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POLITICAL BUSINESS CYCLE AND ECONOMIC INSTABILITY - LITERATURE REVIEW

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Abstract: *This paper analyzes the fundamental concepts that compose the phenomenon of political business cycle and the models that have been created to support this theoretical background. A first theory on this concept is considered to be the classic perspective, which has been developed by William Nordhaus in 1975. As a result of his work, other research started to appear with multiple theories and visions upon this phenomenon. Through this paper we have tried to highlight the most important of these theories. For each major theory, conclusions are presented. In the end, an attempt is made to find reasoned conclusions concerning the validity of these theories to the economic environment.*

Keywords: developing countries, political business cycle, economic cycle, unemployment, inflation
JEL Classification: E32

INTRODUCTION

In modern democracies, elections are national events that bring political scene in the spotlight. The voting process and the active participation of the electorate can play a major role in the political development of a nation. Therefore it is no wonder that these symbiotic organisms made up of the election, political class and economy, looked at macroeconomic scale, become a very attractive area for research.

The political business cycle can be seen as a result of a traditional economic cycle by :

a) handling the macroeconomic policy (fiscal policy, monetary policy) by incumbents in order to stimulate the economy on the eve of the election aiming to be re-elected, either as individuals or as a separate party, or

b) represents the competition between parties of a State to apply political ideology which they are affiliated.

The political Business Cycle concept (PBC) was introduced for the first time in the economic theory by the Polish economist Michał Kalecki (1943) in 1943, in his paper "Political Aspects of Full Employment", which appeared in the Political Quarterly. His results are based on the assumption that individual economic interest (principle of individualism) speaks both in the sphere of political behavior and the dynamics of the global economy. According to the author, the

mechanism that underlies the conflict between political behavior and economic growth is the conflict of interests between individuals.

A first theoretical achievement was made by the American economist Anthony Downs (1957) in 1957, in his "Year Economic Theory of Democracy". The American economist has proposed a model based on economic analysis of political behavior, through the representation of political factors in accordance with assumptions of the standard behavior of firms in micro economy theory, the consequence being that there are actions of politicians who are generated more by their desire to maximize the number of votes than altruistic reasons or ideological visions. In a political context, the condition of equilibrium assumes that incumbents continue to spend until marginal profit from attracted votes is equal with the marginal loss financing to attract those votes.

The first model that has a complete theory analysis on the political business cycles and is developed and tested through a empirical methodology is Nordhaus's model (1975) in his paper "The political business cycle".

The model examines the mechanisms of public elections, where decisions need to be subjected to political constraints. More specifically, Nordhaus studied macroeconomic policies adopted in a democratic system aimed at the problem of employment and unemployment. These phenomena are correlated with the voting behavior (desire of politicians who rule to maximize chances of being re-elected). This model can be applied and extended with other macroeconomic variables such as: State budget, economic growth, public investment, policy on balance of payments, etc.

1. THE MAIN TYPES OF APPROACH TO POLITICAL CYCLE OF BUSINESS

There are two large broad guidelines of the political business cycle theory: cycles generated by the government economic intervention in hope to be re-elected (opportunistic models) and the *partisan view* where the economic problems and policies are adopted in a different way, depending on the ideological orientation of incumbents' party. Also, we find in the PBC literature, models based on the synthesis of opportunistic and partisan model (Frey and Schneider, 1978). In terms of the opportunistic ideology that politicians have, political cycles models can be classified only after taking into account that individuals have a set of expectations already formed.

1.1 Classical theory – Traditional opportunistic political business cycles

Anthony Downs, in his work from 1957, told that political parties "make laws to win elections, not win elections to make laws ". Inspired by Niccolo Machiavelli (1469 -1527) and Anthony Downs (1957), pure opportunistic political business cycle (traditional) is associated with work of Nordhaus (1975). The term "pure" is used accordingly with the presumption that parties are much more concerned to win elections by handling economy than to meet ideological objectives. Economy is described with the help of Philips curve, as a relationship between inflation and unemployment.

Until William Nordhaus revolutionary work, research carried out was brief, almost non-existent. The idea that political intervention may cause a business cycle was never brought in discussion. Nordhaus's model is developed around the relationship between unemployment and inflation.

In economy is generally accepted that relationship of these two variables are under the sign of compromise. Even if voters prefer a optimal rate of unemployment and inflation, it was noted that when they suffers changes from certain measures, the effects are rapidly felt by the population, which in the end translate in a adulterated voting behavior.

In this respect, Nordhaus argues: "Voters cannot conceive a simple economic average of the socio economic variables in the last election period, perhaps of a decaying memory. Yet, on elections day, recent history events are probably much more powerful rooted in their memory than an old suffering " (Nordhaus, 1975).

From the research undertaken by Nordhaus, it could be said that political business cycles are an active component of society and it is important to be taken into account in order to understand the mechanism of political system and economic progress.

1.2 Rational opportunistic political business cycles

Rational opportunistic political business cycles (Cukierman and Meltzer, 1986, Rogoff and Sibert, 1988, Rogoff, 1990, Persson and Tabellini, 1990) combines classical hypothesis of politicians having an opportunistic behavior with the ideas of competence and asymmetric information.

Under the impact of certain assumptions about rational behavior, these models involve cycles of economic growth and multiannual unemployment, but these cycles don't comply with idea of regularly.

Inflation tends to rise before an election and remains high for several quarters, having a decrease after that (in the same way as Nordhaus model), but cycle effects are lower in intensity and time. Percentage of incumbents votes increase during growth periods and decrease in periods with unemployment. This trend follows a pattern which is related and conditioned by voters information.

1.3 Traditional partisan political business cycles

Traditional opportunistic cycle theory omitted the ideological dimension from the incumbents utility function. For this reason, partisan cycle models are based on the correlation between ideological views and economic policies. The decision making process is influenced by ideology, resulting in a different approach to macroeconomic issues and the way objectives are achieved. The partisan theory has divided the political spectrum in two guidelines: left and right (Hibbs,1977).

In order to protect workers interest, the *left* political parties of will speed up the unemployment phenomenon in detriment of inflation by adopting fiscal and monetary policy that will encourage growth and welfare. On the other hand, defending contractors interest, the right parties will descend inflation process against unemployment.

1.4 Rational partisan political business cycles

Rational partisan theory is associated with the work of Italian economist Alberto Alesina. In this theory voters have different voting options and opinions in connection with inflation and unemployment as well as in traditional partisan theory, but unlike that, they chose the party who brings the best results.

Empirical implications of this model are: short term effects: unemployment has a lower rate for a period of time and the growth rate is higher than normal for the first two years in case of victory of a left-wing party. The result is opposite in case of victory of right-wing party. The unemployment rate and economic growth return to natural values in second part of governance.

This model is based on politicians' desire to address the "middle voters" (median voter). It is similar with traditional partisan theory because each party has its own original ideology.

The difference comes from parties who deviate from their own ideologies in exchange of votes. The logic behind this behavior is explained by Alberto Alesina and Nouriel Roubini, Gerald Cohen in the book “Political Cycles and Macroeconomics”: “More specifically, Governments of left (Liberal) follow expansionist monetary policy which starts to decrease the unemployment rate (rate of increase), and towards the end of tenure tend to reduce inflation caused by their policies. Opportunistic left-governments will want to strengthen anti-inflationary policies as a mean to gain sympathy of voters during election years. In contrast, right-wing governments which adopted contradictory policy of decreasing inflation will be more willing to increase the monetary expansion at the end of the mandate, in order to meet elections in a period of economic growth” (Alesina, Roubini and Gohen, 1997).

1.5 Evidence of Rational Partisan model

In his work from 2005, American economist George Krause tested the validity of this model. In his study he analyzed the theoretical hypothesis using quarterly dynamic real personal income from 1948 - 2004. Krause used dependent variables, including the party whose member was the president. Results of linear regression showed that before election the real personal incomes have increased significantly under Republican leadership compared with Democrats. After he had made a series of tests, Krause concluded: "results of simulations have indicated an increase to a maximum of the real income per person in United States under a republican president in compare with a Democrat president" (Krause, 2005). These patterns which are found in real income per capita are similar to those in partisan-rational theory. These results support the clear existence of political business cycle in United States after the Second World War.

1.6 Extension of the Partisan model

In 2003 in Blomberg`s and Hess`s work extended the pattern of business partisan cycle including as a variable, the competences of the political party. The pattern had four essential characteristics:

- The Democrats wanted to raise the share of governmental services and the Republicans wanted to minimize their number to reduce the taxes;
- It was a lag effect until the policies made their presence felt;
- Not all the leaders belonging to the same party are the same. The competent Democrats can

deliver more governmental services at the same price due to a raised productivity. In the same time the Republicans can offer less governmental services by reducing the taxes or the incompetent Republicans offering less services but keeping the same taxing level;

- This competence idea must be included in the pattern.

The result of their pattern suggested that the factor that separated the competent leaders from the incompetent ones was the economy growth in the election period. The next aspect discovered by the two writers was that the leaders who managed to grow the economy during the elections kept their jobs for the next mandate. Finally, Bloomberg and Hess concluded that it was better to be an elected a competent leader than an incompetent one.

Bloomberg and Hess considered the idea that each politician has his own ideology, unique to the party they belong. Their contribution in domain was realized by including the idea that some politicians couldn't manage their political fight by maintaining the party's ideological promises. Even if they can't keep their promises it is better to choose a competent leader (whose results are predictable) than an incompetent leader whose results are unknown (Bloomberg and Hess, 2003).

1.7 Context-dependent models

Another issue discussed in the literature is related to the possibility that opportunistic and partisan models can be combined. The two models that resulted are called *context dependent models*. In those, the results of elections and macroeconomic policies may differ according to circumstances at that time. In their model, Frey and Schneider (Frey and Schneider, 1978) are trying to highlight the existence of a popularity function and one of adopted policies. The function of popularity is expressed as an unemployment, inflation and economic growth function and adopted policy function derives from ideological preferences of the government in feature.

They suggest that partisan incumbents, if they are relatively unpopular, become opportunistic before elections. If popularity of a government is recording an excess, then they have a surplus of popularity. If the popularity index has a sudden drop, then they have a shortage of popularity.

An excess of popularity makes governmental activity ideological, instead, a shortage will make them act more opportunistically. More precisely, if popularity is low, then an intervention upon macroeconomic variables will increase chances of re-election. Governments with supporters and a high popularity will follow their own ideologies as long it will be possible. From that point of view popularity is searched to fulfil the ideological program.

With a similar approach, Schultz (Schultz, 2003) notes that political manipulation of macroeconomic aggregates can be very expensive, since incentives used by parties in power may vary from one period to another. Going on the same idea, Schultz argues that political parties who rule will not feel the need to manipulate economy if the probabilities of winning next elections are great.

1.8 Rejections of business cycle theory- “rational” voters

The most important criticism of political business cycle theory comes from the assumption that voters may be "too rational" (Nordhaus, 1989). If voters are truly rational, politicians would not be able to have an opportunistic behavior. As William Nordhaus says: "If, for example, Governments would stimulate economy before elections hoping that present pleasures will be higher than the future problems, then rational voters could see these political manipulations".

As long as voters can have all information and can see everything it is done, for politicians would be impossible to use opportunistic behavior to win votes. This behavior would push politicians to remain to their party's ideology. In this case the only model that is correct would be the *traditional* one, explained above. If voters can be rational then all models of political business cycle would be invalid.

In his work in 1989, Nordhaus has tested the concept of "rational voter" and has found this theory doesn't have a strong basis. He has been able to conclude in his own study, as well as other's studies, that the existence of alleged rationality in the voting process may not be supported by real evidence. One of the tests conducted by Nordhaus has been called the "honeymoon effect". This refers to a phenomenon of increased popularity recorded at newly elected candidates due to voters' beliefs in unfounded and unrealistic expectations before election. If indeed voters would have been rational, it have meant after a few elections periods, in which they were disappointed, they would have had to adjust their voting behavior. As a result the "honeymoon effect" ought to disappear. Nordhaus's test shows that each president enjoyed such an effect. This would mean a blaming of rationality, because involves certain voting patterns can be predicted.

In both studies, as well as other economists, Norhaus concluded that rationality in voting is not a real threat to political business cycle theory.

2. EFFECTS OF POLITICAL BUSINESS CYCLE IN DEVELOPING COUNTRIES

Most of political business cycles have been focused on developed countries and less on developing countries. In essence, this phenomenon can occur in the same way in countries with different economic situations. From this point it has to be initiated a research efforts to look for those essential differences that customizes the phenomenon. So currently there are a number of authors who have analyzed in more depth this feature of political business cycle, among we can mention Block, Magloire, Khemani, Kraemer, or Schuknecht.

Bates studied public investment cycles in Zambia in the 1960s and Krueger and Turan analyzed PBC phenomenon in Turkey, between the 1950s and 1980s. Schuknecht discovered a group of 35 developing countries with Nordhaus type of fiscal policy cycles in which governments try to implement expansionary fiscal policies before elections and fiscal austerity afterwards. There is also research on economic policy of developing countries, where is discussed the importance of policies that incumbents adopt (Krueger), micro and macroeconomic policy failures (Krueger), internal institutional factors, (Börner, Brunetti and Weder) or international influences (Frey and Eichenberger).

Gonzalez (Gonzalez, 2000) has classified some of the developing countries, particularly in Latin America, as imperfect democracies. From the author's point of view (Gonzalez, 2000), while many developed democratic countries have enjoyed a stable politic environment in the past 60 years, imperfect democracies's group have experienced a number of changes and shocks which made some countries to embrace a more advanced form of democracy and others contributed to the establishment of a system that reduced the civil and political rights of citizens. In other words, the level democracy in these countries has contributed decisively to development of important changes to social and economic indicators over time.

As part of an electoral process held in a normal way, these countries have been studied because of the relatively easy access to the necessary data used in econometric studies. For example, Magaloni (Magaloni, 2000) demonstrated the existence of an opportunistic behavior in Mexico between 1965 and 1985. Kraemer (Kraemer, 1997) investigated the impact of fiscal policy and business cycles in 21 countries of Latin America and the Caribbean, revealing the fact that the budget deficit is higher and unpredictable in the election years than in other periods.

Schuknecht studied (Schuknecht, 1998) the impact of electoral cycles on the exchange rate in 25 developing countries. He found strong evidence for the existence of fiscal policies in countries that had a fixed exchange rate and foreign exchange reserves are sufficient. The author argued that

the flexibility of exchange rate before elections reduces desires of Governments to engage in expansionary fiscal policies. Such measures would produce inflation and will affect the image of the Government. In countries with a fixed exchange rate, Governments have an interest to adopt a opportunistic fiscal behavior before the election to ensure a new mandate.

The difference between developed countries and developing countries has been subjected to analysis by economists Svensson and Shi (Shi and Svensson, 2006). They used a large panel data, covering 123 countries over a period of 21 years to analyze the relationship between electoral cycles and politics. Among the countries included in the model is Romania. The authors used the following arguments: before elections, regardless of whether revenues decrease, the government increase their spending in order to increase the chance of being re elected, which triggers an increase of the budget deficit in the election years. They also highlighted some important differences between the developed countries and those developing, regarding the composition and size of the political business cycle. The elections induced in the developing countries a budget deficit as a percentage of GDP almost double compare to the developed countries: on the eve of the election, the developed countries have recorded an increase in the average budget deficit by roughly 0.6 percent on average, where in developing countries the average percentage was around 1.3%.

The paper (Treisman and Gimpelson, 2001) of economists Treisman (US) and Gimpelson (Russia) focused on the election in Russia and examined how the political cycle is affected by rational motivations of politicians in power and economic policies geared to a retrospective voting electorate. They found that some tools and means of economic influence are only used in certain electoral period and not in others. From this idea, the authors have analyzed the possibility that rational politicians use different ways to intervene in the economy, depending on the election. In their view, the incumbents have the ability to choose several ways to affect the economic situation of the voters: the law on the minimum wage or pension benefits, monetary policy, public spending or tax cuts.

3. EFFECTS OF POLITICAL BUSINESS CYCLE IN EASTERN EUROPE (FORMER SOVIET BLOCK)

The German economist Hayo (Hayo, 2000) revealed that the support for the creation of a market economy depends on personal circumstances (age, sex, education, income level, relatively) and the success of the Government to keep the rate of inflation to a level as low as possible . Deficits can also help to strengthen their support. The differences in employment, GDP per capita,

the opening of the business environment, the share of the private sector and microeconomic transition progress shows no strong effect on people's attitudes towards the creation of a market economy. Hallenberg and Souza (Hallenberg and Souza, 2000) have tested the possibility of political business cycles between the years 1990 and 1999 for 10 countries of Eastern Europe (Bulgaria, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovakia and Slovenia). For this purpose, the authors examined the role of exchange rates, capital mobility and independence of central banks as supporting or opposing the development of the political cycle. According to the Mundell-Fleming model under the condition of the capital mobility, it is shown that the exchange rate and the degree of independence of the Central Bank affects the use of intervention upon macroeconomic variables before the election.

Countries that have a Central Bank "dependent" and flexible exchange rates tend to weaken the monetary policies in the election to the rest of the time. In contrast, in countries with a "independent" Central Bank, record monetary contraction in election years. If a country has a fixed exchange rate, the Government manipulates the economy during the electoral period by increasing budgets at the expense of weakening monetary policy.

In authors's opinion, the results found for the 10 countries in Eastern Europe, former candidate to the European Union, are remarkable similar to those found by Clark and Hallerberg for OECD countries. Monetary cycles exist only when the exchange rate is flexible and the Central Bank is dependent on the Government. When the Central Bank is dependent on the Government is an increase in money supply in the pre-election period . The opposite effect is manifested in the existence of an independent Central Bank in relation with the Government.

CONCLUSIONS

In his paper from 1989, William Nordhaus, tried to review some of the approaches that have been made about the existence of the political business cycle. His conclusions were concentrated in the form of a set of five questions, which are proven to be essential for PBC models. These five questions created by Nordhaus are very important because they are a foundation for those trying to study this area of research. These questions are:

1. Voters are rational voters or emotional? What influence their behavior?
2. Political parties: Leaders of a party implements certain economic policies because they are "obsessed for votes" (opportunistic) or they follow a certain ideology?
3. Economic Structure: politicians can influence economic cycle?

4. Shocks: Are shocks internal or external?

5. Powers: The parties shall follow their objectives being competent or prefer to adopt an unprofessional attitude?

The answers to these questions confirm or deny the validity of a model. Even if all the theories are supported by some arguments, from a historically point of view the more present and correct theory is the partisan theory. This theory argues that politicians and their political ideology manifest in the first period of the mandate, then, after that, they adopt a more moderate policy to gain supporters to its side. Unfortunately, currently we don't have models that can predict correctly movements of the cycle, but the first steps have been made, and now we can enjoy a solid literature in the field. Through continuous research and development we can get to design models that can accurately explain the political effects on the economic environment. We could fall in the misleading classification of Governments as opportunistic or ideological. But often, after the phrase " truth lies in the middle", incorporating the two behaviors in modeling political business cycles seems to be the most viable option.

REFERENCES

- Alesina, A., Roubini, N., Gohen, G. (1997) *Political cycles and the macroeconomy*, Cambridge, The MIT Press.
- Alesina, A., Roubini N. (1992) *Political Cycles in OECD Economies*, in Review of Economic Studies,.
- Alt, J. (1985) *Political Parties, World Demand, and Unemployment: Domestic and International Sources of Economic Activity*, in American Political Science Review.
- Blomberg, S.B., Hess, G. (2003) *Is the political business cycle for real?*, Journal of Public Economics.
- Clark, W.R., Reichert, U.N., Lomas, S.L., Parker, K.L. (1998) *International and domestic constraints on political business cycles in OECD economies* , in International Organization.
- Downs, A. (1957) *An Economic Theory of Democracy*, Harper & Row: NY.
- Fidrmuc, J. (2000) *Political support for reforms: Economics of voting in transition countries*, in European Economic Review.

- Fidrmuc, J. (1996) *Political Sustainability of Economic Reforms: Dynamics and Analysis of Regional Economic Factors*, Center for Economic Research Discussion Paper Nr. 9674., Tilburg University, The Netherlands.
- Frey, B., Schneider F. (1978) *An Empirical Study of Politico-Economic Interaction in the United States*, in *Review of Economics and Statistics*.
- Frey, B., Schneider F. (1978) *A Model of Politico-Economic Behaviour in the UK*, in *The Economic Journal*.
- Gonzalez, M. (2000) *Do Changes in Democracy affect the Political Budget Cycle? Evidence from Mexico*, Princeton University.
- Gonzalez, M. (1999) *On Elections, Democracy and Macroeconomic Policy Cycles. Evidence from Mexico*, Princeton University, Department of Economics.
- Hallenberg, M., Souza, L.V. (2000) *The Political Business Cycles in EU Accession Countries*, Tinbergen Institute.
- Hayo, B. (2000) *Micro and macro Determinants of Public support for Market reforms in Eastern Europe*, Zentrum für Europäische Integrations forschung (Center for European Integration Studies), Rheinische Friedrich -Wilhelms-Universität Bonn.
- Hibbs, D. (1977) *Political parties and macroeconomic policy*, in *The American Political Science Review*.
- Kalecki, M. (1943) *Political aspects of full employment*, *Political Quarterly*.
- Krause, G. (2005) *Electoral incentives, political business cycles and macroeconomic performance: empirical evidence from post-war US personal income growth*, *British Journal of Political Science*.
- Jula, D. (2001) *Economic Impact of Political Cycles – The Relevance of European Experiences for Romania*, Université Panthéon-Sorbonne (Paris I), Paris, France, July 2001.
- Leertouwer, E., Maier, P. (1999) *Who Creates Political Business Cycles? (Should Central Banks Be Blamed?)*, Working Paper, University of Groningen, Faculty of Economics, Groningen, The Netherlands.
- Magaloni, B. (2000) *Institutions, Political Opportunism and Macroeconomic Cycles: Mexico 1970-1998*, Stanford University.
- Nannestad, P., Paldam, M. (1999) *The Cost of Ruling. A Foundation Stone for Two Theories*, Working Paper, Department of Economics, Aarhus University, Denmark.
- Nordhaus, W. (1989) *Alternative approaches to political business cycle*, *Brookings Papers on Economic Activity*.

- Nordhaus, W. (1975) *The political business cycle*, in *Review of Economic Studies*.
- Rodrik, D. (1995) *The Dynamics of Political Support for Reforms in Economies in Transition*, in *Journal of the Japanese and International Economies*, Issue 9.
- Rogoff, K., Sibert, A. (1988) *Elections and macroeconomic policy cycles*, in *Review of Economic Studies*, January.
- Schuknecht, L. (1998) *Fiscal Policy Cycles and the Exchange Regime in Developing Countries*, World Trade Organization, Economic Research and Analysis Division.
- Schultz, K. (1995) *The Politics of the Political Business Cycle*, in *British Journal of Political Science*.
- Shi, M., Svensson, J. (2001) *Political Budget Cycles: Do They Differ Between Developed and Developing Countries?*, Stockholm University.