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TALLER sobre
METODOLOGIAS Y PROCEDIMIENTOS DE
ESTIMACION Y CALCULO DE INDICADORES FISCALES

Fiscal Indicators in Five Latin American Countries:
Their Experience and Challenges towards
International Comparisons

by
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1. Introduction:

In the nineties, many Latin American countries have incorporated a growing transparency to the design and implementation of their economic policies, in general, and specially in their fiscal policy. To achieve this, there has been a continuous effort to make more widely available the results of public finance statistics. Certainly, today, almost all countries of the region provide more information than twenty years ago on their fiscal statistics, not only on public deficit and different measures of flows (nominal, primary and operational results), but also on public debt (internal and external).

This effort on fiscal statistics was promoted because of higher accountability on public authorities by voters and by holders of public debt. Specially, this last group has an interest on evaluating consistency and sustainability of proposed and executed fiscal policies by public administration. Through this data gathering, these agents process information on the probable future outcome of that economy.

Global integration has meant that a greater number of foreign investors and international financing institutions (public and private) are using fiscal data for their decision process. In general, they evaluate country-risk, using fiscal indicators such as tax burden, public expenditure levels, tax incentives, public debt and its service, and other macro indicators that might help to map expectations of the private sector. This task requires significant knowledge of the country being analyzed. It becomes even more challenging when investors go one step further and try to benchmark countries in comparison exercises.

However, these exercises can be contaminated by important limitations from two sources of distortions common to international comparisons:

a) Differences between countries because of methodology and procedures used to calculate fiscal indicators; and
b) Different coverage or definition of public sector and the quality of the data available by each country.

In addition, because of these limitations the use of other indicators of fiscal policy, such as balance sheet exercises, breakdown of cyclical and structural factors of public deficits, redistributive impact of budget expenditures, have to be carefully considered when comparing fiscal performance between countries. These problems have been noticed by international organizations, which deal with this data, and they have studied and generated proposals to overcome these difficulties.

Considering these points, ECLAC with the support of the Brazilian National Economic and Social Development Bank (BNDES) started an effort to check how some major Latin American countries are proceeding to calculate their major public finance indicators. We are reviewing some basic components of fiscal data, such as the results derived from flows (deficits and surpluses), the measure of stocks (debts) and that of less well defined issues such as quasi-fiscal operations and contingent liabilities. To carry this out, questionnaires were sent to those responsible for fiscal data in five Latin American countries: Argentina, Brazil, Chile, Colombia, and Mexico. Last September, we gathered, at BNDES headquarters in Rio de Janeiro, representatives of these countries and from other international organizations to discuss the answers presented and to learn more of each country experience.

This note has two other sections. The next section presents the questionnaire and summarizes the answers given by the countries presented at that meeting. It will comment on some major difference between countries on basic fiscal indicators and how they confront some special fiscal issues. The last section will propose possible steps to either alert for these differences or some possible common ground for international comparisons.

2. The questionnaire, answers and discussion with the countries

To conceive the questionnaire four major areas were chosen. The first identifies what major fiscal indicators are provided by that country. In this area, questions were placed about statistics of revenues, expenditures, and results such as current account or public sector savings, nominal, primary and operational concepts, etc. The second area is about coverage and definition of the public sector (levels of government, Central Bank, state enterprises and social security systems).

The third part of the questionnaire dealt with methodology and responsibility for quality, transparency, coverage, and frequency of publication and comparability of time series in fiscal statistics. In this section, some details were asked about data collection such as if concept used is of cash or accrual basis, “above or below the line” data collection, registering debts (how they are valued, interest rates, terms, etc.), public assets and if they are net out with debts, and if inflation adjustments are made. In addition, this
part asks about the use of reference methodologies (UN or IMF) and what are the institutions responsible on that country for collection and elaboration of fiscal statistics.

The last set of points asked were those special cases on how are they registered in fiscal statistics. A list of questions was made to check on how the countries incorporate into their fiscal statistics situations such as hidden liabilities, impact of privatization, tax expenditures, subsidies, public guarantees and contingent liabilities and arrears. Also, the broader case of quasi-fiscal results and implicit fiscal policy was also an important point debated in the meeting in Rio de Janeiro. Finally, the countries were asked if they are working towards balance sheet approach for their public sector accounts and if inter-generation considerations are been considered in adjusting values of debts and assets.

For the first set of answers on general information of fiscal indicators, all five countries compute fiscal results or indicators such as net borrowing requirements, current and total fiscal balance; monitor public debts and carry out some type of public sector balance sheet. The fiscal indicator results for most countries started in the eighties. Some, such as Chile and Mexico, as early as 1976 and 1977. One contribution of the external debt crisis of the eighties was the incentive for countries to provide better fiscal indicators. All countries reported improvement on quality of their series in the nineties, because of different motives that will be presented later. On the other hand, country representatives alerted for lack of comparability of the longer times series generated. Changes of coverage and/or of forms of data collecting are warned in some methodological notes by these countries, which sometimes are not well understood or perceived by users, especially foreigners, at the first moment.

Most of this fiscal data is already available to the public on a monthly basis, except for Chile and Mexico which make available only quarterly data, and all of the five countries are trying to place these statistics on the Internet. The lag on the publication is, on the average, from 30 to 45 days in relation to the month/quarter reported.

The results presented are mainly nominal balances, with Brazil and Mexico offering operational balances that considers the impact of inflation on debt payments. The lower inflation prevalent in the late nineties has decreased the demand for the operational result. In the case of Brazil, the Central Bank has excluded the operational concept on its most updated publications, reporting it only in its official bulletin, which has a larger data lag period. All of the countries report their data on local currency and percentage of GDP. Brazil adjusts its fiscal balance and GDP value on a monthly basis to maintain purchasing parity.

Major differences start with coverage issue. Four of the five countries have federal structures, but not all levels of government or all each level fiscal data are reported in general indicators. Brazil covers all levels of government but only on financing “below the line” data. There is still large lags or limitation to cover all states.

2 See list of Internet sites at the end of the
and local governments with fiscal results from current and capital transactions, "above the line". Colombia data covers about 80% of its state governments data and 70% of its local government. Mexico reported that its data covers mainly federal government. However, since most of state revenues come through federal transfers, the fiscal performance of these levels of governments are reported in "public sector" numbers. A similar situation applies in the case of Argentina, since its definition of "national administration" considers only states and municipalities relationship with central governments and its units. States/provinces banks social security systems and its enterprises are not included in its data. Last, Chile's central government has control over the flows of revenues and expenditures of local governments.

State enterprises, especially those of local governments, are still a factor of difference in coverage. The privatization process has generalized through these five countries, leaving for example at federal/central government level just a few numbers of enterprises, although still very significant within their economies. In addition, the process of monitoring these large enterprises has been consolidated.

One major point of divergence in the public sector data is related to relationship with the Central Bank. How do Central Bank accounts and/or results are incorporated in public deficit or surplus and in the stock of public debt is still a very country specific answer. Of the five countries considered, only Brazil fiscal data has a more complete link with Central Bank operations. Brazil separates the primary result and financial income of the Central Bank, distinguishing what is deficit financing or genuine fiscal result. With this system, it tries not to contaminate current non-financial or primary revenues with the total result of the Central Bank. Colombia, Mexico, and Argentina place Central Bank profits as part of its revenue. Chile does not consider any impact of Central Bank, given the degree of independence obtained by the Chilean bank.

Last on the issue of coverage or public sector definition is the social security system. This is another area where drastic reforms have been initiated in at least three of the countries studied. The fiscal impacts of social security reforms are two fold: on net flows and debt stocks. When public pay as you systems are substituted by private capitalization systems with the end of tax contributions to the social security institute/ministry, there is a negative impact on net flows. There is a loss of revenue that covered payments those already retired. On the other hand, in these reforms, the government has assumed a debt to paid to active workers as part of their retirement fund. Chile and Argentina have different ways to register these impact. Chile registers both the impact of flows and the higher debt. Argentina only registers the flows and the cost of the debt.

After the issue of coverage, there is the question on the account system: accrual or current/cash basis. Most countries use mostly cash principle for revenue and expenditures especially to maintain updated information. A mixed system occurs on interest payments with countries such as Brazil using accrual basis. In the discussion, all representatives
informed that accrual basis data can be obtained with a trade off of longer lag periods to make the information available.

On stock data, either debts or assets, the answers showed greater difference between countries, because of their own definitions of public sector liabilities and rights. All countries have developed in the last decade systems to monitor and control public debts in its different forms. For example, in Argentina, National Treasury gained full control on debt monitoring with the changes in Central Banks mandate.

This improvement in monitoring and coverage of public debt has not meant that the compatibility between debt variation and deficit/surplus results was fully achieved. First, there are still differences in what debt costs and services are reflected in the budget flow accounts. For example, the exercise of net debt is still been introduced in some countries, like in Argentina beginning last year. Colombia and Mexico nets out cash balances and some financial assets such as Brady guarantees. Chile does not use a net debt concept.

In addition, in the stock of debt, there are situations of “satellite accounts or stocks”, which cover special issues of public liabilities that are not placed within the main budget recognized debt. The most evident case was Mexico, which does not include the stock of debt refinanced within liabilities of its banking restructuring program, although it registers in its deficit results the flow costs of the program within that year. These “satellite accounts” or the exclusion of some debt operation are related to situation where the State has some type of guarantee of later repayment, although there is a subsidy on principal or an interest rate rebate. Therefore, only these benefits should be accounted for and no credit risk cost on principal should be considered.

Another point on the issue of debts and assets is privatization. In general, privatization proceeds influenced only deficit financing, “below the line”, but all countries have established special situations to register part of these sale amounts or to qualify it. For example, Chile until last year registered all proceeds below the line, nonetheless in recent privatization it has separated the proceeds: Only the firm book value went below the line, while the positive spread went as capital gains “above the line”. Brazil separates into a different definition of total net debt the impact of privatization and has separated firm value from concession revenues, as was the case of telecommunications. Argentina created a different fiscal result but the proceeds of privatization were registered above the line. At the other end, Mexico has registered privatization proceeds as revenue, “above the line”.

This notion of guarantees given by the State is also present in contingent liabilities. Not all countries include these operations outright in its debt. Mexico registers these possible liabilities in one of its separate debt accounts. Argentina has the concept of “indirect debt” that are debts assumed by others with some guarantee by the Central Government. In all countries, the eventual cost is budgeted only when it comes
due. There is no preventive write-off or reserves accumulated for the case of these expenditures.

The quasi fiscal impacts, in its more well know definition of non-monetary policy operations by the Central Bank, are not considered explicitly either because it is within the Central Bank results transferred (surplus) or charged (deficit or negative net worth) to the Treasury or because fiscal indicators do not consider the Central Bank, by legal definition. Brazil is the only country that fulfills this concept of quasi fiscal by bringing in all Central Banks accounts in consideration either in flow or stocks of debts and assets. However, both Brazil and Chile have gone trough the debate of Central Bank net worth, with Brazilian Treasury recently transferring nearly US$ 7 billion in bonds to capitalize the Central Bank.

The relationship between Central Bank and Treasury is also showed in how fiscal data considers the stock of public bonds. For Chile and Colombia, public bonds in Central Bank portfolio are not netted out of total debt. Mexico distinguishes between what part of the portfolio is for monetary regulation and what is used as leverage for financing other operations.

All countries based their statistics on the IMF Manual. The information generated by these fiscal institutions is passed for the National Accounts. However, there are cases where the institution responsible for those accounts changes coverage and uses different definitions, especially for the role of public financial institutions or funds and forms to register their flows. Brazil’s national accounts on the public sector includes a fund (FGTS – workers guarantee fund), that in all other fiscal results is considered to a private fund.

Last, the role of Central Bank as source of fiscal indicators is limited to Brazil and Mexico, for “below the line” or deficit financing measurement. Other countries have concentrated their statistics with economic ministry or councils.

3. Comments and Proposals

Even with the improvement of data collection and the efforts to complete coverage of fiscal statistics, the case of these five countries showed clearly that there is reasonable apprehension for any comparison exercise between them. It is possible to identify two main sources of obstacles: On flows, the issue of coverage of public sector and on stocks, the issue of register, values and definitions of public debts and assets.

The measurement of income and expenditures of the public sector has gained quality through the different automated budget and public financial systems now available for developing countries. These systems permit almost on-line and real time monitoring of central government operations.
State enterprises which were another major obstacle in coverage issue has been reduced significantly in numbers and the large state enterprises have created reasonable coordination on providing timely data. A new version of this obstacle to coverage is the creation of independent regulatory agencies, with some direct income, and of special purpose fiduciary funds. In the discussion, some countries pointed out the efforts of these agencies and funds of becoming out of budgetary control and procedures, once they were created. Brazil and Argentina have taken measures to assure that these cases be placed under the budget.

Today, the issue of coverage of public finance flows is concentrated in two points. One specific for countries with federal government structures and the other on debt services or interest payments. The first point depends on the degrees that these sub-national governments have for deficit financing. Mexican states still have some possible space for this situation but since 1995 debt restructuring with the federal government and the limited amount of direct revenues collected by the states, have reduced any of their deficit impact on general fiscal results. Argentina and Brazil have taken measures to restrict control on state and local government financing. Colombia is broadening its data collection capacity. There should be a recommendation that all countries inform continuously on their coverage of these sub-national governments and alert users of limitations or changes in its process.

However, the other obstacle of interest payment is still quite crucial since it has an important link with debt variation. As reported in the previous section, many countries reported different forms of registering their debt and how to consider any payments derived from them. Although, in general, all interest payments are registered in flows, specially those on a cash basis. The use of accrual methodology might be misleading since there will not be an equivalent debt stock to calculate its cost. This is applicable for contingent liabilities or special programs that as a rule only when the bill is presented are registered in the budget.

As the data on flows have improved by a continuous debate on the definition of public sector, the next round of priority on fiscal data should deal with stocks: debts and assets. This debate should include the question of Central Bank relationship with the Treasury, contingent liabilities and debate of asset quality. These issues are most sensitive than just expanding data collection. They involve legal position on recognizing debts, establishing criteria for asset evaluation and expliciting how the asset can respond for debts, and how to rate or establish previous funding for contingent liabilities. In addition, there should be monitoring on social security actuarial status to warn need of additional reserves or new funding. Because of legal impact of these decisions, an academic research center or a non-government institution could help with the task of consolidating the study of the stock of public debts and assets. For example, Mexican government can not recognize the bank structuring debt because of a legislative decision. Also, these institutions could support initiatives for public balance sheet exercises carry out and proceed studies on other fiscal indicators, without legally compromising government authorities.
With these improvements at local level, at first, two main fiscal indicators should be established for international comparisons: the non-financial or primary result and total public debt (hopefully net debt if not gross debt). A third information should be provided on the applicable interest rate (nominal or real) on the debt. Certainly, for macroeconomic evaluation what is important is the total deficit/surplus nominal or operational. As we have seen to reach this number, many questions can be raised if it is the only information available. In addition, for Latin American countries, with the increase of privatization, the new limitations for Central Banks financing and the broad restructuring of state and local governments finances, the international comparisons should concentrate in the central government (defined broadly to include its state enterprises and social security systems). At the end, it is this level of government who has the capacity to influence macro policy variables.
MAIN INTERNET SITES ON FISCAL DATA FOR ARGENTINA, BRAZIL, CHILE, COLOMBIA AND MEXICO:

ARGENTINA: www.mecon.ar


CHILE: www.anfitrion.cl/mhacienda


MEXICO: www.shcp.gob.mx
Annex – Questionnaire:

**CUESTIONARIO:**

I) ¿Cuáles son los principales indicadores de resultados fiscales oficiales del sector público, calculados y publicados regularmente?

a) Necesidades de Financiamiento  
b) Deudas del Sector Público  
   - Interna  
   - Externa  
   - Brutas o netas  
   - Intra-sector público- deuda entre los diferentes niveles de gobierno  
c) Resultado Financiero Corriente (sólo ingresos y gastos corrientes)  
d) Resultado Financiero Total (incluye ingresos y gastos de capital)  
e) Balance de los Gobiernos (cuenta de resultados y posiciones activas y pasivas de un determinado nivel de gobierno)

Del listado arriba, identifique los indicadores utilizados y el período en que comenzó su cálculo, recolección y/o su publicación.

¿Cuál es la actual periodicidad de divulgación de los resultados?

¿Cuál es el rezago promedio entre la recolección de datos y su fecha de publicación? Por ejemplo, en el informe de junio: se tiene informaciones hasta abril o marzo, etc.

¿Por qué medios se hace la divulgación de los resultados?

a) Publicación regular de la institución (Boletín, Informe Mensual, etc.)  
b) Publicación específica para los resultados fiscales  
c) Vía Internet?  
d) Otros

II) ¿Cuáles son los conceptos utilizados al presentar esos resultados?

a) Nominal  
b) Primario (que excluye intereses nominales)  
c) Operacional (primario más los intereses reales)  
d) Real (que excluye el impacto de inflación sobre la deuda y la base)  
e) Otros (que excluye impacto de devaluaciones nominales o reales)

Del listado arriba, identifique y defina cómo es que los conceptos son utilizados y el período desde cuando se empezó la recolección y/o su publicación.
Favor indicar metodología utilizada en cada concepto, para las informaciones de financiamiento (abaixo de la línea) o de ingresos y gastos (por arriba de la línea).

Los indicadores de balance y flujos son presentados en:

a) Moneda local a precios corrientes  
b) Moneda local a precios constantes (informar índice de precio utilizado)  
c) En moneda extranjera  
d) En relación al PIB o PNB (a precios corrientes o a precios constantes)  
e) En flujos mensuales  
f) En flujos acumulados en el año y en doce meses

III) ¿Cuál es la cobertura de los resultados del sector público en su país?

a) Gobierno Central  
b) Banco Central  
c) Gobiernos Provinciales o Estaduales  
d) Gobiernos Municipales o Locales  
e) Empresas Estatales por nivel de gobierno y definición de propiedad (participación en el capital)  
f) Sistema de Seguridad o Previsión Social  
g) Agencias, fondos y otros organismos no financieros para-estatales

Del listado arriba, identifique y defina la cobertura utilizada, en particular el detallamiento de la información, y el período en que se empezó la recolección y/o su publicación.

Favor indicar las fuentes primarias de los datos recolectados. Informar si son datos contables o financieros.

IV) Aunque se esté analizando el sector público no financiero: ¿Cómo se establece en su país la relación entre los agentes financieros del Estado con los indicadores listados arriba?

a) Si incluye el costo diferencial entre las tasas especiales aplicadas por el crédito público y tasa de mercado (arm’s length)  
b) Si considera el monto transferido a cada año para suplementar los recursos de las líneas de crédito  
c) Si considera los incrementos en el capital (equity) del gobierno en las instituciones financieras  
d) Si el Banco Central no es considerado en los indicadores publicados, ¿Cómo el resultado del Banco afecta las cuentas públicas? Por ejemplo, ¿Un resultado positivo del Banco Central (utilidades) es considerado como ingreso no financiero (primario) del gobierno central?
Del listado arriba identifique y defina los conceptos que son utilizados y el período en que se empezó la recolección, colecta y/o su publicación.

V) En la obtención de los datos de ingresos y gastos corrientes de las diferentes partes del sector público, ¿Cuáles son los criterios utilizados?

a) Caja o devengado
b) Desembolsado por la Tesorería
c) Efectivamente pago o cancelado

Del listado arriba, identifique y defina los conceptos que son utilizados y el período en que se empezó la colecta y/o su publicación.

Favor informar:

¿Cómo los casos de atrasos, *arrears*, son considerados?

¿Ingresos y gastos financieros (intereses) son registrados en el concepto de caja o devengado?

VI) En los gastos de capital o inversiones ¿Existe algún tipo de consideración o excepción para que esos montos no sean incluidos en los resultados? Caso afirmativo, explique.

VII) ¿Cuáles son los tipos de deudas considerados en sus indicadores?. Favor listarlos, ejemplo:

a) Bonos
b) Títulos
c) Contractuales (prestamos con sistema financiero local o externo)
d) Compromisos de securitazion
e) Otros

En el caso de que el Banco Central no esté incluido en sus indicadores, ¿Cómo se considera la cartera de títulos públicos del Banco Central?

VIII) ¿Cuáles son los activos financieros considerados en su cálculo de deuda neta? Favor listarlos, ejemplos:

a) Depósitos bancarios
b) Créditos en relación al sistema financiero
c) Reservas internacionales
d) Otros créditos
IX) El monto y tipos de deuda considerados son evaluados de la siguiente forma:

Periodicidad del cálculo:
1) Mensual
2) Trimestral
3) Anual

Deuda Interna:
1) Monto del contrato
2) Monto en la emisión del título
3) Valor corriente en mercado del título
4) Valor presente de la deuda, según tasas de descuento

Deuda Externa:
1) Valor en moneda local calculado por la tasa de cambio promedio o final de período
2) Valor de los títulos a precios de mercado

¿Cómo se registran devaluaciones o revaluaciones del tipo de cambio en la deuda externa o deuda interna indicada a la variación cambiaria?

En deudas relacionadas al tipo de cambio, ¿Cómo son considerados en los flujos, eventuales cambios de paridad entre las monedas extranjeras contratadas?

X) Los activos considerados en el cálculo de la deuda neta son evaluados:

1) Valor corriente
2) Valor presente
3) Por su “fungibilidad” – capacidad legal de ser utilizados en el pago de deudas públicas en general.
4) Por su calidad o riesgo

Del listado arriba, identifique y defina; ¿Cómo los conceptos son utilizados y el período en que se empezó la colecta y/o su publicación?

XI) ¿Los datos de flujos (déficit o superávit) tienen relación directa con la variación de la deuda pública (bruta o neta)? ¿Si hay diferencias como son explicadas?
XI) En las deudas, activos y intereses ¿se hace alguna corrección por el impacto de la inflación? Si es afirmativa su respuesta, informar el índice utilizado y sobre qué ítems son hechos los ajustes.

XI) ¿Cuál es la institución responsable por la recolección y agregación de los datos del sector público? Caso sea un grupo de instituciones, indicar el nivel de responsabilidad de cada una de ellas.

XI) ¿Otras instituciones públicas o privadas hacen cálculo similar? Si es afirmativa su respuesta, favor listarlas.

XI) Caso hayan diferentes mediciones por parte de diferentes instituciones en los conceptos “arriba y abajo de la línea”, favor informar como se identifican y resuelven posibles diferencias.

XI) ¿La metodología de referencia utilizada es del Fondo Monetario Internacional o del Sistema de Cuentas Nacionales de las Naciones Unidas?

XI) Como se considera en los resultados (flujos) o en el cálculo de la deuda neta (existencia o stock) los impactos de los siguientes eventos;

a) Privatizaciones (¿Cómo se registran diversos tipos de ingresos por la venta de una empresa? ¿Hay una revisión de la serie estadística para ajustar las deudas y resultados pasados de la empresa privatizada?)

b) Reconocimiento de deudas no registradas (citar ejemplos)

c) Operaciones cuasi-fiscales del Banco Central (especialmente programas de reestructuración del sistema financiero)

d) Pasivos contingentes de contratos firmados o garantías otorgadas por el Sector Público.

Del listado arriba, identifique y defina como los conceptos son utilizados y el período en que se empezaron los ajustes.

XI) Los posibles desequilibrios acturiales del sistema de previsión social son considerados en los resultados del sector público? Alguna consideración sobre cuestiones inter-temporales es hecha en su metodología? Hay alguna diferenciación entre los sistemas de pensiones de funcionarios del sector público y del sistema general para los demás trabajadores?

XI) Favor adjuntar ejemplos de cuadros detallados de sus resultados del sector público, especialmente los más actualizados.