Breaking the Mold? Ministerial Rotations, Legislative Production and Political Strategies in Lebanon

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Abstract. This paper investigates the effect of ministerial rotations on legislative output. We leverage a novel dataset on "significant" legislation in Lebanon, defined as those texts that introduce changes in the legislative environment and are potentially relevant for legal appeals. We associate legislative output of nine key ministries in all governments between 2005 and 2020 to 72 ministerial changes in this period. We find that rotation decreases output of significant legislation by almost a fourth of average productivity – or more than 0.75 texts – per ministry and term, a result that is robust to various model specifications and fixed effects. Leveraging 35 expert interviews with senior government officials and (ex-)ministers, we provide a theory in which rotations give rise to "memory losses" within ministries depending on the strategies of political parties to penetrate institutions with loyalists. Our findings have important implications for priorities to reform public administrations.

Keywords. Ministerial rotations, legislative productivity, reform, weak bureaucracies, Lebanon

1. Introduction

The rotation of ministerial portfolios among political parties is subject to fierce contestation in the formation of any coalition government, both in developed and developing countries. Recent scholarship on coalition governments shows that in polities with institutions that impose strong checks and balances on ministers, the affiliation of ministers changes little in terms of the output a minister produces within a given coalition (Martin and Vanberg, 2020). In polities in which institutions leave ministers with a greater discretion over policy choices, however, changes in the party affiliation of ministers can have a significant effect on political outcomes (Dragu and Laver, 2019). That way, the rotation of ministries can become a particularly salient source of political contestation in countries with weak bureaucracies and institutional checks on ministerial work. Weak checks on ministerial work can facilitate entrenched interests as ministers can abuse their formal position of power for clientelism and thereby affect ministerial productivity over the unwillingness to change the status quo (Stokes *et al.*, 2013).

Lebanon is a frequently cited example where the allocation of ministerial portfolios is highly contested. The formation of a government often takes many months as elites and their political parties seek to preserve entrenched interests from controlling government institutions. These contests significantly impact political outcomes. Legislative production is much lower than in peer-countries[1] while sluggish legislative responses are commonly identified as a core reason for many of Lebanon's socio-economic challenges (Le Borgne, Jacobs and Barbour, 2015).

In an effort to facilitate reform and ministerial productivity, Lebanon's political elites have advocated for the rotation of ministries among political parties within a new government to address a deep economic crisis that started in 2019 (World Bank, 2021).[2] Advocates of rotation argue that rotations can "break the mold" of vested interests as, over time, many governmental institutions have become deeply entrenched with political elites. These institutions have become "bastions of privilege" to leaders of political parties (Leenders, 2012, p. 225), which abuse their power for political patronage by, for example, allotting employment to core supporters (Salloukh et al., 2015) or procurement contracts to connected firms (Atallah *et al.*, 2020; Atallah, Mahmalat and Maktabi, 2021). These long-standing allegiances are assumed to have reduced the incentives for politicians, parties, and bureaucrats to change the status quo since they risk losing clientelist connections and profits from such rent-seeking activities. Rotating portfolios among parties is therefore supposed foster a novel formation of interests within and across ministries more amenable to reform.

But can rotation facilitate reform? Classical theory on the political economy of reform follows this narrative and implies that rotations can enable reform that would not otherwise be possible by creating new connections among political actors (see Mahmalat and Curran, 2018, for a review). Research focusing on bureaucratic effectiveness, however, highlights that rotations cause the loss of valuable institutional knowledge necessary for enacting complex legislation (Sasse *et al.*, 2020). Existing literature has moreover largely focused on established democracies with strong bureaucracies, making their results not immediately transferable to developing countries with weak

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[1] The average number of laws passed per year from 1990 until 2009 in Lebanon was 80.2 compared to 186.3 for a set of European countries; see Mahmalat and Curran (2020).

[2] See, for example: https://www.middleeastmonitor.com/20201107-lebanon-government-formation-stalled-over-christian-ministerial-representation/

bureaucracies like Lebanon. Comprehensive and comparable data on ministerial output in developing countries is scarce, making quantitative empirical investigations in such contexts difficult.

This paper investigates the effects of rotations of ministries among parties at the beginning of a new governmental term on legislative production in an environment of weak bureaucracies. We leverage a novel dataset of "significant" legislation in Lebanon (Mahmalat, 2020a), defined as those texts that introduce changes in the legislative environment and are potentially relevant for legal appeals. We identify all significant legislations enacted by nine key ministries of all governments between 2005 and 2020, which includes 42 ministerial rotations. We find that rotations decrease the output of significant legislation by about 24% per ministry and term on average, or more than 0.75 texts, for the ministries under investigation. Moreover, incoming ministers have even less output than the average ministry after rotations when they take over a portfolio that has been held by another party for more than one term before. The results are robust when accounting for the individual effects of governments, ministries, and their budgets. However, the affiliation to political parties matters, pointing to differences in the way parties approach legislative production.

We conduct a series of expert interviews with senior government officials and (ex-)ministers to qualify both causation and the mechanisms by which rotations affect legislative activity. We find that institutions can experience "memory losses" following a rotation which are subject to the strategies of political parties. Bureaucrats "allied" with the outgoing party can withhold information, leave the institution, or otherwise obstruct the work of incoming ministers in order to prevent them from reaping the benefits of previous efforts. Incoming ministers face challenges to obtain full information about ongoing projects and to establish trust relationships with their staff, introducing agency-risks in the delegation of work and responsibilities. When allegiances of civil servants to elites of political parties trump those to administrative superiors, these memory losses depend on the extent to which outgoing political parties were willing and able to penetrate institutions with supporters over time.

We understand the weakness of a bureaucracy as the ease by which elites can undermine its effectiveness with clientelist measures, such as discretionary hiring. Such weakness makes a bureaucracy susceptible to the strategies of political parties and is thereby a necessary condition for our theory. There are two main factors, then, that determine the scope conditions of our argument. First, they apply in highly politicized bureaucracies in which bureaucrats' allegiance to party leaders trumps those to administrative superiors. Second, a polities' set-up of accountability institutions needs to allow for a significant discretion of politicians over the staffing of ministries. The arguments of this paper therefore apply to the context of countries in which political elites maintain strong informal means to influence and maintain dependencies of staff in bureaucracies. This is the case, for example, in many post-conflict polities, in particular consociational ones (Hartzell and Hoddie, 2020), in which elites leverage control over state institutions for clientelist services, such as in Iraq (World Bank, 2020).

These findings cannot speak in favor of parties maintaining control over ministries. Continuous control over a ministry can decrease its capacities as clientelist networks reduce the accountability of civil servants. To mitigate the effects of rotations on ministerial productivity, two policy priorities emerge that we briefly discuss in the conclusion. Policymakers should work on increasing, first, transparency by digitizing work processes and, second, accountability by protecting hiring processes and performance evaluations of civil servants from political influence.

Our findings add to existing literature in three important ways. First, to our knowledge we are the first to measure the effect of ministerial rotations on legislative production. Previous research has largely measured output in the form of reform indices which prevents detailed insights into the institutional mechanisms by which reform happens (see Babecký and Campos, 2011, and Mahmalat and Curran, 2018 for discussions on the shortcomings of this approach). Other empirical work relies on more indirect measures of productivity or performance, such as budgetary indicators (Huber, 1998) or aid programs (Cornell, 2014), while much of the remaining work is theoretical (Huber and Lupia, 2001; Indriðason and Kam, 2008). Second, existing literature examines the effect of ministerial rotations independently from political parties and discusses how new ministers change the performance of bureaucracies based on the incentive structures of prime ministers and bureaucrats (Huber and Shipan, 2002). Our analysis seeks an explanation for the variation in legislative output based on the strategies of political parties. Lastly, much of the literature on cabinet reshuffles and instability has focused on well-established parliamentary democracies. By focusing on Lebanon, a semi-presidential consociational democracy with a highly fractionalized party system, we add to recent evidence for the workings of political institutions in developing countries with weak bureaucracies (McDonnell, 2017). Our results qualify the role of the bureaucracy and show how weak bureaucratic structures—in terms of a significant dependency of bureaucrats and ministers to party elites—determine the extent to which rotations can undermine legislative productivity.

The paper proceeds as follows. Section 2 outlines our argument and its theoretical implications. Section 3 introduces our data, while section 4 outlines the empirical approach and results. Section 5 discusses mechanisms. Section 6 concludes.

2. Rotations, Allegiances, and Agency Risks

The hypothesis that a change in the leadership of governmental institutions facilitates reform is widely discussed in the literature on the political economy of reform (Williamson, 1994; Drazen, 2000; Tompson and Price, 2009). A government which just entered office is expected to face fewer constraints to initiate reform as it enjoys greater legitimacy than its predecessor (Haggard and Webb, 1994). Alesina et al. (2006), for example, find that reform successfully leading to macroeconomic stabilization is more likely in the immediate aftermath of elections.

This argument relates to the moment in which governments initiate reform processes. Reform, however, is a lengthy process that includes multiple political and administrative hurdles that introduce a time lag between the elaboration and implementation of reforms. Reforms become more difficult to implement the more complex the institutional and voting requirements become (Chaqués-Bonafont, Palau and Baumgartner, 2015) or the higher the degree of political fractionalization is, i.e. the number of political actors involved (Tsebelis, 2002; Mahmalat and Curran, 2020). Empirical evidence for the hypothesis is accordingly mixed. Høj et al. (2006), for example, find that structural reforms are introduced by more "mature" governments—governments that are more than two years old—presumably reflecting the time needed to overcome these political and administrative obstacles. Other authors find no relationship between the time in office of a government or party with the occurrence of reform (Pitlik and Wirth, 2003; Wiese, 2014; Waelti, 2015).

On a bureaucratic level, previous research points to a negative effect of ministerial rotations. Frequent ministerial changes are commonly thought to prevent ministers from developing expertise needed to lead a bureaucracy and therefore to become productive (Rose, 1987). Studies on cabinet reshuffles in the United Kingdom, for example,

find that frequent reshuffles have a negative effect on governmental effectiveness and undermine efforts for long-term reform (Political and Constitutional Reform Committee, 2013; Sasse *et al.*, 2020). These studies discuss the inefficiencies introduced into ministerial workflows with frequent changes in ministerial leadership. Cornell (2014) finds this effect to apply to bureaucrats as well whose performance declines due to short time horizons and lack of experience.

The underlying argument of these works posits that ministerial rotations undo the informational gains that longer ministerial tenures can bring. This argument, however, poses the question of why ministers would ever be changed. Scholars have therefore paid attention to the strategies of prime ministers to rotate or those of bureaucrats to position themselves vis-à-vis the incumbent minister. Indriðason and Kam (2008), for example, argue that prime ministers change ministers to limit agency losses that emanate from the delegation of power to ministers and bureaucrats. Their model implies that ministers could leverage such agency losses for policy drift and advancing special interests. Their argument highlights the importance of political contestation as bureaucrats, ministers, and leaders would inherently follow mixed motives and incentives, depending on the electoral successes of parties and the ambitions of bureaucrats.

The effects of rotations on productivity are therefore not only a technical matter. Political considerations of actors play an important role, in particular when polities leave ministers with greater freedoms of action, such as in the Lebanese case. As Martin and Vanberg (2020) show, the strength of legislative institutions in providing checks and balances on ministers determines the extent to which political parties can realize their policy preferences in coalition governments. In polities in which institutions leave ministers with a greater discretion over policy choices, incoming ministers can significantly change the policies and workings of an institution (see also Dragu and Laver, 2019).

The discretion of ministers, however, is not only determined by the strength of formal institutions but also informal arrangements between ministers and bureaucrats. Loftis (2015), for example, shows how politicians' informal influence over bureaucrats can facilitate corrupt behavior and determines the extent to which politicians delegate responsibilities. According to Loftis, the more dependent bureaucrats are on politicians, ministers can use delegation to obfuscate responsibility for corruption. Other studies highlight the importance of agency risks in the relationships between ministers and bureaucrats. Huber and Shipan (2002), for example, find that cabinet turnovers result in shorter laws which, in their argument, results from a higher degree of delegation from ministers to bureaucrats that introduces agency-risks. Huber (1998) applies this argument to the partisan affiliation of ministers, arguing that instability in the affiliation of a ministerial portfolio makes it difficult for a minister to obtain relevant information for policy development and implementation. Huber and Lupia (2001) introduce a model of political delegation in which bureaucrats adopt suboptimal policies as they get trapped into the "bureaucrats' dilemma," which is the fear that own efforts are being unrewarded or even punished when an incumbent minister is replaced unexpectedly.

We contend that the relationship between ministers and bureaucrats provides an important link for understanding how rotations can affect political outcomes in settings with weak bureaucracies. Bureaucracies generally rely on competent staff in order to generate output while more complex projects require a relative degree of independence from political interference when these projects overstretch the term of ministers in office (Sasse et al., 2020). But

when parties and their ministers maintain informal means to influence their bureaucrats, dependency between the two can increase with tenure in office. A minister with the support of party leaders can leverage discretionary hiring decisions or the threat of sanctions to increase the number of staff loyal to a particular political party. As in the Lebanese case, allocation of public employment is a common tool for parties to ensure popular support in politics with widespread clientelism (Stokes *et al.*, 2013).

We hypothesize that the use of employment in public institutions for clientelist gains introduces agency-risks once a new minister enters office. As the tenure of bureaucrats usually overstretches the tenure of ministers, their established dependencies are not transferred from the outgoing to the incoming party (at least not in the short term). A ministry's staff will maintain a part of its dependency to the old minister and her/his party even after a rotation. Outgoing parties will therefore have incentives to subside works or retract projects for which it cannot claim credit for (Indriðason and Kam, 2008). Incoming ministers, then, face agency risks in the delegation of work to bureaucrats as she/he cannot know to which extent her/his own policy preferences are being followed through by bureaucrats. Rotations of ministries among parties, in particular those ministries that have been held for long periods of time by one party, should thereby decrease ministerial productivity as incoming ministers need time to establish new connections and relationships with her/his bureaucrats to be able to work effectively.

3. Data, Case Selection, and Methods

We leverage a novel dataset on legislative activity introduced in Mahmalat (2020a). The dataset includes all legislative texts that are "significant", defined as those texts that introduce changes in the legislative environment and are potentially relevant for legal appeals. These texts were identified by legal experts (judges) among all primary and secondary legislation published in the Lebanese Official Gazette who deemed them to be of relevance for legal practice. Notably, this approach goes beyond focusing on high-level legislation (Howell *et al.*, 2000) but includes underlying ministerial works in the form of, for example, setting principles for tax exemptions, the establishment or resolution of committees, the setting or suspension of legal or judicial deadlines, amendments of tariffs, fees or customs, among many others. This approach singles out those legislative texts that require the mobilization of political will and resources and notably excludes less meaningful legislations, such as corrections of spelling mistakes, naturalizations of individuals, or appointments.[3] The dataset reflects the total count of significant legislation categorized into 32 different policy areas.

We focus on Lebanon as an example of a clientelist polity in which broad coalition governments are the norm. The country has a long history of consociational power-sharing arrangements, which produced a fractionalized party system in which parties tend to have a dedicated sectarian identity (Chaitani, 2007; Mahmalat, 2020b). During and after a protracted civil war (1975-1990), a set of political elites emerged that came to leverage the power-sharing arrangement by way of dividing control over state institutions (Makdisi, 2004; Leenders, 2012; Parreira, 2019). The power of these elites rests on the distribution of clientelist rents and services to constituents in many areas of public life, including health care (Cammett, 2014), the private sector (Baumann, 2017; Diwan and Haidar, 2020), and in particular the public sector (Salloukh, 2019). Citing nominal quotas for public service

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[3] This is not to imply that legislation that does not change a legislative environment could *not* sometimes require significant political bargain. Appointments of key posts in public administration, for example, are often a major obstacle to political collaboration. However, legislative texts that publish such decisions, by themselves, do not change the way institutions operate. Rather, the appointed officials will issue the texts that eventually change legislation.

positions among members of sectarian communities, party elites leverage a 'veil of sectarianism' to maintain informal means of influence and dependencies to bureaucrats in order to balance power and economic rents within the power-sharing arrangement (Le Borgne, Jacobs and Barbour, 2015). In such an environment, rotations are part of the elite bargain and reflect the allocation of power among them by changing the way resources are distributed.

Lebanon has a history of civil service in which many institutions are neither outright failures nor dedicated successes. Before the civil war, a set of institutions emerged that managed to serve – largely – a collective interest of society, rather than the interests of sectarian groups (Choueiri, 2007; Traboulsi, 2007). As the war strengthened sectarian elites, however, state capacities became more concentrated on issues that served the interest of the ruling elite (Leenders, 2012), such as finance (Moore, 1987) or security (Berthier and Haddad, 2018). Although bureaucratic quality declined during the period of investigation in our study, the country possesses a range of institutions of which some work somewhat effectively and therefore represents the type of "mid-range" case that has been neglected in much of the previous research on bureaucratic effectiveness (McDonnell, 2017).

Our analysis focuses on the period between 2005 and 2020. This focus takes into account that the nature of political exchange changed after the so-called "Cedar Revolution" in April 2005, marking the end of decades of Syrian military occupation and political tutelage (El-Husseini, 2012). New political parties and elites have emerged, which increased political fractionalization and the distribution of political power, while it restructured the way political collaboration functioned (Makdisi and Marktanner, 2009; Mahmalat and Curran, 2020). Our analysis thereby starts from the first government after the general elections in May 2005 under Prime Minister Fouad Siniora and encompasses eight governments, including the government under Prime Minister Hassan Diab from January 2020.[4]

Figure 1 shows the dispersion of legislative texts across policy areas for each government. The 32 policy areas have been summarized in seven supercategories for ease of visualization. As the capacity of governments to attend to changing environments is limited, the dispersion of legislative texts among policy areas broadly reflects governmental priorities (Jones and Baumgartner, 2005). Financial and economic issues received more attention from the governments under Saad Hariri and Hassan Diab in 2018 to 2020, which enacted more than 57% of all legislative texts in these areas. This focus reflects the need to manage the fallout of a severe economic and financial crisis that began in 2019. The governments under Fouad Siniora up to Najib Mikati from 2005 to 2011, conversely, have placed much more emphasis on the management of public lands and buildings, that is, granting concessions to real estate developers or the sale of public lands.

Figure 1: Distribution of political attention per government in terms of significant legislation per policy area

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[4] The dataset includes legislation for Hassan Diab's government until end of October 2020.

Legend:
- International Affairs and Defense
- Government Operations
- Management of Lands and Buildings
- Economy (Agriculture, Industry, Tourism, and Trade)
- Finance (Public Finance, Taxation and Customs, and Financial Sector)
- Public Goods (Education, Environment, Health, Water, Electricity, and Transport)
- Other
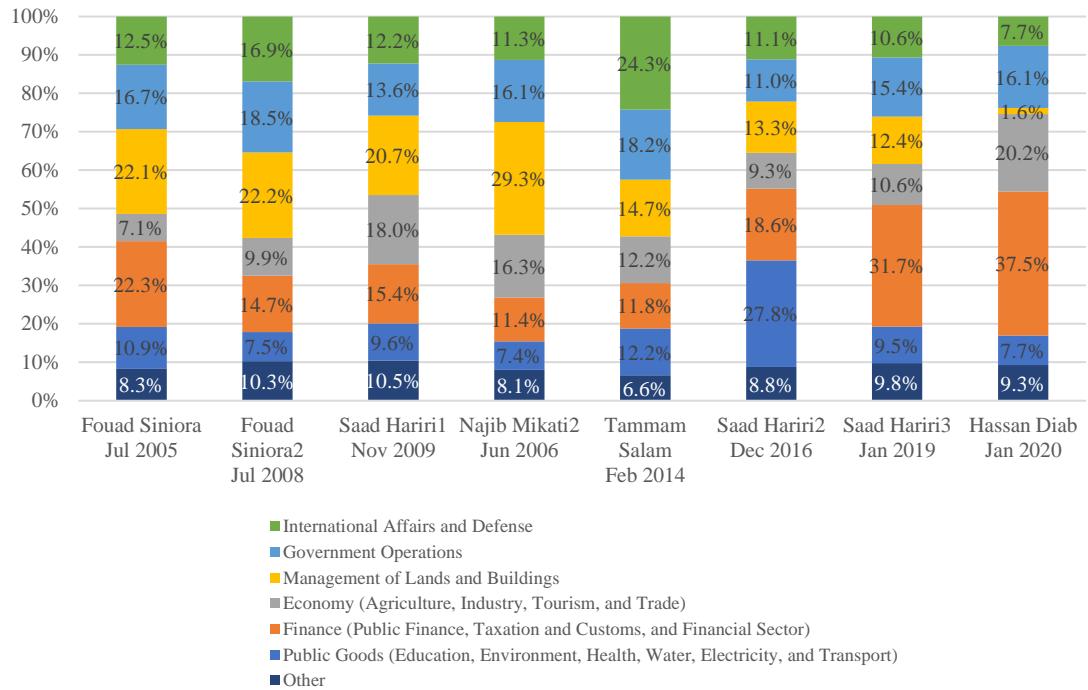
Figure 2 shows the average legislative productivity per government, month, and policy area. The graph shows box plots that indicate the median in the middle and the second and third quartile of observations in the left and right box, while the whiskers represent the first and fourth quartile. The governments of Hassan Diab as well as the first of Saad Hariri have been the least productive in terms of significant legislation with a median of 0.3 and 0.4 and a mean of 0.8 and 1.1 respectively, while the ministries in the second government under Fouad Siniora was the most productive one with a median of 1.2 and a mean of 2.2 significant legislative texts per month and policy area. Note that this view includes times governments serve as caretakers.

Figure 2: Average productivity of significant legislative texts per government, month, and policy area
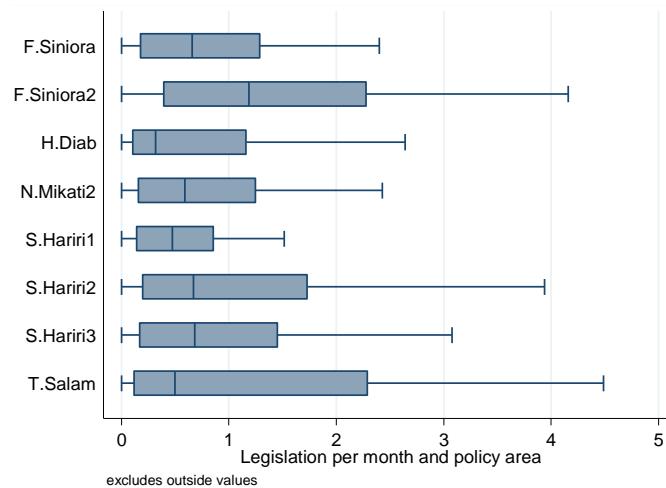
Note: Middle line represents median, boxes the 2nd and 3rd quartile observations, whiskers 1st and fourth quartile observations; outliers omitted. Numbers normalized by policy areas as numbers of ministries vary by government.

In order to single out the effect of rotation on legislative productivity, the analysis further concentrates on nine key ministries, notably energy and water, interior, economy and trade, defense, agriculture, foreign affairs, industry, finance, and justice. We compare the legislative texts issued by the selected ministries with the total production of legislative texts in table 1, which provides summary statistics. Two reasons determine choice for these ministries. First, they correspond to important policy areas in which reform has been contentious, given the context of socio-economic developments in the country. This selection notably includes the four so-called "sovereign" ministries—interior, defense, finance, and foreign affairs—which are endowed with major authorities[5] and are a particular focus of contemporary debates about the importance of rotation. Second, they correspond to the organization of the dataset itself and allow a unique identification of a text within a particular policy area to a specific ministry.

Table 1: Summary statistics of significant legislative texts per government

Government	Mean	Standard Deviation	Number of Ministries Observed	Number of Texts of Selected Ministries	Total Number of Texts	Share of Total
H.Diab	22.9	35.6	9	206	248	83.1%
S.Hariri3	34.8	63.4	9	313	461	67.9%
S.Hariri2	75.6	119.8	9	680	1,277	53.2%
T.Salam	126.0	137.0	9	1,134	1,575	72.0%
N.Mikati	80.1	94.5	9	721	1,279	56.4%
S.Hariri1	55.0	68.0	9	495	706	70.1%
F.Siniora2	51.2	73.8	9	461	729	63.2%
F.Siniora1	98.8	159.1	9	889	1,493	59.5%
Total	68.0	101.7	72	4,899	7,768	63.1%

Three notes are important to make for the interpretation of this data. First, the observed allocation of legislation to ministries is a necessary but not sufficient condition for the legislative production of a particular minister. While texts that appear in one of these nine policy areas have all been elaborated by a particular minister, collaborations across ministries can lead to texts carrying the signatures of multiple ministers.[6] For this research, we attribute a legislation to a ministry according to the policy area in which a text occurs. While we cannot fully observe whether a minister or administration devoted resources to the elaboration of texts that appear in other policy areas not under investigation here, these additional texts are unlikely to bias our results. First, legislative production of these nine ministries represents up to 83% of total legislative production under the mandate of a particular government,

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[5] These ministries are contentious as they control important state functions and security institutions. The interior ministry controls the internal security forces and customs, the defense ministry controls Lebanon's armed forces, while the foreign ministry controls the general security and the diplomatic corps. The finance ministry moreover has almost discretionary powers in blocking or facilitating reform due to its budgetary authorities. These ministries also control among the highest budgetary expenses, with defense having the largest budget, interior the third, and finance the fifth largest budget.

[6] Notably, significant decrees generally need to be signed off by the Minister of Finance and/or the Ministry of Interior.

or 63% in total. Second, extensive reviews of the dataset in other policy areas indicate no systematic bias among ministries to be more or less likely to engage in collaborative projects.[7] Third, we are interested in the core functions of ministers and their administrations to single out the effects of rotations on bureaucracies.

Second, the numeric count of legislative texts, even after having been filtered for significant texts, might under-value the resources that went into complex laws that significantly alter the legislative environment. These complex texts occur as one observation in the same way as more simple decrees or resolutions are reflected in our dataset. On average since 2005, the share of laws to decrees and resolutions is 8.3%. Our data therefore says less about the extent to which the work of a minister has actually changed the legislative environment, or the extent to which legislation has been implemented in practice. Rather, it reflects the average productivity of a ministry as a bureaucratic entity.

Third, our data, by design, remains silent on the normative implications of legislative activity. We cannot determine with certainty whether a particular text serves extractive purposes or aims at welfare improvements, that is, whether it is "good" or "bad." Rather, our concern is the extent to which a bureaucracy utilizes its resources, both in terms of human capital and financial, to govern.

Our key independent variable is a dummy for instances of rotation of parties that control a ministry at the time of the formation of a new government. Since 2005, Lebanon experienced nine government changes for a total of 168 ministerial positions. We find that many of these portfolios have been held by individual parties for consecutive governments (table 2). For example, the ministry of energy and water has been held by the Free Patriotic Movement in three consecutive governments, while the ministry of finance has been held by the Amal movement in four. More than half of the portfolios in the cabinets between 2005 and 2020 were occupied by the same party for two or more consecutive terms. Within our focus on the nine ministries, we record 72 observations that include 42 instances of rotations. Notably, for the period under investigation no rotations occurred during a government's term in office.

Table 2: Instances of rotations in Lebanese cabinets after 2005

	H.Diab	S.Hariri3	S.Hariri2	T.Salam	N.Mikati2	S.Hariri1	F.Siniora2
Agriculture*			■	■		■	■
Culture		■	■	■	■	■	■
Defense*		■	■	■		■	■
Displaced		■	■	■		■	■
Economy and Trade*			■	■	■	■	■
Education	■		■	■	■		
Energy and Water*			■	■		■	■
Environment	■		■	■		■	■
Finance*				■	■		
Foreign Affairs*				■			
Industry*	■	■		■		■	■
Information	■	■	■	■	■		■
Interior and Municipalities*	■			■	■	■	■
Justice*			■	■			■

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[7] The Annex displays the share of collaborative significant ministerial decrees to total decrees for the two latest governments under Hassan Diab and Saad Hariri. The table shows that there is no systematic bias as most texts are co-signed by the Ministry of Finance and only a few co-signed by other resorts.

Labor
Public Health
Public Works and Transport
Social Affairs
Telecommunications
Tourism
Youth and Sports
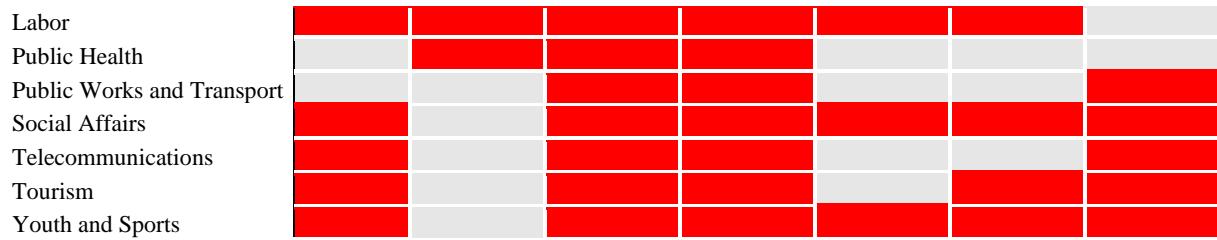
*Notes: Red squares indicate instances of rotation; excludes state ministries. *: Ministries included in econometric analyses.*

As alternative model specifications for causal inference, such as differences-in-differences models, are infeasible for our analysis, we qualify the causality and mechanisms of our results using a mixed-methods approach. We conducted a series of expert interviews with senior bureaucrats and acting ministers that were designed to elicit the narratives and practical examples as to how changes in ministerial leadership impede ministerial productivity and political collaboration more generally. These interviews were held between October 2020 and January 2021 while the study avails of interview evidence from previous work on a very similar topic with (ex-)ministers, high-ranking bureaucrats, members of parliament, and high-level party officials (Mahmalat and Curran, 2020). In total, we draw from 35 expert interviews.

The interviews continued until saturation was reached and additional interviews did not elicit novel insights. Interview participants were selected both from ministries and other state agencies to compare ministries with different organizational structures. For political actors, we selected participants from all major factions to be able to reflect diverging ideologies or preferences. That way, we take into account the ideological and organizational differences that might affect answers towards the phenomena under investigation. The interviews followed a semi-structured guideline with open-ended questions to elicit the free association of the interviewees towards the motives in question (Hollway and Jefferson, 2008). We analyzed the transcripts with predefined codes that were developed after a definition of key concepts and themes (Rubin and Rubin, 2005).

4.   Quantitative Analysis: Rotations and Ministerial Productivity

We start our analysis by dividing our data into two samples, the ministries with and without rotation, and conduct a simple means test. Table 3 presents summary statistics while figures 3 a and b show the distribution of observations within the two groups in a box plot and a kernel density function. Both the mean and the median are lower for the rotation sample, indicating reduced productivity after rotations. The figures further show a larger distribution of observations in the third quartile, showing the characteristics of a negative binomial distribution.

Table 3: Summary statistics of rotated vs. non-rotated ministries

Rotation	Mean	Median	Std Dev	Min	Max	N
No	4.38	1.70	5.75	0.17	22.67	30
Yes	2.17	1.04	3.01	0.21	12.80	42
Total	3.09	1.29	4.46	0.17	22.67	72

Figure 3 a and b: Box plot and kernel density estimations of ministries in samples after and without rotation
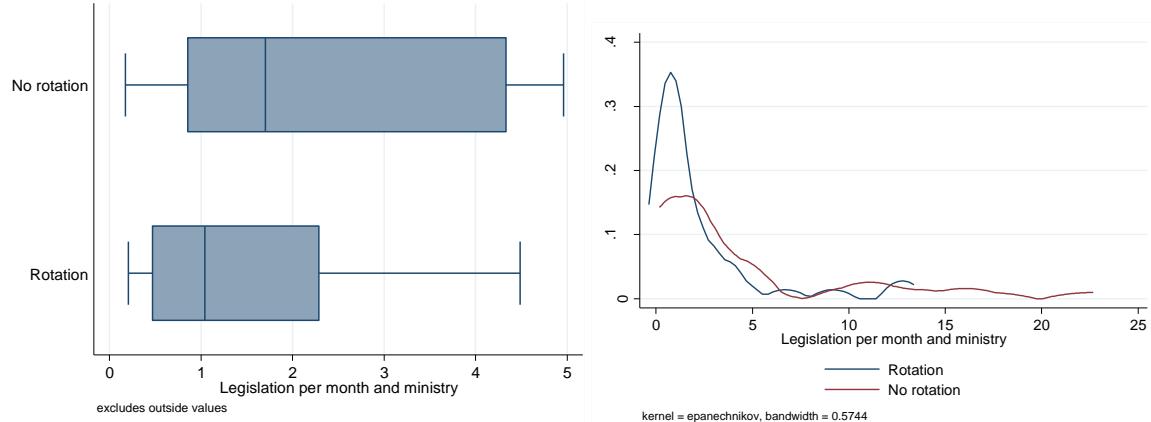
As several factors could influence this result, we deploy regression analyses to account for other potential influencing variables. We run a negative binomial regression estimation, rather than a Poisson model, as the variance of the dependent variable is greater than the mean and therefore shows overdispersion. Our regression follows the following model

$$\ln(y_{i,j}) = \alpha + \beta_1 R_{i,j} + \beta_2 logbudget_{i,j} + \beta_3 gov_i + \beta_4 m_j + \beta_5 aff_{i,j} + \ln(t_i)$$

where *Y* is the output of significant legislative texts for government *i* of ministry *j*. *R* denotes our key independent variable of interest, a dummy variable that takes the value of 1 whenever a ministry rotated and the respective minister changed the affiliation of a party. *logbudget* comprises the natural log of estimated expenditures of each respective ministry in the first full year of a governments' term as reported in the public budget. We include the budget in order to control for the possibility that a change in available resources affects a ministry's capacities to hire personnel or commission the elaboration of legislation. *gov* and *m* denote government and ministry fixed effects, which capture variation pertaining to other potential confounding variables, such as the length of a government serving as caretakers and ministry specific characteristics. We moreover introduce party fixed effects, *aff,* to account for an incoming ministers' affiliation to different parties. This variable reflects that political parties may have different incentives or strategies to use a rotation as an opportunity to garner political or economic gains. We use the White-Huber sandwich estimator to calculate robust standard errors in order to account for model misspecifications. The model takes into account the opportunity of each government to elaborate legislation by subjecting the dependent variable to its exposure *t* in months that a government was in office.

Table 4 presents the results. In the basic model (model 1), the rotations dummy is significantly and negatively related to the production of significant legislation. The coefficient barely misses significance at the 1% level, which does not change as we control for the budget each minister has available (model 2). For each rotation, the expected log count of the number of significant legislations decreases by ~0.29, or about 0.75 legislative texts, per ministerial term on average. In relation to the average production of 3.09 texts per ministry and term (see table 2), this reduction amounts to a 24% contraction of productivity on average. The available budget of a ministry is positively associated with the number of legislations even though the coefficient is not statistically significant (model 2). The significance of the rotation variable drops only when we include party fixed effects (model 3), suggesting that there are differences in the way political parties approach legislative production.

Table 4: Regression results

	Model 1	Model 2	Model 3
rotation	-0.28**	-0.29**	-0.24
	(-2.40)	(-2.40)	(-0.72)
logbudget		0.05	
		(0.55)	
constant	0.65***	-0.33	-0.52
	(3.19)	(-0.18)	(-1.49)
Government FE	Yes	Yes	No
Ministry FE	Yes	Yes	No
Party FE	No	No	Yes

*Notes: Dependent variable is the number of significant legislations per ministry to the exposure of the months in office; Regression model uses robust standard errors; Table shows beta coefficients and t-statistics in parentheses; Significance levels: * p<0.10, ** p<0.05, *** p<0.01. Results adjusted for exposure of duration in months of term in office.*

5. Qualitative Analysis and Robustness Checks: Memory Losses and Agency Risks

This section discusses causality and qualifies the mechanisms that drive the results. In terms of causation, we argue that rotations affect legislative productivity, rather than the other way around. Endogeneity—reversed causation in which characteristics of a ministry impact the likelihood of rotation—is of limited concern. Endogeneity could occur when Prime Ministers would have replaced ministers as a result of their inefficiency during a government's term. However, during the period under investigation no ministers were dismissed for inefficiency largely due to the sensitivity of the issue for the elite-level arrangement. Only two changes of ministers occurred, both of which triggered by the resignation of the minister himself – only one of which in a ministry under investigation[8] – leaving the (threat of) dismissal unlikely to cause endogeneity issues.

Endogeneity could moreover be of concern when political elites bargained the allocation of ministries in the process of government formation over the *anticipated* productivity of a ministry and rotate those in which lower output could be expected. This seems implausible for two reasons. First, the legislation we observe is unlikely for negotiation among elites in the bargaining process for the next cabinet, the allocation of ministries, and its policies. We largely observe the work "behind the front lines" that are necessary to effectively govern a country but rarely make headlines. While our data does include salient laws, these make up on average 8.3% of all significant legislation per year and are therefore unlikely to drive the results. Second, as parties become entrenched in ministries leaders and ministers unlikely constrain their discretion over policy choices by elite-level commitments (remembering that our dataset includes legislation that is directly attributable to one minister). As Lebanon's polity de facto offers very limited institutional provisions to rein in ministerial discretion in practice, such commitments

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[8] These cases are Charbel Nahhas in 2012 resigning from the Ministry of Labor and Nassif Hetti in 2020 resigning from the Ministry of Foreign Affairs, both over political disagreements. While only the latter is part of our data set, Hetti resigned during a period of caretaker government.

are hard to enforce *ex post* (Dragu and Laver, 2019; Martin and Vanberg, 2020), making commitments incredible and therefore unlikely a part of negotiations.

Memory losses and agency-risks

In this section, we argue that the reduction in productivity after rotations emanates from agency-risks rotations induce between incoming ministers and the ministry's staff. We discuss the mechanisms by which agency-risks affect productivity and find that ministries lose a part of their "institutional memory". These memory losses, in turn, depend on the extent to which political parties were able to penetrate institutions with loyal personnel.

In Lebanon, discretionary staffing decisions make ministries and other governmental institutions to what Leenders called "bastions of privilege for supporters" in which bureaucrats report to party heads rather than their superiors and ministers (2012, p.225). A senior civil servant exemplified the extent to which elites capture institutions by quoting a former minister and prime minister who justified his (ostensibly fraudulent) actions with the words that "this ministry belongs to us." Elites of political parties gradually influence the staffing of the institution not only for contractual staff and advisers that can be replaced relatively quickly, but also for followers among civil servants that get discretionary promotions (Salloukh, 2019). Depending on the services a ministry offers, a significant proportion of a ministry's staff can be recruited on an ad hoc manner by shirking the hiring procedures set in place by the Civil Service Board (CSB), the government body tasked with recruiting civil servants. The words of the director of a governmental agency summarize the many accounts of our interviewees on the challenges they experienced with the CSB by describing its processes as being "super fraudulent." Sometimes receiving additional pay by political parties, employees so employed are not accountable to the institution and administrative superiors but the leaders of political parties. As a minister relates, once diverging policy priorities between a minister and her/his bureaucrats result in conflict "no one will hold her/him [the bureaucrat] accountable for obstruction" if she/he is protected by a political party. She/he laments:

> "Before Ta'if [the agreement that formally ended the civil war in 1989], employees of the state were driven by the following motivation: pride, safety, income; in this order. After Ta'if, political parties took over all three. They took the pride to serve for their party, the safety by making people untouchable, and income as well, by providing additional services or income."

In such environments, incoming ministers find it difficult to know how to navigate the trust and work relationships of their teams. In the words of a program manager, incoming ministers "are afraid" and would sometimes refuse to sign "even the simplest papers" causing delays in work processes. As a minister confirms, skepticism as to whom to trust tends to slow down work which contributes to an incoming minister "losing the first two months in office in any case." Collaborative projects that could establish and deepen trust relations within and among governmental agencies tend to have limited success as, in the words of a director of a government agency, "the state doesn't reward collaboration." Other interviewees too ascribe the lack of sustainable and reliable trust relationships within ministries to trust and leadership challenges.

New incoming ministers, then, face a tradeoff when attempting to form their teams. Bureaucrats loyal to opposing parties might obstruct their work which induces agency-risks when a minister delegates work to bureaucrats that pursue different objectives (Huber and Shipan, 2002). Replacing them with staff more loyal to the incoming minister could thereby facilitate productivity. However, both types of public employment prevalent at ministries, civil

servants and consultants, make the mitigation of agency-risks costly. As for civil servants, prevailing regulations largely prevent the dismissal of badly-performing or obstructing bureaucrats, while their relocation (where possible) can become a sensitive political issue (Le Borgne, Jacobs and Barbour, 2015). As for discretionary hires of previous administrations, the more staff the incoming minister exchanges, the more the institution suffers from memory losses as outgoing bureaucrats take their institutional memory and experiences of ongoing projects with them. In the words of a former director general of a ministry, "the worst by far are those ministers who stay for long" as they would "totally disrupt workflows to gain the upper hand in everything that happens."

This mechanism finds support in our model specifications. We rerun the regression model in four specifications. First, we include a categorical variable as the key independent variable that takes the values of 0 for non-rotations, 1 for rotations that follow only one term of the previous party, and 2 for two or more terms by the previous party. Models 4 and 5 in table 5 show that those rotations that follow incumbents after two or more terms drive a large proportion of the variation. Ministries having rotated after two or more terms decrease the log count of significant legislation vis-à-vis the reference of the no-rotation group by -0.48, or 0.62 legislative texts less on average per ministry and term. Controlling for a ministry's budget does not make a significant difference. At the same time, ministries rotating after only one term still enact less legislation than the reference group, but the coefficient loses significance. Institutions that have had a longer exposure to political entrenchment appear to face higher memory losses and therefore take more time to become productive.

Second, in model 6 and 7 we investigate whether the counterfactual – a change of ministers at the beginning of a new term that are both of the same party – has a negative effect. The coefficient is still negative, but the effect is now insignificant. Both effects are in line with our theoretical expectations and the dominant narratives of our interviews, suggesting that ministers from the same party share the information necessary to resume works.

Table 5: Regression results

	Model 4	Model 5	Model 6	Model 7
No rotation	~	~		
Rotation after 1 term	-0.2	-0.2		
	(-1.5)	(-1.52)		
Rotation after >2 terms	-0.48***	-0.51***		
	(-2.6)	(-2.61)		
Change within party			-0.14	-0.15
			(-0.88)	(-0.88)
logbudget		0.07		-0.03
		(0.9)		(-0.3)
Constant	0.68***	-0.69	0.65***	1.23
	(3.29)	(-0.46)	(2.98)	(0.63)
Government FE	Yes	Yes	Yes	Yes
Ministry FE	Yes	Yes	Yes	Yes
Party FE	No	No	No	No

Notes: Dependent variable is the number of significant legislations per ministry to the exposure of the months in office; Regression mode uses robust standard errors; Table shows beta coefficients and t-statistics in parentheses;

*Significance levels: * p<0.10, ** p<0.05, *** p<0.01. Results adjusted for exposure of duration in months of term in office.*

Obstruction of work as a political strategy

This leaves us with the question as to why memory losses occur in the first place, given their detrimental effects on economic and political outcomes. We argue that, once a party was able to penetrate an institution with loyal personnel, the intensity of memory losses depends on the strategies of political parties. As model 3 in table 4 indicates, controlling for the affiliation of ministers to political parties largely captures the variation of legislative production and renders our rotation variable insignificant. Differences in the way political parties approach ministerial work appears to have a significant influence on legislative production, which can emanate from factors such as their wartime history or composition of constituencies. This finding resonates with previous research that has identified several areas in which the strategies of political parties explain variations in political and economic outcomes in Lebanon, such as healthcare (Cammett, 2014, 2015), employment (Corstange, 2016), or local governance (Parreira, 2020).

Many of our interviewees vividly describe how memory losses become a means of strategic political contestation. Outgoing administrations can go beyond stopping work on projects they cannot implement or claim credit for during elections (Indriðason and Kam, 2008).[9] They can deliberately withhold, hide, or destroy important documentation to obstruct the work of incoming ministers. Lack of digitization facilitates opportunities for obstruction as physical documentation can more easily be withdrawn. In the words of a senior civil servant, ministers sometimes face "empty shelves" when they first enter their offices. And as a former director general affirms, outgoing ministers "make sure that nothing is left" and that incoming administrations need to "start again from scratch – all the time."

Parties appear to use memory losses for political contestation depending on the extent to which they are entrenched in an institution. One such powerful tool to penetrate institutions is the deployment of consultants, rather than civil servants, which ministers task with handling sensitive or important projects. Consultants tend to be recruited and sometimes paid directly by a political party as each minister is (legally) only allowed to recruit one adviser on the ministry's budget. While no official statistics on staffing are publicly available, according to our interviewees, some ministers leave more than half of a ministry's regular positions vacant for being filled with contractors and consultants. As a minister laments, an "army of consultants" can extend a ministers' team which she/he would take out of the institution after a rotation. Consultants can therefore be particularly detrimental to institutional memories when they (are advised to) leave the incoming administration unaware of the details of ongoing projects upon their departure.

The differences among parties to leverage ministries for individual gains, then, appears to emanate from the way political parties legitimize themselves vis-à-vis their constituencies. When parties use control over the institution as a patronage tool, their interest in using their formal position of power shifts from garnering support for policy

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[9] The role of electoral incentives is limited in any case as only two elections took place during the time of investigation (2009 and 2018). Even assuming that parties could have anticipated the outcome of the bargain over ministerial portfolios in what often are months of negotiations, only two governments could expect being rewarded or punished electorally for their work immediately before.

choices and legislative production to maintaining support via established patronage networks. As a former director general asserts, over time those ministers and bureaucrats remain in office that manage to redistribute the largest economic or political rewards to a party. Others would be seen as "poor performers", a dynamic that would eventually erode the quality of the entire civil service. Parties with less reliance on maintaining patronage networks from a ministry's work, instead, would have lager incentives to use their discretionary power to replace staff, abandon old projects, and launch new ones that are more visibly connected to the incoming party in order to garner political and economic gains from bureaucratic production.

6. Conclusion

Ministerial rotations do not facilitate reform, at least not by means of increasing ministerial productivity of significant legislative texts. In Lebanon, rotations cost ministries almost one fourth of their average productivity. Importantly, it is not rotations themselves that decrease legislative productivity. Rather, this reduction is conditional on the extent to which parties had a chance to penetrate these institutions before and weaken the bureaucracy by way of increasing dependency of staff to political elites. Lower legislative production is thereby another way by which political entrenchment and patronage infringe on political and economic outcomes in clientelist polities.

We argue that the prevailing mechanism relates to the strategies of political parties to garner political support. Legitimacy of new administrations or the relationship of ministers to the heads of government, the two main explanations in previous research, play a limited role. To the extent that parties receive higher gains from targeted patronage and were able to penetrate institutions with loyal personnel, parties have incentives to obstruct the work of incoming ministers.

Our discussion has a notable limitation by being unable to fully disentangle the effects of bureaucracy and politics. As discussed above, the strategies of political parties are important to explain why work of incoming administrations gets obstructed. However, it is beyond the scope of this paper to explain to which extent incoming ministers would have incentives to *work less* independent of the obstruction of previous administrations. While our analysis does not suggest that this mechanism would be dominant, future work should elaborate on the conditions that shape parties' attitudes towards legislative production. For example, which role does the composition of a party's constituency play in shaping the way elites approach legislative production? What is the role of the function of a ministry in attracting specific political parties?

In terms of policy implications, two priorities emerge. First, reforms to increase transparency of work processes should limit the opportunities of employees to hide or remove documentation. Information technology to digitize work processes can lead these efforts as to make sure that procedures are traceable and responsibilities clearly assigned. Second, accountability of civil servants must be strengthened by protecting the hiring processes of civil servants from political influence and standardizing performance evaluations and promotions based on merit-based criteria.

References

Alesina, A., Ardagna, S. and Trebbi, F. (2006) 'Who Adjusts and When? The Political Economy of Reforms', *IMF Staff Papers*, 53(2000), pp. 1–29.

Atallah, S. *et al.* (2020) 'Public Resource Allocation in Lebanon: How Uncompetitive is CDR's Procurement Process?', *Lebanese Center for Policy Studies*. Available at: http://lcps-lebanon.org/publication.php?id=359&category=1101&title=1101.

Atallah, S., Mahmalat, M. and Maktabi, W. (2021) *Public infrastructure procurement in post-conflict power-sharing arrangements: Evidence from Lebanon's Council for Development and Reconstruction*, *International Growth Centre*. F-20016-LBN-1. Available at: https://www.theigc.org/wp-content/uploads/2021/02/Mahmalat-et-al-2021-Final-Report.pdf.

Babecký, J. and Campos, N. F. (2011) 'Does reform work? An econometric survey of the reform-growth puzzle', *Journal of Comparative Economics*, 39(2), pp. 140–158.

Baumann, H. (2017) *Citizen Hariri: Lebanon's Neo-Liberal Reconstruction*. Oxford: Oxford University Press.

Berthier, R. and Haddad, G. (2018) *The Lebanese warfare state*, *Synapsis Network*. Beirut. Available at: http://www.synaps.network/the-lebanese-warfare-state.

Le Borgne, E., Jacobs, T. and Barbour, P. (2015) *Lebanon: A Systematic Country Diagnosis*. 97498. Beirut. Available at: http://documents.worldbank.org/curated/en/698161468179049613/pdf/97498-CAS-P151430-SecM2015-0202-IFC-SecM2015-0073-MIGA-SecM2015-0047-Box391476B-OUO-9.pdf.

Cammett, M. (2014) *Compassionate Communalism - Welfare and Sectarianism in Lebanon*. Ithaca and London: Cornell University Press.

Cammett, M. (2015) 'Sectarianism and the Ambiguities of Welfare in Lebanon', *Current Anthropology*, 56(S11), pp. 76–87.

Chaitani, Y. (2007) *Post-Colonial Syria and Lebanon: The Decline of Arab Nationalism and the Triumph of the State*. London: I.B. Tauris.

Chaqués-Bonafont, L., Palau, A. M. and Baumgartner, F. R. (2015) *Agenda dynamics in Spain*. London: Palgrave Macmillan UK.

Choueiri, Y. (2007) *Breaking the Cycle: Civil Wars in Lebanon*. London: Stacey International.

Cornell, A. (2014) 'Why Bureaucratic Stability Matters for the Implementation of Democratic Governance Programs', *Governance*, 27(2), pp. 191–214.

Corstange, D. (2016) *The price of a vote in the Middle East: Clientelism and communal politics in Lebanon and Yemen*. Cambridge: Cambridge University Press.

Diwan, I. and Haidar, J. I. (2020) 'Do Political Connections Reduce Job Creation? Evidence from Lebanon', *The Journal of Development Studies*, 31, pp. 1–24.

Dragu, T. and Laver, M. (2019) 'Coalition governance with incomplete information', *Journal of Politics*, 81(3), pp. 923–936.

Drazen, A. (2000) *Political Economy of Macroeconomics*. Princeton: Princeton University Press.

El-Husseini, R. (2012) *Pax Syriana: Elite Politics in Postwar Lebanon*. New York: Syracuse University Press.

Haggard, S. and Webb, S. B. (1994) *Voting for reform - Democracy, Political Liberalization and Economic Adjustment*, *AHIP Coverage*. Washington: World Bank.

Hartzell, C. A. and Hoddie, M. (2020) *Power Sharing and Democracy in Post-Civil War States: The Art of the Possible*. Cambridge: Cambridge University Press.

Høj, J. *et al.* (2006) 'An Empirical Investigation of Political Economy Factors Behind Structural Reforms in OECD Countries', *OECD Economic Studies*, (42), pp. 87–136.

Hollway, W. and Jefferson, T. (2008) 'The free association narrative interview method', in Given, L. (ed.) *The SAGE Encyclopedia of Qualitative Research Methods*. Sevenoaks, California: Sage, pp. 296–315.

Howell, W. *et al.* (2000) 'Divided Government and the Legislative Productivity of Congress, 1945-94', *Legislative Studies Quarterly*, 25(2), pp. 285–312.

Huber, J. D. (1998) 'How Does Cabinet Instability Affect Political Performance ? Portfolio Volatility and Health Care Cost Containment in Parliamentary Democracies', *The American Political Science Review*, 92(3), pp. 577–591.

Huber, J. D. and Lupia, A. (2001) 'Cabinet Instability and Delegation in Parliamentary Democracies', *American Journal of Political Science*, 45(1), pp. 18–32.

Huber, J. D. and Shipan, C. R. (2002) *Deliberate Discretion? The Institutional Foundations of Bureaucratic Autonomy*. Cambridge: Cambridge University Press.

Indriðason, I. H. and Kam, C. (2008) 'Cabinet Reshuffles and Ministerial Drift', *British Journal of Political Science*, 38(4), pp. 621–656.

Jones, B. D. and Baumgartner, F. R. (2005) *The Politics of Attention: How Government Prioritizes Problems*. Chicago: University of Chicago Press.

Leenders, R. (2012) *Spoils of Truce: Corruption and State-Building in Postwar Lebanon*. Ithaca: Cornell University Press.

Loftis, M. W. (2015) 'Deliberate Indiscretion ? How Political Corruption Encourages Discretionary Policy Making', *Comparative Political Studies*, 48(6), pp. 728–758.

Mahmalat, M. (2020a) 'Assessing Policymaking in Data Poor Polities – Introduction of a new data set for Lebanon', *International Development Planning Review*, 42(4), pp. 402–430.

Mahmalat, M. (2020b) 'Balancing Access to the State: How Lebanon's System of Sectarian Governance Became too Costly to Sustain', *Lebanese Center for Policy Studies*, (49).

Mahmalat, M. and Curran, D. (2018) 'Do Crises Induce Reform? A Critical Review of Conception, Methodology and Empirical Evidence of the "Crisis Hypothesis"', *Journal of Economic Surveys*, 32(3), pp. 613–648.

Mahmalat, M. and Curran, D. (2020) 'Fractionalization and Reform: A Framework of Political Collaboration on Reform with Application to Lebanon', *Economics of Governance*, 21(2), pp. 187–214.

Makdisi, S. (2004) *The Lessons of Lebanon - The Economics of War*. London: I.B. Tauris.

Makdisi, S. and Marktanner, M. (2009) 'Trapped By Consociationalism: The Case of Lebanon', *Topics in Middle Eastern and North African Economies*, 11. Available at: http://www.luc.edu/orgs/meea/.

Martin, L. W. and Vanberg, G. (2020) 'Coalition Government, Legislative Institutions, and Public Policy in Parliamentary Democracies', *American Journal of Political Science*, 64(2), pp. 325–340.

McDonnell, E. M. (2017) 'Patchwork Leviathan: How Pockets of Bureaucratic Governance Flourish within Institutionally Diverse Developing States', *American Sociological Review*, 82(3), pp. 476–510.

Moore, C. H. (1987) 'Prisoner's Financial Dilemmas: A Consociational Future for Lebanon', *The American Political Science Review*, 81(1), pp. 201–218.

Parreira, C. (2019) 'The art of not governing - How Lebanon's rulers got away with doing so little for so long', *Synaps Network*. Available at: http://www.synaps.network/lebanon-protests-the-art-of-not-governing.

Parreira, C. (2020) *'The City Receives What She is Worth': Local Governance in Lebanon's Urban Periphery*. Stanford University.

Pitlik, H. and Wirth, S. (2003) 'Do crises promote the extent of economic liberalization?: An empirical test', *European Journal of Political Economy*, 19(3), pp. 565–581.

Political and Constitutional Reform Committee (2013) *The impact and effectiveness of ministerial reshuffles*. London. Available at: www.parliament.uk/pcrc.

Rose, R. (1987) *Ministers and Ministries: A Functional Analysis*. Oxford: Clarendon Press.

Rubin, H. J. and Rubin, I. S. (2005) *Qualitative Interviewing - The Art of Hearing Data*. 2nd edn. Thousand Oaks: SAGE Publications.

Salloukh, B. F. *et al.* (2015) *The Politics of Sectarianism in Postwar Lebanon*. London: Pluto Press.

Salloukh, B. F. (2019) 'Taif and the Lebanese State: The Political Economy of a Very Sectarian Public Sector', *Nationalism and Ethnic Politics*. Routledge, 25(1), pp. 43–60.

Sasse, T. *et al.* (2020) *Government reshuffles - The case for keeping ministers in post for longer*, *Institute for Government*. London.

Stokes, S. C. *et al.* (2013) *Brokers, Voters, and Clientelism: The Puzzle Of Distributive Politics*. Cambridge: Cambridge University Press.

Tompson, W. and Price, R. (2009) *The Political Economy of Reform - Lessons from Pensions, Product Markets and Labor Markets in Ten OECD Countries*. Available at: www.oecd.org/publishing/corrigenda.

Traboulsi, F. (2007) *A History of Modern Lebanon*. London: Pluto Press.

Tsebelis, G. (2002) *Veto Players: How Political Institutions Work*. Princeton: Princeton University Press.

Waelti, S. (2015) 'Financial crisis begets financial reform? The origin of the crisis matters', *European Journal of Political Economy*. Elsevier B.V., 40, pp. 1–15.

Wiese, R. (2014) 'What triggers reforms in OECD countries? Improved reform measurement and evidence from the healthcare sector', *European Journal of Political Economy*. Elsevier B.V., 34, pp. 332–352.

Williamson, J. (1994) *The Political Economy of Policy Reform*. Washington, DC: Institute for International Economics.

World Bank (2020) *Breaking Out of Fragility - A Country Economic Memorandum for Diversification and Growth in Iraq*. Washington, DC.

World Bank (2021) *Lebanon Economic Monitor - Lebanon Sinking (To the Top 3)*. Beirut.

Annex

Table 6: Share of collaborative significant ministerial decrees to total decrees for the governments under Hassan Diab and Saad Hariri (3)

Ministry	Total significant decrees	Of which co-signed	Of which co-signed by Minister of Finance	Of which co-signed with other resorts
Interior	26	25	21	4
Defense	17	17	15	2
Foreign Affairs	14	14	13	1
Finance	72	53	53	0
Justice	18	17	15	2
Energy	4	4	4	0
Economy	15	15	13	2
Industry	18	18	17	1
Agriculture	3	3	3	0