

Benchmarking of Administered Interest Rates

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The current schemes of small savings in India serve a dual purpose: (i) of providing an instrument for the small savers from rural and semi urban areas and (ii) towards borrowing requirements of the Government. As such, these savings are mobilised with incentives like higher interest rate than other competing instruments and in some cases with tax concessions. Further, the interest rates on such small saving schemes are administered by the Government considering various factors and are not generally revised quite often. As tax incentives are available to these schemes, income-tax payers from urban areas also have substantial investments in these schemes thus, in some way creating a distortion among small saving schemes.

The Gupta Committee felt the need for revision of interest rates of these saving schemes because the other commercial interest rates have been freed from administrative control and are market determined. Therefore, the Committee felt that the small savings rates should be in alignment with commercial rates and without affecting adversely the small savings collections.

Current Status

At present, there are ten small saving instruments with varied maturities ranging from less than one year to 15 years carrying different interest rates. On some instruments, interest is calculated on a quarterly basis, on some on annual basis and some on compounding basis. Further, one instrument is a bearer instrument, which is out of alignment in salient features with other instruments. Further, certain schemes enjoy the facility of withdrawal after a prescribed lock in period and certain schemes have to be held to maturity. The small saving schemes [including Public Provident Fund (PPF)] account for nearly 26.0 per cent of the total liabilities of the central government. According to Budget Estimate of 2000-01, the average interest cost of these schemes was around 12.22 per cent *vis-à-vis* 9.99 per cent on the total borrowings. The fiscal concessions given to these schemes also differ. Under the Income Tax Act, investment in small saving instruments enjoys two types of tax concessions (i) exemption of interest income from direct tax under Section 80-L and Section 10 of IT Act. While Union Budget reviews the limits on interest income on instruments under Section 80-L, in the case of instruments under Section 10, the entire interest income on these instruments is exempt from income tax; and (ii) Tax rebate at a rate of 20.0 per cent an investment under Section 88 with a limit reviewed regularly in the Budget.

Issues

If the fiscal concessions available to small saving schemes are factored into the rates of return offered on them, the effective rates of return on these instruments naturally become higher than the nominal rates of return. Further, with in-built tax concessions the effective cost of borrowings to the Government becomes higher. The higher the tax rebate, the higher the cost of funds. Further, the fiscal concessions create distortion in the effective yields across instruments and the interest to maturity structure of small saving instruments gets vitiated. It was also noticed that instruments with a similar maturity have different tax concessions, thereby differing in effective

rates.

With financial sector reforms, interest rates on several financial instruments are market determined. Banks which play an important role in the credit markets have been given freedom for fixing the interest rates on deposits (excepting saving deposit rate) and on loans and advances. The yield on government securities is also market determined through auction system. Unlike the above, interest rates on small savings are still administered and are not in alignment with interest rates on competing instruments. Further, the monetary policy stance of the RBI does not seep to these saving instruments. If interest rate channel for monetary policy transmission is to evolve, all the interest rates in the economy should respond to monetary policy changes.

Issues in Benchmarking

As interest is a future income it is argued that the interest income should at least preserve the value of the principal in future and also generate additional income to the saver. In this context, fixing interest rate factoring inflation expectations becomes valid. This ensures a positive real rate of return to the investors. Since various risks are involved in a competitive market, the interest rates should have a margin over a risk free asset. This brings in the importance of linking the interest rate of small saving instrument to return on risk free instrument besides inflation expectation. The question then arises what could be the benchmark for these schemes and whether the benchmark rate should be a leading rate or following rate. The leading rate is likely to influence other rates and benchmarking to such a rate has in built expectations; whereas, in linking to a following rate, the prevailing rate is used. Ideally, the benchmark should evolve from the market and other interest rates should be linked to such benchmark rate. There are various issues that come up while finding out a benchmark which serves as a reference rate.

A good reference rate should be a stable rate; stability here is defined as less volatility. Other rates when linked to such stable rate also do not fluctuate widely. The crucial issue here is whether interest rates have to be linked to *ex post* indicators or lead indicators. Some argue that, linking to *ex post* indicators is not desirable as they will not be able to influence the investor's preferences. As such, lead indicators become ideal choice in this context.

The present Committee while recognising the need for revision in interest rates have also discussed choice of reference rate to which the interest rate on small savings can be linked. There are various options available as benchmark rates. The Committee reviewed these options individually.

Inflation as a Benchmark

The simplest way of benchmarking is linking to the current inflation rate. Many measures are available for measurement of inflation like Wholesale Price Index (WPI) (on a point-to-point basis and on average basis), Consumer Price Index (CPI) or national income deflator. The availability of these indices also differs from weekly to quarterly. The basic premise for linking with inflation is to ensure a positive real rate of interest to the investors.

As argued by several researchers that the measurement of real interest rate should use expected

inflation rather than current inflation. However, the problem in this context is about measuring inflation expectation. The assessment of inflation expectations is difficult because of methodological problems besides the choice of a suitable index for the measurement of inflation *viz.* Wholesale Price Index or Consumer Price Index or GDP deflator. The inflation expectations can be assessed either through econometric techniques or by surveys. One simple way which many researchers use is to treat the current inflation rate as the expected inflation in the next period. Some feel that inflation expectations can be measured by distributed lag model wherein the expected inflation is derived as weighted average inflation with higher weight attached to the recent past inflation or the contemporaneous inflation and weights decline with the lags. However, it may be recognised that a 5 year weighted index on annual basis may give a different inflation expectation from the one measured through half yearly inflation rates. Therefore, in the lagged scheme, the length of the lag becomes subjective. Depending upon the lagged structure, the benchmark rate could be different. This shows that real interest rates which are derived as nominal interest rates minus the inflation expectation may not be credible. Because of this, some members felt that the present inflation rate is simpler and a better measure of future inflation expectations.

Inflation expectations may be suitable for small saving schemes with a maturity of more than one year but do not serve for linking to the postal savings bank deposits because of the fact that inflation expectations do not change much in short period. Further, if inflation is volatile, by linking to inflation, the volatility in inflation gets translated into the saving instruments also. In such case, savers may not like to build this volatility in their investment decisions. Thus, there are difficulties associated with linking inflation rates with small saving instruments *viz.* estimation of credible measure of expected inflation, artificial fixation of real interest rate and derivation of term structure of interest rates on small saving instruments.

Yields on Government Securities as Benchmark

As small savings are borrowings by the Government on long-term basis, it is logical that their yields also should correspond to yields on government securities. Besides this, as small savings are not as liquid as dated securities some compensation for the illiquid characteristic may have to be given to the small savings. While considering the acceptance of yields on government securities as benchmark rates for fixing interest rates on small saving schemes, a comparative risk assessment of both the instruments *viz.* small saving instrument and government dated securities is needed. Though, they are perfectly comparable in respect of counterparty risk, they are not comparable in regard to liquidity and price risk. Government dated securities on account of active secondary market are inherently more liquid *vis-à-vis* small saving instruments and also carry more price risk unless held till maturity. The major criticism in adopting yield on government securities as benchmark is that the secondary market yield emanate from low levels of secondary market transactions reflecting low levels of liquidity particularly at higher end. The positive aspect in this regard is that the yield is market determined, though *albeit* a thin market. Since the small savings schemes are of various maturities, the yields on similar type of maturities, in the government securities can be used; for e.g. for fixing the interest rates on provident funds the yield on government securities of 15 year maturity can be used.

Bank Deposit Rates as Benchmark

The Gupta Committee analysing this benchmarking with market determined interest rates suggested that interest rates offered by banks and financial institutions may be considered for benchmarking the small savings schemes. Since the interest rates on deposits except in the case of savings bank are deregulated bankers are given freedom to fix the interest rates on deposits. As such, the interest rates on bank deposits can be viewed as market determined. However, there is no conclusive evidence regarding the direction of causality among these rates i.e. whether bank deposit rates determine the interest rates on postal deposits or vice versa. However, since they are not traded in the sense of tradability of government securities some felt that linking to government securities will not be advantageous.

Besides being a market determined interest rate, the market share of the instrument is also important for ascertaining what could be the benchmark. For e.g. if the administered market segment is relatively larger in volume with large number of savers than the non-administered segment, then administered rates can act as benchmark for market interest rates. This is because in order to survive, the non-administered segment has to offer interest rates higher than the prevailing in the administered segment. Further, it needs to be seen whether a single benchmark is sufficient to act as a reference rate for all the small saving schemes with different maturities or there could be different reference rates for different maturities. In this context, it was suggested that small saving schemes could be bifurcated into two broad categories: the first category consisting of post office saving bank, post office term deposits/ recurring deposits etc. and the second consisting of National Savings Scheme, National Savings Certificate, PPF etc. For benchmarking the interest rates in first category, it was suggested that the rates on such schemes could be aligned with movements in deposit rates in the banking system because these schemes are akin to bank deposits.

Average Yield Curve as Benchmark

Since, the movements on yield curve are susceptible to various shocks, it is suggested that the average of yield curves for a particular period can be considered for benchmark. For example, in the United States, interest rates on small savings bond are based on 90.0 per cent of the six month average of five year treasury securities. In some other cases, variable investment yield is used to benchmark the small saving investment; the range varies between 85.0 per cent and 90.0 per cent. Considering all these factors for the purposes of benchmarking of small savings (i) conversion of yield of government dated securities into par yield (b) a six month averaging of par yield so derived and (ii) appropriate adjustment for price and liquidity risks on the part yield derived as above may need to be undertaken.

One view is that the relevant interest rates on a zero coupon yield curve can be a benchmark for these small saving schemes. For e.g. the interest rate on the zero coupon yield curve minus transaction costs of the small savings could be the interest rate on the small savings scheme of that maturity.

For the second category as long term savings do not generate current income but takes the role of social security, it is suggested that the yield on government securities or bond rate can be used as benchmark. However, there are difficulties in adopting this, as market instruments carry market

rates and long-term savings cannot be compared to market instruments *per se*. Secondly, as long term saving schemes remain illiquid till maturity, they cannot be compared with market securities, which are liquid in nature and generate current incomes.

Bank Rate as a Benchmark

A good benchmark rate is one which leads the other interest rates in the economy. If such a rate is also a policy variable then the benchmark not only has credibility but also reflect the policy changes. At present, a transmission mechanism of the monetary policy stance is through the interest rates and in this context, RBI is developing the necessary instruments towards this end. Bank Rate is activated, and reliance on indirect instruments rather than direct instruments in the conduct of monetary policy has increased. The daily liquidity management by the RBI is conducted through repos and OMOs and for the medium term Bank Rate is used to affect the cost of funds in the system. The repo rates are market determined through auction system and as such the quantity and rate reflect the liquidity conditions prevailing in the market. In the case of Bank Rate as it affects the cost of funds, the general interest rates in the economy react to changes in the Bank Rate. Further, Bank Rate gives a positive real interest rate because it is slightly higher than the inflation rate. Changes in the Bank Rate are contemplated by RBI taking into account the macroeconomic developments, developments in various financial markets and inflation. As such, though it is policy variable in the hands of RBI, changes in the Bank Rate reflect changes in the macroeconomic environment and in that sense it can also be treated as a market related interest rate. Besides the above, Bank Rate changes effect the interest rates of the banking system including deposit rates. However, some observers feel that as Bank Rate is an administered rate of the monetary authority and not a market determined rate in the strict sense it may not be proper to link up the interest rate on long term savings to Bank Rate. However, the savings deposits with the post office will not be necessarily affected by the changes in the Bank Rate at present causing distortion in the interest rate structure of similar instruments.

The repo/reverse repo rate evolving through the Liquidity Adjustment Facility (LAF), which is an effective mechanism for absorbing, and/or injecting liquidity on a day-to-day basis in a more flexible manner will provide a corridor for the call money market. As the call money market in future will be purely an inter-bank market a transmission mechanism of the monetary policy through interest rates will be established at a future date. As such, it is suggested that the Bank Rate be treated as benchmark for linking the interest rates on small savings schemes. The margins over the Bank Rate will have to be fixed according to the maturity of the scheme. For schemes with maturity of less than one year, the average Bank Rate in the previous year can be the interest rate. For maturity of one to five years, Bank Rate plus one percentage point and for all instruments of maturity more than five years it could be Bank Rate plus 3.0 percentage point. This will ensure a real rate of return to the investors between 1.0 – 4.0 per cent, which is in accordance with the real rates of interests in the international markets. These rates can be reset every year.

Critical Evaluation of Different Benchmarks

It is argued that in the context of benchmarking, stability in the benchmark rates should be an important issue. Stable rate would be that one which would fluctuate within a narrow range and

having a low coefficient of variation. The stability could be tested based on a long-term time series, or through moving average. For testing interest rates for stability as defined above, various interest rate series were tested and compared through descriptive statistics. Among the market related rates, government securities of 10-year maturity appear to be more stable both in terms of range and coefficient of variation. The result was robust if one uses three or six months moving average for the monthly series. Compared to government securities of 10-year maturity, other interest rates as well as different inflation rates appear to be volatile. Incidentally, it may be noted that inflation measured in terms of both WPI and CPI moved in a wider range. However, three month and six month moving averages marginally narrowed the respective ranges. It may be interesting to note that between April 1998 and March 2001 the market determined rates like bank deposit rate and lending rate are found to be stable whereas in the case of G.10 the variability was larger. During this period, the variations in inflation rates though reduced are still higher than some of the nominal interest rates. Thus, stability of the rates varied over time (sample bias) and are changing over their respective order with respect to variability. Although, stability of rates is an important factor for benchmarking, it may be kept in mind that the ultimate variation in the small saving rate would depend upon the way it is benchmarked to the market related rate. For e.g. if an instrument is given an interest rate of 5.0 percentage point over half the rate of inflation during the given period, this would induce half the variation in inflation on the rate of saving instrument during the specific period. Therefore, even though, some of the nominal rates appear more stable than inflation rates, by devising appropriate rules, it is possible to have an inflation rate based benchmark that would have the same variation as some of the nominal rates currently enjoy. Thus, as far as choice of benchmark is concerned variation in rate is not important *per se* but would depend upon the way it is smoothed.

For benchmarking however, framing up of any linear rule based on the market determined rate would leave the correlation between that rate and the small saving rate unaffected. Further analysis revealed that deposit rates, lending rates, average inflation rates (based on CPI) and the yield rates on securities of 10-year maturity are well aligned. Although, no instrument among the market determined rates emerged uniformly superior in terms of its strength of relation with small saving rates, deposit rate, lending rate and yield on 10 year government dated securities appeared to be better than others. It is interesting to note that after April 1998 the correlation of six months moving average of Bank Rate with most of the rates of small saving appeared to be high giving possible direction that Bank Rate can also be viewed as a benchmark for interest rate on small savings.

It was observed that if interest rates are benchmarked to inflation, in whatever manner inflation is measured, there need not be any tax rebate or concessions on interest income as the benchmark can be set appropriately. However, it may be noted that benchmarking need not remove large distortions in the effective interest rates arising due to differential fiscal concessions and therefore prescribing benchmark becomes difficult.

Options

A possible option before arriving at a benchmark for the small savings interest rate is the removal of fiscal concessions to these schemes. This makes the small savings cost effective as there is a level playing and then benchmark can automatically evolve. Perhaps, there could be a

marginal fall in the collections of small savings once the tax incentives are withdrawn but the experience so far with Kisan Vikas Patra amply demonstrates that only higher nominal returns matter but not the tax incentives attached.

As the monetary policy changes effect the savings and investment decisions in the economy, it is necessary that the savings generated in the economy are captured in the monetary aggregates which are closely monitored by the central bank for its policy formulation. At present, the broad money supply aggregate (M_3) does not take into account the post office savings schemes and therefore, monetary policy actions do not directly reflect in these instruments. It may be mentioned here that these instruments on the recommendation of Dr. Y.V. Reddy Committee on “Money supply compilation” are being included in the liquidity aggregates.

One can also think about giving the investor a choice between fixed rate and floating rate. Choosing floating rates will enhance the ability of the investors in exploiting the financial markets for returns on their savings. If this happens a financial structure will evolve wherein investors trying to maximise their returns on their savings will have a host of instruments and opt for such instruments to their advantage. In such a case, there is a likelihood that government's borrowing requirements may be through such funds rather than the present small saving schemes. The liquidity funds which offer competitive rates for mobilising these saving in turn will invest in the borrowings of the government through securities. In this scenario the deposits with post offices will melt into bank deposits and other contractual savings will then be social security funds. The long-term savings schemes like Provident Fund etc. which will give a positive real rate of return can take care of social security needs of the investors.

Summary and Conclusions

The Committee has to critically examine the various features of different saving instruments and decide whether interest rates of these schemes should be market related or benchmarked to a reference rate. Before attempting such a thing, it will be better if the schemes be rationalised by removing the distortions in the features of the schemes. The first step towards this end could be to differentiate between small saving schemes which essentially cater to park savings for a short/medium term and schemes which are by nature akin to social security funds. All the tax benefits to the former schemes may be withdrawn, whereas schemes in second category may continue to have the tax benefits. After carefully examining different reference rates in the light of their market relatedness, stability and other properties, all the schemes in the second category may be linked to Bank Rate with a positive spread as Bank Rate is a policy signalling variable and determines the general interest rates in the economy or to yield on government securities. The benchmark can be reset at the beginning every financial year by taking the average bank rate or average yield on government securities in the preceding year. For small saving schemes, for less than one year, a suitable benchmark like an average repo rate or bank deposit rate can be considered.