**How to Calculate Tax Freedom Day**

Tax Freedom Day is the day when a nation as a whole has earned enough money to pay its total tax bill for the year. It is a useful way of representing how large a nation’s tax burden is compared to the size of its economy.

For any given year, the date of Tax Freedom Day can be calculated in three steps:

1. Add up all taxes paid to federal and sub-national governments in that year.
2. Divide the total by net national product in that year.
3. Multiply the resulting fraction by 365, and round downward, to yield the number of days before Tax Freedom Day.

$$\frac{(Sum of all taxes paid)}{(Net national product)}\*365=Number of days before Tax Freedom Day $$

This brief guide explains how to properly calculate “taxes paid” and “net national product,” as well as how to gather the necessary data to carry out the calculations.

**A. Taxes Paid**

The first step to calculating Tax Freedom Day is to count all taxes paid to federal and sub-national governments, including, but not limited to:

1. Personal income taxes
2. Corporate income taxes
3. Most contributions to government social insurance programs (see below)
4. Excise taxes
5. Sales taxes
6. Value-added taxes
7. Property taxes
8. Capital stock taxes
9. Estate taxes
10. Other taxes
11. Customs duties
12. Central bank revenues

Tax Freedom Day does *not* count the following payments to governments:

1. Fees (such as licensing fees, highway tolls, or any other user fees that a government charges in exchange for specific goods or services)
2. Fines (such as civil penalties, bail, or any other money paid as a punishment)
3. Contributions to actuarially-fair government social insurance programs. In general, if a government social insurance program functions primarily as an insurance program, rather than a transfer program, its revenues are not counted for the purposes of Tax Freedom Day. This is inevitably a judgement call. (The Tax Foundation counts the following U.S. federal insurance programs as actuarially-fair: veterans’ life insurance, workers’ compensation insurance, military medical insurance, supplemental medical insurance, and the Pension Benefit Guaranty Corporation.)
4. Taxes paid by the rest of the world, other than customs duties. Tax Freedom Day assumes that customs duties, even though remitted by foreign persons, are ultimately born by the nation that imposes them. This is not the case for other taxes paid by the rest of the world.
5. Inter-governmental transfers. For instance, aid from the national government to municipalities should not be counted as a tax collected by a municipal government.

The easiest way to add up the taxes paid to federal and sub-national governments is to use estimates from a government agency that publishes national accounts. For instance, the U.S. Bureau of Economic Analysis publishes annual and quarterly estimates of federal tax revenues in Tables 3.2 and 3.3 of the National Income and Product Account Tables. These figures may need to be adjusted to exclude non-tax revenues and revenues from actuarially-fair social insurance programs.

**B. Net National Product**

Tax Freedom Day divides a nation’s total tax burden by national income. However, there are many ways to measure national income. The measure used by Tax Freedom Day is net national product, which is equal to gross national product minus consumption of fixed capital.

Importantly, net national product in a given year *includes* all taxes paid in that year. If a nation produces $1 trillion, and $200 billion of it is paid in taxes, the denominator of the Tax Freedom Day calculation should be $1 trillion, *not* $800 billion. This is a particularly important concern for countries with value-added taxes, which reduce the prices of goods and services, and can make a nation’s product seem smaller than it actually is. To calculate Tax Freedom Day correctly, it is necessary to ensure that all value-added tax collections are included in the denominator.

To determine a country’s net national product, it is easiest to use estimates from a government agency that publishes national accounts. These estimates will generally be correct, and will not usually need further adjustments. The U.S. Bureau of Economic Analysis publishes annual and quarterly estimates of the U.S. net national product in Table 1.7.5 of the National Income and Product Account Tables.

**C. Calculating Tax Freedom Day for the Coming Year**

To calculate Tax Freedom Day for an upcoming year, it is necessary to project national income and taxes paid. The Tax Foundation does this using the Congressional Budget Office’s Economic and Budget Baseline. The baseline includes assumptions about how national income and government revenue sources will grow or shrink in the coming year. Using these projections, the Tax Foundation inflates or deflates revenue and income figures from the previous year, to arrive at estimates for Tax Freedom Day in the coming year.

**D.** **Deficit-Inclusive Tax Freedom Day**

Current government deficits represent additional taxes that will need to be paid in the future, while government surpluses represent taxes that will not need to be paid in the future. Because of this, the Tax Foundation also calculates “deficit-inclusive Tax Freedom Day.” This is done by adding “net federal saving” to taxes paid, and dividing the sum by net national product. When the federal government runs a deficit, this results in a later Tax Freedom Day; when the federal government runs a surplus, Tax Freedom Day is earlier in the calendar.

**E. Leap Years**

In order to make Tax Freedom Day comparable from year to year, February 29th is not taken into account when calculating Tax Freedom Day. For instance, in 2012, the Tax Foundation’s calculations showed that there would be 103 days in the year before Tax Freedom Day. The 104th day of 2012 was April 13th. However, Tax Freedom Day 2012 was April 12th, because we did not take February 29th into account.