Institutions and Growth: Political Economy of Income Distribution

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1 Introduction

North (1990) defines institutions as "...the rules of the game in a society..." or " humanly devised constraints that shape human interaction.". He also points out that they "...structure incentives in human exchange whether political, social or economic..."

This definition of North obviously shows that the concept of institutions is a very broad concept. One can think of thousands of things which "shape human interaction." Therefore, to be able to incorporate institutions in economic models, it is necessary to specify more in detail what one means by institutions and maybe one needs to look for some proxies for this concept. Actually, this is what many papers, especially empirical ones, are trying to do.

To specify in more details what institutions mean, one should make the distinction between economic institutions and other kinds of institutions such as political institutions,sociological institutions, culture etc. This is why the chapter 6 in the Handbook of Economic Growth starts with a discussion where the authors, Acemoglu et al.(2005), try to differentiate economic institutions from other institutions.

Economic institutions, such as the structure of property rights and organization of markets influence the structure of economic incentives in a society. Thus, they are also effective on economic growth, because by shaping the incentives of economic actors they change human capital and/or physical capital decisions and organization of production which are key for economic growth.

According to Acemoglu et al.(2005) political institutions, such as the form of the government, election system etc. on the other hand "...determine the constraints on and the incentives of the key actors, but this time in the political sphere." Of course, economic and political institutions are not mutually exclusive, they interact with each other. But they need to be analyzed differently. The distinction between them is rather pragmatic. Incorporating economic institutions in economic models is easier than doing the same thing for political ones. For example, one can easily write a model where private ownership is limited and there is public ownership in some degree. It is much more difficult to build a model when one wants to emphasize that the political decision making of the economy modelled is a constitutional monarchy rather than a democracy. In summary, what I want to say is that political institutions are more difficult to model than their economic counterparts and these fields of research still have thousands of questions waiting to be answered.Game theoretical techniques and the theory of social choice need to be used more intensively to overcome this difficulty.One example of this kind of papers is Benhabib,Rustichini(1996)

Again, let me underline the fact that the difference between economic and political institutions is done mainly for pragmatic reasons, they are not separate but they are in a continuous interaction. To show this, Acemoglu et al.(2005) also provides a schematic representation of the framework they are trying to build and argue that political institutions and distribution of resources at time t affect political power which in turn influences economic institutions at time t and political institutions at time $t+1$ where the former also affects economic performance at time t and distribution of resources at time $t+1$. From this schema, the interaction should be clear.For further discussion, one can be referred to Acemoglu et al.(2005).

This project paper concentrates on one of the key ingredients of economic institutions, namely the distribution of income and its effect on economic growth. In many papers, distribution of income is not categorized as an economic institution but seen as an effect or one of the ingredients of economic institutions. This is also what I am assuming. But, however one categorizes income distribution, it is very influential on economic growth.

After the introduction, in the second section of this paper ,I'll first review the papers that I have chosen to study. Then in the third section I'll make small suggestions for possible extensions of these papers. Then I'll conclude.

2 Literature Review

There are dozens of papers and books which talk about the influence of income distribution on economic growth. For this project, I have chosen a few of them.

First, I started with the 6th chapter of the Handbook of Economic Growth that I mentioned in the introduction. This chapter of the Handbook gives a non-technical introduction to institutions and explains why they are so important for economic growth. As the name of the chapter suggests, the authors believe that institutions are one of the fundamental causes of long-run growth. After giving all the necessary definitions of relevant concepts and underlining that institutions, especially economic institutions, are one of the three fundamental causes(the others are geography and culture) of economic growth, they give some historical evidence from Korea and from some former colonies.Then they go and explain why institutions in different countries differ from each other.One of the explanations they make, maybe the most economic one among various others, is called "social conflict" view. This view is not only related to distribution of political power but also to distribution of income and wealth which is mostly positively correlated with distribution of power. As every economist should do, they give more emphasis to this view and examine it in more detail in a separate section (section 7 which they call "The Social Conflict View in Action") of the chapter. In this chapter they look at labor and financial markets and also examine price regulation in different countries. Again, they don't give clear cut answers, rather this chapter serves as a motivating and stimulating introduction for future research.

Another introductory paper on institutions and growth is the paper by Barro(1996). Again, this is a non-technical and a very short paper, but is very important. It is important; first because it provides a fair survey of the literature; second it summarizes most influential papers in this field. Besides other ingredients of these topic, Barro(1996) also talks about income distribution and growth. He refers to Perotti(1996) which finds some empirical evidence that "inequality retards growth by promoting (socio)political instability and by affecting decisions on fertility and schooling." Barro(1996) also warns us that the data on inequality is usually of low quality, hence one should be careful before making any conclusions after using such data.

There are also more technical papers in this field. Three examples of this kind are Persson, Tabellini (1994) , Alesina, Rodrik(1994) and Benhabib, Rustichini (1996). The last paper among these 3 is published after the first two and gives reference to the first two claiming that they are indirectly related to it.

Persson, Tabellini(1994) asks the following question: Is Inequality Harmful for Growth? They have a definite answer for this question: Yes! In this paper they develop a two-period OLG model with heterogeneous agents in which individuals are not only economic agents but also political one, i.e. they are also voters. They both define an economic equilibrium and a political equilibrium and call the combination of these two as the politico-economic equilibrium. In the economic equilibrium they reduce the equilibrium conditions to an equation of growth rate as a function of some parameters and initial conditions. After putting this together with the voting process and using the median voter theorem they conclude that "a more equal distribution of income increases growth." The intuition behind this is very simple: If income is distributed unequally, the result of the voting process yields a policy parameter (which works as a tax on capital) in favor of redistribution which distorts the economy and decreases the growth rate. They also make an econometric analysis and test their results and find out that there is empirical evidence supporting their results, but only in democratic countries.

Alesina, Rodrik (1994) is a paper on the same line with Persson, Tabellini (1994). Their model is a little different but most of their results are quite similar. In Alesina, Rodrik (1994) we have an infinite horizon model compared two period OLG model of the former paper. There is also taxation here but in Alesina, Rodrik (1994) "...tax revenues provide a public good necessary for private production...". There is one key difference between these two papers. In Alesina, Rodrik (1994), we observe a U-curve relationship between taxes and growth; parallel to Barro (1990) If taxes go up, growth rate increases first and then starts to decrease after some point. Since they define inequality as the gap of income between the median and the average voter, it is the decision of the median voter which is decisive for growth. So "for growth to be as high as possible, we need the median voter to own as much capital as possible, and to have as high an income as possible." Otherwise, the median voter votes for higher taxation which decreases the growth rate of the economy. So the basic implication of their model is "...the more unequal is the distribution of resources in society, the lower is the rate of economic growth." Even tough the data set used by Alesina, Rodrik (1994) is different those used by Persson, Tabellini (1994), the empirical results are quite similar. There is also a paper by Perotti(1993) which is very similar to Alesina,Rodrik(1994) and which has the very same results with that. Perotti (1993) examines the effect of income distribution on growth when investment in human capital is the source of growth and agents again vote for redistribution. They have almost the same results with Alesina, Rodrik(1994),therefore I decided not to mention much about it.

Even tough, they refer to Alesina, Rodrik (1994) and Persson, Tabellini(1994), the paper written by Benhabib, Rustichini (1996) is different than the others. The results are in the same line but the method in this paper is game theoretical. "Contrary to the neoclassical theory of growth", they argue, that they observe, poor countries invest less and hence don't grow faster than the rich ones. To explain this puzzle they develop a game theoretical model of social conflict. The criterion of equilibria they check is the second-best equilibria among subgame-perfect ones; those, which are on the constrained Pareto frontier. The result they have, related to income and wealth distribution, is that "there is a trade-off between growth and inequality..." (not only for poor countries but also for richer ones which have a high amount of initial wealth in their model.) For empirical work in support of their paper, they refer to Alesina, Rodrik(1994) and to Persson, Tabellini(1994).

There are two more less technical papers that I read for this project. One of them, King (1992) tries to compare various "famous" growth models, from Harrod-Domar to endogenous growth, in historical perspective. Persson, Tabellini(1992) serves for two purposes. First, it provides a good survey of literature up to 1990s and second, it builds the basis for Persson, Tabellini(1994). Actually, Persson, Tabellini(1994) tries to build a model on the recommendations of Persson, Tabellini(1992),written in the conclusion of the latter, namely:"to identify separately the link between income distribution and policy and the link between policy and growth."

3 Possible Extensions

First extension of the papers covered can be made on the empirical side. Actually, most of the authors are aware of this kind of extensions and mostly suggest in the conclusion section of their papers that the empirical studies done in the papers have to be extended more in detail. Most papers use simple OLS techniques in econometrics which need to be extended using recent developments in econometric theory such as cointegration or VAR estimation etc.

Second, and maybe more interesting, as I have written in the previous section, Alesina, Rodrik (1994), Persson, Tabellini(1994) and Benhabib, Rustichini(1996) share something common.They all argue that inequality of income distribution(at least after some point) retards economic growth. But I also noticed that even tough the last one refers to the first two, the methodology of the last paper is a lot different than the first two. Actually, this difference will build the basis for my suggestions of possible extensions. The first two papers do not use the game theoretical method much. They just use the median voter theorem to be able to incorporate the political process behind the economic one, in the model. In my opinion, it would be interesting to see what happens when someone,using the tools of the theory of mechanism design, tries to create a voting mechanism which leads to a higher rate of growth. In the first two papers, the reason why the inequality of income distribution leads to low rate of growth is directly coming from the results of median voting. The median voter votes for redistribution which is distortive for the economy and hence the growth rate of the economy falls. So at this point if one can build a voting mechanism such that the result of the voting is supportive for the economic growth, then all the results of the papers may change.

4 Conclusion

Honestly speaking, one month research in this topic left my appetite unsatisfied. At his point, I see that I am not able to realize all of my suggestions given in the previous section,at least in the short run, but it can be an interesting field of research for the future because there are still open questions waiting to be answered. Especially, if one can incorporate mechanism design in these models,then one will have better results.

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