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Growth, income distribution, and fiscal policy volatility ☆

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ABSTRACT

The relationship between income distribution and economic growth has long been an important economic research subject. Despite substantial evidence on the negative impact on long-term growth of inequality in the literature, however, there is not much consensus on the specific channels through which inequality affects growth. The empirical validity of two most prominent political economy channels – redistributive fiscal spending and taxes, and sociopolitical instability – has recently been challenged. We advance a new political economy channel for the negative link between inequality and growth, a fiscal policy volatility channel, and present strong supporting econometric evidence in a large sample of countries over the period of 1960–2000. Our finding also sheds light on another commonly observed negative relation between macroeconomic volatility and growth. We carefully address the robustness of the results in terms of data, estimation methods, outlier problem, and endogeneity problem that often plague the standard OLS (ordinary least squares) regression.

1. Introduction

The relationship between income distribution and growth has long been an important economic research subject. The earlier development literature argued that high inequality could help growth by directing scarce resources to high-saving capitalists (Lewis, 1955; Kaldor, 1956). With the advent of endogenous growth theories which made it possible to derive a theoretical relation between inequality and growth, economists renewed their interest in the age-old question. The new growth literature has reversed the earlier prediction and provided persuasive intellectual support for the proposition that inequality harms growth through political economy channels (see Alesina and Rodrik, 1994; Persson and Tabellini; 1994, and Benabou, 1996 for seminal work, and Drazen, 2000 for a literature survey).

Overall, there is substantial supporting evidence on the negative relation between inequality and long-term growth (Easterly, 2007, Perotti, 1996, Clarke, 1995, and Birdsall et al., 1995 for example). Yet there is not much consensus on the specific channel(s) through which inequality affects growth negatively. Some of the earlier empirical studies have focused on the reduced-form relationship between inequality and growth, and hence cannot shed light on the underlying mechanisms that may have different policy implications. Moreover, the empirical validity of two most prominent political economy channels – redistributive fiscal policy (Alesina and Rodrik, 1994, Persson and Tabellini, 1994), and political violence and instability (Benhabib and Rustichini, 1996, Alesina and Perotti, 1996) – has recently been challenged (see Perotti, 1996, Keefer and Knack, 2002a, Campos and Nugent, 2002, Mulligan et al., 2004, Glaeser, 2006). That is, there is little evidence that high inequality leads to more redistribution or political instability.[1]

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[1] The redistributive fiscal policy mechanism predicts that in countries with unequal income distribution voters have a greater tendency to vote for high redistributive fiscal spending that is accompanied with high taxes, which retards capital accumulation and growth process. The political instability channel hypothesizes that in more unequal societies individuals are more prone to engage in rent-seeking activities or other manifestations of political instability, which reduces incentives to invest and lowers economic growth. However, there is a lack of empirical support for these channels. As for the fiscal redistribution channel, Perotti (1996) finds no evidence of a positive relationship between redistribution and inequality in democracies nor a negative relationship between tax variables and growth. In general, there is little evidence that high inequality leads to more redistribution (Glaeser, 2006). Also, Mulligan et al. (2004) do not find more redistribution from rich to poor in democracies than non-democracies, which is inconsistent with the key mechanism – median voter theorem – in Alesina and Rodrik (1994) and Persson and Tabellini (1994). Separately, Campos and Nugent (2002) find that the evidence supporting the hypothesis that high levels of political instability cause lower growth is much weaker than previously believed, and that once institutional development is controlled for, the causality results vanish. Similarly, Keefer and Knack (2002a) do not find a statistically significant positive relationship between inequality and political instability. We will have more to say about this later.

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This paper empirically investigates the relationship between income distribution, fiscal policy, and growth with multiple purposes. We make a contribution to the literature by offering an empirical analysis of a new mechanism for the negative link between inequality and growth: a fiscal policy volatility channel. Intuitively, struggles over income distribution in highly unequal societies can lead to sharp disagreements over ideal government policies. In the presence of social preference polarization, heterogeneous policymakers may have greater incentives to insist on their preferred policies. Such incentives to put forward their preferred agenda may become particularly strong during good times when rising government revenues or newly available resources make their agenda seem more feasible, which results in a pro-cyclical fiscal spending increase and hence a fiscal deficit (especially when institutional constraints are insufficient). At the same time, discretionary spending decisions taken in such a manner yield volatile fiscal outcomes over time. In a non-cooperative fiscal game model embedded in an endogenous growth framework, Woo (2005) formalizes this intuition and shows that in a highly polarized country (due to high inequality), discretionary fiscal spending becomes procyclical and volatile, which in turn reduces growth along the transition path towards a new lower output.[2] This is a new fiscal policy channel that is distinct from the aforementioned redistribution channel. Yet there is no empirical analysis on this channel of fiscal policy volatility. In this paper, we fill this gap in the literature.

It is important to distinguish fiscal volatility from adaptability (or flexibility) to sudden changes of economic conditions, such as counter-cyclical fiscal response to macroeconomic shocks, because the latter is more likely to stabilize the economy and promote economic growth, rather than discourage growth. In our theory, the notion of fiscal policy volatility corresponds to excessive discretionary changes in fiscal policy that take place for reasons other than smoothing out output fluctuations or responding to macroeconomic conditions.[3] Fiscal procyclicality has a parallel with fiscal volatility. Unlike the fiscal response to macroeconomic conditions, discretionary and procyclical fiscal changes can be harmful to growth by amplifying economic volatility.[4] Accordingly, we focus on the empirical counterpart of this notion of fiscal policy volatility, and present strong evidence that countries with high *initial* income inequality tend to suffer greater fiscal policy volatility and procyclicality, which in turn hinders economic growth in a large sample of countries over the period of 1960–2000. Also, we explore the channels through which fiscal volatility and procyclicality influences growth in income per worker by combining the growth accounting decomposition with regression analysis. We find that the negative effects on output per worker growth from fiscal policy volatility and procyclicality are mainly through the channels of TFP and capital per worker growth. Our main results are robust to various estimation techniques, alternative measures of fiscal policy volatility and cyclicality, and different sub-sample periods (1960–2000, 1970–2000, and 1980–2000). Indeed, we carefully address the robustness of our results in terms of data, estimation methods, outlier problem, and endogeneity problem that often plague the standard OLS (ordinary least squares) regression analysis.

Our paper is related to existing studies in various aspects. First of all, income inequality has long been mentioned as an important factor in understanding why populist fiscal policies appear more often in Latin American countries than other regions such as East Asia, and also in explaining contrasting macroeconomic performance across developing regions (Rodrik, 1996; Birdsall et al. 1995; Sachs, 1989 among others). In a well-known study, Engerman and Sokoloff (2002, 2005) make historical observations that initial differences in the extent of inequality across countries contributed to the different decisions they made regarding the types and size of government expenditure programs, how much revenue to raise, and the relative use of different tax instruments, which ultimately influenced long-run paths of development. However, the existing empirical studies have focused on the link between income distribution and other macroeconomic outcomes such as external debt (Berg and Sachs, 1988), public deficits (Woo, 2003) and inflation (Desai et al., 2005). Yet they do not attempt to establish a channel between inequality and growth. Moreover, the existing evidence on the negative effects on growth of these macroeconomic imbalances is at best mixed. In a recent evaluation of growth regressions in relation to macroeconomic variables, Easterly (2005) finds that some of the large effects of a policy variable(s) such as inflation and budget deficits on growth are often caused by outliers that represent "extremely bad policies". In this paper, we focus on fiscal policy volatility in relation to inequality and examine its link to economic growth.

There is a large and growing political economy literature that has studied the effects on fiscal policy of political variables such as political regime, political instability, electoral rules, party structure, institutionalized constraints including veto players (see Milesi-Ferretti et al., 2002; Persson and Tabellini, 2003, 2006; Scartascini, 2007 for example). Most of the existing studies have studied government budget deficit, expenditure and spending composition, rather than fiscal volatility/procyclicality per se. Thus, some of the theoretical implications from this political economy literature are not always directly applicable to our issue at hand. Nonetheless, there is substantial evidence that fiscal outcomes are heavily influenced by political factors, and the issue of fiscal volatility and procyclicality may not be an exception. Intuitively, the effects on fiscal volatility and procyclicality of inequality may be even more pronounced or suppressed, depending on political and institutional structures that influence the fiscal policy-making process. For example, institutional constraints that function as a checks and balances mechanism may discourage large discretionary fiscal policy changes, contributing to lower fiscal volatility. Also, the checks and balances may act as a consensus-building institution and work to suppress conflicts of interest among different groups, making the social polarization effect from inequality less important in determining the fiscal outcomes. Closely related to this are veto players. Multiple veto players may contribute to reducing the fiscal discretion of the incumbent government and avoid abrupt large changes in fiscal policy by providing checks and balances in the fiscal decision-making process. At the same, the existence of multiple veto players may simply mean a status quo, contributing to delaying the necessary fiscal adjustments which would require eventual bigger fiscal restructuring. In this case, multiple veto players may actually be associated with larger fiscal volatility over a time period, which makes the effects of veto players somewhat ambiguous a priori. However, constraints on executive decision makers, multiple veto players, and the political institutions that tend to produce multiple veto players turn out to be associated with the smaller magnitude of fiscal policy volatility.[5] Interestingly,

[2] Income inequality has long been recognized as a fundamental source of social polarization by political scientists (Powell, 1982). In a fascinating book, McCarty et al. (2006) show in modern American history that income inequality and polarization among the public and in Congress have moved in tandem, and income inequality is important in explaining political ideologies and voter preferences. Also, see Keefer and Knack (2002a) about polarization and income inequality.

[3] Following the literature, we use the term "discretionary" fiscal policy to refer to changes in fiscal policy that are implemented for reasons other than addressing current macroeconomic condition such as booms or recessions.

[4] There are many studies that find large macroeconomic effects of exogenous changes in fiscal policy. For example, see Blanchard and Perotti (2002).

[5] Related to this point, Acemoglu et al. (2003) argue that distortionary macroeconomic policies, such as high inflation, large budget deficits and misaligned exchange rates, and the resulting macroeconomic volatility reflect weak institutions, such as political institutions that do not constrain politicians and political elites, ineffective enforcement of property rights for investors, and a high degree of political instability.