

# *Guatemala*



## **Government Expenditure Database**



## *User's Manual*

**The World Bank  
2016**

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# 1. About BOOST

A core function of any government involves collecting and disbursing public funds and maintaining records of such expenditures. Budget execution reporting systems vary greatly in their organization, transparency, accuracy and level of detail. For researchers, the ability to easily access and analyze public expenditure data is critical to providing thorough and timely advice to policymakers and relevant stakeholders. For government officials, rapid access to budget execution data in an easy-to-use format is essential for better decision-making and increasing analytical capacity within ministries.

The purpose of the BOOST project (started by the World Bank in early 2010) is to enhance the transparency and efficiency of public spending across the globe by improving access to government expenditure data and linking spending to relevant results. As of May 2016, the BOOST team has published on the Open Budgets Portal detailed government expenditure databases from 23 countries across regions, creating easy-to-use databases that have been employed by World Bank researchers on a variety of projects.

In Guatemala, the BOOST government expenditure database was developed as part of Guatemala Public Expenditure Review (PER, 2013) and continues to be updated in a yearly basis. The data for the Central Government is based on the treasury data provided by the Sistema de Contabilidad Integrada (SICOIN) and the data for local governments is provided by the Sistema Integral de Administración Financiera Municipal (SIAF-MUNI). This manual describes the resulting database and provides guidance on its use. For help with issues that are not addressed here, please contact the BOOST team.

This document is organized into the following sections:

- Part II outlines the Guatemala Public Sector structure;
- Part III presents the organization of the database;
- Part IV provides examples of how to use BOOST through the Excel PivotTable interface;

The BOOST team would like to thank the staff of the Ministry of Finance as well as the growing BOOST user community of researchers and policymakers who continue to provide useful feedback as this project strives to grow and improve. We hope that this tool is helpful in opening new avenues for analysis and providing answers to important questions regarding the efficiency, equity, and effectiveness of government spending.

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## II. Guatemala Public Sector

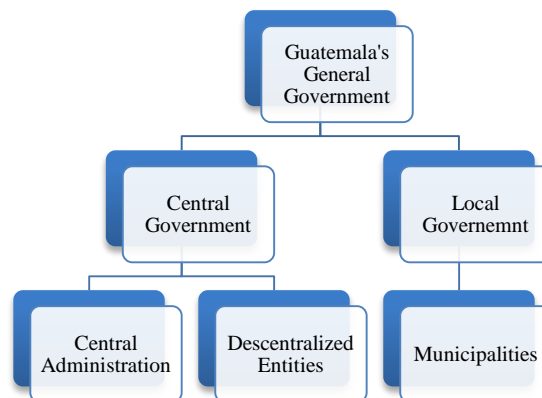
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Guatemala's general government is composed of two main parts, as shown in Figure 1 below: (i) the central government, which is broken down in central administration and decentralized entities, and; (ii) local governments, which is composed by the municipalities.

Expenditures in the central and local budgets are generally grouped according to administrative, economic, functional and program classification listed in the country's budget classification / Chart of Accounts (CoA). The central government budget classification contains three levels of administrative, seven levels of economic, two levels of geographical, three levels of functional, three level of source of funding, two levels of program and two levels of project classification data.

Administratively, central government spending units are classified into ministries and top-level public authorities. At the local government level, Guatemala is divided into 22 departments (*departamentos*), which are further subdivided into 334 municipalities (*municipios*). These distinctions are noted geographically in the central budget and both administratively and geographically within the regional budget.

**Figure 1: Structure of the Guatemalan Public Sector**



There are two important changes to the Guatemalan National Budget classification in the ten years of data currently in the BOOST. The first is the addition of expenditure amounts assigned as 'municipal' at the top level of administrative classification. This occurred in 2008. Prior to 2008, all amounts in the Guatemalan BOOST are classified as 'central' data. The second is the inclusion of a municipal designation to one of 334 municipalities for amounts classified as 'central' at the first level of administrative classification. This occurred in 2010 and 2011. Prior to 2010, expenditure classified as 'central' in the Guatemalan BOOST displays only a department (*Departamento*) classification and not a municipal (*Municipio*) classification. Figure two below illustrates these changes graphically.

**Figure 2: Increasing Specification of Guatemalan Budget**



### III. Database Organization

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The Guatemalan BOOST government expenditure database was constructed on the basis of treasury data provided to the World Bank by the Sistema de Contabilidad Integrada (SICOIN) and the Sistema Integrado de Administracion Financiera Municipal (SIAF-MUNI). Data for Central budget covers annual expenditures from 2004 to 2015 and data for municipal level covers annual expenditure from 2008 to 2015.

The BOOST database contains variables that correspond to fields in the SICOIN data that cover different types and levels of Guatemala's budget classification. Each variable is labeled with a standard BOOST name that identifies the type of budget classification to which the variable corresponds – e.g., *Econ1* corresponds to the top level of the country's economic budget classification. A complete list of BOOST variables and descriptions can be found below in Table 1 and Table 2 for central and municipal databases, respectively:

**Table 1: List of BOOST Variables for the Central Government**

<b>BOOST Variables</b>	<b>Original Description</b>
<i>Otras Variables</i>	
<b>YEAR</b>	Ejercicio (fiscal year)
<i>Clasificación Administrativa</i>	
<b>ADMIN1</b>	Gobierno Central (Central government)
<b>ADMIN2</b>	Entidad (Entity)
<b>ADMIN3</b>	Unidad Ejecutora (spending unit)
<i>Clasificación Geográfica</i>	
<b>GEO1</b>	Departamento (Department)
<b>GEO2</b>	Municipio (Municipality)
<i>Clasificación Funcional</i>	
<b>FUNC1</b>	Finalidad (Function)
<b>FUNC2</b>	Función (Sub-Function)
<b>FUNC3*</b>	División
<i>Clasificación Económica</i>	
<b>ECON1</b>	Nivel 1: Económico (Level1: Economic Classification)
<b>ECON2</b>	Nivel 2: Económico (Level2: Economic Classification)
<b>ECON3</b>	Nivel 3: Económico (Level3: Economic Classification)
<b>ECON4</b>	Nivel 4: Económico (Level4: Economic Classification)
<b>ECON5</b>	Grupo (group)
<b>ECON6</b>	Sub-grupo (sub-group)
<b>ECON7</b>	Reglón
<i>Clasificación por fuente de financiamiento</i>	
<b>SOURCE_FIN1</b>	Fuente agregada de financiamiento (Level1:

	Source of funding)
<b>SOURCE_FIN2</b>	Fuente de financiamiento (Level2: Source of funding)
<b>SOURCE_FIN3</b>	Organismo (Level3: source of funding/agency)
<b><i>Clasificación por programa y proyecto</i></b>	
<b>PROGRAM1</b>	Programa (Level1: Program)
<b>PROGRAM2</b>	Sub-Programa (Level2: Sub-program)
<b>PROJECT1</b>	Proyecto (Level1: Project)
<b>PROJECT2</b>	Actividad u Obra (Level2: Project)
<b><i>Variables de presupuesto</i></b>	
<b>APPROVED</b>	Inicial
<b>RELEASED</b>	Vigente
<b>COMMITTED</b>	Comprometido
<b>EXECUTED</b>	Devengado
<b>PAID</b>	Pagado

\*Start from 2010 onwards

***Table 2: List of BOOST Variables for the Local Governments***

<b>Variable BOOST</b>	<b>Variable Original</b>
<b>YEAR</b>	EJERCICIO
<b><i>Clasificación administrativa</i></b>	
<b>ADMIN1</b>	SECTOR
<b>ADMIN2</b>	ENTIDAD
<b><i>Clasificación geográfica</i></b>	
<b>GEO1</b>	DEPARTAMENTO
<b>GEO2</b>	MUNICIPALIDAD
<b><i>Clasificación funcional</i></b>	
<b>FUNC1</b>	FINALIDAD
<b>FUNC2</b>	FUNCION
<b>FUNC3</b>	DIVISION*
<b><i>Clasificación económica</i></b>	
<b>ECON1</b>	TIPO_PRESUPUESTO
<b>ECON5</b>	GRUPO_GASTO
<b>ECON6</b>	SUB_GRUPO_GASTO
<b>ECON7</b>	OBJETO_GASTO
<b><i>Clasificación programática</i></b>	
<b>PROGRAM1</b>	PROGRAMA
<b>PROGRAM2</b>	SUBPROGRAMA
<b>PROJECT1</b>	PROYECTO
<b>PROJECT2</b>	ACTIVAD U OBRA

<i>Variables del ciclo presupuestario</i>	
<b>APPROVED</b>	ASIGNADO
<b>MODIFIED</b>	MODIFICADO
<b>REALESED</b>	VIGENTE
<b>EXECUTED</b>	DEVENGADO
<b>PAID</b>	PAGADO/EJECUTADO

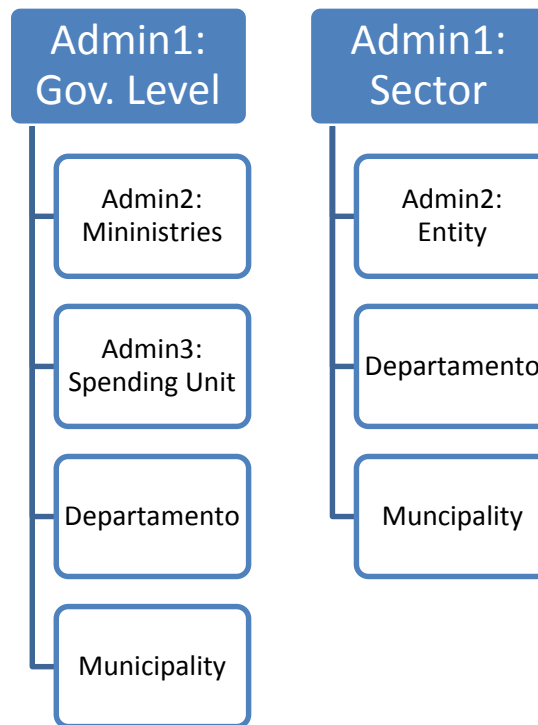
The database for the Central government contains three variables that correspond to different administrative classifications within the Guatemalan budget. The first level of administrative classification, *Admin1*, identifies the government level that incurred the expenditure: Central. The second level of administrative classification, *Admin2*, specifies the ministry or public authority at the Central level. The third level of administrative classification, *Admin3*, specifies the actual spending unit at the Central level.

The database for the Local governments contains two variables that correspond to different administrative classifications within the Guatemalan budget. The first level of administrative classification, *Admin1*, identifies the sector (i.e. Municipality, public enterprises, etc.) at the Local level. The second level of administrative classification, *Admin2*, specifies the entity with in each of the sectors at the local Level.

The databases also contain *GEO1 and GEO2* variables that classify the expenditures into departments and municipalities, respectively.

**Figure 3: Hierarchy of Administrative Classification Variables**





Additionally, at the Central level the database contains variables that correspond to seven levels of economic classification found in the Guatemala’s Chart of Accounts. On the one hand, *Econ1*, *Econ2*, *Econ3* and *Econ4* derived from the original data and correspond to the first four levels of the economic classification of expenditure (*Clasificación económica del gasto*) on the chart of Accounts. On the other, *Econ4*, *Econ5* and *Econ6* correspond to the classification by purpose of expenditure (*Clasificación por objeto del gasto*) on the chart of Accounts.

At the municipality level, the database contains variables that corresponds four levels of economic classification. *Econ1*, corresponds to the type of economic classification according to the economic classification of expenditure (*Clasificación económica del gasto*) and *Econ4*, *Econ5* and *Econ6* correspond to the classification by purpose of expenditure (*Clasificación por objeto del gasto*) on the chart of Accounts. At the municipality data, there is no *Econ2*, *Econ3* and *Econ4*.

At Central and Municipal level, *Func1*, *Func2* and *Func3* refer to different levels of the functional classification, *Finalidad*, *Funcion* and *Division*, respectively. The Functional classification change in 2010, and thus functional classification for 2004-2009 and 2010-2014 differ. In the new classification the reported lines are more desegregated and an extra level of detail, *Division*, was included.

At the Central and Municipal level, the two levels of program, program and sub-program, are classified in the *Program1* and *Program2* variables, respectively. Additionally, *Project1* and *Project2* identifies the Project (*Proyecto*) and the Activity or Work (*Actividad u Obra*), respectively, where the budget was directed to at both Central and Municipal level. In the raw data set, the Activity (*Actividad*) and Work (*Obra*) are reported as different categories. However, the budge line reports either Activity or Work, so we merged this two to create one only category.

*Source\_fin 1* report the source of finance at the aggregate level, while *Source\_fin2* identifies the specific

source of finance. *Source\_fin3*, refers to the Organization that provided the funds. *Source\_fin3* is only available at the Central level. At municipal level *Source\_fin1* and *Source\_fin2* are only available for year 2008 and 2009.

Finally, there are five variables in the Guatemala BOOST that display different budget values. *Approved (Asignado)* contains the amount initially assigned by the Guatemalan government for a specific line item. *Modified (modificado)* contains any changes made to the amount initially assigned in the budget; this stage of the budget is only available at the local level database. *Released (Vigente)* lists the available amounts after any budget modification. *Comitted (Comprometido)* reveals the amount committed; this stage of the budget is only available at the central level. *Executed (Devengado)* reveals the condition when an obligation becomes due and *Paid (ejecutado/pagado)* refers to the actual payments.

## IV. How to Use BOOST

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For ease of use, the BOOST team has developed a standard user interface through which to access the BOOST government expenditure database with the help of Excel PivotTables.

*A PivotTable report is an interactive way to quickly summarize large amounts of data. Use a PivotTable report to analyze numerical data in detail and to answer unanticipated questions about your data. A PivotTable report is especially designed for:*

- Querying large amounts of data in many user-friendly ways.*
- Subtotaling and aggregating numeric data, summarizing data by categories and subcategories, and creating custom calculations and formulas.*
- Expanding and collapsing levels of data to focus your results, and drilling down to details from the summary data for areas of interest to you.*
- Moving rows to columns or columns to rows (or “pivoting”) to see different summaries of the source data.*
- Filtering, sorting, grouping, and conditionally formatting the most useful and interesting subset of data to enable you to focus on the information that you want.*
- Presenting concise, attractive, and annotated online or printed reports.*<sup>1</sup>

PivotTables are straightforward and easy to use and allow for quick, customizable analyses of large amounts of data. This section presents several examples of using the BOOST PivotTable interface to general custom reports. With BOOST, as with many things in life, the best way to learn is by doing.

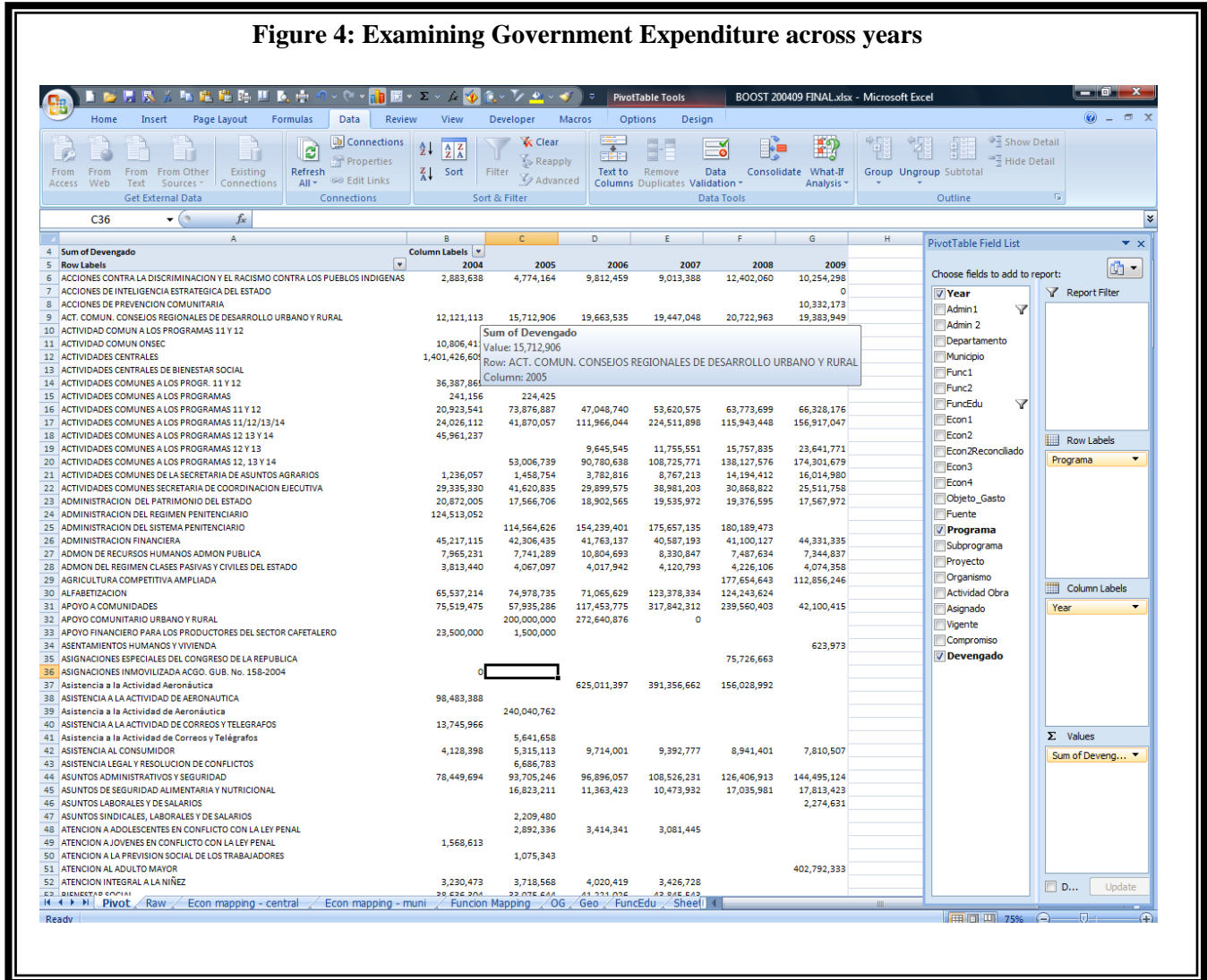
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<sup>1</sup> For more information on Excel PivotTables, please consult the help function in Microsoft Excel or this helpful overview of the Microsoft website: <http://office.microsoft.com/en-us/excel-help/overview-of-pivottable-and-pivotchart-reports-HP010177384.aspx>.

### ***Example 1: Time Trend Analysis***

Figure 4 below presents a simple example of time trend analysis at the macro level. It reports total government expenditures from 2004 to 2009, broken down by the top-level program classification. Note that this data continues to 2013, but due to file size issues mentioned above, 2010 and 2011 are in a separate file. To generate this PivotTable, *programa* is placed in the Row Labels box, *Year* in the Column Labels box and the values in the body of the table consist of the sum of the *Devengado* variable.

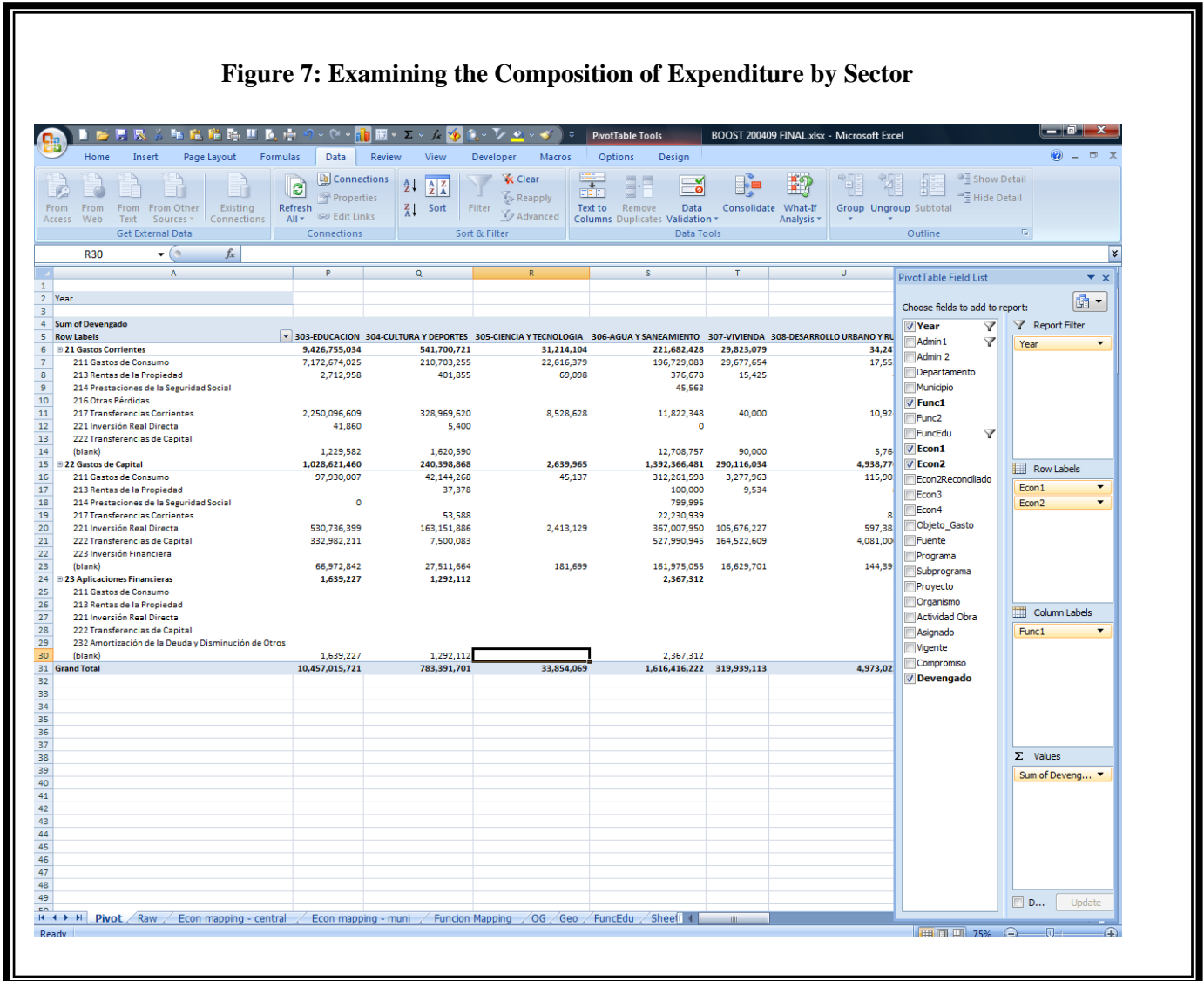
**Figure 4: Examining Government Expenditure across years**



**Example 2: Composition Breakdown**

Figure 4 below presents a breakdown of 2009 government expenditures by economic category and sub-category for each sector in Guatemala's functional budget classification. To generate this PivotTable, *Econ1* and *Econ2* are placed in the Row Labels box, *Func1* in the Column Labels box and the *Year* (2009) variable is used as a filter. The values in the body of the table consist of the sum of the *Devegado* variable.

**Figure 7: Examining the Composition of Expenditure by Sector**



**Example 3: Geographic Variation**

Figure 7 below presents a breakdown of health and social assistance expenditure by department, municipality and sub-function in 2010 and 2011. To generate this PivotTable, *Departamento*, *Municipio* and *Func2* are placed in the Row Labels box, *Year* in the Column Labels box, and *Func1* (301 Salud Y Asistencia Social) is used as a *filter*. The values in the body of the table consist of the sum of the *Devengado* variable.

**Figure 8: Examining the Composition of Expenditure for a Specific Sector across Geographic Area**

