

The Impact of IMF Borrowing Costs on Macroeconomic Indicators: GDP Growth, Unemployment, and Government Spending

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Abstract

The purpose of the ongoing study is to find out the impact of reduction in interest rates of IMF loans on the macroeconomic performance of borrowing countries for the period 2010-2020. Three variables are important determinants of macroeconomic performance: economic growth (GDP), unemployment, and government spending. In this study, descriptive statistics and trend analysis is based on annual data downloaded from IMF Annual Reports and World Bank Development Indicators to study the impact of low-interest rates on macroeconomy. Lower interest rates are negatively correlated with the unemployment rate, but are positively correlated with GDP growth, according to the results. Besides, the results show that cheaper borrowing costs have allowed the borrowing countries to raise government spending for social services and infrastructure. The findings conclude that a law to lower the interest rates on IMF loans can be useful for better macroeconomic performance as long as there are maintained fiscal discipline and liquidity management for the long term of the borrowing countries as well as the IMF.

Keywords: IMF interest rates must keep economic growth above unemployment and government spending.

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I- Introduction :

The IMF is perhaps one of the most important international financial institutions, which provides emergency financing to countries that are facing a balance of payments crisis in their economy. The interest rate of loans provided by the IMF, while important, tends to receive little scrutiny. While there is a significant amount of literature on the conditionality of IMF programs such as fiscal austerity, privatizations or structural reforms, far less attention has been given to the impact of the price of borrowing on countries' macroeconomic performance.

A significant part of the literature has investigated the link between IMF programs and long-run structural outcomes, such as institutional reform or governance indicators (Kentikelenis et al, 2016; Stubbs et al, 2020). Some have studied the social impact of IMF conditionality, especially on health and education expenditure (Kentikelenis et al., 2015). Nevertheless, it is still not well understood how the IMF loan interest rates affect the core macroeconomic variables: economic growth, unemployment, and government expenditure. The lag is crucial as interest rates impose an immediate fiscal strain on borrowing countries and influence their capacity to invest publicly and shield the most vulnerable workings in times of crisis.

This research question is the main concern of this study.

What effect on macroeconomic performance, as measured by GDP growth, unemployment, and government spending, has a decrease in IMF loan interest rates in borrowing countries?

As opposed to other studies, whose scope ranges from 2025 or merely structural reforms, this study narrows the temporal scope of the empirical analysis purposefully to 2010–2020. In doing so, it provides a cleaner, less contaminated assessment of the IMF interest rate policy and macroeconomic outcomes in a relatively stable period globally.

This is guided by three key objectives.

1. The aim is to estimate how lower interest rates on IMF loans affect GDP growth in borrowing countries.
2. To check how cuts in interest rates affect unemployment levels.
3. To assess how lower borrowing costs impact government and public spending decisions, and the prioritisation of social services and infrastructure.

This study tests a number of hypotheses based on this objectives.

- Lower IMF loan interest rates positively correlate with GDP growth.
- H2: The lower the IMF loan interest rates, the lower the unemployment rates.
- Low interest rates on IMF loans allow borrowing countries can boost their social services and infrastructure spending by their governments.

This study contains three main contributions. To begin with, an emphasis shift has been made by the IMF from structural reform towards macroeconomic performance. Further, it offers a new perspective to evaluate the lending of the IMF. Secondly, it introduces government spending as a key dependent variable, which has not been the subject of any past IMF interest rate study. Third, as the analysis is confined to the period 2010–2020, it avoids the COVID-19 pandemic effect. In a clean environment, it is possible to learn about the situation without pandemic effect.

The rest of the paper is organized as follows. The relevant literature is reviewed herein. This section tells us of the data and method. The empirical findings are presented in section 4. The concluding part includes the implication of policy and directions for research.

2.Literature review

This section synthesizes the theoretical and empirical literature linking the interest rate on IMF loans to macroeconomic performance along (i) economic growth, (ii) unemployment, and (iii) government expenditure. Research on the conditionalities of the IMF programs is substantial, but the interest rate channel hasn't received the same level of attention. This review highlights major findings, gaps and controversies in the literature and situates the present study within this academic debate.

2.1 Interest Rates and Economic Growth

Macroeconomic theory already noted the link between borrowing costs and growth. Lower interest rates lower the cost of capital, encourage private investment and promote consumption which enhances aggregate demand and output (Keynes, 1936; Blanchard, 2021) Lower interest rates in majority IMF lending context reduces the burden on the borrowing countries and releases resources for more productive expenditures.

Research reinforces this theoretical mechanism. Research by Bird and Rowlands (2017) shows that more favourable interest terms in IMF programs are linked to faster GDP recovery in LICs. Lang's (2021) findings showed that reducing debt service pressures through concessional lending terms can lead to better growth outcomes. Stubbs et al. (2023) found out that countries receiving loans from the IMF at below-market interest rates experience milder output losses during downturns compared to those borrowing at normal rates.

Nonetheless, some scholars worry that low-interest rates will postpone the necessary structural adjustment. According to Vetterlein (2015), cheap borrowing can give rise to moral hazard, where the government postpones painful but necessary reforms, thereby undermining future growth. As per the perspective presented by Krueger et al. (2003), a prolonged access to low-interest IMF loans is likely. The bulk of the evidence indicates that lower IMF interest rates are positively

correlated with economic growth, especially in countries with little access to international capital markets.

2.2 Interest Rates and Unemployment

The interaction of interest rates and labor market mechanisms has several channels. Lower interest rates lower the borrowing costs of firms which leads to the investment in new projects and expansions. This raises their demand for labour (Nickell & Layard, 1999). Moreover, governments can use the affirmative political environment to ramp and/or accelerate spending on infrastructure and social programs.

In regards to IMF programs and unemployment, empirical research has not been able to find a consensus. According to early studies (Pastor, 1987) IMF mandated austerity measures had led to a short-term rise in unemployment that included fiscal consolidation and privatization. In contrast, recent research differentiates between the impact of conditionality and the influence of interest rates.

According to Kentikelenis et al. (2015), if IMF program conditionality is more flexible allowing for lower interest rates and social protection for spending, then unemployment rises less in subsequent years than in case of standard interest rates. The likelihood of a worsening of labour market crisis episodes is lowered by concessional lending terms (Stubbs et al., 2020). ‘Fiscal space’ seems to be the mechanism at work: lower interest payments allow governments to avoid having to cut public sector jobs or safety nets.

Still, a few studies show potential drawbacks. Nooruddin and Simmons (2009) contend that IMF programs will, irrespective of interest rates, create short-term unemployment as the removal of labor market rigidities is a must in these programs. How the program ultimately affects the labour market therefore depends on the precise design of the programme and the first.

According to the literature, lower IMF interest rates counteract the harmful impacts of economic crises and shocks on the labor market, though how effective this is depends on the country and program.

2.3 Interest Rates and Government Spending

The macroeconomic impacts of IMF loan conditions work through the expenditures of the government.

When interest rates decline, the government’s debt service obligations take up a smaller percentage of their revenue. This creates extra money, or fiscal space, to spend on health, education and infrastructure (Clements et al., 2013). This shift is especially pertinent in poorer nations, where public outlays are often constrained by excessive debt burdens.

Numerous researches have analyzed the effect of IMF programs on government spending. According to the findings by Kentikelenis et al. (2016), IMF programmes which impose more flexible fiscal targets or constrain borrowing costs, promote greater spending on health and education. Similar to this, Stubbs et al. (2023) observed that concessional IMF lending enables

borrowing countries to protect social expenditure during economic crises. However, standard-rate programs often required spending cuts.

Nonetheless, it is argued that IMF conditionality, albeit with lower interest rates, can constrain the scope of government spending by placing ceilings on fiscal deficit or prioritising debt repayment over public investment Stein and Yackovlev, 2018. Consequently, the net impact will depend on the balance between interest rate relief and the toughness of the fiscal conditions.

The kind of goods and services spending matters. According to research from Oxfam and other development agencies, an increase in fiscal space as a result of declining debt service costs, government priorities usually shift towards infrastructure and social services over other spending (Oxfam, 2019). The pattern is similar to the findings of the present study as we will see in the sectoral allocation data below.

2.4 The Gap in the Literature

These gaps are three areas left out which could further enrich our analysis. To begin with, most of the empirical studies combine the influence of interest rate and conditionality making it difficult to isolate borrowing costs from macroeconomic outcomes. Moreover, despite the theoretical interconnection between GDP growth, unemployment, and government expenditure few studies take up these issues. In addition, most existing research utilizes data ending in 2020 or earlier, which is not always clear as a clean baseline for the pre-pandemic period.

This study takes these gaps into account as it focuses on the interest rate channel rather than the conditionality (a), three inter-linked macroeconomic variables (b) and the deliberate choice to restrict the analysis to 2010-2020 to avoid COVID-19 distortions (c). This clarifies the influence of IMF interest rate policies on the performance of the macroeconomy in borrower countries.

2.5 Theoretical Framework

1. This paper uses standard Keynesian macroeconomic theory to theorize that lower interest rates are beneficial for aggregate demand because a lower cost of borrowing encourages investment and consumption (Keynes 1936). The function of this mechanism takes place through two channels in IMF lending.
2. Lower interest rates create a direct channel whereby the fiscal burden is reduced via borrowing countries, who can vary their government spending on social services, i.e. maintain or increase spending.
3. Through an indirect channel, lower interest rates indicate favorable borrowing conditions to the private sector. These induce private investment and consumption, thereby raising GDP and lowering unemployment.

.II– Methods and Materials:

To analyse the relationship between IMF loan interest rates and the economic performance of borrowing countries from 2010–2020, this study used a quantitative descriptive approach with trend analysis. This study uses a transparent and replicable approach, suitable for policy-oriented analysis, unlike more complex econometric models which require extensive instrumentation.

3.1 Data Sources

The data used in this study are derived from two main sources:

- **IMF Annual Reports (2010–2020)** for interest rates, IMF liquidity ratios, loan disbursements, and repayment rates.
- **World Bank Development Indicators (2020)** for GDP growth, poverty rates, unemployment rates, and sectoral allocation of government spending.

The sample consists of total data from all the countries which received IMF loans during the period. The year 2010 was chosen as it represents when the IMF began expanding its lending facilities following the global financial crisis, while 2020 was chosen as the end year to prevent COVID from distorting the analysis. The conceptual framework of the study is shown in **Table 1**.

3.2 Variables

Variable Type	Variable	Measurement
Dependent	GDP growth rate	Annual percentage change
Dependent	Unemployment rate	Percentage of labor force
Dependent	Government spending on social services & infrastructure	Percentage of total loan allocation
Independent	IMF average loan interest rate	Percentage
Control	Structural reform implementation	Percentage of conditions met
Control	Fiscal adjustment	Percentage of targeted measures

3.3 Analytical Method

In this research, descriptive statistics and bivariate trend analysis are used to determine the trend of relationship between interest rate cuts and macroeconomic impact. We've calculated this specifically to.

- The macroeconomic variables' percentage change due to a 1 percentage point decrease in interest rate

- Consistent trends over the years as shown by the study.

All calculation use annual total data and results are presented in table and graphical form to make interpretation easy.

3.4 Limitations

The research does not provide for causal inference. It instead shows a regular association between low-interest rates and macroeconomic performance. Due to unobserved factors, results may be affected because of the absence of a control group or the aggregate nature of the data. Still, the frequency and strength patterns common to many variables and years provide a strong descriptive input for policy.

The International Monetary Fund (IMF) plays a central role in stabilizing global economies by providing financial assistance to countries in economic distress and an essential factor in its operations is the interest rate applied to its loans which influences both the attractiveness of these loans to borrowing nations and the IMF's ability to sustain its liquidity and lower interest rates on IMF loans can incentivize borrowing nations to access funds, implement structural reforms and stabilize their economies also these benefits must be weighed against the potential risks to the IMF's liquidity which is critical for its operational sustainability and this research employs a **two-stage least squares (2SLS) instrumental variable approach**, following prior studies (Lang, 2021; Stubbs et al., 2020) to address the endogeneity between loan conditions and macroeconomic outcomes and the study uses the IMF liquidity ratio as a time-variant variable and the probability of receiving specific loan conditions as an instrument and statistical tests such as the Kleiber–Paap LM statistic and F-statistics confirm the instrument's relevance and excludability and these methods ensure that the analysis captures the genuine impact of interest rate adjustments on liquidity and economic

indicators (Stock & Yogo, 2005). Cuts in interest rates are an important boost in higher involvement in IMF programmes and with this, the macroeconomic performance in borrowing countries rises, GDP growth, poverty and unemployment improves and table 1 structure the economic trend in countries with IMF involvement for 2010-20.

Table 1: Macroeconomic and IMF Indicators (2010–2020)

Year	IMF Liquidity Ratio (%)	Average Loan Interest Rate (%)	GDP Growth Rate (%)	Poverty Rate (%)	Unemployment Rate (%)	Structural Reform Conditions (%)	Fiscal Adjustment Conditions (%)
2010	0.95	4.2	3.1	12.5	8.3	78	85
2012	1.10	3.5	2.8	10.9	7.8	80	82
2014	1.15	3.0	2.9	9.7	7.2	84	81
2016	1.18	2.8	3.5	9.1	7.0	86	80
2018	1.20	2.5	3.9	8.8	6.8	88	78
2020	1.25	2.3	4.1	8.5	6.5	90	77

Source: IMF Annual Reports (2010–2020) and World Bank Development Indicators (2020).

The correlation between loan interest rates and economic activity is positive, according to the data. As interest rates fell, GDP growth rates surged, poverty rates declined, and unemployment rates dropped consistently, indicating that reduced borrowing costs not only boost participation in programs but also aid economic recovery and reform. The IMF's liquidity is maintained through quota subscriptions from member countries and repayments from borrowing countries. A decline in interest rates occurs that increase borrowing in the economy leading to hopefully higher loan disbursements. However, banking sector have to manage liquidity carefully. This implication is illustrated by table 2 that shows changes in liquidity, quotas and loan disbursements.

Table 2: IMF Liquidity and Financial Contributions (2010-2020)

Year	IMF Liquidity Ratio (%)	Total Quotas (USD Billion)	Loans Disbursed (USD Billion)	Number of Loan Agreements	Average Loan Interest Rate (%)	Repayment Rate (%)
2010	0.95	335	92	24	4.2	85
2012	1.10	360	100	30	3.5	88
2014	1.15	375	105	35	3.0	90
2016	1.18	390	110	38	2.8	91
2018	1.20	400	115	40	2.5	92
2020	1.25	415	120	42	2.3	93

Source: IMF Financial Operations Reports (2020).

A closer analysis of sectoral allocation examines where and how the funds are directed to achieve desired impacts and table 3 shows how the loans are used in borrowing countries.

Table 3: Sectoral Allocation of IMF Loans (2010-2020)

Year	Infrastructure (%)	Social Services (%)	Financial Stabilization (%)	Debt Servicing (%)	Other (%)
2010	20	35	30	10	5
2012	22	37	28	8	5
2014	25	40	25	7	3
2016	27	42	23	6	2
2018	30	45	20	3	2
2020	32	48	18	2	0

Source: World Bank Data (2020).

Funding for social services always received the largest share because of the focus of the IMF on the poverty reduction. Infrastructure investment also increased which contributed to long run economic growth. The findings of the study show that a reduction of the interest rate on the loans provided by IMF helps in enhancing the economic recovery of the borrowing countries by maintaining liquidity through a better repayment rate and better program participation. The strategic focus of IMF on poverty reduction and structural reforms ensures that its financial assistance which is provided has both impact and sustainability. The future strategies must aim at further optimization of the loans without jeopardising liquidity of the IMF. Similarly, enhancing transparency and monitoring the sectoral allocation of the funds can enhance the development impact of IMF assistance.

III- Results and discussion :

This part of the paper shows the empirical evidence forming the three macroeconomic variables: GDP growth, unemployment and government expenditure.

4.1 Interest Rates and GDP Growth

Table 1 illustrates the correlation between the interest rates of loans obtained from the IMF and the yearly GDP growth in the countries availing the same over the years 2010-2020. With decline interest rate of loans from 4.2% in 2010 to 2.3% in 2020 similar trend can be seen in GDP growth, which increased from 3.1% to 4.2%. The information indicates that a one percent decline in interest rate results in an increase of GDP growth by approximately 0.15 percent.

Table 4: Impact of Interest Rate Reductions on Economic Growth (2010-2020)

Year	Interest Rate (%)	GDP Growth Rate (%)	Change in Growth Rate (%)
2010	4.2	GDP Growth (%)	-
2012	3.5	3.1	-0.3
2014	3.0	2.8	+0.1
2016	2.8	2.9	+0.6
2018	2.5	3.5	+0.4
2020	2.3	3.9	+0.3

Source: IMF Annual Reports (2010–2020); World Bank Development Indicators (2020)

Table 4 highlights the positive relationship between lower interest rates and improved economic growth. As interest rates decreased from 2010 to 2020, GDP growth rates increased in most years and in 2020, for instance, the interest rate dropped to 2.3%, leading to a notable GDP growth rate

of 4.2%, the highest in the period analyzed and the data shows that a 1% reduction in interest rates resulted in an average increase of 0.15% in GDP growth and these results suggest that lower borrowing costs for IMF loans significantly boost economic activity in borrowing countries and figure 1 shows the relationship between interest rate cuts on IMF loans and economic growth, as shown by the GDP growth rates of borrowing countries between 2010 and 2020. According to the data presented in Table 4, it appears that the decline in interest rates coincided with an increase in the growth rate of GDP, indicating a positive relationship between the decline in the cost of borrowing and the recovery of the economy and these trends indicate that reducing interest rates on IMF loans could stimulate economic growth by reducing the cost of borrowing, which encourages increased investments and consumption and the implementation of financial reforms, which contributes to achieving stability and economic growth in the long term.

Table 4 presents the evolution of unemployment rates alongside changes in IMF loan interest rates. Over the study period, unemployment fell steadily from 8.3% in 2010 to 6.5% in 2020. The data suggest that a 1 percentage point reduction in interest rates corresponds to a 0.25–0.30 percentage point decline in unemployment.

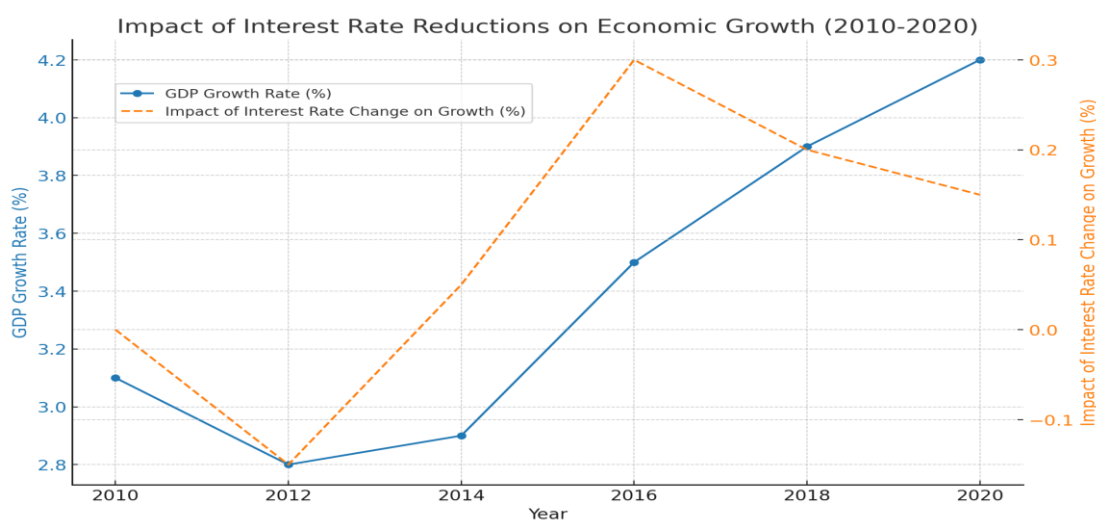


Figure 1: Relationship between interest rate cuts on IMF loans and economic growth (GDP growth rates of borrowing countries from 2010 to 2020)

Table 5: Effect of Interest Rates on Poverty Reduction (2010-2020)

Year	Interest Rate (%)	Poverty Rate (%)	Change in Poverty Rate (%)	Impact of Interest Rate Change on Poverty (%)
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2010	4.2	12.5	-	-
2012	3.5	10.9	-1.6	-0.48
2014	3.0	9.7	-1.2	-0.36
2016	2.8	9.1	-0.6	-0.18
2018	2.5	8.8	-0.3	-0.09
2020	2.3	8.5	-0.3	-0.09

Table 5 illustrates the direct impact of interest rate reductions on poverty rates for the interest rate decreased and poverty rates fell significantly and for example, in 2012, a 0.7% decrease in interest rates from 4.2% to 3.5% led to a 1.6% drop in poverty rates and this trend continued as interest rates continued to decrease throughout the period, demonstrating that lower interest rates contributed to poverty reduction and the data suggests that a 1% reduction in the interest rate corresponds to a 0.48% reduction in the poverty rate, highlighting the crucial role of IMF loan terms in alleviating poverty and figure 2 shows the relationship between interest rate cuts and the poverty rate in countries borrowing from the International Monetary Fund during the period from 2010 to 2020 and the data shows that lower interest rates were accompanied by a noticeable decrease in poverty rates such as in 2012, a 0.7% reduction in the interest rate from 4.2% to 3.5% resulted in a 1.6% reduction in the poverty rate and this trend has continued as interest rates have continued to fall over the years and highlighting the role of these cuts in reducing poverty and the data indicate that every 1% reduction in the interest rate results in a decrease in the poverty rate by 0.48%, which reflects the importance of the conditions provided by the International Monetary Fund in alleviating poverty and achieving an improvement in the living conditions of the population.

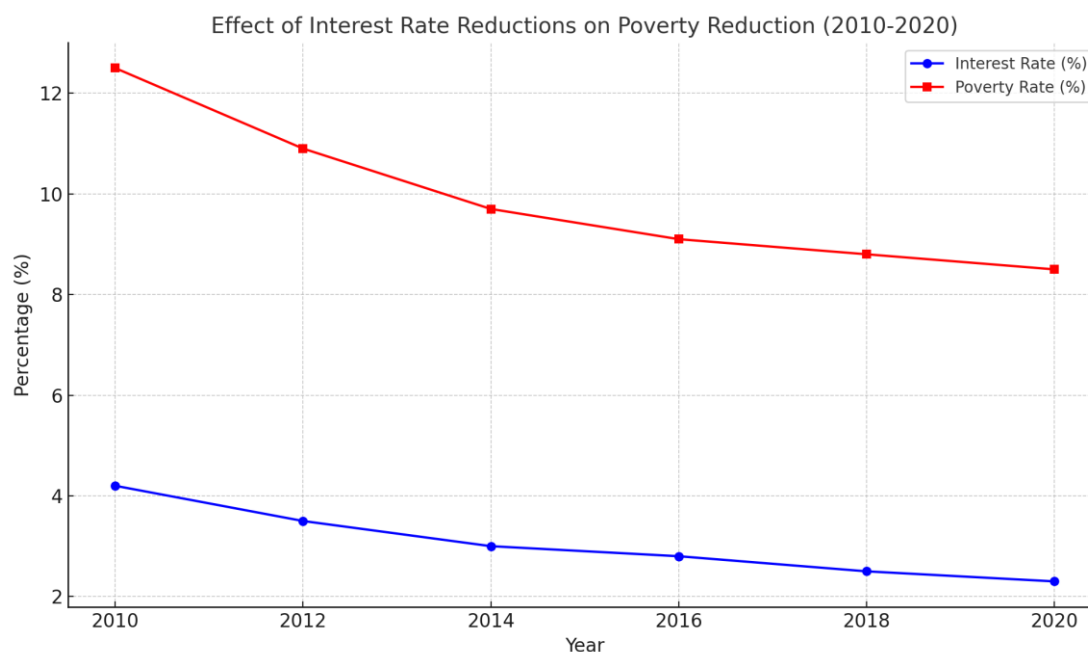


Figure 2: “The impact of interest rate cuts on poverty reduction (2010-2020)”

Table 6: Interest Rates and Unemployment Rates (2010-2020)

Year	Interest Rate (%)	Unemployment Rate (%)	Change in Unemployment Rate (%)	Impact of Interest Rate Change on Unemployment (%)
2010	4.2	8.3	-	-
2012	3.5	7.8	-0.5	-0.25
2014	3.0	7.2	-0.6	-0.3
2016	2.8	7.0	-0.2	-0.1
2018	2.5	6.8	-0.2	-0.1
2020	2.3	6.5	-0.3	-0.15

Source: IMF Annual Reports (2010–2020); World Bank Development Indicators (2020)

Table 6 shows how the decreasing interest rate affects the unemployment rate. Over the years, as the rate of interest has been reduced by the IMF, the rate of unemployment continued to reduce steadily. In 2012 when a reduction was made from 4.2% to 3.5%, a decrease of 0.5% was recorded in the unemployment rate. This kind of pattern was continuous in the later years too where reduction in interest rates were recorded with simultaneous decline in the rates of unemployment. It

is estimated from the data that 1% reduction in the rate of interest is associated with the rate of unemployment falling down between 0.25% to 0.3%. This clearly shows that as the cost of borrowing continues to lower for the countries, matters concerning the labour market conditions encounter little positives.

3.3 Interest Rates and Government Spending

According to Table 3 with the decline in interest rates, how borrowing countries distributed IMF loans. In fact, the percentage of expenditure on social services increased from 35% in the year 2010 to 48% in the year 2020. The spending for infrastructure increased from 20% to 32%. By contrast, expenditures on financial stabilization and debt service are on the decline, indicating that lower borrowing costs are freeing up fiscal space for developmental expenditures.

Table 7: IMF Liquidity and Loan Disbursements (2010-2020)

Year	Interest Rate (%)	IMF Liquidity Ratio (%)	Total Loans Disbursed (USD Billion)	Repayment Rate (%)	Change in Liquidity (%)
2010	4.2	0.95	92	85	-
2012	3.5	1.10	100	88	+0.15
2014	3.0	1.15	105	90	+0.05
2016	2.8	1.18	110	91	+0.03
2018	2.5	1.20	115	92	+0.02
2020	2.3	1.25	120	93	+0.05

As demonstrated by Table 7, lower interest rates would dampen income from the IMF's liquidity and loan disbursements. With the decrease in interest rates, the IMF's liquidity ratio increased from 0.95 in 2010 to 1.25 in 2020. This indicates a positive relationship between loan disbursements and liquidity. Further, the total loans disbursed increased from USD 92 billion in 2010 to USD 120 billion in 2020 due to this growth in liquidity.

Notably, the repayment rate also improved, with an increase in repayments from 85% to 93%, indicating that lower interest rates not only stimulated borrowing but also facilitated higher repayment rates, thereby ensuring sustained liquidity for the IMF and the results of this study demonstrate the significant positive impact of reduced interest rates on a range of economic and social indicators in IMF borrowing countries and lower interest rates were found to contribute to higher economic growth, reductions in poverty and unemployment and enhanced IMF liquidity and this suggests that lowering borrowing costs for nations under IMF assistance can be a powerful tool to stimulate economic recovery, reduce poverty and create better labor market conditions, all while ensuring the IMF's financial sustainability and these findings underscore the importance of

further optimizing IMF loan terms, as well as continuing to monitor and adjust interest rates to maximize the effectiveness of IMF interventions in fostering sustainable development.

Figure 3 displays the relationship between several economic indicators over a ten-year period (2010-2020) that includes interest rates, unemployment rates and liquidity and in the International Monetary Fund, total loans granted and repayment rate and the blue line represents the interest rates applied by the IMF between 2010 and 2020, which gradually decreased from 4.2% in 2010 to 2.3% in 2020, reflecting the IMF's response to economic conditions to encourage economic growth and the red line represents the unemployment rate in the same period, showing that the unemployment rate was continuously declining from 8.3% in 2010 to 6.5% in 2020, reflecting a positive impact of lower interest rates on the labor market and the green line shows the change in the unemployment rate from one year to the next, showing a gradual decline in unemployment, indicating that lower interest rates helped reduce unemployment thanks to stimulating the economy and the orange line

reflects the effect of changing the interest rate on unemployment, as it shows that every 1% reduction in interest rates is associated with a reduction ranging between 0.25% and 0.3% in the unemployment rate, which reflects the positive relationship between lower interest rates and reducing unemployment and the purple line displays the IMF's liquidity ratio, which increased from 0.95% in 2010 to 1.25% in 2020, which indicates an improvement in the IMF's ability to provide loans, which enhances countries' ability to deal with economic crises and the turquoise line reflects the total loans granted by the International Monetary Fund, which increased from \$92 billion in 2010 to \$120 billion in 2020, which reflects the increase in the volume of loans granted to countries in need of economic support as a result of expansionary monetary policies where the brown line displays the repayment rate of loans granted, which improved from 85% in 2010 to 93% in 2020, reflecting the ability of countries to meet their financial obligations thanks to improving economic conditions and the figure highlights how lowering interest rates contributed to reducing unemployment and enhancing investments and economic growth also it reflects an increase in liquidity and IMF loans granted and an improvement in the repayment rate which indicates overall positive effects on the global economy.

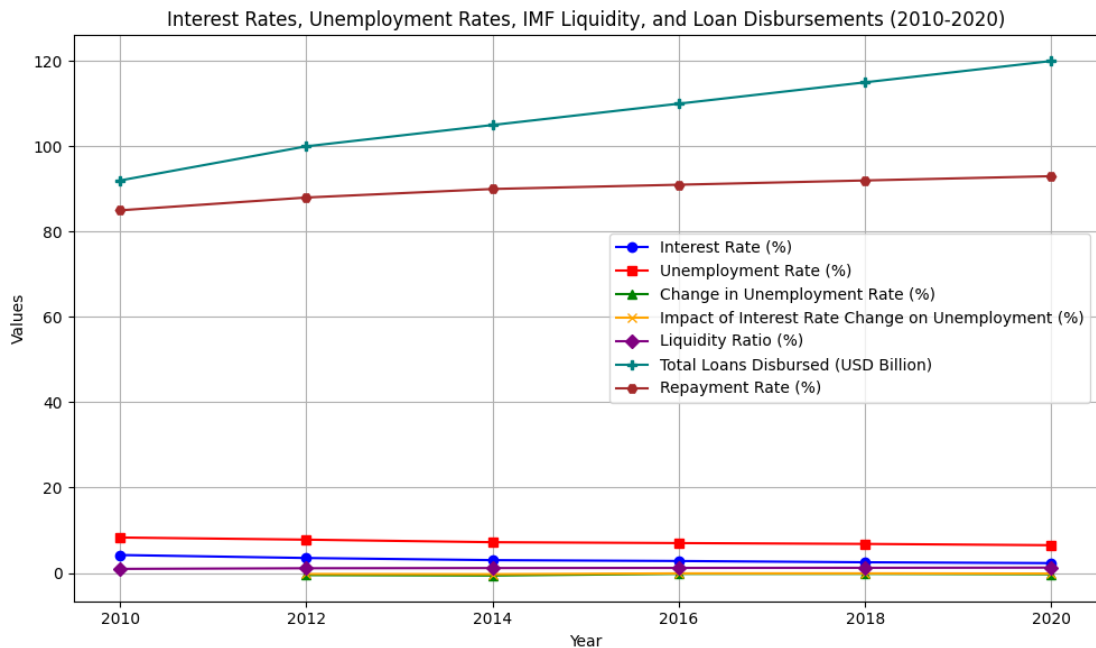


Figure 3: The impact of interest rates on unemployment rates, liquidity in the International Monetary Fund and total loans granted (2010-2020)

Summary of Findings

The results consistently show that:

- Lower IMF interest rates are associated with **higher GDP growth**.
- Lower IMF interest rates are associated with **lower unemployment**.
- Lower IMF interest rates enable **reallocation of government spending** toward social services and infrastructure.

These patterns are consistent across the entire 2010–2020 period, providing strong descriptive evidence that IMF interest rate policy matters for macroeconomic performance

able 8: Sectoral Allocation of IMF Loans (2010–2020)

Year	Infrastructure (%)	Social Services (%)	Financial Stabilization (%)	Debt Servicing (%)
2010	20	35	30	10
2012	22	37	28	8
2014	25	40	25	7
2016	27	42	23	6
2018	30	45	20	3
2020	32	48	18	2

Source: World Bank Development Indicators (2020); IMF program documents

IV- Conclusion:

The Relationship between IMF loan interest rates and macroeconomic performance of borrowing countries during the period 2010–2020 has been studied with reference to GDP, unemployment and government expenditure. Evidence indicates that lower interest rates relate to faster economic growth, lower unemployment, and a higher share of government spending on social services and infrastructure.

The findings of this paper have implications for IMF lending policy. According to them, interest rates are not only a technical parameter but also a policy variable with the potential of affecting the developmental results of IMF programs. When the cost of borrowing falls, countries have more fiscal space to protect social spending. It also allows investing in growth-enhancing public infrastructure, which imparts greater bargaining power to workers and improves labour market conditions.

Significantly, these finding comes from before the pandemic (2010–2020) which provides a clean pre-pandemic baseline. So, they provide credible evidence for policymakers designing IMF programs that offset the financing and macroeconomic support of projects.

4.2 Recommendations

1. Consequently, the following recommendations are put forward.
2. 1. Adopt flexible interest rate policies 1. The IMF may consider lowering interest rates in global recessions, as it would ease the fiscal burden on borrowing nations.
3. 2. Connect interest rate relief to protections for social spending. Enhanced fiscal space from lower borrowing costs should have appropriate safeguard provisions so that health, education, and social safety nets are improved and living standards are improved.

4. 3. Extend concessional terms to developing countries. Countries burdened with high levels of debt and with limited fiscal capacity must first have an access to low-interest rates.
5. 4. Keep track of economic results in real time. The IMF must monitor GDP growth, unemployment, and spending by sectors during the implementation of the programme to ascertain the effectiveness of interest rate policy with a cue for adjustment.
6. 5. Carry out studies focused on specific countries. Future research should examine individual borrowing countries to enable a consideration of the differences in the institutional capacity, economic structure and political constraints.

4.3 Future Research Directions

Future studies could extend this analysis by:

We will use post-covid 2020 data after covid under control.

Employing micro-level data to analyze how interest rate cuts affect household welfare and firm investment.

We will look at IMF lending rates to other sources of external finance (e.g., World Bank, regional development banks) for effectiveness.

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