

Fiscal Institutions

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This paper reviews the mechanisms in place in different fiscal institutions and their effects on fiscal outcomes. Agency problems between governments and citizens could lead to policies that benefit only some groups or politicians. Governments also deal with intertemporal decisions and with the uncertainty of being reelected, which could lead them to run persistent budget deficits. Finally, the design and transparency of institutions could affect policy outcomes. Independent institutions informing the public about the implications of fiscal policies could mitigate some of the mentioned problems. This paper describes the role played by one such institution, the US Congressional Budget Office. [JEL Classification: H1, D82, D72]

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Questo articolo rivisita i meccanismi che possono generarsi in differenti istituzioni e il loro effetto sui risultati delle politiche fiscali. Problemi di agenzia tra governi e cittadini possono selezionare politiche che favoriscano particolari gruppi o politici. Inoltre, i policymaker sono chiamati a decisioni intertemporali e condizionati dall'incertezza di essere rieletti, pertanto possono soffrire di deficit bias. Infine, il disegno delle istituzioni e la loro trasparenza possono condizionare le politiche fiscali. Istituzioni che informino il pubblico sull'impatto delle politiche fiscali possono contribuire a ridurre i suddetti problemi. Questo articolo descrive il ruolo di una di queste istituzioni, il Congressional Budget Office.

1. - Introduction

Information affects both political and economic decision-making processes. When information is either absent or asymmetric, in-

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dividuals in executive posts might have the incentive and ability to engage in inefficient behaviors that enhance their own power (Stiglitz, 2002). The modern economics of information has highlighted many types of inefficiencies that arise from such a lack of information.

The relationship between the state and the governed represents a type of agency relationship, which is one of the oldest modes of social interaction. The state acts as a representative or agent for the governed, the so-called principal, in a particular domain of decisions. Economists have shed light on the inefficiencies that arise when principals and agents act in the presence of information asymmetries (Ross, 1973). For the relationship to work optimally, the principal should possess perfect information about how to incentivize the agent to act optimally on his behalf. When perfect information is absent, the principal is left with only the option of monitoring the agent.

In most modern democracies, parliamentary bodies are constituted as guardians of the executive branches whose mission is to act for the benefit of the governed. In order to optimally monitor them, parliaments need to be constantly informed about the technical aspects — particularly the cost and economic impact — of any decisions taken by the executive branches. If there is no independent body to evaluate technical aspects and economic issues related to legislative acts and government budgets and appropriations, parliaments have to rely solely on information from the executive branch. In other words, any law and budgetary decisions the parliament has to authorize will be grounded only on evaluations and technical reports that the executive branch can provide, creating the potential for problems that arise when information is asymmetric.

The persistence of large, sustained national budget deficits in many developed and developing countries makes those deficits incompatible with optimal fiscal strategies such as tax smoothing and redistribution issues (Poterba and von Hagen, 1999). The fact that deficits have risen simultaneously in many countries characterized by different macroeconomic conditions suggests that those deficits are not driven solely by economic factors.

Governments appear to use budgetary and fiscal policies not only to respond to economic fluctuations and improve the welfare of the governed but also to pursue different objectives.

In many countries, governments do not use evaluation or analytical tools to support many of their budgetary choices. As a result, it is impossible for parliamentary committees to evaluate a budget item in the light of their fiscal policy goals. Furthermore, the absence of an analytical support for parliamentary work related to any legislative and budgetary process makes it difficult or impossible for parliaments to form independent assessments before and after approving budgetary expenses. In this way, governments obtain a monopoly on information and have strong incentives to reduce transparency. At the same time, parliaments have no way to monitor or audit their governing performance and the merits of policy interventions for the citizens' welfare.

Debate in the political economy literature focuses on several ways in which fiscal policies are determined in modern democracies as a result of behaviors that governments can put in place to follow objectives other than those that comply with optimal fiscal policy. A first strand of the literature, the public choice school, has its roots in the seminal work of Buchanan and Tullock (1962) and focuses on how policy outcomes can derive from problems of agency between governments and citizens. Problems mainly originate from the public not being optimally informed about the details of specific policies and agents maximizing heterogeneous objective functions. A second strand of the literature shows that fiscal policy may suffer from a bias toward deficits driven by a time inconsistency problem that can lead governments to run persistent deficits (Alesina and Tabellini, 1990; Persson and Svensson, 1989). Finally, recent attempts to explain why governments run large and persistent deficits that are inconsistent with an optimal policy approach have focused on how political and institutional factors *per se* can affect fiscal and budgetary outcomes (see, for example, Alesina and Perotti, 1994; 1999).

Recently, calls to improve government performance and governance processes in OECD countries have become particularly loud and insistent because of large and increasing public expenditures.

The OECD has published several studies aimed at identifying criteria and principles that institutions should follow to improve their governance and policy actions. Special weight has been given to the possibility of citizens being able to assess the economic impact of various policies and to the mechanisms through which the government can be held accountable. In a growing number of OECD countries, new political processes and institutions have gradually been put in place to solve or limit some of the main issues related to government policies that do not follow welfare-improvement objectives. This paper analyzes one such institution: the Congressional Budget Office (CBO), which was established in the United States as an independent analytical body to help the Congress understand the budget and its economic effects, and track the budget implementation. The paper also highlights how CBO relates to the issues — and can limit some of the problems — that the literature has raised on the determination of fiscal policy outcomes.

The organization of the paper is the following. The second section reviews some of the main issues that animate the literature debate on the determination of fiscal and budgetary policy outcomes. The third section presents CBO as an institution that can limit some of the problems that the literature has pointed out. The fourth section analyzes how CBO relates to the main issues in the existing literature. Finally, the fifth section offers concluding remarks.

2. - Governments and Fiscal Output: The Debate

In the past few decades, several developed and developing countries have accumulated large public debts. In some of those countries, the *ratio* of public debt to GDP has reached three digits. The fact that countries characterized by different macroeconomic conditions could simultaneously accumulate large debts has attracted attention among economists and stimulated a debate on how fiscal policy outcomes develop.

2.1 *The Agency Problem*

The “agency problem” between citizens and the executive branch arises from the fact that when citizens have either no information or asymmetric information, individuals in executive posts have the incentive and ability to engage in inefficient behavior that enhances their own power (Stiglitz, 2002). Information pertinent to individual decisions can exist as incomplete as a result of the knowledge which all the separate individuals possess (Hayek, 1945).

Buchanan and Tullock (1962) analyze the costs associated with policy decisions that any single citizen faces in the presence of heterogeneous preferences. They start by considering the problem when a democracy is direct rather than representative and the citizen himself therefore takes part in the decision-making process. In weighing various decision rules, the citizen takes into account two types of costs: the expected external cost imposed on the individual when decisions must be taken through collective processes, and the total decision-making costs that result from all bargaining efforts necessary for reaching a decision. The citizen’s decision-making costs (or transaction costs) increase as the majority required for a decision increases. When the decision rule approaches unanimity, the costs increase rapidly. The expected external costs falling on the individual decrease monotonically as the share of citizens required for a decision increases.

Under almost any decision-making rule, however, direct democracy becomes too costly in other than very small political units, when more than a few isolated issues must be considered. The costs of decision-making become too large relative to the possible reductions in expected external costs that collective action might produce. In modern representative democracies, individual citizens do not participate directly in public policy decisions. That leads to a principal-agent problem between the citizens and the policymakers having independent objective functions. Citizens are harmed by the large external costs related to governments’ policy decisions because the decision process involves only a small share of citizens.

Buchanan and Tullock's seminal work, although still not at a formalized stage, set the basis for the traditional public-choice approach to the study of how political decision-making results in outcomes that may conflict with the preferences of the general public. Politics is viewed merely as a game in which selfish rational actors seek to divide economic outcomes. This basic approach implies that there is not much productive role for political and non-political institutions since policies result from balancing the power of opposite interests.

Alesina (1988) extends the work to voters or parties with heterogeneous preferences for policy outcomes. In this case, elections are institutions that serve the goal of resolving conflicts and aggregating preferences. Depending on the party that wins and eventually rules, different policies will be put in place leading to what Alesina defines policy cycles. Those cycles can also generate macroeconomic cycles. Alesina and Roubini (1997) document the evidence on policy cycles and their relationship with economic cycles. Since an election allows one party to prevail and clear away conflicts, the major policy action happens in the post-election period. Alesina and Roubini claim that this creates another mechanism through which the agency problem can generate moral hazard behavior. Winning politicians view the relationship with their party and the citizens as an incomplete contract that enables them to behave without a precise and enforceable political mandate. Thus, when they vote, citizens do not select desired policies but only a series of politicians and bureaucrats. Different voting processes and lobbying movements can lead to different election outcomes.

Several more recent studies of policy outcomes in the presence of heterogeneous preferences and imperfect information find that institutions can play an important role, allowing for an efficient use of dispersed information. Political institutions such as electoral systems need to be complemented by other institutions, for instance political parties, in order to achieve efficient information aggregation (Piketty, 1999). One informational rationale for political parties has been proposed by Caillaud and Tirole (1997), who view parties as a means to reduce the informational

inefficiency of voting and policy decision processes. Parties achieve intra-party information aggregation, which helps in arriving at the decision nodes with more homogeneous information and preferences. The information-aggregation approach to political institutions renews the theoretical efficiency analysis of alternative political institutions.

Other studies stress different mechanisms that can emerge in the presence of the agency problem, when voters are rational but imperfectly informed and governments have their own objectives, such as pleasing interest groups and seeking reelection. Persson and Tabellini (1990) observe that in periods prior to elections, public expenditure appears to be particularly high. The authors claim that in that way, governments have an interest in boosting growth to increase the chance of being reelected and to play on the imperfect information that voters have about the policymakers' intrinsic ability and policy shortcomings, such as public deficits or inflation. Since voters only see the economic outcome, they interpret a high level of growth as a signal about the government's capability to solve policy issues. In this way, citizens face a moral hazard problem put in place by the incumbent government through the mechanism of higher spending. A similar scheme was first studied by Holmstrom (1982). As a result, the mechanism of higher spending would create a correlation between the parties in power, macroeconomic outcomes, and the growth of public debt.

In those ways, the outcome of policy decisions can be determined by factors other than optimal policy rules aimed at improving welfare. Policymakers have an incentive to deviate from the social optimum for several reasons and to retain private information. Governments obtain a monopoly on information about many policy issues — particularly about the impact their decisions can have on macroeconomic conditions. This principle is at the core of the literature on corruption, which shows how, in countries characterized by bad public governance, policymakers find it (individually) optimal to reduce transparency. At the same time, citizens and parliaments have no means to monitor or audit the government's performance and the merit of policy interventions for the citizens' welfare. Greater transparency can reduce the effectiveness of the executive branch's

monopoly power over policy decisions and enhance the overall quality of public governance. Rogoff (1990) shows that if voters cannot easily observe the composition of budgetary policies, then policymakers can follow loose fiscal policies before elections and increase their chances of being reelected. In his view, transparency reduces the undesirable outcomes that arise in a principal-agent problem and the emergence of phenomena such as political cycles.

Comparative research undertaken by the World Bank at the global level shows that “in those settings with high levels of transparency, effective parliamentary oversight, and high standards of corporate ethics, there was a higher rate of GDP growth over the previous three years than in countries with lower standards” (Kaufmann, 2003). Several reasons for that may be advanced. International investment flows are higher — and investments tend to be of higher quality — in countries with more transparent policy environments. Such transparency requires governments to provide timely and complete information about macroeconomic developments and policies. Further, more transparent information on policy goals and on the related use of public funds allows for better control of wasteful public expenditure and corruption. When governments are more open, reliable, and timely about sharing such information, they make better-informed economic decisions that lead to a more efficient allocation of resources (Stiglitz, 2002). Also, governments have a near-monopoly on certain types of information that market actors’ performances often depend on (such as reliable statistics about inflation, forthcoming regulations, and interest rate changes).

2.2 Intertemporal Policies, Time Inconsistency, and Credibility

The literature that considers the issues of time inconsistency and credibility studies policy outcomes in a context of dynamic and sequential decision problems. In a dynamic context, governments face an intertemporal budget constraint, and fiscal discipline implies that the constraint is not violated. The intertemporal budget constraint relies on a transversality condition, which states that the

present value of the debt-to-GDP ratio must remain finite.¹ Fiscal rules or discipline is not incompatible with a succession of annual deficits, provided that they are matched by surpluses in following years. In this way, it can be admissible to use fiscal policy in the short run to pursue stabilization policies. In the absence of a fiscal rule, however, governments can run deficits but there is no way to require later policymakers to run surpluses to counter-balance previous years' deficits.

These issues are related to the phenomenon of time inconsistency, which was advanced by Kydland and Prescott (1977) who argue that monetary authorities will have a bias toward inflation. Monetary and fiscal policymakers face similar issues. Monetary policy can be used for two different purposes: to achieve price stability in the long run and to help stabilize output over the business cycle in the shorter run. The challenge is to deliver on the short-run objective without giving up the long-run objective. The debate is whether it is desirable to let policymakers use discretion rather than rules in the short run, since doing so can seriously compromise long-run equilibria.

Fiscal policy objectives can be viewed in the same fashion. The long-run objective is debt sustainability, but in the short run, fiscal policy can make a contribution to output stabilization over the business cycle. Studies by Alesina and Tabellini (1990) and Persson and Svensson (1989) extend Kydland and Prescott's time inconsistency problem to fiscal policy and show that fiscal policy may suffer from a deficit bias driven by time inconsistency. They also extend the previous literature on public choice in two directions. First, their setup considers in the same fashion policymakers with objectives different from a benevolent social planner who maximizes the welfare of a representative consumer, but it extends the problem to multiperiod and sequential decisions. Second, they abandon the view of voters that suffer by fiscal illusion.

Alesina and Tabellini (1990) consider an economy in which

¹ More stringently, given an initial level of debt, the transversality condition implies that the public debt cannot grow faster than the interest rate.

two policymakers or two political parties, who have different objectives, alternate in office as a result of elections. In the presence of disagreement between current and future policymakers upon what specific fiscal policy to enact, public debt is used strategically by each government to limit the choices of its successors by affecting the states that the successor will inherit. As a result, the equilibrium stock of public debt tends to be larger than is socially optimal or results from full agreement. Disagreement and uncertainty about who will be appointed in the future prevent the current government from fully internalizing the cost of leaving debt to its successors. In this case, heterogeneous preferences and sequential decision problems under uncertainty, rather than individual bounded rationality, generate a deficit bias.

Persson and Svensson (1989) consider the expenditure outcome of governments that attach greater weight to reaching their different preferred level of government consumption than to the welfare cost of a distorted tax profile over time. In this case, they analyze the public debt outcome that arises from disagreement on different levels of public expenditure more than on the composition. Similarly to Alesina and Tabellini, they find that the equilibrium level of public debt is biased towards a higher level than is socially optimal and that the current policymakers can affect future policymakers' decisions through the future states of inherited public debt levels. They show that a conservative government may borrow more when it knows it will be succeeded by a more expansionary government than when it knows it will remain in power in the future. To be sure, the argument is completely symmetric, so a liberal government would choose to borrow less if it knew it would be succeeded by a more conservative government. Political and fiscal cycles can therefore also arise as a result of time inconsistency problems.

However, Wyplosz (2005) questions whether, besides a general analogy because of the time inconsistency, fiscal policy issues can be equated with monetary policy ones. Compared with monetary policy, fiscal policy — particularly tax policy — is relatively ineffective as a short-run tool for output stabilization, since the impact on output is slower and uncertain (Blanchard and Perotti,

2002). The Ricardian equivalence established by Barro (1974) can limit the effectiveness of fiscal policy actions. The impact of fiscal policy on growth and output volatility depends on how economic agents perceive fiscal policy actions. Temporary tax measures can be ineffective because agents adjust their saving behavior. Permanent tax measures raise issues of credibility instead because any decision can be reversed in the future, due to time inconsistency problems. Furthermore, unlike monetary policy, fiscal policy lacks some promptness, since in most cases proposals need to receive an *ex-ante* approval by the legislature.

Intertemporal policy decisions and outcomes can also be affected by issues of credibility and commitment. Several seminal studies have shown how credibility problems may lead to bad policy outcomes, such as an over-expansionary monetary policy and high inflation, or excessive taxation of capital and low savings. Barro and Gordon (1983) study policymakers' credibility problem in the presence of rational expectations with complete information about every agent's preferences. A policymaker acting with discretion and no constraint on his or her actions can achieve the objective of reducing unemployment only through surprise inflation. That surprise, however, cannot deliver the desired effect when used systematically over time. As a result, policies that announce low inflation targets do not remain credible to the public, so Barro and Gordon find that inflation becomes excessive and cannot achieve the desired employment objective. In this case, discretion leads to the realization of inconsistent policy outcomes, and rules could achieve better results and commit a policymaker to certain actions.

Backus and Driffill (1985) also show that a policymaker can be faced with intertemporal credibility issues even in a context where time inconsistency does not arise. Those authors extend the work of Barro and Gordon to the case in which the public suffers from a lack of information about policymakers' preferences — in particular, whether they put higher weight on fighting unemployment or inflation. Thus, when the government announces its intention to reduce inflation regardless of the unemployment cost, the public is uncertain whether this will actually be the case.

As a result of that credibility issue, in equilibrium, policies aimed at eliminating inflation will reduce output below the natural rate if the public thinks the government may inflate. Backus and Driffill also suggest that governments may appoint central bankers with solid reputations for fighting inflation, even if their own preferences place positive weight on employment, in order to minimize the bad outcomes arising from uncertainty on their preferences. In that way, independent institutions, such as central banks, can act as a precommitment device, which may help to make noninflationary policies more credible.

Cohen and Michel (1988) demonstrate that time-inconsistent policies actually violate dynamic optimality; they reach the conclusion that policymakers in equilibrium can follow consistent policies. Similar to Backus and Driffill, they also show that a government with limited precommitment capability is better off than one with no capability to precommit when its actions can be interpreted as a public bad.

Kotlikoff, Persson, and Svensson (1988) deal with credibility problems of fiscal policy in life-cycle models. In those models, unlike in Barro (1974), intergenerational redistribution policies, which imply some public deficit, do have an economic impact. Fiscal policies could also raise problems of time inconsistency in those setups and could generate significant issues about credibility. Kotlikoff *et al.* (1988) find a possible solution to the time inconsistency problem: different generations can sell social contracts to each other, such as some Social Security contracts, as a policy precommitment device.

In general, at the core of the credibility problem are all of the political pressures that may cause policymakers to reverse a previously announced program or break certain social contracts through successive reforms. Any institution that makes policy reversals more difficult enables policymakers to make stronger commitments to future policies and thereby enhances their credibility. As a result of time inconsistency, credibility issues and growing government spending, many developed countries have adopted fiscal rules. A number of countries — such as the Netherlands, New Zealand, Sweden, and the United Kingdom —

have introduced limits on increases in public spending that are not matched by higher revenues (or lower spending in other matters). Other countries — such as Chile and Brazil — have adopted rules that restrict the size of the budget deficit or mandate a surplus. Finally, the European Union has adopted the Growth and Stability Pact, which formally sets a limit of 3 percent for its members' annual budget deficits.

Wyplosz (2005) concludes that fiscal discipline must take the form of a commitment to a debt-to-GDP target over a relevant horizon, and that political pressure must be removed from policymakers who undertake this task, through the establishment of new institutions. The most radical institutional solution is to fully mimic the approach used with monetary policy and establish an independent institution for fiscal policy. The continuity and independence of such an institution can limit the time inconsistency problem and improve respect for the intertemporal budget constraint. Wyplosz also recognizes that, if the creation of independent fiscal authorities represents a radical solution, an intermediate one could be to establish independent advisory bodies issuing non-binding recommendations. Some institution of that kind exists in a number of countries (such as Belgium, Chile, and Germany) and has been proposed by the EU Commission (2004) as part of a possible reformed Stability and Growth Pact.

2.3 Institutions and Fiscal Outcomes

Recent attempts to explain why governments run large and persistent budget deficits have focused on political and institutional factors and their effect on fiscal outcomes. Since economic conditions alone cannot provide sufficient explanations for those deficits, some economists have considered how different political and institutional setups can lead to differences in fiscal policy outcomes.

Alesina and Tabellini (1990) conjecture that differences in political institutions can help to explain variations in the debt policies pursued by different countries or by the same country at different points in time. The equilibrium level of public debt tends

to be larger under the following conditions: the larger is the degree of polarization between alternating governments; the more likely it is that the current government will not be reappointed; and the more rigidly downward is public consumption. Alesina and Perotti (1999) focus more specifically on what they call “budgetary institutions”, defined as all the rules and regulations by which budgets are prepared, approved, and implemented. Since these institutions vary between countries, they can be used to explain differences between countries’ fiscal policies. The rules defining budgetary institution can be mainly those which prescribe numerical targets for the budget, such as balance-budget rules, or those prescribing procedural rule to design and implement the budget. Two rationales, stemming from two different schools of thought, suggest that a balanced-budget law would not be optimal. The first rationale is related to stabilization policies. Standard Keynesian anticyclical policies prescribe spending increases and deficits during recessions, and spending cuts and surpluses during economic expansions. The second rationale concerns the tax-smoothing theory of budget deficits (Barro, 1979; Lucas and Stokey, 1983). According to this theory, budget deficits and surpluses should be used to “smooth” the distortionary cost of taxation. A law that prescribes a balanced budget every year would excessively constrain the use of budget deficits as a complement to the implementation of the optimal tax policy. Alesina and Perotti also conclude that balanced-budget rules are not desirable; they argue that appropriate procedures and new institutions could represent an alternative means to implement fiscal discipline.

As for procedural rules, it is possible to identify three stages in the budget process: (1) the formulation of a budget proposal within the executive branch, (2) the presentation and approval of the budget in the legislature, and (3) the implementation of the budget by the administration. For the first two stages, Alesina and Perotti identify two important interconnected issues: voting procedures and the budget and policy transparency. Voting procedures have an impact on the final outcome if the latter can be monitored because it is transparent and can be optimally

assessed. A vast literature in formal political science has studied how different voting procedures in legislatures lead to different outcomes. The two main issues are the order in which the overall budget is approved and the power of amending that the legislature has at any stage. The budget outcome is different if the legislature votes *ex-ante* on the overall size of the budget rather than letting it be determined by the accumulation of individually approved bills. As for the power of amending the budget proposal, two different procedures can be distinguished: hierarchical and collegial. Hierarchical institutions limit in various ways the capacity of the legislature to amend the budget proposed by the executive branch. Collegial institutions emphasize democratic rule at every stage of the decision-making process, but hierarchical institutions are more likely to enforce fiscal restraint, avoid large and persistent deficits, and implement fiscal adjustments more promptly.

As for the transparency of the budget, Alesina and Perotti emphasized that it is crucial for the budgetary and fiscal policy process independent of the voting procedures and institutional rules. Lack of transparency about the budget can increase voters' confusion and reduce politicians' incentives to be fiscally responsible. By making it less clear how policies translate into outcomes, policymakers can retain a strategic advantage over rational, but not fully informed, voters. This advantage would disappear with "transparent" procedures. Empirical work by von Hagen (1992) shows that the transparency of the budget (measured by a variety of indicators) is negatively correlated with public debt. Italy and Ireland — current and former high-debt countries, respectively — have the least transparent budgets. Alesina and Perotti suggest that the optimal solution to implement higher transparency could be establishing certain analytical and informational standards in the presentation of fiscal proposals. Another solution they envision is to have independent agencies that study the budgetary and policy issues proposed by the government and provide an analysis of the accuracy of the budget. They suggest this to be a superior approach but they also highlight that it crucially relies on the independence of those public agencies from political control. This maybe particularly problematic in

parliamentary systems where the government parties also hold a majority in the legislature.

Institutional transparency can interfere with policy outcomes even when there are budgetary rules that somehow constrain the government's ability to set policies on the basis of its own preferences. A recent strand of literature has highlighted that governments that pursue objective functions other than the maximization of citizens' welfare have an incentive to release overly optimistic forecasts of future economic conditions. Hallerberg, Strauch, and von Hagen (2004) found that countries with overly optimistic growth assumptions were also ones with less tight budgetary targets. Other studies show evidence of a clear link between budgetary outcomes and growth forecasts. Larch and Salto (2005) and Jonung and Larch (2006) show that official forecasts for GDP are biased toward optimism in Germany, Italy, and France and that this forecasting bias can be passed on to the structural deficit. These authors conclude that the bias in official growth forecasts partly explains the poor performance of fiscal consolidation observed in recent years in the euro zone. They also stress that an overestimation of potential GDP growth produces *ex-post* the same results as active expansionary fiscal policy. These conclusions lead the authors to call for the establishment of independent forecasting authorities that could also play a leading role in strengthening budgetary surveillance procedures.

A different strand of literature that also advocates the establishment of independent, professional analytical institutions looks at whether elected representatives have incentives to exert optimal levels of effort in policy decisions and consequently to assess government's policies. Politicians or elected representatives are held to account by their voters. Their objective is to enhance voters' perceptions of their abilities so they can be reelected. In order to get reelected, an official may choose an action not because it is right for society but because it is popular. Furthermore, to obtain favors from their constituencies, politicians have no incentive to disclose information that can work against the causes they are advocating, whereas a more impartial professional would have such an incentive (Dewatripont and Tirole, 1999; Tirole and Maskin,

2004). Furthermore, politicians' motivations lead to time inconsistency problems in their actions that would not arise in the case of bureaucrats, which makes bureaucrats more attractive for policy analysis. Alesina and Tabellini (2004) show that the motivations that provide incentives to professionals or bureaucrats in independent institutions give rise to better levels of effort. Professional bureaucrats are, in fact, held accountable by their own peers and seek to develop a good reputation for competency in order to increase future pay and career opportunities. Even in the absence of monetary incentives, they would expend effort and performance in order to increase the perception of strong talent and ability — especially if, as happens in most cases, the level of their talent is uncertain (Dewatripont, Jewitt and Tirole, 1999).

2.4 Fiscal Governance and the Budget Process: OECD View

The OECD's calls to improve public-sector performance and governance in developed countries have become particularly loud and insistent over the past couple of decades. Reasons include increasing claims on public expenditure — particularly pensions, health care, and education — and expectations of higher-quality public services in line with rising living standards.

The national budget is a central policy document of governments, in which policy objectives are reconciled and implemented in concrete terms. National budgets can help manage the direction of a country's policy and economic goals in the following ways:

- Policymakers have to be able to gather information about the long-term impact of decisions through short-term forecasts, medium-term projections, and a long-term perspective.

- Any budget process must be supported by widely available information on the important macroeconomic trade-offs that exist, such as those between consumption and investment or between employment and inflation.

- Policymakers and all of the stakeholders must be able to analyze trade-offs between mission areas and different tools.

— Budgetary decisions need to be enforceable, provide for control and accountability, and be transparent.

Legislatures should have the opportunity and the resources to effectively examine any fiscal proposal before they are called on to give their approval. Greater openness to public and parliamentary scrutiny can help to ensure that “due process” is followed in budgeting and that the use of public funds is consistent with well-defined public goals (OECD, 2002). The publication of annual reports, performance data, and public accounts is important for ensuring public scrutiny of the actions that governments take to achieve the budgetary goals in an *ex-post* phase.

The OECD has defined three key factors that help enhance good governance:

- Ensuring impartiality in the decision-making process
- Increasing transparency in the preparation and execution of the budget
- Promoting freedom of information and consultation of citizens and experts in the formulation and implementation of public policies.

In some of its recent work the OECD highlights — in line with most of the literature mentioned in the previous section — that independent non-partisan analytical agencies and audit institutions are of central importance in providing citizens and parliaments with high-quality, transparent information to assess executive actions and ensure accountability for the use of public funds (OECD, 2005).

In several OECD countries, those institutions have been implemented with more or less stringent requirements to provide policy recommendations as well as support the public and the legislature with independent and professional analysis. In a country such as Belgium, those institutions take the form of a fiscal council that does not have any specific authority over fiscal policy but undertakes analyses and assessments of fiscal developments and policies and issues policy recommendations. In other countries, such as Sweden and the United States, those institutions take the form of agencies that provide independent analysis of the budget proposals and macroeconomic forecasts, but do not make any policy recommendations.

The following section analyzes the issues that led to the establishment of the US Congressional Budget Office, one such independent institution that supports the legislature with professional economic forecasts and fiscal policy analysis.

3. - Case of the United States: The Congressional Budget Office

3.1 How US Policy Decisions Are Made

The role of legislative branches as guardians of the mandate from the governed to the government can be achieved with greater efficiency and effectiveness if those branches have full information about the consequence of any policy decision independent of information provided by the executive branch. In the United States, the tension between those branches is inherent in the particular structure of the government. The US Constitution separates the national government into three equal branches: the legislative (the Congress), executive (the President), and judicial (the courts). Powers are reserved to each branch but are also shared among the three.

Only the Congress may write a law, but generally no law goes into effect unless it is approved by the President. If the President vetoes a bill passed by the Congress, it becomes law if the veto is overridden by two-thirds of the Congress. The President, however, retains tremendous authority to propose and implement laws. This mix of separate and shared powers creates an institutional competition between the President and the Congress that in particular permeates the budget process.²

3.2 Budget Process History

In the United States, the process of developing and examining

² MELISSA MERSON (CBO), October 21st, 2005, testimony before the South Korean legislature.

a budget was relatively uncoordinated in both the legislative and executive branches until 1921, when the Budget and Accounting Act made the President a central player in the process by requiring that he submit a unified budget document to the Congress.

US involvement in World War I led to an unprecedented increase in federal spending. After the war ended, lawmakers concluded that the federal government needed modern budget methods and controls, and that tax and spending decisions for the federal government should be coordinated in a comprehensive budget. Under the Budget and Accounting Act of 1921, the President became responsible for overall budget planning by having to submit a comprehensive annual budget proposal to the Congress.

From 1921 to 1974, however, the Congress continued to act on budget legislation through its decentralized procedures grounded on its committees system, which made it more difficult to evaluate or reassess the President's budget proposal and its policy objectives. That was partly because the Congress had to assess policy actions using only information provided by the executive branch. The principal agencies providing support to the executive branch for policy, budget, and economic analysis were traditionally the Bureau of the Budget — which in 1970 becomes the Office of Management and Budget (OMB) — and the Council of Economic Advisors (CEA).³ Those agencies were the only ones providing analysis of the impact of the federal budget on the economy and of the impact of any executive decisions on the budget. The Congress was suffering from a lack of organized and comprehensive information about the economic effects of the policies proposed by the executive and could not form an independent analysis of those policies as a whole.⁴

³ The Council of Economic Advisors was established by the Congress in the Employment Act of 1946.

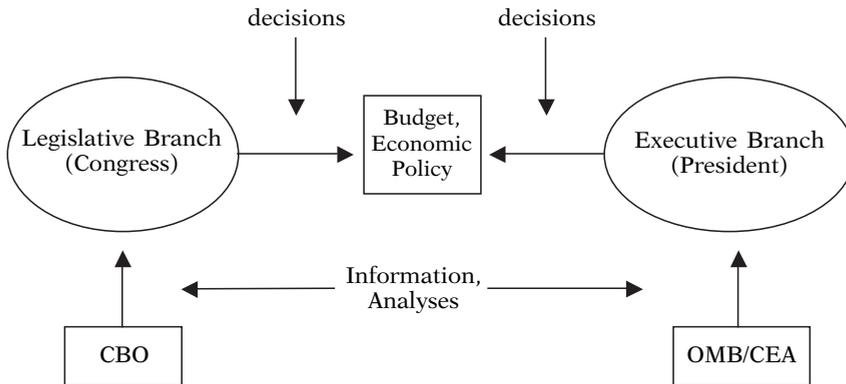
⁴ Before 1974, the Congress was assisted by other institutions, such as the Congressional Research Service and the Joint Committee on Taxation, in analyzing single bills or other budgetary items. But there was no institution with the role of analyzing the economic effects of the budget as a whole nor a budget process that gave a formal place to that analytical and informational work.

3.3 *The 1974 Act and the Creation of the Congressional Budget Office*

In 1974, lawmakers enacted the Congressional Budget and Impoundment Control Act. That legislation represented an opportunity for the Congress to become an active partner in the creation and implementation of the budget. The law created a Congressional budget process, centered on the adoption of a concurrent resolution on the budget, through which the Congress could establish its own broad fiscal guidelines, which might be different from those promoted by the executive branch. With the 1974 act, the Congress needed the ability to analyze the President's proposed economic policies and budgetary priorities and to extend or change some of the budgetary targets. To support the new congressional role in the budget process, the 1974 act also created new legislative institutions for budgeting-budget committees in the House and Senate to oversee the new process and the Congressional Budget Office to provide the Congress and its new process with new analytical and informational support. In line with the literature mentioned above, while each budget committee consists of separate staff for the majority and minority, CBO's work is

GRAPH 1

CBO CONTRIBUTION TO INFORMATION SYMMETRY



inspired by non-partisan principles. Its professional bureaucrats support the Congress with independent, objective analysis on budgetary and economic matters. In this way, the development of information necessary for policy decisions is not left in the hands of elected representatives.

The new congressional process gave the Congress an active voice in the production of a national budget and the creation of fiscal policy objectives. The new analytical agency enabled the Congress to play its new role more effectively by increasing the flow of information (see Graph 1).

3.4 Type of Information That CBO Provides

The information that CBO provides to the Congress can be divided into two broad subsets with the objective of supporting decisions on both budgetary issues and fiscal policy as a whole. The first subset contains all of the information necessary to monitor the economy in all different aspects and sectors and estimate the budgetary impact of governmental activities. Besides a broad range of economic studies on specific topics, CBO regularly issues reports on the economic outlook and forecasts of the main economic variables, such as GDP growth, employment and inflation. That information allows the Congress to make policy decisions by taking into account the economic consequences and the economic climate in which those policies will be enacted. At the same time, the Congress is able to compare information that the executive branch submits to support policies that fall under Congressional consideration with information provided by its analytical arm.

The second set of information aims to improve budget analysis and related estimates. To advise the Congress on budgetary issues, every year CBO produces a 10-year projection of the federal budget and compares its estimates with those released by the executive branch. CBO also prepares an analysis of costs and effects of alternative choices for the composition of the budget. To complete the information that the Congress needs to monitor the budget process, CBO estimates the cost of every

bill that is reported from a Congressional committee for a vote in the House or Senate.⁵ Additionally, CBO keeps track of how the Congress's actions in budgetary matters stack up against its budgetary goals (so-called scorekeeping). Those functions cast CBO as a guardian of an impartial accountability of federal budgetary evaluations and figures as opposed to the executive branch budgetary information authority represented by the Office of Management and Budget.

3.5 Role and Responsibilities of CBO

CBO's chief responsibility under the 1974 Congressional Budget Act is to assist the budget committees with the matters under their jurisdiction — principally, the Congressional budget resolution and its enforcement. The budget resolution recommends total levels of spending and revenues and establishes broad spending priorities for several fiscal years. It is a concurrent resolution, meaning that it is approved by the House and Senate but does not become law; it is not signed by the President and does not create spending or raise revenues. Instead, the resolution serves as a blueprint and guideline for Congressional action on separate spending and revenue legislation within the jurisdiction of other committees.⁶

To help the budget committees and the Congress develop the Congressional budget resolution, CBO prepares a series of three major reports.

First, in January of each year, CBO issues a report on the economic and budget outlook in which it estimates spending and revenue levels for the next 10 years under current policies and current assumptions about the economy. This "baseline" serves as a neutral benchmark against which the Congress can measure the budgetary effects of proposed changes in budget policies. The baseline is not a

⁵ In the case of taxes and tax revenues, CBO is required by law to transmit to the Congress the estimates made by the Joint Committee on Taxation and use them as a basis for any economic analysis.

⁶ For further details, see "Introduction to CBO," available at www.cbo.gov/publications/.

prediction of future budgetary outcomes. Rather, it reflects CBO's best estimate about how the economy and other factors will affect federal revenues and spending under existing law. In the following summer, CBO updates its baseline projections by incorporating a new economic forecast and the effects of any law that has been enacted to date in that session of Congress.

Second, each spring CBO issues a report that analyzes the President's budget 10-year proposal. The President is required by law to submit a detailed budget proposal in early February of each year. CBO's analysis usually follows within a month or so. In its analysis, CBO uses its own economic and modeling techniques to evaluate the President's budget proposals. This independent re-estimate of the President's budget request allows the Congress to compare the Administration's spending or revenue proposals with other proposals using a consistent set of economic and technical assumptions. As part of its report, CBO also includes a revision of its baseline budget projections. That "March baseline" usually forms the basis for the budget resolution.

Third, near the beginning of each new session of Congress, CBO produces volumes that present various options for the budget and, lately, for health care policies. Past volumes have included a wide range of options to decrease or increase spending and to lower or raise taxes. They have also included discussions of the implications of certain broad policy choices, such as paying down the public debt or reforming programs for the long term. In keeping with CBO's mandate to provide objective analysis, each discussion provides arguments for and against the budget option.

In addition to those reports, a large part of CBO's institutional work involves analyzing the spending or revenue effects of specific legislative proposals. CBO prepares cost estimates of pending legislation and tracks the progress of such legislation in a scorekeeping system. CBO's cost estimates and scorekeeping system show how individual legislative proposals would change spending or revenue levels relative to current law; they also help to determine whether those budgetary effects are consistent with the targets in the most recent Congressional budget resolution.

In 1995, a new component was added to CBO's cost estimates.

The Unfunded Mandates Reform Act of 1995 amended the 1974 Budget Act by requiring CBO to identify legislation containing federal mandates that would be imposed on states, localities, tribal governments, or the private sector. That requirement is intended to help lawmakers better assess the costs that federal legislation imposes on other governmental or private entities.

Finally, CBO also produces economic studies of specific policy and programs. Those studies explore significant and non necessary budgetary economic issues in depth and help to inform CBO's statutory work in support of the Congressional budget process. For example, since 1996, CBO has prepared reports on the long-term budgetary pressures associated with the aging of the baby-boom generation, and rising health care cost.

4. - How CBO Conforms to the OECD and Literature Views

Some principles that inspire CBO's work and duties conform to the principles that OECD and some of the reviewed literature have identified as the ones allowing countries to achieve good governance.⁷

Independence. CBO was established by law as an independent entity within the Congress. Also, to enhance the agency's independence, the 1974 act established that although CBO should give priority to the work of the budget committees, it also should be available to other committees and to the Congress in general. Thus, CBO is not a staff agency of one chamber or one committee, or of the majority party in control of the House or Senate. This separate identity has proved to be immensely important in protecting CBO's integrity.

Nonpartisanship. CBO provides nonpartisan, objective information and analysis.⁸ The President's budget office, in contrast,

⁷ MARK HADLEY (CBO), November 13st, 2007, presentation to Kenyan Parliamentary staff, "Building an Efficient, Responsive, Staff Based Support to Legislative Services: the US Congress Experience" .

⁸ Consistently, all CBO personnel are appointed without regard to political affiliation and solely on the basis of their abilities (Title II of the 1974 Congressional Budget and Impoundment Control Act, Appendix, p. 8).

serves as a policy advocate and must promote the President's policy agenda. The CBO director is appointed by the Speaker of the House and the President Pro Tem of the Senate through a process of broad consultation between the two chambers. The Budget Act requires that he or she be appointed "without regard to political affiliation." CBO makes no policy recommendations to or on behalf of the Congress. It must serve both parties. If CBO ever came to be viewed as an arm of one political party or another, its status and effectiveness would be greatly diminished. Independence and nonpartisanship allows CBO to pursue rigorous analysis and to report results that could differ from the ones of the executive branches. In an analysis of the first years after its establishment, Shumavon (1981) reports that CBO economic projections were less optimistic and estimates of public expenditure higher than the ones that the executive branches (mainly OMB) were reporting.

Accountability. CBO strives to maintain professional objectivity in its work. As an extension of its mandate to be nonpartisan, CBO evaluates all sides of a particular issue for its Congressional clientele. Thus, in its budget and economic projections and its cost estimates of legislation, CBO tends to strike a middle course. In providing these analytical services, CBO ensures that policy proposals are analyzed with professional skill; in this way, it improves the accountability of policies enacted by the executive branch. CBO's staff members are chosen for their experience or training as policy analysts — not as policy advocates — and thus instill confidence among citizens and stakeholders.

Transparency. CBO's products, and descriptions of the methods and details of its analyses, are widely available, thereby enhancing the diffusion of information about fiscal policy impacts on the economy among citizens and interest groups. Once a projection, cost estimate, or other analysis has been completed, it is made available to all Members of Congress and the public.⁹ CBO also discloses the methodologies and assumptions that it uses to produce its various analyses, and regularly publishes an evaluation of its past

⁹ Cost estimates for proposals that are still in progress and are not yet official are not made available to all Members and to the public.

record of economic forecasts and budget projections. CBO's estimates must be communicated in a way that the Congress, the press, and the public can easily understand. Such communication is generally aimed at an intelligent, informed, but busy audience. Transparency and openness provide further credibility to CBO's budget and economic projections and other analyses.

4.1 *Some Measures of CBO's Performance*

The contribution of CBO to the policy and budgetary activities and to policy outcomes is very difficult to measure. The amount of information and analyses that CBO provides can furnish a way to gauge its performance and participation to the political debate.

Just as companies are accountable to shareholders, government agencies must be accountable to stakeholders — in this case, taxpayers. In 1993, determined to make agencies accountable for their own performance, the US Congress passed the Government Performance and Results Act, which represented an important step toward an *ex-post* control approach to public governance. The act aimed more directly at improving agencies' program performance by requiring that agencies consult with the Congress and other stakeholders to clearly define their missions. The act requires agencies to establish long-term strategic goals, as well as annual goals that are linked to the long-term goals.

Agencies must then measure their performance against the goals they have set previously and report publicly on their performance. In the past few years, CBO has participated in the process of improving its own accountability and performance as part of the system of providers of public services. Every year, CBO defines its goals in accordance with its analytical mission to support the Congress and later measures and publishes its accomplishments.

CBO is an agency of approximately 230 employees, with higher academic and professional backgrounds. Its products are reports, studies, testimonies, and other publications and its cost estimates for the legislative process. Table 1 refers to the latest performance and strategy plan, published in 2007. The agency was

TABLE 1

CBO'S OUTPUT MEASURES, 2007

	number
Cost estimates	
federal cost estimates	750
other legislative acts estimates	700
Economic analyses	
main reports	4
briefs	5
studies	52
background papers	7
working papers	13
letters to committees	38
other publications	7
Testimonies	39

able to meet the primary goals set for 2007 of producing 4 main reports, more than 700 cost estimates, and hundreds of other studies and working papers. Further, CBO was engaged in a strong relationship with Congressional committees and the Congress through 39 testimonies on various issues.

5. - Concluding Remarks

The emergence of large public debts in many countries around the world that are characterized by different socio-economic conditions has motivated the study of political and institutional factors that might have affected fiscal outcomes. The fact that economic variables alone cannot satisfactorily explain this situation leads researchers to consider whether several political and institutional factors can motivate the emergence of persistent deficits that cannot be explained by the pure maximization of citizens' welfare.

In most of modern representative democracies, parliaments are established as guardians of citizens' welfare and are expected to monitor the scope and outcome of government policies. In most

countries, governments could use discretionary budget policies to achieve their objectives and run persistent deficits, despite varying economic conditions, for several reasons identified in the modern political economy literature. Asymmetric information, problems in the principal-agent relationship, time inconsistency, and the design of institutions are phenomena that could explain the persistence of fiscal outcomes that result from actions that, in many cases, were not enacted to achieve any optimal policy goal. Among several possible ways of limiting government discretion, many works point to the establishment of independent institutions that have a mandate to inform the public about the effect of fiscal policies and to ensure that economic projections and budget rules are respected.

As a case study of one of those institutions, this paper analyzed the role of the US Congressional Budget Office in the process of fiscal policy formation. Through an independent and professional analysis of fiscal policies, the Congressional Budget Office helps in informing the Congress and the public on the possible economic effects of proposed policies and the longer horizons of its analyses can shed light on time consistency issues.

BIBLIOGRAPHY

- ALESINA A., «Credibility and Policy Convergence in a Two-Party System with Rational Voters», *American Economic Review*, no. 78 (4), 1988, pages 496-505.
- ALESINA A. - PEROTTI R., «The Political Economy of Budget Deficits», *NBER, Working Paper*, no. 4637, 1994.
- — — —, «Budget Deficits and Budget Institutions», in POTERBA J. - VON HAGEN J. (eds.), *Fiscal Institutions and Fiscal Performance*, Chicago (IL), The University of Chicago Press, 1999.
- ALESINA A. - ROUBINI N., *Political Cycles and the Macroeconomy*, Cambridge (MA), The MIT Press, 1997.
- ALESINA A. - TABELLINI G., «A Positive Theory of Fiscal Deficits and Government Debt», *Review of Economic Studies*, no. 57 (3), 1990, pages 403-414.
- — — —, «Bureaucrats or Politicians?», Cambridge (MA), *NBER, Working Paper*, no. 10241, 2004.
- BACKUS D. - DRIFFILL, J., «Inflation and Reputation», *American Economic Review*, no. 75 (3), 1985, pages 530-538.
- BARRO R.J., «Are Government Bonds Net Wealth?», *Journal of Political Economy*, no. 82 (6), 1974, pages 1095-1117.
- — — —, «On the Determination of the Public Debt», *Journal of Political Economy*, no. 64 (1), 1979, pages 93-110.
- BARRO R.J. - GORDON D.B., «A Positive Theory of Monetary Policy in a Natural-Rate Model», *Journal of Political Economy*, no. 91 (4), 1983, pages 589-610.
- BLANCHARD O.J. - PEROTTI R., «An Empirical Characterization of the Dynamic Effects of Changes in Government Spending and Taxes on Output», *Quarterly Journal of Economics*, no. 117 (4), 2002, pages 1329-1368.
- BUCHANAN J.M. - TULLOCK G., *The Calculus of Consent: Logical Foundation of Constitutional Democracy*, Ann Arbor (Mich.), University of Michigan Press, 1962.
- CAILLAUD B. - TIROLE J., *Parties as Political Intermediaries*, mimeo, CERAS and IDEI, Toulouse, 1997.
- COHEN D. - MICHEL P., «How Should Control Theory Be Used to Calculate a Time-Consistent Government Policy», *Review of Economic Studies*, no. 55 (2), 1988, pages 263-274.
- DEWATRIPONT M. - JEWITT I. - TIROLE J., «The Economics of Career Concerns, Part II: Application to Missions and Accountability of Government Agencies», *Review of Economic Studies*, no. 66 (1), 1999, pages 199-217.
- DEWATRIPONT M. - TIROLE J., «Advocates», *Journal of Political Economy*, no. 107 (1), 1999, pages 1-39.
- HALLERBERG M. - STRAUCH R. - VON HAGEN J., «Budgetary Forecasts in Europe - The Track Record of Stability and Convergence Programs», *ECB, Working Paper*, no. 307, 2004.
- HAYEK F., «The Use of Knowledge in Society», *American Economic Review*, no. 35 (4), 1945, pages 519-530.
- HOLMSTROM B., «Managerial Incentive Problems: A Dynamic Perspective», *Review of Economic Studies*, no. 66 (1), 1982, pages 169-182.
- JONUNG L. - LARCH M., «Improving Fiscal Policy in the EU: The Case for Independent Forecasts», *Economic Policy*, no. 21 (47), 2006, pages 491-534.

- KAUFMAN D., «Rethinking Governance: Empirical Lessons Challenge Orthodoxy», *EconWPA Macroeconomics*, Series no. 0308007, 2003.
- KOTLIKOFF L. - PERSSON T. - SVENSSON L., «Social Contracts as Assets: A Possible Solution to the Time-Consistency Problem», *American Economic Review*, no. 78 (4), 1988, pages 662-677.
- KYDLAND F.E. - PRESCOTT E.C., «Rules Rather than Discretion: The Inconsistency of Optimal Plans», *Journal of Political Economy*, no. 85 (3), 1977, pages 473-491.
- LARCH M. - SALTO M., «Fiscal Rules, Inertia and Discretionary Fiscal Policy», *Applied Economics*, no. 37 (10), 2005, pages 1135-1146.
- LUCAS R.E. JR. - STOKEY N., «Optimal Fiscal and Monetary Policy in an Economy without Capital», *Journal of Monetary Economics*, no. 12 (1), 1983, pages 55-93.
- OECD, «OECD Best Practices for Budget Transparency», Oecd, *Journal on Budgeting*, 2002.
- - —, *Modernizing Government: The Way Forward*, Paris, France, 2005.
- PERSSON T. - SVENSSON L.E.O., «Why a Stubborn Conservative Would Run a Deficit: Policy with Time-Inconsistent Preferences», *Quarterly Journal of Economics*, no. 104 (2), 1989, pages 325-345.
- PERSSON T. - TABELLINI G., *Macroeconomic Policy, Credibility and Politics*, Harwood Academic Publishers, London, 1990.
- PIKETTY T., «The Information-Aggregation Approach to Political Institutions», *European Economic Review*, no. 43 (4), 1999, pages 791-800.
- POTERBA J. - VON HAGEN J., «Introduction», in POTERBA J. - VON HAGEN J. (eds.), *Fiscal Institutions and Fiscal Performance*, Chicago (IL), The University of Chicago Press, 1999.
- ROGOFF K., «Equilibrium Political Budget Cycles», *American Economic Review*, no. 80 (1), 1990, pages 21-36.
- ROSS S.A., «The Economic Theory of Agency: The Principal Problem», *American Economic Review, Papers and Proceedings*, no. 63 (2), 1973, pages 134-139.
- SHUMAVON D.H., «Policy Impact of the 1974 Congressional Budget Act», *Public Administration Review*, no. 41 (3), 1981, pages 339-348.
- STIGLITZ J.E., «Information and the Change in the Paradigm in Economics», *American Economic Review*, no. 92 (3), 2002, pages 460-499.
- TIOLE J. - MASKIN E., «The Politician and the Judge: Accountability in Government», *American Economic Review*, no. 94 (4), 2004, pages 1034-1054.
- VON HAGEN J., «Budgeting Procedure and Fiscal Performance in the European Community», *EEC Economic Papers*, no. 96, 1992.
- WYPLOSZ C., «Fiscal Policy: Institutions versus Rules», *National Institute Economic Review*, no. 191, 2005, pages 70-84.

