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-RESEARCH ARTICLE-

Fiscal Dominance, Public Debt, and Central Bank Independence in Iraq: Evidence from the 2019–2020 Compound Crisis

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─Abstract─

Against the backdrop of overlapping political, public health and financial crises during 2019–2020, this study investigates the extent to which Iraq's fiscal policy instruments restricted the operational autonomy of the Central Bank of Iraq (CBI). Adopting a descriptive–analytical approach, the research draws on official records covering 2014–2020, obtained from the CBI, the Federal Board of Supreme Audit and federal budget documents. These sources are used to develop indicators capturing revenue concentration, expenditure rigidity, debt monetisation and the adequacy of financial buffers. The findings reveal pronounced dependence on oil revenues and substantial inflexibility in public expenditure. Oil accounted for 92.12% of government revenue in 2019 and 89.00% in 2020, whereas employee compensation represented 52.6% and

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59.3% of current expenditure in the respective years. Meanwhile, domestic public debt increased from 9.5 trillion dinars in 2014 to 47.7 trillion dinars in 2017, with transfers discounted at the CBI constituting 36.9% of the outstanding stock by 2019. Although exchange-rate stability was maintained, this outcome coincided with a 31.9% decline in foreign reserves between 2014 and 2016 and a persistently negative net foreign-currency position. Taken together, these developments indicate a divergence between the CBI's legally established independence and its practical capacity to conduct monetary policy independently under conditions of fiscal dominance driven by oil dependence. The study therefore advocates establishing statutory restrictions on debt monetisation, re-establishing clear institutional boundaries between fiscal and monetary policymaking, and restructuring public expenditure to reduce dependence on the central bank's balance sheet as a mechanism for accommodating fiscal pressures.

Keywords: Fiscal Dominance; Central Bank Independence; Debt Monetisation; Rentier Economy; Compound Crisis; Central Bank of Iraq.

INTRODUCTION

Background

The rule of separate monetary and fiscal powers is based on a structure whose legal form does not necessarily lead to the de facto separation of monetary and fiscal powers. One goal of central bank independence is to shield monetary policy from the pressures of government budget deficits. Central bank independence is supposed to ensure that price stability is the foremost goal with an expectation that the monetary authority will not be caught up in meeting demands on Treasury financing. But this situation is dependent upon the larger fiscal picture. Sovereign financing demands may grow large and become more enduring and not easily amenable to political adjustment and statutory independence may continue despite the central bank taking over responsibility for meeting existing financing demand. In such events, the fiscal aspects become more important in determining monetary results, indicating that the fiscal dominance is taking over from monetary dominance (Bassetto & Sargent, 2020). The significance of this distinction is of basic importance to the determination of price level. If the fiscal path is determined separately from monetary policy, inflation can be the medium in which macroeconomic imbalances are settled and not be fully under monetary policy control (Bianchi et al., 2023).

The institutional intricacies have created a shift in empirical studies of central bank independence, shifting focus from merely formal independence towards the actual impact of independence. While the statutory independence measures in the last 40 years suggest that efforts to enhance the independence of central banks have significantly improved in the last four decades, the ability of the central bank independence to curb inflation will also depend on the institutional setting. The ability of central bank

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independence to reining in inflation will also rely on the institutional setting, although the level of independence has improved over the past 40 years (Dincer, 2022; Romelli, 2022), It is especially weak in contexts where fiscal pressures are high (Garriga & Rodriguez, 2020). A more critical reading would raise the question of whether meaningful institutional separation can remain when monetary decisions have distributive impacts. These impacts are unavoidably political, and thus the central bank is always linked to the political processes that its independence was meant to insure it against (Hartwell, 2019).

Monetary autonomy is especially difficult in economies where the fiscal revenue is derived from rents on physical and human resources, as in such a case the two have a direct operating link. In cases where the Government receives export proceeds in foreign currency and spends money at home in domestic currency, the Central Bank must change the foreign currency into domestic liquidity. This means that the change in monetary base can be more a matter of government spending decisions than a policy decision (van der Ploeg, 2019). This structural dependence is further accentuated by procyclical fiscal policy in resource-rich economies, where in times of boom, spending tends to rise, and in times of bust it is hard to cut (Bjørnland et al., 2019). Such fluctuations subsequently affect both the real exchange rate and monetary aggregates, extending fiscal instability into the monetary system (Mohaddes & Raissi, 2019). Maintaining an exchange-rate anchor has therefore become a common stabilisation mechanism and remains the prevailing exchange-rate arrangement among commodity-exporting countries (Ilzetzki et al., 2019). Nevertheless, this approach makes foreign-exchange reserves central to the preservation of price stability, effectively requiring monetary credibility to be supported through the availability and deployment of foreign-currency assets (Obstfeld et al., 2019).

Iraq is one of the most stark examples of these structural relationships that have become more apparent in the concurrent political, public health and financial destabilisation in 2019 and 2020. As oil prices fell, these effects were quickly felt in terms of fiscal pressures, taking into account the predominant role of oil receipts in public revenues. Meanwhile, the fact that most government revenues came in the form of salaries and transfer payments made it more difficult to shift spending in response to an income decline. Domestic borrowing then was thus a necessary source to finance the deficit, yet the possibility of the banking sector to absorb this borrowing relied on the Central Bank of Iraq (CBI). In this backdrop, the main question is not whether the CBI has managed to keep prices stable, since it was accomplished, but how much cost and institutional burden has it imposed on the economy. Particular focus is thus given to the extent to which steps taken to maintain stability were consistent with the autonomy of the CBI granted under the law of 2004.

Macroeconomic adjustment pressures have been shifting towards the monetary authority since 2003 due to three related features of the fiscal framework in Iraq:Since

2003, three interrelated features of Iraq's fiscal framework have pushed macroeconomic adjustment pressures toward the monetary authority: The first is that public revenues have been much more reliant on a single commodity with significant price fluctuations. Secondly, government spending has been focused on employee wages and benefits, pension liabilities and subsidies, which are hard to change due to their political sensitivity and administrative rigidity. Thirdly, fiscal management has still not been supported by medium-term planning frameworks in sufficient measure, as the line-item budget has been used. This means that expenditure commitments are made before the resources that will finance those commitments are available. Combined, these attributes create fiscal deficits that are beyond the control of the monetary policy framework and have increasing been funded by domestic debt instruments which ultimately need the backing of the central bank.

While this relationship is central to the debates on Iraq's economic policies, its empirical underpinnings have been inadequately examined systematically, based on official financial data. The debate is generally indicative of two competing perspectives that are not compared to a consistent body of evidence. The first states that the intervention by the CBI is not in contradiction with its official duty but is a natural aspect of the operation of Iraq's rentier economy, and its success in maintaining exchange rate and price stability is particularly evidence of this. The other reading sees these interventions as practical dependence, since no matter how autonomous the monetary authority was in its legal status, it faced the necessity to accept fiscal choices made by the government against which it had little say. The difference between these views cannot be taken for granted, and must be demonstrated through measurable evidence. The analysis thus needs to calculate the share of domestic public debt supported by the CBI, and analyse the impact on its balance sheet, and also the impact on foreign-exchange reserves due to the need to sustain the exchange-rate anchor.

Another methodological problem is that of incompleteness in the published statistics on fiscal and monetary indicators. The official information on domestic debt and the source of financing is not always consistent across institutional sources and discrepancies exist among the sources within each publication. Specifically, in explanatory narratives, the units of measurement can vary from those displayed in the tables, and some of the reported percentages cannot be calculated from the corresponding numerical data. These discrepancies are significant for empirical analyses of fiscal dominance as they could lead to conclusions based on relationships that are not arithmetically defensible when using figures that have not been reconciled. In view of this, the present study is designed to provide a direct verification and reconciliation of the official statistical series in its methodological framework, which is made up of the consistency of the data used in the analysis, rather than being a preliminary exercise.

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Significance of the Study

This study has implications for both the analytical and practical research and implications for policy. On the analytical level, it offers both an empirically sound and coherent evaluation of the fiscal–monetary interactions in an oil-dependent economy in simultaneous crisis. Fiscal dominance has been well theorized in the context of diversified economic systems (Bassetto & Sargent, 2020; Bordo & Levy, 2021), but there has been much less empirical work on the dynamics of fiscal dominance in rentier economies, where pressure might be exerted mainly through the foreign-asset side of the central bank's balance sheet as opposed to direct central-bank financing. This is especially relevant as the monetary adjustment mechanisms in place vary significantly. In the traditional approach, if the central bank buys government securities, it decreases the money supply. By contrast, an economy that depends on oil as a source of rents could see the money base contract as a result of foreign exchange sales, and the monetisation of petroleum incomes would produce expansionary forces. These opposing mechanisms have different financial implications and hence call for policy interventions that reflect their respective mechanisms of transmission.

In terms of practice, the study establishes measurable and repeatable indicators that Iraqi policymakers can use to assess the pressure they apply on monetary operations due to fiscal policies. The three measures that are particularly relevant are: the ratio of the outstanding stock of domestic public debt to the stock of treasury transfers discounted at the CBI; the spread between the net foreign-currency position of the bank and the net foreign-currency position of the market; and the proportion of non-oil revenue in aggregate public expenditure. Together, these provide a more complete picture of fiscal dominance than the traditional budget deficit figure. This is particularly the case in Iraq where significant discrepancies in the fiscal deficits have often occurred between forecasts and realization, making budgets by themselves a poor gauge of reality.

The results are of policy significance in the current discussion about the effectiveness of statutory limitations on central bank funding of government spending. The CBI Law of 2004 specifically bans direct lending to the government (article 26). However, the mechanism which involves the transfer of treasury instruments to state-owned banks prior to the rediscounting at the CBI is an indirect financing arrangement which is similar to the impact of government financing in the primary markets without necessarily contravening the specified legal process. It is important to determine the extent of this mechanism to determine if the current statutory prohibition is adequate to prevent fiscal encroachments or needs strengthening. The importance of this matter is transcending Iraq, especially given the renewed international discussion on the limits of central bank's involvement in fiscal financing since the outbreak of the COVID-19 pandemic from an emerging economy perspective (Alberola et al., 2021). Furthermore, the evidence on the credibility effects from a less pronounced institutional separation

between the monetary and fiscal authorities confirms that it is important to look at this arrangement in detail (Coibion et al., 2022).

Research Objectives and Hypothesis

The study is guided by five interrelated objectives designed to examine how fiscal policy instruments constrained the operational autonomy of the Central Bank of Iraq (CBI) during the compound crisis:

- Prior to and during the compound crisis, the level of revenue concentration and structural rigidity in expenditure of the federal budget of Iraq was determined.
- To analyse critically the feasibility and internal coherence of the provisions of the legislation with respect to deficit financing in 2020, with a specific focus on the effectiveness of these provisions as fiscal crisis-management instruments.
- To determine the ratio of domestic public debt that the CBI finances and to examine the effect on the structure of the CBI's financial portfolio.
- To assess the financial consequences of maintaining exchange-rate stability, by looking at the change in foreign-exchange reserves and the change in the net foreign-currency position of the CBI compared to the market.
- To develop institutional and legislative proposals which strengthen the division between fiscal and monetary powers while at the same time ensuring the capacity for the necessary coordination of policy during crisis situations.

The study advances the central hypothesis that the prevailing configuration of fiscal policy instruments during the period under investigation adversely influenced the CBI's capacity to achieve financial stability, its second formally stated objective, notwithstanding the continued attainment of its primary objective of maintaining price stability.

LITERATURE REVIEW

The Case for Independence and Its Qualifications

The existence of an institution to which the government delegates the task of monetary policy which is shielded from direct political control is theoretically explained by the time-inconsistency problem that is typical of government decision-making. Depending on the specific responsibilities and policy planning time assigned to a monetary institution, its objective is to keep average inflation lower without harming its long-term economic performance; political authorities may be tempted to pursue more ambitious economic objectives by engaging in unexpected inflation. This relationship is generally confirmed by empirical evidence in the international context, but with varying degrees of intensity depending on the institutional context. The inflation-reducing effects of statutory central bank independence seem larger than often assumed

in developing economies, once methodological adjustments are made for mistakes in measuring inflation and endogenous central bank reforms. However, legal autonomy is still dependent on the quality and nature of the broader institutional context (Garriga & Rodriguez, 2020). During the last decades, there have been nearly continuous reforms of legislation regarding monetary independence in countries, and the related transparency and accountability systems have been strengthened (Dincer, 2022; Romelli, 2022). The focus of the analysis is therefore shifting away from the issue of formal recognition of independence to the issue of how far legally defined autonomy extends to independent money-making.

One alternative theory suggests that this separation of monetary policy from politics is simply wrong. Inflation, interest rates and monetary conditions decisions unavoidably have distributional consequences on the economic benefits and costs to and from creditors and borrowers, and on the nature of the economic trade-off between employment goals and price stability, as well as cost shift over time. Monetary policy cannot, therefore, be considered a purely technical operation, free of political and distributional implications. In this view, institutional independence is more likely to be sustainable when these conflicts are politically manageable, but not when they are economically challenging (Hartwell, 2019). Central bank independence is therefore more of a political arrangement that is subject to the effectiveness of the economic and institutional environment. The interpretation implies that when assessing the autonomy of the central bank in policy making and operations under high stress, its actual actions and operational reactions are more important than its statutory duty. For this reason, the present study follows the approach of observing institutional behaviour in times of crisis as the main criterion for assessing the independence of the CBI.

Fiscal Dominance: Mechanism and Measurement

Fiscal dominance occurs when the monetary authority is forced to accommodate the consequences of the intertemporal fiscal constraint, as it is not taken into account in formulating fiscal policy decisions by the government. This can happen via seigniorage, inflationary adjustment or some mechanism of financial repression. The theoretical discussion presents a view of fiscal-monetary interactions as a strategic relationship, in which the institutions involved are able to exert more influence over the level of prices through monetary policies or fiscal policies. The current institutional structure is not a purely discretionary one, but a compromise that emerges from the willingness and ability of fiscal and monetary policymakers to keep their policies unchanged (Bassetto & Sargent, 2020). The contributions of the last few years show that a price instability stemming from fiscal developments is empirically separable from other types of price instability. These pressures can also exist after the initial fiscal shock when economic agents still believe that the economic government will not carry out enough future consolidation of the budget to achieve the fiscal balance (Bianchi et al., 2023). The historical record, however, shows that fiscal deficits need not always lead to inflation,

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regardless of how they are financed. Their inflationary implications are especially strong if the government borrows, if the monetary authority does not have institutional means to stop the government from being too generous, and if the government is not disciplined by the interest rate. Thus, the performance of monetary institutions, not just the size of fiscal deficits, is a key factor shaping the inflationary effects (Bordo & Levy, 2021).

Another insight on sovereign debt sustainability comes from the research on fiscal benefits that are not reflected in the traditional indicators of government borrowing. Governments can also gain a significant amount of implicit revenue from effectively cheaper borrowing costs, institutional arrangements that ensure demand for their securities and the real value of their liabilities can be reduced due to inflation. Such mechanisms are not typically included in standard debt accounting, and so may not capture the actual burden of debt imposed on monetary and financial institutions (Reis, 2022). While public debt can involve lower welfare losses with economic growth rates above the interest rate on government borrowing, this need not hold in the long run. The reliability of its performance is especially questionable in resource-based economies where the expansion of the economy and revenues are subject to the volatility of one major traded commodity internationally. Political-economy explanations also link sovereign debt accumulation over time to incentives to prevent fiscal consolidation in institutions and politics (Yared, 2019). Furthermore, the sustainability of debt is subject to changes in the investor community's confidence, as sudden shifts in investor confidence can trigger self-reinforcing financial shocks, making the debt previously considered “affordable” unsustainable (Bocola & Dovis, 2019). Taken together, these arguments suggest that fiscal stability in economies that depend heavily on domestic borrowing from state-controlled financial institutions could mask financing pressures, instead of reflecting their absence.

Another aspect of fiscal dominance is that when governments are constrained politically or institutionally from using inflation as a financing tool, they can no longer do so, especially at the level of fine print.A second layer to fiscal dominance is that if governments are constrained politically or institutionally from using inflation as a financing instrument they can no longer do so – particularly on the finer details. In such situations, however, fiscal adjustment could be effected increasingly by means of financial repression, which would involve making it more attractive or less risky to hold government securities at rates that are lower than would otherwise obtain on competitive markets. The implicit transfer of resources to the sovereign thus acts as a financing tax similar to an inflation tax, with the difference being that the implicit costs from the transfer occur in the financial system instead of in the general price level. This mechanism can be quite large but its impact is not fully captured in the traditional public debt accounts. As a result, the study on just reported fiscal balances can systematically underestimate the degree of fiscal dominance, especially in countries with a high degree of government influence in the operations of the banking sector (Reis, 2022). This

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analytical distinction is particularly important for Iraq as all of the domestic sovereign liabilities are held in two banks owned by the state and the CBI. Without market-determined yields, deteriorating fiscal conditions do not need to be apparent from the pricing of government securities. However, an assessment of the financing pressures must include an analysis of the amount of debt and institutional ownership as well as pinpointing those institutions that are first to purchase government debt and the balance sheet into which the debt ultimately ends up.

Resource Rents and the Mechanics of Oil-Fiscal Dominance

Fiscal dominance can affect monetary operations via various channels and in many different ways, depending on the nature of the economy. These fiscal pressures are typically passed to the central bank by means of buying government debt in diversified economic systems. However, in rentier economies an extra and more basic transmission mechanism is rooted in the asset side of the balance sheet of the monetary authority. This arrangement is the result of the mismatch of revenues and expenditures of the Government; the revenue is generated in foreign currency while the expenditures are made in national currency. The central bank then plays a crucial intermediary role, by changing external receipts into domestic liquidity. For every dollar of government spending that is financed using this approach, in turn, a dollar of currency is created. This structural linkage is a key issue that commodity exporters face in the process of macroeconomic management of resource windfalls, as suggested by research on the topic. In the absence of credible fiscal rules, in particular, the burden of absorbing revenue volatility and ensuring macroeconomic stability is cast on monetary policy and exchange rate management (van der Ploeg, 2019).

Fiscal pressures are further accentuated by the empirical features of fiscal behaviour in resource-rich economies. In many cases, government spending is procyclical, with increases in government spending if the commodity price boom is successful, and decreases in government spending if the commodity price downturn is successful. This means that counterbalancing adverse commodity price impacts is typically done with extra borrowing and by drawing down accumulated reserves rather than matching reductions in spending commitments (Bjørnland et al., 2019). Oil-price effects on the economy are consequently also passed on to domestic economic activity to a large extent via fiscal policy decisions, and not only via the direct effects of changes in export revenues. In this transmission mechanism, the contribution of government spending is crucial to the size of the impact on the real economy (Mohaddes & Raissi, 2019). Economic efficiency of such expenditure should also be taken into account. Empirical studies of fiscal multipliers clearly show that the output impact of government spending varies significantly with the composition of government spending and with the macroeconomic environment. In particular, the evidence available is not particularly strong for assuming that spending patterns with a high consumption component lead to lasting improvements in the level of economic output (Chodorow-Reich, 2019).

In the institutional dimension, it is especially relevant to differentiate between the situation of discretionary monetary accommodation and the situation of structural fiscal dependence, as it is for understanding rentier economies. In these systems, there may not be a voluntary decision on the part of the central bank to assist the financing of government. Rather, the connection is built into the accounting process for foreign-currency income to be converted to domestic units of payment. If the income of the government is in dollars, but the salary and other expenses paid by the public sector are in dinars, then there is no way to avoid large-scale currency conversion, and the monetary authority is the main institution that can facilitate currency conversion. In these circumstances, the central bank has a relatively small amount of discretion in the initial increase in the monetary base due to government spending. The policy decisions it has made are the most important ones in terms of how much of the liquidity generated can be subsequently sterilised and the costs to the financial system of doing so. It is an important interpretation for the institutional reform. Increased regulation of the independence of central banks – a mechanism that may apply in other cases of fiscal interference – is not enough to break the transmission mechanism caused by the arrangement of government revenues. In addition, the underlying fiscal arrangements – in the form of excessive reliance on income from natural resources and the rigidity of recurrent expenditures – must be a focus of meaningful constraints on fiscal dominance. Legislative steps that target the monetary authority alone are not likely to resolve the fiscal pressure stemming from structural factors, unless they are accompanied by reforms in revenue diversification and expenditure management.

The Exchange Rate as Nominal Anchor and Its Price

Both the prevalence of fixed exchange rates and closely managed floating exchange rates among resource-dependent countries are evidenced in the continued dominance of USD-based exchange-rate arrangements in commodity exporters. International exchange-rate classifications also show a long-term trend of dollar anchoring becoming more, not less, influential as a main factor in keeping nominal exchange rates stable (Ilzetzki et al., 2019). What makes this arrangement attractive is its ability to offer an "observable and easily verifiable nominal anchor," as the policies of underdeveloped monetary transmission mechanisms and limited responsiveness to interest-rate shifts are common in economies. The credibility that goes with exchange-rate stability, however, comes with high financial costs, for the central bank has more and more come to shoulder the responsibility for containing external shocks by reducing its foreign-exchange reserves. Empirical research on the monetary policy trilemma of emerging economies indicates that active exchange-rate management does not allow for monetary policy autonomy even with some degree of control over international capital movements. Therefore, the choice of keeping the exchange-rate anchor cannot be considered a no-cost substitute to autonomous monetary policy (Obstfeld et al., 2019).

In this context, international reserves are directly relevant for macroeconomic management both in terms of quantity and form, and the higher the risk of external financing disruptions, the higher the precautionary reserve requirement will be (Aizenman et al., 2020). These fragilities are also exacerbated by changes in the international dollar funding markets and appreciation of the dollar is correlated with tighter financial conditions for the group of borrowers who rely heavily on dollar-denominated liquidity (Avdjiev et al., 2019).

Budget Institutions, Credibility and Execution

Another strand of development literature points to the institutional framework of public budgeting as a crucial factor affecting the performance of the macroeconomy. It is not just a bad economy that accounts for the ongoing trend of sovereign debt, from this angle. Instead, it is a symptom of deeper political-economy biases against fiscal consolidation. The political and economic advantages of public spending in the here and now are often enjoyed by governments making the spending decisions while the costs of the financing are left to the next administration. This intertemporal imbalance is due to institutional and political factors and is not a temporary process of economic ups and downs (Yared, 2019). These pressures deepen when there is no medium-term expenditure framework (MTEF) or where the primary focus for fiscal planning is on annual line item. Without a way of tying current expenditure commitments to their future financing needs, decisions about budgets may be made without proper consideration of fiscal sustainability.

The impact of these institutional deficiencies on the practical application of the figure is evident in the credibility of the budget, specifically how well expenditures are in line with the appropriations approved by the Legislature. Budgeted and actual expenditures have shown some discrepancies in past years, indicating that formal budgeted expenditure limits are not effective constraints on fiscal behavior. Furthermore, budget cuts are also seldom allocated proportionally to budget areas. The protection of the recurrent obligations is generally stronger than other obligations, particularly those that are politically sensitive and are due under contract because they are recurrent. Capital expenditure, on the other hand, is more susceptible to cuts or delays because investment projects may also not have as strong a political constituency, and the delay might not have immediate results. The imbalance has impacts that go beyond mere short-term expenditure management. Evidence on fiscal multipliers suggests significant differences in the impacts of various types of public spending, and weak support for the hypothesis that spending of consumption goods has a permanent impact on output or government revenue (Chodorow-Reich, 2019).

A fiscal policy that has a tendency to keep worker wages high at the expense of not making the necessary planned investment expenditures therefore negatively affects the immediate allocation of public resources, as well as the long-term possibilities of

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economic and revenue diversification. This, in turn, ensures that the monetary authority continues to have structural fiscal pressures. The sustainability of the ensuing public debt development also hinges on the interplay of the borrowing rates and economic growth. A favourable interest-growth gap can help to mitigate the debt service burden in many economic conditions, but it is even less certain in commodity-based economies, in which the price of a single commodity affects economic activity and financing conditions. The risk of sudden changes in investor expectations adds to these weaknesses and can throw off an otherwise comfortable debt situation (Bocola & Dovis, 2019).

Crisis Coordination and Its Residue

The COVID-19 pandemic led to a level of flexibility in the institutional separation between fiscal and monetary policies that has never been seen before. Governments engaged in a large number of fiscal measures to mitigate the economic shock, which were often coupled with purchases of sovereign debt instruments by the central bank. These measures were not only implemented in advanced economies, but also in emerging markets, also in countries where such monetary interventions have never been applied before (Alberola et al., 2021). Such extraordinary policy moves took place in a period of great economic uncertainty and uncertainty about government revenue, making the information and forecasts that are typically relied on by conventional policy frameworks less reliable (Altig et al., 2020). He experiences has two implications when considering the fiscal–monetary relations in Iraq. First, a tighter link between institutional entities in the fiscal and monetary sides in times of exceptional events and situations might be warranted, if the measures are explicitly and unequivocally temporary, subject to specific quantitative restrictions and accompanied by public explanations. But the ongoing support beyond a crisis, without a viable exit plan, has the potential to deplete their institutional division, which they were designed to maintain. Secondly, monetary credibility is an institutional asset which can be eroded over time by consistent use of fiscal accommodation. The communication from the central bank and the credibility of policy commitments have been shown to be key influences on economic expectations. Thus, the ability of the monetary authority to affect expectations through policy signals it provides in isolation may weaken if it becomes increasingly viewed as a source for financing government (Coibion et al., 2022).

Synthesis and Research Gap

The available scholarship, summarized in the following, underlies the analytical framework of this study.The available scholarship, summarized below, will provide three main insights that underlie the analytical framework of this study. First, it does not always follow from the statutory independence of the central bank that it has a genuine degree of monetary autonomy when the fiscal financing pressures build up.

Second, fiscal dominance in resource-dependent economies is not limited to holdings of domestic government debt by the central bank, but also to foreign-currency holdings of assets generating resource income. Third, while exchange-rate anchoring is widely used in the effort to keep money flowing in a stable manner in these economies, it does not take away the fundamental pressures for adjustment. Rather, it offshores the economic costs to the foreign-exchange reserves and the central bank's balance sheet.

Even with all these theoretical and empirical contributions, the literature is sparse in terms of explanations of how these mechanisms work together in a single national administration facing the challenges of multiple simultaneous political, economic and public-health crises. Current research on fiscal dominance focuses mainly on the cross-country dimension and is often based on the actual inflationary effects. This method can, however, neglect the significance of particular types of monetary dependence in economies like Iraq where inflation was kept in check, yet the fiscal pressures were manifested in changes of the central bank's asset mix and the international reserves. Likewise, studies on fiscal behaviour in resource-rich economies have tended to focus on the procyclical nature of government spending and have not systematically explored the adjustments on monetary authorities' balance sheets. The present study addresses these limitations by conducting an integrated analysis of fiscal and monetary statistics of Iraq for the period of 2014-2020. The analysis aims to extract the information contained in the financial series from the official statistics, and at the same time to construct indicators that reveal fiscal dominance regardless of whether the inflation has been realised or not, through the absorption of domestic debt, adjustment of the balance sheets and use of foreign exchange reserves.

METHODOLOGY

Research Design

An inductive research is used with a descriptive–analytical approach to analyze Iraq's fiscal–monetary relationships during the period 2014-2020. The methodological design includes the theoretical arguments presented in Section 2 and to documentary evidence and official statistical data, and allows the mechanisms of fiscal pressure transmission to be explored in one national institutional framework. A focus on an individual country is especially relevant because an accounting and institutional framework of interdependent accounting transactions that cannot be captured by standard cross-country regression analysis determines the relation between government financing needs and central bank balance-sheet changes. The choice of this study period is also meaningful, spanning two periods of economic and political turmoil that do not overlap. The beginning of 2014 marks the first compound crisis, when the international oil price collapsed and a territorial crisis emerged, and 2020 the next period of heightened instability. Looking at both episodes provides a comparative historical context in which you can consider the fiscal and monetary consequences of the crisis of 2019–2020

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against the fiscal and monetary consequences of an earlier disturbance instead of against an assumed period of normal economic activity.

Data Sources

Empirical analysis is only based on quantitative data from official institutional sources. The main monetary and fiscal items are derived from the annual economic reports of the CBI such as the information on the aggregate fiscal indicators, the fiscal structure of government revenue and expenditure, domestic public debt, domestic public debt instruments, monetary aggregates, exchange rate in the parallel market, foreign currency transactions of monetary authority, and international reserves. (C. B. o. Iraq, 2020; Iraq, 2021). The legislative framework governing deficit financing in 2020, including its original provisions and subsequent amendments, is examined using the officially published draft legislation and associated parliamentary assessments (C. o. R. o. Iraq, 2020; R. o. Iraq, 2020). The government's White Paper provides the documentary basis for identifying proposed fiscal and institutional reform commitments (R. o. Iraq, 2020). To strengthen the reliability of the empirical assessment, the principal macro-fiscal aggregates are additionally cross-checked against the Article IV consultation documents published by the International Monetary Fund and the country monitoring reports issued by the World Bank (Bank, 2020; Fund, 2023, 2024). are also considered for improved reliability of the empirical assessment. The statistical observations available for 2020 cover the same time period as the observations in the underlying source series, January–October. All figures in this interval are therefore presented as partial year figures and not annualised to be consistent with the original figures reported.

Indicator Construction

The study classifies the fiscal pressures into five types of indicators from the main statistical records, to evaluate the transmission of fiscal pressures to monetary operations. The first measures revenue concentration by dividing the value of all government receipts by the value of the government's receipts from oil and mineral resources. A complementary measure is a comparison of non-oil revenue and total public expenditure; it is an approximation of the non-oil primary balance and a more robust indicator of government's ability to finance its expenditure needs without relying on petroleum revenues. The second approach is based on two indicators: the share of employee compensation, social welfare payments and subsidies in current expenditure; and the share of total public expenditure in recurrent obligations. The third considers budget credibility, and compares budgetary expenditures to approved budgetary allocations. The execution rates are derived separately for current and investment expenditure, as a way to highlight disparities in the application of the two elements of the budget. The fourth category is designed to assess the level of debt monetisation, and calculates the ratio of the amount of outstanding domestic public debt to treasury

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transfers discounted at the CBI. Lastly, the fifth uses the amount of foreign-exchange reserves and CBI's net foreign-currency position to measure the monetary buffers. The latter is the amount of foreign currency that the government buys minus the amount of foreign currency that it sells to the market. A negative balance means that the monetary authority's foreign-currency holdings are already being used to to meet market demand, and are not only being used to redirect foreign-exchange receipts brought in by the government.

Data Reconciliation and Validation

Numerical reliability of each table was verified through a three-stage verification process before substantive interpretation was performed, because the series of statistics produced by the official sources are not consistent. First, percentages reported for each distribution were added together and compared with the total of 100. Subsequently, all the published ratios were independently reworked with the numerical value of the ratios published in each case, to see if the relationships were arithmetically reproducible. The last step was to compare the tabulated observations with the narrative descriptions in the originals, and, where possible, the tabulated results with known quantity–price relationships. This systematic examination showed 4 significant differences, which are listed in Table 8 with the matching corrective treatment. In order to avoid introducing adjustments that are difficult to explain, the study clearly notes all adjustments and reveals the inconsistency before applying the corrected figure to further analysis. Such verification is not simply a 'data cleaning' process, but part of the research methodology, especially as two out of the four discrepancies that were found would have affected the order of magnitude of the main empirical finding.

Analytical Procedure and Limitations

The study's research objectives are carried out in four phases, which are sequential in nature based on the following empirical investigation: The analysis is started with an analysis of the composition of government revenue and expenditure, then is examined legislative and financial arrangements introduced to the crisis. It then examines the degree of domestic public debt financing provided by the CBI and then reviews developments in monetary conditions and foreign exchange reserves. This methodological framework makes descriptive inferences and tracks institutional transmission mechanisms easier, but not causal effects. Specifically, the study investigates whether the shifts in fiscal policy instruments were associated with shifts in indicators of the central bank's monetary policy operations consistent with theoretical expectations, and whether the attributes of the fiscal policy instruments indicate the observable channels the fiscal policy instruments were used to finance monetary policy operations.

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The analysis, however, does not attempt to build and estimate a counterfactual scenario of the evolution of international reserves or the monetary base without the fiscal measures analysed. Another restriction is the availability of public monetary statistics. The pressures on the CBI may also be gauged from parallel-market exchange rates and foreign-exchange reserves reported, but these indicators are not exhaustive of pressures. Lack of access to disaggregated information on the amount and nature of foreign-currency demand flowing through the auction mechanism also limits the extent to which underlying sources and distribution of foreign-exchange pressures can be comprehensively understood.

RESULTS

Revenue Concentration

The economic classification of government revenue presented in Table 1 highlights Iraq's substantial dependence on petroleum-related income. Oil and mineral revenues accounted for 92.12% of total public receipts in 2019, compared with 89.00% during January–October 2020.

Table 1: Composition of Public Revenue by Economic Classification, 2019 and 2020 (Percentage of Total)

Revenue Category	2019	2020[a]	Change (pp)[b]
Oil and Mineral Resources	92.12	89.00	−3.12
Taxes on Income and Wealth	2.53	3.60	+1.07
Commodity Taxes and Excise Duties	1.73	2.40	+0.67
Transferable Revenue	0.98	1.00	+0.02
Fees	0.90	1.20	+0.30
Public Sector Profits	0.59	0.90	+0.31
Capital Revenue	0.09	0.60	+0.51
Other	1.06	1.30	+0.24
Total	100.00	100.00	–
Memorandum: Non-Oil Revenue	7.88	11.00	+3.12

Note: [a] January to October 2020. [b] Change in percentage points, computed by the authors. Columns sum to 100.00 in both years. Adapted from C. B. o. Iraq (2020); Iraq (2021) and C. o. R. o. Iraq (2020).

The rise of non-oil revenue in the relative contribution of revenue within the two periods does not necessarily reflect true structural diversification. Instead, the share of petroleum receipts had decreased, rather than the overall amount of alternative income increased. While all non-oil revenue categories saw an increase in percentage shares, the increases were relatively small. The shares of income and commodity taxes grew in value from 2.53% to 3.60% and from 1.73% to 2.40%, respectively. Even so, the non-oil revenue's share rose by just 3.12 percentage points from 7.88% to 11.00%, whereas overall government revenue decreased by a significant amount. This pattern suggests the non-oil revenue base was not able to significantly cushion the effects of the decline

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in petroleum income. As a result, the role of alternative revenue collection was unable to offer significant fiscal relief during a time where increased domestic tax collection is especially vital to ease the fiscal pressures. Figure 1shows the comparative composition of public revenue in the two periods.

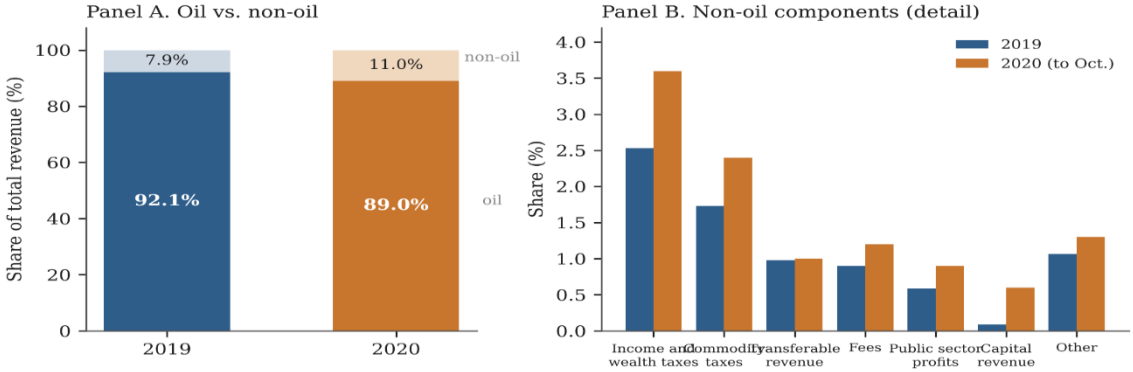


Figure 1: Composition of Public Revenue, 2019 and 2020
Note: Panel A contrasts the oil and non-oil shares of total revenue. Panel B disaggregates the non-oil component on an expanded scale. Data for 2020 cover January to October.

Table 2 shows 2019's fiscal position in terms of selected financial ratios, and the monetary authority's implications stemming from the current fiscal structure. As shown in Table 2, non-oil revenue accounted for just 8.9% of total public expenditures, which demonstrates the very narrow range of Iraq's domestic sources of revenue to support government expenditure without the support of petroleum revenues. If the volume of oil receipts is discounted, the government would have enough foreign-currency earnings to finance, at best, less than one-tenth of its expenditure commitments, leaving about nine-tenths of that bill to be settled with foreign-currency earnings that would have to be converted by the monetary authority. The relationship is a more direct reflection on the structural fiscal pressures that the CBI faces than the traditional budget deficit, since it reflects the degree of reliance on the monetisation of external resource revenues. Table 2 confirms the inflexibility in Iraq's budgetary system with regard to spending indicators.

The vast majority of expenditure, 86%, was on current expenditure, while only 14% was for investment activities. There was also significant variation in budget implementation, as only 28.4% of planned investment spending was realized, while 57% of the current budget was implemented. Reconciled therefore was the investment budget at about half the pace as the current budget, showing that fiscal adjustment was skewed toward capital spending rather than towards recurrent spending commitments. The pattern indicated that investment allocations were the main adjustment mechanism when facing fiscal constraints, and when the adjustments were made, expenditure that was otherwise associated with productive capacity and longer-term diversification of government revenue were the ones to be reduced.

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Table 2: Selected Indicators of the Executed Federal Budget, 2019

Indicator	Value (%)	Interpretation
Oil Revenue / Total Revenue	92.1	Extreme Revenue Concentration
Non-Oil Revenue / Total Revenue	7.9	Narrow Domestic Tax Base
Non-Oil Revenue / Total Expenditure	8.9	Under One-Tenth of Spending is Self-Financed
Current Expenditure / Total Expenditure	86.0	Consumption-Weighted Spending
Investment Expenditure / Total Expenditure	14.0	Limited Capital Formation
Execution Rate, Current Budget	57.0	Moderate Budget Credibility
Execution Rate, Investment Budget	28.4	Investment Absorbs the Compression
Execution Rate, Total Budget	49.9	Half of the Approved Budget Realised

Note: Execution rate is the ratio of realised to planned expenditure. The interpretation column is supplied by the authors. Adapted from C. B. o. Iraq (2020).

Expenditure Rigidity

Table 3 shows the distribution of current expenditure in terms of the relative importance of employee compensation, which significantly increased during the crisis year. The amount designated for employee compensation increased by 6.7 percentage points, to 59.3%, while grants, subsidies and debt servicing fell by 19.5% to 15.3%.

Table 3: Composition of Current Expenditure by Economic Classification, 2019 and 2020 (Percentage)

Expenditure Category	2019	2020[a]	Change (pp)[b]
Compensation of Employees	52.60	59.30	+6.70
Social Welfare	23.50	22.50	−1.00
Grants, Subsidies and Debt Service	19.50	15.30	−4.20
Commodity Supplies	2.60	1.90	−0.70
Service Supplies	0.60	0.40	−0.20
Asset Maintenance	0.49	0.20	−0.29
Special Programmes	0.48	0.19	−0.29
Capital Expenditure within Current Budget	0.20	0.14	−0.06
Commitments and Contributions	0.05	0.02	−0.03
Total	100.02	99.95	–
Memorandum: Three Protected Categories	95.60	97.10	+1.50

Note: [a] January to October 2020. [b] Change in percentage points, computed by the authors. Totals depart marginally from 100 because the source reports rounded shares. The memorandum line sums compensation of employees, social welfare, and grants, subsidies and debt service. Adapted from C. B. o. Iraq (2020) and C. o. R. o. Iraq (2020).

These three relatively protected expenditure categories comprised 22.5% of social welfare expenditure, bringing the total amount of current expenditure (including social welfare) to 97.1% in 2020, which was up from 95.6% in 2019.

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This high concentration of budgetary resources significantly reduced the government's ability to make budgetary adjustments related to the revenue shock in the recurrent side of the budget. The expenditure components which had more room for discretionary decrease accounted for less than 3% of current expenditure, namely commodity supplies, service supplies, maintenance and special programmes. Thus, the factor to compress expenditure was mathematically not big enough to allow for proportionate cuts in expenditure to match the extent of the revenue drop. The growth rate of the compensation of employees in this period should rather be viewed as the result of the nominal expenditure requirements becoming more rigid in a period of overall expenditure reductions, and not as a corresponding increase in the absolute amount of compensation paid. The pattern reflects the lack of flexibility in recurrent commitments in the fiscal response to the crisis and the additional pressure that was placed on alternative financing arrangements. The changes in the composition of current expenditure corresponding to the changes in current receipts are shown in Figure 2.

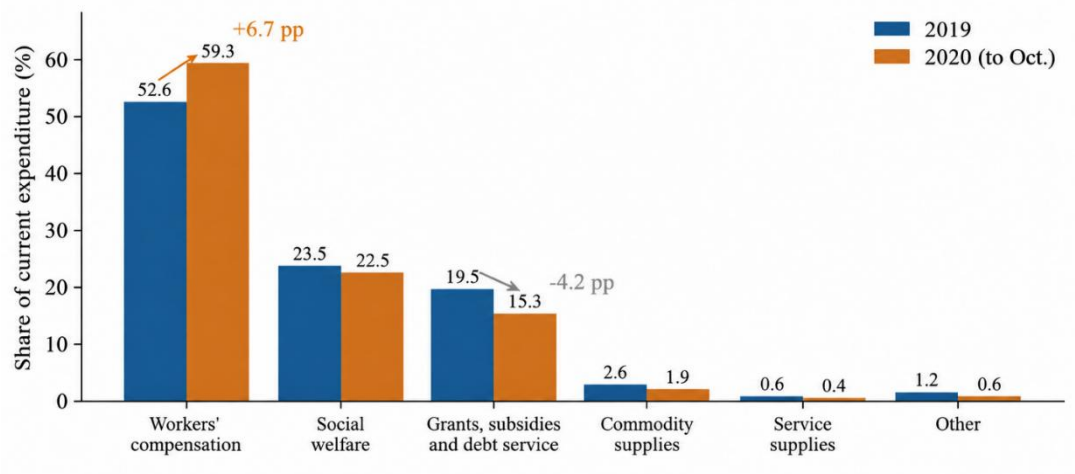


Figure 2: Composition of Current Expenditure, 2019 and 2020
Note: Categories below 0.5% of the total in both years are aggregated as "Other". Data for 2020 cover January to October.

Table 4: Largest Actual Investment Allocations by Ministry, 2019

Ministry or Body	Share of Investment Allocations (%)	Cumulative (%)
Ministry of Oil	44	44
Ministry of Electricity	14	58
Ministry of Defence	6	64
Ministry of Construction and Housing	5	69
Council of Ministers	3	72

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Note: Five largest recipients only; the remaining 28% is distributed across all other budget entities. The cumulative column is computed by the authors.

Table 4 shows that investment appropriations are very unevenly distributed among the various government ministries, with a significant amount of money going into a small number of sectors. The top five ministries, which received the highest investment budgets, together received 72% of the total investment budget, while oil and electricity alone received 58%. The prioritisation of these sectors is not, per se, problematic, as they are very capital intensive and critical to Iraq's economic infrastructure. The continued existence of electricity supply problems despite the many investment allocations, however, more points to the failure of project implementation and the management of public investment than it does to a lack of funding. This interpretation is also reinforced in the light of the relatively low level of investment budget execution as reported in Table 2, which indicates that investment budget usage and delivery could be a more important problem than the distribution of investment budgets.

The 2020 Deficit-Financing Instrument

Table 5 Describes the proposed borrowing bill to cover Iraq's financing needs for the remaining four months of the 2020 fiscal year and the changes made to it during the lawmaking process. There are three points of the proposed framework that need to be highlighted. The first is that the funding deficit of 41.63 trillion dinars was about 2.1 times the revenues expected in the four months. To balance this great inequality, the legislation was presented to the Minister of Finance to have very wide powers to borrow domestically and abroad to finance the project. Second, the size of the upcoming revisions suggests that there is doubt surrounding the fiscal forecast. The projected financing gap was lowered by 71.2 per cent in legislative discussions, and the estimated revenue was lowered by 46.8 per cent. The level of adjustment required indicates that there is a high degree of uncertainty about the original fiscal estimates, which reduces the quantitative underpinning for the original level of borrowing authorisation.

Third, inconsistencies in the financial calculations of the legislation make it harder to evaluate the fiscal assumptions of the legislation. The amount of oil revenue is reported as 14.18 trillion dinars, which is said to be 79.9% of total revenue, but this represents only 71.9% of the total revenue as reported. Furthermore, the assumptions in the legislation regarding oil prices, production volumes and exchange rates yield estimated gross petroleum receipts of about 17.5 trillion dinars, or around 15.7 trillion dinars after the stipulated 10% deductions. The stated figure 14.18 trillion dinars is, however, not in accord with the underlying assumptions, while the reported share of oil revenue is 79.9%. The law also made provisions to boost non-oil revenue mobilisation, such as the biometric verification of public-sector salary recipients, electronic linking of the tax and customs systems with foreign-currency auction mechanism, and enhanced utility payment collection. These programs are substantially and content-wise appropriate

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administrative reforms, but if they are to be implemented in an effective way, it would take several years. The addition of the banks to a financing scheme that was meant to tackle an immediate four-month shortfall in the fiscal account further underscored the disconnect between the need for shorter-term financing and proposals for institutional changes to better collect revenues, which take longer.

Table 5: Provisions of the 2020 Deficit-Financing Bill and Proposed Amendments (Trillion Iraqi Dinars Unless Otherwise Stated)

Item	As Drafted	As Amended	Revision (%)
Coverage	Last 4 months	Last 3 months	–
Estimated Revenue	19.719	10.500	−46.8
Estimated Expenditure	57.811	22.500	−61.1
Of Which Current	53.858	–	–
Of Which Investment	3.953	–	–
Financing Gap	41.629	12.000	−71.2
Assumed Oil Price (USD/Barrel)	40.5	–	–
Assumed Export Volume (Million bpd)	3.033	–	–
Assumed Exchange Rate (IQD/USD)	1,180	–	–
Stated Oil Revenue	14.181	–	–
Stated Oil Revenue / Total Revenue (%)	79.9	–	–
Oil Revenue Implied by the Stated Share	15.755	–	–
Oil Revenue Implied by Price × Volume × Rate, Net	≈15.7	–	–

Note: The revision column is computed by the authors. Adapted from R. o. Iraq (2020) and C. o. R. o. Iraq (2020).

Internal Debt and Its Absorption by the Central Bank

Table 6 presents the evolution of Iraq's domestic public debt, together with the financial instruments employed to mobilise the associated borrowing.

Table 6: Internal Public Debt and Its Financing Instruments, 2014–2019 (Billion Iraqi Dinars)

Year	Internal Public Debt	Transfers Discounted at the CBI	CBI Share (%)[a]	Bonds	Treasury Transfers Balance	Residual Debt Owed by the MoF
2014	9,520.0	0.0	0.0	0.0	7,064.5	2,455.5
2015	32,142.8	6,225.3	19.4	14.5	13,086.3	2,355.5
2016	47,362.2	16,225.3	34.3	1,696.9	16,538.1	2,355.5
2017	47,678.7	16,225.3	34.0	2,682.4	16,069.2	2,155.5
2018	41,822.9	14,925.4	35.7	1,953.2	25,689.1	1,955.5
2019	38,331.5	14,125.4	36.9	1,921.2	23,979.3	1,755.5

Note: CBI = Central Bank of Iraq; MoF = Ministry of Finance. [a] Adapted from C. B. o. Iraq (2020); Iraq (2021).

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The outstanding stock of internal public debt increased substantially between 2014 and 2017, rising from 9.52 trillion dinars to 47.68 trillion dinars, representing an approximately fivefold expansion within three years. This upward trajectory subsequently reversed as petroleum prices recovered, with domestic debt declining to 38.33 trillion dinars by 2019.

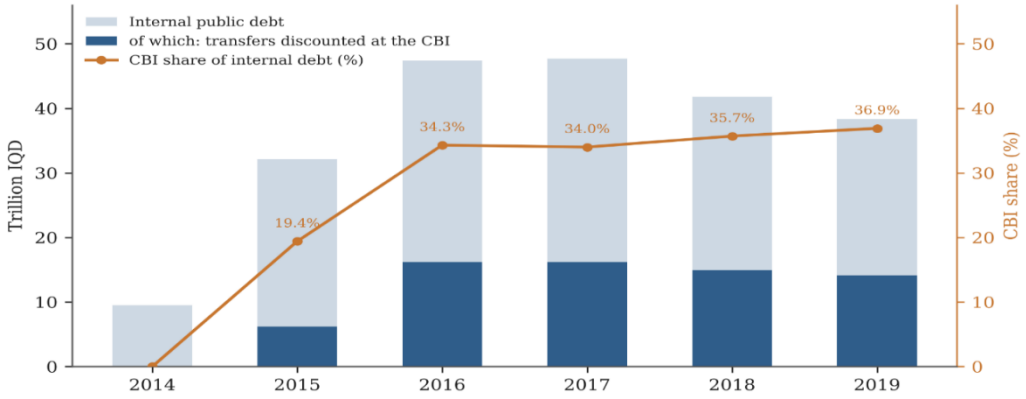


Figure 3: Internal Public Debt and Central Bank Absorption, 2014–2019
Note: The internal public debt stock is shown by the bars, the shaded area being the discounted amount held at the Central Bank of Iraq. The line indicates what percentage of the stock is that portion.

The increasing size of domestic indebtedness is not so important as the compositions of the instruments used for financing the borrowing of the governments. The domestic debt structure did not include the treasury transfers rediscounted by the CBI in 2014, but by 2016 these had reached 16.23 trillion dinars. In 2019, their outstanding value was 14.13 trillion dinars, representing 36.9% of total internal public debt; however, their subsequent performance was rather good. In that case, over a third of government's domestic indebtedness was in the hands of the monetary authority. The institutional context in which these transactions take place is important for grasping the implications of such transactions on central bank independence. The government did not take bank financing directly from the CBI but it issued treasury instruments to the two major state banks which rediscounted them with the central bank. The limited depth of the secondary securities market combined with the lack of public ownership of the intermediary banking institutions, made it an economically similar form of indirect financing to direct central bank involvement in the primary market. The transactions, which were meant to preserve the institutional separation mandated by Article 26 of the 2004 law, undermined the separation in reality by allowing the government to borrow through the central bank's balance sheet. Therefore, if the purpose of the proposed monetary financing restriction was not to be respected with compliance in practice, the legal structure was not necessarily complied with. The movements in the total level of the outstanding domestic public debt and the share taken up by the CBI are shown in Figure 3.

Monetary Aggregates, Reserves and the Exchange Rate

The exchange-rate stability and the exchange-rate-related pressures on the balance sheet revealed by the monetary and external-sector indicators shown in Table 7, suggest a need for more consistent and effective policy implementation. The parallel-market exchange rate ranged from 1,196 dinars to 1,275 dinars to the dollar over the 7-year period, with the overall variation amounting to 6.6%, with an increase to 1,227 dinars to the dollar in 2020. This relatively tight range of exchange rates suggests that the primary exchange-rate stabilisation goal of the past few years has been met, but trends in foreign-exchange reserves and monetary aggregates point to the financial stresses that went with the success. International reserves shrank from US$65.37bil in 2014 to US$44.52bil in 2016, indicating that the decrease by 31.9% was followed by a recovery only when petroleum prices improved. Despite foreign exchange sales which reduced the supply of liquidity, broad money supply (M2) increased by 14.0% from 2014 to 2019, and by 24.1% in October 2020 over the 2014 value to reach 112.57 trillion dinars.

Table 7: Money Supply, Exchange Rate and Foreign Reserves, 2014–2020

Year	M2 (Trillion IQD)	Parallel Rate (IQD/USD)	Sales (bn USD)	Purchases (bn USD)	Reserves (bn USD)	Net Position (bn USD)[a]
2014	90.728	1,214	54.463	47.515	65.365	−6.948
2015	82.595	1,247	44.304	32.450	53.139	−11.854
2016	88.067	1,275	33.524	25.653	44.516	−7.871
2017	89.441	1,258	42.201	40.355	48.499	−1.846
2018	95.391	1,209	47.139	52.229	66.102	+5.090
2019	103.441	1,196	51.127	58.851	63.559	+7.724
2020[b]	112.571	1,227	n.a.	n.a.	65.132	n.a.

Note: [a] Purchases from the government minus sales to the market, computed by the authors; negative values indicate net supply of foreign currency from the reserve stock. Cumulative net position 2014–2017: −28.519 billion USD. [b] January to October 2020; auction data not available for the partial year. Adapted from C. B. o. Iraq (2020); Iraq (2021).

In sum, these developments are in line with the monetary transmission mechanisms linked to the fiscal dominance of oil. The movement of petroleum receipts into domestic currency, along with the rediscounting of government debt instruments, helped push money supply higher and the CBI also meddled in the foreign-exchange market to prevent these pressures from affecting domestic prices and exchange-rate stability. Hence it was necessary for the monetary authority to meet the need of the fiscal authorities for finance while simultaneously conducting offsetting operations to achieve stabilisation goals. But these interventions were only partial sterilisations, and the foreign asset reduction in the central bank's balance sheet was a reflection of the adjustment. The parallel growth in monetary aggregates and the decline in reserve holdings, therefore, demonstrates the conflict between fiscal accommodation and

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monetary stability in the face of substantial reliance on petroleum revenues. The comparative development of the three indicators is shown in Figure 4.

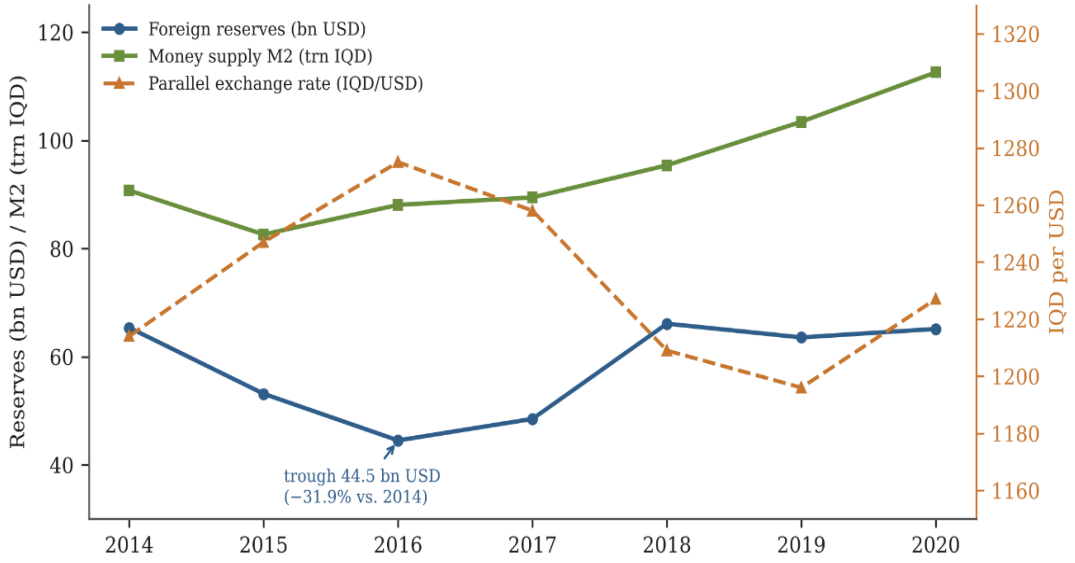


Figure 4: Foreign Reserves, Money Supply and the Parallel Exchange Rate, 2014–2020
Note: Reserves and M2 are read on the left axis in their respective units; the parallel exchange rate is read on the right axis. Data for 2020 cover January to October.

The net foreign-currency position shown in Figure 5 shows clearly how pressures are facing the CBI, both in terms of the direction and the strength. Import from the domestic market from the foreign currency market has been consistently higher than export to the foreign country market from the domestic country market during the period of 2014-2017, and the net outflow for the total period is US$28.52 billion. This shortfall is highest in 2015, at US$11.85 billion. The negative position was only corrected in 2018 and 2019 when petroleum revenues picked up. The developments suggest that in times of increased fiscal stress, the role of the CBI was not limited to a traditional role of intermediation of foreign exchange receipts generated by the government. Rather, the demand of the domestic market would be met by the monetary authority's use of its foreign reserves, while the government's ongoing spending would expand the domestic money supply. This divergence of foreign-currency inflows and market operations reflects the double pressure that the fiscal financing needs and stabilisation of the exchange rate exerted on the central bank's balance sheet, limiting its ability to ensure monetary stability without tapping into foreign-currency holdings.

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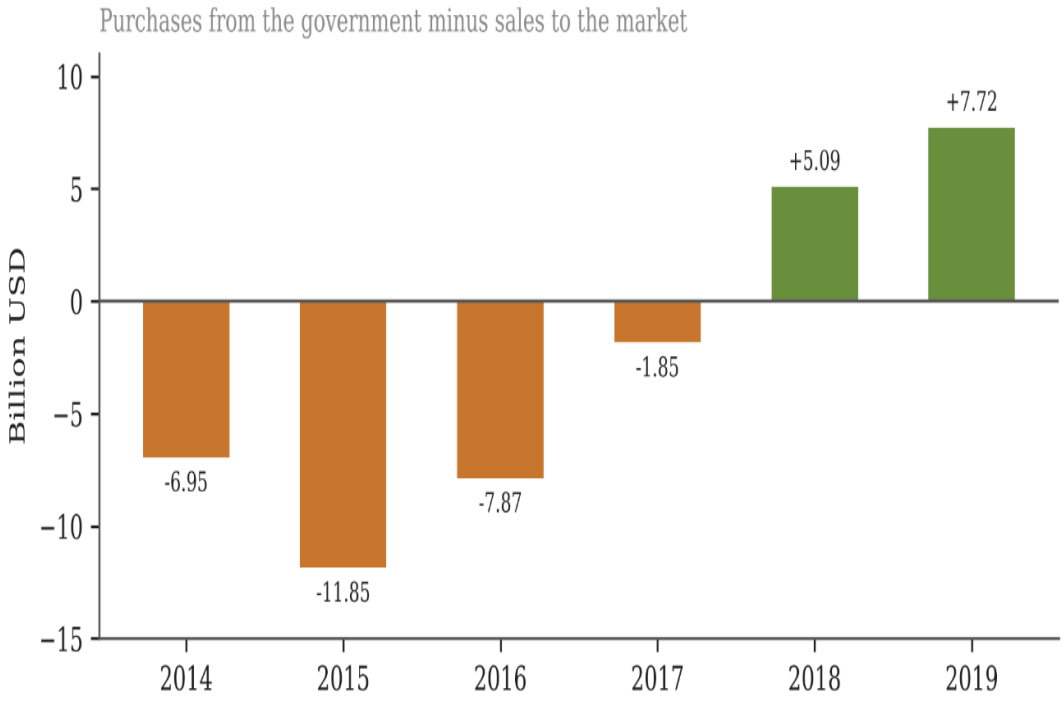


Figure 5: Net Foreign-Currency Position of the Central Bank of Iraq, 2014–2019
Note: Computed as purchases of foreign currency from the government minus sales to the market. Negative values indicate that the bank supplied the market from its own reserve stock.

Data Discrepancies Identified

These data validation differences and corrective measures are discussed systematically in Table 8, and significant emphasis is placed on Items 1 and 2 due to their implications with respect to the interpretation of the empirical findings. The figures of domestic debt in the published form would have given a massive error in the estimation of the amount of debt outstanding in 2019, from 38.3 trillion dinars to 383 trillion dinars. In the same way, the uncorrected data would have yielded debt monetisation ratio estimates that would not have matched the financial aggregates underlying the same data on the same sources. All of this was important to rectify so that there would be no material misrepresentation of the level of domestic public debt and monetary accommodation. The revised data series is consistent with the accounts of public debt developments in Iraq in the period under consideration, in both the data source and in independent assessments of the developments in public debt in Iraq during the period under study. (Fund, 2023).

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Table 8: Inconsistencies Identified in the Source Data and Treatment Applied

No.	Inconsistency	Evidence	Treatment
1	Internal debt series stated in the wrong unit	Tabulated values are exactly ten times the magnitudes given in the narrative of the same source (e.g. 95,200 against 9,520.019 billion for 2014).	Series rescaled to billion dinars throughout; disclosed in the note to Table 6.
2	Published monetisation ratios not reproducible	Ratios for 2015–2017 (32.6, 51.5, 48.6) cannot be derived from the debt magnitudes reported beside them, which yield 19.4, 34.3 and 34.0; the 2018 and 2019 ratios reproduce exactly.	All ratios recomputed from the reported magnitudes; original values not used.
3	Oil revenue inconsistent with its stated share	The 2020 bill reports oil revenue of 14.181 trillion and an oil share of 79.9% of a 19.719 trillion total; the stated amount yields 71.9%, while the bill's own price, volume and exchange-rate assumptions imply about 15.7 trillion net.	Both values reported; the discrepancy is treated as a finding on the quality of the legislation rather than silently corrected.
4	Inconsistent decimal notation	Commas and periods used interchangeably as decimal separators within a single table (e.g. 54.463 alongside 47,515).	Notation standardised to the period; magnitudes verified against the arithmetic identity linking purchases, sales and the net position.

DISCUSSION

Dominance Without Inflation

The main empirical result is that there is a unique fiscal dominance in Iraq without the traditional inflationary monetary reaction to government deficits. This seeming paradox can be explained once the transmission process is considered in the institutional framework of an oil-based economy with a controlled exchange rate regime. According to the traditional theory, monetary base expansion can lead to price changes in the general price level in the long run (Bianchi et al., 2023). In Iraq, monetary expansion, however, had not been expected to lead to inflation as the CBI intervened in the foreign-exchange market to keep the exchange rate stable. The M2 money supply rose by 14.0% from 2014 to 2019, but the price pressures were kept under control by foreign currency sales at the supported exchange rate. This meant that the adjustment burden was shifted from domestic prices to the central bank's foreign assets, and international reserves fell 31.9 percent until they hit their troughs in 2016.

This result has relevance for the measurement of monetary policy independence. Measuring central bank independence in terms of actual inflation results may mask the institutional and financial limitations faced by central banks due to the need for fiscal financing. In this instance, Iraq's fairly stable price environment may be seen as a sign of monetary autonomy, although the changes in the balance-sheet suggest that there was a high level of fiscal control over monetary operations. The evidence then points to the

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possibility that fiscal dominance can be first discerned in a country with an oil-based economy and one with an exchange-rate anchor, as the country runs out of foreign-exchange reserves, and not as domestic inflationary pressures increase. This is in line with the monetary policy trilemma, which states that exchange-rate management can impose an upper bound on the independence of the monetary policy stance, whether the pressures are manifest in the price level are not immediately apparent (Obstfeld et al., 2019).

The Two Channels of Dominance

The empirical results confirm that the two transmission channels described in Section 2 were simultaneous, complementing the fiscal transmission channel via different parts of the CBI's balance sheet. Table 6 also shows that by 2019, the central bank had claims equal to 36.9% of the amount outstanding in public debt at the national level. These holdings developed as a result of an indirect financing arrangement where government debt instruments were first moved to the state owned commercial banks and subsequently to the monetary authority for rediscount. While this sequence was formally within the statutory prohibition on direct lending in the primary market, its economic impact was very similar to the type of financing that the prohibition sought to curb. The asset-side process is clearly visible in the data in Table 7 and in Figure 5, which records the monetary impact of using fori gn receipts, born of the petroleum sector, to generate domestic liquidity and then the use of the foreign reserves to offset some of that liquidity by foreign-exchange interventions. Although having opposing effects on the monetary base, both of them led to a similar institutional effect: they tied the central bank's balance-sheet operations to the financing and stabilisation needs of fiscal policy. The resulting configuration is a good example of how monetary accommodation and reserve depletion can coexist among an oil-based fiscal system, increasingly constraining the ability to make autonomous monetary choices. This is in line with the literature on resource windfall, which focuses on the need for fiscal rules to avoid the delegation of macroeconomic stabilisation responsibility from fiscal institutions to monetary policy institutions. (van der Ploeg, 2019).

Expenditure Structure as the Binding Constraint

It is argued that the institutional explanation of the disproportionate burden of stabilisation placed on the monetary authority is given by the composition and execution of public expenditure. In 2020, relatively protected expenditure categories covered 97.1% of current spending, with only 28.4% of investment expenditures being spent on their planned levels. These indicators are all pointing to a very narrow range in fiscal policy space to be able to act on expenditure changes. The growth in the share of current expenditure on employee compensation of 6.7 percentage points during the crisis is another example of the nominal commitment to expenditure during the crisis despite worsening fiscal conditions. This rigidity is a more extreme example of the

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procyclical expenditure ratchet that is characteristic of resource dependent economies, under which good revenue conditions stimulate the adoption of long-term binding commitments to fiscal spending that are difficult to adjust when resource income falls (Bjørnland et al., 2019). Thus, the main method of coping with the financing pressures created is through borrowing.

This constraint contains an extra intertemporal dimension because the cut in expenditure is allocated. Fiscal consolidation was focused on investment expenditure, which limits the types of public spending that can help build productive capacity and enables revenue diversification in the future, rather than making significant changes to recurrent consumption commitments. It is salient to note that this pattern of allocation is significant considering that non-oil revenue covered only 8.9% of total public expenditure Table 2. If investments are made under such conditions, it is likely that structural reliance on petroleum receipts will continue, as was the case originally that led to the fiscal imbalance. Moreover, the implications do not just apply to the ability to be flexible with budgets but to the efficacy of public spending. While there is some evidence that fiscal multipliers vary significantly by type of spending, there is little evidence to expect that spending on goods and services would have as much impact on the economy as other types of public expenditure that have a larger impact on the economy (Chodorow-Reich, 2019). Based on this, the government was limited in its ability to absorb fiscal shocks in the short term and in its efforts to lower the structural source of fiscal vulnerabilities in the long term.

Legal Independence and Realised Autonomy

The experience of Iraq provides empirical support for the distinction increasingly recognised in contemporary scholarship between the formal legal foundations of central bank independence and the autonomy exercised in practice. The CBI Law of 2004 establishes a comparatively robust statutory framework for monetary independence, reflecting the broader international adoption of institutional arrangements designed to insulate central banks from direct fiscal influence (Romelli, 2022). Nevertheless, the operation of the treasury rediscounting mechanism demonstrates how legal restrictions defined according to particular financial market segments may be formally respected while their underlying economic objectives are effectively circumvented. By channelling government financing through state-owned banking intermediaries, the institutional framework permitted transactions that reproduced the economic consequences of direct monetary financing without explicitly violating the prescribed legal procedure. This discrepancy reinforces the proposition that central bank independence should be understood as an outcome sustained by prevailing political and institutional conditions rather than as an inherent characteristic guaranteed by legislation (Hartwell, 2019). It also accords with findings indicating that the capacity of statutory independence to restrain inflation in developing economies depends substantially on the quality and effectiveness of the wider institutional environment

(Garriga & Rodriguez, 2020). From this perspective, Iraq's monetary performance requires a more nuanced interpretation. Although the CBI demonstrably maintained price stability, this achievement depended on financial interventions and balance-sheet adjustments that simultaneously exposed the limitations of its operational independence. Thus, successful inflation control cannot, in itself, be regarded as conclusive evidence of monetary autonomy when the instruments employed to achieve that outcome reflect continuing fiscal constraints.

Crisis Coordination and Its Exit

The exceptional economic circumstances of 2019–2020 provided a legitimate justification for closer coordination between fiscal and monetary authorities. During the COVID-19 pandemic, comparable adjustments to the conventional boundaries separating fiscal financing from monetary operations were adopted across numerous economies, including emerging markets with limited previous experience of such interventions (Alberola et al., 2021). These measures were introduced amid extraordinary uncertainty surrounding government revenues, economic activity and the broader macroeconomic outlook (Altig et al., 2020). However, the principal concern in Iraq was not the temporary relaxation of institutional boundaries in response to an unprecedented emergency, but rather the persistence of arrangements that had already weakened those boundaries since 2014, without a clearly defined strategy for their eventual withdrawal. The accumulation of rediscounted treasury instruments during the initial overlapping crises had not been reversed before the subsequent shock emerged. Consequently, the CBI confronted the fiscal pressures of 2020 with a balance sheet already substantially exposed to government financing requirements, thereby limiting its capacity to respond independently to the renewed deterioration in economic conditions.

The longer-term implications of such arrangements extend beyond their immediate effects on liquidity and public debt financing. Continued reliance on monetary accommodation may progressively weaken institutional credibility, an asset that can deteriorate incrementally but requires considerable effort and time to restore (Coibion et al., 2022). Furthermore, the availability of captive domestic financing channels can obscure the underlying severity of fiscal imbalances by reducing the immediate visibility of financing constraints, thereby delaying necessary adjustments to government revenue and expenditure policies (Reis, 2022). The Iraqi experience consequently illustrates how emergency coordination, when maintained without explicit limits or an exit mechanism, can evolve into a persistent institutional dependency that constrains monetary autonomy beyond the crisis conditions that initially justified its use.

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CONCLUSION, RECOMMENDATIONS AND IMPLICATIONS

Conclusion

The results of the empirical study confirm the hypothesis of the research and indicate that Iraq's fiscal policy arrangements in 2014-2020 have affected the ability of the CBI to maintain financial stability, despite its formal success in maintaining price stability. This was a result of structural revenue dependence and inflexible expenditure commitments as well as a greater need for monetary accommodation to finance the fiscal deficits. Government revenue was 92.12% from petroleum receipts, and only 8.9% from non-oil income. Meanwhile, relatively protected spending categories accounted for 97.1% of current expenditure and fiscal authorities had low discretionary space to cope with adverse revenue shocks with budgetary measures. This meant the subsequent financing pressures were transferred to the monetary authority via two closely linked channels. The first was the indirect financing of government liabilities via rediscounted treasury transfers, which led to the CBI taking over 36.9% of domestic public debt outstanding. The second one related to maintaining exchange rate stability via foreign currency interventions and a decline of international reserves by US$31.9% and cumulative net foreign currency outflows of US$28.52 billion in 2014-2017. Taken together, these trends suggest that the concept of statutory independence did not confer the same level of operational independence to the Jews. The CBI has maintained its de jure institutional independence during the period, but a growing reliance on its balance sheet for fiscal financing and exchange-rate stabilisation has meant that its ability to take an independent stance on monetary policy has been severely limited in practice.

Recommendations

Table 9 establishes a direct correspondence between the study's empirical findings and the policy interventions proposed to address the identified institutional and fiscal weaknesses. However, the effectiveness of these measures depends not only on their substantive design but also on the order in which they are implemented. Restoring meaningful monetary autonomy requires the underlying fiscal imbalances to be addressed before additional restrictions are imposed on the central bank's capacity to accommodate government financing requirements. Introducing such constraints without first reducing fiscal dependence on monetary support would not eliminate the underlying adjustment pressures. Instead, it would redirect them towards the accumulation of government payment arrears or potentially necessitate a sudden and disruptive exchange-rate adjustment.

Accordingly, the proposed reforms must follow a carefully coordinated sequence in which fiscal consolidation and institutional restructuring create the conditions necessary for the sustainable restoration of central bank independence. Consequently, the proposed ceiling on central bank holdings outlined in the first row of Table 9 can be

regarded as a credible and sustainable policy instrument only when implemented alongside the revenue mobilisation and wage-bill reforms specified in the second and third rows.

Table 9: Recommendations Mapped to Empirical Findings

Finding	Recommended Measure	Responsible Authority
The CBI held claims equal to 36.9% of internal public debt through rediscounted transfers	Redraft the prohibition on government lending by economic substance rather than by market segment, and impose a statutory ceiling on the stock of government paper the CBI may hold, with a defined unwinding path.	Council of Representatives; CBI Board
Non-oil revenue financed only 8.9% of expenditure	Set a binding multi-year target for the non-oil revenue ratio and complete the electronic linkage of tax and customs administration to the currency auction already specified in the 2020 bill.	Ministry of Finance; General Commission for Taxes
Protected categories absorbed 97.1% of current spending	Establish a biometric payroll register and a rule limiting growth in compensation of employees to a fixed share of non-oil revenue, so that the wage bill is not indexed to oil.	Council of Ministers; Ministry of Finance
Reserves fell 31.9% defending the exchange rate	Publish a reserve adequacy benchmark and an explicit intervention framework so that the cost of the anchor is transparent and bounded rather than residual.	CBI
Investment executed at 28.4% of plan while current spending reached 57%	Protect the investment budget from in-year reallocation and report execution rates for both budgets quarterly.	Ministry of Planning; Federal Board of Supreme Audit

The gradual reduction of the central bank's exposure to government debt should therefore be aligned with the actual progress of these complementary fiscal adjustments, ensuring that the withdrawal of monetary accommodation proceeds at a pace consistent with improvements in the government's independent financing capacity.

Implications

The findings carry important implications for theoretical understanding, institutional reform and macroeconomic surveillance. From a theoretical perspective, the Iraqi experience demonstrates that fiscal dominance in oil-dependent economies operating under a pegged exchange-rate regime may be more accurately identified through changes in central bank balance-sheet composition than through observed inflation outcomes. Consequently, conventional diagnostic approaches that rely predominantly on inflation indicators risk systematically underestimating the prevalence and intensity of fiscal dominance in this category of economies. At the institutional level, the evidence exposes a fundamental weakness in legal restrictions that distinguish

permissible and prohibited central bank financing according to the market segment in which transactions occur. Where secondary securities markets remain underdeveloped and financial intermediation is dominated by state-owned banks, restrictions confined to direct primary-market lending can be circumvented through economically equivalent indirect arrangements. Effective legislative safeguards must therefore address the substantive economic characteristics of financing transactions rather than relying exclusively on their formal market classification.

The study also identifies practical opportunities to strengthen fiscal and monetary surveillance through three indicators derived from publicly available information: the ratio of non-oil revenue to government expenditure, the proportion of domestic public debt held by the central bank, and the net foreign-currency position. Because these measures can be consistently reconstructed from published statistical series, they offer a transparent and reproducible framework for detecting emerging fiscal pressures on monetary operations. In Iraq, where realised budgetary outcomes repeatedly departed from approved fiscal projections, these indicators could provide earlier and more informative warning signals than the headline fiscal deficit alone.

A further implication concerns the institutional conditions under which fiscal–monetary coordination can remain effective without compromising long-term monetary independence. The findings do not challenge the legitimacy of temporary cooperation between fiscal and monetary authorities during exceptional economic disturbances, particularly given the severity of the 2019–2020 crisis. Rather, they demonstrate the risks associated with maintaining emergency financing arrangements indefinitely. Treasury transfers rediscounted during the 2014 crisis remained on the CBI's balance sheet when the subsequent crisis emerged in 2020, indicating that an instrument initially associated with exceptional financing needs had evolved into a persistent component of government funding. As a result, the monetary authority entered the later crisis with its capacity for additional emergency accommodation already constrained by earlier commitments. The broader institutional lesson is that effective crisis coordination requires clearly defined termination conditions and credible arrangements for withdrawing extraordinary interventions. Restoring the capacity to respond flexibly to future emergencies therefore depends on systematically reversing the exceptional financing commitments established during previous crises.

LIMITATIONS AND FUTURE RESEARCH

The methodological framework adopted in this study permits the identification and tracing of institutional transmission mechanisms but does not establish causal relationships or estimate the counterfactual trajectories of international reserves and the monetary base. Furthermore, the observations for 2020 encompass only the first ten months of the year and have not been annualised, a limitation that must be considered when interpreting comparisons across periods. These constraints provide the basis for

three directions for future research. First, constructing a comparative panel of oil-exporting economies using harmonised fiscal and monetary indicators would help determine whether the balance-sheet patterns identified in Iraq represent a broader characteristic of resource-dependent economies or arise from its particular institutional arrangements. Second, developing a structural model that explicitly incorporates the monetary implications of converting petroleum revenues into domestic currency would enable counterfactual estimation and a more rigorous assessment of the transmission mechanisms examined. Third, extending the empirical series beyond 2020 would facilitate an investigation into whether the exchange-rate devaluation implemented in December 2020 constituted a delayed adjustment in domestic prices and exchange-rate conditions, consistent with the pressures previously reflected in declining foreign-exchange reserves. Together, these extensions would strengthen the analytical foundations of the findings while clarifying their applicability beyond the Iraqi context.

REFERENCES

Aizenman, J., Cheung, Y.-W., & Qian, X. (2020). The currency composition of international reserves, demand for international reserves, and global safe assets. *Journal of International Money and Finance*, *102*, 102120. https://doi.org/10.1016/j.jimonfin.2019.102120

Alberola, E., Arslan, Y., Cheng, G., & Moessner, R. (2021). Fiscal response to the COVID-19 crisis in advanced and emerging market economies†. *Pacific Economic Review*, *26*(4), 459-468. https://doi.org/10.1111/1468-0106.12370

Altig, D., Baker, S., Barrero, J. M., Bloom, N., Bunn, P., Chen, S., Davis, S. J., Leather, J., Meyer, B., Mihaylov, E., Mizen, P., Parker, N., Renault, T., Smietanka, P., & Thwaites, G. (2020). Economic uncertainty before and during the COVID-19 pandemic. *Journal of Public Economics*, *191*, 104274. https://doi.org/10.1016/j.jpubeco.2020.104274

Avdjiev, S., Du, W., Koch, C., & Shin, H. S. (2019). The Dollar, Bank Leverage, and Deviations from Covered Interest Parity. *American Economic Review: Insights*, *1*(2), 193-208. https://doi.org/10.1257/aeri.20180322

Bank, W. (2020). Iraq economic monitor, Fall 2020. *World Bank Group*. https://www.worldbank.org/en/country/iraq/publication/iraq-economic-monitor---fall-2020

Bassetto, M., & Sargent, T. J. (2020). Shotgun wedding: Fiscal and monetary policy. *Annual Review of Economics*, *12*(1), 659-690. https://doi.org/10.1146/annurev-economics-091319-050022

Bianchi, F., Faccini, R., & Melosi, L. (2023). A Fiscal Theory of Persistent Inflation. *The Quarterly Journal of Economics*, *138*(4), 2127-2179. https://doi.org/10.1093/qje/qjad027

Bjørnland, H. C., Thorsrud, L. A., & Torvik, R. (2019). Dutch disease dynamics reconsidered. *European Economic Review*, *119*, 411-433. https://doi.org/10.1016/j.euroecorev.2019.07.016

Bocola, L., & Dovis, A. (2019). Self-Fulfilling Debt Crises: A Quantitative Analysis. *American Economic Review*, *109*(12), 4343-4377. https://doi.org/10.1257/aer.20161471

Bordo, M. D., & Levy, M. D. (2021). Do enlarged fiscal deficits cause inflation? The historical record. *Economic Affairs*, *41*(1), 59-83. https://doi.org/10.1111/ecaf.12446

Chodorow-Reich, G. (2019). Geographic Cross-Sectional Fiscal Spending Multipliers: What Have We Learned? *American Economic Journal: Economic Policy*, *11*(2), 1-34. https://doi.org/10.1257/pol.20160465

Coibion, O., Gorodnichenko, Y., & Weber, M. (2022). Monetary Policy Communications and Their Effects on Household Inflation Expectations. *Journal of Political Economy*, *130*(6), 1537-1584. https://doi.org/10.1086/718982

Dincer, N. N., Eichengreen, B., & Geraats, P. (2022). Trends in monetary policy transparency: Further updates. *International Journal of Central Banking*, *18*(1), 331-348. https://www.ijcb.org/journal/v18n1/trends-monetary-policy-transparency-further-updates

Fund, I. M. (2023). Iraq: 2022 Article IV consultation—Press release and staff report (IMF Country Report No. 23/75). *International Monetary Fund*. https://www.imf.org/en/publications/cr/issues/2023/02/03/iraq-2022-article-iv-consultation-press-release-and-staff-report-529146

Fund, I. M. (2024). Iraq: 2024 Article IV consultation—Press release and staff report (IMF Country Report No. 24/128). *International Monetary Fund*. https://www.imf.org/en/publications/cr/issues/2024/05/15/iraq-2024-article-iv-consultation-press-release-staff-report-and-statement-by-the-executive-549028

Garriga, A. C., & Rodriguez, C. M. (2020). More effective than we thought: Central bank independence and inflation in developing countries. *Economic Modelling*, *85*, 87-105. https://doi.org/10.1016/j.econmod.2019.05.009

Hartwell, C. A. (2019). On the impossibility of central bank independence: four decades of time- (and intellectual) inconsistency. *Cambridge Journal of Economics*, *43*(1), 61-84. https://doi.org/10.1093/cje/bex083

Ilzetzki, E., Reinhart, C. M., & Rogoff, K. S. (2019). Exchange Arrangements Entering the Twenty-First Century: Which Anchor will Hold? *The Quarterly Journal of Economics*, *134*(2), 599-646. https://doi.org/10.1093/qje/qjy033

Iraq, C. B. o. (2020). Annual economic report 2019. *Department of Statistics and Research*. https://cbi.iq/static/uploads/up/file-160984166268831.pdf

Iraq, C. B. o. (2021). Annual economic report 2020. *Department of Statistics and Research*. https://cbi.iq/static/uploads/up/file-164491584783038.pdf

Iraq, C. o. R. o. (2020). Analysis of the federal budget and the deficit financing bill (Budget Research Office, Research and Studies Department). *Council of Representatives of Iraq*. https://iq.parliament.iq/en/

Iraq, R. o. (2020). White paper for economic reform. . *Ministry of Finance, Emergency Cell for Financial Reform*. https://iraqieconomists.net/en/wp-content/uploads/sites/3/2020/10/Iraq-White-Paper-Complete-En.pdf

Mohaddes, K., & Raissi, M. (2019). The US oil supply revolution and the global economy. *Empirical Economics*, *57*(5), 1515-1546. https://doi.org/10.1007/s00181-018-1505-9

Obstfeld, M., Ostry, J. D., & Qureshi, M. S. (2019). A Tie That Binds: Revisiting the Trilemma in Emerging Market Economies. *The Review of Economics and Statistics*, *101*(2), 279-293. https://doi.org/10.1162/rest_a_00740

Reis, R. (2022). Debt Revenue and the Sustainability of Public Debt. *Journal of Economic Perspectives*, *36*(4), 103-124. https://doi.org/10.1257/jep.36.4.103

Romelli, D. (2022). The political economy of reforms in Central Bank design: evidence from a new dataset. *Economic Policy*, *37*(112), 641-688. https://doi.org/10.1093/epolic/eiac011

van der Ploeg, F. (2019). Macro policy responses to natural resource windfalls and the crash in commodity prices. *Journal of International Money and Finance*, *96*, 263-282. https://doi.org/10.1016/j.jimonfin.2017.07.004

Yared, P. (2019). Rising Government Debt: Causes and Solutions for a Decades-Old Trend. *Journal of Economic Perspectives*, *33*(2), 115-140. https://doi.org/10.1257/jep.33.2.115