

Budget Brief No. 34

Digital Budgets: Improving How Fiscal Information is Disseminated Online

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February 2016

Key Messages

- Governments are increasingly disseminating fiscal information through websites and dedicated budget portals. Portals, in particular, have the potential to provide easy access to detailed and up-to-date budget data.
- Government practice in disseminating budget information online can be assessed along four dimensions: scope, accessibility, reliability and feedback.
- The research found that countries do better on scope than on accessibility and reliability, and that few governments are providing channels for users to submit feedback.
- The findings suggest that governments can improve their online disclosure practices by setting up a
 dedicated portal for budget information. Such portals should provide tools and resources that help
 users understand the raw data; establish standards that instill confidence in the data; and provide
 channels for users to submit feedback.

Introduction

In times past, when governments made budget information available to the public they would print physical copies of budget documents. Interested parties would then have to directly request copies of the documents from the ministry or visit a specific location, such as the government printing office, public information center, or even the ministry itself.

Over the last two decades, the spread of information and communication technologies has seen governments increasingly use websites and dedicated portals to disseminate budget information. As the Open Budget Survey (OBS) shows, in 2006 80 percent of publicly available budget documents were also published online. By 2015 this had jumped to 96 percent. In many cases, online availability has replaced physical distribution as the main avenue for making budget information available to the public.

While ordinarily budget information is made available in "portable document format" (PDF) documents, governments have also begun publishing budget data in machine-readable formats (such as Excel spreadsheets) on online budget information portals that allow users to search for and download specific types of fiscal information. These portals typically provide comprehensive and up-to-date data in a variety of formats. This emerging practice has the potential to not only dramatically increase the public's access to budget information, but also its usability and relevance to various stakeholders.

This brief examines emerging practices in publishing budget information online. It draws on research by Fundar, a Mexican civil society organization, which examined websites and portals of 80 governments worldwide, proposing a framework through which to assess online disclosure of budget information.¹

Websites and Portals

There is no clear standard differentiating websites from portals. For the purposes of this research, websites are defined as a basic platform that government ministries and agencies use to publish different types of information online. They primarily serve the disclosure needs of a specific institution and, as such, typically offer few, if any, tools for the user. Websites will often include non-budget information, such as information on the functions and organization of the institution. While websites can host or link to budget documents or datasets, they will typically offer little in the way of search functionality or data manipulation.

Portals, on the other hand, are a specific kind of website designed with the user in mind, and respond to the user's needs. Portals will often contain reference materials, a clear menu system, and search and data manipulation functions. The user-friendly features facilitate access to budget information, allowing users to quickly find the information they require, whether it is key budget documents or machine-readable datasets.

A quick example may help clarify the difference between websites and portals. The U.S. Government's Office of Management and Budget website, which is part of the White House, includes links to a wide set of budget-related documents and some data in Excel spreadsheets, alongside detailed information on how the office is organized, its functions, and its activities.² The portal USASpending.gov, on the other hand, provides easy access to very detailed and up-to-date information on government spending by territory, agency, etc.³ Users can search for information and data can be visualized, customized, and downloaded through a user-friendly interface.

¹ Romero León, J., de la Mora, D., and Ruiz, L. (2016) *Digital Budgets: How are Governments Disclosing Fiscal Information Online?* IBP: Washington, D.C. http://www.internationalbudget.org/publications/digital-budgets-how-are-governments-disclosing-fiscal-information-online

² See https://www.whitehouse.gov/omb

³ See https://www.usaspending.gov/Pages/Default.aspx

Although there is overlap, these two types of platforms serve different functions and are geared towards different audiences. One is not necessarily better than the other, in fact they can be considered as complementary to each other. The vast majority of countries examined as a part of Fundar's research have websites for their ministries of finance and audit institutions, while only a third have budget portals.

The Framework for Examining Online Disclosure

Two parallel, but related, movements have framed the online disclosure of budget information. First, the World Bank has led efforts to modernize and standardize Financial Management Information Systems (FMIS) in governments around the world. A key component of these systems includes the digitization of public financial management (PFM) processes and information, which not only has the potential to improve the efficiency of government, but also to increase budget transparency, as governments create a centralized and digital repository of budget data. Publishing data online is relatively simple once it is compiled, standardized, and digitized. Second, the global Open Data movement has developed a normative set of standards and principles for online data and information disclosure, which have been used to design and assess online access to fiscal information. Fundar's study borrowed aspects from both movements, specifically the ones that matter the most to budget transparency and how citizens access and use budget information.

From this background, four key dimensions emerged, through which online budget platforms can be examined: scope, accessibility, reliability, and feedback.

Scope refers to the extent and comprehensiveness of the budget information disclosed online. This includes data and information that can be used to monitor government commitments and fiscal performance, the key budget documents produced by governments and auditing agencies, macro-economic assumptions and revenue estimates, up-to-date as well as historic debt information, and the impact of tax expenditures. Most countries produce this information, although not all publish it, online or otherwise.

Accessibility refers to how governments facilitate public access to budget information. It measures whether or not, and the extent to which, governments make the budget information and data easy to access, comprehend, and use. Accessibility tools include search and query functions, guides and glossaries, and downloadable datasets in free, open, and machine-readable formats. These tools make it easier for citizens to use, reuse, manipulate, and study budget information and data.

Reliability refers to a set of standards that generate confidence in the budget information and data being disclosed. It measures what descriptive metadata, including the source, date of creation, date of upload and last edit, is provided to determine whether the data can be considered reliable. This is tied to a key challenge, cited by experts, of ensuring that the public knows when governments create, publish and change information that is made available. While key budget documents are unlikely to change frequently, if at all, much of the information included in budget portals, such as up-to-date actual expenditure and revenue data, is likely to change often. Descriptive metadata can help to ensure that the public not only trusts the data, but also can place it in its proper context and chronology.

Feedback refers to the efforts made by governments to provide users with tools and opportunities to engage with the providers of budget information. This includes listing a contact email or phone number, providing a feedback form, or a platform through which users can ask questions or seek help. Additionally, governments sometimes provide basic user statistics and report on inputs received from users. Feedback mechanisms can help the government identify the different users of budget information and their needs, and improve online budget platforms accordingly.

Main Findings

Evaluating government budget disclosure platforms through the four dimensions of scope, accessibility, reliability, and feedback reveals a number of interesting findings.

First, few countries do well across all four dimensions. France stands out as a clear leader, while the Kyrgyz Republic and Peru also perform well. All three of these countries pair finance ministry websites with budget portals linked to their FMIS databases. In the case of France, budget information is disclosed on the finance ministry's website, a standalone budget and fiscal information portal, and a broader open data portal which provides data from across different ministries.

Second, a clear pattern emerged when comparing countries across the four dimensions. Most countries do better on scope, which relates to the breadth and comprehensiveness of budget information, than on accessibility and reliability, the systems that ensure user access to and trust in the information provided. Almost all countries perform very poorly on feedback, providing limited participatory mechanisms for users to interact and engage with the platform's data providers.

Third, many countries doing well across the different dimensions are middle-income countries, suggesting that it is not only advanced economies that are capable of building robust and user-friendly online budget disclosure platforms. The Kyrgyz Republic, Peru, Brazil, the Dominican Republic, El Salvador, and Guatemala all provide good examples of a comprehensive and useful approach to disclosing fiscal information online. Most of these countries have made significant progress in budget transparency in recent years, with their Open Budget Index score rising by an average of 14 points between 2012 and 2015.

There is a second set of middle-income countries that do well on one or more dimensions, but are significantly deficient in others. These are Argentina, Colombia, India, Indonesia, Mexico, and Chile. Colombia, for example, was found to have one of the strongest feedback systems built into its online platform, with the government providing reports on users and feedback that it has received, but is weaker on the reliability and accessibility dimensions. Similarly, the platforms of Mexico and Chile provide a broad range of budget information and data, which are easily accessible and paired with good guidance materials. Both countries, however, feature only basic feedback mechanisms and lack important reliability functions, including metadata on changes, dates, and sources.

Examples of Good Practice

Scope

The website for the U.S. Office of Management and Budget (OMB) contains one of the most complete sets of budgetary information in the world, including a consolidated database for the last 15 years.⁴ The latest budget documents are available in PDF, with a supplemental materials section providing the data in machine readable formats.⁵

Additionally, a separate portal contains detailed spending information (see Figure 1), allowing users to see expenditures down to the contract level by location, date, government agency, and recipient.⁶

⁴ See https://www.whitehouse.gov/omb

⁵ See https://www.whitehouse.gov/omb/budget/Supplemental

⁶ See https://www.usaspending.gov/Pages/Default.aspx

Figure 1. The United States of America's Government Portal



Accessibility

Brazil's portals contain both glossaries of budget terminology and frequently asked questions (see Figure 2).⁷ These resources potentially increase the site's audience by providing the users who may not be familiar with government agencies and budget terminology with comprehensive reference materials.

Figure 2. Brazil's Government Portal



Public access to budget data can also be improved by the implementation of application program interfaces (APIs), such as the one found in South Korea's portal.⁸ APIs provide direct access to the data, allowing for both specific and batch downloads. APIs also allow external platforms to piggy-back on the data hosted by the government. This would allow, for example, a civil society organization to build an interactive tool to examine and visualize the expenditure data provided through an API.

Reliability

Along with a high score for accessibility, France's open data portal also employs a robust query tool that is tied to a descriptive metadata and tagging system. Though containing data from across government ministries, the French open data portal allows for quick access to over 90 datasets from the Ministry of

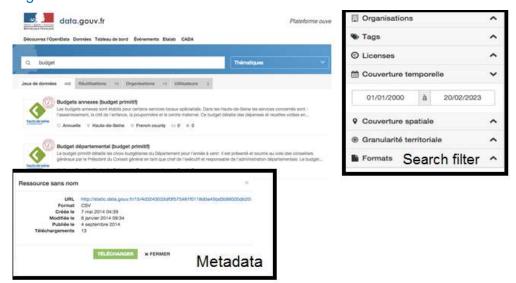
⁷ See http://orcamentofederal.gov.br/perguntasfrequentes

⁸ See http://www.openfiscaldata.go.kr/portal/service/openInfPage.do#

⁹ See http://www.data.gouv.fr/fr/

Finance and Public Accounts. The search term "budget," for example, gives quick access to a number of documents and datasets (see Figure 3).

Figure 3. The Search Function for France's Government Portal



After searching for a topic, the portal displays a menu that allows users to filter search results by organization, date, geographic location, type of public license, and format, among other tags. This is accomplished by embedding each dataset with metadata, and dramatically increases the usability of the data. The search and filter functionality allows a user with even limited technical ability to quickly search through hundreds of datasets and find the one that they need.

This descriptive metadata can also be accessed for each individual file hosted on the portal. These popups, shown in Figure 3, include the direct permanent link, file format, a data of creation, a date of last edit, and the number of times the file has been downloaded. Users can also register to receive updates on specific datasets and gain access to more specific information on dates and sources.

Feedback

Both of Colombia's budget platforms contain leading examples of feedback mechanisms. In addition to contact information for the ministry and a user satisfaction survey, the government also provides detailed statistics on the users of its websites. This information allows the government to see what information citizens and other interested parties are accessing and how they are using it. The government can use these statistics to improve both the ministry of finance website, as well as the dedicated budget portal.

Figure 4. User Statistics for Colombia's Government's Portal

Estadisticas

Ministerio de Hacienda y Crédito Público - Sistema Integrado de Información Financiera - SIIF Nación - Estadisticas



Encuestas de Satisfacción Solución en Primer Contacto Nivel I.



Conclusions and Recommendations

Far too many countries fail to make an adequate amount of budget information available to the public, whether it is online or otherwise. However, findings from our research show that a diverse set of countries (including many middle-income countries) are increasingly employing innovative ways of disseminating budget information online.

Many of the examples of good practice that we identified come from budget portals. While relatively new, portals have great potential to improve both the accessibility and the usability of budget data, and the findings clearly show that countries that have invested in dedicated portals perform better across the four dimensions identified (scope, accessibility, reliability and feedback). However, the fact that many more countries do better on scope than on the other three dimensions suggests that governments are not taking full advantage of the tools and practices that advances in information and communications technology now make possible. Unless portals provide data that are accessible and reliable, and allow users to provide feedback, they risk being seen as data dumps, rather than serious efforts to share budget information and encourage its use amongst CSOs and the public.

Beyond establishing a dedicated portal that contains a broad range of budget information, there are three ways governments can improve how they disseminate budget information online.

Provide tools and resources to help users access and interpret raw data.

Budget data can be difficult to navigate, even for experienced users. Robust query and search functions can help users to quickly find the budget information that they are interested in. Guides, glossaries, and other explanatory materials can broaden the potential audience of the data. Additionally, governments should make the data available in free, open, downloadable, and machine-readable formats.

2. Establish standards that instill confidence in the data.

Relatively simple features, such as including the date a document or dataset was created and posted online, dramatically improves the usability of budget information. Such features also instill confidence in the information. This is particularly important for hosting figures on expenditure and revenue information that may be subject to frequent changes.

3. Provide channels for users to submit feedback.

As an emerging practice, we still have a lot to learn about which tools and features are most useful

for budget portals. By providing users with opportunities to submit suggestions, feedback, and requests through online forms and user surveys, governments can collect information to improve their budget portals, and track how budget information is being used.