

ECONOMIC
RESEARCH
FORUM



منتدى
البحوث
الاقتصادية

2018

working paper series

FISCAL OUTCOMES IN BAHRAIN: OIL PRICE
VOLATILITY, FISCAL INSTITUTIONS OR POLITICS?

Hoda El Enbaby and Hoda Selim

Working Paper No. 1234

FISCAL OUTCOMES IN BAHRAIN: OIL PRICE VOLATILITY, FISCAL INSTITUTIONS OR POLITICS?

Hoda El Enbaby¹ and Hoda Selim²

Working Paper No. 1234

October 2018

The authors are grateful to Justin Gengler, Ibrahim Elbadawi, Anders Jensen, Tarek Masoud and Jeffrey Nugent and the participants of the APSA-MENA workshop for comments on an earlier draft and to Marc Valeri for discussions on Bahrain's internal politics.

Send correspondence to:

Hoda El Enbaby

International Food Policy Research Institute

h_enbaby@aucegypt.edu

¹ Research Associate, International Food Policy Research Institute (IFPRI), h_enbaby@aucegypt.edu

² Research Fellow, Economic Research Forum, hodaeselim@gmail.com. This paper was written before the author was employed by the International Monetary Fund. This paper is unrelated to the author's IMF employment and is being undertaken in her personal capacity. Any views expressed are made in my personal capacity and do not necessarily reflect the views or policies of the IMF, its Executive Board, or IMF management.

First published in 2018 by
The Economic Research Forum (ERF)
21 Al-Sad Al-Aaly Street
Dokki, Giza
Egypt
www.erf.org.eg

Copyright © The Economic Research Forum, 2018

All rights reserved. No part of this publication may be reproduced in any form or by any electronic or mechanical means, including information storage and retrieval systems, without permission in writing from the publisher.

The findings, interpretations and conclusions expressed in this publication are entirely those of the author(s) and should not be attributed to the Economic Research Forum, members of its Board of Trustees, or its donors.

Abstract

The paper argues that political economy factors, rather than oil wealth, shape the budgetary process and outcomes in Bahrain. Fiscal volatility and excessive current spending (in the form of wages, social welfare and subsidies) leading to unsustainable non-oil deficits are not fully derived from oil price volatility. Weak institutions including those underlying the budgetary process contributed to some fiscal laxity. They have allowed rulers to use current spending as a channel for the redistribution of oil rents and to secure political stability and allegiance to the regime in a turbulent socio-political environment. The budgetary process is undermined by the structure of the bicameral parliament and the absence of restrictions on the parliament to amend the budget weaken the position of the executive. In the general context of limited transparency and accountability, the government may also be exercising its discretionary powers over the budget execution but it would not be known.

Keywords: Fiscal policy, fiscal institutions, fiscal sustainability, public spending efficiency, budget fiscal rules, oil curse, Bahrain, oil exporters, MENA

JEL Classifications: E02, E62, H50, H60, H61, O53

ملخص

تبين هذه الورقة أن العوامل المتعلقة بالاقتصاد السياسي ، وليس بالثروة النفطية ، هي التي تشكل مسار الميزانية ونتائجها في البحرين. إن تقلبات المالية العامة والإنفاق الحالي المفرط (في شكل أجور ورعاية اجتماعية وإعانات) ويؤدي إلى عجز غير مستدام في غير نفط، لا يرجع بالكامل إلى تقلب أسعار النفط. حيث ساهمت المؤسسات الضعيفة، بما في ذلك المؤسسات التي تقوم عليها عملية الموازنة، في بعض التراخي المالي. فقد سمحت للحكام باستخدام الإنفاق الحالي كرافد لإعادة توزيع عائدات النفط ولضمان الاستقرار السياسي والولاء للنظام في بيئة اجتماعية وسياسية مضطربة. كما يتم تقويض عملية الميزانية من خلال بنية البرلمان المكون من مجلسين ، وغياب القيود على البرلمان لتعديل الميزانية مما يضعف موقف السلطة التنفيذية. في السياق العام للشفافية والمساءلة المحدودة ، قد تمارس الحكومة ضلًا سلطتها التقديرية على تنفيذ الموازنة ولكن الأمر يظل طي الكتمان.

1. Introduction

Bahrain was the first GCC economy to discover oil in 1931. Around half of oil resources were depleted between 1935 and 1965 (Askari, 2013). Today, it is a small and mature oil producer, with expected resource horizons estimated at 15 years to depletion. It is also highly dependent on hydrocarbons which accounted on average for 71 percent of total revenues, around 50 percent of exports between 1990 and 2016, and one-fifth of GDP between 1998 and 2016. Large oil dependence has been associated with fiscal volatility and excessive non-oil deficits close to 20 percent of GDP.

Research has argued that institutional structures that govern the budget process can influence incentives and choices of politicians and can thus affect fiscal policy outcomes. Hierarchical and/or countercyclical institutions can contribute to lower deficits, debt and countercyclical policies (Alesina et al. 1996 and Dabla-Norris et al., 2010). In commodity exporters, fiscal rules could contribute to smoothing commodity fiscal revenue and expenditure volatility, reducing pro-cyclicality and thus more fiscal discipline (Schmidt-Hebbel, 2016). Political arrangements with clear separation among governing powers, limited corruption, strong law enforcement and accountability could also contribute to lower budget deficits (Persson et al., 2000 and Acemoglu et al., 2003). In Arab commodity exporters, weak institutions including fiscal ones were found to be the main cause for poor oil management (El Anshassy et al., this volume and Selim and Zaki, 2016).

Without strong fiscal institutions, oil price volatility may lead to dire implications for fiscal policy especially with Bahrain's fixed exchange rate regime. First, growing deficits since 2009 will continue to limit the space for countercyclical fiscal policy and therefore the effectiveness of fiscal policy in output stabilization. As a result, excessive fiscal volatility may contribute to overall output volatility. Second, on a more operational level, the volatility and uncertainty of oil prices may make it difficult to plan, budget and execute spending and therefore reduce the effective implementation of fiscal policy (Sharma and Strauss, 2013). Third, low oil prices and short resource horizons raise the question of long-term public spending sustainability and pursuing diversification. Finally, the heavy reliance on the Abu Saafa jointly-owned field with Saudi Arabia, the source of 80 percent of production, pose pressing challenges for fiscal sustainability (OAPEC, 2010). A product sharing agreement negotiated in 1966 gives Saudi Arabia's Aramco control over all operations and in return Bahrain would not incur any production costs and would receive 50 percent of the revenues (Askari, 2013).³ This arrangement reflects the desire of Saudi Arabia's rulers to support Bahraini rules in diluting the political influence of their Shia majority (estimated at 53-62 percent of the population by Gengler (2015)), which if empowered, could empower the Saudi Shia population in the Eastern Province (Askari, 2013). In a context of low oil prices, any restricted access to oil revenues from this field would put public finances in Bahrain in a critical state.

³ When oil prices were low in 1996 and the following years, Saudi Arabia granted Bahrain the revenue of the full production of the field (Gengler, 2015).

This paper describes and assesses budgetary processes and institutions and underlying political economy factors in Bahrain. The analysis shows that fiscal volatility and excessive non-hydrocarbon deficits is not fully derived from oil price volatility. The paper argues that political economy factors, rather than oil wealth, shape the budgetary process and fiscal policy outcomes in Bahrain. The paper argues that political economy factors, rather than oil wealth, shape the budgetary process and outcomes in Bahrain. Fiscal volatility and excessive current spending (in the form of wages, social welfare and subsidies) leading to unsustainable non-oil deficits are not fully derived from oil price volatility. Weak institutions including those underlying the budgetary process contributed to some fiscal laxity. They have allowed rulers to use current spending as a channel for the redistribution of oil rents and to secure political stability and allegiance to the regime in a turbulent socio-political environment. The budgetary process is undermined by the structure of the bicameral parliament and the absence of restrictions on the parliament to amend the budget weaken the position of the executive. In the general context of limited transparency and accountability, the government may also be exercising its discretionary powers over the budget execution but it would not be known. The analysis suggests that for Bahrain to achieve sustained growth and prosperity, it must adopt meaningful institutional reforms to promote budget accountability and transparency.

The structure of the paper is as follows: section I presents stylized facts about Bahrain's macroeconomic and fiscal volatility since the 1990s. Section II describes and assesses the discipline of the budgetary process. It constructs a budgetary index based on information from legal documents. Section III discusses the political economy of the budget process. The last section concludes.

2. Stylized Facts in Bahrain: Oil, Macroeconomic Volatility and Fiscal Outcomes

With hydrocarbon rents accounting for around 7 percent GDP between 1980 and 2016, Bahrain is the only GCC country that is not among the top 30 global oil producers (Figure 1). Oil production does not lead to self-sufficiency and oil imports account for almost half of total imports. Natural gas wealth supplied by the onshore Awali field is limited and faces the prospects of depletion.

Hydrocarbon revenues have financed Bahrain's diversification strategy since the 1970s and have resulted in a large non-oil economy (Figure 2). Nevertheless, Bahrain's fiscal policy has suffered from excessive non-oil deficits and volatility. Bahrain has posted a deficit in 18 out of 28 years between 1990 and 2017. A budget deficit persists since 2009 and has deteriorated from 3 percent in 2009-2014 to 12 percent of GDP in 2015-2017 with lower oil prices (Figure 3). The non-oil deficits are much higher, averaging around 20 percent of GDP and peaking to 27 percent of GDP in 2015 (Table 1).

Fiscal aggregates have also been volatile though not all components are equally affected by oil price volatility (Figure 4). Oil revenues doubled from 11 percent of GDP in 1998 - when oil prices hit a low of US\$13 a barrel, to 23 percent of GDP in 2008, when they climbed to close to US\$100 a barrel, but declined again to below 13 percent of GDP in 2015, as oil prices dropped by

half. Non-hydrocarbon revenues are negatively correlated with oil price shocks, but they only account for a quarter of total revenues (Figures 4 and 5). Similarly, the fiscal balance worsened in busts (to -6.5 percent of GDP in 1998 and -13 percent of GDP in 2015) and improved in booms (to more than 6 percent of GDP in 2008) (Figure 4).

Meanwhile, spending has also been volatile though to a lesser extent than other revenues or fiscal balances. Moreover, spending volatility does not seem to be fully derived from oil price volatility. Figure 4 shows that overall spending during the oil boom of 2008 was lower than the oil busts in 1998 and 2015. Figure 6 confirms that real spending shocks are negatively correlated with oil prices shocks. However, the different spending components do not have the same response to oil price shocks (figure 7). Current spending in the form of wages for a large public-sector workforce, generous subsidies and welfare benefits, accounting for 80 percent of total spending is negatively correlated with oil prices. The negative correlation between the cyclical components of real current spending and oil price (around 57 percent) suggests that other factors than the oil price cycle shape discretionary current expenditure. The correlation between the oil price cycle and public investment (accounting for only one-fifth of total spending) is also negative but much weaker (Figure 7).

Figure 8 confirms that spending is slightly countercyclical during the whole period (correlation between cyclical components of spending and GDP is negative at 21 percent).⁵ This outcome is derived from countercyclical capital spending during 1990-2004, suggesting that capital spending increased with the economic slowdown (figure 9). Meanwhile, current spending has been acyclical between 1990-2004 but countercyclical afterwards suggesting that the government reduced spending as the economy grew. This has been the result of large increases in wages, transfers and subsidies that took place since 2011, a period of social unrest and falling oil prices (figure 10).

To sum-up, despite a large non-oil economy, fiscal policy in Bahrain suffers from excessive non-oil deficits and fiscal volatility. Current spending has significantly increased since 2011, a period of social unrest and falling oil prices, suggesting that spending volatility is not fully driven by oil price volatility. Is it the result of weak budgetary institutions?

3. The Budget Formulation Process in Bahrain

The budget process has 3 phases: (i) the preparation of the budget proposal within the executive, (ii) the approval by the legislature, and (iii) the implementation by the executive. Ex-post parliamentary control of budget execution and independent external audit of fiscal accounts take place after the close of the Financial Year (FY). Key actors in Bahrain's budgetary process are the ministry of finance (MoF) which guides line ministries in budget preparation and execution; the Parliament which approves the budget law and the King who promulgates the budget law. A Financial Audit Bureau (FAB) audits the final fiscal accounts.

⁵ According to Abdi et al. (2010), fiscal policy is defined as: (i) procyclical if and only if government spending increases (decreases) in good (bad) times, (ii) countercyclical if and only if government spending decreases (increases) in good (bad) times, and (iii) acyclical if and only if government spending remains constant across time.

This section describes the annual budget formulation process in Bahrain based on information derived from the legal framework (box 1) and the Ministry of Finance's website.

3.1 Budget preparation

Bahrain's budget is prepared for two years with the FY running from January 1st to December 31st (articles 4 and 23 of SBL). The responsibility of budget preparation lies with the MoF, under the authority of the Council of Ministers (CoM) (article 109 of Constitution and articles 5, 21-22 of the SBL). Decision-making power lies with the finance minister (FM) who oversees line ministries and other public agencies.

Budget preparation time is relatively short, starting only a bit more than 3 months before the start of the new FY. It starts with a memorandum sent by the FM to the CoM describing the broad objectives of economic and fiscal policies as well as estimates for the main budget aggregates for the FY (Figure 11). The memorandum helps the CoM set at least 3 months prior to the start of the FY: (i) fiscal policy goals, the macroeconomic framework underlying budget estimates as well as potential fiscal risks, (ii) aggregate expenditure levels based on forecasted revenues, (iii) the criteria for expenditure allocations among the different ministries and government agencies, in light of strategic development priorities aligned with defined in the National Economic Strategy (NES) (article 9 of the SBL). The FM then issues a budget circular to line ministries setting policy goals, spending policy priority areas, and expenditure ceilings.

Each line ministry prepares two budgets (for current and capital expenditures), and is required to follow FM "instructions" and respect approved ceilings (articles 14 and 18 of the SBL). The FM examines revenue and spending estimates with each line ministry (article 21 of SBL). Oil revenue forecasts are carried out in consultation with BAPCO, the national oil company. Estimates on public wages spending for each ministry must be coordinated with the Civil Service Bureau (CSB) subject to employment needs. The CSB must obtain MoF approval on changes to civil service employment in ministries, if they entail increases in public spending. Any delay in submitting the budget would result in the MoF preparing those estimates (article 14 of the SBL).

Finally, the FM compiles the budget from the line ministries. He prepares a detailed budget for the first FY and an aggregate budget for the following year. The FM submits the draft budget together with a report with two-year fiscal and macroeconomic projections to the CoM (article 36 of SBL). Since the 2011-2012 budget formulation, the CoM submits the budget to Bahrain's Economic Development Board (EDB) before presenting it to the cabinet for approval.⁶

3.2 Parliamentary Approval

The parliamentary budget process starts with the submission of the draft budget by the executive to parliament on November 1st (article 109 of the Constitution and article 24 of the SBL) and ends with issuance of the budget law. Budget negotiations should last no more than 60 days for the budget to be adopted before the beginning of the FY.

⁶ The EDB was established in 2000, under the chairmanship of the Crown Prince, with the aim of pursuing the King's economic reform plans through attracting investments. It is also responsible for implementing Bahrain 2030 vision in order to ensure that spending priorities are aligned with NES.

Bahrain's legislative body (Al-Majlis al-Watani) is a bicameral national assembly. A lower house, the Council of Representatives (CR) (Majlis al-Nuwab), with 40 members *elected* by universal suffrage and the Consultative Council (CC) (Majlis al-Shura), an upper house with 40 members *appointed* by the King. All laws (including the budget law) should be issued by the National Assembly and ratified by the King (articles 70 and 109 of the Constitution).

After the FM presentation of the budget proposal to Parliament, the draft budget undergoes 3 phases. First, the Financial and Economic Affairs Committees (FEACs) in both houses have 6 to 8 weeks to examine it. In each council, this is an eight-member specialized budget committee formed at the beginning of each legislative round. Each committee independently examines the draft budget and then they both convene upon an invitation by the president of the CR in a joint session with the government (articles 167 and 138 in the IPR). Both houses have the right to accept, amend or reject the budget proposal (article 109 in the Constitution and articles 167 and 137 of the IPR). The committees submit separate reports to their relevant chambers. The FEAC of the CR must do so in a period of 6 weeks, otherwise the draft budget as submitted by the government is referred to the CC (article 167 of IPR). The FEAC of the CC may be granted two additional weeks to prepare a complementary report following discussions in the CR, otherwise the draft budget is discussed as submitted by CR (article 138 of IPR). Second, voting on the budget proposal should start around early to mid-December after an agreement has been reached between the Parliament and the government. The voting takes place first in the CR then in the CC. The final stage involves the submission of the budget by the president of Parliament to the CoM within a maximum period of two weeks, which in turn submits it to the King for ratification (article 86 of Constitution). The budget is then issued by royal decree.

The parliament cannot close its session (which should typically end in April/May given that it starts in October) before approving the budget law (article 72 of Constitution). In practice, however, there are significant delays during the legislative stage, with a new budget only getting approved 7 months after the beginning of the FY.

If there are delays in parliamentary approval beyond the legal deadline (December 31st), a provisional budget is adopted such that one-twelfth of the budget of the previous FY is spent for each month (articles 109 of Constitution and 27 of SBL). The law does not put a time limit for the adoption of the provisional budget.

3.3 Budget Execution

The MoF has the responsibility of budget execution. The FM informs line ministries and government agencies of the approved budget and issues decrees, decisions and instructions related to its execution (articles 28-32) (Figure 12). Line ministries and government agencies are required not to exceed their approved spending allocations (article 33 of SBL). They are required to submit quarterly execution reports to the MoF (article 47 of SBL). The FM also prepares similar reports to the CoM (article 51 of SBL).

3.4 External Audit

Within 3 months of the end of the FY, the FM must prepare the annual consolidated fiscal accounts, based on input from line ministries and government agencies, together with a budget execution report (articles 48-50 of SBL). They are both submitted to the CoM. Some ministers and government heads also present a separate budget execution report with a copy sent to the FM.

The CoM refers the final accounts for parliamentary approval within 5 months of the closure date of fiscal accounts (article 49 in SBL). The accounts are first sent to the CR for approval and then referred (together with comments) by the president of the CR to the CC (IPR articles 173 and 144 in CC and CR). The approval is published in the official gazette before the end of the following FY.

Article 116 of the Constitution states that FAB: (i) assists the government and the CR in supervising revenue collection and spending limits and presents an annual report to both of them, (ii) reviews the final fiscal accounts of the previous FY. Yet, FAB is accountable to the King and not Parliament.

To sum-up, the full cycle of the budget process lasts around 28 months starting in September (prior to the start of the FY) from preparation to execution and Parliament approval of the final fiscal accounts. Preparation lasts around two months (September and October). If the state budget is to be adopted on time, parliament has two months for budget analysis and discussion, which is less than the three months recommended by the OECD. Execution lasts a year and is followed by the preparation of consolidated accounts which lasts for 5 months (May). External audit and approval by parliament should occur before the end of the following FY (December).

4. Assessment of Budgetary Institutions in Bahrain

The literature suggests that *hierarchical institutions* help overcome the common pool problem and are thus conducive to fiscal discipline (von Hagen, 1992 and Stein et al., 1999). This problem arises because individual policymakers involved in the budget process compete for limited public spending resources. Each policymaker will ask for spending programs that benefit his relevant constituency and thus takes into account only that share of the social marginal costs of higher taxes or borrowing that is borne by their constituents (Weingast, Shepsle, and Johnsen, 1981). This process often results in excessive spending, deficits and debt levels. According to Alesina and Perrotti (1999), hierarchical institutions include:

- *A top-down approach* to budget preparation;
- *Constraints on parliament's amendment powers* of the budget proposed by the executive;
- *Discipline and transparency* in budget execution.

A top-down approach to budget preparation provides the Prime Minister (PM) or the finance minister (FM) with *strategic dominance* over line ministries allowing him to overrule decisions during budget negotiations (von Hagen, 1992 and Alesina and Perotti, 1999). In practice, the FM, who would consider the fiscal implications for the collective, would have prerogatives to set

expenditure ceilings and other fiscal rules and line ministries can allocate resources within the assigned ceilings (Kim and Park, 2006). The presence of fiscal rules can reduce budgetary discretion and control the fiscal balance.

While parliament's active involvement in budget formulation promotes accountability and the legitimacy of budget decisions, restrictions on parliament's budget amendment powers can lead to better fiscal outcomes (Alesina et al., 1999). Such restrictions can counteract the common pool problem. In serving their constituencies, rather than the national interest, elected representatives may vote for budgets with higher deficits. Other institutional mechanisms can determine parliament interference in the budget proposed by the government. The position of the executive is stronger when the government faces one opposing chamber instead of two. This is the case when budgetary authority of the upper house is limited and when the lower house can overrule decisions if an agreement between the two chambers cannot be reached. Alternatively, bicameral legislatures with equal budgetary authority in both houses tend to weaken the position of the executive because it faces two opponent bodies (Posner and Park, 2007). A cabinet that can combine a vote of confidence with a vote on the budget can pass its own version of the budget. However, a president with broad constitutional powers over certain policy issues may use his veto power to pursue his own agenda, which may be less conducive to fiscal discipline.

Discipline in budget execution helps ensure that spending is aligned with allocations approved by the legislation. Budget amendments should be submitted to the legislature, and not be too frequent. Transfer between budget lines should require the approval of the FM (or even the parliament) and subject to quantitative limitations to limit abuse and to not discourage effective expenditure planning (Lienert 2010). In order to ensure some flexibility to adapt to unforeseen circumstances, the executive could be granted the authority to spend from an unallocated contingency reserve to cover unexpected revenue shortfalls or spending increases, without over-running the aggregate spending targets for departments. Such reserves need to be subject to conditions, including on the size of the reserve, the nature of spending, the access to reserve by line ministries and the reporting to parliament (Lienert, 2010).

Guided by the above considerations, the literature has proposed indices to assess budgetary discipline. The first index was suggested by Alesina et al. (1996) and included 10 different components of the budgetary process in Latin American countries. Other studies include Dabla-Norris et al. (2010) for low-income countries, Fabrizio and Mody (2006) and Gleich (2003) for Central and Eastern European countries.

This section constructs an index to assess the discipline of budgetary procedures in Bahrain. To compute the index, we follow Gleich (2003) because the coverage of the index is quite comprehensive. Methodology is presented in annex I.

Table 2 reports the weights used to aggregate the variables into the overall index and the 3 sub-indices and the scores assigned to Bahrain. Overall, Bahrain has a score of 5.4 out of 12.

Bahrain has a score of 2.75 out of 4 in budget preparation. The score reflects a dominant role for the FM in budget preparation under the authority of the CoM. Budget preparation is undermined by the absence of fiscal rules. The legislation is not explicit about dispute resolution mechanisms during bilateral negotiations (variable 4), except in one case. The FM takes the final decision in case of conflict between the CSB and the line ministry. He can also make final decisions about fiscal estimates submitted by line ministries and therefore Bahrain gets a maximum score of 4.

The parliamentary stage is the weakest link in Bahrain's budgetary process. This reflects the bicameral national assembly with *de jure* equal budgetary powers for both chambers since constitutional amendments introduced in 2012.⁷ Both houses can now originate legislation and have the right to approve draft laws in identical versions. Each house has the right to accept, amend or reject any changes introduced by the other as well as has the right to refer the law version that was approved by the other back to them for reconsideration (article 81 of the Constitution). This means that CC can only consider the version of the draft budget law that includes the amendments approved by the CR (article 139 of IPR of CC). If the two chambers fail to agree more than twice on the draft law, they convene in a joint sitting chaired by the president of the CR (articles 82-85 of Constitution). The draft law may then be passed by simple majority of the present members. If it is rejected, it cannot be presented to the Parliament during the same session. If the latter fails to reach a decision, the law is issued with a royal decree (article 87 of the Constitution).

Institutional rules provide Bahrain's parliament with the right to amend the draft budget, provided the government agrees to such amendments and this agreement is included in the FEAC's reports (article 109 in the Constitution article 25 of the SBL, articles 170 of the IPR of CR and 141 in IPR for CC). The absence of constraints on parliament amendment powers has often enabled it to force through its own version of the budget with approved higher social spending (such as inflation allowances and pension payments) without any revenue-enhancing measures. This often resulted in higher deficits as well as significant delays (5-7 months into the FY) in obtaining the legislative approval (Figure 13).

Any minister can raise a motion during his interpellation by the CR (articles 65 and 66 of the constitution). However, any delay in obtaining legislative approval bears no consequences either in terms of adopting the draft budget or in parliament dissolution.⁸

The King not only has broad executive powers (shared with the PM) but also legislative prerogatives (article 32 of Constitution).⁹ While parliament can originate legislation, enactment

⁷ Prior to this, the CC exercised a *veto power* over the legislative process.

⁸ Variable 8 summarizes 3 institutional mechanisms that reflect the relative power of the government vis-a-vis the parliament. For each arrangement strengthening the power of the government we assign 4 points if it exists, and zero points otherwise. The value for the government strength variable is then calculated as the *un-weighted* average of the scores assigned.

⁹ If a president is independent from the other constitutional bodies, i.e. if elected directly by the citizens, and has constitutional powers over certain policy issues, then he may use his veto power to pursue a more particularistic policy agenda, which may be less conducive to fiscal discipline.

into law requires ratification by the King. The King can refuse to promulgate any law (including the budget law) and then return it together with his/her objections to the parliament, within six months of receiving an act approved by parliament, may return it to the legislature for reconsideration, in which event it will pass into law only if approved by a two-thirds majority of both houses (article 35 of Constitution). The King also has the right to issue legislation (by decree) when parliament is in recess. These decrees can only be approved or rejected by parliament but not amended.

4.1 Discipline in Budget Execution

Bahrain budget execution is subject to some discipline. There is limited flexibility in changing the budget during execution. Any excess spending that was neither budgeted for nor approved in the initial budget should be approved by the FM (following presentation of “necessary justification” from the relevant line ministry/government agency), presented to the CoM and backed by law (articles 32 and 33 of SBL). Any unforeseen budgetary amendment could be suggested by the FM to the CoM and referred to parliament for approval in a supplementary budget (article 34 of SBL). Additional capital spending allocations not only require the FM approval upon presentation of justifiable causes but also the presence of savings from another allocation so that the total cost of the project is not increased (articles 41-42 of SBL).

However, the FM has the discretion to draw upon the budget contingency reserve (budgeted for an amount of 3 percent of recurrent spending to fulfill any *pressing commitment* during budget execution (article 32 of SBL). He is not required to report on contingency fund spending. Meanwhile, article 12 of SBL allows for the creation of “government reserves” financed from the treasury consolidated account.¹⁰ The FM can also directly withdraw from the account to finance unforeseen and emergency expenditure for which no provision has been made in the budget and which cannot be postponed – due to public interest concerns- to the subsequent year (article 11 of SBL). The law requires that: (i) the FM obtains the CoM approval, (ii) the amount withdrawn does not exceed 5 percent of the total budget for the current FY, (iii) the FM reports to the CoM *within one month* after the expenditure was incurred, (iv) *emergency spending must be backed by (retroactive) legislation*, whether it is in the next annual budget law, as an amendment to the existing law or as an independent legislation within three months from the spending date, whichever comes first.

Line ministries and government agencies can move savings from expenditure across budget lines items within the same budget chapter or to other chapters, subject to FM approval (articles 32 and 46 of SBL). Line ministries and other spending agencies cannot carry-over unused funds to next FY though the FM has the right to do so “*if there is public interest*”, and he must inform the CoM ((article 39 of SBL). There is no quantitative limit for the carry-over. No mechanisms are in place to counter the deterioration of public finances and therefore, a score of zero is assigned.

¹⁰ The consolidated account hosts all funds collected by line ministries and government agencies (with the exception of funds that are exempted by Law, or funds held in trust or custody) (article 10 of SBL).

In practice, the executed budget show that oil revenue forecasts were consistently underestimated relative to actual prices by 30 to 40 percent (EDB, 2013c) and in some years (like 2008 and 2010) by close to 100 percent. Using such prudent assumptions could reflect the government's wish to control spending and/or mindfulness about abrupt fiscal adjustment in the event of an unanticipated decline in oil revenues. However, consistent underestimation of oil prices may indicate discretionary outside the budget, which contributes to inefficient spending. The executive often underspent approved allocations by near 10 percent between 2003 and 2017 (Figure 14). Underspending related mostly to capital spending, which amounts to only 78 percent of budgeted spending.

To sum-up, Bahrain's has a below-average score in the index, suggesting that policymakers do not subject themselves to fiscal prudence. Bahrain's top-down approach to budget preparation and budget execution rules are broadly consistent with budgetary discipline. The parliamentary approval stage is the weakest link in the budgetary process. The structure of the bicameral parliament and the absence of restrictions on the parliament to amend the budget weaken the position of the executive and contributed to some fiscal laxity.

To better understand the dynamics and outcomes of budget negotiations, a discussion of political economy aspects is needed.

5. A Political Economy Interpretation of Fiscal Outcomes

This section argues that fiscal policy through current spending on public employment and a welfare system for nationals is politically motivated. It has been used as a tool to appease citizens and maintain regime stability and has been recently a reflection of internal power dynamics.

Bahrain has a history of social unrest shown by the first popular strikes in the history of the GCC in 1938 when workers demanded better standards of livings (Fakhro, 1997). The rulers' response to such demands combined a partial repression with a cautious response resulting sometimes in some gains in political rights such as elected parliament, lifting the state of emergency, freedom to form associations and labor unions, introduction of civil and criminal laws and economic privileges and better working conditions for workers (Valeri, 2012).

Data since the 1990s confirm the rise of public spending after periods of violence in 1994 and 2011 (Figure 15). During the 1994 uprising when prominent citizens and religious leaders presented a petition (signed by 23,000 citizens from both Sunni and Shia groups) to the King, citing both economic and political concerns, the rulers responded with arrests and repression (Fakhro, 1997). Following these incidents, the government increased wages from 48 percent of total spending in 1994 to 54 percent in 1995 and 1996. In 2011, tens of thousands of Bahraini youth (including the Shia) protested for weeks with calls to remove the PM and turn the Kingdom into an effective constitutional monarchy. In reaction, the ruler repressed the revolts and accepted support from a military intervention by Saudi Arabia. Parliament afterwards approved a supplementary budget spending with higher social spending on public wages, cash hand-outs to households and a cost of living subsidy. As a

result, subsidies and transfers increased to more than 9 percent of GDP from 5 percent of GDP during the 1990s and most of the 2000s. Some political concessions were granted such as the constitutional amendments of 2012.

The internal power politics provide another compelling explanation of fiscal outcomes. The accession of the new King “Hamad” in 1999 have been accompanied with the same pattern of fiscal expansion and political concessions. The King attempted to tilt the balance of power to his favor and away from his powerful uncle, and PM, Sheikh Khalifa bin Salman. The latter has been appointed since Bahrain’s independence in 1971 and was the *de facto* ruler, during the reign of the previous King. He had also surrounded himself with loyal supporters from the royal family, tribal allies and powerful private sector friends among the merchant families, in return for selective favoritism and discretionary patronage (Peterson, 2009 and Wright, 2006 and 2008).

To increase his popularity, the new King adopted generous public gestures - both political and economic - towards the opposition and citizens. He launched a national dialogue with the opposition, increased political representation in the CC and abolished key components of the state’s repressive machinery (Wright, 2008). The King’s National Charter paved the way for a new constitution in 2002 that turned Bahrain into a constitutional monarchy and reinstated the national assembly. The King also granted several economic gestures such as the provision of free electricity for around 10,000 impoverished families, cutting education fees at the University of Bahrain by 80 percent, reducing import tariffs on vehicles, and offering financial assistance for single parent families and orphans (Wright, 2006). As a result, transfers and subsidies increased from 12 to 18 percent of total spending (Figure 15).

The King often interfered in the budgetary process to end deadlocks in executive-legislative budget negotiations and often sided with parliamentary suggestions to increase social spending beyond the level proposed by a government. These negotiations opposed the FM who *de facto* was an ally to the reformist group under the leadership of the Crown prince with the parliament which was dominated by loyalists to the PM.¹¹ Budget negotiations deadlocks have provided the King with an opportunity to increase discretionary spending and increase his popularity and secure allegiance from the Parliament. In a context where the King has broad executive powers and where, the parliament, especially the appointed CC, tends to be controlled by a majority of regime loyalists making, it very unlikely that it will pass legislation that runs contrary to the King’s wishes.

For instance, after six months of unsuccessful negotiations on the 2009-2010 budget proposal, the King gave direct instructions to increase the budget with an additional BD100 million for an inflation allowance proposed by the CR. After 7 months of negotiations, the King also endorsed

¹¹ Under the leadership of the Crown Prince, the EDB acted like a shadow cabinet between 2006 and 2011 (Wright, 2008 and Valeri, 2013). The Crown Prince selected ministers and private sector representatives, to be members of the EDB board. In 2008, he issued a law (which bypassed the PM’s office) that increased the number of ministers who reported directly to the EDB from six to sixteen, of which the FM is a member (Valeri, 2013).

the Parliament version of 2013-2014 that included expenditure-increasing amendments (BD210 million for low-income families, pension payments and higher subsidies.

6. Conclusion

The paper argues that political economy factors, rather than oil wealth, shape the budgetary process and outcomes in Bahrain. Fiscal volatility and excessive current spending (in the form of wages, social welfare and subsidies) leading to unsustainable non-oil deficits are not fully derived from oil price volatility. Weak institutions including those underlying the budgetary process contributed to some fiscal laxity. They have allowed rulers to use current spending as a channel for the redistribution of oil rents and to secure political stability and allegiance to the regime in a turbulent socio-political environment.

The budgetary process is undermined by the structure of the bicameral parliament and the absence of restrictions on the parliament to amend the budget weaken the position of the executive. Bahrain's top-down approach to budget preparation and budget execution rules are broadly consistent with budgetary discipline. Notwithstanding, in the general context of limited transparency and accountability, the government may be exercising its discretionary powers over public finances' execution but it would not be known.

The analysis suggests that for Bahrain to instill fiscal discipline and protect its resource wealth, it must reform its fiscal institutions. The following reforms would constrain discretionary spending and contribute to a better resource management and therefore put public finances on a sustainable track to fiscal sustainability and more effective resource management.

First, transparency is crucial to promotes accountability and establish credibility of fiscal policy as it enables the public to understand fiscal plans and gives them the ability to compare the actual performance of the government against its plans. Transparency can also improve efficiency, prevent fraud and corruption. Despite being among the few Arab countries where there are legal requirements for the regular disclosure of fiscal data (article 52 of the SBL), there is significant room for improvement. For example, neither the National Oil and Gas Authority nor BAPCO publishes financial statements. The 2008 audit report also found that US\$615 million in oil revenue—or around 12 percent of total revenues—was unaccounted for. The expenditures of the ministries of interior and defense are exempt from FAB scrutiny. Domestic resistance to accountability and transparency reforms including more effective oversight institutional mechanisms, including an independent anti-corruption commission and budget transparency, have been resisted by the government and its allies (Lawson, 2010). Several global initiatives are available to enhance these efforts, such as the Open Budget Initiative, the Extractive Industries Transparency Initiative (EITI), which aims to strengthen governance by improving transparency and accountability in the extractives sector.

Second, mobilizing non-oil fiscal revenues is important for spending sustainability and for the establishment of a fiscal contract between the citizens and their rulers through taxation (Devarajan. this volume). As citizens pay higher taxes, they demand better service, which

requires more effective public expenditures. Bahrain's sovereign wealth funds "Mumtalakat" need to better invest savings and generate wealth for future generations.

Third, the adoption of a simple fiscal rule and a medium-term fiscal framework could guide multi-year budget decisions and contribute to fiscal discipline. A target for the non-resource fiscal balance (as a share of non-oil GDP) should keep spending at sustainable levels as oil revenues decline (Daniel et al., 2013). In addition, a structural budget balance rule which is based on an estimate of the long-term oil price could contribute to smoothing revenues and intergenerational equity (Schmidt-Hebbel, 2016). The creation of an independent fiscal council could serve both as advisory and accountability especially if deviations from the rule occur (Schmidt-Hebbel, 2016).

References

- Acemoglu, D., Johnson, D., Robinson, J., & Thaicharoen, Y. (2003). Institutional causes, macroeconomic symptoms: volatility, crises and growth. *Journal of Monetary Economics*, 50(1):49-123.
- Alesina, A., Hausmann, R., Hommes, R., & Stein, E. (1996). Budget Institutions and Fiscal Performance in Latin America. *Journal of Development Economics*, 59(2): 253–273.
- _____, & Perotti, R. (1999). Budget Deficits and Budget Institutions. In J. Poterba & J. von Hagen (Eds.), *Fiscal Institutions and Fiscal Performance*. Chicago: University of Chicago Press and NBER.
- Alesina, A., Baqir, R., & Easterly, W. (1999). Public Goods and Ethnic Divisions. *The Quarterly Journal of Economics*, 114(4) 1243–1284, <https://doi.org/10.1162/003355399556269>.
- Askari, H. (2013). *Collaborative Colonialism: The Political Economy of Oil in the Persian Gulf*. New York: Palgrave Macmillan.
- Central Bank of Bahrain. (2016). *Economic Report*. Manama.
- Central Bank of Oman. (2018). *Annual Report 2017*. Muscat.
- Central Bank of The U.A.E. (2017). *Annual Report*. Abu Dhabi.
- Central Statistical Bureau of Kuwait. (2018). Revised and Provisional Estimates – National Accounts at Current Prices. Retrieved from https://www.csb.gov.kw/Pages/Statistics_en?ID=55&ParentCatID=3.
- Dabla-Norris, E., Allen, R., Zanna, L.-F., Prakash, T., Kvintradze, E., Lledo, V., Yackovlev, I., & Gollwitzer, S. (2010). Budget Institutions and Fiscal Performance in Low-Income Countries. *IMF Working Paper*, WP/10/80.
- Daniel, P., Gupta, S., Mattina, T., & Segura-Ubiergo, A. (2013). Extracting Resource Revenue. *Finance and Development*, 50(3).
- Devarajan, this volume.
- Economic Development Board. (2013a). *Kingdom of Bahrain Economic Yearbook*. Manama.
- _____. (2013b). *Bahrain Economic Quarterly, February 2013*. Manama.
- _____. (2013c). *Bahrain Economic Quarterly, September 2013*. Manama.
- El Anshassy et al., this volume.
- Fabrizio, S., Mody, A. (2006). Can Budget Institutions Counteract Political Indiscipline?. *Economic Policy*, 21(48): 689-739.
- Fakhro, M. (1997) The uprising in Bahrain: an assessment. In: G. Sick & L. Potter (Eds.) *The Persian Gulf at the Millennium: Essays in Politics, Economy, Security and Religion*. London: Routledge. pp. 167–88.

- Gengler, J. (2015). *Group Conflict and Political Mobilization in Bahrain and the Arab Gulf: Rethinking the Rentier State*. Bloomington IN: Indiana University Press.
- Gleich, H. (2003). Budget Institutions and Fiscal Performance in Central and Eastern European Countries. *European Central Bank Working Paper*, 215.
- IMF. (2018). World Economic Outlook: August 2018, Washington, DC: International Monetary Fund.
- Kim, J., Park, C.K. (2006). Top-down Budgeting as a Tool for Central Resource Management. *OECD Journal On Budgeting*, 6(1): 87-125.
- Lawson, F. (2010). *Countries at the Crossroads: Bahrain*. Freedom House.
- Lienert, I. (2010). Role of the Legislature in Budget Processes. *IMF Technical Notes and Manuals*. Washington D.C.
- Ministry of Finance of the Kingdom of Bahrain. Government Financial Statistics, various years. Manama. Kingdom of Bahrain. Available on: <http://www.mof.gov.bh/>
- Ministry of Finance of the People's Democratic Republic of Algeria. (2018). *Rapport de Présentation du Projet de la Loi de Finances pour 2018 et Prévisions 2019-2020*. Algiers.
- Organization of Arab Petroleum Exporting Countries (OAPEC). (2010). *Paper on Bahrain*. 9th Annual Conference.
- Perotti, R. (1999). Fiscal Policy in Good Times and Bad. *Quarterly Journal of Economics*, 114, 1399–1436.
- Persson, T., Roland, G., & Tabellini, G. (2000). Comparative Politics and Public Finance. *Journal of Political Economy* 108 (6):1121–1161.
- Peterson, J. E. (2009). Bahrain: Reform, Promise, and Reality. In J. Teitelbaum (Eds.), *Political Liberalization in the Persian Gulf* (pp. 157–85). New York: Columbia University Press.
- Posner, P., & Park, C.K. (2007). Role of the Legislature in the Budget Process: Recent Trends and Innovations. *OECD Journal on Budgeting* 7(3):1-26.
- Qatar Central Bank. (2017). *The Forty First Annual Report*. Doha.
- Saudi Arabian Monetary Authority. (2018). *Annual Statistics 2017*. Retrieved from: <http://www.sama.gov.sa/en-US/EconomicReports/Pages/YearlyStatistics.aspx>.
- Schmidt-Hebbel, K. (2016). Fiscal Institutions in Resource-Rich Economies: Lessons from Chile and Norway. In I. Elbadawi, & H. Selim (Eds.), *Understanding and Avoiding the Oil Curse in Resource-rich Arab Economies*. New York: Cambridge University Press.
- Selim, H. & Zaki, C. (2016). The Institutional Curse of Natural Resources in the Arab World. In I. Elbadawi, and H. Selim (Eds.), *Understanding and Avoiding the Oil Curse in Resource-rich Arab Economies*. New York: Cambridge University Press.
- Sharma, N. & Strauss, T. (2013). Special Fiscal institutions for Resource-rich Developing Economies: The state of the Debate and Implications for Policy and Practice. *Overseas Development Institute Research Report*. London.

- Stein, E., Talvi, E., & Grisanti, A. (1999). Institutional Arrangements and Fiscal Performance: The Latin American Experience. In J. M. Poterba, & J. von Hagen (Eds.), *Fiscal Institutions and Fiscal Performance*. Chicago: University of Chicago Press.
- Von Hagen, J. (1992). Budgeting procedures and fiscal performance in the European Communities. *Commission of the European Communities*, 96.
- Weingast, B. R., Shepsle, K. A., & Johnsen, C. (1981). The Political Economy of Benefits and Costs: A Neoclassical Approach to Distributive Politics. *Journal of Political Economy*, 89 (4): 642–64.
- Wright, S. M. (2006). Generational Change and Elite Driven Reform in the Kingdom of Bahrain. *Durham Middle East Papers*, 81 (7).
- Wright, S. M. (2008). Fixing the Kingdom: Political Evolution and Socio-Economic Challenges in Bahrain. *Center for International and Regional Studies*, Occasional Paper No. 3.

Table 1. Public Finances in Bahrain (percent of GDP), averages 1990-2017

Total Revenues	25.7
Hydrocarbon revenues	18.1
Non-hydrocarbon revenues o.w.	6.7
Tax revenues	3.0
Total spending	27.3
Current spending o.w.	22.0
Wages and Salaries	12.5
Subsidies and Social Benefits	5.31
Capital Spending	5.3
Fiscal balance	-1.7
Non-Hydrocarbon balance	-19.79

Source: Authors' calculation based on Ministry of Finance

Table 2. Budgetary Discipline Index in Bahrain

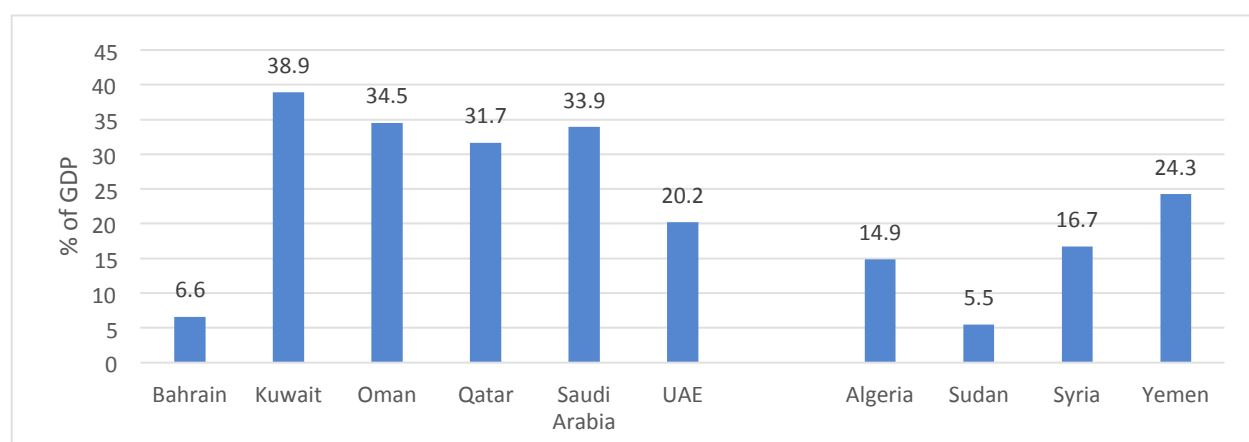
	Weighting Factors		Numerical coding	Bahrain's Score
	Index	Sub-index		
A. Preparation	0.33			2.75
1. Existence of statutorily mandated fiscal rules		0.25		0
a. Balanced budget rule			4	
b. Limits on public borrowing			2	
c. No legal limits on borrowing			0	0
2. Sequence of budgetary decision-making		0.25		3
a. MF sets forth aggregate and specific budget targets in initial budget circular			4	
b. MF proposes, cabinet decides on targets for budget aggregates and spending limits are assigned to each ministry before spending ministries develop budget requests			3	
c. MF proposes, cabinet decides on targets for budget aggregates before spending ministries develop budget requests			2	
d. Budgetary targets are set on the basis of preliminary budget requests			1	
e. No budget targets are determined			0	
3. Compilation of the draft budget		0.25		4
a. Finance ministry holds bilateral negotiations with each spending ministry			4	
b. Finance ministry only collects budget requests and compiles summary for cabinet session			0	
4. Members of executive responsible for reconciling conflicts over budget bids		0.25		4
a. MF or PM can veto or overrule cabinet decision			4	
b. Senior cabinet committee, then whole council of ministers or cabinet			2	
c. Executive collectively (e.g. council of ministers or cabinet)			0	
B. Legislation	0.33			0.27
5. Relative power of the upper house vis-à-vis the lower house		0.2		0
a. No budgetary power vested in upper house or unicameral parliament			4	
b. Lower house has prerogatives			2	
c. Both houses have equal rights (e.g. joint sittings)			0	
6. Constraints on the legislature to amend the government's draft budget		0.2		0
a. Deficit provided in the draft budget cannot be exceeded, or individual amendments have to indicate offsetting changes			4	

b. No restrictions		0	
7. Sequence of votes	0.2		0
a. Initial vote on total budget revenues, expenditures, and the deficit		4	
b. Final vote on budget aggregates		0	
8. Relative power of the executive vis-à-vis the parliament	0.2		1.3
a. Cabinet can combine a vote of confidence with a vote on the budget		4	4
b. Draft budget is executed if parliament fails to adopt the budget before the start of the fiscal year		4	0
c. Parliament can be dissolved if it fails to adopt the budget in due time		4	0
9. Authority of the national president in the budget procedure	0.2		0
a. No special authority		4	
b. President has veto right (president elected by parliament)		2.67	
c. President has veto right (president directly elected by citizens)		1.33	
d. President has veto right (qualified majority required to override veto)		0	
C. Implementation	0.33		2.3
10. Flexibility to change budget aggregates during execution	0.25		4
a. Any increase in total revenues, expenditures and the deficit needs to be approved by the parliament in a supplementary budget		4	
b. Revenue windfalls can be used to increase expenditure without the approval of the parliament as long as the deficit is not increased		2.67	
c. Simultaneous changes in revenues and expenditures allowed without approval of parliament if budget balance is not changed		1.33	
d. At discretion of government		0	
11. Transfers of expenditures between chapters (i.e. ministries' budgets)	0.25		2.67
a. Require approval of parliament		4	
b. FM or cabinet can authorize transfers between chapters		2.67	2.67
c. Limited		1.33	
d. Unrestricted		0	
12. Carry-over of unused funds to next fiscal year	0.25		2.67
a. Not permitted		4	

b. Only if provided for in initial budget or with finance ministry approval	2.67	2.67
c. Limited	1.33	
d. Unlimited	0	
13. Procedure to react to a deterioration of the budget deficit (due to unforeseen revenue shortfalls or expenditure increases)	0.25	0
a. MF can block expenditures	4	
b. The cabinet can block expenditures	2.67	
c. Approval of the parliament necessary to block expenditures	1.33	
d. No action is taken	0	
TOTAL INDEX		5.4

Source: Gleich (2003) and authors' calculations

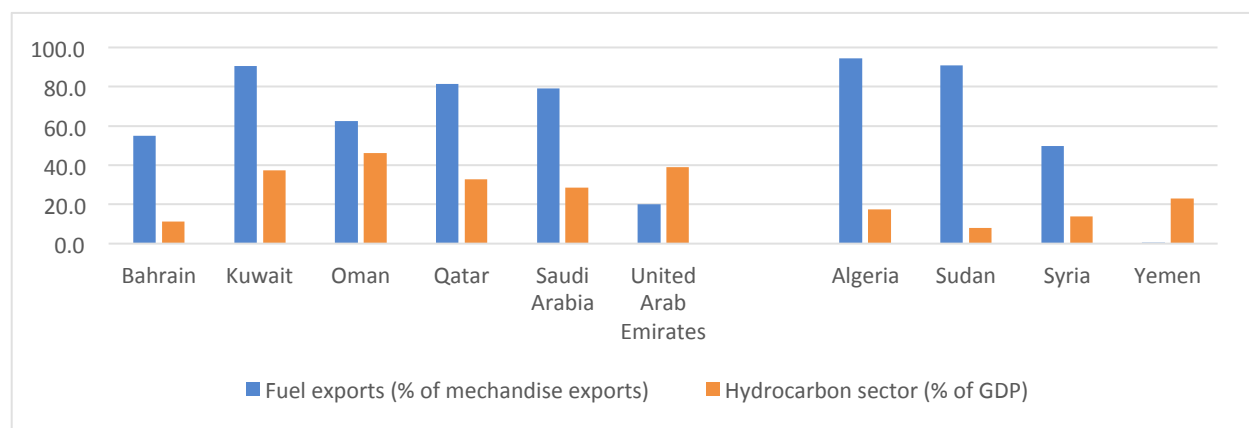
Figure 1. Natural Resource Rents, Percent of GDP, Average 1980-2016



Source: Authors' calculations based on World Development Indicators, 2018

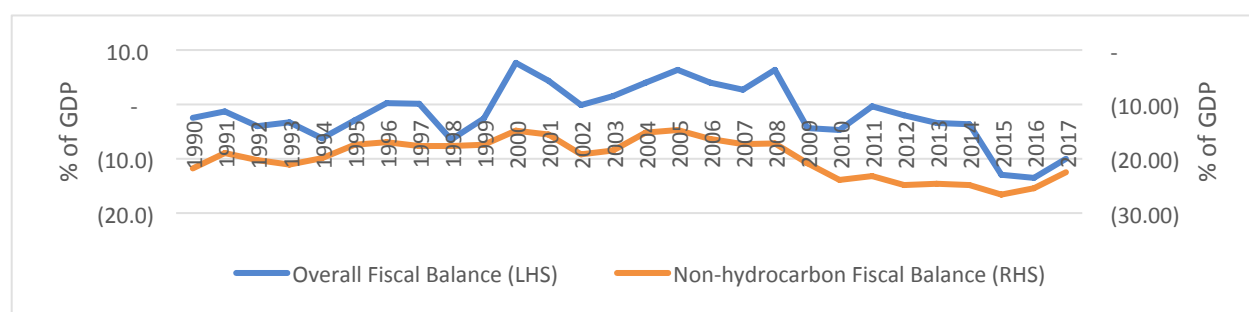
Note: Syria's figures are until 2007 only, and Yemen's data starts in 1990.

Figure 2. Structure of Value-Added and Exports, Most Recent Year Available



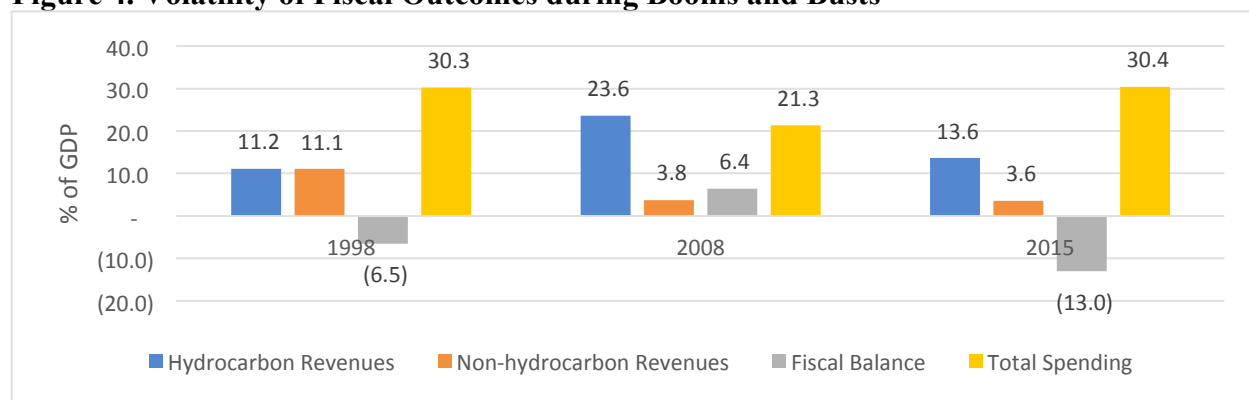
Source: The share of the hydrocarbons sector to GDP was calculated by the authors based on the following data: Bahrain (for 2016): Central Bank of Bahrain; Kuwait (for 2017): Central Statistical Bureau; Oman (for 2017): Central Bank of Oman; Qatar (for 2017): Qatar Central Bank; Saudi Arabia (for 2017): Saudi Arabian Monetary Authority; UAE (for 2017): Central Bank of the UAE; Algeria (for 2016): Ministry of Finance. Remaining Figures are calculated by authors from WDI.

Figure 3. Overall and Non-Hydrocarbon Fiscal Balances, 1990-2017



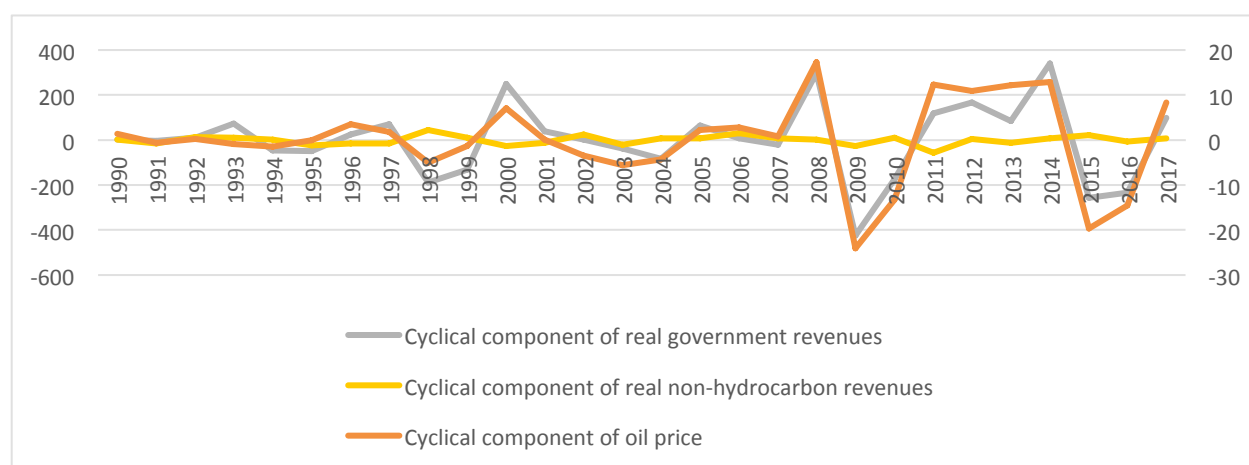
Source: Authors' calculations based on Ministry of Finance

Figure 4. Volatility of Fiscal Outcomes during Booms and Busts



Source: Author's calculations based on Ministry of Finance

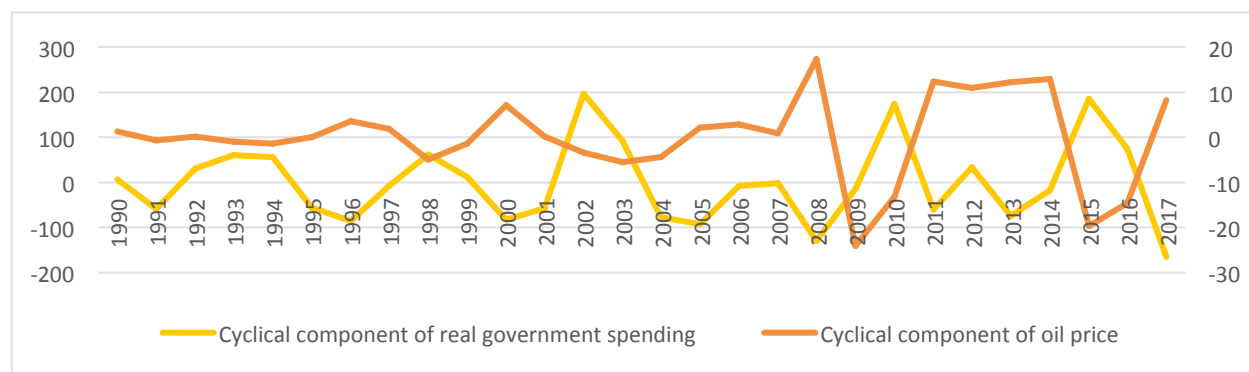
Figure 5. Cyclical Components of Oil Price and Real Government Revenues



Note: Cyclical components are calculated using the Hodrick-Prescott filter command on STATA, on the real variables (2001 prices) obtained by the GDP deflator.

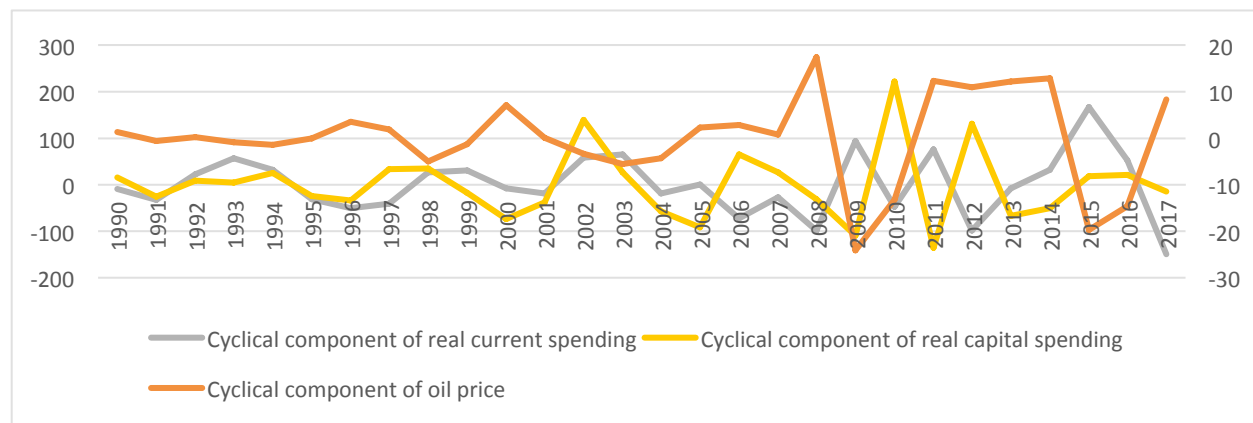
Source: Authors' calculation based on Ministry of Finance and Energy Information Administration (2014)

Figure 6. Oil Price and Real Government Spending



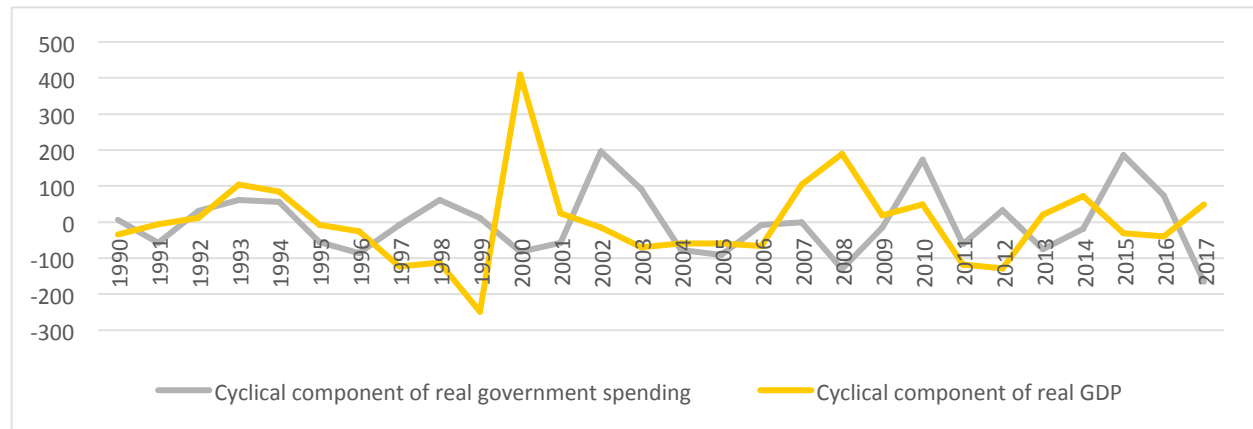
Source: Author's calculations based on Ministry of Finance and Energy Information Administration (2014)

Figure 7. Oil Price and Real Current and Capital Spending



Source: Author's calculations based on Ministry of Finance and Energy Information Administration (2014)

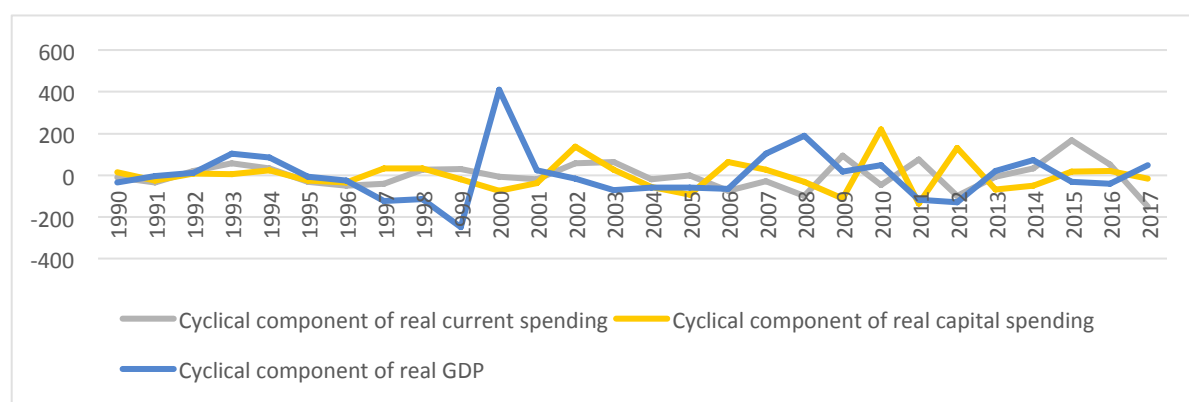
Figure 8. Cyclical components of Real GDP and Real Government Expenditure



Note: Cyclical components are calculated using the Hodrick-Prescott filter command on STATA, on the real variables of the time-series (based on the 2001 prices).

Source: Author's calculations based on Ministry of Finance and Central Informatics Organization

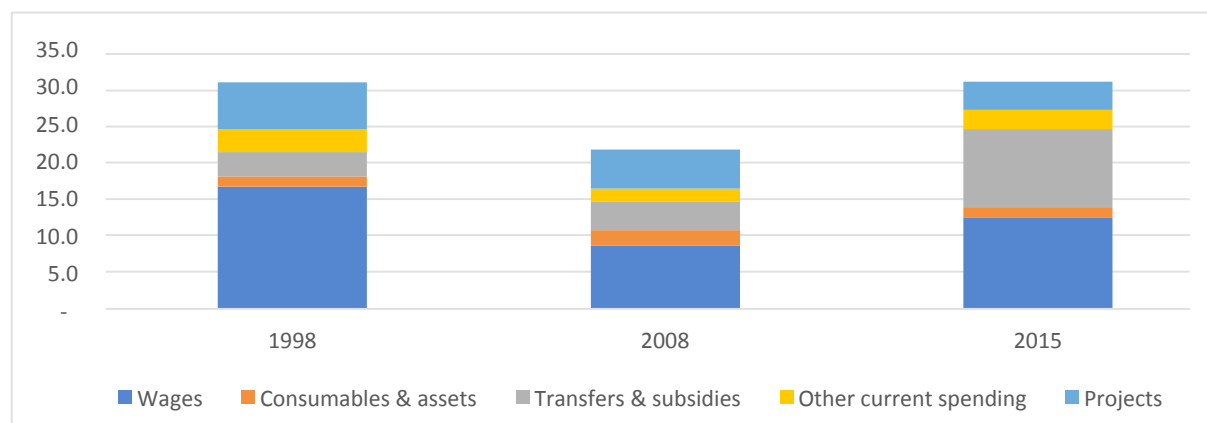
Figure 9. Cyclical components of Real GDP and Real Current and Capital Expenditures



Note: Cyclical components are calculated using the Hodrick-Prescott filter command on STATA, on the real variables of the time-series (based on the 2001 prices).

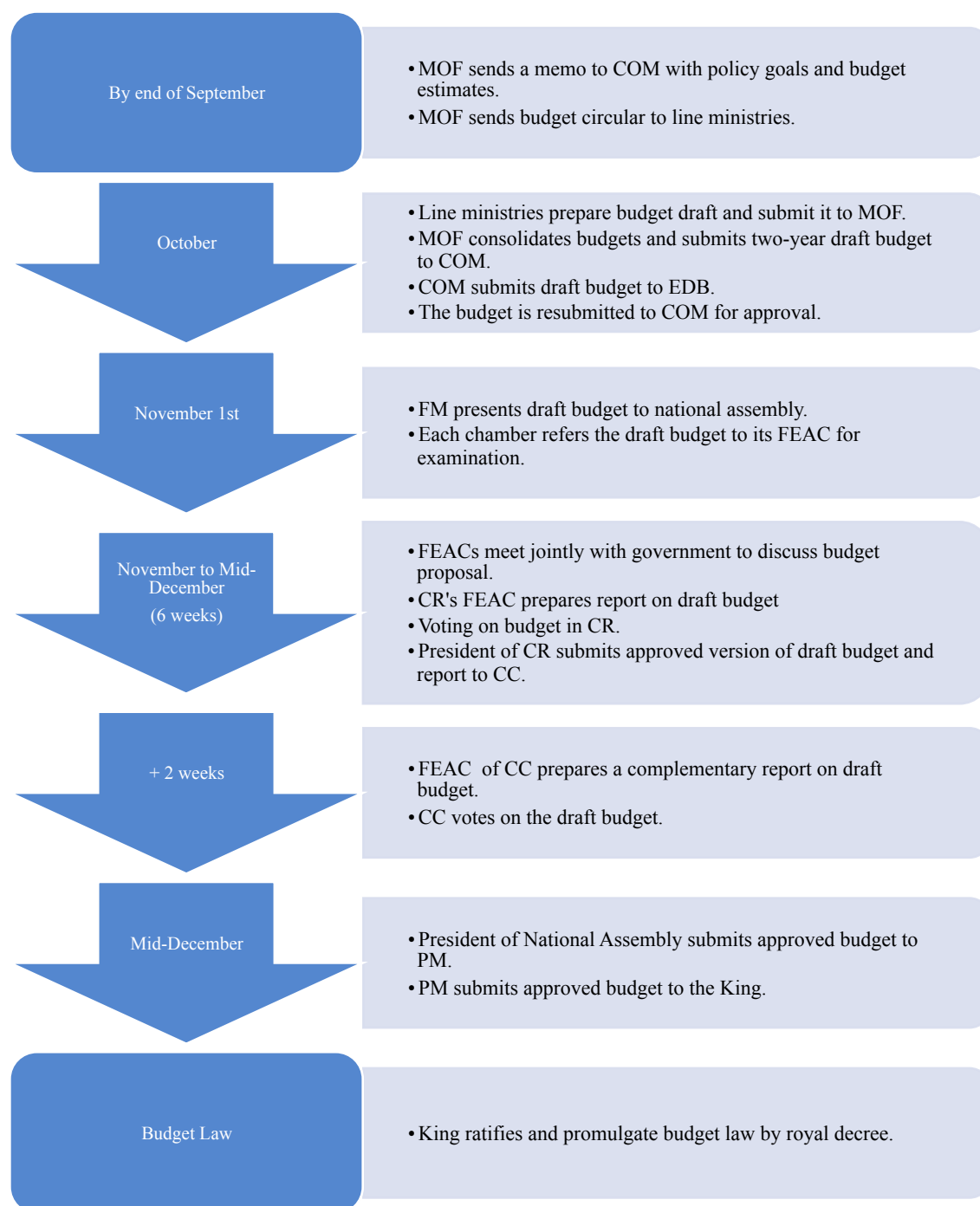
Source: Author's calculations based on Ministry of Finance and Central Informatics Organization

Figure 10. Composition of Public Spending, percent of GDP



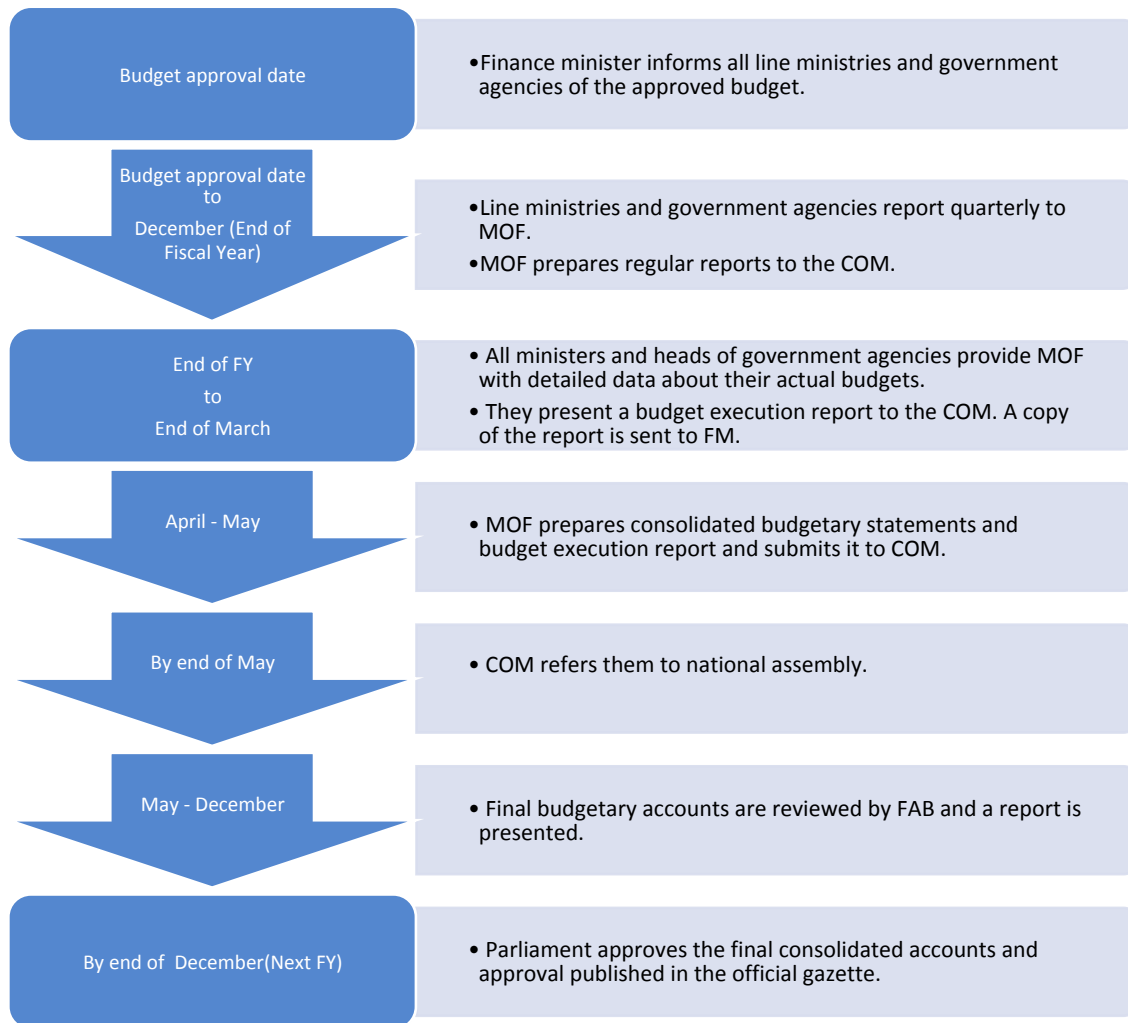
Source: Author's calculations based on Ministry of Finance

Figure 11. Procedures for budget preparation and approval



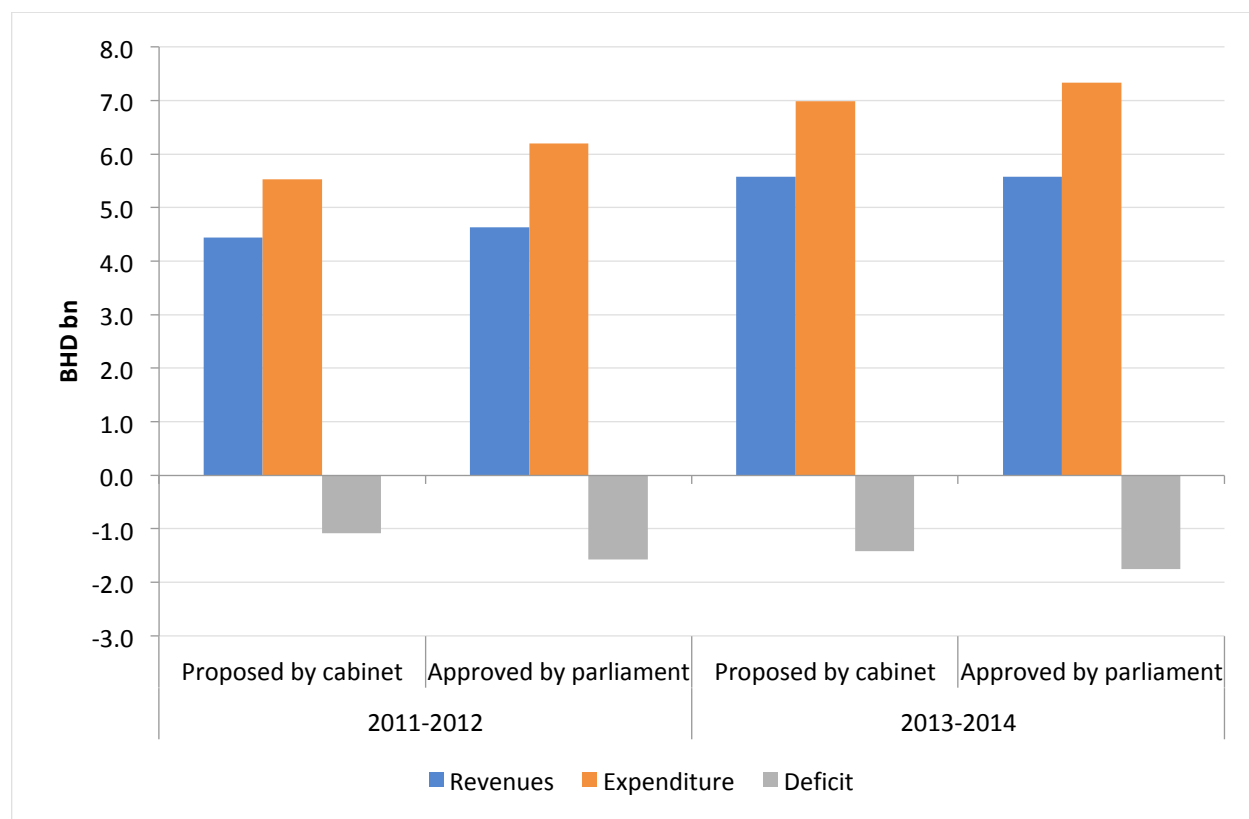
Source: Constructed by the authors

Figure 12. Budget Execution and Audit



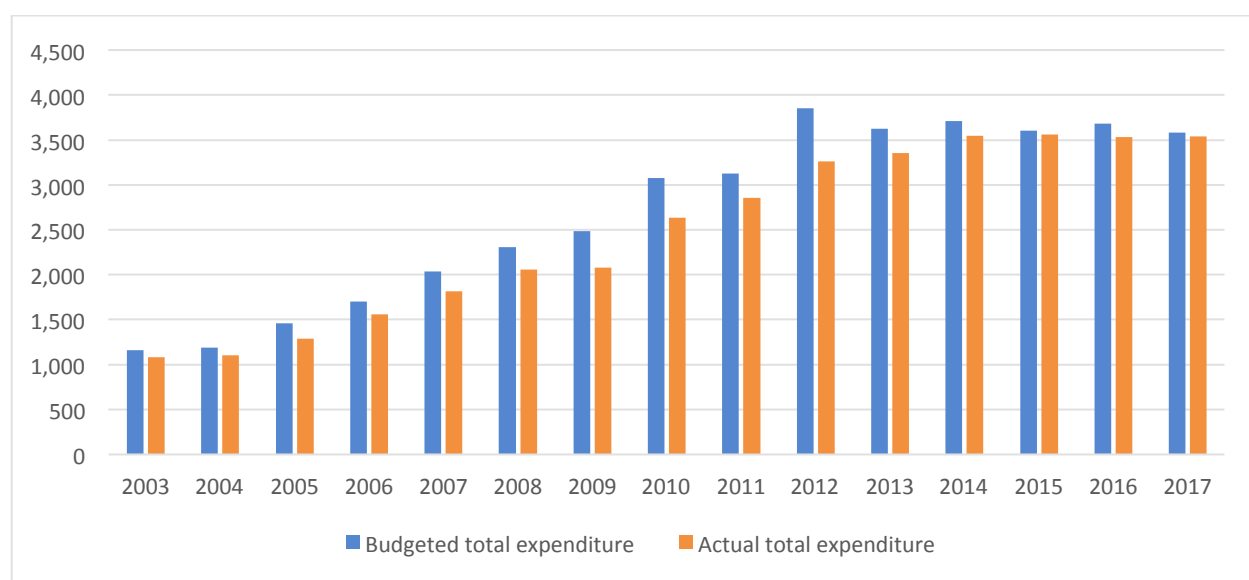
Source: Constructed by the authors

Figure 13. Initial Budget Aggregates Proposed by Government versus Approved Budget Aggregates



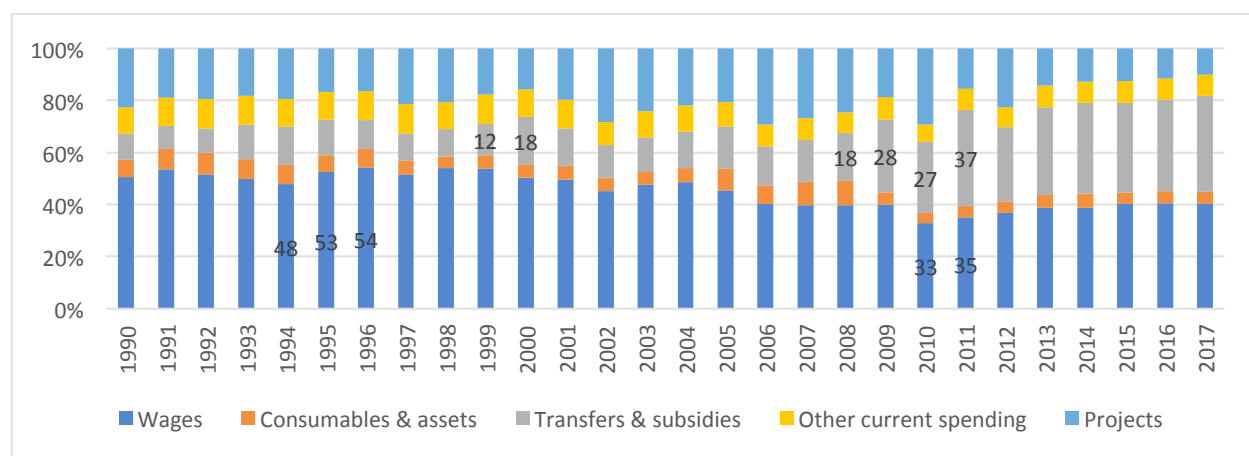
Source: Constructed by the authors based on Ministry of Finance and EDB reports

Figure 14. Budgeted versus Actual Expenditure in Bahrain



Source: Ministry of Finance

Figure 15. Domestic Political Events and Fiscal Spending



Source: Authors' calculations based on Ministry of Finance Data

Annex

Methodology

The index is constructed based on information derived from legal documents. Four sub-indices are developed for Bahrain, one for each of the three stages of the budget process and an overall index for the budget process as a whole. For each of the stages, indices labeled PREPA (for preparation), LEGIS (for legislature approval) and IMPL (for execution) is constructed, each computed as the simple mean of the variables used to characterize the particular stage in the budget process:

$$PREPA = \frac{1}{4} \sum_{i=1}^4 v_i \quad 1$$

$$Legisl = \frac{1}{5} \sum_{i=5}^9 v_i \quad 2$$

$$IMPL = \frac{1}{4} \sum_{i=5}^{13} v_i \quad 3$$

where the v_i s are the values of the different institutional variables.

The overall index is then derived as the sum of the scores of the three sub-indexes:

$$INDEX = PREPA + LEGIS + IMPL \quad 4$$

Each sub-index has a potential range from 0 to 4, and the overall index has a potential range from 0 to 12. Higher index scores indicate that the budget process is more conducive to providing fiscal discipline.