). This simplified reduced representation is provided in algebraic form and again retested, with the results provided below:

Table 5: Regression Results with only significant variables							
(Dependent variable = NEPALinf)							
XXXVII							
	Value						
Constant	0.0240						
Prob	(0.1214)						
INDIAinf	0.6767***						
Prob	(0.0022)						
Diagnostic statistics							
R-squared	0.3969						
Durbin-Watson (d)	2.0171						
(4-d)	1.9829						
F-statistic	12.5058***						
Prob	(0.0022)						

*, ** and *** denote statistical significance at 10%, 5% and 1% respectively; probability of the t-statistics are in parenthesis.

dL and dU at 5% = 0.895 and 1.920

dL and dU at 1% = 0.699 and 1.674

The results confirm statistically significant contribution of Indian inflation to Nepal inflation in the short term.

Test of structural break: To further confirm the absence of a structural break in the above regression at 2002, CUMSUM as an alternative test of structural breaks is conducted. Results suggest that there are no structural breaks at 5% level of significance. A sample CUMSUM structural break test result is given below:



Figure 2: Result from a sample CUMSUM structural break test

IV. ANALYSIS

The results (robust to specification) provided above suggest that despite the release of NRB Act 2002, which has a specific provision for reporting on monetary policy on an annual basis, it has not had a significant impact on inflation. 8 This result is robust to alternative specifications.9

While the objective of the paper is to determine the impact of NRB Act 2002 on domestic inflation, as a residual, it is pointed out that results of inflation dynamics are consistent with earlier studies and show that inflation in India has a significant impact on inflation in Nepal.

The similarity of Indian and Nepalese inflation is portrayed with the two time series provided below:

⁸ This conclusion is consistent with exercise on inflation variability (which is the standard deviation of monthly year-on-year inflation taken at the annual level) however the results of all the explanatory variables were insignificant.

⁹ The modified Indian inflation variable was found to be significant at 5% level of significance (when LIQLIAB was taken as the financial development variable) and significant at 10% level of significance (when BANKCREDIT and COMMBANK were taken as the financial development variables) as indicated by regression equations I, II, III and IV, each of which has Nepali CPI inflation as its dependent variable



Figure 3: Comparative graph of Nepali CPI inflation and Indian CPI inflation modified to reflect Nepali fiscal year

From different perspectives, these suggest that the Nepal Rastra Bank's formal communication policy has been less effective in significantly affecting domestic inflation. Alternatively it can be interpreted that this communication policy had not added value to the existing informal communication of domestic inflation, reflected in the rigid bilateral exchange rate.

V. CONCLUSION AND CONCLUDING REMARKS

The empirical results show that the Bank's formal communication policy, which started in 2002 with the annual release of monetary policy, did not have statistically significant contribution to annual domestic inflation. This suggests that the results are consistent with those from standard textbooks and imply substantiation of the impossible trinity – that the three conditions of fixed exchange rate, monetary independence and capital mobility, cannot exist simultaneously. In one way this suggests that the informal communication policy reflected in the exchange rate regime is still a useful tool/predictor of domestic annual inflation.

However, there are two caveats to the above results:

• The results highlighted on inflation but have not discussed on capital markets. As the released monetary policy elaborates on banking and financial measures, the paper has not tested this aspect of stability.

• Also there has not been an examination of short-term effects simply that of annual frequency. It is plausible that the impact is only seen in the very short term (i.e. monthly or quarterly) and disappears in the annual period; hence there is a need of analysis using high frequency data.

It is noted that the nature of domestic economy has an embryonic financial sector. The interconnections are growing, thus this aspect of examining monetary policy of having a broader effect beyond that of domestic annual inflation and also its very short term impacts (monthly or quarterly) have to be examined – these are thus agendas for future research.

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Data Sources

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SN	Fiscal Year of Monetary	Release date of Monetary Policy
	Policy	
1	2002/2003	July 16, 2002
2	2003/2004	July 24, 2003
3	2004/2005	July 19, 2004
4	2005/2006	July 22, 2005
5	2006/2007	July 23, 2006
6	2007/2008	July 23, 2007
7	2008/2009	September 29, 2008
8	2009/2010	July 24, 2009
9	2010/2011	July 28, 2010
10	2011/2012	July 21, 2011
11	2012/2013	July 25, 2012
12	2013/2014	July 21, 2013
13	2014/2015	July 18, 2014
14	2015/2016	July 23, 2015
Source:	Nepal Rastra Bank, various issue	es of monetary policy

Annex 1: Release Date of Monetary Policy

Annex 2: Adjusted Period of Indian CPI to Harmonize with Nepalese Fiscal Year

The study requires data on Indian CPI. However this is reported for the Indian fiscal year which starts on April 1 and ends on March 31. As The Nepalese fiscal year, on the other hand, starts on July 17 (Mid-Juy; the first of the Nepalese month of Shrawan) and ends on July 16 (Mid-July; the last day of the Nepalese month of Ashar). This biases the inflation results (however this is nevertheless a consistent bias).

To make the CPI based measures of Nepali and Indian inflation more comparable, this paper adjusts the Indian CPI to reflect the Nepalese fiscal year. This is done by dividing the Indian fiscal year into 24 equal time periods (units are half months) and calculating the adjusted Indian CPI to reflect Nepali fiscal year as follows: Adjusted Indian CPI for this FY = (7/24)*Reported Indian CPI for this Indian FY + (17/24)*Reported Indian CPI for last Indian FY.

Fiscal year	CPI for	Indian fisca	1	Adjusted		
starting on	year	(Source)		CPI India		
1993	5	5.707		57.38		
1994	6	1.429		63.21		
1995	6	7.549		69.41		
1996	7	73.92		75.40		
1997	7	8.978		82.00		
1998	8	9.345		90.24		
1999	9	2.405		93.43		
2000	9	5.932		97.14		
2001	10	00.072		101.23		
2002	1	04.05		105.22		
2003	1()8.063		109.27		
2004	11	2.203		113.65		
2005	11	17.153		119.53		
2006	12	25.289		127.46		
2007	13	132.731				
2008	14	14.933		149.42		
2009	16	50.302		164.76		
2010	17	75.585		180.42		
2011	19	92.165		197.91		
2012	21	1.861		218.03		
2013	23	233.028				
2014	2	246.84				
2015	26	50.114		264.30		
Source: Int	ernational	Monetary	Fu	und, World		
Economic	Outlook	database	an	d authors'		
calculations						

The adjusted series is provided below:

Raw data (in millions of Rs.)							
Fiscal							
Year	NGDP	CURR	TCOMM	TNRB	CREDIT	LIQLIAB	M2
1992/93	171474	43370	59057	47602	20695	0.2529	58,322.5
1993/94	199272	52305	73458	54807	29068	0.2625	69,777.1
1994/95	219175	61164	83796	58821	41309	0.2791	80,984.7
1995/96	248913	71346	101499	62326	54585	0.2866	92,652.2
1996/97	280513	81661	118427	68138	63170	0.2911	103,720.6
1997/98	300845	102544	145860	79890	75644	0.3409	126,462.6
1998/99	342036	127063	172888	87771	89433	0.3715	152,800.2
1999/2000	379488	154941	210895	99097	107343	0.4083	186,120.8
2000/01	411217	181675	253111	113814	123417	0.4418	214,454.2
2001/02	459443	184331	270938	126792	130088	0.4012	223,988.3
2002/03	492230	203297	305526	126308	148073	0.413	245,911.2
2003/04	536750	233293	309729	144653	168693	0.4346	277,310.1
2004/05	589412	251008	341023	142825	193270	0.4259	300,440.0
2005/06	654084	290558	398131	167974	240362	0.4442	346,824.1
2006/07	727827	336793	441468	172808	265361	0.4627	395,518.2
2007/08	815658	423488	553275	212450	336781	0.5192	495,377.1
2008/09	988272	552857	721510	282328	434913	0.5594	630,521.2
2009/10	1192773	622508	771139	296626	497140	0.5219	719,599.1
2010/11	1366953	567521	853491	319693	544252	0.4152	921,320.1
2011/12	1527344	703526	1052451	455827	633361	0.4606	1,130,302.3
2012/13	1695010	823926	1242881	534898	766327	0.4861	1,315,376.3
2013/14	1941623	955203	1467152	655281	906852	0.492	1,565,967.2
2014/15	2124650						1,877,801.5
Source: GO	Source: GON and NRB						

Annex 3: Raw data of Financial Statistics

	Constructed data						
	Dependent	FD Indica	tors				
Fiscal Year	Nepal _{inf}	LIQLIAB	COMMBANK	BANKCRED	Open	Indiainf	Dummy MP
1992/93	0.0886	0.2529	0.553700009	0.1206871	0.3293		0
1993/94	0.0895	0.2625	0.5727	0.1459	0.3556	0.1018	0
1994/95	0.0766	0.2791	0.5876	0.1885	0.3710	0.0980	0
1995/96	0.0813	0.2866	0.6196	0.2193	0.3790	0.0863	0
1996/97	0.0809	0.2911	0.6348	0.2252	0.4142	0.0876	0
1997/98	0.0833	0.3409	0.6461	0.2514	0.3873	0.1004	0
1998/99	0.1138	0.3715	0.6633	0.2615	0.3602	0.0354	0
1999/2000	0.0339	0.4083	0.6803	0.2829	0.4172	0.0397	0
2000/01	0.0243	0.4418	0.6898	0.3001	0.4167	0.0421	0
2001/02	0.0289	0.4012	0.6812	0.2831	0.3359	0.0394	0
2002/03	0.0475	0.4130	0.7075	0.3008	0.3541	0.0385	0
2003/04	0.0396	0.4346	0.6816	0.3143	0.3543	0.0400	1
2004/05	0.0454	0.4259	0.7048	0.3279	0.3532	0.0517	1
2005/06	0.0796	0.4442	0.7033	0.3675	0.3578	0.0664	1
2006/07	0.0590	0.4627	0.7187	0.3646	0.3491	0.0693	1
2007/08	0.0670	0.5192	0.7226	0.4129	0.3448	0.0963	1
2008/09	0.1263	0.5594	0.7188	0.4401	0.3563	0.1027	1
2009/10	0.0960	0.5219	0.7222	0.4168	0.3648	0.0951	1
2010/11	0.0964	0.4152	0.7275	0.3981	0.3369	0.0969	1
2011/12	0.0830	0.4606	0.6978	0.4147	0.3509	0.1017	1
2012/13	0.0990	0.4861	0.6991	0.4521	0.3738	0.0872	1
2013/14	0.0910	0.4920	0.6913	0.4671	0.4153	0.0576	1
2014/15	0.0722				0.4048	0.0542	1

Annex 4: Derived time series of Financial Statistics