Cabinet

– 19th November 2018

Treasury Management Mid-Year Report 2018-19 Cabinet Member: Cllr Mandy Chilcott – Cabinet Member for Resources

Cabinet Member: Cllr Mandy Chilcott – Cabinet Member for Resources Division and Local Member: All Lead Officer: Peter Lewis, Director of Finance Author: Alan Sanford, Principal Investment Officer Contact Details: 01823 359585/6

	Seen by:	Name	Date					
	County Solicitor	Honor Clarke	26/10					
	Monitoring Officer	Scott Wooldridge	26/10					
Report Sign off	Corporate Finance	itorHonor ClarkefficerScott WooldridgenancePeter LewispurcesChris SquiregerStephen MortonnberCllr Mandy Chilcotta for information only. It gives a sumreasury Management activity and outpeyear and ensures Somerset Countporacing Best Practice in accordancestitute of Public Finance and Accountpormendations.ment balances stood at just under £per yielding an average rate of returnte. This figure includes approximateed on behalf of the Local Enterprise8.4m of other external bodies (e.g. Ek (ENP), and South West Councils (x months, gross investment balancesBan net of funds held for others), yielddoiof that apportioned to the LEP and eoproximately £808,000 has been earanticipated income of £590,000.uly delivered base rate rise in Augusontributory factors.carry associated with long term borrotemporary investment returns mear	29/10					
	Human Resources	Chris Squire	29/10					
	Senior Manager	Stephen Morton						
	Cabinet Member	Cllr Mandy Chilcott	29/10					
Forward Plan								
Reference:	FP/18/09/05							
	first half of the year a (SCC) is embracing Chartered Institute o (CIPFA) recommend Gross investment ba 30 th September yield as at that date. This	first half of the year and ensures Somerset County Council (SCC) is embracing Best Practice in accordance with the Chartered Institute of Public Finance and Accountancy's (CIPFA) recommendations. Gross investment balances stood at just under £206m on 30 th September yielding an average rate of return of 1.04% as at that date. This figure includes approximately £55m of						
Summary:	 cash managed on behalf of the Local Enterprise Partnership (LEP), and £8.4m of other external bodies (e.g. Exmoor National Park (ENP), and South West Councils (SWC). During the six months, gross investment balances averaged £223m (£158m net of funds held for others), yielding 0.91% 							
	for the period. Income (net of that apportioned to the LEP and external bodies) of approximately £808,000 has been earnt in the period, against anticipated income of £590,000. Anticipation of, and the duly delivered base rate rise in August were significant contributory factors.							
	The cost of carry associated with long term borrowing compared to temporary investment returns means that a passive borrowing strategy, borrowing funds as they are required has been most appropriate. No new borrowing has							

	been taken during the period, and due to timing of spending and changes to the Capital Plan, it is not currently envisaged that any will be taken in the second half of the year.
	All Treasury activities undertaken have been in full compliance with relevant legislation, codes, strategies, policies and practices.
Recommendations:	That the Cabinet endorses the Treasury Management Mid-Year Report for 2018-19 and recommends it is received and endorsed by Full Council on 28th November 2018.
Reasons for recommendations	The Local Government Act 2003 requires the Council to operate the overall treasury function with regard to the CIPFA Code of Practice for Treasury Management in the Public Services. The Code requires Full Council to receive as a minimum, an annual strategy and plan in advance of the year, a mid-year review, and an annual report after its close. This is the mid-year review for 2018-19.
Links to Priorities and Impact on Service Plans:	Effective Treasury Management provides support to the range of business and service level objectives that together help to deliver the Somerset County Plan.
Consultations undertaken:	None
Financial Implications:	As per links to priorities box
Legal Implications:	As above
HR Implications:	As above
Risk Implications:	There are no specific risks associated with this outturn report. The risks associated with Treasury Management are dealt with in the Annual Treasury Management Strategy, Annual Investment Strategy, and Treasury Management Practice documents.
Other Implications (including due regard implications):	None
Scrutiny comments / recommendation (if any):	The Audit Committee is the nominated body to provide scrutiny for Treasury Management.

1. Economic Background

1.1 The rebound in quarterly Gross Domestic Product (GDP) growth in Q2 to 0.4% appeared to overturn the weakness in Q1 which was largely due to weather-related factors. However, the detail showed much of Q2 GDP growth was attributed to an increase in inventories. Year on year GDP growth at 1.2% also remains below trend.

Oil prices rose by 23% over the six months to around \$82 a barrel. UK Consumer Price Inflation (CPI) for August rose to 2.7% year on year, above the consensus forecast and that of the Bank of England's in its August Inflation Report, as the

effects of sterling's large depreciation in 2016 began to fade.

The most recent labour market data for July 2018 showed the unemployment rate at 4%, its lowest since 1975. The 3-month average annual growth rate for regular pay, (i.e. excluding bonuses), was 2.9% providing some evidence that a shortage of workers is providing support to wages. However real wages (i.e. adjusted for inflation) grew only by 0.2%, a marginal increase unlikely to have had much effect on households.

The Bank of England made no change to monetary policy at its meetings in May and June, however unexpectedly hawkish minutes and a 6-3 vote to maintain rates at the June meeting convinced the market that the Bank wanted to raise rates at the earliest opportunity, as long as data remained supportive. The rise was duly delivered at the August meeting, the unanimous decision taking Bank Rate to 0.75%.

Having raised rates in March, the US Federal Reserve again increased its target range of official interest rates in each of June and September by 0.25% to the current 2%-2.25%. Markets now expect one further rise in 2018.

The trade war between the US and China escalated as tariffs announced by the Trump administration appeared to become an entrenched dispute, damaging not just China but also other Asian economies in the supply chain. The fallout, combined with tighter monetary policy, risks contributing to a slowdown in global economic activity and growth in 2019.

The EU Withdrawal Bill, narrowly made it through Parliament. With just six months to go until Article 50 expires on 29th March 2019, neither the Withdrawal Agreement between the UK and the EU (which will be legally binding on separation issues and the financial settlement), nor its annex (which will outline the shape of their future relationship), have been finalised, extending the period of economic uncertainty.

Gilt yields displayed marked volatility during the period, particularly following Italy's political crisis in late May when government bond yields saw sharp moves akin to those at the height of the European financial crisis, with falls in yield in safe-haven UK, German and US government bonds. Over the period, despite the volatility, the change in gilt yields was small. The 5-year benchmark gilt only rose marginally from 1.13% to 1.16%. There was a larger increase in 10-year gilt yields from 1.37% to 1.57% and in the 20-year gilt yield from 1.74% to 1.89%.

As gilt yields have a direct correlation to Public Works Loan Board (PWLB) borrowing rates, the movements, and particularly the Italy induced downward dip in late May, can be seen in Tables 2 and 3 in Appendix A.

London Interbank Bid (LIBID) rates based on the Intercontinental Exchange London Interbank Offered Rate (LIBOR) fixings show that there was barely any movement in rates from April to the end of June. This changed after the June Monetary Policy Committee meeting minutes were released, as the Bank implied an impending rise in rates. Rates along the curve rose in line with the expected 0.25% increase, but the curve flattened once it was delivered, due to the meeting minutes stating that "Any future increases in Bank Rate are likely to be at a gradual pace and to a limited extent". 1-month, 3-month, 6-month, and 12-month LIBID rates averaged 0.46%, 0.60%, 0.71%, and 0.87% respectively over the period. All periods mentioned above closed on year-to-date highs of 0.60%, 0.68%, 0.78%, and 0.94% respectively.

Rates paid by banks to Local Authorities have continued to be volatile and nonuniform, being based on individual institutions' wholesale funding requirements at any given time.

The effect that economic conditions had on money market rates during the period, can be seen in Table 1, Appendix A.

1.2 Debt Management

The Council's need to borrow for capital purposes is determined by the Capital Programme. Council Members are aware of the major projects identified by the 4-year Medium-Term Financial Plan (MTFP) at the beginning of 2018-19 totalling circa £125m. £96.8m of this was for Schools new build or major extensions over the four years, whilst £28.5m was for the general 2018-19 programme. Much of this was to be funded using a combination of grant, capital receipts, and contributions. Although timings of capital expenditure may not be totally predictable, it was envisaged that borrowing of up to £40m may have been necessary in 2018-19.

The cost of carry associated with long term borrowing compared to temporary investment returns means that a passive borrowing strategy, borrowing funds as they are required has been most appropriate. The benefits of this strategy have been monitored and weighed against the risk of shorter-term rates rising more quickly than expected. No new borrowing has been taken during the period, and due to timing of spending and changes to the Capital Plan, it is not currently envisaged that any will be taken in the second half of the year.

	Balance on 31/03/2018 £m	Debt Matured / Repaid £m	New Borrowing £ms	Balance on 30/09/2018 £m	Increase/ Decrease in Borrowing
Short Term	0.00	0.00	0.00	0.00	0.00
Borrowing	0.00	0.00	0.00	0.00	0.00
PWLB	159.05	0.00	0.00	159.05	0.00
LOBOs	113.00	0.00	0.00	113.00	0.00
Fixed Rate Loans (Including Ex- Barclays LOBOs)	57.50	0.00	0.00	57.50	0.00
Total Borrowing	329.55	0.00	0.00	329.55	0.00

The debt position at the beginning and end of the period are shown overleaf:

The overall rate paid on loans remained unchanged for PWLB at 4.59%. The average Market Loan rate at 30th September (LOBOs + Barclays) was also the same as at 31st March, at 4.72%. The combined average rate was 4.66%.

As there has been no change to the PWLB portfolio during the period, the average weighted maturity as at 30th September had decreased by six months to 25.7 years. The average duration of all Market Loans dropped to 33.2 years from 33.7.

1.3 Investment Activity

The Guidance on Local Government Investments in England gives priority to security and liquidity and the Council's aim is to achieve a yield commensurate with these principles.

Security of capital remained the Council's main investment objective. This was achieved by following the counterparty policy as set out in the Annual Investment Strategy, and by the approval method set out in the Treasury Management Practices. Counterparties having approval for use during the period are listed below. Those used during the first half of the year are denoted with a star.

Bank or Building Society		Bank or Building Society	
Bank of Scotland		Oversea-Chinese Banking Corp	
Barclays Bank Plc		Commonwealth Bank of Australia	*
Close Brothers Ltd	*	National Australia Bank	
DBS Bank Ltd	*	Bank of Montreal	
Goldman Sachs Inv Bank	*	Toronto-Dominion Bank	
HSBC Bank	*	Landesbank Hessen- Thüringen	
Lloyds Bank	*	Canadian Imperial Bank of Commerce	
National Westminster	*	Bank of Nova Scotia	
Nationwide BS		Sterling CNAV Money Market Funds	
Santander UK	*	Goldman Sachs	
Standard Chartered Bank		Deutsche MMF	
Australia & NZ Bank	*	Invesco Aim	
Svenska Handelsbanken		Federated Prime Rate	*
Nordea Bank		JP Morgan	
Rabobank	*	Insight	*
United Overseas Bank	*	Standard Life	*
OP Corporate Bank	*	LGIM	*
		SSGA	*
Other Counterparties			
Debt Management Office		Other Local Authorities	*
CCLA Property Fund	*	(13 used – Total £78.5m)	

SCC has continuously monitored counterparties, and all ratings of proposed counterparties have been subject to verification on the day, immediately prior to investment. Other indicators considered have been:

- > Credit Default Swaps and Government Bond Spreads.
- > GDP and Net Debt as a Percentage of GDP for sovereign countries.
- Likelihood and strength of Parental Support.
- Banking resolution mechanisms for the restructure of failing financial institutions i.e. bail-in.
- Share Price.
- Market information on corporate developments and market sentiment towards the counterparties and sovereigns.

Counterparty Update

The ringfencing of the big four UK banks - Barclays, Bank of Scotland/Lloyds, HSBC and RBS/Natwest Bank plc – is complete. The transfer of their business lines into retail (ringfenced) and investment banking (non-ringfenced) is progressing and will need to be completed by the end of 2018.

There were a few credit rating changes during the period. Moody's downgraded Barclays Bank plc's long-term rating to A2 from A1 and NatWest Markets plc to Baa2 from A3 on its view of the credit metrics of the entities post ringfencing. Upgrades to long-term ratings included those for Royal Bank of Scotland plc and NatWest Bank to A2 from A3 by Moody's and to A- from BBB+ by both Fitch and Standard & Poor's (S&P). Lloyds Bank plc and Bank of Scotland plc were upgraded to A+ from A by S&P and to Aa3 from A1 by Moody's.

Moody's also upwardly revised the outlook on Canadian banks from Negative to Stable.

Reflecting its perceived higher risk, the Credit Default Swap (CDS) spread for nonringfenced bank NatWest Markets plc rose relatively sharply over the period to around 96bps. The CDS for the ringfenced entity, National Westminster Bank plc, has held steady below 40bps. Although the CDS of other UK banks rose marginally over the period, they continue to remain low compared to historic averages.

Maturities for new investments with financial institutions on the Council's list at 30th September are currently limited as follows: -

UK Institutions

Barclays Bank, Goldman Sachs International Bank, National Westminster Bank, and RBS - a maximum period of 100 days;

Bank of Scotland, Close Brothers Ltd, HSBC Bank, Lloyds Bank, Nationwide Building Society, Santander UK, and Standard Chartered Bank - **a maximum period of 6 months**;

Non-UK Institutions

Landesbank Hessen-Thüringen, DZ Bank, OP Corporate Bank, and all Australian and Canadian Banks - **a maximum period of 6 months.** Nordea Bank, Rabobank, Svenska Handelsbanken, DBS Bank, OCBC, and UOB - **a maximum period of 13 months.**

To diversify the portfolio, some deposits have been placed with UK Local Authorities. This allows for longer-dated maturities (up to 24-months at present) with excellent creditworthiness and an appropriate yield.

Liquidity: In keeping with the Ministry of Housing, Communities, and Local Government (MHCLG) guidance, the Council maintained a sufficient level of liquidity through the use of call accounts, Money Market Funds, and short-term deposits.

85 cash deposits totalling more than £368m were made during the first half of the year. SCC did not need to borrow short-term money during the first half of 2018-19.

Yield - Comfund: As at 30th September Comfund investment stood at just over £175m averaging just over £180m for the year-to-date. The Comfund vehicle, which consists mainly of SCC Capital, Revenue Reserves, and money held on behalf of the Local Enterprise Partnership (LEP), has an average return for the year-to-date of 0.78%, and has out-performed the benchmark by 0.20% as base rate has averaged 0.58% for the period. The weighted average maturity of the Comfund was approximately 4.6 months. This is slightly shorter than previously and is because of SCC holding approximately £55m of LEP money, (thereby needing to retain more liquidity), and that a much more cautious approach is taken with regard to interest rate risk, i.e. more funds are available sooner to invest in an anticipated rising rate market. The return of 0.78% is comfortably above the 6-month LIBID average of 0.71 and was 0.09% below the 12-month LIBID average of 0.87% in a rising rate environment.

A total of over £707k (£496k net of that paid to the LEP and external bodies) has been earned in Comfund interest in the first six months of the year (£660k gross 2017-18). Comfund administration charges and other Treasury Management fees totalled approximately £76k for the period.

Revenue: Revenue interest has contributed a further £96k of income, with an average revenue balance (general monthly working capital) of just over £32.5m (£34m 2017-18), and an average return of 0.59%, 13 basis points above the average 1-month LIBID rate.

Property Fund: To 30th September the £10m invested in the Churches, Charities, Local Authorities (CCLA) Property Fund delivered an average net income yield of approximately 4.31%, £215,000 cash, or £170,000 more than if invested in cash. The level of this investment is kept under review, to see if advantage can be taken of this better rate on a larger sum. As per the Treasury Strategy for 2018-19, an appropriate level will be determined with reference to core balances and reserves.

Combined: Combined return for the period has been 0.91% on an average balance of £223m. This figure includes approximately £55m of cash managed on behalf of the Local Enterprise Partnership (LEP), and £8.4m of other external bodies (e.g. Exmoor National Park (ENP), and South West Councils (SWC). This equates to a £1.29m per annum gross benefit of investing over the risk-free option, the Government Debt Management Office (DMO).

The combined gross return for the same period in 2017-18 was 0.65% on an average balance of £261m, or approximately £854k in monetary terms. The increase in rates achieved is in part due to the rise in base rate and a full year of the Property Fund The investment in the CCLA Property Fund has added 16 basis points to average cash returns of 0.75%. The reduction in average balances of £37.5m reflects reduced income and net outflows of capital balances and the passive borrowing strategy, i.e. using internal funds to finance spending, and borrowing money only when necessary.

The table below highlights investment figures over the period: -

	Balance 31-03- 2018 £m	Rate of Return at 31-3- 2018 %	Balance as at 30- 09-2018 £m	Rate of Return at 30-9- 2018 %	Average Balance 31-3 to 30-09 £m	Average Rate 31-3 to 30-09 %
Short- Term						
Balances	10.00	0.40				
(Variable)	16.89	0.49	19.54	0.75	32.59	0.59
Comfund (Fixed)	179.68	0.69	176.15	0.89	180.59	0.78
CCLA Property						
Fund	10.00	4.22	10.00	4.31	10.00	4.31
Total Lending	206.57	0.84	205.69	1.04	223.18	0.91

Icelandic Investments Update

The current position is this: -

Landsbanki & *Glitnir* – As reported in the end of 2017-18 Treasury Management Outturn Report, SCC has concluded any interest that it had with these two banks.

Kaupthing, Singer & Friedlander – The estimated range for total dividends in the Administrator's April 2018 report remains at 86p-86.5p in the pound.

A further dividend of £25,787.33 was received in August 2018, 85.75% of this claim having been paid to date. Future dividends will be paid subject to consultation with the Creditors' Committee, and when the level of distributable funds makes it cost effective to do so.

In total, as at 30th September 2018 £23,241,306.63 had been recovered. The shortfall of £1.76m from the original investment was written off back in 2008-09.

1.4 Compliance with Prudential Indicators

The Council can confirm that it has complied with its Prudential Indicators for 2018-19. Those indicators agreed by Full Council and actual figures as at 30th September are included below:

	2018-19	As at 30-09
	£m	£m
Authorised limit (borrowing only)	437	338
Operational boundary (borrowing only)	403	338

Upper limit on fixed interest

rate exposure		100%	100%
Upper limit on variable interest rate exposure		30%	0%
Maturity structure of borrowing			
	Upper	Lower	As at
	Limit	Limit	30-09-18
Under 12 months	45%	15%	36.0%
>12 months and within 24 months	20%	0%	0.0%
>24 months and within 5 years	20%	0%	0.0%
>5 years and within 10 years	20%	5%	10.7%
>10 years and within 20 years	20%	5%	10.6%
>20 years and within 30 years	20%	0%	0.0%
>30 years and within 40 years	45%	15%	41.2%
>40 years and within 50 years	15%	0%	1.5%
50 years and above	5%	0%	0.0%
		2018-19	As at 30-09
		£m	£m
Prudential Limit for principal su	ms	2111	2111
invested for periods longer than		s 100	30

1.5 Outlook for Quarters 3 & 4

Having raised policy rates in August 2018 to 0.75%, the second rate rise in 9 months, the Bank of England's Monetary Policy Committee (MPC) has maintained expectations of a slow rise in interest rates over the forecast horizon.

The MPC has a definite bias towards tighter monetary policy but is reluctant to push interest rate expectations too strongly. While policymakers are wary of domestic inflationary pressures over the next two years, it is believed that the MPC members consider both that (a) ultra-low interest rates result in other economic problems, and that (b) higher Bank Rate will be a more effective weapon should downside Brexit risks crystallise, and cuts are required.

The UK economy still faces a challenging outlook as the minority government continues to negotiate the country's exit from the European Union. Central bank actions and geopolitical risks, such as prospective trade wars, have and will continue to produce significant volatility in financial markets, including bond markets. Some upward movement from current borrowing levels is expected, based on interest rate projections, the strength of the US economy, and the European Central Bank (ECB) forward guidance on higher rates. However, volatility arising from both economic and political events will continue to offer borrowing opportunities.

	Dec 18	Mar 19	Jun 19	Sep 19	Dec 19	Mar 20
Upside Risk	0.00	0.00	0.00	0.25	0.25	0.25
Base Rate	0.75	1.00	1.00	1.25	1.25	1.25
Downside Risk	0.00	-0.50	-0.50	-0.75	-0.75	-0.75

A table of forecast rates to September 2021 is shown below.

	Jun 20	Sep 20	Dec 20	Mar 21	Jun 21	Sept 21
Upside Risk	0.25	0.25	0.50	0.50	0.50	0.50
Base Rate	1.25	1.25	1.25	1.25	1.25	1.25
Downside Risk	-0.75	-0.75	-0.75	-0.75	-0.75	-0.75

Revisions to CIPFA Prudential and Treasury Management Codes and Guidance, and MHCLG Investment Guidance:

Some Local Authorities have been investing in non-financial assets, with the primary aim of generating profit. Others have entered into very long-term investments or provided loans to local enterprises or third-party entities as part of regeneration or economic growth projects. The National Audit Office and the Public Accounts Committee raised concerns about Local Authority (investment) behaviour, including: -

- Local Authorities are exposing themselves to too much financial risk through borrowing and investment decisions
- There is not enough transparency to understand the exposure that LA's have as a result of borrowing and investment decisions
- Members do not always have sufficient expertise to understand the complex transactions that they have ultimate responsibility for approving

As a result of concerns of the growth of esoteric investments, and the subsequent review, CIPFA published new versions of the Prudential Code for Capital Finance in Local Authorities (Prudential Code) and the Treasury Management Code of Practice; However, it has yet to publish the local authority specific Guidance Notes to the latter.

MHCLG also published revised Investment Guidance which came into effect from April 2018.

The updated Prudential Code includes a new requirement for local authorities to provide a Capital Strategy, which is to be a summary document approved by Full Council covering capital expenditure and financing, treasury management <u>and non-treasury investments</u>. The Council will be producing its Capital Strategy later in 2018-19 for approval by Full Council for the 2019-20 financial year.

Both the CIPFA Code and government guidance require the Council to invest its funds prudently, and to continue to have regard to the security and liquidity of its treasury investments before seeking the optimum rate of return, or yield.

The Council's objective when investing money remains to strike an appropriate balance between risk and return, minimising the risk of incurring losses from defaults and the risk of receiving unsuitably low investment income.

SCC does not currently, and has no immediate plans to 'invest' in esoteric schemes.

1.6 Summary

In compliance with the requirements of the CIPFA Code of Practice this report provides Councillors with a summary report of the treasury management activity during the first six months of 2018-19. As indicated in this report all treasury activity was conducted within the benchmarks set as Prudential limits for prudent and sustainable capital plans, financing, and investment. A risk-averse approach has been taken in relation to investment activity with priority being given to security and liquidity over yield.

Whilst the average duration of cash investments has been circa 4.5 months, the return of 0.91% (4 basis points above the period average 12-month LIBID rate) has

been achieved on average balances of £223m, producing income of over £1m.

2. Options Considered - None

3. Consultations Undertaken - None

4. Financial, Legal, HR, and Risk Implications

4.1 The financial implications contained in this paper are included within the Medium Term Financial Plan (MTFP). Effective Treasury Management provides support to the range of business and service level objectives that together help to deliver the Somerset County Plan.

5. Other Implications - None

6. Background papers

6.1 Treasury Management Strategy Statement and appendices.

Money Market Data and PWLB Rates

The average low and high rates correspond to the rates during the financial year-to-date, rather than those in the tables below.

Table 1: Bank Rate, Money Market Rates (LIBID Rates based on Intercontinental Exchange LIBOR rates)

Date	Bank Rate	O/N LIBID	7- day LIBID	1- month LIBID	3- month LIBID	6- month LIBID	12- month LIBID	2-yr SWAP Bid
01/04/2018	0.50	0.35	0.36	0.39	0.59	0.70	0.88	1.10
30/04/2018	0.50	0.35	0.37	0.39	0.59	0.68	0.85	1.05
31/05/2018	0.50	0.35	0.36	0.37	0.49	0.59	0.76	0.93
30/06/2018	0.50	0.34	0.36	0.38	0.55	0.66	0.84	1.01
31/07/2018	0.50	0.33	0.5	0.56	0.67	0.78	0.93	1.11
31/08/2018	0.75	0.58	0.58	0.6	0.68	0.77	0.92	1.10
30/09/2018	0.75	0.58	0.59	0.6	0.68	0.78	0.94	1.15
Average	0.58	0.42	0.43	0.46	0.6	0.71	0.87	1.06
Maximum	0.75	0.58	0.59	0.6	0.68	0.78	0.94	1.16
Minimum	0.5	0.33	0.35	0.37	0.48	0.59	0.75	0.89
Spread	0.25	0.25	0.24	0.23	0.20	0.19	0.19	0.27

Table 2: PWLB Borrowing Rates – Fixed Rate, Equal Instalment of Principal (EIP) Loans

Change Date	Notice No	4½-5 yrs	9½-10 yrs	19½-20 yrs	29½-30 yrs	39½-40 yrs	49½-50 yrs
03/04/2018	128/18	1.84	2.06	2.43	2.65	2.73	2.75
30/04/2018	167/18	1.82	2.09	2.53	2.77	2.81	2.89
31/05/2018	207/18	1.68	1.94	2.38	2.64	2.75	2.76
30/06/2018	251/18	1.75	1.99	2.39	2.64	2.75	2.77
31/07/2018	295/18	1.82	2.06	2.46	2.70	2.81	2.83
31/08/2018	339/18	1.82	2.05	2.44	2.68	2.80	2.83
30/09/2018	380/18	1.91	2.16	2.55	2.79	2.91	2.94
	Low	1.66	1.89	2.31	2.56	2.67	2.70
	Average	1.82	2.06	2.47	2.71	2.82	2.84
	High	1.95	2.22	2.65	2.89	3.00	3.03
	Spread	0.29	0.33	0.34	0.33	0.33	0.33

Change Date	Notice No	1 year	4½-5 yrs	9½-10 yrs	19½- 20 yrs	29½- 30 yrs	39½- 40 yrs	49½- 50 yrs
03/04/2018	128/18	1.68	2.04	2.42	2.73	2.71	2.54	2.47
30/04/2018	167/18	1.63	2.06	2.51	2.86	2.86	2.69	2.63
31/05/2018	207/18	1.50	1.91	2.36	2.74	2.72	2.56	2.49
30/06/2018	251/18	1.60	1.97	2.38	2.74	2.74	2.60	2.55
31/07/2018	295/18	1.66	2.04	2.44	2.80	2.80	2.66	2.61
31/08/2018	339/18	1.69	2.03	2.42	2.80	2.80	2.67	2.62
30/09/2018	380/18	1.75	2.13	2.53	2.91	2.91	2.80	2.76
Low		1.48	1.87	2.29	2.67	2.67	2.52	2.45
Average		1.66	2.04	2.45	2.82	2.81	2.67	2.61
High		1.77	2.19	2.63	3.00	3.01	2.89	2.84
Spread		0.29	0.32	0.34	0.33	0.34	0.37	0.39