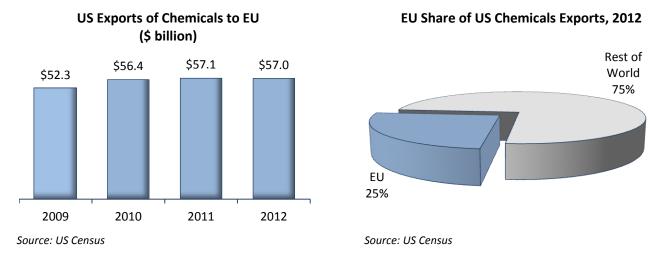


## **Chemicals and TTIP**

**At a Glance**: Assuming the implementation of an ambitious Transatlantic Trade and Investment Partnership, US chemicals exports to the EU will grow by **almost 61 percent over 2012 levels**.

**Industry Overview:** The chemicals sector is comprised of several related industries, including basic chemicals, synthetic resins, pesticides, pharmaceuticals, paints and adhesives, and cleaning agents, as well as plastics and rubber products. At **more than \$960 billion**, these products accounted for **almost 6.2 percent of US GDP**, and made up over 16.8 percent of US manufacturing shipments in 2012--led by plastics and rubber products (\$210 billion) and pharmaceuticals (\$167 billion).



**US Chemical Exports to the EU:** In 2012, the United States exported **\$57 billion** worth of chemicals to the EU. Pharmaceuticals (\$27.7 billion), basic chemicals (\$15.3 billion), and synthetic resins (\$5.3 billion) accounted for the majority of these exports. Top US states exporting these goods to the EU include Texas, Indiana, California, Pennsylvania, and Illinois. Nearly **\$1 out of every \$4** in U.S. exports of these products went to the EU in 2012, but the EU market is significantly more important for some states: 54 percent of Indiana exports and 49 percent of Delaware exports of these products went to the EU in 2012.

**Current Barriers to Transatlantic Trade:** US exports face EU tariffs averaging 2.3 percent, although the EU applies tariffs of up to 6.5 percent on many top chemical exports like nucleic acids. Additionally, a number of non-tariff measures (NTMs) restrict access for US producers to the EU market. It is estimated that these NTMs are equivalent to additional tariffs on US exports of 34.6 percent for cosmetics, 23.9 percent for generic chemicals, and 15.3 percent for pharmaceuticals.

**Estimated Export Gains from TTIP:** Implementation of an ambitious TTIP by the year 2027 is expected to increase US chemical exports to the EU by more than **\$35 billion**, an increase of **over 61 percent** from 2012 levels. About 60 percent of these gains would result from reducing NTMs.



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## Methodology

This study depicts the estimated economic impact of the implementation of an ambitious Transatlantic Trade and Investment Partnership (TTIP) on US exports and employment for a series of fourteen key economic sectors. The estimated changes in exports to the EU are based on the Centre for Economic Policy Research (CEPR) report Reducing Transatlantic Barriers to Trade and Investment: An Economic Assessment, The Trade Partnership's CDxports database, and the approach used by Ecorys to quantify non-tariff measures. According to the CEPR study, an agreement would increase US GDP by up to €95 billion, or \$125 billion at current exchange rates, under its ambitious scenario.

The CEPR study defines an ambitious agreement as: 1) a 100 percent reduction in tariffs, 2) a 25 percent reduction in the costs resulting from non-tariff measures such as regulatory barriers affecting goods and services, and 3) a 50 percent reduction in procurement non-tariff barriers. CEPR's study estimates reflect the full implementation of an ambitious TTIP agreement by the year 2027. The results are based on an estimated change derived from TTIP compared to a 2027 baseline year without the TTIP in place. Our figures for exports and job creation take into account the countervailing forces of increased imports to the US from the EU.

Employment impacts were derived under the same TTIP liberalization scenarios as in the CEPR report. However, while the core CEPR assessment is a long-run assessment based on an assumption of full employment, Moody's forecasts include continued soft labor markets in 2027, with unemployment above long run levels. We therefore conducted an alternative measure of the potential impact of TTIP on employment reflecting an economy that is not at full employment in 2027. This involved assumptions of both increased labor demand and increased wages. Resulting national impacts by industry were distributed to the state level based on Moody's baseline state and sector level labor force projections.

It is important to note that the largest positive effects of the TTIP arise from the agreement's indirect impacts on US spending and investment. For example, due to the lower costs of imports, companies and consumers have additional resources available to spend on other goods and services, and that spending is itself job supporting. According to European Commission estimates, TTIP increases disposable income by approximately \$865 annually for an average American family of four.<sup>1</sup>

## Dataset used in this study

The study was conducted using export data for goods and services from The Trade Partnership's CDxports database. CDxports refines US government export data to estimate merchandise exports to more than 230 countries from individual US states and Congressional districts. It details exports for 104 sectors for 2002 through 2012. This analysis uses figures for goods exports to the EU<sup>2</sup> and services exports to the EU<sup>3</sup>, based on the most recent data available at the time of publishing.

## Terminology

The terminology used to describe current US exports to the EU in this study is based on the Census Bureau's North American Industry Classification System (NAICS). The CEPR study, by contrast, uses a more broadly defined classification of industry categories based on those in the CEPR study. The two classification systems are interoperable. For instance, logging, fishing, support activities for crop production, animal production, and forestry fall within the right-hand classification "Ag., Forestry, Fisheries." Services agglomerations include the following: Business services (legal, accounting, architecture, engineering, management consulting, etc.), personal services (arts, entertainment, lodging, food services, maintenance and repair, beauty services, etc.), and other services (utilities, wholesale and retail sales, domestic transportation, education, health care, etc.).

<sup>&</sup>lt;sup>1</sup> http://ec.europa.eu/trade/policy/in-focus/ttip/questions-and-answers/

<sup>&</sup>lt;sup>2</sup> Based on 2012 data

<sup>&</sup>lt;sup>3</sup> Based on 2011 data, the most recent available at the time of publishing