



## Teva Global Economic Impact Report Methodology

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This document describes the methodology used by Matrix Global Advisors (MGA) to analyze Teva's generic drug savings and macroeconomic impact in the study, "Teva Global Economic Impact Report."<sup>i</sup>

### Generic Medicine Savings Analysis Generally

Teva's contribution to generic medicine savings in each country was estimated using one of two methods, referred to below as the primary method and the alternative method. The primary method relies on existing third-party estimates, and the alternative method uses IQVIA sales data.

#### *Primary Method*

In Canada, France, Italy, Japan, Spain United Kingdom, and the United States where estimates of national generic medicine savings are publicly available,<sup>ii</sup> MGA applied Teva's 2018 generic market share by value to each respective country's national savings estimate.<sup>iii</sup> Teva market share for these countries was derived from IQVIA data.

#### *Alternative Method*

For countries without publicly available estimates of national generic medicine savings (Bulgaria, Chile, Czech Republic, Germany, Hungary, Ireland, Netherlands, Poland, Russia and Ukraine), estimates were created using IQVIA data on the oral solids prescription drug market in 2018. These data excluded biologics, vaccines, over-the-counter medicines, and products with unknown protection status. Average price among multisource brand drugs, average generic drug price, and brand and generic market shares were used to calculate the additional spending if generics were sold at the average price of multisource brands. MGA applied Teva's 2018 generic market share by value, derived from IQVIA data, to determine Teva's share of national savings.

### Generic Savings in the United States in Detail

MGA's estimate for Teva's 2018 generic savings in the US is \$41.9 billion. This estimate relies on the Association for Accessible Medicines (AAM) 2018 national generic savings estimate, as prepared by IQVIA, which is \$292.6 billion. The AAM/IQVIA methodology compares the 2018 prices of ~800 generic drugs to the prices of those drugs before they became available as generics and multiplies that price difference by the quantity of generics sold in 2018.<sup>iv</sup> AAM/IQVIA have been publishing annual US generic savings estimates for ten years. In 2018, Teva's US generic market share was approximately 14%, and MGA assumes the generic drugs sold in the US by Teva are similar to the overall market for US generics.

#### **US Out-of-Pocket Savings**

Of Teva's \$41.9 billion in 2018 US generic savings, \$5.9 billion is out-of-pocket savings, \$16.8 billion is private insurance savings, and \$19.2 billion is government savings. These estimates are based on the distribution of cost sharing for all prescription drug expenditures as reported by the federal government's National Health Expenditures for 2018, which report that 14.1 percent of prescription drug expenditures were out-of-pocket expenses.<sup>v</sup>



## Macroeconomic Impact Analysis

In the countries in which Teva operates, expenditures by Teva and Teva employees ripple through economies and support jobs, contribute to GDP and generate labor income. This impact was measured by applying a macroeconomic input-output model calibrated to reflect each country's unique characteristics. Generally, MGA employed models developed by IMPLAN, which are widely used across government, academia, non-profit and corporate settings.<sup>vi</sup> Drawing on publicly available historical economic data, the models project economic indicators (e.g., production and employment levels) by industry. Teva payroll and operating expenses for 2018 served as inputs to the model for each country.

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<sup>i</sup> An analysis for Teva in Israel was conducted by Rotem Strategy and results were incorporated into the MGA study. Methodologies for the Israel analysis may differ from those described here.

<sup>ii</sup> See Teva Global Economic Impact Report for sources of national generic medicine savings estimates.

<sup>iii</sup> In the UK, market share was only available by volume.

<sup>iv</sup> Prices in the AAM/IQVIA analysis exclude drug rebates.

<sup>v</sup> See Table 19, available for download at [www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/NationalHealthExpendData/NationalHealthAccountsHistorical](http://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/NationalHealthExpendData/NationalHealthAccountsHistorical).

<sup>vi</sup> For Ukraine, an alternative proprietary model was employed because no IMPLAN model was available. In Israel, a different model was employed.