

Chapter 6 Taxes less subsidies

Introduction

6.1 In the Canadian System of National Accounts, the aggregate gross domestic product (GDP) is measured at market prices – that is, at prices faced by purchasers. These market prices include the effects of government intervention in the market, specifically: taxes levied on production of goods and services; taxes on the goods and services themselves; subsidies paid to producers to influence the costs of production; and, subsidies paid to directly change the price of goods and services or the incomes arising from their production and sale.

6.2 Taxes on production include property taxes, taxes on payrolls and capital, and the costs of business licences, permits and fees. These taxes are levied regardless of the current level of production of goods and services.

6.3 Taxes on products, on goods and services themselves, include the Goods and Services Tax, provincial sales taxes, federal and provincial taxes on sales volumes of gasoline and other motive fuel taxes, tobacco and alcohol, etc. These taxes only arise as a result of the actual production or sale of goods and services.

6.4 Subsidies are unrequited payments made to business sector entities by governments to affect the current costs of production or the final prices of the goods and services produced or the incomes arising from that production.

6.5 Subsidies on production include payments made to business to influence the mix of factors of production used in their operations. They include assistance for training and other payments to reduce the cost of labour as well as payments to compensate producers for the interest costs of capital, property and other taxes, etc.

6.6 Subsidies on products directly affect either the price of those goods and services or the incomes arising from their production and sale. These subsidies include payments to reduce the price of, for example, passenger rail travel and other transportation services such as ferries and electricity, natural gas and other home-heating fuels. Also included in subsidies on products are payments to farmers to compensate them for low market prices for their products and to enhance their incomes from that production.

6.7 Whenever possible, taxes and subsidies are estimated on an accrual basis of accounting rather than a cash basis of accounting so that output reflects as accurately as possible the costs related to it.

6.8 In the income-based GDP table, two items relate to taxes and subsidies: taxes less subsidies on factors of production, and taxes less subsidies on products.

Concepts and definitions

Taxes on products

6.9 Taxes on products¹ are taxes payable per unit of some good or service sold. The tax may be a specific amount of money per unit or it may be calculated as a specified percentage of the goods and services sold. Taxes on products include:²

- general sales taxes such as the Goods and Services Tax (GST) and provincial retail sales taxes;
- taxes on alcoholic beverages and on tobacco, which include special taxes, excise taxes and duties collected on the production and sale of alcoholic beverages and tobacco products;

1. In the *System of National Accounts 1993* (SNA 1993), this aggregate appears under “Taxes on products” in the Primary Distribution of Income Account and is described in paragraphs 7.62 to 7.69.

2. The descriptions of the types of taxes on products are based on the descriptions in section 6.07 of the *Financial Management System* (FMS), catalogue no. 68F0023.

- taxes on entertainment, which include taxes collected on tickets to cinemas and theatres and on recreational, cultural and other entertainment activities. Taxes levied by provincial governments on pari-mutuel betting at racetracks and on casino gambling also fall into this category;
- taxes on fuels, including the revenue from special taxes on gasoline, aircraft fuel, diesel fuel, propane and other substances used as fuel;
- custom duties are solely the domain of the federal government; they include the revenue from duties imposed on goods imported into Canada, such as manufactured goods, food, beverages and tobacco;
- profits from the sale of alcoholic beverages and gambling cover all profits earned by government-owned liquor boards, lotteries and other gaming corporations. Since these organizations are fiscal monopolies, their profits are treated as taxes on products because it is impossible to determine if they are derived from market forces or the fact that they are monopolies;
- other consumption taxes include airport security taxes, taxes on meals and hotel rooms and various other consumption taxes.

Table 6.1 Taxes on products by level of government, 2000

	CANSIM	Millions of dollars
Federal		
Taxes on products	V29346149	37,879
Customs import duties	V690200	2,441
Excise duties	V690201	2,291
Excise and other taxes	V690202	33,078
(of which: Goods and Services Tax)	V690203	27,090
Air transportation tax	V690204	0
Miscellaneous	V29346150	69
Provincial		
Taxes on products	V29346153	48,270
Amusement tax	V690207	595
Gasoline tax	V690212	7,037
Retail sales tax (including liquor and tobacco)	V690217	30,585
Profits of liquor commissions	V690218	3,001
Gaming profits	V690208	5,553
Miscellaneous	V29346154	1,500
Local		
Taxes on products:	V29346157	272
Amusement tax	V690220	4
Retail sales tax	V690223	79
Miscellaneous	V29346158	189
Total taxes on products	V29346147	86,422

Source: *Provincial Economic Accounts*, Table 12, Taxes on production and imports - Canada, catalogue no. 13-213.

Taxes on factors of production

6.10 Taxes on factors of production³ are paid by enterprises and are related to operations. Such taxes are collected regardless of the level of goods and services production. They must be paid even in the absence of production. These taxes are payable on land, fixed assets, labour or certain types of activities. Taxes on factors of production include:⁴

- all forms of land taxes (property taxes, property transfer fees, business taxes, etc.);
- taxes on payroll;
- vehicle licences (fees and permits);
- taxes and permits from the exploitation of natural resources;
- farm insurance premiums;
- taxes on insurance premiums;
- other licences and permits associated with operations paid by enterprises; and
- fines and penalties imposed on enterprises.

Table 6.2 Taxes on factors of production by level of government, 2000

	CANSIM	Millions of dollars
Federal		
Taxes on factors of production	V29346148	460
Provincial		
Taxes on factors of production	V29346151	19,445
Corporation tax (not on profits)	V600211	4,060
Motor vehicle licences and permits	V690213	1,036
Other licences, fees and permits	V690214	527
Miscellaneous taxes on natural resources	V690215	553
Real property tax	V690216	3,112
Payroll taxes	V690209	7,939
Miscellaneous	V29346152	2,218
Local		
Taxes on factors of production	V29346155	32,672
Licences, fees and permits	V690221	499
Real and personal property tax	V690222	29,898
Business tax	V690224	1,280
Developer's fees	V690225	980
Miscellaneous	V29346156	15
Total taxes on factors of production	V29346146	52,577

Source: *Provincial Economic Accounts*, Table 12, Taxes on production and imports - Canada, catalogue no. 13-213.

Subsidies on products and on factors of production

6.11 Subsidies⁵ are current payments without compensation that governments make to enterprises on the basis of their production activity or the quantity or value of the goods and services they produce, sell or import. Subsidies are equivalent to negative taxes on production.

3. In the *System of National Accounts 1993* (SNA 1993), this aggregate appears under "Other taxes on production" in the Primary Distribution of Income Account and is described in paragraph 7.70.

4. The descriptions of the types of taxes on factors of production are based on the descriptions in sections 6.08 and 6.09 of the *Financial Management System* (FMS), catalogue no. 68F0023.

5. The description of subsidies in this paragraph is based on paragraph 7.71 of the *System of National Accounts 1993* (SNA 1993).

6.12 Subsidies on products⁶ are payable per unit of a good or service sold. They may be a specific amount of money per unit or may be calculated as a specified percentage of the goods and services sold. A subsidy may also be calculated as the difference between a specified target price and the market price actually paid by a buyer.

6.13 Subsidies on factors of production⁷ are paid to enterprises based on their production activities. These subsidies include, for example, subsidies on payroll or workforce or subsidies to reduce pollution.

Annual estimation methods and data sources

6.14 Taxes less subsidies, either on products or on factors of production, are estimated from the same sources, using the same methodologies.

6.15 For this discussion of sources and methods, the three stages of the production-revision cycle will be considered starting from the benchmark years (first two years of the four year revision cycle, t-4 and t-3) to the non-benchmark years (last two years, t-2 and t-1) and progressing to the current quarter estimates. This order works better because the benchmark year estimates which are based on information from public accounts, audited financial statements and censuses of universe entities, provide a solid ground for understanding the government institutional sector and its activities.

6.16 The benchmark years estimates also benefit from the commodity and industry balancing of the Input-Output Tables (IOT) and are the product of an integrated effort by statisticians of the Industry Accounts Division, the Income and Expenditure Accounts Division and the Public Institutions Division. These estimates are used in establishing the level of the non-benchmark years.

6.17 Non-benchmark year estimates are based on similar source information – financial reports and statements, budget estimates and survey responses—but final versions are often not yet available and the information is still subject to revision.

6.18 Current quarter estimates are based on sub-annual administrative or financial reports, budget estimates and related indicators.

Federal government

6.19 The federal government sub-sector is divided into two parts for purposes of estimation, as the underlying data sources are different. These two parts are called budgetary⁸ and extra-budgetary.

6.20 Information for the budgetary part of the sub-sector comes from the Government of Canada Banking and Accounting System of Public Works and Government Services Canada (PWGSC), specifically the Public Accounts of Canada⁹ and from monthly statements provided by PWGSC and by Canada Revenue Agency (CRA). Budgetary taxes include customs duties, excise duties (on alcohol and tobacco), excise taxes on motive fuel and other products and the Air Travellers Security Charge. For the last year of the four-year revision cycle, no public accounts are available and the estimates are based on the monthly CRA and PWGSC information.

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6. In the international system, this aggregate appears under “Subsidies on products” in the Primary distribution of Income account. This item is described in paragraphs 7.73 to 7.78 of the *System of National Accounts 1993*.
 7. In the international system, this aggregate appears under “2. Other subsidies on production” in the Primary Distribution of Income Account. This item is described in paragraph 7.79 of the *System of National Accounts 1993*.
 8. Budgetary entities is the terminology used in Canadian public finance to describe the ministries, departments and agencies of the government. Similarly, extra-budgetary entities is used to describe what the public sector universe refers to as autonomous organizations, boards, commissions and funds, that is, entities that the Canadian System of National Accounts includes in the federal sub-sector but which are not included in the Government of Canada’s budgetary universe, for example, the Canadian Broadcasting Corporation (CBC).
 9. The federal, provincial, territorial and Canada and Quebec pension plans public accounts benchmark data are all on a fiscal-year basis. Since estimates for these entities in the IEA were all originally made for a specific quarter, based on monthly or quarterly information, it is a relatively simple matter to convert the benchmark data from a fiscal-year to a calendar-year basis using the appropriate component quarters.

6.21 Data sources for the extra-budgetary part include annual and sub-annual financial reports and statements of the extra-budgetary entities or other information obtained directly from them. If the information is not forthcoming for the most recent year(s), estimates are calculated using data from earlier periods. Extra-budgetary taxes include the Canadian Dairy Commission Levy, premiums charged by the Canada Deposit Insurance Corporation and licence fees paid into the Canadian Television Fund.

6.22 The Goods and Services Tax (GST), while a part of budgetary revenue for the Government of Canada, is not estimated from information contained in the Public Accounts of Canada. For the benchmark years (and the first non-benchmark year), the annual estimate for GST revenue comes from the GST/HST Revenue Pool established by the Government of Canada and those provinces that have harmonized their sales taxes with the GST (New Brunswick, Nova Scotia and Newfoundland). This estimate is then reconciled with the estimate of GST embedded in the components of the final demand matrix of the Input-Output Tables (IOT) to produce annual control totals.

6.23 For the most recent year, the Goods and Services Tax (GST) is estimated using an aggregate indicator and projector calculated from the estimates of GST embedded in the final domestic demand components of GDP. Through the IOT reconciliation and integration process, control estimates are established for the GST embedded in each GDP final demand component. As these final demand components are estimated for non-benchmark years (and, indeed, for current year quarters) they yield an estimate of related GST. An aggregation of these estimates of embedded GST yields the estimator used to produce the GST for the second non-benchmark year, and subsequent periods. Available quarterly, this estimator is also used to distribute the annual GST data for use in the quarterly IEA.

6.24 Agricultural subsidies¹⁰ are estimated as part of accrued net income of farm operators from farm production (Chapter 5). The main sources are Agriculture Division surveys, Agriculture and Agri-Food Canada, the Canadian Grain Commission and various marketing and regulatory agencies in Canada and the provinces.

6.25 Non-agricultural subsidies paid by the federal administration are derived from the Public Accounts of Canada and financial statements of government business enterprises receiving subsidies for the benchmark years. Non-benchmark years are estimated from monthly PWGSC information and information obtained from federal government business enterprises. All non-agricultural subsidies are part of the budgetary accounts.

Provincial and territorial governments

6.26 For benchmark years, source documents used to estimate provincial and territorial taxes and non-agricultural subsidies include the public accounts of each province and territory for budgetary components, and audited financial statements and annual reports of extra-budgetary entities. Non-benchmark year estimates are prepared from information published, annually and quarterly, by provincial governments in budgets, public accounts and other financial statements. In the case of component entities for which financial statements are not available for the most recent year(s), information from the most currently available year is substituted.

6.27 An exception is the provincial share of the Harmonized Sales Tax (HST) which is derived from the same GST/HST Revenue Pool used to establish the federal GST control. Three provinces, Newfoundland, New Brunswick and Nova Scotia, harmonize their provincial sales taxes with the federal sales taxes. The reported HST figures in the provincial government public accounts are not used because they may contain adjustments for prior periods.

6.28 Agricultural subsidies paid by provinces and territories are part of the estimation of accrued net income of farm operators from farm production (see paragraph 6.24 and Chapter 5).

10. Government program payments to farmer and government payments made under farm support programs are used as alternate terminology for agricultural subsidies in Chapter 5.

Local government

6.29 Taxes and subsidies received or paid by municipal governments are derived from annual reports of provincial and territorial government departments of municipal affairs, which summarize information for all municipalities in their jurisdiction, and from financial statements of municipalities and other local government entities.

6.30 Estimates for school boards are based on provincial and territorial department of education information representing a census of local schools. This information is gathered from surveys conducted by Culture, Tourism and the Centre for Education Statistics.

6.31 For non-benchmark years, local administration taxes and subsidies are estimated using: a sample survey collecting municipal budget estimates information, conducted by Public Institutions Division; and, a sample survey collecting financial information for local schools conducted by Culture, Tourism and the Centre for Education Statistics.

Quarterly estimation methods and data sources

6.32 Current quarter estimates of federal taxes, subsidies and Goods and Services Tax (GST) are calculated from the same information used for the last year of the four year revision cycle. The only difference being an increasing difficulty in obtaining information for extra-budgetary entities for current quarters and hence an increasing reliance on prior-period information.

6.33 Provincial and territorial tax revenue estimates are developed from a variety of source information varying widely across jurisdictions. L'Institut de la Statistique du Québec provides estimates based on Government of Quebec internal information. Other provinces provide monthly and quarterly information from their government accounting systems while estimates of some series for some jurisdictions have to be calculated using budget estimates distributed across quarters, using related indicators.

6.34 Current-quarter estimates of taxes less subsidies for the local sub-sector are derived using estimates of annual values and a variety of quarterly distribution methodologies.

6.35 The bulk of local sub-sector taxes, consisting mainly of real property taxes, are levied on an annual or semi-annual basis. Since the stream of services produced by real property is, for national accounts' purposes, continuous throughout the year, these annual taxes are divided evenly over the component quarters of the year.

6.36 A small sub-set of local taxes is levied on current, observable activity and these are estimated quarterly using related indicators. An example is the Deed Transfer Tax series, estimated on the volume of real estate transactions.

Estimation methods – Provincial and territorial estimates

6.37 Estimates of provincial and local taxes on products and on factors of production as well as provincial and local subsidies are built up by province in the course of preparing national estimates, and pose no problem for provincial accounts.

6.38 Federal government taxes and subsidies on products and on factors of production, on the other hand, must be allocated across provinces and territories.

6.39 Federal taxes less subsidies on factors of production are allocated by province based on the location of production of the industry being taxed or subsidized. For example, employment development subsidies are first allocated across receiving industries and then geographically, using information on the location of production by each industry.

6.40 Taxes less subsidies on products are allocated by province according to the location of production in the case of subsidies and according to the location of final sale in the case of taxes. Therefore, passenger rail subsidies are allocated by passenger-mile travelled and tobacco excise taxes on sales of tobacco products are allocated by province.

6.41 By-province allocation of the Goods and Services Tax is a special case. As discussed previously, calculation of the GST for non-benchmark years and current year quarters is done using a composite indicator and estimator calculated by aggregating the embedded GST included in the value of GDP final demand components. This same procedure is used to allocate the GST by province and territory. Through the benchmarking of GDP components to the provincial IOT, control totals are established for each GDP final demand component by province. For non-benchmark years, the by-province estimation of each final demand component includes a value for embedded GST. Aggregating these estimates of embedded GST produces a composite by-province allocator, which is applied to the national total for GST.