

## THE EFFECTS OF SUPREME AUDIT INSTITUTIONS' INDEPENDENCY ON PUBLIC DEBT SUSTAINABILITY: AN INVESTIGATION FOR TURKEY\*

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### ABSTRACT

In this study, the effects of Supreme Audit Institutions' (SAIs) Independency, that audit the budget process on behalf of the legislative body, on the sustainability of public debt is analysed. For this reason Independency of SAIs' Index, formed by International Budget Partnership (IBP), and primary surplus (the measurement of debt sustainability) datas of Turkey for the years 2006 to 2013 is examined by using descriptive analysis. At the end of the study, it is reached that when Supreme Audit Institutions work independent, public debt decreases and this helps to ensure public debt sustainability.

**Keywords:** Supreme Audit Institutions' Independency, Public Debt Sustainability

**JEL Classification:** E69, H39, H63, H69

### YÜKSEK DENETİM KURUMLARININ BAĞIMSIZLIĞININ KAMU BORCUNUN SÜRDÜRÜLEBİLİRLİĞİ ÜZERİNDEKİ ETKİSİ: TÜRKİYE İÇİN BİR ARAŞTIRMA

#### ÖZ

Bu çalışmada, bütçe sürecini yasama organı adına denetleyen Yüksek Denetim Kurumlarının (SAIs) kamu borcunun sürdürülebilirliği üzerindeki etkisi incelenmektedir. Bu amaçla, Uluslararası Bütçe Ortaklığı (International Budget Partnership) tarafından oluşturulan "SAI'lerin Bağımsızlığı Endeksi" kullanılarak, Türkiye'deki Yüksek Denetim Kurumunun (ülkemizde Sayıştay olarak bilinmektedir) bağımsızlığı ile faiz dışı fazlayla ölçülen kamu borcunun sürdürülebilirliği arasındaki ilişki 2006-2013 yılları arası betimsel olarak analiz edilmektedir. Çalışmanın sonucunda; bağımsız yapılan dış denetimin kamu borcunu azalttığı ve kamu borcunun sürdürülebilirliğinin sağlanmasına katkıda bulunduğu sonucuna ulaşılmaktadır.

**Anahtar Kelimeler:** Yüksek Denetim Kurumlarının Bağımsızlığı, Kamu Borcunun Sürdürülebilirliği

**JEL Sınıflandırması:** E69, H39, H63, H69

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## 1. INTRODUCTION

Nowadays, the important problem for countries is to ensure the macroeconomic balances as much as to keep the fiscal balances. Sustainability is the criterion for which usually used is to evaluate whether or not fiscal policy is under control (Holmes & Otero and Panagiotidis 2007, 1).

In recent years fiscal sustainability is one of the popular subjects about sustainability. Although there is no common definition about fiscal sustainability, it can be described that the governments to have ability both to pay their debts and to keep the political programs.

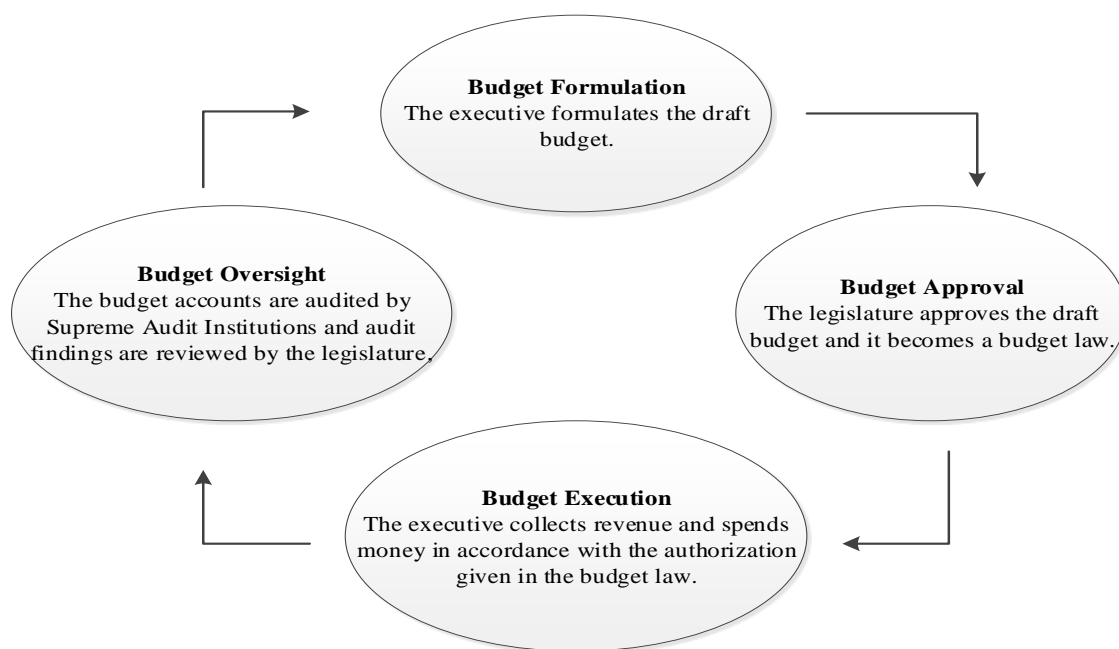
The term of fiscal sustainability encompasses public debt sustainability and budget deficit sustainability. But usually public debt sustainability is used for fiscal sustainability criterion. Alike this relation, the term of primary surplus is a criterion for debt sustainability. It is expressed the budget balance in terms of debt management.

In fact, all institutions in the budget cycle have critical role. But, Supreme Audit Institutions (SAIs) are very important to ensure the sustainability of public debt. The purpose of debt auditing is to obtain reliable information for citizens. SAIs become useful to ensure transparency and accountability when they are independence from the audited institutions. Independence is the corner stone of effective Supreme Audit Institutions.

For these reasons, in this study the effects of SAIs' Independency on sustainability of public debt is studied. First of all, the mandate of Supreme Audit Institutions is explained. Then, some information is given about Independency of SAIs' and the measurement of SAIs' independency. After explaining about SAIs' independency and public debt sustainability, literature review is reported. At the end of the study datas of SAIs' independency and primary surplus is given for Turkey and the results are negotiated in the conclusion part.

## 2. MANDATE OF SUPREME AUDIT INSTITUTIONS

The budget sets out the government's fiscal policies, detailing revenue, spending and the economic policies on which they are based (The World Bank 2001, 2; OECD 2014b, 1). In most countries the budget cycle consists of four stages, as shown in the Figure 1.

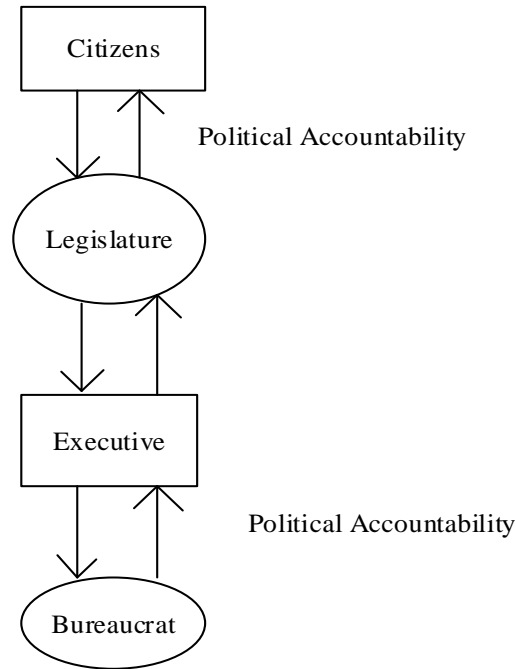


**Figure 1. Budget Cycle**

**Source:** Own presentation based on IBP 2017.

Supreme Audit Institutions (SAIs) are the national bodies responsible to overview public resources and providing an independent opinion on how and where they have been used (DFID 2004, 1). SAIs' function is important in the budget process because of the triple principal-agent problem between citizens and government: on the first level, the citizens is the principal and the legislature its agent. On the second level, the legislature assumes the role of principal and the executive becomes the agent. On the third level, the executive can be interpreted as the principal, and the bureaucracy as its agent (Figure 2). In all the three levels, there is an asymmetric information<sup>1</sup> between the principal and the agent (Blume and Voigt 2011, 215-217). In a scenario of information asymmetry, distinct interest and different incentives, agents can select a volume and type of spending that is different from the preferences of the principal. Each agent sets the amount of expenditure in the utility maximization process without considering the volume of expenditure set by others. The result is a level of spending above the socially optimal, generating deficits and debt accumulation in the long term (Giuberti 2015, 178).

<sup>1</sup> Asymmetric information means a situation in which certain agents believe other agents to be better informed about some aspect of the economic environment. It is a fact that everything isn't known by everyone in a market (Harris & Townsend 1981, 33; Hillman 2009, 19).



**Figure 2. Principal-Agent Theory**

**Source:** Yılmaz & Biçer 2010, 208.

In this perspective, transparency and control help to reduce the principal-agent problem (Giuberti 2015, 178). A Supreme Audit Institution (SAI), or national audit institution, is responsible for overseeing government's usage of public resources and providing that the national budget is implemented in accordance with existing laws and regulations (IBP 2015, 51; OECD 2014a, 39). SAIs' aim is to reduce the agency problem between citizens and legislature (Schelker 2008, 1). Blume and Voigt (2011) point out that the way to reduce asymmetric information between principal and agent is to strengthen SAI in the country. In this perspective SAIs play significant role in the budget cycle (World Bank 2001, 2). In a democratic system, SAI is the highest national audit institution of a country (Leeuwen 2004, 163).

Traditionally, SAIs audit public resources in two types: regularity and performance audit. Regularity audit, includes financial and compliance audit. In this type of audit, auditors examine

the accuracy of the accounts and compliance with laws and regulations (Schelker 2008, 10). On the other hand, performance audits have focussed upon issues of economy (*i.e.* minimising resources consumed), efficiency (*i.e.* getting the most out of the limited resources available) and effectiveness (*i.e.* achieving the intended policy objectives) of public resources (OECD 2014a, 92). Also, public debt audit and environment audit are other works of SAIs.

**Table 1. Different Types of External Audit**

	Subject of Audit	Content of Audit	Code of ISSAI
General Audit	Regularity Audit	Compliance Audit	ISSAI 4000-4100
		Financial Audit	ISSAI 200 ve 1000
	Performance Audit	Economy	ISSAI 300, 3000, 3100, 3200
		Efficiency	
		Effectiveness	
	Special Audit	Public Debt Audit	Regularity Audit Performance Audit
Environment Audit		Regularity Audit Performance Audit	ISSAI 5120

**Source:** Own presentation

In all types of audits, International Audit Standards are used. After all types of audit SAIs usually report their findings, related conclusions and recommendations to legislatures in a published format. SAIs also aim to inform citizens by promoting and sharing this information through social media outlets (OECD 2014a, 46-47). By sharing audit reports with legislature and public, the transparency of government policies is provided and principal-agent problem is reduced. Consequently, trust of citizens' to economy is increasing and this effects macroeconomic variables. In other words, SAIs have an important role on the development strategies by auditing public resources.

### 3. INDEPENDENCY OF SAIs'

The SAI plays a critical role in facilitating good governance, and fostering more effective public financial management. However, the role of SAIs as public finance watchdogs is still

limited in many countries because of the SAIs' lack of independence from the executive (IBP, 2017).

Independency of SAIs is a topic that has highlighted by international organizations like INTOSAI<sup>2</sup>, OECD and United Nations (UN). INTOSAI, emphasizes the importance of independency in Lima Declaration (1977) and Mexico Declaration (2007a). The primary purpose of Lima Declaration is to achieve implementing independent government audit (INTOSAI 1998, 2). It is expressed in the Lima Declaration that Supreme Audit Institutions can accomplish their tasks objectively and effectively only if they are independent from the audited institution and are protected against outside influence.

Like Lima Declaration, in Mexico Declaration, there have been eight principles for making SAIs independent. These are (INTOSAI, 2007a);

- ♦ The existence of an effective constitutional/statutory/legal framework.
- ♦ The independence of SAI heads and members (of collegial institutions).
- ♦ A sufficiently broad mandate and full discretion, in the discharge of SAI functions.
- ♦ Free access to information.
- ♦ Auditors should not be restricted from reporting the results of their audit work.
- ♦ The freedom to decide the content and timing of audit reports and to publish them.
- ♦ The existence of effective follow-up mechanisms on SAI recommendations.
- ♦ SAIs manage their own budget and allocate it as appropriately; the executive should not control or direct the access to these resources.

For all these reasons, SAIs should have the functional and organisational independence and this should be guaranteed in the constitutional framework (INTOSAI 1998, 6).

### **3.1. Measurement of SAIs Independency**

In relevant literature about SAIs' independency, some criteria are used for measuring it. In the study of Blume and Voigt (2011), they examine the relationship between the organisational design of SAIs and economic variables. They create an index for measuring the Independency of SAIs' by using average degree of answers given to five questions. These questions are; how much the recommendations of the SAIs are implemented, is there any organisational design

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<sup>2</sup> INTOSAI is an autonomous, independent and non-governmental organisation for the external government audit community that has 194 full members and 5 associated members.

about SAIs' independency, by whom decide the subjects of audit, is the executive body's fiscal accountability approved or not, is the audit of financial system covers the internal control, as well as financial compliance.

Alike this study, IBP creates The Open Budget Survey which is an independent, comprehensive survey on budget transparency and accountability. Throughout the budget process, the Survey assesses three stages: i) Public availability of national budget information, ii) Opportunities for the public to participate in the budget process, for example by attending public hearings; iii) Strength of the oversight institutions, such as the legislature and the external audit bodies (Seifert, Carlitz & Mondo 2013, 90).

The index of SAIs Independency is formed by using criteria that are included international accepted auditing principles. In Open Budget Survey (2008) there are four questions used to create Independency of SAIs. These are (IBP 2008):

- ✓ Before the head of the supreme audit institution (SAI) can be removed, is final consent given by government or executive (such as the legislature or the judiciary).
- ✓ Does the SAI have the discretion in law to undertake those audits it way wish to?
- ✓ By whom determined the budget of the SAI is?
- ✓ Is the central government institutions including security sector audited by external auditors?

Because of it is objective and comprehensive, the index created by IBP is used for measuring SAIs' Independency in this study.

#### **4. SAIs AND PUBLIC DEBT SUSTAINABILITY**

International Standards of Public Debt Audit (ISSAI 5440) emphasizes that debt management is very important to ensure public debt sustainability. In ISSAI 5440 it is written that the main objective of public debt management is to finance the governments financing needs and its payment obligations are met at the lowest possible cost over the medium to long run, consistent with a prudent degree of risk (INTOSAI 2007b, 7; IMF & World Bank 2003, 9).

ISSAI 5440 points out that public debt management is important for a number of reasons:

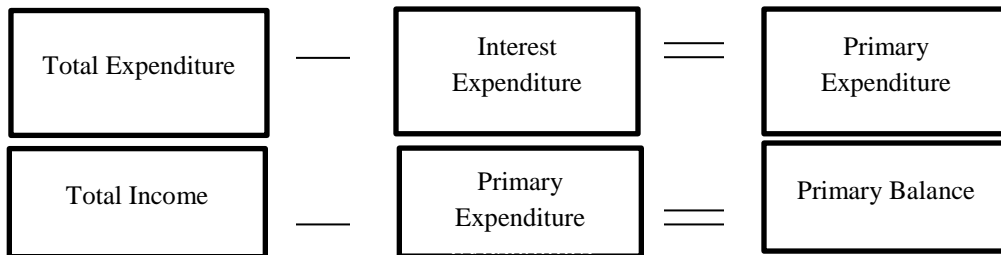
- To ensure the growth of public debt in a sustainable level and rate.
- For the long term, to reduce public borrowing costs and by this way the impact of deficit financing decreases and this contributes to debt and fiscal sustainability.

- Prevents economic crises which are arised from unstructured debt.
- The public debt portfolio is often the largest financial portfolio in the country and can have a big effect on financial stability; as a result, effective public debt management is essential.

Efficient public debt management ensures the sustainability of public debt and also auditing the public debt management activities by SAIs is one of the criteria to provide transparency and accountability of debt management.

Because of all the reasons that are explained above, the measurement of public debt sustainability becomes important for economies to ensure fiscal discipline. In the simplest way, if the rate of public debt stock to national income is constant for a long time, it means that public debt stock is sustainable. In economy literature, public debt sustainability is measured by the data of primary surplus (Gürdal 2008, 417).

The term of primary surplus is a criterion used for both debt sustainability and expressing the budget balance in terms of debt management. Countries' primary surplus (deficit) refers to the component of the fiscal surplus (deficit) that is the result of the equation of public revenue mines public expenditure (except interest expenditure) (TCMB 2011, 1; Cansız 2006, 69) (Figure 3). If a country's income is much more than current spending, it is said to have a primary surplus; in the opposite case, if a country has larger levels of current spending relative to income, it is said to have a primary deficit.



**Figure 3. Formulation of Primary Balance**

**Kaynak:** Own presentation



## 5. LITERATURE REVIEW

When SAIs are well-functioning and independent, they play a key role in ensuring the effective use of public resources, sound fiscal management and proper execution of administrative activities (OECD 2014a, 29). In addition, as the bureaucrats become more risky and disadvantaged to engage in corruption activities, the level of corruption and waste are significantly reduced as the external audit becomes more independent (Olken 2007, 243; Ferraz & Finan 2008, 744; Schelker 2008, 1 ve Blume & Voigt 2011, 217). For this reason, there is a great deal of independent control over the government's financial performance (Schelker 2008, 7 ve Schelker 2012, 435).

It is stated in Zyl et al. (2009) that in countries where the external auditors are liable to the executive body rather than the parliament, the independence of the SAI and the validity of its audit reports have diminished, resulting in the power and authority to directly influence the executive, supervised and reported issues. This situation prevents effective usage and control of public resources.

Therefore; it is necessary that the independency of the SAIs is guaranteed by the law against government and parliament, SAI has its authority to determine its own budget, the head of SAI should be elected by the Parliament and the discussions of the SAI reports in parliament and the publicity periodically. In countries where the Supreme Audit Institution is not independent from the executive body, the financial transactions of the government can not be supervised. For this reason, SAIs need to work independently from the executive body (IBP, 2006: 25). Supreme Audit Institutions are only able to influence fiscal transparency and public debt when they work independently, and when these independences are guaranteed by law.

Yalçın (2017) examines the effects of SAIs' Independency on fiscal performance for 85 countries. The datas of 85 countries for the years 2007 to 2013 is analysed by using panel data analysis. At the end of the study, it is reached that when SAIs independency is increases, public debt (the indicator of fiscal performance) increases. Schelker and Eichenberger (2010) reaches in their study that, when the independency of SAIs is increases, tax rates, tax burden and public expenditures are decreases. Persson and Tabellini (2003) mentions that when supreme audit institutions work efficiently, public expenditures decrease. Opposite of these studies mentioned above, Blume and Voigt (2011, 216) reach the result in their study that there is no significant

relation between SAIs' independency and fiscal policy, government effectiveness and productivity.

If it is considered that public debt is closely related to public expenditures, it will be understood that external audit decreases public debt and also ensures public debt sustainability.

**Table 2. Literature Review**

No	Source	Dependent Variables	Independent Variables
1	Yalçın (2017)	Public debt	Fiscal transparency (-) SAIs' Independency (-)
2	Blume ve Voigt (2011)	Effectiveness of SAIs	Public expenditure (-) Budget deficits (-) Public income (+) Corruption level (-) Total factor productivity (+)
3	Schelker ve Eichenberger (2010)	Independency of SAIs'	Tax rate (-) Tax burden (-) Public expenditure (-)
4	Olken (2007)	Independency of SAIs'	Corruption level (-)
5	Persson and Tabellini (2003)	Public expenditure	SAIs' efficiency (-)

**Source:** Own presentation

Because of this reason, it is focused on the relation between public debt sustainability and independency of SAI in this study. Also Turkey's datas are used while examining this relationship.

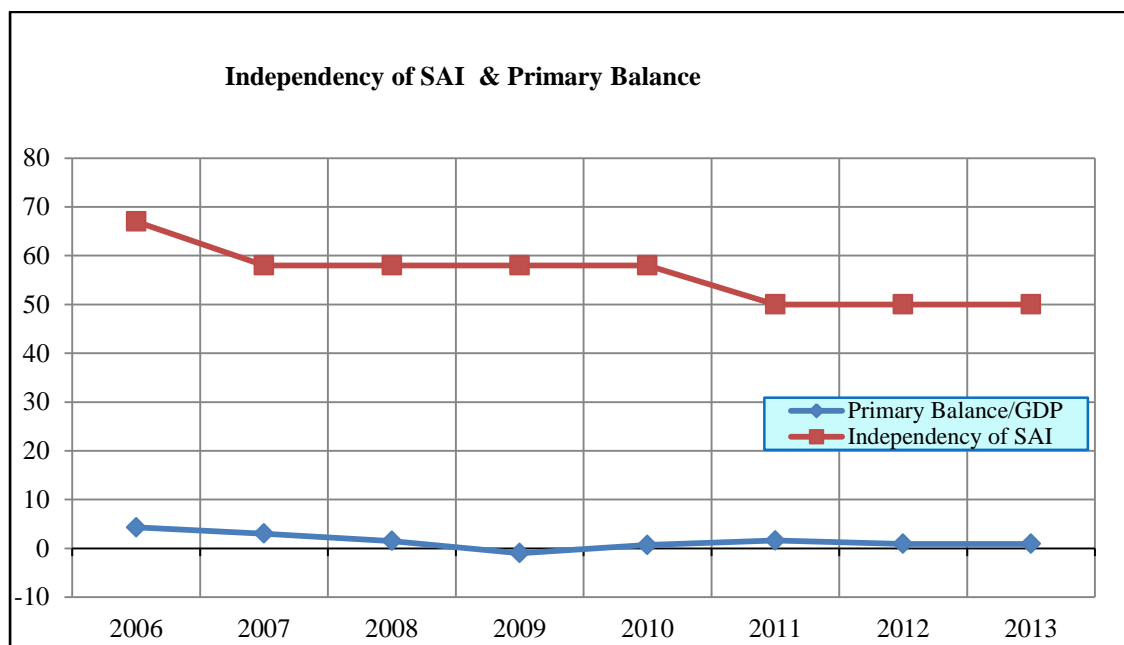
## 6. THE RELATION BETWEEN SAIS' INDEPENDENCY-PUBLIC DEBT SUSTAINABILITY IN TURKEY

The main purpose of fiscal policy in Turkey which is based on primary balance is to ensure debt sustainability. There is datas of Turkey's primary surplus / GDP and SAIs' Independency in Table 3 and Graphic 1 for the years of 2006-2013.

**Table 3. Primary Surplus / GDP In Turkey (2006-2013)**

Years	2006	2007	2008	2009	2010	2011	2012	2013
<b>Primary Surplus/GDP</b>	4,3	3,0	1,5	-1,0	0,7	1,6	0,9	0,9
<b>Independency of SAI</b>	67	58	58	58	58	50	50	50

**Source:** Own compilation based on Open Budget Index (IBP) and Public Debt Management Report (Republic of Turkey Prime Ministry)



**Graphic 1. The Relation Between Independency of SAI – Primary Surplus In Turkey (2006-2013)**

**Source:** Own presentation.

In Graphic 1, it is seen that the rate of primary balance to GDP and SAI's Independency Index are nearly parallel to each other. It can be said that if other factors are constant, there is a positive relation between SAI's Independency and public debt sustainability.

## 7. CONCLUSION

In this study, the effects of institutional independency of SAIs' on public debt sustainability which is an indicator of fiscal sustainability is analysed. For this reason the relationship between the independency of Supreme Audit Institution and primary surplus which is used for public debt sustainability is examined for Turkey between the years 2006 to 2013.

When external auditors work independent, information costs and principal-agent problem decreases and by this way fiscal transparency increases. It becomes possible to provide the same amount of public good by using less resources. By this way, public expenditure and public debt decreases. When it is considered that the size of primary surplus is affected from public revenue and public expenditure, it is understood that independence of SAIs' effects the primary surplus and the sustainability of public debt.

Consequently, when the SAIs independency is increases, public debt decreases and it contributes to ensure public debt sustainability and fiscal sustainability. In other words, SAIs' Independency effects economic variables especially fiscal sustainability and public debt sustainability.

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