Loaded Questions: Global Liquidity and the Legislative Agenda in Zambia

Jacob Winter
University of Toronto
February 2025

Abstract

How do local politicians react to changing global economic conditions? Literature on policymaking in developing countries typically highlights countries' dependent position in the global economy or focusses exclusively on domestic political dynamics. In this paper, I explore how politicians in Zambia respond to their entry to global markets. From 2011 onwards, Zambia funded infrastructure spending by borrowing heavily from international markets and bilateral creditors. However, the content of spending demands from local members of parliament (MPs) vary significantly, with some pressing for local infrastructure investment while others pursue shared national investment in health and education. Using a new dataset of 9,362 parliamentary questions and multinomial regression for categorical variables, I show that MPs shift their attention toward infrastructure when global interest rates drop and when they have electoral leverage over the party. I then use random forests to test the interactive effects of these variables. I show that MPs are sensitive to both local and global constraints on fiscal policy choices. This paper demonstrates that MPs in developing countries act strategically when choosing which issues to foreground in the public agenda.

Draft – Please do not circulate

Introduction

Roads. Schools. Jobs. Hospitals. Upon entering office, politicians face endless demands for all kinds of investment. One MP told me that he receives more than 100 WhatsApp messages each day, and responding to each request means that he hasn't gone to bed before midnight since he was elected. There's no way to grant each and every request. With limited time and resources, what problems do politicians focus their attention on solving?

Conventional wisdom on the political economy of development affirms that all politics is local: demonstrating competence in delivering development at the constituency level is crucial to staying in office (Hern 2019; Bleck and Van De Walle 2013; Opalo 2022). Constituency service is especially salient in Sub-Saharan Africa, where less than a third of parliamentarians are re-elected (Bowles and Marx 2023). But while local demands are unending, resources are highly constrained. National budgets and international financial conditions severely limit the MPs' ability to address their constituents' needs. How do politicians resolve this tension?

Examining the Zambian case, I find that MPs are strategic prioritizers, using legislative tools to push for investments which are boost their popularity while being achievable. MPs who can deliver important electoral victories demand more geographically particular investments. However, this dynamic changes in response to shifts in the global political economy. MPs respond to high borrowing costs by advocating for less particular—but more achievable—investments.

To demonstrate this, I introduce a new framework which nuances the typical distinction between pork and policy, showing how different types of development have different costs and benefits for MPs. Public investment varies in the degree of geographic particularity and the level of local attributability. Road contracts are negotiated one at a time, making them geographically particular investments. Teacher salaries are negotiated at a national level, and raises are unlikely to boost an MPs' popularity on the ground. Agricultural inputs are locally distributed, but often credited as a national program undertaken by the president. Nonetheless, MPs advocate for all these types of spending. I contend that the degree of concern over re-election and readoption as well as the governments' budget constraint shapes what kinds of benefits MPs prioritize.

I then demonstrate this empirically by examining a new dataset of over 9,000 parliamentary questions from the Zambian National Assembly. Classifying them sector, I find

that exogenous drops in the cost of borrowing are associated with increased demands for infrastructure spending relative to spending on agriculture, health, or education. I then use random forest classifiers to explore the possibility of nonlinear heterogeneity. I find that drops in borrowing cost are most salient to MPs from swing districts, who have higher re-election costs and less concerns about readoption. I also find evidence that rises in domestic revenues like mineral royalties are associated with more demands for social spending, however, this effect varies by region.

Understanding the interaction between these effects helps clarify a tension in the literature on comparative and international political economy. While African politics is well known for the central role that executives play in policymaking, this paper contributes to emerging work on the importance of regional coalitions and politicians with independent power bases (Boone 2024; Choi 2018). At the same time, while there is research on how domestic political arrangements impact borrowing choices (Bunte 2019; Cormier 2024), there is less attention on how this access changes domestic politics. This project demonstrates that local MPs are sensitive to changes both in the international political economy and in their own electoral leverage. Swing MPs who can successfully secure infrastructure will further entrench their own future in politics, while party strongholds will be left behind. This has important implications for the future of democratic accountability and distributive politics.

Theory

Politicians' agendas emerge out of both domestic and global constraints. Domestically, the pressures to be re-adopted by their parties and re-elected by their constituents. Legislators are trying to minimize their re-election costs by maximizing the tangible, attributable benefits that the state delivers to their constituents. Their relative strength determines the types of benefits which they can successfully pursue. Externally, the availability of external finance shapes how realistic it is to expect certain types of benefits to be delivered. When politicians expect that the government has access to external credit or resource revenues, they can push for more tangible benefits, while they turn to 'softer' service delivery when finances are constrained.

In developing countries, there are fewer broad cross-cutting cleavages through which to mobilize the electorate. In this context, executives remain in power by forging an electoral

coalition in a fragmented landscape of potential rivals and defectors (Khan 2017; Adebanwi and Orock 2021; Lupu and Riedl 2013; Riedl and Dickovick 2014; Sartori 1976; Momba 2007; Kim 2017). Parties typically emerge from regional strongholds, but these are insufficient to win majorities in parliament. Due to the winner-take-all institutions in place across much of Africa, regional parties are largely untenable. Consequently, leaders court elites from regions outside their typical bases of support with promises of important positions, or policy favours. For example, in Zambia, waves of leaders have promised increased autonomy to separatist Western province during electoral campaigns in hopes of winning over the province as a bloc (Sishuwa 2024). Urban areas are particularly volatile, with fewer traditional ties making conventional ethnic appeals less relevant.

Executives need to recruit winners, but cannot offer anything ahead of time. Potential MPs cannot expect campaign support from the executive. In fact, most MPs contribute personal resources to the presidential campaign (Chizonde et al. 2024). A candidate's ability to fund their own campaign is a key criteria for adoption (Arriola et al. 2022). In stronghold areas, executives can be assured of the vote, and can therefore exercise discretion in their selection of candidates. In areas where elections are competitive, they must be willing to adopt which ever candidate can deliver them the election. MPs then, face two challenges, they must be re-adopted by their party and re-elected by their constituents. The importance of these two concerns determines what issues they will prioritize.

Re-election

MPs seeking re-election are evaluated on their ability to *deliver development*: provide concrete benefits like jobs, education, health, and roads to their constituents (Hern 2019; Opalo 2022; Bleck and Van De Walle 2013). For historical reasons, parties in Africa do not fall into typical left-right typologies of redistributive politics. Instead, parties across sub-Saharan Africa campaign on valence issues—those which all voters agree on—such as building infrastructure, delivering education, or fighting corruption (Bleck and Van De Walle 2013). Hern (2019) shows that in the Zambian case, voters evaluate candidates on their ability deliver on these priorities. Rather than staking out an ideological position, leaders- at both local and national levels- must demonstrate their competence in addressing common challenges.

The institutional context reinforces the dynamic of MPs being evaluated on constituency service. In single member, first-past the post systems, voters have a direct link to a single

politician to evaluate performance (Lijphart 1994). Clientelist links exacerbate this dynamic, making politicians strongly motivated to deliver tangible benefits to voters (Barkan 2009). Voters evaluate politician competence on their service delivery—visible, salient investments like school blocks, bridges, or agricultural inputs. Unlike in developed countries, retrospective voting gives African legislators an incumbency *disadvantage*, as incumbents must defend their track record against the promises of challengers (Opalo 2022; Barkan 2009).

This creates a challenge for politicians. Developing countries do not have the resources to develop programmatic benefits to the majority of their populations. Even clientelistic benefits are strongly constrained (Kramon 2016). In executive-dominated systems, these sources of patronage are rarely under the discretion of MPs. Instead, members are expected to win re-election through self-funded campaigns rather than state-led service delivery (Arriola et al. 2022; Opalo 2022). In 2021, Zambian politicians funded more than 85% of their own campaign expenses (Chizonde et al. 2024). Access to state resources is crucial for remaining in office.

Re-adoption

MPs may also consider their need to be readopted by their parties. Some politicians may be powerful enough to win office regardless of support from a particular party. These politicians are *strong:* relying on material, symbolic, and organizational resources to mobilize voters (Adebanwi and Orock 2021; Khan 2017; Riedl 2016). When elections are competitive, executives have to recruit these candidates to win tough races. However, in areas where the party dominates local elections, parties can exert more control over the nomination process. They attempt to limit the emergence of strong politicians who might disrupt party hierarchy. Instead, whenever they are assured of electoral victory, leaders choose weak candidates without an independent power base. Choi finds that in Kenya, these politicians are forced to substitute constituency service for party service- boosting the popularity of the president (Choi 2018). Independent mobilizing power gives politicians leverage because they can bring voters with them away from their current party. Strong politicians with independent power bases are a regular feature in Zambian politics, evidenced in the persistence of floor crossing, defection, and independent MPs.

Policy Priorities

Given the importance of both re-election and re-adoption, which policy issues do politicians prioritize? I suggest a typology of spending which distinguishes between whether

investment is geographically particular and the degree to which it can be directly attributed to an MP. This nuances the typical dichotomy between programmatic and clientelistic policy, addressing the "vast grey area of regionally targeted policy" (Boone 2024).

I identify two primary axes of variation in spending sectors. First, *particularity*: some spending is concentrated in specific geographies, while other types require sharing across the country. Second, some types of spending are easily *attributable* to local legislators, while others are diffuse, more readily attributed to president or party.

Table 1: Sectors by Attributability and Particularity

	Broad Attributability	**Local Attributability**
Geographically Particular	Routine Maintenance	New Infrastructure (Roads, bridges, buildings, wells)
Nationally Shared	Teacher Salaries Health Supplies	CDF Agricultural Inputs (FISP)

First, sectors vary in their degree of geographic particularity. Though spillover effects certainly exist, construction of local infrastructure primarily benefits the targeted area. Road building is the quintessential example of this type of benefit, which involves using state resources to benefit a specific location. In Ghana, parties received electoral boosts for providing roads (Harding 2015) and electrification to constituents (Briggs 2021). Maintaining infrastructure like roads, buildings, and the electrical grid is also geographically particular.

By contrast, nationally shared benefits are areas in which pushing for spending involves investment across a large number of districts. For example, MPs might push for agricultural inputs or clearing public salary arrears, but any resources allocated to these areas are shared across the country. Of course, not all spending will benefit everywhere—fertilizer will benefit rural areas, and universities will benefit urban—but resources are still shared. The quintessential example of shared benefits are CDFs, which give MPs total discretion over resources but must be shared across all constituencies. Nationally shared items like health, education, and agriculture constitute what Mkandawire (2016) labels agrarian welfare regimes. Boone (2024) expands:

'Agrarian welfare regimes' seek to provide a subsistence floor for most of the poor

by upholding the peasant model of rural household consumption and production.

Prime instruments for doing so are land policy, regionally and locally targeted "rural development" schemes (including farm input subsidies), locally targeted social service delivery (especially schools and health facilities) and, in some circumstances and places, food transfers and food subsidies (p.245).

Second, benefits vary in the degree of attributability. When benefits are both contingent and visible, voters can attribute them to their elected representative. MPs have significant discretion over distributing agricultural inputs or using constituency development funds and will often be present at ribbon cutting ceremonies or distribution events. By contrast, it is much more difficult for MPs to claim credit for the release of public sector salaries or restocking clinics. Citizens will not attribute spending to their local MP if it is not immediately visible, or hard to link to the efforts of politicians.

How are these dimensions distinct? In most cases, geographically particular benefits can be attributed to local MPs. The exception to this is routine maintenance, which may not be visible to voters. By contrast, nationally shared benefits can be attributable when MPs have discretion on their local allocation. For example, CDFs are shared benefits which MPs can still claim credit for delivering locally. By contrast, MPs have little discretion over public sector salaries or medical stocks, so voters will not readily attribute it to their local politicians.

Explaining Sectoral Focus

Legislative debate shows MPs pushing for all kinds of different sectors- what explains this variation? MPs get their biggest popularity boost from highly attributable spending. Therefore, we expect that MPs focussed on re-election will push for this type of spending.

However, MPs must balance this concern with the need to maintain their position in party hierarchy. Re-adoption pressures give them varying degrees of success in delivering attributable to their constituents. MPs will push for these benefits when they are in a position of strength. In the European context, Alexiadou (2015) shows how 'heavyweight' MPs can shift policy in their preferred direction. There is indicative evidence that this occurs in Zambia as well. For example, after Hastings Imasiku won a by-election in a swing constituency, he made explicit demands for attributable benefits:

> *I am compelled to deduce that since Liuwa Constituency has always been the domain of the Opposition, these sceneries were, perhaps, not brought to the attention of the Government…we are requesting our listening Government to*

> *construct an all-weather paved road round and through the park, ultimately*
> *upgraded to a bituminous finish.*

While all MPs would like funds for attributable projects, strong MPs should be more incentivized to seek them out because of their increased chances of success. This leads to my first hypothesis:

> *H1: Strong MPs will make more claims for attributable benefits.*

Fiscal Constraints

These dynamics are tempered by exogenous changes in global conditions which alter the government's budget constraint. Variation in interest rates and commodity prices dramatically shift the resources available to governments to build coalitions. Wide ranging scholarship has highlighted the ways in which developmentalist policy aspirations in the Global South are constrained by international financial forces (Cardoso and Faletto 1979; Mkandawire 2015; Getachew 2019). Fluctuations in global liquidity limit developing country fiscal policy because these countries are highly exposed to global markets and have limited access to credit to smooth economic downturn (Wibbels 2006).

When borrowing becomes cheaper, legislatures will push for expansions to the capital budget (debt-funded). However, capital projects are almost always geographically particular, which means MPs compete to have funds allocated to their regions. MPs with autonomy are more likely to make successful claims than those without. Weak MPs might instead push for nationally-shared spending from debt. On the other hand, when credit is tight, capital budgets are the first to be frozen. In this context, MPs will make claims on the recurrent/operational budget, which is more likely to be successful.

Commodity prices can also shift the government's budget constraint. Copper is Zambia's top export earner, and corporate taxation plus mineral royalties comprise between 10-20% of the government budget each year. While loans must be justified to lenders and therefore used on 'productive' capital investment, the government enjoys broad discretion over copper revenues. MPs regularly highlight rising copper prices as the basis for their claims on government accountability. I also expect that rising copper revenues will lead to more intense redistributive

demands, especially from non-copper regions. This several observable implications in behaviour of parliamentarians.

- *H2a: When budget constraint is low:*
    - *Strong MPs will push more for geographically particular investment.*
    - *Weak MPs will push for shared attributable benefits.*
- *H2b: When budget constraint is high, all MPs will push for shared benefits.*

	Tight Credit	**Loose Credit**
Strong MPs	Social Spending	Local Infrastructure (Local Roads)
Weak MPs	Social Spending	CDF Fertilizer Regional Infrastructure (Regional Roads)

Data and Empirical Setup

Parliamentary Speech: Why listen to legislators?

In order to examine which sectors MPs prioritize, I pay attention to what they say. The stance of individual legislators is difficult to identify (Alexiadou 2015), but legislative speech can be a meaningful indicator of their priorities (Laver 2021; Martin 2011a). There are several reasons to pay attention to legislative speech in the institutional context of the Zambian National Assembly. Zambia is a hybrid presidential system with separation between the executive and legislative branch, so legislative proceedings cannot "make or break" governments. In this context "legislative speeches may be more informative about the policy preferences of individual legislators" (Laver 2021, 22). Zambian legislators are elected in single member FPP districts. Proksch and Slapin (2012) show that this gives MPs freedom from the pressure of party lists, as they have less need to toe the party line in parliament. Zambian MPs almost never diverge from party positions in votes and rarely defy executive-initiated bills (Opalo 2019). Nonetheless, where votes are not instructive and MPs are not muzzled by parties, speeches are an instructive

indicator of the issues which they focus on. In interviews, several Zambian MPs from multiple parties told me that they were totally free to submit questions as they please. They consider it as one tool in the arsenal of getting development to their constituencies.

Existing methods of analyzing legislative speech are ill-suited to measuring attention paid to valence issues. Literature on legislative speech has focussed on explaining who speaks, often driven by the identity of the speaker, such as gender, experience, and status in government (Bäck, Debus, and Fernandes 2021; Clayton et al. 2019; Frantzeskakis, Wahman, and Yildirim 2021; Frantzeskakis and Seeberg 2023). Studies that have analyzed the content of MP speech attempt to scale legislator stance or compare it to an ideological spectrum or party platform 2025-02-20 8:58:00 PM. This is not useful where party platforms do not vary across the left-right distinction typical of Europe.

However, an emerging literature examines the constituency orientation of parliamentary speech. Martin (2011b) finds that in Ireland, geographically peripheral MPs ask constituency focussed questions. Motolinia (2021) uses a difference-in-differences approach to show that increasing electoral incentives led Mexican politicians to focus on particularistic legislation. Wegmann and Evequoz (2019) show that in Zambia and Kenya, MPs with narrower margins and less experience are more likely to ask constituency focussed questions. A few studies extend this type of analysis to substantive policy areas Espírito-Santo, Sanches, and Kartalis (2024) find that female MPs in South Africa focus their questions on 'soft' policy issues, but electorally vulnerable women focus their attention on 'hard' policy issues to signal competence. Other work focusses on speech and electoral prospects. Frantzeskakis (2023) demonstrates that MPs who speak about local issues are more likely to be re-elected. York (2024) finds that Moroccan opposition MPs who ask constituency-focussed questions receive more votes in subsequent elections.

Building on this literature, I examine the policy areas which MPs emphasize in parliamentary questions. Most parliamentary democracies include structured institutions through which members can ask questions of the government in written or verbal form (Franklin and Norton 1993). Many authors focus on PQs because MPs enjoy significant latitude over the topic and timing of their questions (Espírito-Santo, Sanches, and Kartalis 2024; Martin 2011a; 2011b; Wegmann and Evequoz 2019). Questions are a crucial tool for representing constituency issues and—more than many other forms of legislative activity— "discern the true preferences and

interests of individual members" (Martin 2011a, 260). Despite this attention, there is much less work linking legislative speech to policy outcomes. Though voters certainly value 'representation', it seems likely that they would appreciate resources actually allocated to the issues that their representatives highlight.

In Zambia, questions are enshrined in the Standing Orders of the National Assembly, which gives MPs broad latitude. Additionally, MPs confirmed that they face no constraints from their parties in submitting questions to the clerk. Once submitted, the clerk dispatches them to the relevant ministry, which must offer a response within seven days, or 14 for non-policy questions (80.2, 80.3). This is taken seriously—one interviewee told me about how a question he asked shut down Parliament for three days because the minister could not provide an answer! Responses often include a specific promise from the ministry ("construction will start in July"), which interviewees highlighted as the primary reason to ask a question. This is because ministerial responses are tracked by the Committee on Government Assurances, one of five general purpose committees established in the Standing Orders of the National Assembly (204.3). The committee is mandated to scrutinize promises from the vice president and ministers as well as "Comment on delays in implementation and adequacy of the implementation of the assurance, promises or undertaking by the Executive" (204.3.b). The committee releases reports for each legislative session tracking the progress on each assurance made, executive responses, and their comments on the executive responses. Though getting an assurance is no guarantee of resource allocation, it is an important way in which MPs conduct oversight of the executive branch.

Questions in the Budget

Parliamentary questions fit within the larger structure of the legislative power of the purse. Though legislative oversight of the budget in new democracies is relatively weak, MPs fulfill legal obligations in scrutinizing and approving government revenues and expenditures. The budget process is an annual cycle culminating in the passage of the appropriations act each December. The fiscal year runs from January to December, and the annual cycle is summarized in Table 2.

Until 2008, the budget was drafted in the first three months of the year, during which time a provisional budget was used, and the annual budget was applied to the remaining nine months of the year. Reforms in 2008 led to an adjusted calendar which was codified in the 2020 National Planning and Budgeting Act (Bwalya, Phiri, and Mpembamoto 2011). While the outline below draws on the 2020 Act, the annual cycle has been in place since 2008 (National Assembly of Zambia 2017).

The first deadline is mid-April, when each department (head) submits a budget policy paper. These papers contain a review budget performance and a list of proposed projects which have been appraised. The last Friday in April is also the date for budget proposals which can be submitted by the public. There are then public consultations on the budget policy paper in May. While these might be dismissed as perfunctory, Bwalya et al (2011) report that in 2008, there were 249 tax-related proposals, of which 36 were adopted. Mining companies, NGOs, and unions all regularly give input into tax and spending proposals.

In the second Friday in June, each department's policy paper is submitted to cabinet for approval. Two weeks later at the end of June, Budget Performance Reports are due. By the first Friday of July, the Ministry of Finance and National planning publishes a green paper with estimates of expenditures by department. By the second Friday in August, the budget framework paper is due, and is reviewed throughout August.

Formal budget debates happen in the fall. The Minister of Finance presents the budget on the last Friday of September. The budget speech includes a sectoral breakdown of revenue, borrowing, and expenditure and highlights the governments goals and major policies. It is accompanied by the Budget Yellowbook, a 1500-page book of itemized expenditures. Over the next month, the National Assembly debates each spending area (head) of the budget. This culminates in the approval of the appropriations bill, usually in early December. Most years also have supplementary appropriation bills, usually in June and December (Interview with Parliamentary Staff).

Table 2: Budget Cycle

Month	Budget Activities
Jan	
Feb	Review of priorities based on progress reports and mid-term evaluations.

Mar	
Apr	Department Heads submit Budget Policy Paper
May	Public Consultations
Jun	Department Policy Papers
	Department Budget Performance Reports
Jul	Green Paper (first estimates)
Aug	Budget Framework Paper
Sep	Budget Speech
Oct	Budget Debates
Nov	Budget Debates
Dec	Appropriations Bill (Supplementary Appropriations in June/December)

By the time the budget is presented in parliament, it has undergone considerable refinement. If MPs want to have a project in their constituency brought forward, then they need to make their case much earlier in the process. I expect that MPs make their constituency needs known to ministers during the period in which ministers are preparing their proposals to be shared with the budget committee in April. I also expect that MPs would push to have their projects retained in the budget when public consultations are happening in July, before the Yellow Book is drafted. The figure below shows that this is the case, as parliamentary questions are concentrated in February/March and June/July.

Source: Hansard and Order Paper National Assembly, 2001-2024
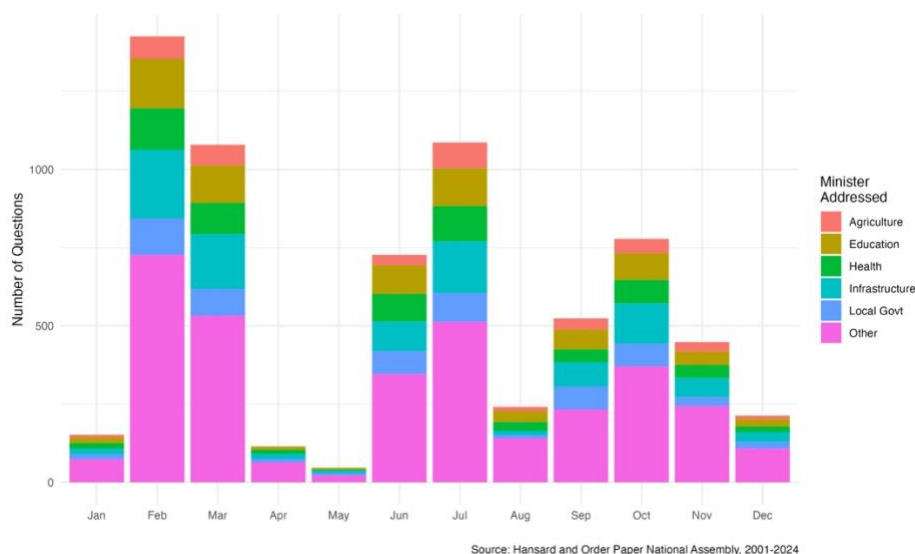
MPs petition most in February and March, when ministers are preparing the list of appraised projects and positions to be brought forward to the ministry. Questions are structured to elicit specific assurances around the progress of particular projects. For example, take this question from February 2013:

> *Mr Mpundu asked the Minister of Mines, Energy and Water Development when the Government would employ the following staff in the Water Affairs Department in Nchelenge District: (a) District Water Engineer; (b Assistant District Water Engineer; (c) secretary; (d)driver; and (e) watchman[1].*

In this case, the minister responded negatively, highlighting the limits on the budget process, stating

> *Recruitment for these positions cannot take place anytime soon since these positions…were not budgeted for…The ministry will, therefore, employ officers to the positions within the establishment once Treasury authority has been granted by the Ministry of Finance.*

MPs also ask questions in June and July, when department heads are preparing their to submit final policy papers to the ministry of finance. MPs are using questions to ensure allocations and releases for preferred projects. For example, this question from June 2017 shows an MP attempting to have a road project in his constituency:

> *Mr Zimba (Chasefu) asked the Minister of Housing and Infrastructure Development:*
> a. *why the tarring of Lundazi/Chama Road had stalled;*
> b. *whether the initial contract had been terminated;*
> c. *if so, who the new contractor was;*
> d. *when the works would resume; and*
> e. *what the time frame for the completion of the project was.[2]*

Along with government assurances, questions also force bureaucratic attention to the issue, especially for projects which were announced but not implemented, such as the question above.

---

[1] Debates, February 28, 2013: https://www.parliament.gov.zm/node/732

[2] Debates, June 28, 2017: https://www.parliament.gov.zm/node/6413

Responses from ministers often include details on schedules and budgets that show that they have researched their response.

Dependent Variable: Question Sector

The main dependent variable is the *sector* of questions asked by MPs. I focus on four sectors: infrastructure, health, education, and agriculture. As described above, infrastructure is the most geographically particular and attributable sector. Education and health are less particular but still attributable, and agriculture is more particular but less attributable. Regardless of sector, most questions are demands for particular projects (clinic construction, classroom upgrades). However, social sector spending is still largely shared, as contracts in the social sector are usually announced and negotiated en masse, such as the construction of 650 health posts in 2017 (), or the recruitment of 30,000 teachers in 2021. By contrast, road projects are typically planned and contracted individually.

To classify sector, I identify the minister to whom MPs address their questions. Martin (2011b) categorizes PQs by minister addressed, but only reports summary statistics for this measure. Wegemann and Evequoz (2019) examine Zambian PQs, but sample only 500 questions from a single year of debates, limiting the ability to draw inferences over time. I collect PQs available on the Zambian National Assembly Website using Hansard Transcripts going back to 2001. Since coverage is uneven, I also use order papers, which also list PQs and have better coverage. Questions are structured in a consistent many which allows for easy identification. I end up with 9362 questions, of which 562 are written and 8794 are oral.

Ministry portfolios shift over time, so I merge categories to create a harmonized list over time. The Ministry of Infrastructural Development is sometimes named Works & Supply, and sometimes includes housing. In other cases, housing is included in the Ministry of Local Government. Since the questions addressed to Local Government are almost always requests for local infrastructure spending, I treat Housing, Local Government, and Infrastructure all as infrastructure spending requests in my models.
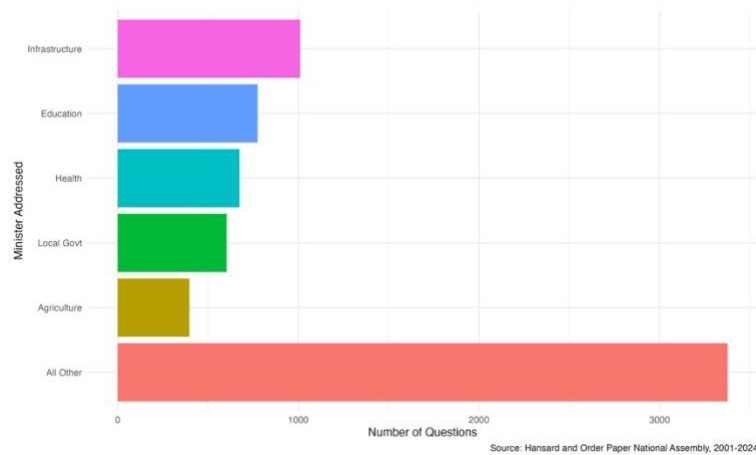
Figure 1: Questions by Minister Addressed

Strength

The mobilizing capacity of an MP is largely unobservable. Therefore, I proxy strength by examining whether an MP was able to emerge victorious in competitive elections. I expect that MPs with tight electoral margins to have increased autonomy. I calculate this margin as the difference between the ruling party vote share and the next highest vote share. This value is negative for members who are not in the ruling party (their vote share being "next highest"). This setup means that I do not have to be symmetric across ruling and non-ruling MPs. Data are from the electoral commission from Zambia, as well as archival research to track the results of 87 by-elections.

Interest Rates

Interest rates vary with global macroeconomic conditions, but African countries pay a special premium to access credit (Olabisi and Stein 2015) and have had varying access to new development partners. Therefore, I assess regional borrowing costs, using the annual average of interest rates on loans to Africa from the African debt database (Mihalyi and Trebesch 2022). I also use a more conventional measure, 10-year US Treasury Bill rates, which I aggregate at the monthly level.

Copper Royalties

Copper revenues are a major earner for the Zambian government. Revenues are quite volatile as mineral prices change on global markets. The tax regime has also been highly unstable, leading to additional uncertainty about revenues. Copper royalties include information on both mineral prices and tax rates. Since they are published in the Ministry of Finance's quarterly economic reviews, I expect that politicians will be aware of them. I operationalize this variable as the average collections in the 6 months before an MP asks a question.
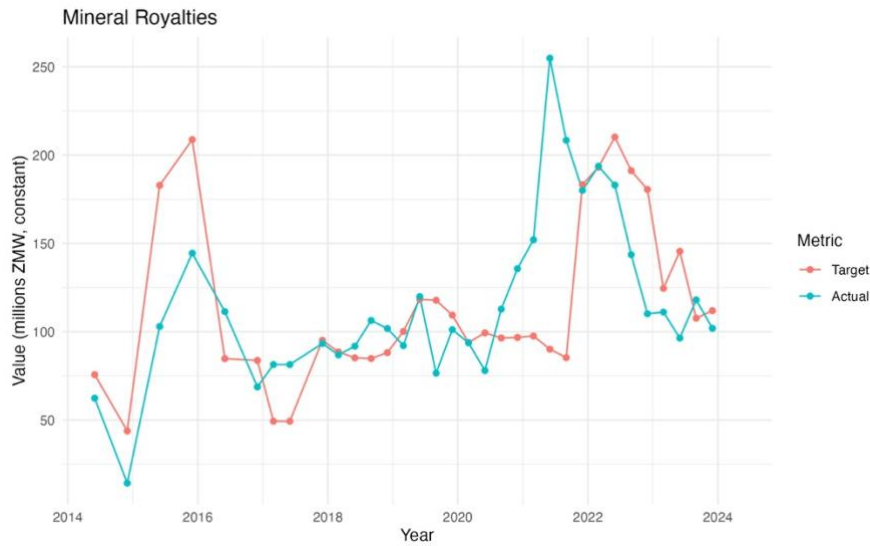
Model

Since the dependent variable is categorical—the minister to which questions are addressed—I model the process using multinomial logit, which estimates the log-odds ratio of each category relative to a base in using a series of equations. For each category *i*, the probability that a question from politician *p* falls into that category in year *j* is modelled as:

$$ln\left(\frac{P\ Category_{ijp}}{P\ Category_{Base\ jp}}\right) = \beta_0 + \beta_1 Margin_p + \beta_2 Interest_j + \beta_3 Lights_j + \epsilon_{ij}$$

Where *margin* is the difference in vote share between the ruling party and the next highest competitor, *interest* is the average borrowing cost in sub-Saharan Africa that year, and *lights* is a control variable for the level of development. Results are estimated using maximum likelihood. A key assumption for multinomial logit is the independence of irrelevant alternatives. Since my theory expects similar results for health and education, I merge these categories, but report similar results with them separated in the appendix.

While the multinomial logit approach is able to provide a simple test of the argument, the model difficult to interpret, and adding an interaction effect would be unwieldy. Moreover, the theory developed above suggests the possibility of nonlinear patterns in the data. Consequently, I turn to random forests, which are useful in modelling nonlinear and interactive relationships (Wager and Athey 2018; Funk, Paul, and Philips 2022; Jordan, Paul, and Philips 2023). Jordan, Paul and Philips (2023) lay out a methodology for integrating machine learning models into inference-focused social science in which researchers specify a parametric model, check robustness with machine learning tools, then use insights from the ML model to update a model that allows more traditional inferential methods. This allows the researcher to take advantage of the flexibility of many ML models without resorting to "dredging" up empirical findings from data.

Since there are fewer concerns with collinearity in random forest approaches, I am able to introduce a wider set of controls, including the province, whether the questioner comes from a urban constituency, and a counter for year. However, since there are many fewer questions addressed to the minister of agriculture, I drop this category and only show results for infrastructure, health, and education. To interpret results, I display partial dependence plots, which show the impact of changing the value of a single explanatory variable[3].

---

[3] This approach shows predicted outcomes for all possible values of one explanatory variable. It fixes the value of an explanatory variable in the existing dataset then calculates the mean outcome using the trained model. The explanatory variable is iterated through its observed range, yielding plausible estimations across the range of the explanatory variable. I bootstrap credible intervals, training 500 additional forests with a resampling of the data and displaying the 95% range (See Cialdella 2020).

Results

Table 3: Multinomial Logit Results

	Model 1		Model 2	
	Infrastructure	Social	Infrastructure	Social
	(1)	(2)	(3)	(4)
ruling_margin	0.491***	0.130	0.749**	-0.335
	(0.190)	(0.192)	(0.367)	(0.371)
africa_interest	-0.786***	-0.353	-0.517*	-0.243
	(0.241)	(0.241)	(0.287)	(0.290)
light_value	0.021*	0.016	0.215***	0.127***
	(0.011)	(0.012)	(0.048)	(0.049)
Constant	2.577***	1.828***	2.154**	1.284
	(0.375)	(0.377)	(0.957)	(0.985)
FEs	N	N	Y	Y
Observations	2354	2354	2354	2354
Akaike Inf. Crit.	4,885.632	4,885.632	4,987.954	4,987.954

Note: Base Category: Agriculture
$* p < 0.1, ** p < 0.05, *** p < 0.01$

Table 3 shows the results of the multinomial logistic regression. The coefficients are relative log-odds ratios, which can be interpreted as the increase in the odds of an observation falling into a particular category relative to the baseline category. Since this is not intuitive, results for both models are presented graphically. I show the predicted likelihood of each sector across values of borrowing costs, holding other variables at their median. Figure 2 shows that when borrowing costs are low, MPs address their questions to the minister of supply or local government, seeking infrastructure spending for the constituencies. However, when rates rise, the

strategy flips and MPs press for allocation social sectors (health, education), and more for agriculture.
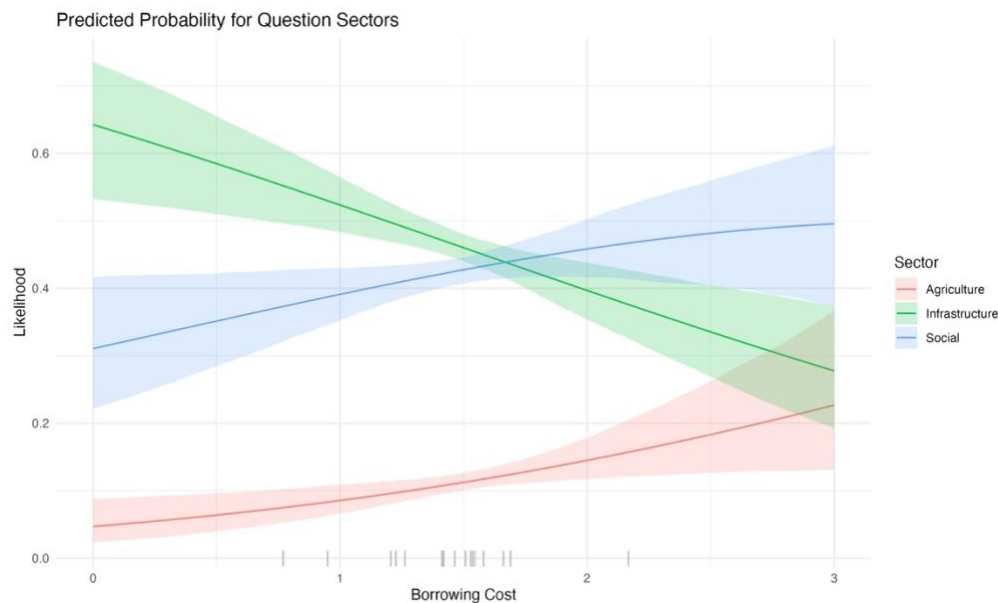

Figure 2: MLogit Likelihoods across Borrowing Cost

Does this vary with MP strength? If we examine the results using the same technique, we see that MPs with higher voting margins are more likely to press for infrastructural spending. However, since the term is entered linearly, we can only learn that MPs from the ruling party are more likely to push for infrastructure and less for social spending. While this conforms to our theory that stronger MPs (ruling) are more likely to ask for these benefits, we cannot identify the impact of close races on spending demands.

Predicted Probability for Question Sectors
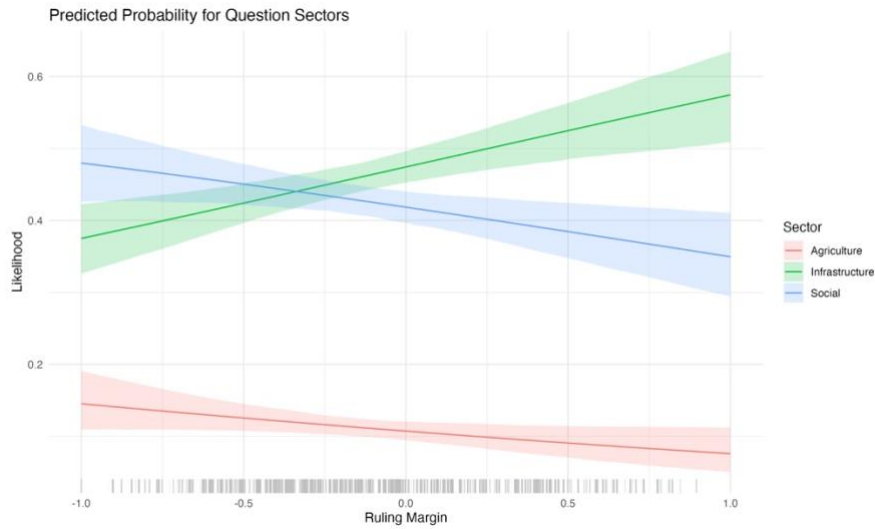
Figure 3: Mlogit Likelihoods across Electoral Margin

Random Forest

The results from the random forest approach largely support theoretical expectations. I first display the variable importance plot, which shows the loss of explanatory power when each variable is converted to random noise. If the error of the model increases significantly when a variable is scrambled, then it is considered to be doing work. My explanatory variables do more work than any of the controls, confirming their explanatory power.
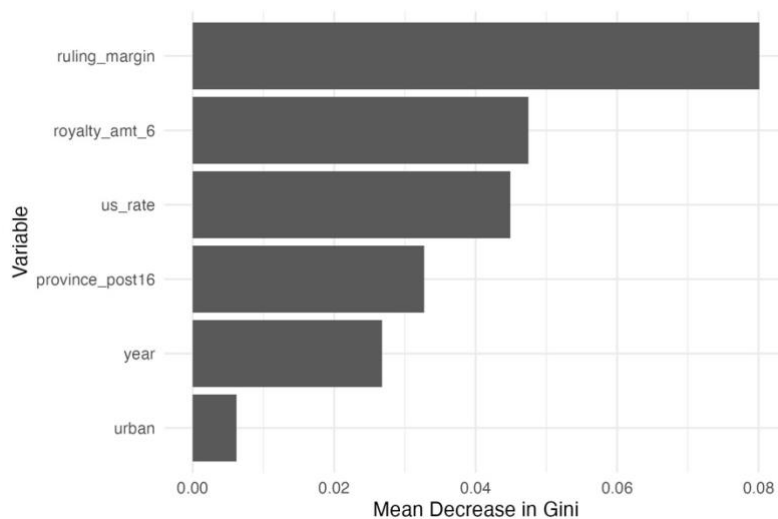
Figure 4: Random Forest Variable Importance

Next I show partial dependence plots, which can be interpreted similarly to the plots above, showing the predicted value of the dependent variable across values of the independent variable. Results support our hypothesis that as interest rates drop, MPs seek infrastructural spending, and when rates rise, they seek shared spending. Education spending is more volatile, which may be due to relatively constant demand for education spending and the longer-term nature of investment.
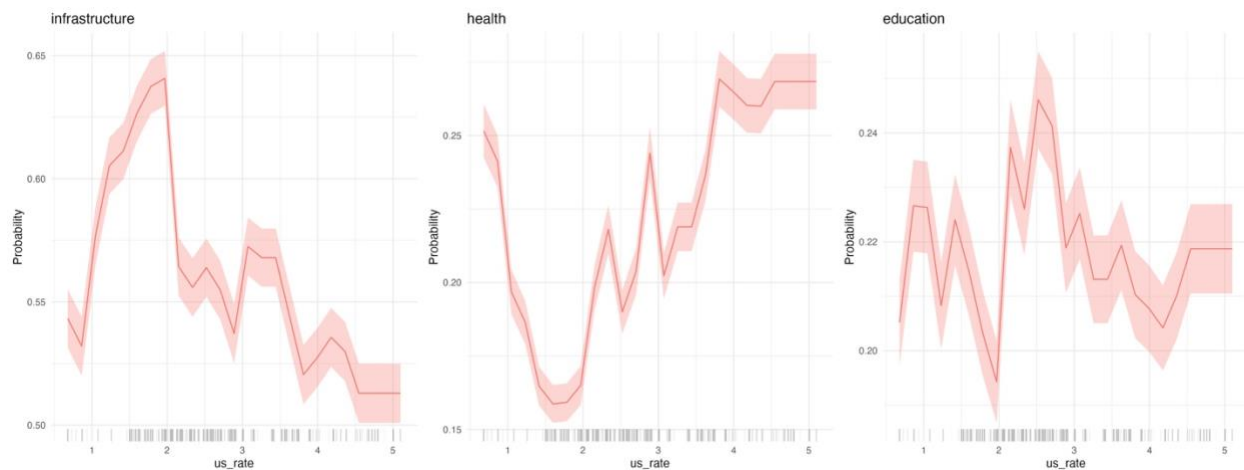
Figure 5: Impact of Changing Global Liquidity on Question Sectors

I expect that MPs from swing districts will have more leverage over the executive, and as a result will make more claims for infrastructure. In the partial dependence plots, this would look like an upside-down U-shape for infrastructure, and U-shape for health and education. The partial dependency plots for ruling margin confirm this: infrastructure questions are more likely to be from swing politicians, while health and education questions come from either end—ruling or opposition stronghold MPs with little leverage over the executive. Consistent with the results of logistic regression, ruling MPs are also more likely to ask for infrastructure.
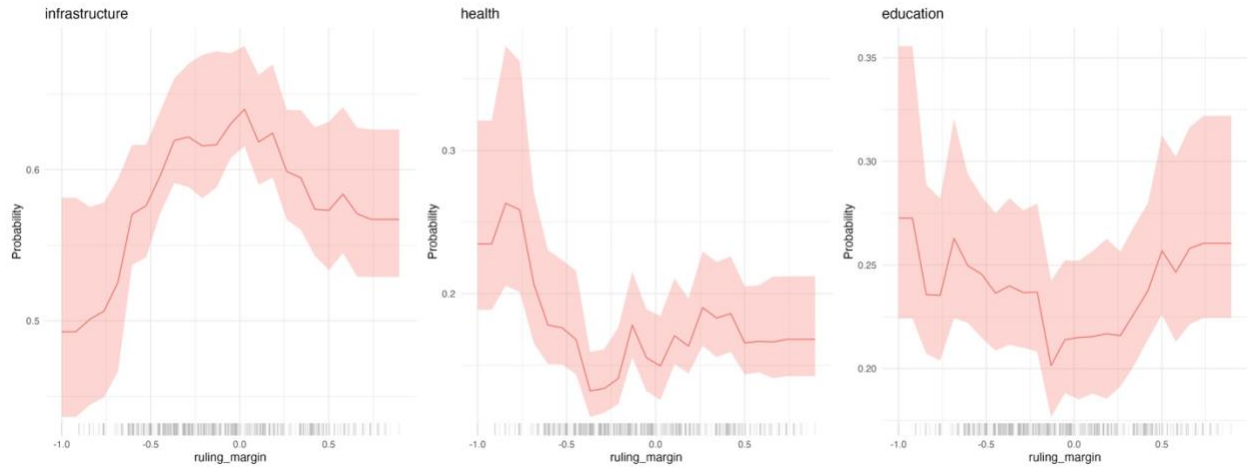
Figure 6: Impact of Changing Electoral Margin on Question Sectors

We can explore how these variables interact by plotting partial dependency plots for multiple values of a moderating variable (Figure 7). The overall patterns are similar to Figure 5, but comparing MPs with a narrow win (10%) and easy win (60%) shows that overall, MPs from competitive constituencies do not decrease their demands for infrastructure when borrowing costs rise as much as their colleagues from safe regions. Similarly, they are less likely to ask for health or education spending. In particular, when interest rates are high, it is only weak MPs who push for education spending.
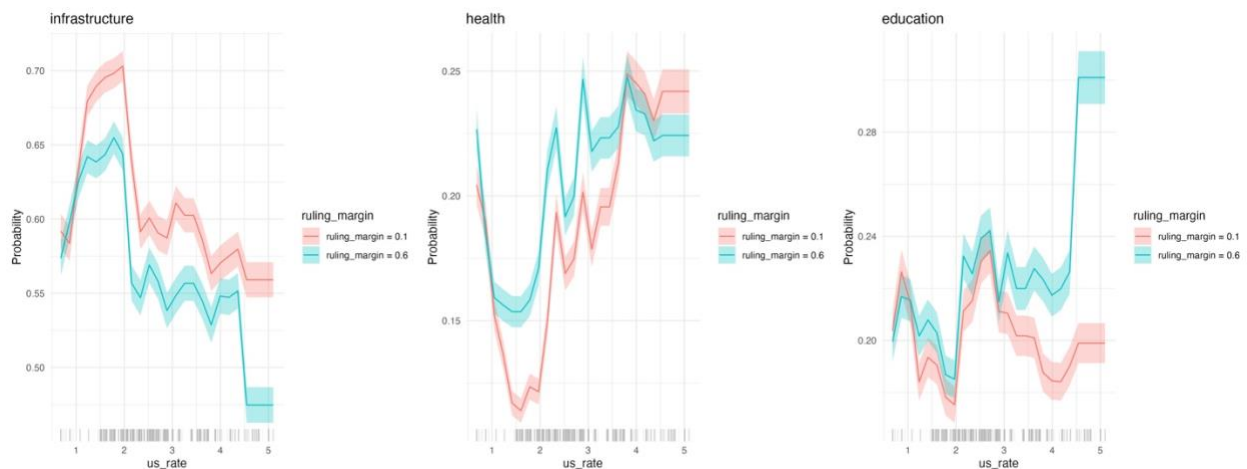

Figure 7: Impact of Changing Global Liquidity on Question Sectors for different MP types

Finally, we can explore the full set of interactions with a two-dimensional partial dependency plot, which shows predicted likelihoods for combinations of independent variables. This kind of visualization can falsely highlight unlikely combinations, but the rug plots on the side suggest that observations occur across the full range of both values. These can be interpreted as a heat map of which politicians are prioritizing which issues. Infrastructure questions come from swing MPs when interest rates are low. Health questions seem to be concentrated among opposition candidates, especially when interest rates are high[4]. Finally, education questions come from ruling MPs, especially when rates are high.
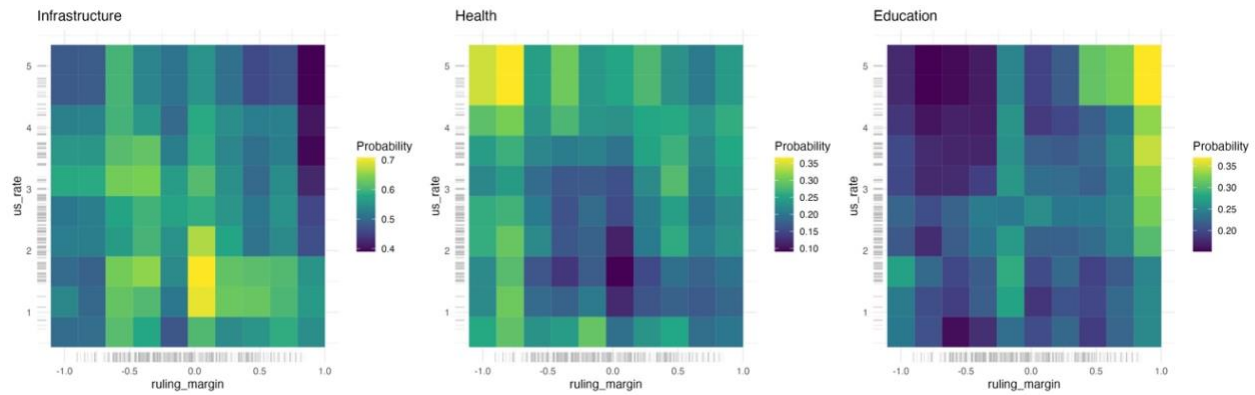

Figure 8: Interactive Effects of Margin and Borrowing Cost on Question Sector

Next, I look at whether speech changes based on the copper royalty amounts reported in the Ministry of Finance's quarterly economic reports. Increased royalties are associated with fewer infrastructure questions and more health questions, especially in the typical range of payments (80-120 million kwacha). This is puzzling, as we expect that increased royalties would be associated with demands for infrastructure projects.

---

[4] This could be due to opposition MPs questioning the ministers pandemic response, rather than asking for health allocations.
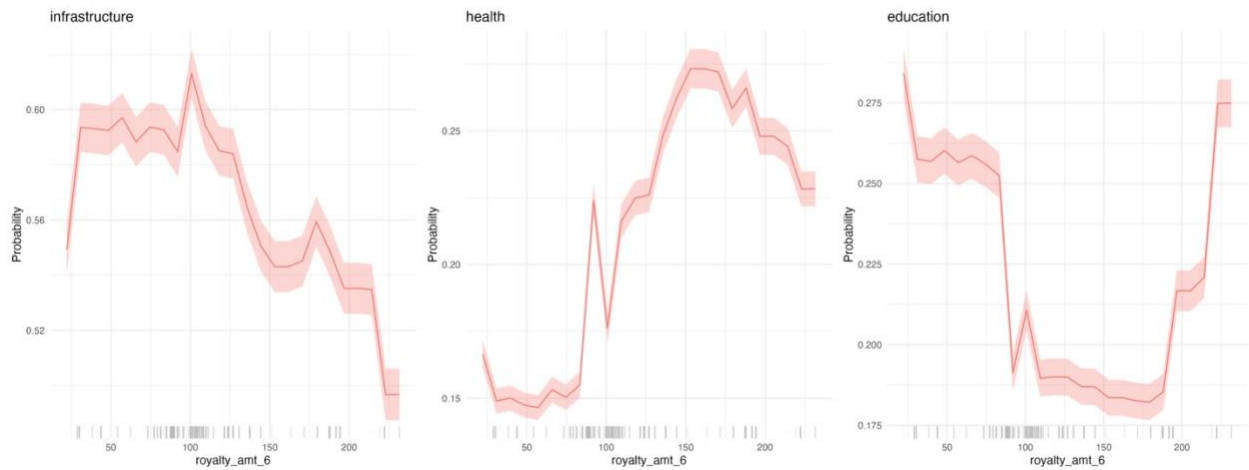
Figure 9: Impact of Changing Royalty Amounts on Question Sector

Finally, we can examine whether this dynamic changes across provinces. While I find little effect on health and education demands, there is distinct variation in infrastructure demands. For most of the period under analysis, Northern province (Green) was a ruling party stronghold. When copper royalties increase, MPs from Northern province made more infrastructure demands. By contrast, MPs from the Copperbelt (Red) made somewhat fewer demands. Southern province (Blue), which was in opposition for most of the period under analysis, made far fewer demands for infrastructure.
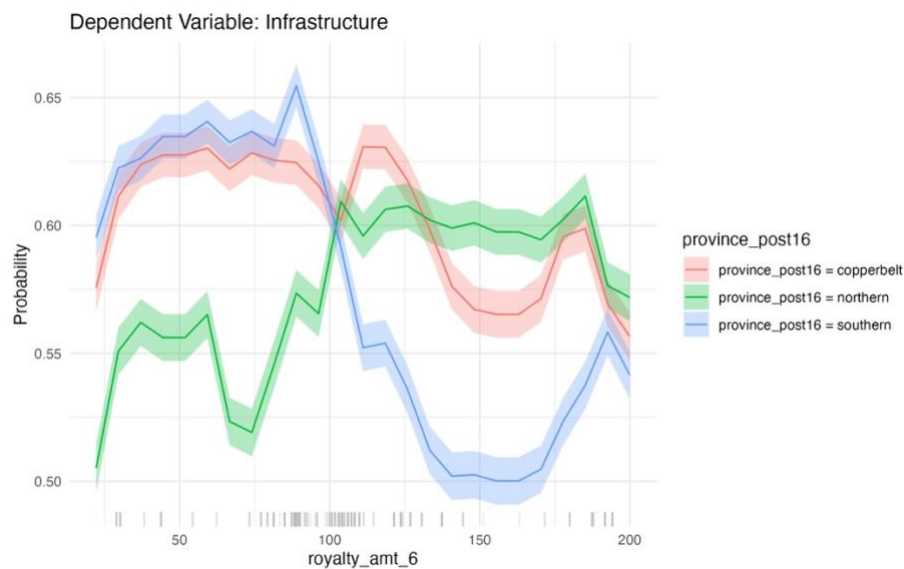

Figure 10: Impact of Changing Copper Royalties on Infrastructure Demands Across Selected Provinces

Discussion

What mechanisms might support these results? Are politicians explicitly aware of the government's fiscal constraint? Interviews with MPs affirmed that questions were a useful tool for both representation and accountability. After raising a PQ, MPs are likely to get a text thanking them for raising the question in parliament. Second, government assurances are not taken as a guarantee, but they do make it more likely that a project will be completed. MPs from a wide variety of constituencies highlighted that their constituency had many needs, including roads, boreholes, schools, and clinics. They also highlighted that in the early 2010s, when the government was borrowing a lot, it was easier to get projects done, but harder when the government doesn't have money. [More to come here].

Conclusion

This paper explored the ways in which Zambian politicians bring public attention to different sectoral issues. Building on a theory of re-election and readoption costs, I showed why MPs can be expected to use parliamentary questions strategically throughout the year to bring bureaucratic and political attention toward issues in their constituencies. Using multinomial logistic regression and random forests, I showed that politician vary their choice of minister to question based on their own electoral position and the government's fiscal situation. Overall, this offers strong support to the theory that politicians shift their focus toward particular, attributable sectors when they are in a strong position and the government has the resources to allocate.

In future iterations, I will examine the government responses to each question as recorded by the government assurances committee. Executive reports typically highlight whether the project was completed, which provides an important window into which MPs are successful in making claims on public resources.

References

Adebanwi, Wale, and Rogers Orock. 2021. *Elites and the Politics of Accountability in Africa*. Ann Arbor, MI: University of Michigan Press. https://doi.org/10.3998/mpub.11628987.

Alexiadou, Despina. 2015. "Ideologues, Partisans, and Loyalists: Cabinet Ministers and Social Welfare Reform in Parliamentary Democracies." *Comparative Political Studies* 48 (8): 1051–86. https://doi.org/10.1177/0010414015574880.

Arriola, Leonardo R, Donghyun Danny Choi, Justine M Davis, Melanie L Phillips, and Lise Rakner. 2022. "Paying to Party: Candidate Resources and Party Switching in New Democracies." *Party Politics* 28 (3): 507–20. https://doi.org/10.1177/1354068821989563.

Bäck, Hanna, Marc Debus, and Jorge M. Fernandes. 2021. "The Politics of Legislative Debates: An Introduction." In *The Politics of Legislative Debates*, by Hanna Bäck, Marc Debus, and Jorge M. Fernandes, 1–20. Oxford University Press. https://doi.org/10.1093/oso/9780198849063.003.0001.

Barkan, Joel D. 2009. *Legislative Power in Emerging African Democracies*. Boulder (Colo.): L. Rienner.

Bleck, Jaimie, and Nicolas Van De Walle. 2013. "Valence Issues in African Elections: Navigating Uncertainty and the Weight of the Past." *Comparative Political Studies* 46 (11): 1394–1421. https://doi.org/10.1177/0010414012453448.

Boone, Catherine. 2024. *Inequality and Political Cleavage in Africa: Regionalism by Design*. Cambridge Studies in Comparative Politics. Cambridge: Cambridge University Press. https://www.cambridge.org/core/books/inequality-and-political-cleavage-in-africa/F224A9681A591EDF6C4FA11199B5A972.

Bowles, Jeremy, and Benjamin Marx. 2023. "Turnover and Accountability in Africa's Parliaments." SSRN. https://doi.org/10.2139/ssrn.4642554.

Briggs, Ryan C. 2021. "Power to Which People? Explaining How Electrification Targets Voters across Party Rotations in Ghana." *World Development* 141 (May):105391. https://doi.org/10.1016/j.worlddev.2021.105391.

Bunte, Jonas B. 2019. "Governments' Borrowing Decisions across the Developing World." In *Raise the Debt*, by Jonas B. Bunte, 1st ed., 180–207. Oxford University PressNew York. https://doi.org/10.1093/oso/9780190866167.003.0009.

Bwalya, Samuel M., Ezekiel Phiri, and Kelvin Mpembamoto. 2011. "How Interest Groups Lobby to Influence Budget Outcomes in Zambia." *Journal of International Development* 23 (3): 420–42. https://doi.org/10.1002/jid.1778.

Cardoso, Fernando Henrique, and Enzo Faletto. 1979. *Dependency and Development in Latin America*. Translated by Marjory Mattingly Urquidi. Berkeley: University of California Press.

Chizonde, Bright, Chimuka Nachibinga, William Nyarko, and Sizala. 2024. "Elections and Money." Transparency International Zambia. https://tizambia.org.zm/wp-content/uploads/2024/12/Elections_and_Money_Study_Report-1.pdf.

Choi, Dong-Hyun. 2018. "Severed Connections: Political Parties and Democratic Responsiveness in Sub-Saharan Africa." Dissertation, UC Berkeley. https://escholarship.org/uc/item/3388n6qr.

Cialdella, Louis. 2020. "Partial Dependence Plots Are a Simple Way to Make Black-Box Models Easy to Understand." Casual Inference. November 27, 2020. https://lmc2179.github.io/posts/pdp.html.

Clayton, Amanda, Cecilia Josefsson, Robert Mattes, and Shaheen Mozaffar. 2019. "In Whose Interest? Gender and Mass–Elite Priority Congruence in Sub-Saharan Africa." *Comparative Political Studies* 52 (1): 69–101. https://doi.org/10.1177/0010414018758767.

Cormier, Ben. 2024. *How Governments Borrow: Partisan Politics, Constrained Institutions, and Sovereign Debt in Emerging Markets*. Oxford, New York: Oxford University Press.

Espírito-Santo, Ana, Edalina Rodrigues Sanches, and Yani Kartalis. 2024. "Gender, Intraparty Competition, and the Substantive Focus of Parliamentary Questions in South Africa." *Politics and Governance* 12 (July):8326. https://doi.org/10.17645/pag.8326.

Franklin, Mark N., and Philip Norton, eds. 1993. *Parliamentary Questions*. Clarendon Press.

Frantzeskakis, Nikolaos. 2023. "Speaking of Home: Local Representation and Reelection in Africa." Michigan State University. https://d.lib.msu.edu/etd/51304.

Frantzeskakis, Nikolaos, and Henrik Bech Seeberg. 2023. "The Legislative Agenda in 13 African Countries: A Comprehensive Database." *Legislative Studies Quarterly* 48 (3): 623–55. https://doi.org/10.1111/lsq.12404.

Frantzeskakis, Nikolaos, Michael Wahman, and T. Murat Yildirim. 2021. "Malawi: Parliamentary Debate under Executive Dominance." In *The Politics of Legislative Debates*, by Nikolaos Frantzeskakis, Michael Wahman, and T. Murat Yildirim, 553–71. Oxford University Press. https://doi.org/10.1093/oso/9780198849063.003.0027.

Funk, Kendall D., Hannah L. Paul, and Andrew Q. Philips. 2022. "Point Break: Using Machine Learning to Uncover a Critical Mass in Women's Representation." *Political Science Research and Methods* 10 (2): 372–90. https://doi.org/10.1017/psrm.2021.51.

Getachew, Adom. 2019. *Worldmaking after Empire: The Rise and Fall of Self-Determination*. Princeton University Press. https://doi.org/10.1515/9780691184340.

Harding, Robin. 2015. "Attribution And Accountability: Voting for Roads in Ghana." *World Politics* 67 (4): 656–89. https://doi.org/10.1017/S0043887115000209.

Hern, Erin Accampo. 2019. *Developing States, Shaping Citizenship: Service Delivery and Political Participation in Zambia*. African Perspectives. Ann Arbor: University of Michigan Press.

Jordan, Soren, Hannah L. Paul, and Andrew Q. Philips. 2023. "How to Cautiously Uncover the 'Black Box' of Machine Learning Models for Legislative Scholars." *Legislative Studies Quarterly* 48 (1): 165–202. https://doi.org/10.1111/lsq.12378.

Khan, Mushtaq. 2017. "Political Settlements and the Analysis of Institutions." *African Affairs* 117:636–55. https://doi.org/10.1093/afraf/adx044.

Kim, Eun Kyung. 2017. "Party Strategy in Multidimensional Competition in Africa: The Example of Zambia." *Comparative Politics* 50 (1): 21–39.

Kramon, Eric. 2016. "Electoral Handouts as Information: Explaining Unmonitored Vote Buying." *World Politics* 68 (3): 454–98. https://doi.org/10.1017/S0043887115000453.

Laver, Michael. 2021. "Analyzing the Politics of Legislative Debate." In *The Politics of Legislative Debates*, by Michael Laver, 21–33. Oxford University Press. https://doi.org/10.1093/oso/9780198849063.003.0002.

Lijphart, Arend. 1994. "Democracies: Forms, Performance, and Constitutional Engineering." *European Journal of Political Research* 25 (1): 1–17. https://doi.org/10.1111/j.1475-6765.1994.tb01198.x.

Lupu, Noam, and Rachel Beatty Riedl. 2013. "Political Parties and Uncertainty in Developing Democracies." *Comparative Political Studies* 46 (11): 1339–65. https://doi.org/10.1177/0010414012453445.

Martin, Shane. 2011a. "Parliamentary Questions, the Behaviour of Legislators, and the Function of Legislatures: An Introduction." *The Journal of Legislative Studies* 17 (3): 259–70. https://doi.org/10.1080/13572334.2011.595120.

———. 2011b. "Using Parliamentary Questions to Measure Constituency Focus: An Application to the Irish Case." *Political Studies* 59 (2): 472–88. https://doi.org/10.1111/j.1467-9248.2011.00885.x.

Mihalyi, David, and Christoph Trebesch. 2022. "Who Lends to Africa and How? Introducing the Africa Debt Database." *Kiel Working Papers* 2217 (December). https://www.ifw-kiel.de/publications/kiel-working-papers/2022/who-lends-to-africa-and-how-introducing-the-africa-debt-database-17146/.

Mkandawire, Thandika. 2015. "Neopatrimonialism and the Political Economy of Economic Performance in Africa: Critical Reflections." *World Politics* 67 (3): 563–612. https://doi.org/10.1017/S004388711500009X.

———. 2016. "Colonial Legacies and Social Welfare Regimes in Africa: An Empirical Exercise." Working paper 4. Geneva: United Nations Research Institute for Social Development (UNRISD).

Momba, Jotham. 2007. "The Impact of Floor Crossing on Party Systems and Representative Democracy." In *The Impact of Floor Crossing on Party Systems and Representative Democracy*, 61–70. 19. Cape Town, South Africa: Konrad-Adenaur-Stiftung.

Motolinia, Lucia. 2021. "Electoral Accountability and Particularistic Legislation: Evidence from an Electoral Reform in Mexico." *American Political Science Review* 115 (1): 97–113. https://doi.org/10.1017/S0003055420000672.

National Assembly of Zambia. 2017. *National Assembly Public Financial Management Handbook*. Lusaka. https://www.parliament.gov.zm/sites/default/files/publications/Tenth_version_of_National_Assembly_Public_Financial_Management_Handbook.pdf.

Olabisi, Michael, and Howard Stein. 2015. "Sovereign Bond Issues: Do African Countries Pay More to Borrow?☆." *Journal of African Trade* 2 (1–2): 87. https://doi.org/10.1016/j.joat.2015.08.003.

Opalo, Ken Ochieng'. 2019. *Legislative Development in Africa: Politics and Postcolonial Legacies*. Cambridge University Press.

———. 2022. "Formalizing Clientelism in Kenya: From Harambee to the Constituency Development Fund." *World Development* 152 (April):105794. https://doi.org/10.1016/j.worlddev.2021.105794.

Proksch, Sven-Oliver, and Jonathan B. Slapin. 2012. "Institutional Foundations of Legislative Speech." *American Journal of Political Science* 56 (3): 520–37. https://doi.org/10.1111/j.1540-5907.2011.00565.x.

Riedl, Rachel Beatty. 2016. "Strong Parties, Weak Parties: Divergent Pathways to Democracy in Sub-Saharan Africa." In *Parties, Movements, and Democracy in the Developing World*, edited by Deborah J. Yashar and Nancy Bermeo, 122–56. Cambridge Studies in Contentious Politics. Cambridge: Cambridge University Press. https://doi.org/10.1017/9781316661581.005.

Riedl, Rachel Beatty, and J. Tyler Dickovick. 2014. "Party Systems and Decentralization in Africa." *Studies in Comparative International Development* 49 (3): 321–42. https://doi.org/10.1007/s12116-013-9144-9.

Sartori, Giovanni. 1976. "Parties and Party Systems: A Framework for Analysis." In *How Parties Organize: Change and Adaptation in Western Democracies*, edited by Richard Katz and Peter Mair, 71–106. London: Cambridge University Press.

Sishuwa, Sishuwa. 2024. *Party Politics and Populism in Zambia: Michael Sata and Political Change, 1955-2014*. Woodbridge, Suffolk ; Rochester, NY: James Currey.

Wager, Stefan, and Susan Athey. 2018. "Estimation and Inference of Heterogeneous Treatment Effects Using Random Forests." *Journal of the American Statistical Association* 113 (523): 1228–42.

Wegmann, Simone, and Aurélien Evequoz. 2019. "Legislative Functions in Newly Democratised Countries: The Use of Parliamentary Questions in Kenya and Zambia." *The Journal of Legislative Studies* 25 (4): 443–65. https://doi.org/10.1080/13572334.2019.1697057.

Wibbels, Erik. 2006. "Dependency Revisited: International Markets, Business Cycles, and Social Spending in the Developing World." *International Organization* 60 (2): 433–68. https://doi.org/10.1017/S0020818306060139.

York, Erin. 2024. "Constituency Service and Electoral Accountability in Autocratic Legislatures." *Comparative Political Studies*, August, 00104140241271251. https://doi.org/10.1177/00104140241271251.

Appendix