“Like any evolving creature, the political business cycle is likely to emerge in the future in unexpected shapes and with unanticipated dynamics.”

-William D. Nordhaus

Abstract

This paper discusses the background of what constitutes a political business cycle and some of the models that have been developed. The first and classic PBC theory was developed by William Nordhaus in 1975. After Nordhaus’s research, many other theories were developed and this paper examines a couple of these. For each theory, the conclusions of the model are presented. Finally, conclusions are drawn about the validity of particular theories from literature on political business cycles.
**Introduction**

Political business cycles (PBC) refer to the effect politicians have on the movements of the economy. When voters make their decisions, they tend to put weight on the performance of the economy. As long as voters use the performance of the economy as criteria for their decision making, and the politicians have the desire to be re-elected, it has to be assumed that politicians will try to influence the economy to better their chances of re-election. William Nordhaus talks about this phenomenon in his 1989 paper stating:

> “The theory of the political business cycle, which analyzes the interaction of political and economic systems, arose from the obvious facts of life that voters care about the economy while politicians care about power.”

(Nordhaus, 1989 p.1).

If governments are in fact changing economic outcomes in order to improve re-election probability, PBC theory must be explored because of the effect that these changes can have on the economic welfare of the public. Politicians have the ability to affect economic outcomes and many current business cycle theories fail to incorporate politics into their models.

Business cycles are typically explained using Real Business Cycle models (RBC). RBC models are general equilibrium economies where productivity shocks are the main source of consumption. The business cycle fluctuations are created from the accumulation or de-accumulation of capital (Blomberg & Hess, 2003). These models incorporate many factors that can cause fluctuations in the economy, but they fail to include the possibility that politicians might influence the cycles due to their desire to be re-elected. In the attempt to incorporate this political influence into business cycle theory, many models have been developed with the goal of including politics as a variable. As Blomberg and Hess state in their 2003 paper, “In contrast to RBC models, political business cycle models take the view that the economy shifts or cycles as power is transferred from President to President.” (Blomberg & Hess, 2003 p.1092).

In a 1989 paper, William Nordhaus reviewed the various approaches to political business cycles. In his paper, he discusses a set of five questions that are central to PBC
models. These five questions by Nordhaus are very important because they help lay the foundation that the various models developed for political business cycle theory need to encompass. These questions are: (Nordhaus, 1989)

1. **Voters**: Are voters rational or irrational? What governs their behavior?
2. **Parties**: Do political leaders implement policy because they are “voter maximizing” (opportunistic) or are they instead “ideological”?
3. **Economic Structure**: Do politicians have the ability to affect the business cycle?
4. **Shocks**: Are shocks internal or external?
5. **Competence**: Do parties pursue their objectives competently or do they bumble around?

The answers to these questions will decide which models are valid and which models do not fit with the actions of the participants and the actions of the economy.

This paper will discuss some of the PBC models that have been developed. The first and classic model for PBC theory was by William Nordhaus in 1975. Nordhaus jump started the research into the theory of political business cycles. From here, many other theories were developed and this paper will examine a couple of these. For each theory, the conclusions drawn about the model will be presented. Finally, from literature about political business cycles, conclusions will be drawn about the validity and significance of the various models.

**The Classic Theory**

Until the revolutionary work by William Nordhaus in his 1975 paper, “The Political Business Cycle”, there was very little, if any, research being conducted on the idea that politicians affect the business cycle.

The Nordhaus model is developed around the relationship between unemployment and inflation. In economics, it is generally believed that there is a trade off between the level of unemployment and the rate of inflation. In an economy, policy makers must make a decision about whether to lower inflation at the cost of higher unemployment, or decrease unemployment with the cost of higher inflation. Also, voters
tend to put more weight on the unemployment rate; they want to see that the unemployment rate is being decreased, which is associated with an economic expansion (Nordhaus, 1975). If voters indeed have this preference, then it would be in the politician’s best interest to maximize voter’s utility in order to maximize the number of votes they will receive in the next election. Although voters have preferences for the optimal unemployment rate and inflation rate, the timing of the policy changes can have an effect. Nordhaus states:

“Voters do not take simple averages of economic variables over the last electoral period, but have a decaying memory of past events. On election day, the memory of recent events is probably more poignant than that of ancient ills.” (Nordhaus, 1975 p.182).

Voters tend to have the, what have you done for me lately? mentality. This persuades a politician to try and please voters more as the election approaches.

Once the preferences of the voters are determined, it is easy to develop the predicted behavior of politicians and develop the political business cycle. Nordhaus’s typical cycle works as follows:

“Immediately after an election the victor will raise unemployment to some relatively high level in order to combat inflation. As elections approach, the unemployment rate will be lowered until, on election eve, the unemployment rate will be lowered to the purely myopic point.” (Nordhaus, 1975 p.184).

By boosting the economy in the periods closest to the election, politicians are able to capitalize on the decaying memory of voters. The voters will forget the slow economy at the beginning of their term, and will put more weight on the recent expansions. This causes the business cycle to move in tandem with the campaign strategies of politicians.

Nordhaus tested this theory with historical evidence using annual data on unemployment rates from 1947 to 1972. His results found that unemployment fell sharply before elections and rose after elections, suggesting that the business cycle does in fact move in a way that is predicted by his theory. Another interesting fact he discovered was that there were two elections that did not follow the anticipated pattern and in both circumstances, the incumbent lost the election (Nordhaus, 1975). From the
evidence that Nordhaus collected, he was able to conclude that the political business cycle is a clear factor in the way some capitalist democratic economies operate.

Various Models

The following section will discuss some of the political business cycle theories that have evolved from the 1975 work of Nordhaus. Some of these models contradict the work of Nordhaus and some build off of his model, but they all address the effect politics can have on business cycles.

Opportunistic Cycle
This is the basic Nordhaus model discussed above. This model predicts that the implemented policy will move in a cycle that will be contractionary for the first half of the election cycle and then expansionary as the election approaches. This occurs because of the politician’s desire to capitalize on the decaying memory of voters and maximize votes by increasing voter utility closer to the election.

Ideological Cycle
The ideological cycle was developed by Douglas Hibbs. In Hibbs’s theory, each party can be identified by their unique ideologies. Left wing parties choose high inflation and low unemployment. Right wing parties, on the other hand, will choose low inflation and high unemployment. Voters will make their decisions based on which party’s ideologies they agree with the most (Hibbs, 1977). Politicians stick to the ideologies that are represented by the parties they are associated with. Therefore, politicians do not act in the opportunistic way that Nordhaus’s original theory assumes. The cycles occur when the party that is in power changes, like when a current left wing president is beaten by a right-wing competitor (Hibbs, 1977).
**Electoral Security & Electoral Uncertainty**

The electoral security hypothesis is similar to the opportunistic cycle first introduced by Nordhaus except that it addresses the competitiveness of the election race. In his 2005 paper, George Krause states, “Pre-election manipulations of economic policy will vary inversely with the government’s security going into the election.” (Krause, 2005 p.81). If a candidate is very secure in the fact that they will win the election regardless of the policy they take, that candidate will not sacrifice their ideologies in the quest of extra meaningless votes. However, if the outcome of the election is up for grabs and candidates are not secure in their re-election, they will then tend to pursue a more opportunistic strategy. The pursuit of a more opportunistic strategy will lead to an expansion in the periods coming up to the election, resulting in a political business cycle. Therefore, the desire to create a PBC will be greater as the election becomes more competitive. The incumbent has to make a decision as to whether they want to increase their re-election chances at the cost of sacrificing their ideologies and “incurring the social welfare costs” (Krause, 2005).

**Partisan - Opportunistic**

The partisan-opportunistic model deals with the incumbent’s desire to appeal to the “median voter.” It is similar to the ideological cycle in that each party has a distinct set of ideologies that are unique to that party. The difference comes in the party’s willingness to stray from these ideologies to maximize votes. The logic behind this theory is explained by Alberto Alesina and Nouriel Roubini (with Gerald D Cohen) in their book *Political Cycles and the Macroeconomy*. They state:

“More specifically, left-wing (liberal) governments pursuing expansionary monetary policies at the beginning of their term to lower unemployment (raise income growth) may be willing to reduce money growth at the end of their terms to reduce inflation caused by their initial policies. Opportunistic left wing governments may want to strengthen their anti-inflation policies to appeal to the median voter in election years. Conversely, right –wing governments that undertook contractionary monetary policy to lower inflation may be more willing to expand
monetary growth at the end of their terms to face elections in a period of economic expansion.” (Alesina & Roubini, 1997)

Partisan-opportunistic theory works around what is known as the median voter. This refers to the assumption that Democrats tend to have a low unemployment, high inflation ideology; and Republicans tend to have a low inflation, high unemployment ideology. The hypothesis predicts that as the election nears, in order to maximize votes, parties will set aside their strict ideologies and adopt a more moderate policy. The reasoning behind this is that whoever wins the median voters, will win the election.

Evidence of Partisan Opportunistic Model
In his 2005 paper, Krause tested the significance of this model. In the study, he analyzed the hypothesis results using US quarterly real personal income growth during the period of 1948 – 2004. Krause used the dynamics of real personal income growth by including lags of the dependent variable, incorporating the president’s party; and made the last quarter the apex of PBC effects in real macroeconomic activity. (Krause, 2005)

The results of the regression indicate that pre-election real personal income growth is significantly higher under Republican administrations relative to Democratic. After running some more tests, Krause determined that: “The simulation results indicate that the maximum growth in US real personal income occurs in the first two to three years of a term for Democratic presidents, while its apex is attained during the election year for Republican administrations.” (Krause, 2005 p.97). The patterns that are seen in real personal income growth are similar to the path that partisan-opportunistic hypothesis predicts will happen. The results are in clear support of the partisan PBC theory for US real personal income growth in the post-war (Krause 2005).

Extension of the Partisan Model
In a 2003 paper, S.B. Blomberg and G.D. Hess extend the partisan approach to incorporate a party’s competence. Their model has four main features:

1. Democrats wish to increase government services, where as, Republicans want to cut them in order to lower taxes.
2. There is a lag before these policies will take affect.
3. Not all leaders from the same party are alike. Competent Democrats can deliver more services at the same cost through enhanced productivity, whereas incompetent ones must raise taxes. Competent Republicans provide fewer government services by cutting taxes while incompetent ones provide fewer services without tax cuts.

4. This idea of competence must be included in the model. In the outcome of their model, Blomberg and Hess (2003) first distinguished that what separates competent leaders from incompetent ones is that competent leaders will expand the economy near to the election. Next, they found that if the economy is expanding near to the election, leaders and their political parties will retain office. Finally, Blomberg and Hess concluded that it is always better to re-elect competent leadership regardless of party, than to elect the opponent who may or may not be competent.

Blomberg and Hess take the notion that each politician has ideologies that are unique to their individual party. Their contribution to the literature was to include the idea that some politicians cannot come through on the promises that go along with their ideologies. If a party cannot come through on what it promised, then it is always better to elect a more competent president (in which the outcomes can be predicted), than to re-elect an incompetent one whose outcomes will be unknown (Blomberg & Hess, 2003).

Rejections
(Ultrarational Voters)

The most piercing criticism of PBC theory derives from the approach that assumes that voters are “ultrarational” (Nordhaus, 1989). If voters are in fact ultrarational, politicians will not be able to manipulate them with opportunistic behavior. As William Nordhaus (1989) states:

“If, for example, the government were to stimulate the economy before an election – hoping that the present pleasures would in the voters’ minds outweigh potential future pains – ultrarational voters would see through the manipulative policies. . . . The most penetrating criticism of PBC
models is grounded in the assumption that ultrarational voters can see through the manipulative actions of parties.” (Nordhaus, 1989 p.4).

As long as voters have all the information and can see everything that politicians do, it would be impossible for a politician to use opportunistic behavior to gain votes. This would result in politicians sticking to their ideologies and therefore the only valid model would be the “ideological cycle” explained above. If voters are in fact ultrarational, many models used to explain PBC would be disproved (These include partisan, opportunistic, electoral security).

In his 1989 paper, William Nordhaus tested the possibility of ultrarational voters and found conclusively that this theory does not hold strong. He concluded from both his, and the studies of others, that the assumption of ultrarationality cannot withstand a confrontation with behavioral evidence. One interesting test that Nordhaus conducted was the test of a “honeymoon effect”. This “honeymoon effect” refers to the phenomenon that the newly elected candidates enjoy high popularity early in their terms, (while on their “honeymoon”) but that this high popularity decays over time because voters had unrealistic expectations of the candidate. If voters were in fact ultrarational, then after their expectations were let down a couple times, they would adjust their expectations and the “honeymoon effect” would inevitably disappear. Nordhaus’s tests show that every president enjoys some type of honeymoon time after being elected. This is a strict violation of ultrarationality because it implies that patterns in voter approval can be predicted (Nordhaus, 1989). From studies by Nordhaus and others, it can be concluded that the criticism of ultrarationality does not pose much of threat to the validity of political business cycle theory.

Conclusions

William Nordhaus, a professor at Yale University, began the research into the possibility of political business cycles. Nordhaus developed the opportunistic cycle, in which parties try to expand the economy in the periods approaching the election in order to maximize voter utility and therefore maximize their chance at re-election. After this model was developed, many other theories and models have been constructed in the attempt to
explain the way politics affect the business cycle. Some of these theories include: The ideological cycle, electoral security, partisan, and the partisan-competence model.

Although most of these theories are supported by some type of evidence, the theory that tends to stick out as being the most historically correct is the partisan theory. This theory states that politicians will follow their ideological policies early in the electoral cycle, and then as the election approaches, they will move toward a more moderate policy in order to appeal to the median voter. There are no current models that can completely predict cycle movements, but the strides that have been taken in this subject are tremendous. Through increased research, these models get closer and closer to explaining politics affect on business cycles.
References


