

From Microeconomic Favoritism to Macroeconomic Populism

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Abstract

Why would people support policies that are macroeconomically unsound, in that they are more likely to lead to such events as sovereign crises, balance of payments crises, and the like? This may arise if decisive voters are likely to bear a lower fraction of the costs of the crisis, while benefitting from the short-run gains associated with those policies, such as greater public expenditure or lower taxes.

I first discuss an illustrative model based on Saint-Paul et al. (2017), based on the assumption that in a crisis, not everybody can access his or her entitlement to publicly provided goods, a feature labelled “favoritism”. If the decisive voter is relatively favored in this rationing process, then people are more likely to finance public expenditure by debt, the greater the degree of favoritism. Furthermore, favoritism and the likelihood of a crisis raises the level of public spending.

Next, I consider the choice between electing a “populist” who reneges on anonymity when allocating the public good, even in normal times, and a “technocrat” who sticks to anonymity, and does all it takes to balance the budget. I show that the support for the populist is greater, (i) the greater the likelihood of default, (ii) the more depressed the macroeconomic environment, (iii) the greater the inherited level of public debt and (iv) the lower the state’s fiscal capacity.

I then argue that the model helps understanding some episodes in French pension reform. Some occupational groups supported unsustainable reductions in the retirement age because they expected that other workers would bear a higher proportion of the burden of future adjustment.

Finally, using a panel of countries, I provide evidence in favor of some of the predictions of the model. As predicted, favoritism raises public debt, budget deficits, and public spending. It also raises the likelihood of a fiscal crisis through its effect on public debt. Furthermore, “populists” are more likely to conquer power, the higher the degree of debt and budget deficits, and the higher the level of government spending – the latter finding being consistent with the model’s prediction on the effect of fiscal capacity.

Keywords: political economy, fiscal crises, favoritism, entitlements, public debt, inequality, state capacity

JEL Classification: E620, F340, H120, H600, O110, P160

¹ I am grateful to Abhijit Banerjee, François Bourguignon, Andrea Ichino, Davide Ticchi, Mathilde Viennot, and Andrea Vindigni, as well as seminar participants at the Bank of Finland, for helpful comments and suggestions. This work has been funded by a French government subsidy managed by the Agence Nationale de la Recherche under the framework of the Investissements d’avenir programme reference ANR-17-EURE-001.

1. Introduction

Why would people support policies that are macroeconomically unsound, in that they are more likely to lead to such events as sovereign crises, balance of payments crises, and the like? Dornbusch and Edwards (1991) have noted that such policies, which they label “macroeconomic populism”, are recurrent, in particular in Latin America, and typically end in severe crises and painful internal and external adjustment. Perhaps the popular support for such platforms is a result of irrationality or short-sightedness. But I want to argue that it is rational for some social groups to support those policies. This is because they are predictably likely to bear a lower fraction of the costs of the crisis, while benefitting from the short-run gains associated with the policies, such as greater public expenditure or lower taxes. We can think of a fiscal crisis as implying expenditure cuts and restricted access of citizens to their entitlements of publicly provided goods.² This paper’s central insight is two-fold: First, favoritism is more likely to occur in a fiscal crisis than absent a crisis. That is, to the extent that a crisis involves the government renegeing on its commitments to citizens, it is natural to assume that favoritism and suspension of equal treatment are likely to arise, if only as the outcome of competition between people to access their entitlement to publicly provided goods. Second, and consequently, expectations of the burden of the crisis being allocated in an uneven way, generates an ex-ante political support in favor of fiscal indiscipline.

This mechanism sheds light on the insights of Dornbusch and Edwards. I show that greater favoritism favors higher public expenditure, debt financing, and raises the likelihood of fiscal crises. In other words, by pursuing unsound fiscal policies, the favored groups somehow “engineers” future crises. Thanks to crises, these favored groups manage to have their entitlements financed on average by the unfavored groups.

To illustrate these effects, I first discuss a short illustrative model based on Saint-Paul et al. (2017). All agents are entitled to consuming a certain level of a publicly provided good – that is, in normal times, public good provision is based on principles of equity and anonymity. In a crisis, however, budget cuts imply that not everybody can access his or her entitlement, and I assume that some groups are better than others at getting it. For this feature, called favoritism, to reduce the sustainability of fiscal policy, the decisive voter must be favored relative to the mean, a central assumption underlying my results. If this holds, I show that people are more likely to finance public expenditure by debt, the greater the degree of favoritism, the lower income inequality, and the greater the probability of a crisis. One can also show that favoritism and the likelihood of a crisis raises the level of public spending, which also goes up (as in the standard literature that follows from Meltzer and Richard (1981)) with income inequality.

I also tackle the issue of favoritism arising endogenously as the outcome of collective choice. I consider the choice between electing a “populist” who reneges on anonymity when allocating the public good, even in normal times, and a “technocrat” who sticks to anonymity, and does all it takes to balance the budget so as to ensure that as many citizens as possible can access their entitlement – thus the technocrat will restrict access to public goods only if there is a fiscal crisis, and will do so by implementing random rationing. I show that the support for the populist is greater, the greater the likelihood of a crisis. This means in particular that populists are more likely to conquer power (i) the greater the likelihood of default, (ii) the more depressed the macroeconomic environment, (iii) the greater the inherited level of public debt and (iv) the lower the state’s fiscal capacity. Somehow, there is a connection between populism in a sense often used by the popular mainstream press – a populist party favors some groups at the expense of others – and macroeconomic populism in the Dornbusch and Edwards sense.³

I then provide empirical evidence supporting the theory. I first discuss a case study, that of French pension reform, and show how it can be interpreted in light of the model: That is, civil servants and wage earners covered by specific pension regimes supported unsustainable reductions in the retirement age because they had good reasons to believe that other workers would bear a higher proportion of the burden of future pension reforms. I then provide evidence based on a

² However, as briefly discussed below, favoritism also potentially arises when one consider tax hikes, although the definition of a fiscal crises used here assumes such tax hikes to be impossible.

³ Both definitions differ from that of Acemoglu et al. (2013), who consider populism as a left-wing phenomenon.

panel of countries. I match four datasets: the IMF's World Economic Outlook for macro indicators, the Institutional Profiles Database (IPD) for indicators of favoritism at the micro/institutional level, the Database of Political Institutions (DPI) for indicators of party ideology, and the CRAG-Bank of Canada database of sovereign defaults to get proxies for fiscal crises. Based on an IPD indicator of equality of treatment, I show that favoritism raises public debt, budget deficits, and public spending, as predicted by the theory. Favoritism raises the likelihood of a fiscal crisis through its effect on public debt. Finally, to test for the effects on collective choices, I define a "populist" party as either nationalist, regional, rural or religious. This definition can be criticized but, based on the indicators available in DPI, comes closest to a measure of whether a party favors some groups (defined by non-economic characteristics) at the expense of others. I then show that populists are more likely to conquer power, the higher the degree of debt and budget deficits, and the higher the level of government spending. The two first findings are consistent with the model's predictions. The last one may capture other mechanisms, but is also consistent with my predictions if interpreted as the effect of fiscal capacity.

The present paper contributes to the literature on the effect of institutions on the performance of macroeconomic policy. In contrast to the work of e.g. Persson et al. (2000) or Cukierman (2003), the focus here is not on the role of formal institutions such as political constitutions or the status of the Central Bank, but on the more informal one of favoritism.

Before proceeding to the analysis, it is useful to discuss the different forms of favoritism.

2. Forms of favoritism

We can enumerate a number of mechanisms by which favoritism would arise, especially so in a crisis. We may distinguish between *explicit* and *implicit* favoritism.

2.1 Explicit favoritism

A most salient form of explicit favoritism is *ethnic discrimination*. Hitler's Nuremberg laws, for instance, included provisions for expropriating Jews. They were deprived of their nationality, right to vote, and access to many professions. They were also banned from using public goods; for example, Jewish children were excluded from public schools in Berlin in 1937; they were banned from owning a car (thus using public infrastructures) or having a driver's license in 1938.⁴ Historically, many governments have regularly struck the Jewish community with discretionary tax levies, especially in times of fiscal crises.⁵ In modern democracies, anonymity and equity prevail in principle, but ethnic favoritism may arise in an opaque way as an outcome of identity politics (recall the controversy in the US about the Community Reinvestment Act).⁶

While nationality and ethnicity are obvious criteria, the frontier between favored groups and disadvantaged ones may obey other criteria, such as for example occupational ones. The example of French pensions discussed below shows that civil servants have enjoyed preferential statutory treatment in the pension reforms, and still enjoy better terms that are indirectly financed by other occupational groups. It is useful to interpret such discrepancies as an outcome of differences in *bargaining power* between civil servants and private sector employees that lead to the latter bearing most of the burden of adjustment in a fiscal consolidation, much in the fashion of Alesina and Drazen (1991).

⁴ A concise account of those laws can be found at <http://alphahistory.com/holocaust/anti-jewish-laws/>

⁵ See for example Gerber, 1980.

⁶ See Banerjee and Pande (2007) for an analysis of how ethnic preferences in political parties may lead to a reduction in the quality of elected officials, in particular in the dimension of corruption. See also Franck and Rainier (2012) on ethnicity and Grim and Finke (2006) on religion.

A natural source of explicit favoritism is the one associated with income and embedded in the *progressivity of the tax system*. The more progressive this system, the more people expect adjustment to fall upon a small set of people – the richest – to the extent that adjustment involves tax hikes.⁷ As shown by Ferrière (2015) both empirically and theoretically, more progressive tax systems raise the political support for and level of public debt which in turn makes default more likely. The theory outlined here focuses on differences in access to publicly provided goods that are not due to income.

2.2 Implicit favoritism

A natural source of favoritism is *corruption*.⁸ One may consider corruption as a perfectly competitive market: any publicly provided good (say a driving license) can be obtained by any citizen at the going market bribe. In such a situation favoritism arises only insofar that there is an income effect: the rich's willingness to pay for the good being higher than the poor's. If one considers, on the other hand, that some individuals are more corrupt than others, then more corrupt citizens lose less from restricted access to publicly provided goods in a crisis, since they are disproportionately likely to be granted their entitlement by paying bribes. Also, on the supply side, more corrupt officials may also benefit from a fiscal crisis to the extent that tighter rationing may help them raise the bribes they charge.

Similarly, differential access to *tax evasion* in the case of a tax hike may provide a mechanism for favoritism to operate.⁹ Clearly, groups who have better access to tax evasion, when expecting that crises would lead to tax increases, are less likely to oppose macroeconomic populism. This may have some relevance in explaining the policies that led to the Greek sovereign crisis, for example.

Another source of inequities in access to publicly provided goods is the role of *social networks*, in particular in conveying information about procedures and opportunities. For example, a news piece by Le Boucher (2010) reports that the growing intricacies of the system to attend the elite *grandes écoles* in France favors insiders, i.e. in particular people whose relatives work at the ministry of education.¹⁰

I now formally discuss the consequences of favoritism for the political economy of spending, indebtedness, and crises.

⁷ This mechanism is absent from our theoretical analysis below, because by definitions crises occur when the government has exhausted its fiscal capacity and is only left with the option of renegeing on its commitments over publicly provided goods.

⁸ See Olken and Pande (2012) for a survey on the measurement of various forms of corruption.

⁹ Gerber (1980) discusses how some members of the jewish community in Morocco could bribe officials to escape tax levies, which in turn undermined the community's ability to resist such hikes.

¹⁰ Saint-Paul (2014) discusses a model where social connections gives one an edge in accessing rationed goods (such as public housing), so that policies of price controls that lead to such rationing are likely to be supported by people well endowed in social connections, despite that such policies are inefficient. Afonso et al. (2015) document the role of clientelism in the adjustment to the Greek fiscal crisis. See Robinson and Verdier (2013), for an analysis of clientelism.

3. A model

In this section I sketch a formal model of fiscal policy under favoritism. I use it to analyze basic intuitions—the reader can refer to Saint-Paul et al. (2017) for a related model with formal results.¹¹

My key assumptions are the following:

- Society precommits on an “entitlement” level of the publicly provided good, denoted by G . This means that any individual is entitled to consume G . For example, any person may have the right to use the local public library, to a certain number of years of education, to access day care, and so forth. However, the government can deny access to some individuals, which may be picked more or less randomly, but that is costly. This default on the government’s commitment to the people may occur because a fiscal crisis may force a cut in expenditures, or, as discussed below, as an outcome of collective choice, in particular due to a ‘populist’ government allocating public spending in a discriminatory fashion.
- Society is partitioned into groups, indexed by a parameter λ . Groups with a higher value of λ have a better access to their entitlement. This access is summarized by a function $\psi(\phi, \lambda)$, assumed to be C^2 , where ϕ is the aggregate probability of getting one’s entitlement; that is, $\phi = \hat{G}/G$, where G is the entitlement level and \hat{G} the actual spending on publicly provided goods. Assuming that there is a continuum of groups with λ uniformly distributed over $[0, 1]$, we must have that

$$\int_0^1 \psi(\phi, \lambda) d\lambda \equiv \phi.$$

It is natural to assume that no group becomes better-off in accessing the public good if it becomes harder to get on average, that is,

$$\psi_1 \geq 0.$$

The assumption that access is easier for more highly ranked groups reads as

$$\psi_2 \geq 0. \tag{1}$$

A special case is random rationing, i.e. $\psi(\phi, \lambda) = \phi, \forall \lambda$. In such a case every group has the same access to the publicly provided good. Otherwise, the process for allocating the public good is discriminatory over some range, implying from (1) that $[\psi(\phi, 1) > \psi(\phi, 0)]$ for a range of values of ϕ .

- As in Meltzer and Richard (1981), the publicly provided good has a redistributive dimension. In each group there are rich and poor people. Aggregate GDP is denoted by y , and is subject to random fluctuations – i.e. y is drawn from a distribution with support $[\underline{y}, \bar{y}]$ and density $f()$. The income of a poor (of any group) is βy , while the income of a rich is γy , where $\beta < 1 < \gamma$. For this to be consistent, the proportion of rich people in the population, θ , must be such that $(1 - \theta)\beta + \theta\gamma = 1$, that is

$$\theta = \frac{1 - \beta}{\gamma - \beta}.$$

¹¹ Relative to that paper, the model presented here has a more flexible representation of favoritism and allows to analyze the interplay between favoritism and fiscal and economic condition when choosing between “populist” and “non-populist” parties. On the other hand, it delivers fewer clear-cut predictions.

- Taxes are proportional to income. Let τ be the equilibrium tax rate. Then a poor consumes $\beta y(1 - \tau)$ of the generic consumption good, while a rich consumes $\gamma y(1 - \tau)$. Fiscal policy will be determined by a political equilibrium as in Meltzer and Richard. In this paper I do not prove any results regarding such an equilibrium. Instead I simply assume that there exists a decisive voter who is poor and belongs to some group λ .¹²
- Public spending may be financed by taxes or debt. I introduce debt as follows: Public debt is determined prior to the realization of the shock y and is used to finance a proportional tax credit. Therefore, denoting the debt level by D , each poor gets a credit equal to βD and each rich gets a credit equal to γD . I normalize the interest on debt to zero, so that the total tax receipts that are needed to finance the government's commitments simply equal $D + G$.
- A fiscal crisis may occur under poor macroeconomic conditions. I assume a maximum possible tax rate denoted by $\bar{\tau}$, and referred to below as *fiscal capacity*. More specifically,

– If

$$y \geq \frac{D + G}{\bar{\tau}},$$

the tax rate is set to

$$\tau = \frac{D + G}{y}$$

and all agents get their entitlement level G .

– If

$$y < \frac{D + G}{\bar{\tau}},$$

aggregate expenditures are equal to

$$\hat{G} = \bar{\tau}y - D < G$$

and access to the public good is rationed so that $\phi = \hat{G}/G < 1$. Furthermore, such rationing is costly. I assume it entails a disutility loss incurred by all agents and equal to

$$\delta = \varepsilon G(1 - \phi).$$

I shall assume that the marginal cost of rationing, ε , is smaller than β . This makes it potentially valuable for the decisive poor to issue debt at the cost of raising the likelihood of a crisis. I denote by $A = F\left(\frac{D+G}{\bar{\tau}}\right)$ the probability of a crisis.

- The utility of any given individual is given by

$$U(c, G, \psi, \delta) = c + \psi G - \delta,$$

where c is his consumption of the private good and ψ his probability of accessing his entitlement.

From there it is easy to see that absent a crisis, the utility of a poor of any group is equal to

$$u_P(y, G, D, \lambda) = \beta y + (1 - \beta)G.$$

¹² Again, see Saint-Paul et al. (2017) for a formal characterization of the equilibrium.

In particular, it does not depend on D : one euro of tax credit is paid back as one extra euro of tax liability. On the other hand, if there is a crisis, this utility is equal to

$$u_P(y, G, D, \lambda) = \beta y(1 - \bar{\tau}) + \beta D + \psi\left(\frac{\bar{\tau}y - D}{G}, \lambda\right)G - \varepsilon(G + D - \bar{\tau}y).$$

Fiscal policy consists of G , the entitlement level, and D , the debt level. I assume that these two quantities are decided by the decisive voter, who is poor and of type λ_d , prior to the realization of the shock y . Therefore the equilibrium values of D and G maximize

$$\begin{aligned} V(G, D) &= E_y u_P(y, G, D, \lambda_d) \\ &= \int_{\underline{y}}^{\frac{D+G}{\bar{\tau}}} \left(\beta y(1 - \bar{\tau}) + \beta D + \psi\left(\frac{\bar{\tau}y - D}{G}, \lambda\right)G - \varepsilon(G + D - \bar{\tau}y) \right) dy \\ &\quad + \int_{\frac{D+G}{\bar{\tau}}}^{\bar{y}} (\beta y + (1 - \beta)G) dy. \end{aligned}$$

We want to analyze how favoritism affects fiscal discipline, i.e. how it affects the equilibrium values of G and D . For this we can simply look at the marginal utility to the decisive voter of raising D and G .

Let us start with the incentives to issue debt, for any given G . Clearly, we have that

$$V_2(G, D) = \beta A - \int_{\underline{y}}^{\frac{D+G}{\bar{\tau}}} \left(\psi_1\left(\frac{\bar{\tau}y - D}{G}, \lambda_d\right) + \varepsilon \right) f(y) dy.$$

All the terms in this expression come from states of fiscal crisis. This is because absent a crisis, Ricardian equivalence holds: an extra euro of tax credit financed by debt is simply matched by an extra euro of taxes. In a crisis, raising taxes is impossible because they are constrained by fiscal capacity. Therefore, the individual experiences a gain from the tax credit (the βA term), but that is financed by a reduced access to the public good (captured by the ψ_1 term). To this cost should be added the distortory effects of rationing (the ε term).

Let us now discuss how the choice of debt is affected by favoritism. We start from the benchmark case of no favoritism; then $\psi(\phi, \cdot) \equiv \phi$ and $\psi_1 = 1$, implying that $V_2 = -A(1 + \varepsilon - \beta) < 0$. Absent favoritism, the decisive poor always loses from increasing debt. This is because in a crisis, a dollar of additional government liability is matched by a dollar of reduced expenditure. Since the poor only pay β dollars per dollar of extra taxes, their monetary gain from the increased debt is lower than the monetary value of their reduced consumption of the public good; and these losses are compounded by the distortions induced by rationing. Under proportional rationing, then, the decisive voter is averse to debt; more so, the greater the probability of a crisis A .

What happens, now, if the decisive voter is favored “at the margin” in accessing his entitlement? This means that his probability of being served, ψ , only falls by a small amount when ϕ falls, i.e. that ψ_1 is small. Intuitively, this will be the case if group λ_d is among the groups that are “served first”, while other groups would bear most of the adjustment burden. Clearly, then, V_2 may be positive, more so, the smaller ψ_1 , i.e. the more the decisive group is protected from the burden of adjustment. The above formula also implies that the propensity to issue debt is larger, the larger β and the greater the probability of crisis A . The larger β , the greater the gains to the decisive group of voting for a tax credit in exchange for rationing G in times of crises. Since it is in crisis times that the gains are incurred, they are greater, the more likely the crisis is.

Let us now turn to the determination of G , the entitlement level of the public good. We have that¹³

$$V_1(G, D) = (1 - A)(1 - \beta) + \int_{\underline{y}}^{\frac{D+G}{\tau}} \left(H\left(\frac{\bar{\tau}y - D}{G}, \lambda_d\right) - \varepsilon \right) f(y) dy, \quad (2)$$

where $H(\cdot)$ is defined as

$$H(\phi, \lambda) \equiv \psi(\phi, \lambda) - \phi\psi_1(\phi, \lambda).$$

The first term in (2), $(1 - A)(1 - \beta)$ tells us that absent a crisis, there is a net gain to the poor from raising G , because they only pay β euros per euro spent. This is the standard Meltzer and Richard effect. The second term tells us that the marginal gain from increasing G in crisis states is equal to the probability of being served, ψ , from which one deducts the distortionary cost induced by the additional rationing, ε , as well as the average reduction in the amount of G consumed due to rationing, $\phi\psi_1$. To the extent that the decisive group is favored, ψ is large while ψ_1 is low; therefore we expect that $H > 0$, more so, the more favored the group (Note that $H = 0$ if $\psi \equiv \phi$). Altogether, this discussion implies that society will choose a greater entitlement level, the greater inequality, and the greater favoritism. Furthermore, if favoritism is very large, one will have that $H - \varepsilon > 1 - \beta$, and V_1 and the optimal level of G will go up with the crisis probability A . On the other hand, if favoritism is not too strong, G will fall with the probability of crisis A .

At this stage, it is useful to summarize the predictions of this section:

- For a given level of favoritism, debt will be higher, (i) the greater the probability of a crisis, (ii) the lower the inequality between the politically decisive voter and the average one. Furthermore, debt goes up with the degree of favoritism.
- For a given level of favoritism, public spending goes up with inequality. Furthermore, public spending goes up with the degree of favoritism. Finally, a rise in the crisis probability raises public spending if favoritism is very large, but reduces it if it is moderate.

3.1 Endogenizing favoritism: the populist as a discriminator

So far, the discussion has assumed that favoritism is a structural property of the society under study. In reality, favoritism may be the outcome of collective choices – indeed, all political parties represent the interests of some specific groups of people. Indeed, much of the debate about populism, and many of the arguments of the so-called populist politicians, center around whether national citizens should have a better access to publicly provided goods than non-nationals. This example shows that people can choose some degree of discrimination by electing a populist or not, even though nationality or ethnicity are only one set of attributes along which one may discriminate.

The preceding section highlights the potential benefits of voting for a populist: his policies will grant privileged access to the favoured groups in a crisis. In this section I analyze the incentives for putting a populist in power. I assume people can choose between two kinds of politicians: a technocrat and a populist.

¹³ We ignore any resource cost of G , for simplicity. Of course, actual spending GA has a resource cost and must be financed by taxes; but G is the nominal entitlement level of citizens to the publicly provided good; it is a social contract, not an actual production activity.

See Saint-Paul et al (2017) for a full analysis which embodies a convex resource cost for G and a complete characterization of the political equilibrium.

3.1.1 The technocrat

The technocrat does whatever it takes to balance the budget while providing the entitlement level G . Therefore, he will set $\tau = \bar{\tau}$ and $\hat{G} = \bar{\tau}y - D$ in a crisis, and $\hat{G} = G$, $\tau = (D + G)/y$, absent a crisis. The outcome is the one described in the preceding section, with $\psi \equiv \phi$.

3.1.2 The populist

The populist favors a specific group, denoted by λ_p . He always allocates the public good on the basis of favoritism, i.e. with access probability $\psi(\phi, \lambda)$. Furthermore, upon realization of the shock y , he picks the value of \hat{G} , which maximizes the utility of group λ_p . Potentially, this means that once the entitlement level G is set the populist may elect to ration access to the public good, even though there exists a feasible tax rate which guarantees universal access. If fiscal capacity is not binding, then $\tau = (D + \hat{G})/y = (D + \phi G)/y$, and the utility of group λ_p is given by

$$\beta y \left(1 - \frac{D + \phi G}{y}\right) + \psi(\phi, \lambda_p)G - \varepsilon(1 - \phi)G + \beta D.$$

Consequently, as long as fiscal capacity is not binding, the populist picks $\hat{G} = \phi^* G$ such that

$$\phi^* = \arg \max_{\phi} -(\beta - \varepsilon)\phi + \psi(\phi, \lambda_p).$$

If $\phi^* < 1$, access is rationed regardless of the realization of the macroeconomic shock y . This is because rationing allows to reduce taxes, which favors group λ_p as long as its rank is high enough, since its access to G is not much reduced as ϕ falls.

3.1.3 Choosing between the technocrat and the populist

I now discuss who gains and who loses from populism, depending on the current state of the economy, and conditional on the preset values of G and D . I focus on the case where $\phi^* < 1$ and distinguish between three possible outcomes:

- Normal times, where neither a technocrat nor a populist would be constrained by fiscal capacity, which occurs if

$$y \geq \frac{D + G}{\bar{\tau}}.$$

- Crisis, where the technocrat would be constrained by fiscal capacity and would have to implement rationing, while the populist can pursue his unconstrained policy. This occurs if

$$\frac{D + \phi^* G}{\bar{\tau}} \leq y < \frac{D + G}{\bar{\tau}}.$$

- Supercrisis, where fiscal capacity is binding for both kinds of participants, which occurs if

$$y < \frac{D + \phi^* G}{\bar{\tau}}.$$

In a supercrisis, both the technocrat and the populist implement the same rationing level, $\phi = \frac{\bar{\tau}y - D}{G} < \phi^*$.

I now compute the set of people who gain and lose from the populist being in power, for each of those environments.

Preferences for populism: Normal times In normal times, the utility of group λ from the technocrat being in office is given by

$$U_T(y, G, D, \lambda) = \beta y + (1 - \beta)G;$$

if the populist is in power, utility is given by

$$U_P(y, G, D, \lambda) = \beta(y - \phi^*G) + \psi(\phi^*, \lambda)G - \varepsilon(1 - \phi^*)G. \quad (3)$$

We note that D is absent from these formulas: absent a fiscal crisis, Ricardian equivalence holds. It is then clear that

$$U_P > U_T \Leftrightarrow \lambda > \lambda_N,$$

where λ_N is the solution to

$$\psi(\phi^*, \lambda_N) = 1 - (\beta - \varepsilon)(1 - \phi^*). \quad (4)$$

Not surprisingly, those who support the populist are those whose rank is above some critical λ_N , i.e. those who are favored by the allocation of public resources. Furthermore, $\partial\lambda_N/\partial\beta < 0$, meaning that when inequality is lower, the poor benefit more from the tax cuts implemented by the populist, which increases the support for the latter.

Crisis In a crisis, the utility of group λ from the technocrat has to be changed and is now given by

$$U_T(y, G, D, \lambda) = \beta y(1 - \bar{\tau}) + \beta D + \bar{\tau}y - D - \varepsilon(G + D - \bar{\tau}y). \quad (5)$$

The term $\bar{\tau}y - D$ comes from the fact that $\psi(\phi, \lambda)G = \phi G = \hat{G} = \bar{\tau}y - D$. The formula for U_P is unchanged, and supporters of the populist are now ranked above some critical $\lambda_C(y)$ which is defined by

$$\psi(\phi^*, \lambda_C(y)) = (\beta - \varepsilon) \left(\phi^* - \frac{\bar{\tau}y}{G} \right) + \frac{\bar{\tau}y}{G} - (1 - \beta + \varepsilon) \frac{D}{G}. \quad (6)$$

From this formula, we can establish the following predictions:

First, as long as $D \geq 0$, $\lambda_C < \lambda_N$.¹⁴ This means that the support for the populist is larger in times of crisis than in normal times. The technocrat somehow loses his comparative advantage in times of crisis, because he is forced to implement rationing, which the populist does anyway. As the marginal voter in normal times λ_N is relatively favored, in crisis times he switches to the populist who offers a better access to his entitlement, given that such access is rationed.

Second, $\partial\lambda_C/\partial D < 0$. An increase in the stock of debt raises the support for the populist. This is because the greater the stock of debt, the greater the degree of rationing that the technocrat implements in a crisis. As seen above, this harms the poor because, through debt, they only get β euros of tax rebate per euro in average reduction of their public good consumption. In contrast, the stock of debt has no effect on the populist's choice for ϕ , because he is not constrained by fiscal capacity. Thanks to his choice of rationing people, the populist has a greater fiscal margin

¹⁴ From (4), $\psi(\phi^*, \lambda_N) - \psi(\phi^*, \lambda_C(y)) = (1 - \beta + \varepsilon) \left(\frac{D}{G} + 1 - \frac{\bar{\tau}y}{G} \right) > 0$. Since $\psi_2 > 0$, it follows that $\lambda_N > \lambda_C(y)$.

of maneuver, and raises taxes when debt goes up, leaving ϕ^* and therefore ψ unchanged, which is a better adjustment strategy for the poor than what the technocrat does, i.e. reducing ϕ .

Third, the support for the populist is greater, the more severe the crisis (the lower y) and the lower the state's fiscal capacity (the lower $\bar{\tau}$). In both cases, the technocrat is constrained to increase the extent of rationing by reducing ϕ , while the populist raises τ while maintaining the same degree of access to the publicly provided good.

Supercrisis In a supercrisis, both politicians are constrained by fiscal capacity. As a result, (3) has to be replaced with

$$U_P(y, G, D, \lambda) = \beta y(1 - \bar{\tau}) + \beta D + G\psi\left(\frac{\bar{\tau}y - D}{G}, \lambda\right) - \varepsilon(G + D - \bar{\tau}y). \quad (7)$$

Comparing (7) with (5), we find that people support the populist provided their rank is higher than $\lambda_S(y)$, where $\lambda_S(y)$ is given by

$$\psi\left(\frac{\bar{\tau}y - D}{G}, \lambda_S(y)\right) = \frac{\bar{\tau}y - D}{G}.$$

This formula is simple to understand. In a supercrisis, both the populist and the technocrat will spend the same amount on the public good, $\hat{G} = \bar{\tau}y - D$. Hence, they implement the same degree of rationing, which induces the same distortions. Under a technocrat each group is served its entitlement with the same probability $\phi = \hat{G}/G$. Under a populist, group λ is served with probability $\psi(\phi, \lambda)$. Group λ favors the populist if and only if it has a greater than average probability of being served under the populist, which is equivalent to $\lambda > \lambda_S$.

We also note that

$$\frac{d\lambda_S}{d\phi} = \frac{1 - \psi_1}{\psi_2} \quad (8)$$

This quantity is positive iff $\psi_1 < 1$, i.e. if the pivotal group is marginally favored. If that is true, λ_S falls when ϕ falls, implying that the support for the populist will go up, the smaller the government's "fiscal space", i.e. the smaller y , the smaller $\bar{\tau}$, and the larger D . Also note that $\lambda_S(\frac{D+\phi^*G}{\bar{\tau}}) = \lambda_C(\frac{D+\phi^*G}{\bar{\tau}}) < \lambda_N$. By continuity, $\lambda_S < \lambda_N$ for y not too small. Furthermore, if in addition the RHS of (8) is always nonnegative for $\phi < \phi^*$, then since $\frac{d\lambda_S}{d\phi} > 0$, one has that $\lambda_S < \lambda_N$ for any $y \leq \frac{D+\phi^*G}{\bar{\tau}}$, i.e. in any supercrisis. We can conclude that in a supercrisis, as in a crisis, the support for populism is typically larger than in normal times.¹⁵

To summarize, this section has studied the endogenous political choice between a technocrat and a populist. Key results are summarized as follows:

- *The support for a populist government as opposed to a technocratic one, is larger, the greater the required degree of adjustment. This means that it is larger in crises than in normal times, and typically larger, the higher the inherited level of public debt, the lower the state's fiscal capacity, and the more adverse current macroeconomic conditions are.*

¹⁵ However, the opposite case is not entirely ruled out for severe supercrises if $\frac{1-\psi_1}{\psi_2} < 0$ over some range.

4. Empirical evidence

I now provide some empirical evidence, based on two different approaches.

First I discuss the recent history of French pension reforms. I argue it highlights the mechanisms analyzed above. Essentially, supporters of unsustainable reductions in the retirement age had good reasons to anticipate that subsequent adjustments were likely to hit other social groups proportionally more.

Second, I provide evidence across a panel of countries that supports the above predictions. Unequal treatment from administrations is more likely to generate high debt, high public expenditures, and high deficits, as well as (indirectly through debt) sovereign default. Also, I study the determinants of populism in government and show that, consistent with the predictions in Section 3.1, adverse fiscal conditions such as high public debt, high deficits and low fiscal capacity are more likely to lead to a populist government. On the other hand, there is no robust evidence that adverse macroeconomic conditions have any effect on the likelihood of populism.

4.1 The French pension reform saga

While the French general government budget has never encountered a formal fiscal crisis which has led to cut in entitlements, the pension system traditionally has its own separate budget and its financial difficulties and the reforms that they have triggered do illustrate the mechanisms highlighted by the model.

In 1981, the left-wing Mitterrand administration was elected. A notable characteristic of the French left is that it is disproportionately supported by civil servants. The following Table, taken from Roubaud (1999), depicts the evolution of the vote for the main two French left-wing parties of the time, the Communists and the Socialists, for public vs. private sector employees. We see that civil servants vote for these parties much more than private sector employees; the difference is 10 to 15 points.

Table 1: Percent vote for the French Communist Party (PC) and the French Socialist Party (PS) in parliamentary elections.

	1973		1978		1986		1993		1997	
	PC	PS	PC	PS	PC	PS	PC	PS	PC	PS
Private	13.3	23.3	18.4	21.7	7.1	38.6	7.1	25.8	9.1	23.6
Public	18.3	32	23.2	28	9.3	46.9	10.1	32.5	11.4	30.4

Source: Roubaud (1999).

A key point in Mitterrand's electoral platform was the reduction in the retirement age from 65 to 60. This reform was implemented despite demographic projections that indicated such a measure was financially unsustainable in the long run, as pointed out by the 1991 *Livre Blanc* (white paper).¹⁶ Another important feature of the French public pension system, is that it is split in different *régimes*. This means that workers are treated differently by the pension system depending on their industry, occupation, or type of labor contract. For example, civil servants are part of a different régime from private sector employees, while many publicly owned companies (in particular EDF, SNCF, RATP and the Banque de France) have their own regimes, called *régimes spéciaux*. Regimes differ from each other in terms of (i) the age at which people may retire, (ii) the number of years of contribution necessary in order to retire, and (iii) the amount of the pension, in relation to the total amount that has been contributed. Given their entitlements, dif-

¹⁶ See French Office of the Prime Minister (1991).

ferent regimes have different financing needs, and restoring fiscal balance is likely to involve cross-subsidies. Absent such cross-subsidies, some regimes would have to levy very large taxes upon their active members in order to fulfil their commitments to their pensioners. These inequities reflect the respective bargaining strength of the different social groups involved in the pension game. Publicly owned companies typically are strongly organized by the major labor union CGT, while this is less so for civil servants, and even less so for private sector employees, whose unionization rate is about half that of their public sector counterparts.¹⁷ While this balance of power implies that some groups are favored on *average* (i.e. have a higher value of ψ in terms of the above model), it is also likely that they will be favored at the *margin* when the inevitable fiscal consolidation of the pension system is implemented (i.e. have a lower value of ψ_1). According to my analysis, these groups are more likely to favor unsustainable increases in the generosity of the system, as was the case for civil servants who supported Mitterrand in 1981 to a greater extent than private sector employees.

The first attempt to balance the accounts of the pension system came with the 1993 “Balladur” reform. While it did not formally overturn the reduction in the retirement age, it did make this entitlement much more difficult to obtain for a fraction of the population, namely private sector wage earners.¹⁸ While having reached the retirement age is one necessary condition for becoming a pensioner, there is another one having to do with the duration of contributions. The 1993 reform raised the duration of contributions from 37.5 years to 40 years *for private sector employees only*, thus making it less likely that they be able to effectively retire at 60. In the public sector, the 37.5 year rule was left untouched. It took 10 more years for a subsequent reform, the 2003 “Fillon” reform, to align the required duration of contributions of the public sector to that of the private sector. The Balladur reform also toughened the conditions for retirement for private pensioners only in other dimensions: private sector pensions were now based on the average wage earned over the 25 best years, instead of the 10 best years,¹⁹ they were indexed on the CPI instead of the average wage (in times of productivity growth, the latter grows faster than the former).

Not surprisingly, as illustrated on Table 2, the reform curbed expenditures on the *régime général*, while expenditures on the régime for civil servants continued to grow at a higher rate.

Table 2: Growth rate of expenditures on the three main regimes, 2000–2002.

Regime	Growth (%), 2000–2002
Private	6.2
Central government	7.5
Local government	13.5

Source: Conseil d’Orientation des Retraites (2004).

It is highly plausible that the right-wing Balladur administration shied away from a reform of public pensions because of the superior ability of public employees’ unions to organize in order to block a reform²⁰ – as was painfully experienced by his successor Juppé, who had to withdraw a proposal for reforming the *régimes spéciaux* in the face of violent protests. In turn, consistently with the model, it was rational for public sector employees to support Mitterrand

¹⁷ See DARES (2016).

¹⁸ See Observatoire des Retraites (2009).

¹⁹ As of today, the civil servant’s pensions is based on the last 6 months of wages, reflecting their highest level throughout their career, due to seniority.

²⁰ Given its ideological positioning, it is natural, as far as the pension issue is concerned, to interpret the right-wing government of Balladur as a “Technocrat” and Mitterrand as a “Populist”. However we do observe that under pressure from the unions, Balladur failed to act as a technocrat and instead implemented a reform which increased inequities, at the expense of his own constituency.

in the 1981 election, despite overwhelming evidence that the reduction in the retirement age was fiscally unsustainable; the civil servants knew that because of their greater clout in resisting reforms, any adjustment was likely to fall predominantly on private sector employees, who ended up effectively subsidizing the civil servants' superior entitlement.

4.2 Evidence from a panel of countries

I now provide some more formal statistical evidence in favor of this paper's key hypotheses.

My most central argument is that lack of equal treatment of citizens by the administration is likely to deliver fiscal indiscipline at the macroeconomic level. To test for this hypothesis, I use the institutional profiles database (IPD). It includes a large number of indicators of institutional quality across countries, in particular with respect to equality of treatment of citizens by the state.²¹ Furthermore, the IPD survey is conducted every four years, implying that these indicators can be organized in a panel. In practice, the number of countries is quite small before 2012, so that I construct a panel with only two time observations by matching the 2012 and 2016 waves of IPD—the fixed effects estimates reported below are in effect difference-in-differences estimates. These two waves contain data on some 300 institutional indicators for 144 countries. For all these indicators, a higher number indicates better institutions. Therefore, for example, a country is better at collecting taxes, the higher its fiscal capacity indicators, and less corrupt, the higher its corruption indicators. One should keep this in mind when reading the estimates below.

I use five indicators to proxy for favoritism:

- Equality of treatment (A1032), which measures “equality of treatment of citizens in their relationship with the administration”.
- “de facto equality of treatment of citizens by the public service” in the four specific areas of schooling (A9040), health (A9041), formalities (A9042) and access to public jobs (A9043).

For these indicators, I estimate their effect on a macro fiscal performance measure, controlling for time and country fixed effects, GDP per capita, as well as three IPD-based composite indicators of institutional quality that are likely to affect aggregate fiscal discipline:

- A measure of fiscal capacity, constructed as the first principal component of the following IPD fiscal efficiency indicators: state efficiency in collecting corporate taxes (A3030), income taxes (A3031), and taxes across the territory (A3032).
- A measure of conflict, constructed as the first principal component of the following IPD conflict indicators: ethnic/religious/regional (A2020), social (A2021), rural land (A2022), urban land (A2023), plus two measures of violent activities related to political organizations (A2040) and criminal organizations (A2041).
- A measure of corruption, equal to the first principal component of the IPD corruption indicators for small corruption (A3020), political corruption (A3021), corruption between administration and local firms (A3022) and corruption between administration and foreign firms (A3023). Arguably, this control variable can be interpreted as another measure of favoritism.

The macroeconomic variables are borrowed from the IMF's World Economic Outlook Data.

²¹ See <https://www.tresor.economie.gouv.fr/Articles/2018/05/03/tresor-economics-no-221-institutions-and-development-insights-from-the-institutional-profiles-database-ipd>

4.2.1 The effect of favoritism on debt

I first look at the effect of favoritism on the level of public debt.

Table 3: Effect of equality of treatment on public debt

Controls			Equality of treatment
Fiscal capacity	Conflict	Corruption	A1032
			-2.7*
	-1.6***		-3.2**
1.4			-2.0
1.4	-1.6***	-2.3***	-4.3***
	0.1		-2.6*
		-2.3***	-4.2***
1.9*		2.6***	-3.7**
1.9*	0.07	-2.7***	-3.6**

Dependent variable: Gross public debt relative to GDP. All regressions control for time and country fixed effects as well as GDP per capita in constant PPP terms. *** = significant at the 1% level; ** = significant at the 5% level; * = significant at the 10% level.

Table 3 estimates the effect of equality of treatment on the ratio between gross public debt and GDP. For the main indicator A1032, in most specifications the effect is strongly significant with the expected sign: better equality of treatment reduces the debt/GDP ratio. The coefficients are virtually unchanged when one varies the set of controls. Note also that higher fiscal capacity has a positive effect on debt, suggesting it actually makes it easier for governments to borrow, in contrast to what one might believe based on the naive view that debt is an alternative to taxation. Corruption also raises debt levels in all specifications, consistent with our analysis if one is willing to interpret it as a form of favoritism. Finally conflict typically raises public debt (since a higher level of that variable indicates less conflict), in accordance with theories of divided government,²² although the coefficient becomes essentially zero when corruption is controlled for.

In the Appendix I replace the favoritism measure by alternative ones, including all controls as in the last line of Table 3. The results are qualitatively identical when instead of equality of treatment A1032, I use either equality of access to public jobs (A9043) or of access to the administration (A9042). For the two other indicators – access to schooling and access to health – the coefficient on equality has the right sign but is not significant.²³

²² Tabellini and Alesina (1990), Persson and Svensson (1989).

²³ On the other hand, the coefficients on fiscal capacity and corruption have the same sign as in the last line of Table 3 and are significant – See Table A1.

4.2.2 The effect of favoritism on budget deficits

Alternatively, we can use net primary government lending as a fraction of GDP as a measure of fiscal discipline. The results (Table 4) essentially confirm those of Table 3. Equality of treatment A1032 has a significant positive effect on the primary budget surplus. Both conflict and corruption have a positive sign, meaning that more conflict and more corruption are conducive to budget deficits.

On the other hand, none of the specific indicators A9040-A9043 has any significant effect, although they all have the predicted positive sign (See Appendix).

Table 4: Effect of equality of treatment on primary budget surplus. Controls include time and country fixed effects as well as GDP per capita. Dependent variable: net primary government lending as a fraction of GDP.

Variable	Coefficient
Fiscal capacity	0.0
Conflict	0.7*
Corruption	1.3***
Equality of treatment (A1032)	2.6***

4.2.3 The effect of favoritism on public spending

Another prediction is that the decisive voter will tend to vote in favor of higher public expenditure, the greater the degree of favoritism. Such prediction is validated in Table 5, which regresses public spending as a share of GDP on our usual equal treatment indicators.

Table 5: Effect of equality of treatment on public expenditure. Same controls as for the preceding tables.

Variable	Coefficient
Fiscal capacity	0.31
Conflict	-0.6**
Corruption	-0.5*
Equality of treatment (A1032)	-1.8***

Again, equality of treatment has a significant negative effect on spending, as predicted by the model. This only holds, however, for the general indicator A1032, the other ones are again insignificant (See Appendix).

4.2.4 Favoritism and fiscal crises

Does favoritism make fiscal crises more likely to occur? To test for this prediction, I need a measure of sovereign default. To do this, I import data from the Bank of Canada CRAG database (See Beers and Mavalwalla, 2017). This panel of countries provides estimates of the total dollar amount owed to institutional creditors such as the IMF and the Paris Club. I construct a default indicator as the ratio between the amount owed the following year and the outstanding level of public debt (gotten from the WEO database). This, in principle, is an indicator of default in the year following the observation, although due to rescheduling and rollover of delinquent debt there is much serial correlation in this default variable. One other drawback is that since the second time observation of the IPD is 2016 and the CRAG database does not have data posterior to that date, while the 2016 data themselves have many missing values, I can no longer exploit the panel dimension of IPD and can only run a cross-sectional regression for 2012.²⁴ Given these shortcomings, we expect poorer quality results than in the preceding regressions. The estimates are reported in Table 6.

Table 6: Effect of equality of treatment on subsequent sovereign default rate.

Controls			Equality of treatment	Debt/GPD ratio
Fiscal capacity	Conflict	Corruption	A1032	
			-0.22	0.02***
	0.0		-0.22	0.02***
-0.23**			-0.12	0.02***
		0.1	-0.18	0.02***
-0.23**	-0.03		-0.13	0.02***
	-0.02	0.1	-0.19	0.02***
-0.22**		0.02	-0.11	0.02***
-0.23**	-0.04	0.03	-0.13	0.02***

Dependent variable: subsequent delinquent amount/outstanding public debt (Source: CRAG database). All regressions are cross-sectional for year 2012. They all control for GDP per capita.

Table 6 only provides mild support for a direct effect of favoritism on the likelihood of fiscal crises. While the equality measure A1032 always has the correct sign, it is never significant at the 15% level or less. Note however that the coefficient on equality captures its effect on default while *controlling for public debt*. In all specifications, the outstanding level of public debt has (unsurprisingly) a strong positive effect on default (See Table 6, column 4). Since, on the other hand, we have documented a significant effect of favoritism on public debt, clearly favoritism makes crises more likely through that channel. But the evidence in favor of a direct effect of its own is much weaker.

²⁴ Instead of using subsequent default as our dependent variable, I could use contemporaneous default, which given the availability of CRAG for 2016, would in principle allow us again to use the panel dimension. However, the estimates would be polluted by the endogenous effect of default itself on favoritism. In any case, there are so many missing data for 2016 that running this exercise does not deliver any useful result.

4.2.5 IV estimates

One issue with the estimates of Tables 3 to 5 is that the equal access measure may be correlated with the error term. For example, one may plausibly argue that high public debt, or more generally high fiscal strain, breeds favoritism as an outcome of the uneven effects across citizens of the public administration's attempts to save money. To control for this potential source of bias I instrument the (preferred) A1032 equality of treatment indicator with a set of variables from the IPD database which capture deeper institutional characteristics of a country that are unlikely to be affected by current budgetary developments and, to varying degrees, are arguably correlated with effective equality of treatment.²⁵ In addition to my equality of treatment variable, I also instrument for the conflict and corruption indicators, that may arguably suffer from the same endogeneity bias as the equality of treatment indicator.

The IV estimates of the effect of favoritism are reported in Table 7. For the sake of comparison I also report the OLS estimates from Tables 3–5.

Table 7: Instrumental variables estimates of the preferred regressions in Tables 1 to 3.

Dependent Variable (%GDP)	Debt		Net gvt lending		Public spending	
	OLS	IV	OLS	IV	OLS	IV
Covariates						
Fiscal capacity	1.9*	2.3*	0.006	-0.5	0.31	0.6*
Conflict	-0.07	1.4	0.71*	0.9	-0.6**	-0.7
Corruption	-2.7***	-6.1*	1.3***	0.5	-0.5*	0.4
Equality of treatment A1032	-3.6**	-6.2*	2.6***	-0.1	-1.8***	1.0

The picture that emerges from Table 7 is mixed. While conclusions are essentially unchanged for the determinants of debt (favoritism comes with the expected sign and is significant, as well as corruption; fiscal capacity again tends to raise debt), the IV estimates, in contrast to their OLS counterparts, do not show evidence of any significant effects of either the equality of treatment variable or the main controls of interest on either net lending or public spending. The evidence therefore seems less robust for the effects of favoritism on these two measures of fiscal performance than for public debt.

4.2.6 Explaining populism

In this section I investigate the prediction outlined above that adverse fiscal and macroeconomic conditions are conducive to populist governments. While the definition of populism is controversial, in the context of this theory it is natural to define a populist party as one whose platform would favor some social groups at the expense of others, for groups defined by characteristics other than income: regional, ethnic, religious, etc.

²⁵ These instruments are: electoral freedom (A1000), regularity of electoral processes (A1001), representativeness of institutions (A1002), efficiency of control institutions (A1003), freedom of association (A1030), freedom of reunion (A1031), intensity of counterpowers (A1020), national participation (A1021), local participation (A1022).

To construct such an indicator, I use the Interamerican Development Bank's *Database of Political Indicators* (DPI), which is a panel of countries for which a number of political variables are provided.²⁶ In particular, indicator variables capture whether a party is either (i) nationalist, (ii) rural, (iii) regional or (iv) religious. I define any such party as "populist". While the definition of populism is much open to debate, this particular one, among the variables available in DPI, is the one most consistent with this paper's definition of populism.

This leads me to construct four alternative measures of populism, based on the DPI indicators: 1. A dummy equal to one if the executive belongs to a populist party, in the sense I just defined; 2. A dummy equal to one if the ruling coalition party is populist; 3. That dummy multiplied by the fraction of parliamentary seats held by the main coalition party, and 4. That dummy multiplied by the fraction of votes obtained by the main coalition party. The last two indicators weigh the presence of a populist party in the government by power, measured as its relative importance among either MPs or voters.

Next, I match the DPI with my WEO database of macro outcomes to estimate a fixed effects regression of my populism indicators on lagged macro variables. In particular, based on the above theory, we expect adverse macroeconomic conditions such as a low output gap to raise the likelihood of a populist government. Similarly, adverse fiscal conditions such as high debt or large deficits should also lead to a greater likelihood of populism.

Table 8: Macroeconomic determinants of populism, fixed effects estimates. Dependent variable: (1)=populist executive dummy, (2)=populist main coalition party dummy, (3)=populist main coalition party dummy times fraction of seats held by this party, (4)= populist main coalition party dummy times fraction of votes obtained by this party. Coefficients multiplied by 100 except on GDP per capita. Time dummies included. † significant at the 15% level.

	(1)	(2)	(3)	(4)
A. Lagged dependent variable not included				
GDP per capita (-1) real PPP constant USD	4.5	2.8	-0.6	-0.4
Inflation (-1)	-0.1	-0.2	-0.06	-0.11
Output Gap (-1)	-1.0	-1.1†	-0.3	-0.4
Unemployment Rate (-1)	-0.5	-0.7	-0.5*	-0.6**
Gross debt/GDP ratio (-1)	0.1	0.1	0.08***	0.1**
Primary Gvt net lending/GDP (-1)	-0.3	-0.04	-0.08	-0.1
Gvt spending/GDP (-1)	0.5	0.4	0.15	0.1
Current account/GDP (-1)	1.0**	0.3	0.04	-0.7
B. Lagged dependent variable included				
GDP per capita (-1) real PPP constant USD	2.5	1.5	0.2	0.46
Inflation (-1)	0.15	0.05	0.02	0.003
Output Gap (-1)	0.1	0.2	0.08	0.02
Unemployment Rate (-1)	0.6	0.5	0.2	0.2
Gross debt/GDP ratio (-1)	0.1*	0.1*	0.04*	0.04*
Primary Gvt net lending/GDP (-1)	-0.9***	-0.7*	-0.2†	-0.2*
Gvt spending/GDP (-1)	-0.6*	-0.6t	-0.2*	-0.25*
Current account/GDP (-1)	0.4t	0.1	0.03	0.01

²⁶ See <https://publications.iadb.org/en/publication/12390/database-politicalinstitutions-2015-dpi2015>

The results are reported in Table 8. In the first panel I report 4 regressions where the lagged dependent variable is not included. All explanatory variables are lagged: hopefully the coefficients capture the causal effect of preexisting macro and fiscal conditions on the nature of government (populist vs. technocrat). The only salient finding is that a higher level of public debt raises the likelihood of a populist government – the coefficient is always positive and statistically significant in two specifications. The output gap and unemployment rates appear to have a negative, sometimes significant, effect but these estimates will turn out to be less robust than the estimates on fiscal variables.

Despite that explanatory variables are lagged, these estimates may reflect the effect of populism on macro and fiscal performance as much as the converse. One way to alleviate this problem is to add the lagged dependent variable as a regressor (the effect of an incumbent populist government on macro and fiscal performance at $t - 1$ would then be reflected in the correlation between the lagged dependent variable and the other covariates, as opposed to a correlation between the latter and the error term).

The results where the lagged dependent variable is included are reported in the bottom panel of Table 8. Macro variables are no longer significant. On the other hand, fiscal variables become more significant. Debt now has a positive significant effect on populism in all specifications, while the budget surplus has a negative significant effect in all specifications. Finally, under inclusion of the lagged dependent variable, we see that a higher level of spending reduces the likelihood of populism.

Given the presence of the lagged dependent variable, it makes sense to compare these estimates with GMM ones.²⁷ This is done in Table 9. If anything, the estimates improve. In all specifications, debt has a positive effect on populism, while budget surpluses and government spending have a negative effect. The coefficients are always significant. Furthermore, inflation now makes populism less likely.

²⁷ Arellano and Bond, 1991; Arellano and Bover, 1995.

Table 9: Dynamic panel data estimation of the determinants of populism. Significance levels computed using robust p-values.

	(1)	(2)	(3)	(4)
A. GMM estimates				
GDP per capita (-1) real PPP constant USD	4.1t	4.4t	0.6	0.9
Inflation (-1)	-0.9*	-0.9**	-0.2*	-0.3**
Output Gap (-1)	-0.4	-0.4	-0.1	-0.3
Unemployment Rate (-1)	0.6	-0.2	0.0	0.0
Gross debt/GDP ratio (-1)	0.7**	0.9***	0.2**	0.2**
Primary Gvt net lending/GDP (-1)	-2.6**	-1.9**	-0.8***	-0.7***
Gvt spending/GDP (-1)	-2.4*	-2.4***	-0.8***	-0.8***
Current account/GDP (-1)	0.0	-0.2	-0.1	-0.1
B. System estimates				
GDP per capita (-1) real PPP constant USD	4.0t	3.9*	0.8	1.0†
Inflation (-1)	-0.6†	-0.7**	-0.15*	-0.2**
Output Gap (-1)	-0.4	0.1	0.0	-0.1
Unemployment Rate (-1)	1.1**	0.7	0.2†	0.2
Gross debt/GDP ratio (-1)	0.3†	0.5***	0.1**	0.1**
Primary Gvt net lending/GDP (-1)	-1.5**	-1.2*	-0.6***	-0.5***
Gvt spending/GDP (-1)	-1.0*	-1.3***	-0.5***	-0.5***
Current account/GDP (-1)	0.4	0.2	0.0	0.0

The finding that greater government spending reduces the likelihood of a populist government is not so surprising, in light of the fact that debt and deficits are controlled for. Controlling for net lending, greater spending mean greater revenues, hence a greater fiscal capacity. This confirms my prediction above that greater fiscal capacity reduces the support for the populist. As for inflation, it may seem surprising that higher inflation reduces the likelihood of a populist government. To the extent that this is a sign of fiscal stress, one would expect the opposite. But the coefficients may be viewed as consistent with the theory if one considers inflation as a source of tax revenues which, everything else equal, reduces future levels of required fiscal adjustment, thus affecting the trade-off between a technocrat and a populist in favor of the former.

5. Conclusion

In this paper I have analyzed the connections between inequality of treatment of citizens, on the one hand, and policies that make fiscal crises more likely, on the other hand. Empirical evidence suggests that inequality of treatment is associated with higher levels of public debt, public spending, and public deficits, consistent with the theory – although the evidence seems less robust for spending and deficits than for debt. Furthermore, a “populist” platform (defined as more likely to discriminate between groups) is more likely to conquer power, the greater the degree of required fiscal adjustment. This is consistent with the prediction that fiscal crises alter the trade-off between electing a technocrat vs. a populist in favor of the latter. Finally, the theory sheds light on the reason why a priori unsound policies may nevertheless be implemented, as exemplified by the French 1981 reduction in the retirement age. □

APPENDIX

Table A1: Regression results with different equal treatment indicators. Same specification as Table 3. Dependent variable: Debt/GDP ratio.

Equal treatment in	Fiscal	Confl.	Corruption	Eq. tr.
Public jobs (A9043)	2.0*	0.1	-2.5***	-3.5**
Administration (A9042)	2.2**	0.0	-2.3***	-3.2*
Public health (A9041)	1.8†	0.1	-2.5***	-0.1
Education (A9040)	1.9*	0.1	-2.5***	-1.0

Table A2: Effect of indicators A9040–9043. Same specification as Table 4. Dependent variable: Government net primary surplus/GDP ratio.

Equal treatment in	Fiscal	Confl.	Corruption	Eq. tr.
Public jobs (A9043)	-0.1	0.7*	1.1*	1.51
Administration (A9042)	0.0	0.7*	1.1***	0.6
Public health (A9041)	0.1	0.7*	1.1**	0.5
Education (A9040)	0.1	0.7*	1.2***	0.7

Table A3: Effect of indicators A9040–9043. Same specification as Table 5. Dependent variable: Government spending/GDP.

Equal treatment in	Fiscal	Confl.	Corruption	Eq. tr.
Public jobs (A9043)	0.2	-0.6**	-0.5†	0.2
Administration (A9042)	0.2	-0.7**	-0.4†	0.3
Public health (A9041)	0.3	-0.6**	-0.4†	-0.2
Education (A9040)	0.3	-0.6**	-0.4†	-0.5

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