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Abstract:

Are public grant allocations biased toward the birth districts of governors, and if so, what explains this favoritism? The allocation of budget authority to local government officials is a common trend around the developing world but is often criticized for transferring favoritism from the center to lower government levels. To limit the risk of such grant manipulations in fiscally decentralized countries, it is crucial to analyze the influence of such informal ties at the subnational level. Using a unique panel data set of 410 Indonesian districts for the period 2005–2013, I exploit the discretionary nature of a government grant and a large amount of asynchronous local direct elections to investigate if the origin of the provincial governor determines fund allocations to the district level. I show that birth districts of incumbent governors receive significantly larger shares of discretionary grants compared with the other districts within a province. Local favoritism is driven by governors with a political history in the mayor's office of their birth district and limited by local electoral accountability. Classical pork-barrel politics, however, as reelection motives or formal political party ties to the district administration, do not explain local favoritism. The allocations of formula-based transfers, which limit the discretionary power of a governor, are not affected by local favoritism. These results illustrate the importance of non-discretionary institutional grant design and local democratization reforms in the context of Indonesia's political system. The country is a young democracy characterized by low ideological cleavages, little party loyalty, and the prevalence of money politics in its highly decentralized fiscal system. These features are not unique to Indonesia and characterize a number of developing countries; however, and they are in sharp contrast to established democracies for which subnational favoritism has been analyzed.

Keywords: *Fiscal Decentralization, Subnational Favoritism, Discretionary Grants, Local Elections, Indonesia*.

1. Introduction

This paper analyzes if provincial governors in Indonesia favor their birth districts in the allocation of discretionary subnational development grants. Starting in 1999, Indonesia, a young democracy and the third-largest democracy in the world, implemented large-scale fiscal decentralization reform to improve its public service delivery at the local level. These fiscal decentralization reforms have improved local public service delivery (Schulze & Sjahrir, 2014). There remain severe challenges to Indonesia's transfer system, however, such as the low quality of local spending (Sjahrir, Kis-Katos, & Schulze, 2014; World Bank, 2017a), or clientelistic practices, and elite capture (Aspinall & Berenschot, 2019; Berenschot & Mulder, 2019), which hamper further local development (World Bank, 2017b, Berenschot & Mulder, 2019). The analysis of these informal dimensions in subnational public fund allocation is crucial and helps improve the effectiveness of Indonesia's intergovernmental transfer system and ultimately, the local public service delivery to Indonesia's 264 million inhabitants.

I conduct the first large-scale empirical analysis on Indonesia that investigates birth-town favoritism, a very prominent type of informal public grant manipulation. In this context, birth-town favoritism is defined as the preferential treatment of the birth districts of local government officials in the allocation of subnational public funds. I investigate if this birth-town favoritism exists, if it is reduced by local electoral accountability and if the local political career history of a governor in a district influences favoritism. In addition to analyzing the influence of these informal ties of a governor to a district, I also test for a variety of other competing motives that explain subnational fund allocations, such as formal political party ties to a local mayor's office.

Indonesia is a particularly interesting candidate for analyzing regional favoritism at the subnational level. Its political arena is often described as highly clientelistic (Mietzner, 2013), (Aspinall & Sukmajati, 2016; Aspinall & Berenschot, 2019; Berenschot & Mulder, 2019), and political patronage is prevalent (Mietzner, 2013; Aspinall & Sukmajati, 2016). Additionally, the country implemented large-scale (fiscal) decentralization and democratization reforms to improve its public service delivery quality. These fiscal decentralization reforms have been observed to have shifted informal deal-making downward to lower government levels (Hadiz, 2010), where local politicians face intensive electoral competition and campaign costs to win the local direct elections (Mietzner, 2018). The political system at the local level has no strong ideological cleavages, political party platforms are often difficult to distinguish (Mujani & Liddle, 2010), and informal ties are often more important for political candidates than formal political party ties (Buehler & Tan, 2007). As Aspinall and Berenschot (2019, p. 31) report: "clientelism occurs mostly through informal networks rather than through parties." Although these features are common in subnational politics, in particular among young democracies, where such informal practices are often (still) far more prevalent (Keefer, 2007), my study is the first to analyze the influence of this type of favoritism at the local level in a highly decentralized, young democratic system of an emerging economy.

This lack of empirical evidence is surprising, in particular as Indonesia is still characterized by vast differences in local development levels and various researchers have shown the significant effects of birth-town favoritism on local development[1].

[1] Baskaran & Lopes de Fonseca (2017) illustrate that the home municipalities of federal ministers in Germany have higher employment growth compared with other municipalities. Do, Nguyen, & Tran (2017) show for Vietnam that the promotion of local officials leads to an improvement in their hometowns' infrastructure. Hodler & Raschky (2014) show for a worldwide sample of countries that the birth regions of national political leaders develop more rapidly during their tenure.

One of the most prominent channels for government officials to favor their birth region are public fund allocations[2]. Hence, the analysis of these type of fund manipulation is relevant for the local development of fiscally decentralized countries, which transfer spending authority to different levels of the subnational government. Although local officials in decentralized countries have a substantial influence on the development in these countries (Faguet, 2014; Weingast, 2014), most studies on favoritism have only focused on the central-government level (e.g., hometowns of central parliamentarians or presidents). Only one study analyzes favoritism in the allocation of grants by subnational government representatives. Fiva & Halse (2016) show, local politicians in Norway direct more public funds to their birth towns if the local government is from the political party in power. In an established democracy such as Norway political party affiliations and ideological attachments to political parties are likely to influence subnational policymaking. In a young democracy as Indonesia, however, political party ties are less important.

In Indonesia, political parties are often only used as a vehicle for a nomination (Ufen, 2008). Informal ties based on a governor‘s origin are, therefore, potentially a far more relevant factor than formal political party ties (Buehler & Tan, 2007). This relatively low importance of formal political ties increases the necessity to analyze other, more informal dimensions of subnational ties between local government officials in a country such as Indonesia, a context very different from countries with an established democracy as Norway. I contribute to closing this gap in the literature by providing the first within-country analysis on subnational favoritism by local government officials in a young democracy and a country that is strongly (fiscally) decentralized.

[2] Empirical evidence shows that aid money is diverted to birth regions of national political leaders (Dreher, Fuchs, Hodler, Parks, Raschky, & Tierney (2019)), that European Union (EU) budget allocation favors the country of origin of EU commissioners (Gehring & Schneider (2018), and that birth towns of the members of the national parliament in Italy receive larger per capita transfers from the center (Carozzi & Repetto (2016)).

Indonesia's decentralized fiscal system allows me to exploit the discretionary nature of a particular subnational funding mechanism at the local government level, the '*Dana Dekonsentrasi' (Dekon, DK)* grant. Under this scheme, provincial governors receive grants from the central government to support public service delivery at the lower district level. *DK* grants are the largest source of discretionary funds allocated from the provincial to the district level; from 2005 to 2013, they accounted for approximately USD 15.5 billion allocated to the district level or, on average, approximately 5 percent of a district's revenue.

Using a Tobit model on an unbalanced panel data set that includes 410 districts for the period 2005–2013, I investigate whether governors allocate more grants to their birth district. Additionally, I assess potential explanations for this birth district favoritism namely the reelection interest of the governor, a lack of local electoral accountability, and the influence of ties based on the governor's former political career in a district. I also test a variety of other competing motives that may influence subnational grant allocations, for example, the formal political party alignment between a district head and a provincial governor. To achieve this objective, I exploit many direct local elections for different subnational government offices. These local elections, which were gradually introduced starting in 2005, are asynchronous to the national elections and induce a large variety of changes in personal and political ties between different subnational government levels across Indonesia.

This paper is the first to empirically test for subnational favoritism in public grant allocations by local government officials in Indonesia. This is surprising given the various anecdotic evidence indicating that personal motives of subnational government officials in Indonesia influence the distribution of public funds (Aspinall & Sukmajati, 2016; Aspinall & Berenschot, 2019). However, the literature has exclusively focused on Indonesia's formula-based transfers,

which disallow decisions at the discretion of local officeholders (inter alia (Brodjonegoro & Martinez-Vazquez, 2005). Other researchers have focused on strictly political–economic motivations of the central government in the allocation of central discretionary grants (Gonschorek, Schulze, & Sjahrir, 2018) or the variation and consequences of political clientelism across Indonesia (Berenschot & Mulder, 2019). This analysis the first to examine local favoritism in subnational fund allocations in Indonesia, a phenomenon that differs from political clientelism. Favoritism is not defined as the distribution of benefits in exchange for political support but is the practice of preferential treatment toward a region based on other, personal motives.

The main results show that the birth districts of governors receive significantly larger shares of discretionary development grants than other districts within the province. This subnational birth district favoritism is not explained by reelection motives of the provincial governor and limited by the local electoral accountability due to competitive local direct elections. The results also indicate that the political history of governor's in the local mayor's office of their birth district is a driver of favoritism. Comparing discretionary and formula-based subnational grant allocation schemes (for the same set of governors and years) I also show that no preferential treatment of a governor's birth region is observed if the discretionary scope of the provincial governors is reduced. These results clearly illustrate the importance of local electoral accountability and institutional grant design to limit subnational fund manipulation in a decentralized fiscal system.

The remainder of this paper proceeds as follows. Section 2 provides a brief background on Indonesia's local government officials and the fiscal structure relevant to the analysis. Section

3 discusses theoretical arguments for the determinants of subnational government transfers in a decentralized system, relates them to the Indonesian context, and presents four testable hypotheses. Section 4 describes the data, the empirical approach, the results, and the robustness checks. Section 5 concludes.

2. Institutional Background

2.1 Local Elections

In Indonesia, provincial governors, district mayors (*walikotas*), and regents (*bupatis*) have been directly elected by popular vote since 2005 (Law No. 32/2004)[3]. These district mayor and provincial governor elections occur on different dates[4] that are independent from the timing of the national executive and legislative election and held asynchronously after the five-year term of a local official ends, which is a legacy from the Suharto era.[5] This asynchronous nature of the local elections allows me to exploit changes to the personal and political ties between different subnational levels of government on discretionary transfer allocations.

2.2 Fiscal Transfers

Indonesia has three major levels of government—central, provincial, district—relevant for my analysis. The central government is responsible for law enforcement, the judiciary, monetary and macroeconomic policies, religious affairs, foreign relations, security policy, and defense. The subnational governments are responsible for all remaining functions, especially for

[3] Before 2005 governors were appointed, and they were later indirectly elected by the local provincial legislative.

[4] Since 2015, local elections of mayors and governors are held in a synchronized manner, on the same day, but not within our observation period.

[5] Before 1998, local government officials were appointed at different points in time. After Suharto's demise in 1998, the incumbent local government officials were allowed to serve out their terms; then, in the following years, they were appointed, and later, they were elected by the local legislative at the time of their term end. Hence, with the implementation of the local direct elections in 2005, not all districts started to elect their heads through direct popular elections, but at different points in time.

decentralized public service provision in the education, health, and infrastructure sector. To provide these public services, districts[6] receive the majority of their revenue through transfers from the center (Lewis, 2014). In 2016, central-government transfers accounted for more than 80 percent of district and approximately 40 percent of provincial revenue (Gonschorek & Schulze, 2018). Province governments have limited responsibilities compared with district governments; they are mostly responsible for supervision and the management of cross-district cooperation.

Indonesia's major inter-government transfers (Dana Alokasi Umum [DAU], Dana Bagi Hasil [DBH], Dana Alokasi Khusus [DAK]) are non-discretionary; they are determined by tax revenue generated at the subnational level, by specific criteria, or by a formula.[7] The general allocation grant, DAU, is a non-earmarked, formula-based general purpose grant and the most crucial source of subnational government revenue (Gonschorek & Schulze, 2018). The DAU formula considers the fiscal capacity and fiscal needs of a district (for details see Gonschorek & Schulze, 2018). The specific allocation grant, DAK, is earmarked for national priorities. Its allocation is determined by general criteria (e.g., financial capacity of a subnational government), technical criteria (e.g., guidelines established by the responsible line ministry), and special criteria (e.g., specific characteristics of a region). The DBH is Indonesia's tax and natural resource revenue-sharing system and is allocated according to a formula (Agustina, Fengler, & Schulze, 2012). The amount of DBH is based on revenues generated by natural resources, personal income tax, and property tax at the subnational government level.

[6] *Kabupaten* (Municipality) and *Kota* (City).

[7] Law No. 33/2004 on fiscal decentralization, Law No. 32/2004 on subnational governance, and Law No. 25/1999 on fiscal balance between central government and regions. There are also Special Autonomy Funds (for Aceh and Papua) based on Law No. 35/2008, Law No. 11/2006, and Law No. 21/2001, Adjustment Funds for financial ad hoc assistance, a special incentive grant (DID), Hibah-transfers for assistance in the infrastructure sector and village funds (*Dana Desa*).

Compared with these non-discretionary transfers, DK (Deconcentration Funds) is a discretionary central-government grant under the authority of the central government[8] but is co-administered by the provincial governors and spent at the district level[9]. DK grants are the largest source of discretionary funds allocated from the provincial to the district level in Indonesia. From 2005 to 2013, they accounted for approximately USD 15.5 billion allocated to the district level and on average approximately 5 percent of a district's revenue. These funds are supposed to be spend for tasks of a non-physical nature (Government Regulation 7/2008), for example, awareness-raising campaigns for health concerns, not for visible infrastructure.

By law, DK grants should be allocated in accordance to general principals, namely a "harmonious national and regional development" (Government Regulation 7/2008); however, a specific allocation criteria has not been defined by the government. Provincial governors can therefore allocate them in a discretionary manner. DK grants are likely to be an even more crucial avenue to influence subnational public funding allocations for provincial governors because governors generally have limited budget allocation authority, compared with mayors and village heads (Aspinall & Berenschot, 2019).

Descriptive statistics suggest that the birth districts of governors receive beneficial treatment in the distribution of subnational discretionary government grants. They receive on average more than four and a half times the amount of DK grants per capita than the other districts (Table 1a). Birth districts of provincial governors receive an average share of 21.33 percent of all *DK* grants allocated within a province, compared with approximately 4.05 percent for the non-birth districts (Table 1b).

[8] Since 2001, the line ministries of the central government not responsible for the five "core" responsibilities defense, justice, foreign affairs, fiscal/monetary policy, and religion must delegate the implementation of their tasks to subnational governments, these local governments act as representatives of the central government (Government Regulation No. 52/2001, Government Regulation No. 7/2008, and Government Regulation No.106/2000.)

[9] Government Regulation 7/2008 Article 6 paragraph 2.

Table 1a

Average DK Per Capita (in IDR), 2005–2013					
	count	mean	sd	min	max
Non-Birth District	3300	35718	203597	0	3197243
Birth District	225	163262	432183	0	3161265
Total	*3525*	*43860*	*227266*	*0*	*3197243*
N	3525				

Source: author's calculation

Table 1b

Share of DK (in %), 2005–2013					
	count	mean	sd	min	max
Non-Birth District	3300	4.05	18.45	0.00	100.00
Birth District	225	21.33	39.41	0.00	100.00
Total	*3525*	*5.15*	*20.86*	*0.00*	*100.00*
N	3525				

Source: author's calculation

3. Theoretical Considerations

In theory, various factors could explain these allocation differences between districts. From an efficiency perspective, the grants allocated from the provincial government to the districts are instruments that allow minimizing the costs of decentralization in terms of adverse external effects or fiscal inequity while benefitting from the advantages of decentralization (Boadway, 2007). Theoretically, decentralization is beneficial for local governance and public service delivery at the local level because the knowledge of local preferences allows for better preference matching of a geographically heterogeneous population. Local governments have informational advantages over upper levels of government, and the participation of the local constituency is higher because their actions are more transparent to the local electorate (Oates, 1972). Decentralization is also a laboratory for policy solutions (Hayek, 1954) and can promote competition between local governments, which increases their performances (Besely & Case, 1995). Mobile individuals in a decentralized system can theoretically move to

local jurisdictions that offer the best mix of public services and taxes (Tiebout, 1956). This mobility, however, also creates negative externalities; it can, for example, bias public expenditure composition (Keen & Marchand, 1997) or lead to the erosion of local tax bases (Wilson, 1999) if local governments do not consider the effects of their policies on other local jurisdictions.

Oates (1999) argues that government transfers have the normative objectives of fiscal equalization and the internalization of spillovers of local public services to ensure national public service standards (see also Boadway, 2007). As a consequence, subnational grants in Indonesia should also, theoretically, account for differences in fiscal capacity and different development levels between districts. Indeed, Government Regulation 7/2008 on Deconcentration and Co-Administration Funds stipulates that the financial capacity of a district and its overall development level should determine DK grant allocations.

I control for these normative determinants using data on the local revenue of Indonesian districts from non-discretionary sources (e.g., own source revenue, formula-based transfers) and data on the socioeconomic development of the districts (based on a district's gross domestic product [GDP] per capita, share of poor people). Based on this data, I calculate a relative measure for fiscal capacity of a district and its relative socioeconomic development compared with the other districts of the province because. These criteria should have a significant influence on DK grant allocations within a province (section 4).

Compared with this normative explanation, transfers could also be influenced by reelection motives. Theoretically, subnational transfers could be regarded as a means to persuade voters to vote for the provincial incumbent (governor). This political–economic perspective considers transfers as governed by tactical and strategic considerations of government officials, who

decide on the allocation of transfers to maximize votes, called “political capital” (Grossman, 1994). Democratically elected politicians attempt to maximize the number of votes by diverting transfers to politically important regions (Cox & McCubbins, 1986; Lindbeck & Weibull, 1987). The electorate votes for the candidate who provides them the highest utility, which is a combination of the voter’s ideological preference and the voter’s consumption level compared with another respective political candidate (Dixit & Londregan, 1996).

Transfers increase the voter’s utility and hence may increase an incumbent’s voter share. In the literature, however, there are two competing theories regarding the groups an incumbent may cater to: swing voters (Lindbeck & Weibull, 1987) or core constituencies (Cox & McCubbins, 1986). Both theories focus on different aspects of the political investment process made by incumbents.

The core voter hypothesis argues that the electoral responsiveness of voters to transfers is only partly known, making them a risky political investment. Risk-averse incumbents will therefore channel their resources predominantly to their core voters, whose responsiveness to this political investment is better known (Cox & McCubbins, 1986). Moreover, the preferences of core voters are better known and can therefore be targeted more effectively (Dixit & Londregan, 1996). The swing voter hypothesis argues that incumbents focus on voters with only weak ideological preferences for the different candidates because focusing on voters who are easy to persuade by this political investment will have higher returns. Groups with strong preferences in favor or against the incumbent either need not or cannot easily be persuaded. Therefore, the incumbent will focus on groups with weak party preferences, i.e., the swing voters (Lindbeck & Weibull, 1987). Applied to the Indonesian context, characterized by low ideological differences between parties, voters’ low party loyalty, the importance of money politics, and governors being elected by popular vote at the district level (section 2),

the swing voter theory implies that transfers are targeted at districts that did not vote in large numbers for the incumbent but can be persuaded to do so through the allocation of funds.

Various examples of anecdotal evidence have illustrated that political considerations influence the distribution of public funds in Indonesia (Aspinall & Sukmajati, 2016; Aspinall & Berenschot, 2019). Gonschorek, Schulze, & Sjahrir (2018) also show that central discretionary grants (TP, *tugas pembantuan*), which are directly allocated from the central government to the district level, are significantly influenced by such political considerations of the central government. They demonstrate that the central government allocates significantly more discretionary grants to districts with a low voter support in the past presidential election. Subnational transfers could also be influenced by other, more informal ties, such as the birth district of a provincial governor. Additionally, such birth district favoritism often cannot be explained by the reelection considerations. Gonschorek, Schulze, & Sjahrir (2018) show for Indonesia that the birth district of the president receives significantly larger central discretionary grants even when the president cannot be reelected. Their result provides an indication that reelection interests in Indonesia might not explain birth district favoritism. This conclusion would also be in line with empirical evidence from other countries[10].

Thus, I formulate the first two hypotheses:

Hypothesis 1 ("Birth Districts Favoritism"):

Discretionary grants are biased in favor of the birth districts of provincial governors.

Hypothesis 2 *("*Investment in Votes*"):*

The birth district bias is not driven by reelection interests (investment in votes) of the provincial governor.

[10] In Italy, birth towns of national parliament members receive significantly larger per capita transfers from the center, even if they are not part of a parliamentarian's electoral district (Carozzi & Repetto (2016)). For Norway, Fiva & Halse (2016) find a hometown bias in investment funding by regional council members if they represent the political party in power, even if they have no electoral incentive.

The existence of birth district favoritism and whether its drivers are reelection motives, however, remain empirical questions for Indonesia. In Gonschorek, Schulze, & Sjahrir (2018) the birth district of the president was a single outlier they had to control for (same president, one birth district); hence, their analysis could not provide empirical proof of birth-town favoritism and if it is explained by reelection interests.

This paper can now answer both questions; the analysis of the subnational level allows me to use a variety of birth districts of the different provincial governors, and the governors' involvement in the administration of the DK grants provides a unique institutional grant design to test for the existence of birth-town favoritism. I test if a birth district bias exists by adding a dummy equal to one for all the years a district is supervised by a provincial governor born in this district. The analysis also allows me to test if birth district favoritism in DK allocations is motived by reelection interests[11]; to test for this, I exploit that the Indonesian constitution stipulates a two-term limit for governors. If birth-town favoritism was an investment in votes, that is, motivated by reelection motives, it should prevail only in the first term of the governor, when he/she can be reelected, not in his/her second and final term (section 4).

Indonesia's local direct election system could limit this type of fund manipulation because it increases local electoral accountability. In theory, in a decentralized system, direct local elections better account for different local preferences and increase local electoral accountability (inter alia Tommasi & Weinschelbaum, 2007), potentially decreasing local favoritism. Direct local elections in Indonesia have induced intensive competition among candidates (Mietzner, 2018). To win their next election, provincial governors might not

[11] As DK grants are supposed to be spent on tasks of non-physical nature (section 2), they are less visible to voters and potentially less useful for vote maximization than large visible infrastructure projects (Muraközy & Telegdy (2016)). By contrast, their non-physical nature allows them to show on-ground results quickly and makes them potentially more fungible for spending purposes of any other, also physical, nature and hence a potential political tool.

consider it an optimal strategy to invest in votes in their birth district because they must maximize votes in the whole province to be reelected. Facing such a competitive local election could reduce the governors incentive to allocate their limited public funds to their birth district.

Thus, I formulate **Hypothesis 3 ("Local Electoral Accountability"):**

> ***Birth district bias is lower if the local electoral accountability of provincial governors is higher.***

By contrast, direct local elections in a decentralized fiscal system may also increase birth district favoritism because local governments are more likely captured by local elites (inter alia (Bardhan & Mookherjee, 2000). Fiscal decentralization in Indonesia has often been observed to have shifted informal deal-making to lower government levels (Hadiz, 2010), this could allow for birth district favoritism by subnational government officials with a higher discretionary authority over transfers after decentralization. The high campaigning costs for local candidates (Mietzner, 2018) could also have increased the need to invest in campaign donors located in their home region. As the Indonesian state does not provide campaign financing support, many local candidates must rely on private donors, which they feel obliged to reward after winning an election. If a substantial percentage of campaign funding is from a governor's (corporate) network in his/her home town, birth district favoritism could increase.

Moreover, Indonesia's democracy was still very young at the beginning of the observation period in 2005, only six years old, and direct local elections had just been introduced. Electoral accountability was therefore possibly not yet a main factor of a provincial governor's calculus.

The rather new electoral game for governors, maximizing votes across the whole province, and their potential dependence on donors at home are potential reasons why electoral accountability might not limit birth-town favoritism in the case of Indonesia at that point in time.

I test for the influence of electoral accountability by splitting the sample into first- and second-term governors to analyze whether governors still facing a direct local election, that is, still accountable to their voters, behave differently from those who are not (section 4).

Subnational transfer allocations could also be influenced by a governor's former local political history. Governors that started their political career in a certain district might allocate more grants to this district because they know its needs and have connections to the local administration or personal obligations to supporters from an earlier career stage. Additionally, governors born in a district and also started their political career in its mayor's office might feel even more strongly attached to this district or maintain even stronger ties to the local mayor's office.

Thus, I formulate **Hypothesis 4 ("Local Political History"):**

> ***Birth district bias is higher if a governor has a local political history at the district's mayor office.***

I test this hypothesis using a unique hand-collected data set on the career history of governors in Indonesia. I generate a dummy variable equal one if an incumbent governor was previously the mayor of this district and interact this measure for local political history with my birth district dummy (section 4).

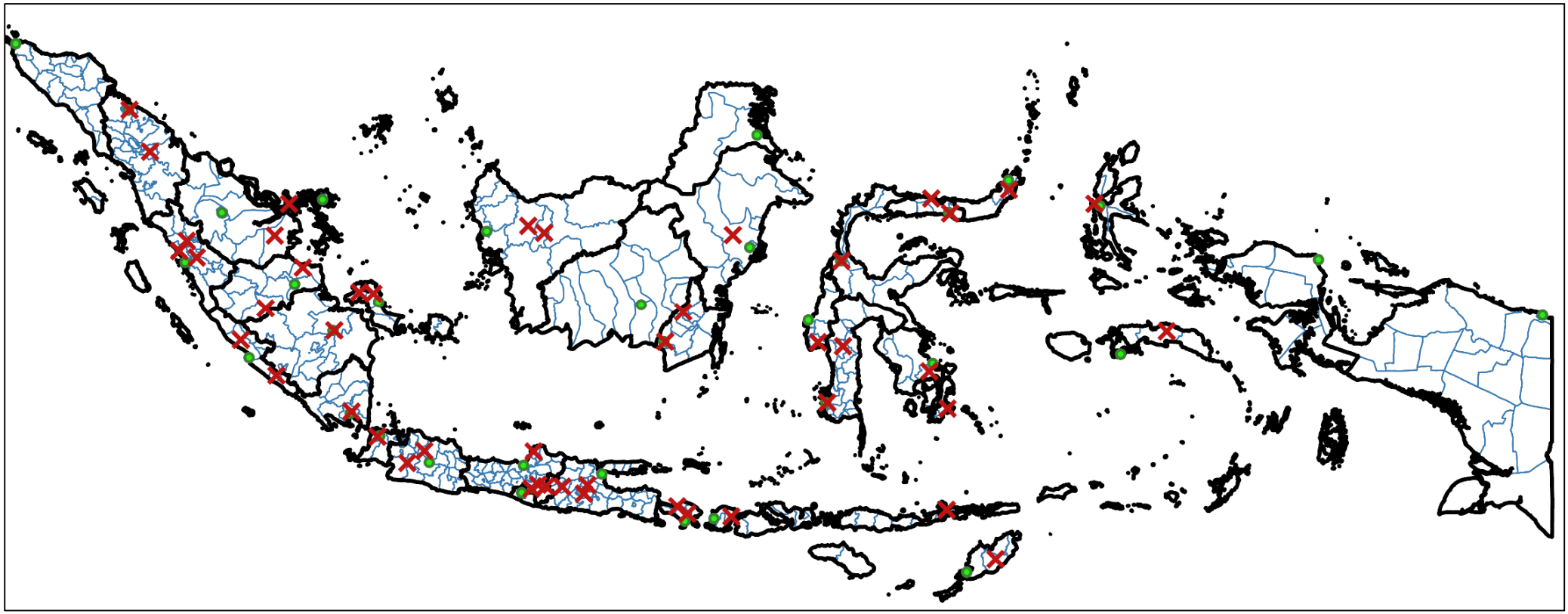
4. Empirical Analysis

4.1. Data

To test these four hypotheses on birth district favoritism in subnational public grant allocations, I collected a unique unbalanced panel dataset of 410 Indonesian districts for the period 2005–2013, representing approximately 90 percent of Indonesia's population in 2013 and including 28 of the current 34 provinces. The special autonomous province Aceh Darussalam is not included.[12] I also excluded the province DKI Jakarta; it has a special legal status being the capital region and its districts are not autonomous. The province Yogyakarta was excluded because it is a special autonomous region governed by a sultan; the provinces Papua, West Papua, and Kalimantan Utara were excluded based on data restrictions. The primary data sources were the Indonesian Database for Policy and Economic Research (DAPOER) of the World Bank Indonesia, the Ministry of Home Affairs, the Ministry of Finance, and the Statistical Office (BPS) of Indonesia. The bibliographical information on governors was collected from Indonesia's Election Commission (KPU), the online encyclopedias *TokohIndonesia* and *Merdeka,* and various newspaper archives. The sample contains 66 different governors from 2004 to 2013: 52 of them were governors of provinces containing their birth districts. These 52 governors originate from 47 different districts (Figure 1), most of them do not originate from the provincial capital district (Figure 1).

[12] According to Law No. 35 (2008), Law No. 11 (2006), and Law No. 21 (2001), districts in these regions receive special autonomy funds.

Figure 1



Note: Black lines indicate provincial boundaries, blue lines district boundaries. Red crosses mark the birth district of provincial governors (2004–2013), if they were born in the province of which they are governor. Green dots mark the location of provincial capitals/provincial capital districts. The most eastern provinces of Papua and West Papua were excluded because of data restrictions. The most western province, Aceh, was excluded because of its special autonomy status.

Source: author's illustration (QGIS)

4.2. Empirical Model

The dependent variable is the share of DK grants in district *d* at time *t* of all DK grants allocated to all districts ($ShareDK_{dt}$) in a province. Many districts receive a very low share or even zero of the discretionary grants allocated within a province.[13] To account for this large amount of zeros in the dependent variable, I use a Tobit model.[14]

The baseline controls for the relative budgetary capacity of a district from other (non-discretionary) revenue sources and the relative overall socioeconomic development of a district within a province.[15] I lag time-variant variables by one year because budgetary decisions are made one year in advance. $FCAP_{it-1}$ measures the relative budgetary capacity of a district as its share of the total transfers to all districts within a province from other (non-discretionary) revenue sources (own source revenue, DAU, DBH, and DAK).

DEV_{dt-1} controls for a district's relative socioeconomic development within a province. It stands for two variables: a dummy equal to one if a district's real GDP per capita (excluding oil and gas) is below the province average, and the share of the population below the poverty line a district accounts for within a province. I also control for the relative size of a district within a province measured by its share of the province's area size and its population share ($SIZE_{dt-1}$). I control for the total number of districts within a province *p* (ND_{pt}) in year t because this influences the possible shares between all districts within a province. Year fixed effects ($DmyYear_t$) account for common macroeconomic shocks and provincial dummies ($DmyProvince_d$) for unobservable time-constant factors at the province level, the omitted category is Bali Province. I add a dummy $DmyCity_d$ equal to one if a district is a city-

[13] 67.3 percent of observations have DK shares of zero, and 32.7 percent have DK shares above zero.
[14] Rescaling my dependent variable DK share to values between 0 and 1 and using a fractional logit model does not change the results.
[15] From a normative perspective, within provincial differences in the fiscal capacity and socioeconomic development levels should determine transfer allocations (Oates (1999)), see section 3.

district (*kota*) because cities, as urban centers, are likely to differ in need characteristics from rural regencies (*kabupatens*).

Provincial governor offices are located in provincial capitals; hence, I control for this special status of provincial capital districts and add a dummy for provincial capitals ($DmyProvincialCapitalDistrict_d$). Because some districts split during the observation period, I add a dummy ($DmyAnySplit_d$) equal to one if a district lost parts of its administrative area within the observation period. I also add a dummy for coastal regions ($DmyCoastline_d$) to account for the difference between landlocked districts and those with sea with access. This dummy is equal to one if districts have sea access and zero otherwise. ε_{dt} is the error term. Standard errors are clustered at the district level to account for serial correlation of unobserved variables within a district.

$$(1)\ ShareDK_{dt} = \alpha_1 FCAP_{dt-1} + \alpha_2 DEV_{dt-1} + \beta DmyBirth_{dt-1} + \gamma_1 DmyCity_d + \gamma_2 SIZE_{dt-1} + \gamma_3 ND_{pt} + \gamma_4 DmyCoastline_d + \gamma_5 DmyProvincialCapitalDistrict_d + \gamma_6 DmyAnySplit_d + \gamma_7 DmyYear_t + \gamma_8 DmyProvince_d + \varepsilon_{dt}$$

Next, I add the main variable of interest to test for a possible effect of being the birth district of a governor, the dummy variable $dmyBirth_{dt-1}$, which is equal to one for all years in which the governor of a province at *t-1* was born in district *d* within this province, and zero otherwise.

4.3. Empirical Results

The results show that the birth districts of an incumbent governor receive approximately nine percentage points larger DK grants allocated within a province compared with the districts that do not share this connection with an incumbent governor (Table 1). Thus, I observe a significant bias in transfer allocations, also in magnitude, because it is almost twice as high as the average DK share a district receives (5.5 percent, Table 1b).

The relative fiscal capacity of a district within a province, however, does not significantly determine grant allocations, nor does a districts' relative socioeconomic development need. Districts with a GDP per capita below provincial average and with relatively lower fiscal capacity from other funding sources do not receive significantly larger shares of grants. Districts with a larger share of poor people actually receive lower shares. Time-variant characteristics of a district's development and fiscal capacity are not observed to influence subnational transfer allocations; however, their urban status does because city districts receive significantly larger shares. The results also show that districts with a larger share of the province population or provincial capital districts receive a significantly larger share of DK grants (Table 1, model 1).

These results do not necessarily demonstrate that DK grants are not at all need-oriented because, for example, an awareness-raising campaign on health concerns might be very effective and necessary in urban, highly populated, places. However, once I add the birth district dummy to this baseline specification, controlling for such urban centers and the district's relative development and need, the birth district of an incumbent governor receives a significantly larger shares of the DK grants than the remainder of the districts within the province (Table 1, model 2).

Hypothesis 1 is supported—birth districts receive significantly more grants compared with the other districts in the province.

Table 1: Birth District Favoritism, 2005–2013, TOBIT

	(1)	(2)
Relative Fiscal Capacity (non-dis.) (%) *(t-1)*	0.151	0.101
	[0.243]	[0.241]
Dummy GDP per Capita Below Province Average *(t-1)*	-2.132	-1.927
	[1.583]	[1.611]
Share of Population (%) *(t-1)*	1.261***	1.219***
	[0.369]	[0.332]
Share of Population below the poverty line (%) *(t-1)*	-0.618**	-0.677**
	[0.313]	[0.311]
Share of Area Size (%) *(t-1)*	-0.010	0.012
	[0.093]	[0.088]
Number of Districts *(t)*	-1.334	-1.384
	[1.194]	[1.119]
Dummy for City-District *(t)*	5.976**	5.540**
	[2.460]	[2.293]
Dummy for District with Sea Access *(t)*	2.577**	2.677**
	[1.155]	[1.152]
Dummy for Provincial Capital District *(t)*	84.705***	84.216***
	[5.474]	[5.349]
Dummy for Any Split *(t)*	-1.697	-1.364
	[2.507]	[2.341]
Dummy for Birth District Governor *(t-1)*		**9.689****
		[4.427]
N	3243	3243

Note: TOBIT MODEL. Dependent variable: Share of DK a district receives in *t* from the total DK distributed in a province (excluding the province level). The special regions DKI Jakarta and Yogyakarta and the special autonomy region Aceh are excluded from the analysis. Papua, West Papua, and Kalimantan Utara are excluded due to data restrictions. All specifications include province dummies and year fixed effects. All time-variant baseline controls are lagged by one year. Robust standard errors clustered at the district level are reported in brackets. * $p<0.1$; ** $p<0.05$; *** $p<0.01$

The results also indicate that reelection interests of a provincial governors do not motivate birth place favoritism; by contrast, they limit it. If a governor invested in his/her home district to gain political capital for his/her reelection, we would expect first-term governors, that is, governors who can be reelected, to invest more in their birth district because they are not yet facing their term limit. To test for this, I add a dummy for first-term governors and interact it with the home dummy.[16] The results show that birth districts do not receive significantly more transfers in the first term of a governor; instead, the opposite is observed (Table 2, model 1). These results are in line with Hypothesis 2—birth district bias is not explained by the reelection interest of the governor (Table 2).

By contrast, the results show that birth district favoritism is limited by local electoral accountability during the first term of a governor. To investigate this, I split the sample into governors in their first term (reelection possible, model 3) and governors in their second term (reelection not possible, model 4).[17] The results show, whereas first-term governors do not allocate significantly more grants to their birth district (model 3), second-term governors do (model 4), which indicates that the electoral accountability induced by direct local elections reduces birth district favoritism in Indonesia. The results are in line with Hypothesis 3–local electoral accountability reduces the birth district bias of provincial governors.

Governors who started their political career in their birth district might allocate more grants to it because they have more knowledge of the needs of this district, have connections to the local administration, or personal obligations to supporters. I test for this using a unique hand-collected data set on the career history of governors in Indonesia. To analyze whether birth

[16] No data is available on past voter support of provincial governors at the district level.

[17] I use information on governors before 2005 as well of course, to include governors already being in office before 2005, later starting their second and final term at some point between 2005-2013.

district favoritism might be explained by a governor's political history in his/her birth district, I generate a add a dummy equal to one if a governor was the mayor of a district before entering the governor's office ($\mathrm{dmyMayorHistory}_{\mathrm{dt}-1}$) (Table 3).

The results show that just having been a mayor of a district before entering the governor's office does not have a significant effect on grant allocations towards this district (Table 3, model 2-3); DK allocations are not solely driven by governors' local political history. If, however, I interact this dummy for political history in the mayor's office with my birth district dummy, discretionary grants to these birth district increase significantly (model 4). Birth districts of a provincial governor, and in which this governor was previously the mayor, receive approximately 41 percentage points larger DK grants than the other districts. These results indicate that the birth district bias is driven by governors starting their political career as mayors in their birth district.[18]

[18] Birth district bias could also be influenced not by a governor's past but by an investment in future career prospects at the local level. Provincial governors might invest in a career as a district mayor for after their time as province governor. This investment in a future local career is highly unlikely however; the governors of our sample were often mayors before becoming governor and usually ended their professional careers in the governor's office, changed to the private sector, or took up a higher political office (e.g. as members of the national parliament or ministers).

Table 2: Reelection Interests and Electoral Accountability, 2005–2013, TOBIT

	(1)	(2)	(3) 1st term	(4) 2nd term
Dmy Birth District Governor *(t-1)*	**14.872***	**7.878***	**5.892**	**12.191***
	[7.722]	**[4.352]**	**[4.683]**	**[6.767]**
Dmy Birth District Governor *(t-1)* x FirstTermGovernor *(t)*	-8.029			
	[7.756]			
Dmy Birth District Governor *(t-1)* x DirectElectionYear *(t)*		5.379	2.626	7.147
		[4.334]	[6.498]	[6.472]
Baseline Controls	*Yes*	*Yes*	*Yes*	*Yes*
N	3163	3163	2193	970

Note: TOBIT MODEL. Dependent variable: Share of DK a district receives in *t* from the total DK distributed in a province (excluding the province level). The special regions DKI Jakarta and Yogyakarta and the special autonomy region Aceh are excluded from the analysis. Papua, West Papua, and Kalimantan Utara are excluded due to data restrictions. All specifications include province dummies and year fixed effects. All time-variant baseline controls are lagged by one year. Robust standard errors clustered at the district level are reported in brackets. * $p<0.1$; ** $p<0.05$; *** $p<0.01$

Table 3: Local Political History as a District Mayor, 2005–2013, TOBIT

	(1)	(2)	(3)	(4)
Dmy Birth District Governor *(t-1)*	**9.837****		**8.054****	**5.088**
	[4.484]		**[3.584]**	**[3.369]**
Dmy Mayor History *(t-1)*		18.780	15.282	-7.138*
		[11.974]	[11.063]	[4.227]
Dmy Birth District Governor *(t-1)* x Dmy Mayor History *(t-1)*				**41.286****
				[18.987]
Baseline Controls	*Yes*	*Yes*	*Yes*	*Yes*
N	3220	3220	3220	3220

Note: TOBIT MODEL. Dependent variable: Share of DK a district receives in *t* from the total DK distributed in a province (excluding the province level). The special regions DKI Jakarta and Yogyakarta and the special autonomy region Aceh are excluded from the analysis. Papua, West Papua, and Kalimantan Utara are excluded due to data restrictions. All specifications include province dummies and year fixed effects. All time-variant baseline controls are lagged by one year. Robust standard errors clustered at the district level are reported in brackets. * $p<0.1$; ** $p<0.05$; *** $p<0.01$

4.4. Robustness Checks

Formal Political Party Ties

Political party ties do not explain birth district favoritism in Indonesia. Theoretically, political party alignment may play a significant role in the allocation of subnational transfers by a provincial governor to maximize the total amount of votes. If voters can attribute a transfer-financed project to the provincial government level, this could pay off for the governor because the benefits derived from the project are directly attributed to him/her. Governors could also benefit indirectly through the increased popularity of a politically aligned local district incumbent under their political party banner. If provincial and district incumbents, however, belong to different parties, transfers to the district level are a less effective investment for the governor because some of the electoral benefits created through the transfer-financed project will "leak" to the opposition, in particular, if the source of the transfer-financed project is difficult to attribute to the provincial government level. Hence, for governors who aim to increase support for their reelection, optimal transfers will favor politically aligned districts—if there is a strong party affiliation of local candidates.[19]

In the Indonesian context, however, whether political party alignment has a significant influence on subnational grant allocations is questionable. Party alignment is more likely to influence transfers if the provincial incumbent and its party chapter profit from a strengthening of the district party chapter. The governor will not (entirely) profit from the transfers if the benefits provided are (partly) attributed to the local district head and not to

[19] There is substantial empirical evidence for a political alignment effect in the allocation of (central government) grants, in particular for countries with a strong political party polarization and strong ideological attachment to political parties. Empirical evidence for the US shows that states with governors from the same party as the president (Larcinese, Rizzo, & Testa, 2006) or districts and counties represented by members of the president's party receive significantly more funds (Berry, Burden, & Howell, 2010). In Italy, politically aligned municipalities are given 40 percent more grants compared with non-aligned municipalities(Bracco, Lockwood, Porcelli, & Redoano, 2015). Solé-Ollé & Sorribas-Navarro (2008) find a similar positive effect of political alignment on central grant allocation for Spain, and in Brazil, politically unaligned mayors receive approximately 30 percent lower discretionary grants than aligned ones (Brollo & Nannicini (2012)).

the governor's party. If the district head's party loyalty is weak, the provincial incumbent will not be able to capitalize on the district head's increased popularity. Transfer-financed projects will benefit the governor directly if the source can be clearly attributed to him/her[20] but not indirectly through an increased local support base.

This comparatively weak political party loyalty is precisely how many scholars describe Indonesia's local political system. Local officials often have only a very fragile institutional attachment to a political party (Mietzner, 2013) or are no official party members (Qodari, 2010) . Candidates often switch their party affiliation to parties with a stronger local network and better financial opportunities (Ufen, 2008). Political parties, in turn, tend to sell nominations to high-profile, well-endowed local candidates (Buehler, 2010), who, in turn, often regard political parties as mere vehicles for their nomination and have otherwise only a loose (institutional) attachment to "their" political party (Qodari, 2010).

The robustness checks are in line with this low political party attachment; it does not influence the subnational grant allocation if a mayor and governor share the same political party background (Table RB1). To test for the effect of political ties, I add a dummy variable ($dmyPoliticalTies_{dt-1}$), which is equal to one for all years in which the directly elected mayor of a district was formally affiliated to the political party of the incumbent governor (i.e., solely nominated by the same major political party in the last local district head elections) and zero otherwise.

As expected, I find no evidence that the political party background or the political alignment of the governor and a district head influences the distribution of subnational discretionary

[20] The DK grants I analyze are supposed to be spent on tasks of non-physical nature (section 2), which might make it even more difficult for voters to attribute the transfer-financed projects to a particular government level, compared with, for example, a visible infrastructure project named after the governor.

grants.[21] Provincial governors are not diverting more funds to mayors of their political party. For completeness, although this finding is based only on a limited number of observations, I find no evidence that birth districts that are also politically aligned with the governor receive larger shares of grants (model 4). Unlike informal local ties measured by a governor's birth place or local political history (section 4.3), current formal political party ties to a district do not significantly influence subnational fund allocations (Table RB1).

Non-Discretionary (formula-based) transfers

The results suggest that governors use their discretionary scope to manipulate grant allocations in favor of their birth districts; hence, I expected to find no significant birth district favoritism in the case of formula-based general allocation grants (*DAU*, section 2.1), which limit the discretionary scope of the governors. Although formula-based transfers are not a panacea against political manipulation (Banful, 2011; Litschig, 2012), the DAU is a grant allocation scheme with fewer entry points to influence allocation decisions. DAU grants are allocated based on a formula designed and supervised by the central government. As DAU shares to districts are only zero in a very few cases, I run this specification also as a pooled ordinary least squares (OLS) model (1). The results for both models show that formula-based transfers are not biased toward the birth region of provincial governors (Table RB2). As expected, DAU allocations are correlated with the needs measures contained in the DAU formula (Gonschorek & Schulze, 2018). Hence even though Indonesia's main equalization grant, DAU, has its flaws, in particular its lack of equalization on a per capita basis, local favoritism by provincial governors is not observed to be one of them.

[21] This result is also in line with the findings of Gonschorek, Schulze, & Sjahrir (2018), showing that district mayors in Indonesia do not get more central discretionary grants if they are politically aligned with the incumbent presidential party at the central government level.

Table RB1: Formal Political Party Ties, 2005–2013, TOBIT

	(1)	(2)	(3)	(4)
Dmy Birth District Governor *(t-1)*	**17.109*** **		**17.116*** **	**17.772*** **
	[6.322]		**[6.324]**	**[6.687]**
Dmy Political Ties *(t-1)*		0.651	0.818	1.649
		[4.714]	[4.786]	[4.852]
Dmy BirthDistrictGovernor *(t-1)* x Dmy Political Ties *(t-1)*				-11.582
				15.627]
Baseline Controls	*Yes*	*Yes*	*Yes*	*Yes*
N	2341	2341	2341	2341

Note: TOBIT MODEL. Dependent variable: Share of DK a district receives in *t* from the total DK distributed in a province (excluding the province level). The special regions DKI Jakarta and Yogyakarta and the special autonomy region Aceh are excluded from the analysis. Papua, West Papua, and Kalimantan Utara are excluded due to data restrictions. All specifications include province dummies and year fixed effects. All baseline controls are included. All time-variant baseline controls are lagged by one year. Robust standard errors clustered at the district level are reported in brackets. The first direct local mayor and governor elections were held in 2005, providing the political party background of local candidates to test for the influence of political party ties between governors and mayors on subnational grant allocations for the years after 2005. As not all districts held direct elections in 2005, some held their first elections later, the amount of observations on the party background of direct elected mayors and governors is reduced. * p<0.1; ** p<0.05; *** p<0.01

Table RB2: Formula-Based Transfers (**non-discretionary, DAU**), 2005–2013, OLS and Tobit

	(1) OLS	(2) TOBIT
Dummy for Birth District Governor *(t-1)*	**0.310**	**0.311**
	[0.512]	**[0.508]**
Relative Fiscal Capacity (no DAU) (%) *(t-1)*	-0.160***	-0.162***
	[0.047]	[0.046]
Dummy GDP per Capita Below Province Average *(t-1)*	-0.394**	-0.396**
	[0.163]	[0.162]
Share of Population (%) *(t-1)*	0.283***	0.283***
	[0.048]	[0.048]
Share of Population Below the Poverty Line (%) *(t-1)*	0.107***	0.108***
	[0.035]	[0.035]
Share of Area Size (%) *(t-1)*	0.118***	0.118***
	[0.023]	[0.023]
Number of District *(t)*	-0.210***	-0.210***
	[0.060]	[0.060]
Dummy for City-District *(t)*	-0.502**	-0.500**
	[0.217]	[0.216]
Dummy for District with Sea Access *(t)*	-0.520***	-0.524***
	[0.189]	[0.188]
Dummy for Provincial Capital District *(t)*	2.279***	2.286***
	[0.521]	[0.518]
Dummy for Any Split *(t)*	-0.481**	-0.482**
	[0.211]	[0.210]
Province Fixed Effects	*Yes*	*Yes*
Year Fixed Effects	*Yes*	*Yes*
N	2320	2320

Note: Pooled OLS (1) and Tobit Model (2). Dependent Variable: Share of DAU (formula-based transfers) a district receives in t from the total distributed in a province (excluding the Province Level). The special regions DKI Jakarta and Yogyakarta and the special autonomy region Aceh are excluded from the analysis. Papua, West Papua, and Kalimantan Utara are excluded due to data restrictions. All specifications include province dummies and year fixed effects. All baseline controls are included. All time-variant baseline controls are lagged by one year. Robust standard errors clustered at the district level are reported in brackets. * $p<0.1$; ** $p<0.05$; *** $p<0.01$

Provincial Capitals

The importance of provincial capital districts does not explain birth district favoritism. Provincial capital districts are special because they are, for example, the location of the governor's office, and often also the location of a governor's residence during his/her term. I already controlled for this by adding a dummy equal to one for capital districts to my baseline controls (Table RB3). The results shows, that provincial capital districts receive larger shares of the DK grants allocated within a province. There is, however, also a small group of governors born in the provincial capital. I control for this group by adding an interaction term equal to one if the birth district of a provincial governor is also the provincial capital. The results show that birth-town favoritism does not increase if a governor was born in the provincial capital (Table RB3, model 2), it actually decreases favoritism, although not significantly. Thus, governors born outside of the provincial capital seem to benefit their birth district once they take over office in the capital.

Table RB3: Role of Provincial Capitals, 2005–2013, TOBIT

	(1)	(2)
Dmy Birth District Governor *(t-1)*	**9.689****	**10.247***
	[4.427]	**[5.964]**
Dmy Province Capital District *(t)*	84.216***	84.524***
	[5.349]	[5.026]
Dmy Birth District Governor (t-1) x Dmy Province Capital District *(t)*		-1.763
		[8.853]
Baseline Controls	*Yes*	*Yes*
N	3243	3243

Note: TOBIT MODEL. Dependent variable: Share of DK a district receives in *t* from the total DK distributed in a province (excluding the province level). The special regions DKI Jakarta and Yogyakarta and the special autonomy region Aceh are excluded from the analysis. Papua, West Papua, and Kalimantan Utara are excluded due to data restrictions. All specifications include province dummies and year fixed effects. All baseline controls are included. All time-variant baseline controls are lagged by one year. Robust standard errors clustered at the district level are reported in brackets. * $p<0.1$; ** $p<0.05$; *** $p<0.01$

Birth District President

The results are not driven by favoritism toward the birth district of the incumbent president. As the central government is involved in the initial fund allocation, the president could attempt to direct funds toward his/her home region (as shown for other countries, e.g., (Hodler & Raschky, 2014). The results show that President Yudhoyono's birth district, *Kabupaten Pacitan*, does not receive significantly more DK grants than other districts (RB4, model 1). This finding is in stark contrast to the central discretionary grants, TP, which are directly allocated to the district level without the involvement of provincial governors, and for which Gonschorek, Schulze, & Sjahrir (2018) found significant preferential treatment of the president's home region.

Economic Importance

Next, I check if the results are robust to the economic importance of a district within a province. Economically more important districts might have more bargaining power or lobbying opportunities at the provincial government level, which might influence subnational transfer allocations. Therefore, I add a measure controlling for the share of provincial GDP of a district. The results show (Table RB4, model 2) that economically stronger districts do not receive significantly larger DK shares.

Cost of Providing Services

I also check whether DK grants differ in connection with the local price level of the districts[22]. If districts with higher price levels received more grants in nominal terms, and a greater

[22] Price changes over time are captured by the full set of time FE.

number of provincial governors originate from these districts than from other districts, the results could be biased. To investigate this, I include the construction price index (CPI) at the district level. Table RB4, model 3 shows the CPI is insignificant; its inclusion does not alter the results.

Table RB4: President's Birth District (2005–2013), Share of Provincial GRDP (2005–2013), Local Price Level (2007–2012), TOBIT

	(1)	(2)	(3)
Dmy Birth District Governor *(t-1)*	**9.691****	**9.770****	**13.604****
	[4.427]	**[4.419]**	**[6.095]**
Dmy Birth District President *(t-1)*	-3.471		
	[2.884]		
Share of Provincial GRDP *(t-1)*		0.006	
		[0.007]	
Construction Prince Index *(t-1)*			-0.046
			[0.153]
Baseline Controls	*Yes*	*Yes*	*Yes*
N	3243	3243	2639

Note: TOBIT MODEL. Dependent variable: Share of DK a district receives in *t* from the total DK distributed in a province (excluding the province level). The special regions DKI Jakarta and Yogyakarta and the special autonomy region Aceh are excluded from the analysis. Papua, West Papua, and Kalimantan Utara are excluded due to data restrictions. All specifications include province dummies and year fixed effects. All baseline controls are included. All time- variant baseline controls are lagged by one year. Robust standard errors clustered at the district level are reported in brackets. * $p<0.1$; ** $p<0.05$; *** $p<0$.

Mayoral Election Timing

District heads facing imminent local mayoral elections could lobby for more funds at the provincial level to increase their chances of reelection because the timing of mayoral elections is independent of provincial governor elections. To test this, I include a dummy equal to one for the year of a local mayor election or the following year (t+1). The results demonstrate that the share of DK grants does not significantly increase in election years (Table RB5). I observe no significant evidence for local political cycles in DK allocations at the level of the mayor's office, and the results remain unchanged.

Table RB5: Local Mayor Elections (2005–2013), TOBIT

	(1)	(2)	(3)
Dmy Birth District Governor *(t-1)*	**9.740****	**9.800****	**9.782****
	[4.527]	**[4.526]**	**[4.528]**
Dmy Direct Election Mayor *(t)*	-0.271		-0.594
	[1.009]		[1.044]
Dmy Direct Election Mayor *(t+1)*		-1.342	-1.491
		[1.290]	[1.331]
Baseline Controls	*Yes*	*Yes*	*Yes*
N	3212	3212	3212

Note: TOBIT MODEL. Dependent variable: Share of DK a district receives in *t* from the total DK distributed in a province (excluding the province level). The special regions DKI Jakarta and Yogyakarta and the special autonomy region Aceh are excluded from the analysis. Papua, West Papua, and Kalimantan Utara are excluded due to data restrictions. All specifications include province dummies and year fixed effects. All baseline controls are included. All time-variant baseline controls are lagged by one year. Robust standard errors clustered at the district level are reported in brackets. * $p<0.1$; ** $p<0.05$; *** $p<0.01$

District Proliferation

Next, I analyze whether district splits explain birth-town favoritism (Table RB6) because approximately 120 new districts were established through splits during the sample period of 2005–2013. The new districts often experience a construction boom because the national economic policy focuses on the development of new infrastructure in these areas (Fitrani, Hofman, & Kaiser, 2005). To control for this, I include a dummy for district splits in the base line specification, this dummy equals one for all years in which a district experienced a split (Table 1).

As additional robustness checks, I also include dummies being equal to one for all the years after a district lost a part of its administrative area (*parent district*) or separated from an area (*child district*). The results show that the *child districts* receive significantly smaller shares than the other districts (model 1) after a split. I find no significant difference for the parent districts (model 2).

Although these splits must be endorsed at the national level by the president or the central parliament (Fitrani, Hofman, & Kaiser, 2005), governors could have an interest in splitting

districts, for example, to target their birth area more accurately with discretionary grants.[23] To control for this, I interact the birth district dummy with a dummy for child districts and for parent districts. The results show that newly established districts that are also the incumbent governor's birth district receive significantly higher shares than other districts (model 4); birth districts that lost parts of their administrative area receive significantly lower shares (model 5).

Unfortunately, I can only identify the birth district, not the exact birth location within the district, for most governors. For one of the provinces that split during the observation period, I could not identify if the governor was born in the later parent or child district. To account for this, I exclude this province (Province Kalimantan Barat) from the sample. However, the exclusion of all observations from this province does not change the results (model 7); birth districts of provincial governors still receive a 8.5 percent larger share of DK grants allocated within a province.[24]

[23] Because splitting districts may be more homogenous after the split (Fitrani, Hofman, & Kaiser, 2005; Burgess, Hansen, Olken, Potapov, & Sieber, 2012; Alesina, Gennaioil, & Lovo, 2019)

[24] In three other provinces, the birth district of the governor split within the observation period. For these provinces, however, I know the exact birth location of the governor and can check to which current district the birth location belongs; thus, these provinces remain included.

Table RB6: District Proliferation, 2005–2013, TOBIT

	(1)	(2)	(3)	(4)	(5)	(6)	(7) no birth splits
Dmy Birth District Governor *(t-1)*	**9.350****	**9.546****	**9.555****	**9.670****	**11.682****	**12.148****	**8.525****
	[4.240]	**[4.424]**	**[4.254]**	**[4.417]**	**[5.274]**	**[5.325]**	**[4.230]**
Dmy Child District *(t)*	-8.146***		-15.148**	-7.937***		-14.653**	
	[2.642]		[6.415]	[2.582]		[6.159]	
Dmy Parent District *(t)*		2.474	-8.615		3.518	-7.438	
		[2.229]	[5.769]		[2.166]	[5.414]	
Dmy Birth District Governor *(t-1) x* Dmy Child District (t)				-6.753		-9.358	
				[6.867]		[7.656]	
Dmy Birth District Governor *(t-1) x* Dmy Parent District (t)					-11.047**	-10.992**	
					[5.147]	[5.151]	
Baseline Controls	*Yes*	*Yes*	*Yes*	*Yes*	*Yes*	*Yes*	*Yes*
N	3243	3243	3243	3243	3243	3243	2758

Note: TOBIT MODEL. Dependent variable: Share of DK a district receives in *t* from the total DK distributed in a province (excluding the province level). The special regions DKI Jakarta and Yogyakarta and the special autonomy region Aceh are excluded from the analysis. Papua, West Papua, and Kalimantan Utara are excluded due to data restrictions. All specifications include province dummies and year fixed effects. All baseline controls are included. All time-variant baseline controls are lagged by one year. Robust standard errors clustered at the district level are reported in brackets. * $p<0.1$; ** $p<0.05$; *** $p<0.01$

5. Conclusion

This analysis is the first to test for birth district favoritism in the allocation of subnational discretionary public grants in Indonesia, a highly decentralized country, and the fourth largest country and the third-largest democracy in the world. I use a Tobit model on a panel data set of 410 Indonesian districts, covering the period 2005–2013, and demonstrate that the origin of a provincial governor determines the subnational allocation of grants.

The results demonstrate that the birth districts of incumbent governors receive a significantly larger share of discretionary grants than the other districts in the province and that a governor's local political history, having been mayor in his/her birth district, is a driver of this birth district favoritism. The results also show that this bias in the allocation of funds cannot be explained by classical pork-barrel politics, such as the formal political alignment of the governor with a district`s mayor or his/her reelection interest. By contrast, the results indicate that local electoral accountability limits local favoritism. Governors in their first term, who can be reelected, do not allocate significantly more funds to their birth district. In contrast, governors in their second and final term allocate significantly more funds to their birth district.

These results are indicative of Indonesia's political system and provide lessons for other countries with similar characteristics. Indonesia is a very young democracy—aged six years at the beginning of the observation period—and characterized by low ideological cleavages, little party loyalty, and the prevalence of money politics in its highly decentralized fiscal system. These features, however, are not unique to Indonesia but characterize a number of developing countries with decentralized fiscal systems, in particular in South-East Asia, such as in Cambodia, Myanmar, the Philippines, and Thailand. All these countries have embarked on a form of fiscal decentralization and informal ties are critical factors in their political arenas; at

the same time they have not implemented democratization reforms as far reaching as Indonesia's.

Given this country context, if those countries want to benefit from the advantages of fiscal decentralization but limit the risk of favoritism in the allocations of subnational funds, the results clearly demonstrate the importance of such democratization reforms inducing local electoral accountability. Electoral accountability, induced by local direct elections, reduces birth-town favoritism in Indonesia. Therefore, it is particularly important that fiscal decentralization reforms are accompanied by local democratization reforms, to allow a country to benefit from the advantages of fiscal decentralization and to impede favoritism from becoming prevalent at the subnational level.

The results also show that compared with the allocation of discretionary grants, no favoritism is observed toward the birth place of a governor with regards to the allocation of formula-based transfers with a higher institutional quality (limiting the discretionary scope of the provincial governor). Although formula-based grant designs are no panacea against political manipulation (Banful, 2011; Litschig, 2012), they seem to impose effective restrictions on the preferential treatment of birth regions by local incumbents in Indonesia. This provides support for Indonesia's formula-based intergovernmental fiscal transfers (DAU) in particular, and supports the general notion that formula-based allocations can reduce the risk of favoritism in subnational transfer allocations, especially if local democratization, hence local electoral accountability, is (still) lacking.

The analysis has limitations. To test for favoritism, I exploit the institutional design of a comparably small transfer within the whole of Indonesia's intergovernmental transfer system, the *DK* grant. The development consequences of an identified bias in this one transfer are not

very large for Indonesia as a whole. Considering the results as just one measurable dimension of the general importance of informal ties in Indonesia, however, a notion that anecdotal evidence seems to support, the long-run costs of such behavior for Indonesia's development are likely to be substantial. Another limitation of this analysis is the low within-district variation of birthplaces, which does not allow control for district fixed effects. The analysis attempts to encounter this limitation by adding a variety of district controls, as well as year and province fixed effects. It also controls for a variety of competing hypotheses at the district level that could potentially explain subnational transfer allocations. What the analysis still lacks, however, is a test for the influence of ethnicity. I initially also planned to incorporate ethnic linkages between district heads and governors based on the analysis of their surnames because I had no other information on their ethnicity. This approach was abandoned, however, because experts raised concerns about its accuracy. Hence, finding another means to measure and test for ethnic favoritism in subnational fund allocations for Indonesia remains a fruitful area for further research.

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