Fiscal policy institutions and history☆

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ABSTRACT

This paper shows that historical variables can explain a significant part of discretionary government spending across countries. We argue that these results provide evidence in favor of Besley and Persson's (2009) hypothesis that institutional quality or state capacity is historically determined and further that institutional quality determines, in part, economic policy.

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1. Introduction

This paper contributes to the empirical debate on the effects of fiscal policy by examining whether discretionary government spending can be explained by historical or exogenous variables related to an economy's institutional development. It then relates both predictable and unpredictable discretionary government spending to macroeconomic outcomes.

We find that a large part of discretionary government spending is predictable by historical and geographical variables. We then find that this predictable discretionary government spending is negatively associated with variables that are known to foster economic growth. We argue that these results provide evidence in favor of Besley and Persson's (2009) hypothesis that state capacity is historically determined and that state capacity affects economic policy. Nevertheless, it is still the case that unpredictable discretionary government spending is also negatively related to growth, in keeping with the seminal study of Fatás and Mihov (2003).

This paper makes interesting contributions to two related literatures. First, it provides evidence in support of Besley and Persson's (2009) formalization of Tilly's (1990) hypothesis that

state capacity is historically determined, in part by the need to cope with external conflict. Besley and Persson (2009) argue that dealing with an external conflict is a public good, and therefore agents will choose to invest in building state capacity when there is likely to be a high demand for such public goods in the future. In this paper, we argue that one important dimension of state capacity is the control over government spending. If politicians find it easy to control government spending for their own ends, then they will be more able to misdirect resources away from public goods including those which are good for growth. We show that the degree of external historical conflict can significantly predict the level of discretionary government spending, and further that this predictable discretionary government spending is negatively associated with growth-enhancing variables. We corroborate these findings by looking at other exogenous/historical variables associated in the literature with institutional development: geographical variables and Acemoglu et al.'s (2001, 2002) historical colonial variables. We find that both colonial settler mortality and geographical variables can also explain the level of discretionary government spending in a way that is consistent with the hypothesis that institutional quality underpins the functioning of economic policy.

The paper is also intrinsically linked to the seminal paper of Fatás and Mihov (2003) and in general to the literature on the importance of economic policy for economic growth. There is a debate in this literature about whether economic policy is important in its own right or whether economic policy is itself the product of historically determined institutions (Acemoglu et al., 2003, 2009; Fatás and Mihov, 2008). The contribution of this paper

is to show that Fatás and Mihov's measure of fiscal discretion is, in part, explained by historical variables. However, our analysis also allows us to construct a tighter variable for fiscal discretion than Fatás and Mihov (2003), and this, much tighter, measure of discretionary fiscal policy is still negatively associated with growth-enhancing variables.

2. Is discretionary fiscal policy predictable?

2.1. Benchmark regressions

In this section, we show that the level of discretionary government spending in an economy is predictable by historical data and by geographical data using three datasets. The first is a dataset based on the historical level of external conflict in an economy following Besley and Persson (2009). The second dataset is a purely geographical dataset and the third is from Acemoglu et al.'s (2001, 2002) seminal work on the historical determinants of institutional quality.

Measurement and data.

In this paper, we keep to established data sources and definitions of fiscal variables. Our data and our measure of discretionary fiscal policy (DFP) are the same as in Fatás and Mihov (2003) i.e., DFP is the variance of the residual from an estimated government spending rule. This measure of fiscal discretion is consistent with the theoretical discussion. While Besley and Persson's (2009) framework does not explicitly model the evolution of constraints on the ability of politicians to abuse state capacity, the logic of their argument follows through. The ability of politicians to use government revenues for their own ends is like a tax which reduces the return on investing in state capacity. As state capacity and the ability of the state to raise revenues grows, it is intuitive that state oversight and the control of government spending would also rise, thus limiting the ability of politicians to misdirect public funds. In this case, greater state capacity should be associated with smaller expected deviations from a fiscal rule, for example in a model where a government's ability to expropriate resources was stochastic and reduced by state capacity. In the simplest case where every year a government has a 50% chance of spending a on its own supporters, where a is decreasing in state capacity, the expected level of discretionary spending is $a/2$ and the variance is $a^2/8$.

The regressions are run from 1960 to 2000 for the colonial and geographical datasets and from 1966 to 2000 for the conflict datasets.[1] *Conflict* is measured following Besley and Persson (2009) by calculating the proportion of time that a country was involved in an external military conflict between 1816, or the year of independence (if later), and 1965 using the Correlates of War (Version 4.0) and *UCDP/PRIO Armed Conflict* datasets.[2] Other data are obtained from the *World Bank Lost Decades: Social Indicators and Fixed Factors* dataset compiled by William Easterly (1998), from Acemoglu et al. (2001, 2002) and from the World Development Indicators (2009).

Predicting discretionary fiscal policy using historical conflict data.

Table 1a displays the results from our regressions of fiscal discretion on conflict. The estimates show that conflict is negatively associated with DFP across a variety of different specifications. This is consistent with the argument of Besley and Persson (2009). States that are more prone to conflicts were able to build up stronger government institutions which give government less discretion over fiscal policy. The results of the basic regression of DFP on conflict are shown in columns [1] and [2] for the entire sample and non-OECD countries, respectively. Columns [3] to [7] show that the results are quite robust to alternative specifications including legal frameworks and continental dummies.[3] The specification with both legal frameworks and continental dummies in the non-OECD sample, column [8], shows that the conflict coefficient becomes insignificant in a two-sided hypothesis test and only significant at the 90% level in a one-sided test. This loss of significance is caused by wars close to the independence date. If one argues that a country is only truly established when the initial disruption connected to its birth is over and so removes wars associated with independence, then a high level of significance returns. This is shown in column [9], where all wars starting in the five years following the year of independence are excluded from the sample.

Predicting discretionary fiscal policy using geographical data.

Table 1b displays the results from our regressions of fiscal discretion on geographical variables. This dataset is the largest cross section in our exercise, and it includes all the countries from the original Fatás and Mihov (2003) study. In this dataset, it is again the case that a significant part of discretionary fiscal policy can be explained, this time by exogenous geographical variables. The key geographical variables we use are the *absolute value of latitude* of an economy and whether the economy is *landlocked*. These variables have been used in the literature as proxies for European influence on an economy; see, e.g., Hall and Jones (1999). The results show that discretionary fiscal policy is negatively related to an economy's absolute latitude and positively related to an economy being landlocked, which are the correct signs for the institutional hypothesis.

Predicting discretionary fiscal policy using Acemoglu et al.'s historical colonial data

The work of Acemoglu et al. (2001, 2002) has been seminal in the analysis of the effects of institutional quality on economic performance. It is natural therefore to use their data to corroborate the above findings that low institutional quality is associated with high fiscal discretion. The key variable from Acemoglu et al.'s data set is the *mortality rate of colonial settlers*, which Acemoglu et al. argue is negatively associated with institutional quality. The results in Table 1c are consistent with our hypothesis. Settler mortality is positively related to the level of fiscal discretion in all specifications, including when we add continental dummies and urbanization as covariates.[4]

2.2. Discretionary fiscal policy and the macroeconomy

To show that higher predicted DFP is indeed a measure of low institutional quality rather than high institutional quality, we need to demonstrate that high levels of predicted DFP are associated with adverse economic outcomes. In Table 2, we show across all three datasets that predicted DFP is associated negatively with variables positively linked to growth (investment, and schooling)

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[1] We choose 1966 as our initial year for the conflict dataset in order to increase the size of the conflict sample. The results are robust to using alternative initial years.

[2] We use conflicts recorded in either the *Correlates of War* and *UCDP/PRIO Armed Conflict* datasets and include any external war that is in either dataset and only give a zero conflict score to countries with no war in both datasets; see http://www.correlatesofwar.org/ and Gleditsch et al. (2002) for information on these datasets. The independence year is taken from the CIA The World Factbook https://www.cia.gov/library/publications/the-world-factbook/. Since the first year that the *UCDP/PRIO Armed Conflict* dataset starts collecting data is 1946, countries that became independent before 1946 and have zero conflicts in the *Correlates of War* database are not included the sample. However, the results are robust to a looser sample inclusion rule where such countries are included.

[3] We include different dummies for African, Asian, and European countries. We also use dummies for British, French, and German legal systems.

[4] In columns [2] and [4] we exclude the US, Canada, Australia, and New Zealand which is the equivalent of looking at non-OECD economies in this sample.