

AN ECONOMETRIC ANALYSIS OF SOCIAL SECURITY AND SOCIO-ECONOMIC DEVELOPMENT

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ABSTRACT

Social security benefits are required payments made to the government in exchange for the right to claim further societal benefits in the future. Additional factors that affect social security contributions exist. Social security contributions may have a positive or negative association. Therefore, the study uses secondary data gathered from The World Development Indicators database (WDI) between 1990 and 2020 to analyse the impact of tax income, expense, and life expectancy on social security contributions. The ARDL model was used to conduct a quantitative evaluation of information and statistical analysis of it. According to an empirical finding, social security contributions have a negative relationship with tax receipts whereas expenses have a positive relationship with life expectancy. A precise definition should be utilized when referring to the distinction between social security contributions and tax revenue. In various circumstances, a nation must deal with the problem of a double economic contribution.

Keywords: *Social security, Life expectancy, Tax revenue, Expense, ARDL model*

Introduction

Social security benefits are required payments made to the government in exchange for the right to claim further societal benefits in the future. Social security contributions include old-age benefits, widow pension, disability pension, unemployment allowance, injury at work and accidents at work, sickness allowance, survivors' pensions, family assistance for medical, and other basic provisions of survival. The burden of social security support is shared by both employers and workers. Such social assistance is generally held in reserve to back social assistance and remained generally compensated to those organizations of the government that make available such reimbursements. This indicator tells to government and is considered as a proportion of GDP and total tax policy.

Social security faces a significant mismatch between the revenues. It would take in the benefits paid out currently in 2021. Generally, we pay more in assistance than we receive from returns. Since 2010, the social security cash movement has been adverse, which is an expensive method of saying that the activity is not gathering adequate cash through levies to protect what it is compensable out. But all was not lost. There was still this considerable trust fund behind social security, so we started tapping the interest on the fund. In contrast, the growth in our country becomes hampering. Because of this, In order to conduct our research on social security contributions and development in India, we followed certain reviews based on this topic.

Every government need tax money from several sources. Individual wage levies and social security benefits are included in the collection of taxes on labour income, which accounts for almost half of all tax returns. When we tax the labour class's income more heavily, it puts additional tax pressure on the workforce. Considering that various age groups of individuals are still living in a nation. Due to variances in the socioeconomic factors, life expectancy varies throughout nations (Olshansky et al., 2012). In a nation whose taxes are the same for all groups except senior residents, this demographic trend creates disparities. On the other hand, the government spends the same amount of money on all of its inhabitants.

The works had been broadly measured a change in the age encourages change in the government spending said (European Commission, 2018; Balassone et al., 2011) the impact of changes in the age patterns on government revenue is understood less than it should have understood.

Those people which have a huge quantity of earning less and their consumption pattern is different especially when retired said (Doring and Walder, 2012), but they are usually better off than others. Income and consumption patterns vary from individual to individual as per their earning level after being taxed in many countries, and their level of social-cultural differences have diverse financial results and also on their revenue side. Based on this matter, collections in tax returns get decrease which leads to an effect on public spending.

Therefore, for our study on social security contribution and development in India, we have adhered to specific reviews focused on this topic.

Literature review

In this section, the authors have analyzed various worldwide popular studies to summarize findings relevant to research in two parts. The first one is related to the association of social security contribution with tax revenue and the second one is the association of social security contribution with life expectancy and expenditure.

Association of social security contribution with tax revenue:

(Avenue, 1983) Social security and tax rate go opposite to each other as the tax rate increases social security contribution is reduced. Especially for those whose earnings are below than ceiling. (Hubbard & Judd, 1987) stated that social security increases lifetime welfare and reduces the national saving if they don't borrow it. Individual welfare is reduced when borrowing is taken into account. (Feldstein & Samwick, 1992) explained that social security tax is negative for many employees. (Kotlikoff, 1996) examined that size of efficiency gains depends on the existing structure of the association between social security benefits and taxes. (Arthur and Annika, 1997) Examined an inverse relationship between social security benefit plan coverage and its effect on non-pension saving. (Schneider & Jelinek, 2005) examined the influence of the tax hypothesis on the falling of poor's income significantly over time. Which results in less contribution towards social security. (Mateos-Planas, 2008) analyzed that social security contributed to the deterioration in the population progress rate because of its additional rate and tax rate. (Olovsson, 2010) stated that the social security structure is the proper guide to pay and rates of interest. The efficient policy involves the net income tax over the life. (Torres et al., 2012) their study showed that employees' social security contributions and income tax were reduced. It implies there is a negative association between both tax and social assistance contributions. (Pestieau & Racionero, 2016) found that longevity is related to occupation. Social security is maximum utilized for short-lived workers but least for old and retire the earliest. It can be achieved by taxing heavenly their saving and earnings from long activity.

Association of social security contribution with life expectancy and expenditure:

(Echevarría & Iza, 2006) found that high life expectancy reduces the per capita growth rate in social safety assistance due to reeducation in the proportion of the active population. The higher social security involvement rate reduces the per capita GDP growth rate. (Glomm & Kaganovich, 2008) found that increase in the social security contribution as government education expenditure which results from the overall size of the public budget is defined in the same manner in non-monotonic growth-inequality relationships. (Ito & Tabata, 2008) revealed that there is an association

Between their life expectancy and their per capita output growth hump-shaped. (Bruce & Turnovsky, 2013) found that there is a positive association between, life expectancy, consumption, and social security. Compensation benefits have a direct impact on life expectancy. (Jaba et al., 2013) highlighted that the health system and health care directly impact life expectancy. (Yurdakul & Binay, 2015) suggested that insurance premium revenue contribution can be increased by increasing the premium rate. (Isaacs & Choudhury, 2017) proposed that rising life expectancy and social security change involves increasing the retirement age.

A decrease in social security insurance during life would be considerably larger than for the high earners. (Sánchez-Romero & Prskawetz, 2017) showed an increasing gap in life expectancy due to socio-economic variables, making the US pension scenario increasingly deteriorating and increasing the per capita income gap among ability groups. (Bennett et al., 2018) examined that universalism of health and social care can postpone death into older ages and decrease life expectancy inequality. (Reynolds & Avendano, 2018) explained that life longevity can be considerably slighter if the expense incurred on education and incapacity programs were compared to other high-income countries. (Bilal et al., 2019) examined that social security and life expectancy are positively associated with each other. A low level of social security leads to less life expectancy. (Margitic & Ravallion, 2019) found that social insurance does the heavy lifting for poor people and social assistance lifts.

On average, there is only 1.5 % per day, which is somewhere less than 10% of the mean spending on social security. (Prammer, 2019) found that life expectancy increases by these things. The first is growing remuneration and pension assistance, and the second is population progress that responds negatively per capita effect of life expectancy on overall revenue. (June 2020) the study evaluated that older persons' working life expectancy significantly increases by social security due to their extra livelihood than to financial gains from a big amount of pension wealth. (Gu et al., 2020) found that a small regional gap in life expectancy leads to an increase the housing facilities in the backward regions. (Heer et al., 2020) examined the effects of initial and welfare of no of policies frequently supported to progress the acceptable of pension systems. (Yu & Li, 2021) showed there is a negative relationship between rural poverty incidence to social security expense, which means social support expense assistance to diminish absolute rural poverty. (Li et al., 2021) examined that food expense was positively associated with the increases in county-level life expectancy and nutritional measures against early disease and stationery of increases the life expectancy. (Bravo et al., 2021) explained that the life expectancy gap is direct and significant for many countries and years.

It will keep it the same and the size of grant rates between the age groups can be large, demand the initially social insurance reduce and consistently reduce the annual rates of the social insurance to correct it. (Alfano & Capasso, 2021) revealed that social security contribution

escapes shrinkages as our life expectancy increases, but it increased when the revenue on the other long-run prosperity collected increases. (Schernberg and Bommier, 2021) explained that the demand of the people for the social security incomes gradually learn about their life expectancy. Social security offers an evading policy that pair’s short life with a high level of consumption.

Objectives of the study

- To investigate the impact of tax revenue, expense, and Life expectancy on social security Contributions.
- The study's second objective is to look into the impact of life expectancy on social security contributions.

Hypothesis

- H₀: There is no statistically significant relationship between tax revenue, expenditure, life expectancy, and Social Security contributions.

Data Source and Methodology

Data

For the study, a time-series analysis was carried out. To investigate the impact of independent variables on the dependent variable, this includes social security contribution data from 1990 to 2018, (SOSEC) Social security contributions as a percent of GDP, expenses as a percent of GDP (EXP), life expectancy at birth, total years (LIEX), and tax income as a percentage of GDP (TXR) for India. The World Development Indicators database provided the variables for the study. SOSEC percent of income is the study's dependent variable, whereas LIEX, TXR, and EXP are the study's independent variables. The specifications for all variables, as well as the sources of the data taken into the present study.

Table 1: sources of the data used

Variables	Variables Specifications	Sources
SOSEC	Social security Contributions (% Revenue)	WDI
LIEX	Life expectancy at birth, total years	WDI
TXR	Tax revenue % of gross domestic product	WDI
EXP	EXP (% of GDP)	WDI

Model selection

The elementary model used in the present study to evaluate the relationship between social security contribution, life expectancy, tax revenue, and expense is as follows.

$$SOSEC_t = f(LIEX_t, TXR_t, EXP_t) \tag{1}$$

$$SOSEC_t = \alpha_0 + \alpha_1 LIEX_t + \alpha_2 TXR_t + \alpha_3 EXP_t + \varepsilon_t \tag{2}$$

Where SOSEC_tdenotes the dependent variable social security contribution (% Revenue) and

independent variables $LIEX_t$, TXR_t , and EXP_t , which indicates the life expectancy, tax revenue, and expense and ε_t is the white noise, respectively.

Methodology

In this study, the ARDL model is used to examine the impact of life expectancy, tax revenue, and expense on Indian social security contributions. The research is carried out in two steps: first, the variables' stationarity and cointegration qualities must be determined; second, the regression model must be estimated.

Unit root test

To carry out an empirical exercise efficiently and avoid any misleading associations, it is vital to determine if the variables are stationary or not. Various tests in the econometric literature can be used for this goal, each with its own set of advantages and disadvantages. Because of their popularity and simplicity, we utilized ADF to determine the order of integration.

Augmented Dickey-Fuller (ADF) test:

The following model is estimated to determine whether series X_t is stationary:

$$\Delta X_t = \alpha_1 + \alpha_2 t + \alpha_3 X_{t-1} + \sum_{i=1}^p \phi_i \Delta X_{t-i} + u_t$$

Where $\Delta X_t = X_t - X_{t-1}$. We state the null hypothesis and alternative hypothesis as follows:

$H_0: \alpha_3 = 0$ (if it results like this then series comprise unit root)

$H_0: \alpha_3 < 0$ (if it results like this then the series does not comprise root)

If there is no unit root, the data should be combined in order 0 or I (0). When a unit root occurs, the Augmented Dickey-Fuller (ADF) test proceeds to check the stationarity of the changing data with the period of taken series X_t . If the data set is X_t is stationary, the initial data set is said to be of order I(1) or I(0).

ARDL Estimation

To study the long-run connection between social security Contributions expenses Life expectancy, and tax revenue, this study used an Autoregressive Distributed Lag Model (ARDL) developed by Pesaran and Shin (1998) and Pesaran et al. (2001). The ARDL Co-integration method was chosen over other co-integration methods such as Engle and Granger (1987), Johansen (1988), and Johansen and Juselius (1990) due to its elasticity and efficacy for small sample size (Narayan and Smyth, 2005). There are some other benefits too to the use of the ARDL method:

- This model helps to estimate the short-and long-run parameters simultaneously with a minor change.
- (Pesaran, et. al., 2001) revealed that The ARDL model abounds with the testing procedure that is more suitable in small sample scenarios and provides consistent estimates.
- ARDL models do not cover any endogeneity problem. (Rahman and Shahbaz, 2013) stated that β in difference to outdated error correction approaches, the coefficients of lagged level variables are not limited to a modified error correction mechanism (ECM).

We construct the representation of the ARDL model as:

$$p \qquad \qquad \qquad q \qquad \qquad \qquad q \qquad \qquad \qquad q$$

$$\Delta\text{SOSEC}_t = \alpha_0 + \sum_{i=1} \pi_1 \Delta\text{SOSEC}_{t-i} + \sum_{j=0} \pi_2 \Delta\text{LIEX}_{t-j} + \sum_{j=0} \pi_3 \Delta\text{TXR}_{t-j} + \sum_{j=0} \pi_4 \Delta\text{EXP}_{t-j} + (\delta_1 \text{SOSEC}_{t-1} + \delta_2 \text{LIEX}_{t-1} + \delta_3 \text{TXR}_{t-1} + \delta_4 \text{EXP}_{t-1}) + u_t$$

Where,

$\pi_1, \pi_2, \pi_3,$ and π_4 are the short-run parameters.

$\delta_1, \delta_2, \delta_3,$ and $\delta_4,$ are the long-run parameters.

u_i is the Gaussian white noise error term.

$(t - i)$ shows the lagged order of the dependent variable.

$(t - j)$ shows the lagged order of the independent variable.

The occurrence of long-period linking can be studied by associating the null hypothesis with the alternative hypothesis of cointegration. The following are the null and alternative hypotheses:

Null hypothesis (no cointegration), i.e., $H_0: \delta_1 = \delta_2 = \delta_3 = \delta_4 = \delta_5 = 0$

Alternative hypothesis (cointegration), i.e., $H_1: \delta_1 \neq \delta_2 \neq \delta_3 \neq \delta_4 \neq \delta_5 \neq 0$

Designed F-statistic values are then equated to the critical values. Calculated F-statistics are less than the lower critical bound value $I(0)$, then it means the series are not cointegrated.

In contrast, the series are cointegrated when the computed F-statistic surpasses the upper bound critical value $I(1)$. Lastly, the cointegration choice is questionable if the F-statistic falls between the lower and upper bound critical values.

When the cointegration association has been established, the short and long-run dynamics of the cointegration equations will be projected. These models' lags will be selected by severely observing the investigative checks and using suitable lag choice conditions such as the Akaike Information Criterion, Schwarz Bayesian Criterion, and the Universal to Specific modeling method.

$$\Delta\text{SOSEC}_t = \varphi_0 + \sum_{i=1}^p \beta_1 \Delta\text{SOSEC}_{t-i} + \sum_{j=0}^q \beta_2 \Delta\text{LIEX}_{t-j} + \sum_{j=0}^q \beta_3 \Delta\text{TXR}_{t-j} + \sum_{j=0}^q \beta_4 \Delta\text{EXP}_{t-j} + \omega \text{ECT}_{t-1} + u_{tj=0}$$

Where ECT denotes the error correction term; ω is the speed of adjustment. Last but not least, the superiority of the ECM and precision projected results measured with the Lagrange Multiplier test for heteroskedasticity planned by Engle (1982), the Breusch–Godfrey test for autocorrelation planned by Breusch and Godfrey (1981), and the Cumulative Sum (CUSUM) and Cumulative Sum of Squares (CUSUMSQ) proposed Chow (1960) and Brown et al. (1975).

Observed results and findings

Descriptive Statistics:

Before proceedings with regression analysis, it is essential for the correct information about the data collected. So, we go for the descriptive statistics, which are as follows.

Table 2: Descriptive Statistics

	TXR	SOSEC	EXP	LIEX
Mean	10.05243	0.131947	15.38325	64.40819

Median	9.993591	0.113215	15.27195	64.50000
Maximum	12.10835	0.384681	17.22767	69.65600
Minimum	8.079454	0.028506	14.08071	57.86500
Std. Dev.	1.198127	0.088457	0.749303	3.715942
Skewness	0.171464	0.971773	0.560154	-0.151894
Kurtosis	2.008142	3.375520	3.058489	1.775792
Sum	311.6253	4.090360	476.8809	1996.654
Sum Sq. Dev.	43.06522	0.234737	16.84364	414.2468
Observations	31	31	31	31

Note: Results calculated by the authors using EViews 10.

In the above table, the descriptive statistics reveal that there are 31 observations for each variable. For measuring the central tendency of the variables where is the simply the average is called mean, so here the mean values are for tax revenue (% of GDP) is 10.05, for Social security Contributions (% Revenue) is 0.13, for EXP (% of GDP) is 15.38. For Life expectancy at birth, the total (years) is 64.41. The average is the central value after arrangement in ascending or descending order, while the mode the most appeared value of each variable has been shown. The maximum and minimum values tell us the highest and lowest figure in each of these variables. To spread out the data the measures of dispersion have been shown; the standard deviation tells how far the observations are from the sample average for each of the variables. Two tools were being used to measure the normality: Skewness and Kurtosis. The kurtosis talks about the thickness of flatness of the distribution of each series. Here the variables TXR (2.01) and LIEX (1.78) are less than three because a value of three implies that the distributions are normal, which mesokurtic is, but these two are platykurtic. It means that these series are lower values below the sample mean. So, in the TXR series, many matters were lower than 10.05, and in LIEX, most of the deals are more down than 64.41. So, these two are going to have a flat surface. And for the variables SOSEC and EXP, the kurtosis values are nearer to three, indicating that they are a little bit normally distributed. The Skewness measures the degrees of asymmetry of the series. For average Skewness, the value is zero. Here the variables TXR and LIEX are closed towards zero; hence these two are typically distributed. Since SOSEC and EXP have the weights a little toward one, it implies that these two distributions have a short right tail. Again, stationarity is necessary before applying the regression analysis because if the time series is non-stationarity, the regression results will become false.

Formal Unit Root Tests:

Before moving ahead to predict the model, check whether the time series of the variables are stationary or not. Hence the unit root test has been applied to study the stationarity in each variable, shown in the following table.

Table-3: Unit Root

	Variables	1% Level	T-statistic	Prob	Decision
SOSEC	At level	-1.95	-1.10	0.13	I(1)
	First Difference	-1.95	-5.63	0.00	

EXP	At level	-1.95	-0.84	0.64	I(1)
	First Difference	-1.95	-7.07	0.00	
LIEX	At level	-1.95	-1.74	0.00	I(0)
	First Difference	-1.95	-4.39	0.12	
TXR	At level	-1.95	0.44	0.80	I(1)
	First Difference	-1.95	-5.30	0.00	

Note: Results calculated by the authors using EViews 10.

Lag length Selection:

Table4: Lag Criteria and F-Bound Test

LAG	LOGL	LR	FPE	AIC	SC	HQ
0	-97.13649	NA	0.012570	6.974930	7.163523	7.033995
1	37.50901	222.8615	3.56e-06	-1.207518	-0.264555*	-0.912194
2	59.86791	30.83986*	2.47e-06*	-1.646063*	0.051270	-1.114479*

Cointegration Test:

F-Bound Test		Null Hypothesis: No levels of relationship			
Test Statistic	Value	Signif.	I(0)	I(1)	
F-statistic	8.628146	10%	2.72	3.77	
K	3	5%	3.23	4.35	
		2.5%	3.69	4.89	
		1%	4.29	5.61	

Note: Results calculated by the authors using EViews 10.

The above table shows the lag selection criteria where the most star signs are shown in the second lag. Hence the second lag recommended by the criteria selected decision criteria for the bound test is that once the F value is less than the I(0) bound, we cannot reject the null hypothesis of no co-integration. Even so, if the F value is higher, the I(1) bound values reject the null. Here we obtain the F statistic value, 8.628146 greater than the lower and upper bound. The lower bound for a 5% level is 3.23, while the maximum bound is 4.35. At the 5% significance level, 8.628146 are more significant than both lower (3.23) and higher wrapped (4.35). As a result, it implies that the dependent and independent variables are in a long-run equilibrium relationship.

Moreover, we can say that there is a rejection of the null hypothesis of no levels relationship. It means there is a relationship among the variables. It is implied that series are co-integrated and

exhibit a long-run relationship. So, the string can be integrated into a linear function because, even if there are short-term shocks that alter individual series movements, there will be convergence in the long run. As a result, we run both short-run and long-run models in this case. The ARDL and VECM models are examples of this. Furthermore, because we do not have a combination of variables with I (0) and I(1) integration, we can use VAR in this circumstance.

Short-run elasticities:

Table-5: Outcomes of Short-run elasticities

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-1.208820	0.314064	-3.848959	0.0007
SOSEC(-1)*	-0.803993	0.149091	-5.392617	0.0000
D(TXR)**	-0.035846	0.013910	-2.577020	0.0163
D(EXP)**	0.070088	0.017855	3.925352	0.0006
D(LIEX)**	0.009265	0.005033	1.840772	0.0776

Note: calculated by authors using EViews 10.

Long-run elasticities:

Table6: Outcomes of Long-run elasticities

variables	Coefficient	Std. Error	T-Statistic	Prob.
TXR	-0.044585	0.020642	-2.159888	0.0406
EXP	0.087174	0.010747	8.111814	0.0000
LIEX	0.011524	0.004540	2.538105	0.0178
ECM CointEq (-1)	-0.803993	0.129317	-6.217242	0.0000
EC = SOSEC - (-0.0446*TXR + 0.0872*EXP + 0.0115*LIEX)				

Note: Results calculated by the authors using EViews 10.

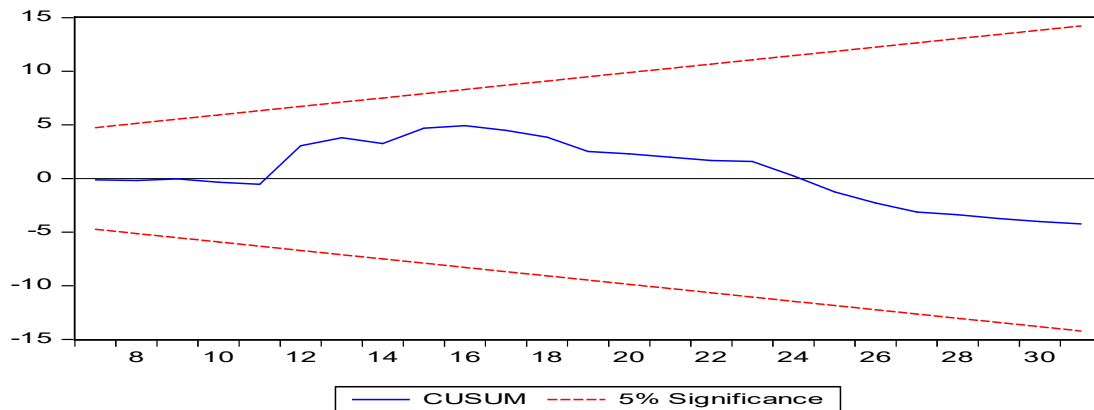
Table6 shows the long-run results amid independent variables and the dependent. It demonstrated that probabilistic values of independent variables are lower than the 5% level indicating that all are significant. A long-run relationship exists with the Social Contributions (% Revenue) (SOSEC). Since all the values are important, it indicates that if the tax revenue is increased by one per cent, then there will be a 0.04% decrease in Social Contributions (% Revenue). There is a negative relationship between these two. At the same time, expense and Life expectancy at birth and total (years) positively correlate with Social Contributions (% Revenue). If a one per cent increase happens in cost, a 0.09% increase will have occurred in Social Contributions (% Revenue). Similarly, a one unit per cent increase in Life Expectancy will lead to rising of 0.01% in Social Contributions (% Revenue).

Stability parameter tests:

We used Brown, Durbin, and Evans' CUSUM and CUSUMSQ residual tests to assess the consistency of the results and the stability of the ARDL model (1975). Figures 2 and 3 show the

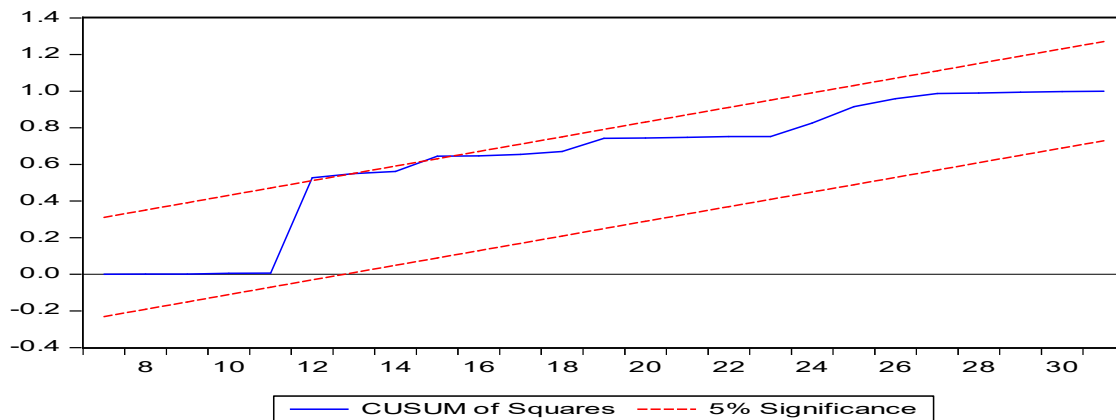
results of the CUSUM and CUSUMSQ tests, which show that our projected ARDL model is stable and that there is no statistically significant evidence of basic variability. The CUSUM and CUSUMSQ test statistics fit within the 5 percent significance level critical limits, which are denoted by two straight lines whose equations can be found in Brown, Durbin, and Evans (1975). As a result, the projected outcomes are reliable and worthy of further investigation. So, the model is proper for evaluating the effect of life expectancy and tax revenue and expense, on India's social security contribution.

Figure-1: CUSUM Test



Note: Results calculated by the authors using EViews 10.

Figure-2: CUSUM Square Test



Note: Results calculated by the authors using EViews 10

Findings

This empirical study found a negative relationship between Social Security Contributions and tax revenue. Some other studies where this relationship exists (Torres et al., 2012), described in their study that social security contribution from employees and their income tax was reduced. It implies the negative association between tax and social security aids. Similarly(Avenue, 1983)also found in his study that social security and tax rate go opposite each other as the tax rate

increases, and social security contribution is reduced. Especially for those whose earnings are below than ceiling.

Moreover, one more study (Mateos-Planas, 2008) showed that social security contribution declined with the population growth rate because of its replacement rate and the tax rate decline. Since in the current study, it has been found that social security contribution has a positive relationship with Life expectancy at birth, total (years), such finding was similar to study conducted by (Bruce & Turnovsky, 2013) in their study explained that life expectancy, consumption, and social security all have a positive relationship with each other. Compensation benefits have a direct impact on life expectancy. The previous study (Bruce & Turnovsky, 2013) has also revealed that life expectancy, consumption, and social security have a positive relationship. Compensation benefits directly impact life expectancy (Bilal et al., 2019) and found there is a direct association between social security and life expectancy. A low level of social security leads to a low level of life expectancy.

Moreover, (June 2020) has also described that older person-wage workers' life expectancy significantly increases by social security due to their extra livelihood than to financial gains from considerable pension wealth, and (Prammer 2019) showed that life expectancy is considerably higher increases by these things. The first is growing remuneration and pension assistance, and the second is population progress that responds negatively per capita effect of life expectancy on overall revenue. However, the study (Alfano & Capasso, 2021), has contradicted this finding. They revealed that as our life expectancy increases,

it diminishes the social security contribution evasion but rises when the return on other long-term wealth accumulated increases. Similarly, in the current study, it has been found that the growth of the country is also having a positive correlation with the social security contribution, which a study has supported carried out by (Ito & Tabata, 2008) described that there is a bond Between life span and per capita, income growth stationary and (Glomm & Kaganovich, 2008) revealed that increase in the social security contribution as government education expense general budget is characterized by the same manner in non-monotonic growth-inequality relationships.

Conclusions

Social security contribution which is compulsory to any government has been investigated mainly in the context of advanced nations regarding retirement incentives. Since, in a study (Gruberand, 2004) explained if the government provides more and more forward-looking incentives for the people, they will be motivated more to work in the old age. But the evidence is varied by different model specifications. In the case of less developed countries, there is not available sufficient data, still, there is this type of situation is not working rather very slowly it is happening due to the low public pension system. In these countries, the government needs to focus more on the public pension system even though there is less population the countries.

An increase in wages and pension benefit system is lead to an increase in per capita income and tax revenue and social security contribution. Moreover, if it happens properly it will lead to more reforms in the real wage rate and it will boost the growth. Similarly, social security contribution enhances human capital accumulation so their growth exists. On the other hand, a positive effect of social security contribution for development through reducing tax rate system is not available properly as data. There should be some social security reforms to enhance the growth of the country. The government agencies must provide some supplement benefits to the citizens of the

nation as a result people will have some responsibility not to be tax evaders in the future. Because of any reason, if people are unemployed, there must be some specified and transparency schemes for the same categories of people until they access any job. Again, the government should give more power to National Social Security Board. An opposite relationship exists between tax revenue and social security contribution. And a direct relationship exists between expenditure and life expectancy at birth, (total years) with social security contribution is there. If a one per cent increase happens in cost, a 0.09% increase will have occurred in social security contributions (% revenue). Similarly, a one per cent increase in life expectancy, total (years) will be increased by 0.01% in social security Contributions (% Revenue). An alternative explanation is that even if the incentives are there by the government towards society, people need to follow the government protocol towards the taxpaying. That could lead to a generation in tax revenue and promote growth in the country.

Recommendations

In this study, we compared the relationship between social security contributions and tax receipts, life expectancy, and spending. We found that while there is a favourable relationship between expenditure and life expectancy and social security contributions, the relationship between social security contributions and tax receipts is incongruous. Therefore, the study suggests that if a household anticipates making a significant contribution to social security in their lifetime, the government should be required to lessen their tax burden by implementing some early tax structure modification.

Additionally, increased longevity is an indication of societal progress because it indicates that the population is growing and developing. However, if individuals live longer, the government must face the task of developing policies for these extra years. The cost of various governmental programmes is put under more upward pressure when people retire for longer periods of time. Policymakers in the nation should focus more on reforming the statutory components of the tax system rather than directly adjusting the tax burden of labour immigrants. It will therefore establish the average and marginal tax rates in the nation.

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