

SOCIAL POLARIZATION AND ITS EFFECTS ON PUBLIC INVESTMENTS

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Abstract:

In democratic countries, at both local and national level, voters expect a fair and effective provision of services for them. Politicians, on the other hand, strive to increase services for pressure and interest groups and politically close citizens instead of democratic components. Bureaucracy grounds generally steers investments by being on the axis and under the influence of political polarization. This situation both causes the public resources to be spent on inefficient areas and prepares the ground for the emergence of economic and social problems due to polarization. Central government having sufficient resources is decisive in this. However, this situation causes the activity of the state to expand enormously. The main purpose of this study is to examine how social polarization has an impact on public investments at local and central levels. In this study, Turkey's public investment with the local administrations 's politic power to be used to express dummy variable is the party and the use of public resources that might influence the polarization was analyzed by Hausman test. The findings strongly demonstrated that polarization has a significant effect on public investment. In addition, according to the other findings of the research, it can be concluded that the negative effects of political polarization on public investments also bring about social polarization and indirectly paves the way for another problem such as injustice in income distribution. In order to prevent polarization, a number of recommendations are given to politicians to leave certain duties of the central government and the authority to use income sources to local administrations to reduce political and social polarization.

Key words: Social polarization, Political polarization, Public investments, local administrations

JEL classification: D63, Z13, H50, R53, R12.

1. INTRODUCTION

The concept of polarization has become mature with the formation of different societies in terms of race, religion, language, ideology and income diversity. Social polarization emerges as an important concept in the economics literature with articles examining the economic effects seen as a result of polarization. While polarization affects the economy by shaping households' expectations about areas of activity such as government spending and investments; It acts as an external pressure on policy makers, as policy makers feel obliged to consider polarization in their decision-making processes in order to be re-elected. The point at which the economic literature is concerned with polarization is how the decisions emerging from this political climate shaped by households and policy makers regards macroeconomic phenomena. The macroeconomic effects of polarization are seen on economic reform processes such as private and public investment, government spending and budget deficits, fiscal policies and taxation.

The periodic uncertainty experienced in political terms in some of the countries in the world may not be caused by the uncertainty of the elections, which is always a pre-requisite of democracy. On the contrary, it is a parameter of uncertainty that is postponed in order not to decrease the sympathy of the society towards political authority by popular expenditures in order not to lose the

power of power. In this way, although public expenditures or investments seem to have created an internal benefit on a significant segment of the society, it enables that society to become impoverished over time and reach a level that will only create external benefit for certain segments. It can be said that the economic problems brought about by polarization in low-income countries create more serious issues, especially investor portfolio revenues, compared to developed countries. Because it is accepted that economic growth contributes both to the success of the political authority and to social apprehension. Although it is known that polarization is not sustainable, the uncertainty that will be experienced in the economic environment may cause the investments to fail. Therefore, in the presence of uncertainties or unstable political environment, the marginal profitability of investments will decrease and this will also bring about the problem of efficient resource management.

The degree of efficiency of public investments, which is a parameter of economic life, decreases as the political authority insists on continuing the dependence of the power-society against the society by removing the democratic processes over time. This situation is frequently encountered in developing countries. Therefore, the economic consequences of social polarization enable the market mechanism to become entangled with deepening problems such as uncertainty, growth, unemployment problems and financial marginalization (frightening some capital owners) both in the private sector and the public. In other words, the polarization crisis starting from the income distribution will extend to regional inequalities and from here to the ineffectiveness of the framework determined by macro-economic programs.

The expectation that economic growth in the world economy will increase at a slower rate than the predictions made with the Covid-19 outbreak, With the reality of accessibility brought by globalization, it was also effective to observe the need for larger rational reforms in areas such as health and economy, which societies should consider in terms of their own future triggered the writer to come up with such a paper.

Especially if trust in public institutions is low and the perception that certain interest groups are favored by public policies is established in the society, populist investment or policy approaches are seen that do not have good relations between governments and their citizens, are not inclusive, do not strengthen sustainable growth, increase income distribution injustices and only provide short-term benefits.

The effects of social polarization on the economy through the production and consumption tools listed above are examined in the following sections and this study focuses on the effect of polarization on public investments and offers recommendations for a recipe.

2. POLARIZATION, POLITICAL CLIMATE AND COMMON POOL PROBLEM

If a homogeneous society, which is the components of different beliefs, ethnic groups and political views, is considered, it will be seen that the income differences on the basis of sectors increase in an economy that has entered the process of industrialization with unequal income distribution at the beginning. Larger differences will also be observed in sectors' expectations for government spending. In this case, income disparities across sectors encourage governments to be more persistent in spending more for their favorite sectors. From this point of view, polarization is regarded as a balance of political economy over unsustainable fiscal goals, a reflection of the interest groups formed by the industrialization process through the influence of the initial distribution of income and competing for the focus of government spending. If the income inequality that increases with the wage gap between sectors turns into a conflict of interest over government spending, policy makers' disagreement in the use of government resources will prevent the economy from reaching a social optimum, as policymakers will tend to be more impulsive in directing resources during their government period. Moreover, in a polarized society, fiscal deficits will be greater in a polarized society due to policy makers' propensity to spend more on their favorite sectors and inequality in income distribution. Also, intertemporal fiscal policies will become more volatile.

Woo (2004), in his article examining the relationship between fiscal instability and social polarization, states that when policymakers' budget use turns into a common pool problem, the decline in growth rate and output is an increasing function of polarization through unsustainable fiscal policies that herald large budget deficits. Basically, governments borrow from future periods to finance expenditures, through taxation. At this point, it is necessary to talk about the discounting rate. If the policy maker discounts the future period at a relatively higher rate than its own period, it will increase its spending both in order to create a negative externality to future governments and to ensure benefit maximization for a particular group or sector it supports. The way policy makers use their power in an environment of political uncertainty created by polarization will lead to further fluctuations in financial expenditures through shocks in government revenues. Moreover, the behavior of policy makers to spend government resources to maximize their utility functions is one reason for the permanently low levels of capital stock and output in the economy as deficits will gradually erode private sector capital accumulation as deficits turn into deficits in the public budget balance.

According to Satya R. Chakravarty (2015), social polarization means the widening of the gap between certain human subgroups in terms of their social conditions and opportunities. The nature of the relationships between high ethnic diversity and issues such as social cohesion, public interest, corruption and growth has been explained in many important contributions to the literature.

3. POLARIZATION AND POLITICAL UNCERTAINTY

The environment of political uncertainty created together with the uncertainty in the election results can make it attractive for governments to behave prudently and implement inefficient policies in the decision-making process. This point can also be used to clarify the link between growth and polarization found by Easterly and Levine (1997). Ultimately, inefficient policies and governments that exceed their budgets finance their expenditures through taxation, and in the long run, under-investment and low per capita income are observed as a result of governments' investment decisions. It is observed that the political uncertainty has increased as the behavior of the governments repeats their expenditures and investments regardless of the budget balance. This situation points to a vicious circle of short-sighted decisions. This cycle, which can be conceptualized as dynamic inefficiency, is compatible with the negative relationship between political uncertainty and private investment found by Barro (1991).

The efforts of governments to fulfill the demands of pressure and interest groups in order to be re-elected may cause public resources to be spent on a number of unnecessary investments rather than priority service areas. However, the support of the governments in the fields of activity and institutions of a number of non-governmental organizations that are beneficial to the public can be considered as a right step in terms of regaining the vote of those who are close to their own policies (Kuşat and Dolmacı, 2011: 129).

Political instability is also associated with high inflation by Aisen and Veiga (2006, 2008), as governments increase their confidence in seigniorage revenues. Seigniorage is basically the revenue that the state generates by using its right to print money, and it determines the amount of goods and services it purchases. If the process is followed, it will be seen that the governments are printing money to finance the budget deficits and the increased seigniorage revenues due to the increase in the monetary base will pose an upward risk for inflation.

In addition, political uncertainty appears as a factor that mitigates the responsibility of the parties. In a society with increased social polarization, party polarization will be seen as an ideological reflection of polarization, and this polarization will give governments the luxury of not owning the financial burden of the preceding or the next period in an environment of political uncertainty. The effect of political uncertainty is also increased by using government debt. It is shown by Alberto Alesina and Guido Tabellini (1990) that as polarization between governments increases, the likelihood of the next government being re-elected decreases. Government debt, which has been transformed into a strategic variable by policy makers to shape the preferences of

future governments, will be used by the government, which has the authority to access taxes, in the political climate shaped by party polarization, to leave less resources to the policymaker of the next period and raise taxes in order to finance the expenditures it wants to increase. . Excessive taxation in the aforementioned current period, on the other hand, decreases the investment in the future period and also narrows the tax base. Negativities that put downward pressure on growth through the investment channel are only partially balanced as a current government with the expectation of being re-elected will shape its policies by considering the next period. (Pinho,2004:32).

Since the long-term political uncertainty affects the decision-making processes of politicians, it affects the economy and the social environment worse over time through the preferences of public spending and investment by policy makers. Budget deficits, inflation and the short-term preferences of the governments can turn into an element of pressure and present itself as a negative risk on aggregate supply and aggregate demand. Moreover, the effects of the consequences on aggregate supply and demand that provoke polarization by increasing the tension on the society can cause severe damage to the society and economy through tutelage such as civil war, revolution, protests. When the literature is reviewed on the subject, Jong-a-Pin's (2009) study on the measurement of political instability and its effect on economic growth is included as an explanatory study. In this article, Jong-a-Pin states that the situation that drives governments to excessive spending behavior and triggers the above-mentioned processes is related to the existence and polarization of ethnic groups, religion and language groups. Moreover, examining the effect of twenty-five indicators of political instability on economic growth reveals that the increase in the instability of the political regime resulted in slower economic growth. An unstable macroeconomic environment is often considered detrimental to economic growth (Campos and Nugent, 2002).

4. POLARIZATION AND POLITICAL ALLOCATION OF ALLOWANCES

Governments can make government spending in favor of some interest groups (pork-barrel politics) to increase their chances of being re-elected. In this respect, government spending may be a sign of politicians' concerns about re-election and political uncertainty. At this point, it will be useful to talk about the concept of party polarization. Party polarization is used to explain the difference between the ideal policies of different political parties in a society. On the other hand, policy polarization conceptualizes the difference between the policies implemented by current policy makers and those of other parties. The allocation of political allowances by governments for re-election can be associated with party polarization to the extent that they deem other parties' policies harmful. (Velasco, 1999, s. 41-46).

Hetherington (2001) argues that increasing party and policy polarization reveal the differences of parties. At the same time, he says that the polarization of the parties and the meaningful separation from each other creates an effect that facilitates ideological voting for citizens. Given this situation, voters who act according to their own interests will want the party that values their concerns to be re-elected and the elections will be a reflection of party polarization.

Eric Maskin and Jean Tirole (2019), in their article on the political allocation of allowances, mention three characteristics of either excessive promotion of public spending or an equally excessive public deficit where taxes remain constant. The first is when the authority holders face constraints due to financing from inefficient allowances. The second is that governments must decide between pleasing interest groups and increasing their accountability, as expenditures can be monitored by the voters in the budget balance. Finally, he states the budget deficit constraints determined by law, such as the European Stability and Growth Agreement (Stability and Growth Pact).

Nouriel Roubini (1991) provides some preliminary evidence that an important reason for the failure of the balance approach in fiscal policy is that fiscal deficits are partially determined by political factors and that the differences in budget deficits between countries may be due to political instability measures. In particular, an increase in the degree of political instability, as suggested by a number of new theoretical approaches, appears to lead to larger budget deficits.

The provision of certain services by local administrations with sufficient own resources and independent spending, management and organization will reduce the pressure on bureaucrats and weaken the possibility of governments to use resources in unproductive areas due to political risks. Thus, bureaucrats will spend more time on their essential duties, that is, solving economic and social problems. In addition, this will be a useful method in reducing some probable budget deficits (Şanlısoy and Kök, 2010: 106).

Investments should be made by which administrative unit at a local or national level is likely to be made less costly and more effectively, in order to use the resources optimally. Most of the time, the central administration allocates much more resources and invests in areas that are not at all effective for political reasons. When left to local administrations, services that will provide more social benefits with less input are undertaken by the central administration and are offered in an ineffective manner (Çetinkaya, 2020: 13-15).

The marginal cost of investments is reduced when increasing returns to scale under the conditions of economies of scale. Therefore, it can be said that investments that require high fixed costs in terms of many investments should be submitted by the central government. But the central administration has an extraordinary workload on services and investments side. In this respect, it may be an alternative to leave the services that local administrations cannot perform alone, to the unions established by local administrations among themselves. It shows that it would be more appropriate to leave such services to local administration unions. This situation may also support the healer of some problems in terms of social stratification. Most of the time, it is likely that a polarization in income will arise within regions due to social, economic and geographical conditions. While the socio-economic opportunities of some local regions are wide, other units are weaker. Therefore, local administrations produce solutions to the problem of resource insufficiency by establishing unions and combining their resources. This situation is handled more easily without any intervention of the central administration (Chobanov & Mladenova, 2009: 6; Şanlısoy, 2010: 198-199).

With the emergence of political polarization, the central administration sometimes personalizes the problem and tends not to allocate resources to local administrations that do not vote for them in terms of investments. It may be slower and unwilling to invest in the service demands of the citizens, including the minority. In this respect, it would be more appropriate to undertake some services by local administrations, which are administrative units that are closer to the public and have the potential to follow current problems easily. Thus, the problem of social stratification will be resolved without reflecting on political practices (Özbudun, 1979: 93).

Social stratification problems that are likely to arise in regions less developed and more developed regions, through horizontal financial transfers to less developed regions (as the income gap will be eliminated by the financial assistance of local administrations among themselves) without the need for central government to allocate resources or can be solved with less resource allocation. Politicians, who allocate less resources to the development differences that arise between the regions, will thus be able to spend the resources for financing the priority and necessary investments at the national level (Çetinkaya, 2020: 25-26).

5. POLARIZATION AND INVESTMENT

The literature suggests that the presence of multiple veto actors (government decision makers) with polarized interests increases the credibility of sovereign commitments, but reduces the ability of governments to adjust policies when faced with external shocks that compromise their ability to fulfill their commitments. If the state is credited, countries will be considered more creditable if the initial effect continues; the second is less. Studies address the issue in two ways. First, he asks whether the net effect of multiple veto players is positive or negative, using the country's creditworthiness metrics. Second, the authors go beyond the existing literature to suggest that the net influence of multiple veto actors depends on the nature of social polarization in a country. In particular, he argues that political competition in countries with ethnic polarization is

fundamentally different from countries polarized by income or wealth. Evidence supports the estimate that when countries are more ethnically polarized, more than one veto actor is more important, and less important when income inequality is greater. He argues that political competition is fundamentally different in ethnically polarized countries from countries polarized by income or wealth. (Keefer, and Knack, 2002).

Since it enables a segment of the society that is in need of support and has a low income to benefit from the activities of non-governmental organizations, it is likely to contribute to justice in income distribution. The important point here is that the fields of activity of this segment, which we call the pressure and interest group, are more directed towards which income level in the society. Some expenditures that will increase the income levels of those who are already high in income and who are in a privileged position in the society may further expand the sphere of influence of the influential people and ensure that some jobs will be done by the government in a short time. However, if this situation is used by governments as a permanent tool, it may create another kind of polarization environment against the government. It should be kept in mind that those who think that the government has behaved unfairly in resource allocation and lost its limited resources to interest groups closer to the government will be more reluctant to support the current government in the upcoming elections. (Okşar, 2009: 125-126).

6. PUBLIC INVESTMENT

It can be said that there are basically two aspects of social polarization in politics. While the first of these is intellectual polarization, the other is income polarization. The effect of the intellectual polarization on the fiscal policies of the government is that it causes the government to constantly increase public expenditures for the sector that supports their policies. In this way, governments accelerate a number of investments that will satisfy those they think they vote for, rather than the minority that expresses the opposite view. In polarization in terms of income, a possible social polarization that may occur between the poor and the rich in society can be mentioned. Governments often fail to establish an order and balance between these two polarizations. On the one hand, while focusing on social transfer expenditures in order not to lose the votes of individuals who adopt their own political policies, but on the other hand, it also enables the segment of the upper income group and support their own policies to expand their business and activity volume. And for this reason, they allocate extraordinary resources to this segment, increasing the area of activity of the state as much as possible. This situation also provides an opportunity for some negative situations to arise in terms of budget balance in the future. Another possible result of the issue related to this situation is that the investments are negatively affected. Governments whose budget deficit increases as much as possible will have to spend their income sources for financing the budget deficit instead of priority investment areas (Çatalbaş, 2007: 91-93; Chobanov & Mladenova, 2009: 6).

Decrease in investments will pave the way for another economic instability, such as a decrease in employment. High unemployment will make it necessary to re-allocate resources to unproductive public expenditures such as unemployment payments and social benefits, which will not directly contribute to production. In this case, it is inevitable for governments to make a choice. It is necessary to decide which policy should be given priority in terms of ensuring justice in income distribution, which are among the objectives of fiscal policy, ensuring economic stability, or ensuring economic growth and development. Either they will pave the way for the investment demands of business people they feel close to in order to ensure economic growth, or they will temporarily ignore economic growth and increase the expenditures for the demands of middle and low income citizens. Politicians generally closely follow the results of voting in their policies to be elected again. They often abandon politically risky policies, albeit against efficiency, and prefer political spending to save the day instead of solving general macroeconomic and social problems. This situation brings to the agenda a deadlock problem in itself in terms of income distribution. Because it will either spend the resources in a way that favors the socially more grassroots and

undertake a situation where there is another uncertainty and risk in terms of politics, or it will prepare the ground for another political risk by using the resources in favor of the interests of another socially more advantageous but not interested in income distribution. In fact, the main reason for these two possible negative situations is the inability to prevent social and political polarization in the first place. Leaving the views on how to overcome this problem to the later part of the study, it is now necessary to focus on what situation these two clientelist policies actually put the state in (Yay, 2002: 35; Şanlısoy, 2010: 197-200).

Alesina and Tabellini's (1990) finding that the median voter currently prefers borrowing from the future for higher public spending is also coupled with Cukierman's (1992) statement that the politician prefers the seigniorage income that will be received today over future reform, inadequate public investment it causes a disruption in expenses. Reducing polarization and political uncertainty above the threshold will lower the current discount value and increase public investment when a threshold is set on the government's appetite for investment and spending, on the basis of a situation where public spending will be disrupted, considering a government in which the process is reversed and that avoids interruption of public spending. When the political uncertainty and polarization diminish further, the additional halves will gradually decrease as the marginal profitability of investments decreases. However, if polarization and political uncertainty remain, governments will continue to make public spending and investment decisions in their interests in order to be re-elected. Public expenditures and investments, taxes or seigniorage revenues of the governments in their own terms will be financed forward, and those that cannot be financed will be transferred to the next government term. Considering this situation with the burden of previous periods and the willingness of re-election of policy makers, it will be seen that the short-term policy preferences of elected governments will be normalized and eventually a tightening (gridlock) will be observed in public investments. When the literature is reviewed on the subject, the findings of Bohn's (2008) article on the effect of polarization on the economy are in line with what has been described. In his article, Bohn states that the effect of polarization on the economy appears as inadequate public investment, as in the case of political uncertainty. He adds that the prospect of not being re-elected adversely affected the governments' own terms in terms of the decisions to be taken in the second term.

7. TIME SHIFT AND COST OF CHANGE

In addition to the insufficiency of public investment as a result of the attitudes of political makers prioritizing short-term policies, it is also necessary to mention the time shift and cost of change concepts in terms of delaying long-term investments.

Governments determine state policies in every period. If the policy of the second period is different from the policy chosen in the first period, both parties are exposed to the cost of change and the cost of change increases depending on the size of the policy reform and this increase is called the marginal cost of policy change. The concept of cost of change is used in the case of policy reform for expenditures and losses arising from the existence of the current situation. These costs include additional investments that must be made to facilitate the change process. Consequently, these costs, which depend on the scope of the policy reform, are covered by taxes, prices of goods and services, and limited employment. The policy makers, who are the addressees of the households who have burdened the cost of change, postpone long-term public investments as they will suffer from financing problems and there is a decrease in welfare in the economy. Gersbach et al. (2019) asserts that if party polarization increases, welfare will decrease while policy polarization increases, excluding the case where party polarization remains reasonable compared to the marginal cost of change.

8. POLARIZATION AND THE IMPORTANCE OF INSTITUTIONS

In a polarized society, when the economy is left to the control of households and policy makers, the processes run against growth and prosperity. The restriction of the process's impact on the economy can be attributed to regimes establishing the necessary institutional infrastructure. The polarization stated by Alesina and La Ferrara (2005); If the necessary institutional infrastructure is provided, the view that it brings significant benefits also appreciates that institutions can be beneficial despite polarization. In addition to creating an adequate infrastructure for institutions, it will inspire confidence for the markets, as well as the pleasure of policymakers to be re-elected and to satisfy some interest groups, will be restrictive in terms of the cost of these policies and against the short-term and inefficient policies.

Testa (2012), in his article describing how polarization can be beneficial for society, determined the process of being beneficial as a primary goal of dominance over the ideological dimension of politics in the long run, and started by considering the future elections by showing their candidates among those who are accountable to the electorate in the elections. He states that the candidates in political campaign thanks to the party polarization, and as the ideological distance between the other parties' candidates widened, they became more inclined to renounce their own interests, considering the future of their party. He concludes his analysis by stating that when polarized parties struggle for elections, ideological stances increase political competition and elected candidates become more accountable. Moreover, Testa (2010) linked the increase in party polarization across thirty-five democratic countries with the decline in political corruption using the 1996 to 2004 time frame.

As it is understood, the appreciation of the importance of institutions by the regime in a polarized society will increase the accountability of the candidates put forward by the parties and reduce political corruption. However, as the established institutional infrastructure can follow long-term investments and policies, the political allocation of allowances will help polarization processes against political uncertainty.

In the Torah and the Bible, a mythological sea monster believed to represent evil is mentioned. The monster called "Leviathan" lives in the sea and swallows everything that comes in its way and grows steadily. As it grows more and more dangerous, it has become impossible to fight this sea monster after a certain period of time. Probably, although this monster represents the appetite of the individual belonging in religious terms, it can also be said for states that take what individuals have in order to spend and finance them as living institutions. This issue was discussed by T. Hobbes before. At the same time, this situation coincides with the assumption that bureaucrats and politicians use these revenues for their arbitrary demands. Hobbes stated that states, whose field of activity is highly developed and very eager to increase public expenditures, are the main sources of economic instability and social injustice after a while. The philosophers who approached the solution of this problem from another perspective are Brennan and Buchanan. Brennan and Buchanan stated that if an effective and efficient public sector size is aimed, this should share some financial and administrative powers of the central administration with the local government. Buchanan stated that some of the public services and investments belonging to the center should be shared by the local administrations by granting broad powers to local governments, especially regarding taxation authority (Korlu and Çetinkaya, 2015: 97-98).

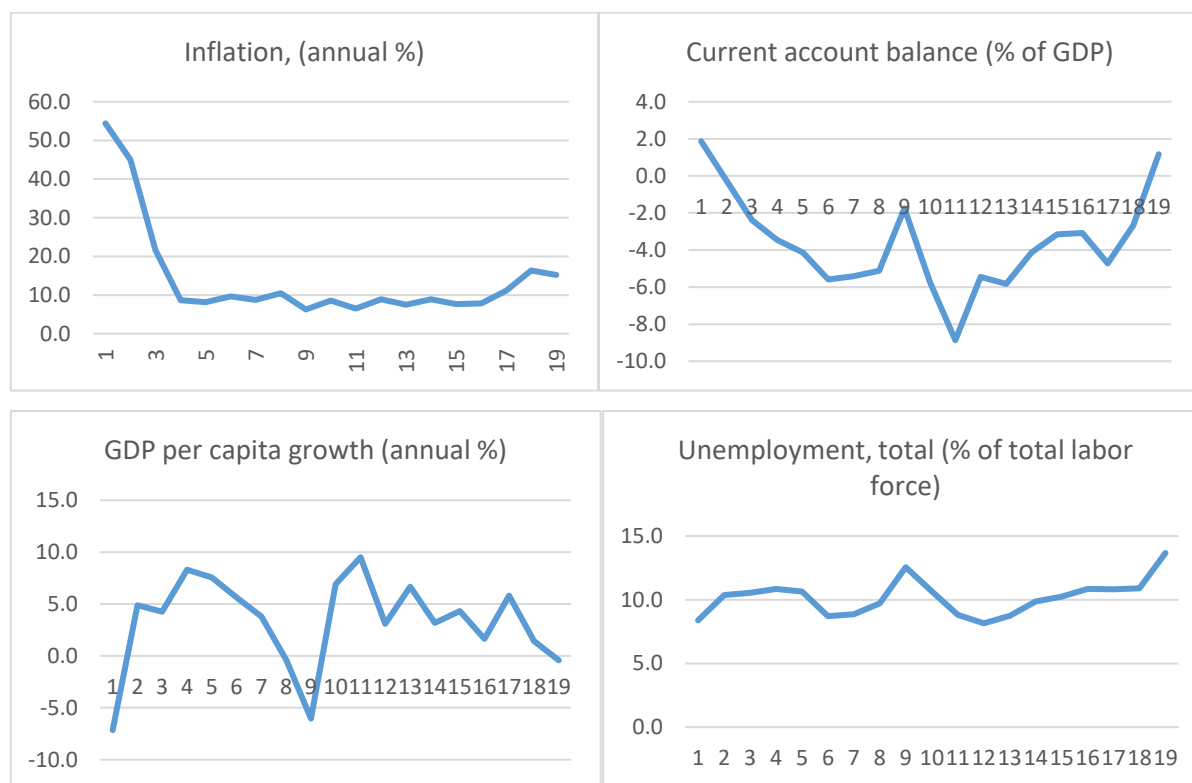
Buchanan describes this situation with the idea that "Political federalism is a tool for restrictions on the size and scope of the regulatory activities of the state, as well as on the total budget, tax rates and tax issues" (Çetinkaya, 2020: 31).

Philip Keefer and Stephen Knack (2003) found that social polarization (in the form of income inequality, ethnic tensions, or other differences) undermined both the credibility of government promises and the ability to respond to crisis. However, it is treated in isolation from the role of political institutions and free from all social polarizations, and it is revealed that institutions, particularly the number of veto players (or checks and balances) in a country, are the key to credibility.

9. EMPIRICAL EVALUATION AND PUBLIC INVESTMENT IN TURKEY

Polarization and thought-provoking effect of public investment relationship is not an exception for Turkey. Today, it is a common situation, especially in developing economies. While conflicts among policy makers are the cause of inefficient investments, inefficient investments can manifest themselves as negative pressure on macroeconomic indicators over time.

The view of the change in public investments over the last 20 years is shown below. Despite the increasing public investments, the negative course of macroeconomic indicators such as inflation, foreign trade balance and interest rates is suspicious about the profitability of investments. The chart below will be useful to notice the increasing trend in public investments.



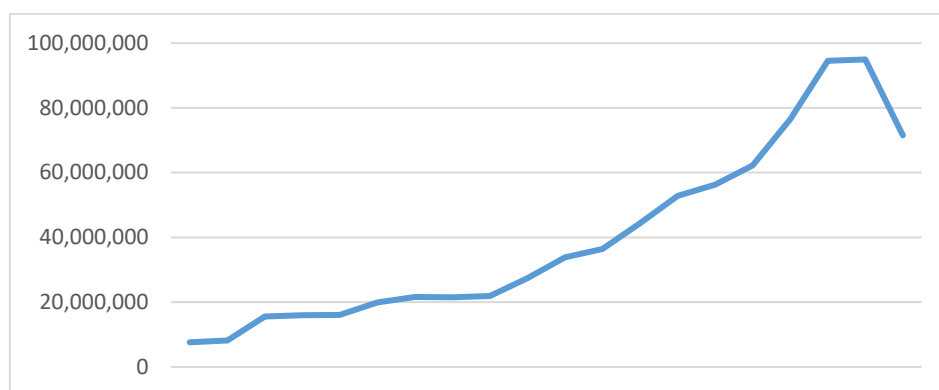
Source: Worldbank

As can be seen from the graphics above, The Turkish economy has shown signs of stability and development since 2002. However, the negative developments in macroeconomic indicators in the last 5 years are worrying.

Especially the increase in unemployment and the decline in per capita income levels suppress the increase in social welfare. In such cases, it is difficult to spread public investments to the base and to ensure income distribution justice. Because the most important thing that the ruling parties want to do in difficult situations is to increase their investments in cities where voting interests are more.

Table 1. Public Investments in Turkey (million TRY)

2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
7.612	8.197	15.533	16.009	16.093	19.899	21.608	21.513	21.915	27.458
2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
33.832	36.400	44.434	52.881	56.279	62.240	76.606	94.518	94.953	71.508



Public investments support the innovative and productive investments of the private sector and trade, increase the quality of life of the citizens and direct them primarily to infrastructure investments and within this scope, in the allocation of investment allowances, public investments; It is ideal to direct them to areas that will contribute to growth, stimulate the development potential of the regions, increase employment and the welfare of the country.

Empirical method

In this section, up expressed assesments, we can provide the ultimate interpretation of the results by an empirical short analysis for Turkey.

The scope of the study is 2004-2019. Turkey in 30 metropolitan owned by public investment variable (INV) that expresses the (GOV) dummy variable is the local government's ruling party is determined and used in the model. The purpose here is to see whether the polarization affects the use of public resources depending on whether the parameter of the GOV variable given in equation 1 is meaningful or not.

$$INV_{it} = \varphi_i + \beta TREND + GOV_{it} + e_{it} \quad (1)$$

If the dummy variable is;

$$GOV_{it} = \begin{cases} 0, Ruling Party \\ 1, Other \end{cases}$$

Model prediction

In the expression in Equaiton 1, it was estimated by both random and fixed effects model, and the results are given in table 2.

Table 2. Effect Models

<i>Fixed Effects Model</i>					<i>Random Effects Model</i>			
Variable	Coefficient	Std. Error	t-Statistic	Prob.	Coefficient	Std. Error	t-Statistic	Prob.
C	360385	94450.3	3.815605	0.0002	359741.7	170611.1	2.108548	0.0355
@TREND	58400.34	7437.597	7.852044	0	58383.91	7395.92	7.894069	0
GOV	-446070	161764.5	-2.75753	0.0061	-444580	145209.4	-3.06165	0.0023

Table 3. Correlated Random Effects - Hausman Test

Test cross-section random effects			
Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	000000	2	1.000

When the results are examined, the dummy variable coefficient is found to be significant for both models. In other words, we see that polarization has a significant effect on public investments.

When the Hausman test given in Table 3 was examined (Hausman, 1978), it was concluded that the random effects model was suitable.

These results, in other sense, together with the accompanying process of polarization of economic fluctuations experienced in Turkey in recent years also shows that in a process towards inefficiency in resource use. However, we should note that with the contraction of employment in recent years, per capita income has fallen. We think that this increases the youth unemployment and accelerates the polarization process. Considering that Turkey's population above the European average; We are concerned that the growing number of male and female populations will be caught in the midst of social polarization.

10. CONCLUSION

While polarization has a shaping effect on the preferences of households and policy makers, it has an impact on macroeconomic indicators. As a result of the polarization, the differentiating public investment preferences of the households cause the public investment decisions of politicians to cause a common pool problem, and the process that affects macroeconomic indicators begins. The addition of political uncertainty to the equation in the process is the reason why the ruling parties are used and allocated political allowances in order to create negative externalities to other parties. The use of investment decisions to create negative externality to other parties that are seen as potential rulers affects the profitability of investments. When this situation is combined with the method used for financing investments, it shows its effects in macroeconomic indicators. For politicians, financing methods that can be listed as taxation of public investment, seigniorage incomes, domestic and foreign borrowing cause different problems. The tax burden faced by households for financing gradually shrinks the tax base, reducing welfare. The expansion of the monetary base in the name of seigniorage revenues leads to inflation over time and decreases the welfare. In the case of domestic borrowing, the exclusionary effect, which is observed with the increase in interest rates as a result of increased demand for money, creates negative pressure on welfare by decreasing private investment. Testa's (2012) study mentioned in the "Polarization and the Importance of Institutions" section gains importance at this point where it is clear that polarization affects the economy. As a result of the polarization shown by Testa (2012), it will be useful to consider that politicians put forward more accountable candidates in order not to lose power, and Alesina and LaFerrara (2005) discovered that polarization may be beneficial for the economy if sufficient institutional infrastructure is established.

Since there is no immoral solution to polarization, it would be more appropriate to continue the search for solutions through legal and judicial arrangements by dealing with policy makers so that polarization does not result in a decrease in welfare.

It is important to properly establish an adequate institutional infrastructure in order to solve the dynamic inefficiency created in the economy through public investments as a result of polarization. The size of the country and its population will help determine a solution route. The high number of public investments spread over a large area due to the high population makes it difficult to track and control the investments. In addition, it should not be ignored that the coordination problem may be seen due to the difference in the sectors in which public investments are made. In order to solve both problems, supervision and determination of standards should be done centrally, and also the responsibility of public investments should be transferred to a single unit in order to ensure the coordination between the units considered as the addressee of the investments. However, it will be beneficial to follow up the projects by locally authorized branches and report them to the main unit.

Another dimension of public investment is the intervention of politicians. As mentioned in the "Polarization and Political Allocation of Grants" section, politicians are able to allocate the opportunities given to them in accordance with their own interests. Politicians' allocation of resources to their favorite sectors causes inefficiency of investments. Measures on the issue should

be taken by laws, but a balance should be created between the officials appointed by the laws and elected policy makers in a way that does not cause tension.

The most important aspect of the problem is the financing of public investments with public means. As mentioned above, as long as all financing aspects of public investments are not treated with restraint, macroeconomic indicators are disruptive. Governments' budget deficits should be restricted because polarization is a norm and the measures to be taken against the mentioned disorder are delayed when faced with a situation of political instability. It is important that budget deficits are not burdened on households in order not to experience a decrease in welfare in the economy. In order for public investments to be made in the long term, the budget deficits of the governments should be restricted in a suitable basis.

When an overall evaluation of the results of the analysis of economic investment with social stratification is an inverse relationship as alleged in the literature it seems to be verified in terms of Turkey. Considering the political and social polarization environment in which Turkey's need to make structural changes in the political sphere as well as in the economic sphere and the relationship between these changes while political polarization and social welfare impact should not be ignored. As a matter of fact, the elements that constitute political polarization and polarization arising from the internal structure of the political field should be resolved with the necessary legal regulations; Depending on the internalization of the compromise culture in the policy, there is a need for non-governmental organizations and pressure groups that contribute to the implementation of reconciliation among the people and policy-making to restructure themselves. In addition, by transferring certain powers belonging to the central government to local governments, both the service burden of the central state will be alleviated and public resources will be provided to the citizens more effectively by the service units closest to the public, as required by the principle of availability. Thus, with less political favoritism and less pressure and the influence of interest groups, public resources will be used more efficiently by providing services to the minority group. With this practice, which is also beneficial for the emergence of development differences between regions, it will be possible for the central government to introduce fairer regulations with less cost in providing justice in income distribution.

REFERENCES

1. Aisen, A., & Veiga, F. J. (2006). *Does political instability lead to higher inflation? A panel data analysis*. *Journal of Money, Credit and Banking*, 38(5), 1379-1389.
2. Aisen, A., & Veiga, F. J. (2008). *The political economy of seigniorage*. *Journal of Development Economics*, 87(1), 29-50.
3. Alesina, A., & Ferrara, E. L. (2005). *Ethnic diversity and economic performance*. *Journal of economic literature*, 43(3), 762-800.
4. Alesina, A., & Tabellini, G. (1990). *A positive theory of fiscal deficits and government debt*. *The Review of Economic Studies*, 57(3), 403-414.
5. Azzimonti, M. (2011). *Barriers to investment in polarized societies*. *American Economic Review*, 101(5), 2182-2204.
6. Barro, R. J. (1991). *Economic growth in a cross section of countries*. *The quarterly journal of economics*, 106(2), 407-443.
7. Bohn, F. (2007). *Polarisation, uncertainty and public investment failure*. *European Journal of Political Economy*, 23(4), 1077-1087.
8. Campos, N. F., & Nugent, J. B. (2002). *Who is afraid of political instability?*. *Journal of Development Economics*, 67(1), 157-172.
9. Çatalbaş, N. (2007). *Üniversite-Yerel Ekonomi İlişkisinde Kutuplaşma Teorisi İyi Bir Model Olabilir Mi?*. *Karamanoğlu Mehmetbey Üniversitesi Sosyal ve Ekonomik Araştırmalar Dergisi*, 2007(3), 90-101.
10. Çetinkaya, Ö. (2020). *Mahalli İdareler Maliyesi*, Ekin Yayınevi, 7. Baskı, Bursa.
11. Chakravarty, S. R. (2015). *Inequality, Polarization and Conflict*. *Economic Studies in Inequality, Social Exclusion and Well-Being*, 12.

12. Chobanov, D., & Mladenova, A. (2009). *What is the optimum size of government*. Institute for Market Economics, Bulgaria, 1-47.
13. Cukierman, A., Edwards, S., & Tabellini, G. (1989). *Seigniorage and political instability* (No. w3199). National Bureau of Economic Research.
14. Devereux, M. B., & Wen, J. F. (1998). *Political instability, capital taxation, and growth*. *European Economic Review*, 42(9), 1635-1651.
15. Easterly, W., & Levine, R. (1997). *Africa's growth tragedy: policies and ethnic divisions*. *The quarterly journal of economics*, 112(4), 1203-1250.
16. Maskin, E., & Tirole, J. (2019). *Pandering and pork-barrel politics*. *Journal of Public Economics*, 176, 79-93.
17. Erkan, V. (1999). *Dış Proje Kredisi Kullanan Kamu Yatırımlarının Gelişimi Ve Değerlendirilmesi. İktisadi Sektörler Ve Koordinasyon Genel Müdürlüğü Proje, Yatırımları Değerlendirme Ve Analiz Dairesi*, Ankara <http://Ekutup. Dpt. Gov. Tr/Yatirim/Erkanv/Diskredi. Pdf>. *European Journal of Political Economy*, 2019: 60: 101801.
18. Goldin, C., & Katz, L. F. (1998). *The origins of technology-skill complementarity*. *The Quarterly journal of economics*, 113(3), 693-732.
19. Gersbach, H., Muller, P., & Tejada, O. (2019). *Costs of change and political polarization*. *European Journal of Political Economy*, 60, 101801.
20. Hausman, J. A. (1978). "Specification Tests in Econometrics". *Econometrica*. 46 (6): 1251–1271. doi:10.2307/1913827. hdl:1721.1/64309. ISSN 0012-9682. JSTOR 1913827.
21. Hetherington, M. J. (2001). *Resurgent mass partisanship: The role of elite polarization*. *American Political Science Review*, 619-631.
22. Jong-A-Pin, R. (2009). *On the measurement of political instability and its impact on economic growth*. *European Journal of Political Economy*, 25(1), 15-29.
23. Keefer P., Knack S. (2003) *Social Polarization, Political Institutions, and Country Creditworthiness*. In: Heckelman J.C., Coates D. (eds) *Collective Choice*. Springer, Berlin, Heidelberg. https://doi.org/10.1007/978-3-540-24711-1_10
24. Keefer, Philip; Knack, Stephen. (2002). *Social Polarization, Social Institutions, and Country Creditworthiness*. Policy Research Working Paper; No. 2920. World Bank, Washington, DC. © World Bank. <https://openknowledge.worldbank.org/handle/10986/19227> License: CC BY 3.0 IGO.”
25. Korlu, R. K., Çetinkaya, Ö. (2015). *Türkiye’deki belediyelerin mali özerkliğinin öz gelirler bağlamında analizi ve değerlendirilmesi*. *Siyaset Ekonomi ve Yönetim Araştırmaları Dergisi*, 3(4), 95-111.
26. Kuşat, N., Dolmacı, N. (2011). *Kamu Tercihi Teorisi Çerçevesinde Seçim Ekonomisi Kavramının Değerlendirilmesi*. *Cumhuriyet Üniv. İİBF Dergisi*, (12)1. 129-146.
27. Okşar, M. (2009). *Sosyal adaletin onuncu köye sürgünü*. *Ankara Barosu Dergisi*, (2), 106-122.
28. Özbudun, E. (1979) *Siyasal Partiler*, AÜHF Yayınları, 3. bs., Ankara.
29. Pinho, M. M. (2004). *Political models of budget deficits: a literature review*. Universidade Do Porto. Working papers.
30. Roubini, N. (1991). *Economic and political determinants of budget deficits in developing countries*. *Journal of International money and Finance*, 10, S49-S72.
31. Şanlısoy, S. (2010). *Politik istikrarsızlık-ekonomik süreç politikaları etkileşimi*. *Sosyoekonomi*, 13(13).
32. Şanlısoy, S., Recep, K. Ö. K. (2013). *Politik İstikrarsızlık-Ekonomik Büyüme İlişkisi: Türkiye Örneği (1987–2006)*. *Dokuz Eylül Üniversitesi İktisadi İdari Bilimler Fakültesi Dergisi*, 25(1).
33. Testa, C. (2010). *Bicameralism and corruption*. *European Economic Review*, 54(2), 181-198.

34. Velasco, A. (1999). *A model of endogenous fiscal deficits and delayed fiscal reforms*. J. Poterba ve J. von Hagen (Eds), *Fiscal Institutions and Fiscal Performance* (ss. 37-58) içinde. University of Chicago Press
35. Woo, J. (2005). *Social polarization, fiscal instability and growth*. *European Economic Review*, 49(6), 1451-1477.
36. Woo, J. (2003). *Social polarization, industrialization, and fiscal instability: theory and evidence*. *Journal of Development Economics*, 72(1), 223-252.