



The Role of the Medium-Term Framework of Public Finances in Isolating Fiscal Policy from Adhering to Cyclical Trends, With Reference to the Experiences of Some Commodity Exporting Countries

Khadidja ISHAK*

University of Tamanghasset
Algeria
khadidja_ishak@hotmail.com

Received: 01/10/2024

Accepted: 15/11/2024

Published: 14/12/2024

Abstract:

This research aims to highlight the role of the medium-term framework of the public budget in neutralizing fiscal policy from aligning with the cyclical fluctuations of oil prices in oil-producing countries. This is achieved by presenting the experiences of several resource-rich countries that have utilized this approach in planning their public budgets. The study concludes that establishing medium-term public finance forecasts ensures the protection of expenditures from following the cyclical trends of commodity revenues. Additionally, the study indicates a general movement towards adopting a medium-term expenditure framework in commodity-exporting countries to enhance expenditure planning and improve its efficiency.

Keywords: Medium-term framework; Public finance; Cyclical trends; Isolation; Commodity-exporting countries.

JEL Classification E62, H61.

* Corresponding author: Ishak Khadidja (*khadidja_ishak@hotmail.com*)

Introduction:

Public finance serves as a primary channel for transmitting fluctuations in commodity prices to other sectors of the economy, particularly in countries where natural resources play a critical role in export revenues and government income. In such contexts, it is challenging to isolate government spending from the variations in public revenues. Consequently, fiscal policy in these countries has tended to follow cyclical price trends, leading to a lack of macroeconomic stability, deterioration in human capital investment, and hindrance to overall welfare. These failures have rendered them vulnerable to the resource curse. These challenges have prompted these countries to adopt models that enable them to neutralize their fiscal policies from cyclical trends.



The Problematic of the study:

Based on the above, we pose the following research question:

How does medium-term public finance contribute to isolating fiscal policy from cyclical trends?

Importance of the Research:

The significance of this research lies in its provision of a clear framework for understanding how medium-term public finance frameworks can act as countermeasures to cyclical trends. It highlights the experiences of commodity-exporting countries to extract lessons learned and develop a robust, resilient medium-term public finance framework in Algeria.

Objective of the Research:

Through this research, we aim to:

- Address the concept of medium-term public finance frameworks;
- Highlight the importance and role of medium-term public finance frameworks in isolating fiscal policy from cyclical trends;
- Present the experiences of resource-rich countries that have adopted medium-term budget frameworks and public finance rules.

Methodology of the Study:

In this research, we employed a descriptive approach suitable for defining the key concepts related to the Medium-Term Fiscal Framework (MTFF), its nature, and objectives by reviewing relevant literature on the subject. This includes examining its role in isolating public finance from cyclical trends.

Structure of the Research:

To address the research question and systematically present ideas, we divided the study into two parts. The first part is titled "The Medium-Term Framework of Public Finance," where we discuss its concept, underlying objectives, and challenges faced by governments in designing and implementing this framework. We then explore its importance in neutralizing fiscal policy from commodity price cycles. In the second part, we will present the experiences of resource-rich countries that have adopted this approach and the benefits they have reaped.

Previous Studies :

- Study of (Jason Harris, Richard Hughes, and others, 2013) titled "**Medium-Term Budget Frameworks in Advanced Economies: Objectives, Design and Performance**", this study aimed to demonstrate the importance of medium-term budget frameworks in improving public financial management through analyzing the experiences of a sample of advanced economies with medium-term budget frameworks. The study found that



medium-term budget frameworks contribute to enhancing fiscal discipline, maintaining sustainable financial positions, and better resource allocation. The study showed that there is no unified model; rather, the most appropriate model for a specific country or context depends on how policymakers balance competing objectives in multi-year budget planning. The study emphasized that medium-term estimates must be built on reliable annual budgets based on conservative macroeconomic assumptions, guided by stable and transparent fiscal objectives, and implemented through a comprehensive and unified top-down approach.

Our study shares similarities with the previous one in that both highlighted the conceptual context of medium-term budget frameworks within the study content. However, they differ in that the previous study focused on advanced economies as case studies, while our study will highlight commodity-exporting countries regardless of their classification as advanced or developing economies.

- Study by (Thomas Baunsgaard, Mauricio Villafuerte, and others, 2012), titled **"Fiscal Frameworks for Resource-Rich Developing Countries"**: This paper aimed to highlight the challenges associated with managing natural resource revenues in resource-rich developing countries and present strategies to help these countries achieve fiscal sustainability and promote economic growth. This was done through analyzing fiscal policies adopted in a sample of resource-rich developed countries and evaluating their effectiveness in achieving set objectives. The study concluded that strong public financial management systems enhance countries' ability to deal with revenue volatility and reduce risks associated with natural resource dependence. The study also showed the necessity of designing flexible and sustainable fiscal frameworks that align with each resource-rich country's economic and social characteristics, allowing increased development and growth spending while maintaining fiscal sustainability in the face of natural resource revenue volatility.

Our study shares similarities with the previous one in that both addressed resource-rich countries as case studies. However, they differ in that our study highlighted a sample of countries without classification, while the previous study took advanced resource-rich countries as case studies.

- Study by (IMF, 2018), titled **"Fiscal Frameworks and Fiscal Anchors: The Experiences in Commodity Exporting Countries and Implications for Saudi Arabia"**: This study aimed to analyze and evaluate fiscal frameworks designed in Saudi Arabia. It also sought to identify long-term fiscal objectives that could help the government achieve future fiscal and economic stability, based on analyzing existing institutional frameworks in Saudi Arabia, including financial management, transparency, and accountability. The study revealed that Saudi Arabia needs to strengthen its



fiscal framework and better manage public finances to reduce dependence on volatile oil revenues. The study recommends focusing on improving fiscal planning, increasing transparency, and strengthening financial institutions, rather than introducing formal fiscal rules at present.

Our study shares similarities with the previous one in that both took commodity-exporting countries as case studies. However, they differ in that the previous study addressed the medium-term fiscal framework and its implications for Saudi Arabia, while our study reviewed different countries' experiences in medium-term fiscal frameworks.

I. Medium-Term Fiscal Framework (MTFF):

1. Concept of the Medium-Term Fiscal Framework:

There are two definitions of the Medium-Term Fiscal Framework (MTFF) (Teresa Curristine, 2024):

- **Narrow Definition:** Under this definition, the MTFF is a set of forecasts for key macroeconomic variables and financial aggregates over the medium term (3-5 years), aligned with the government's financial objectives.
- **Broad Definition:** This more comprehensive definition refers to a set of institutional arrangements for prioritizing, reporting, and managing financial aggregates (revenues, expenditures, balances, and debts), generally over a period of three to five years. The framework provides medium-term forecasts for key macroeconomic variables and financial aggregates and establishes multi-year targets or ceilings for these aggregates that align with the government's financial objectives. The medium-term framework sets a downward ceiling for total spending, serving as the starting point for preparing the government's annual budget.

The precision in defining the concept of the Medium-Term Fiscal Framework necessitates distinguishing between the following concepts:

1.1. Medium-Term Budget Framework (MTBF): The MTBF is a document that details the annual budget itself or at least provides relatively detailed future estimates for government entities funded through the budget, as well as government policies, programs, and projects. The medium-term budget typically covers three to five years and is subject to review and updating each year in light of changes in the economic environment, government policies, programs, and the gap between available financial resources and the costs of government programs and policies. The MTBF is part of a broader set of frameworks related to medium-term public finance policy planning (Jason Harris, 2013).

1.2. Medium-Term Expenditure Framework (MTEF): This is a planning process for expenditures lasting no less than three years, where medium-term expenditure frameworks are usually defined by combining expenditure ceilings



with a baseline estimate of government policy costs that are continuously updated. Medium-term expenditure frameworks enhance budget formulation by encouraging the development of spending plans based on available resources and promoting fiscal discipline.

2. Objectives of the Medium-Term Fiscal Framework:

Governments design the medium-term fiscal framework to achieve the following objectives:

2.1. Achieving Public Finance Sustainability:

A medium-term public finance framework requires setting realistic financial goals based on available resources and establishing a manageable ceiling for public debt. This enables understanding, preventing, and/or mitigating risks associated with unsustainable fiscal policies that could lead to economic instability.

2.2. Enhancing Public Finance Transparency:

Establishing specific medium-term financial targets or ceilings includes multi-year forecasts for revenue aggregates or limits on total government spending, deficits, and debts. One of the main focuses of the multi-year framework is to provide a downward ceiling for total government spending, which will guide annual budget preparation for each year within the framework. By clearly defining these goals, governments provide a framework that encourages fiscal discipline and accountability for their financial performance .(Curristine, 2024)

2.3. Effectiveness in Resource Allocation by Extending Planning Horizons Beyond Annual Budget Cycles:

This enables governments to prioritize and allocate resources more effectively. It integrates the annual budget formulation cycle with a medium-term planning process to make decisions about current and future policy priorities more effectively while exercising control over budget aggregates. It facilitates systematic consideration of the impact of current spending and tax policies on future budgets, as well as the potential effects of new measures. This becomes increasingly important as countries seek to achieve fiscal sustainability while making progress toward sustainable development goals. (Harris, 2013)

3. Considerations for Designing a Medium-Term Fiscal Framework in Commodity-Exporting Countries:

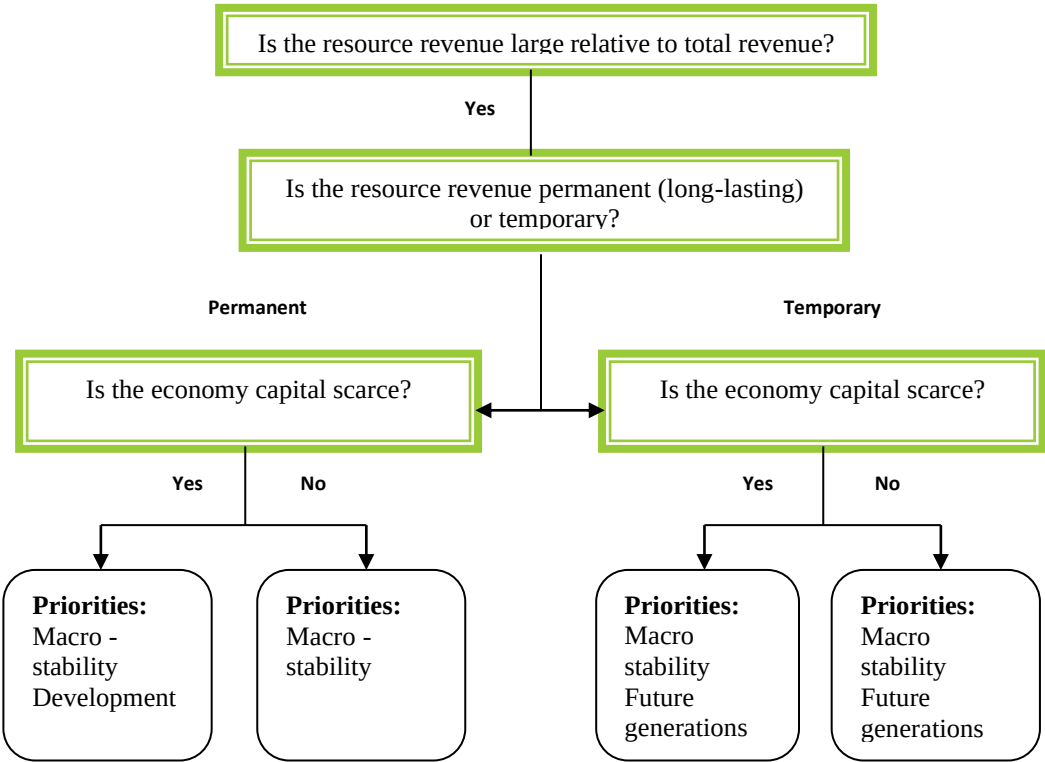
To develop a robust medium-term fiscal framework, the following elements should be taken into account:

3.1. Defining Fiscal and Economic Policy Objectives According to Priorities:

This should be based on the expected timeframe for natural resources and, consequently, the revenues derived from them, in addition to the size of accumulated capital. The decision tree below can illustrate the appropriate decision:



Fig. 1: “Decision Tree to Determine Fiscal Framework Priorities”



Source : Thomas Baunsgaard, Mauricio Villafuerte And Others , **Fiscal Frameworks for Resource Rich Developing Countries**, IMF, 2012, p 7.

3.2. Linking the Medium-Term Fiscal Framework to a Fiscal Rule:

To isolate public finances from fluctuations in oil revenues, it is essential to link the medium-term fiscal framework to a fiscal rule. These rules are quantitative financial indicators that, if properly selected and adhered to, ensure the separation of expenditures from revenue fluctuations in resource-rich countries. When adopting one of these rules, it is important to consider the degree of reliance on natural resource revenues, the duration of resource abundance, and development needs. The most significant and commonly used rules in resource-rich countries include: (Baunsgaard, 2012).

3.3. Non-resource Primary Balance:

This is defined as the primary balance minus net resource revenues, preferably expressed as a percentage of non-resource GDP. It serves as the main financial indicator in resource-dependent countries. It measures the core fiscal policy and government domestic demand, and can be compared against long-term fiscal sustainability benchmarks. Relying on this indicator helps separate fiscal



policy from resource revenue fluctuations. This financial indicator can be based on **permanent income** calculations or other macroeconomic considerations.

3.4. Overall (or Primary) Balance:

Used in countries without natural resources, this balance is employed in fiscal rules that limit the government's net financing requirements or assess financial vulnerability. However, these indicators may be cyclical in resource-dependent countries: with rising resource revenues, fiscal expansion (increased spending) can mask improvements in the overall balance. Nonetheless, the overall balance provides an indication of changes in net financial assets and associated vulnerabilities and total financing needs in the event of declining resource revenues.

3.5. Current Balance:

This excludes public investment from the overall balance. A practical drawback of this indicator is that it does not provide a clear anchor for fiscal policy. Additionally, it overlooks difficulties in classifying current versus capital expenditures, which can lead to creative accounting.

3.6. Domestic Balance:

This refers to the overall financial balance excluding transactions with the rest of the world. It excludes resource revenues and import content from government spending, particularly investments that tend to rely heavily on imports. This approach can be appealing when investment spending increases. However, aside from losing a financial anchor, there is a practical issue related to measuring import content in government spending, which may also encourage creative accounting similar to that seen with current balance rules.

4. Fiscal Frameworks Suitable for Carbon-Rich Resource Economies (Araujo, 2012)

4.1. Permanent Income Hypothesis:

This hypothesis suggests that expenditure fluctuations can pave the way for future stability. To ensure a consistent and sustainable level of spending, expenditures should not exceed the present value of expected revenues. This implies borrowing when permanent income exceeds actual oil resource revenues or accumulating assets and savings when actual revenues surpass permanent income.

4.2. Public Finances Excluding Resource Balance:

In this case, fuel revenues are entirely or partially excluded from the public finance balance. Targeting a public finance balance that excludes resources can isolate fiscal policy from fluctuations in resource revenues while allowing for setting targeted balances based on short-term demand management considerations.



4.3. Structural Balance Rules:

In this scenario, annual expenditures consist solely of the "structural" component of hydrocarbon revenues. This approach is directly linked to fluctuations in hydrocarbon prices and primarily ignores depletion issues and changes in production volume. The "structural" component of revenues can be estimated independently using computational formulas or by an independent committee, as seen in Chile. Various price formulas can be utilized, including moving averages of past prices or a combination of past and future market prices as practiced in Mexico. The latter formula may enhance credibility by narrowing the gap between current prices and those calculated using the formula. To account for long-term sustainability considerations when determining structural targets, it may be possible to aim for a "structural" surplus rather than a "structural" balance, potentially leading to savings over time that promote intergenerational equity. However, desired outcomes from this framework can be reinforced by targeting more modest balances or paths based on capacity analysis.

4.4. Expenditure Growth Rule:

This rule limits government expenditure growth by nominal or real values or as a percentage of non-hydrocarbon GDP. The advantage of this rule lies in its clarity and its potential connection to economic capacity, encouraging its use to promote desired objectives. However, this approach overlooks changes that may occur in revenues, such as tax reductions or increases; thus, it may become more effective if used as a complementary element to total balance rules (as seen in Peru) or structural balance rules (as practiced in Mongolia).

5. Challenges in Designing a Medium-Term Fiscal Framework:

Designing a medium-term fiscal framework faces several challenges, including:

- **Weak Budget Preparation:** For instance, when the annual budget does not reflect the true costs of programs or due to weak budget execution controls leading to overspending;
- **Unrealistic Forecasts:** Such forecasts can undermine the credibility of the medium-term fiscal framework and lead to difficulties in budget execution, resulting from overly optimistic assumptions or forecasting biases, particularly regarding macroeconomic variables or revenue expectations.
- **Challenges in Integrating the Medium-Term Fiscal Framework with the Annual Budget Process:** This includes challenges in ensuring that the total expenditure ceiling has a real impact on overall budget preparation and across various expenditure items.
- **Data Availability, Quality, and Reliability Challenges:** This affects data accuracy; accurate and timely data is crucial, as incomplete or outdated data—



especially the lack of precise and timely information on budget execution—can undermine the credibility of medium-term forecasts.

6. The Importance of a Medium-Term Fiscal Framework in Mitigating Cyclical Trends:

The significance of relying on medium-term fiscal planning for resource-rich countries lies in preventing disruptions in annual revenue from translating into fluctuations in public expenditures. Such disruptions can destabilize the economy and diminish the quality of government spending. By adopting this approach, countries can neutralize their public finances from cyclical trends in resource prices, achieving more than 30% stability compared to the levels experienced by Algeria, Qatar, and Saudi Arabia in recent years (Public Finance Institutions and Financial Outcomes). During periods of economic recovery, these frameworks can help resist natural pressures to increase spending due to rising oil revenues and accumulated financial surpluses. Conversely, during economic downturns, these frameworks can protect priority expenditures and maintain the strategic focus of policy plans. Therefore, establishing and adhering to medium-term spending plans reduces the risk of long-term public finance objectives being compromised by short-term spending pressures.

II.Experiences of Resource-Rich Countries that Adopted Medium-Term Budget Frameworks:

There has been a global movement toward increasing reliance on fiscal rules and medium-term budget frameworks to help overcome challenges in public finance policy. As of 2013, 81 countries had adopted some form of fiscal rule, while 61 countries implemented medium-term budget frameworks (Al-Ghaith, 2015).

The following presents experiences from a sample of five countries that adopted fiscal rules and medium-term budget frameworks: Chile, Mexico, Mongolia, Norway, and Russia (IMF, 2018):

1.The case of Chile:

Chile has a long history of using fiscal rules and institutional frameworks to manage the impact of its substantial copper exports on public finances. In the late 1980s, Chile established a "Copper Revenue Stabilization Fund" and began implementing a structural balance rule in 2001, which was later modified in 2005. The Financial Responsibility Law was enacted in 2006. Expert committees determine the reference price for copper (forecasts for the next ten years) and potential GDP to be used in calculating the structural budget. According to Chile's framework, budget proposals must include medium-term budget forecasts (four years) based on medium-term expectations for GDP and commodity prices. Each new administration must present its structural balance target for its term within 90 days of taking office. Public expenditures are set in line with structural revenues



and structural balance targets. The application of this rule has evolved over time; from 2001 to 2007, a fixed target for the structural balance was set at a surplus of 1% of GDP. In 2008, this target was adjusted to 0.5% of GDP, and by 2009 it was set at zero with a withdrawal clause introduced to accommodate countercyclical measures. The current administration has set a medium-term structural balance target of a deficit of 1% of GDP by 2014. The Public Finance Council, established in 2013, oversees existing committees responsible for potential GDP and long-term copper prices. Two funds were created: the "Economic and Social Stabilization Fund," which covers public finance deficits and debt consumption issues, and the "Pension Reserve Fund," designated to cover part of pension expenses starting in 2016.

Experts generally consider Chile's experience with adopting fiscal rules and medium-term budget frameworks successful; the rule is well understood by the public and market participants. This fiscal policy has helped protect the national economy from significant fluctuations in copper prices while keeping expenditure volatility relatively low. Chile's public finances remain strong compared to its peers.

Chile managed well during the global financial crisis by utilizing assets from the stabilization fund as a precautionary margin for public finances. Simultaneously, amid a commodities price boom in the early 2000s, the reference copper price was adjusted upward significantly, allowing for robust growth in spending even as the economy operated at near full capacity.

2.The case of Mexico:

The management of oil revenues has been a key issue in Mexico, leading to the enactment of the Financial Responsibility Law in 2006, which was amended in 2008. This law mandates the preparation of a balanced budget on a cash basis, including a withdrawal clause that can be activated during periods of economic recession (this clause was utilized during the period from 2010 to 2012). The rule applies to the federal public sector, which includes the central government, social security, and major public enterprises (such as PEMEX and CFE). In 2009, the rule was modified to exclude PEMEX, shifting the goal from achieving a balanced budget to a deficit of 2% of GDP. While the fiscal rule helped reduce deficit levels and served as a cornerstone for macroeconomic stability, demonstrating sufficient flexibility to counter cyclical trends during the public financial crisis, it also had shortcomings. Expenditure levels increased rapidly during periods of economic prosperity, and the rule did not impose restrictions on public sector borrowing. In response to these issues, a new growth rule was recently established, stipulating that the growth of "structural current expenditure" (primary current expenditure minus spending governed by automatic rules such as pensions, electricity subsidies, and revenue-sharing transfers to state and local governments) should not exceed potential growth (as estimated by the Minister of Finance). Additionally, it set



broader borrowing conditions for the public sector under the Financial Responsibility Law alongside the balanced budget requirement.

3. The case of Mongolia:

Mongolia has a large and growing mining sector, with expectations for significant increases in public revenue. The country experienced a substantial decline in mineral revenues between 2007 and 2009, leading to a crisis that exposed vulnerabilities in public financial management (weak public investment planning, significant and poorly targeted social expenditures, and severe neglect of infrastructure maintenance). Consequently, Mongolia enacted a Financial Stability Law implemented in 2013 and established a fund for financial stabilization while undertaking complementary reforms in public financial management. The Financial Stability Law includes three fiscal rules: setting an upper limit on the structural deficit at 2% of GDP starting in 2013; establishing an upper limit on public expenditure growth based on non-mineral GDP growth starting in 2013; and imposing an upper limit on debt. Structural revenues are calculated as a moving average of major mineral prices over 16 years (12 previous years, the current year, and three future years), with forecasts sourced from the International Monetary Fund and other internationally recognized financial institutions. The expenditure rule is linked to non-mineral GDP growth (the higher figure between the current year or an average of the past 12 years). The public finance framework is supported by a stabilization fund—when mineral revenues exceed structural mineral revenues, the difference must be placed in the financial stabilization fund; conversely, if revenues fall short, resources from the fund may be used to cover deficits.

4. The case of Norway:

Norway established a new public finance framework in 2001 to manage its oil revenues. This framework is designed to achieve four main objectives: macroeconomic stability, continuity in public finances, intergenerational equity, and efficient resource use. It is based on three institutional pillars: a structural fiscal rule, a sovereign wealth fund, and full integration of this fund into the government budget. Net flows from oil and gas are transferred to the "Government Pension Fund Global," which links fiscal policy between non-oil deficits and investment revenues from this fund. The average transfer is based on a real return estimated at 4%. However, this rule is flexible enough to allow for additional transfers to stabilize against cyclical trends. This means that transfers from the pension fund may be higher than expected revenues during recessions and lower during periods of recovery.

5. The case of Russia:

Russia established a budgetary framework for managing its oil and gas revenues. The previous framework was suspended in 2009 after being implemented in 2007; it included a long-term target for non-oil deficits at 4.7% of GDP due to



the global financial crisis and was officially abolished in 2012. A new framework was adopted in December 2012 and implemented in 2013, setting a maximum limit on federal government expenditures according to reference oil revenues plus non-oil federal revenues. It also imposed an upper limit on public borrowing estimated at 1% of GDP. Reference oil revenues are calculated based on oil prices over the previous ten years (using a five-year average in 2013 that gradually increases to ten years by 2018). When oil prices exceed reference prices, surpluses are saved in an oil reserve fund; when resources in this fund reach 7% of GDP, 50% of additional allocations are transferred to the National Wealth Fund and 50% to infrastructure projects. If oil prices fall below reference prices, resources from the oil reserve fund are utilized to maintain spending levels; if low prices persist for an extended period, the reference price is recalibrated to equal the average prices over the past three years.

6.Oil-Exporting Countries in North Africa and the Middle East:

More than 50% of oil-exporting countries in North Africa and the Middle East have medium-term fiscal frameworks that can reduce the pro-cyclical nature of fiscal policy by 30%. This can lead to a reduction in government expenditure volatility by up to 19%, thereby improving the predictability of overall fiscal policy. (IMF, 2019).

Conclusion:

Focusing on short-term horizons in the design of fiscal policy exacerbates the pro-cyclical behavior of public finances. This means that during periods of economic recovery, government spending increases, and during downturns in natural resource prices, with persistently high government expenditure, authorities are compelled to seek alternative revenue sources, often resulting in stringent austerity measures.

The public finance framework aids in planning and managing public revenues while ensuring smooth expenditures free from resource price fluctuations. It also helps establish medium-term priorities based on the goals the government wishes to achieve and the financial resources available to it. Adopting this approach necessitates identifying the gap between available financial resources and the costs of government programs and policies each year, as well as analyzing public finance risks and indicating the sensitivity of public finance plans to various economic assumptions.

Recommendations:

- Establish realistic and achievable objectives based on available resources and their timeframes.
- Select appropriate fiscal rules to assess the public finance situation.



- Work on enhancing the capabilities of public finance institutions and alleviating administrative constraints.

References :

- Araujo, R. C. (2012, February 5). Libya: Technical assistance report—Public financial management reform priorities in the new environment. International Monetary Fund. (Original work published 2013). Retrieved from <https://www.imf.org/external/pubs/ft/scr/2013/cr1336.pdf>
- Harris, J., & Jason, R. H. (2013). Medium-term budget frameworks in advanced economies. In M. Cangiano (Ed.), *Public financial management and its emerging architecture* (p. 137). Washington, DC: International Monetary Fund.
- Curristine, T., & I. A. (2024, September 26). How to develop and implement a medium-term fiscal framework. International Monetary Fund. (Original work published 2024). Retrieved from <https://www.imf.org/en/Publications/imf-how-to-notes/Issues/2024/09/27/How-to-Develop-and-Implement-a-Medium-Term-Fiscal-Framework-555581>
- Baunsgaard, T., & M. V. (2012). *Fiscal frameworks for resource-rich developing countries*. USA: International Monetary Fund.
- Al-Ghaith, A. A. (2015). Saudi Arabia: Addressing emerging economic challenges to sustain growth. International Monetary Fund. Retrieved from file:///C:/Users/Admin/Downloads/1501mcda.pdf
- International Monetary Fund. (October 2019). *Public finance institutions and financial outcomes*. Retrieved from file:///C:/Users/Admin/Downloads/MENAP-chapter5-Arabic.pdf