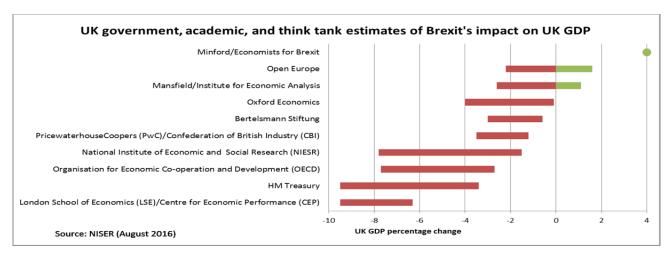
The Potential Impact of Brexit on the United Kingdom's GDP

Joanne Guth (joanne.guth@usitc.gov) and Meryem Demirkaya (meryem.demirkaya@usitc.gov)

The European Union (EU) is the United Kingdom's (UK) largest trade partner, accounting for about a half of the UK's total two-way trade. The UK's membership in the EU results in lower trade costs between the two partners, making goods and services cheaper for UK and EU customers and creating greater market opportunities for UK and EU exporters. The current literature projecting the effect of the UK's vote to leave the EU (Brexit) largely finds declines in the UK's gross domestic product (GDP) in the long-term, although uncertainties regarding the future UK-EU economic relationship prevent more definitive assessments.

Overview—Uncertainty over the UK's post-Brexit relationships with the EU and the rest of the world make it difficult to estimate the economic consequences of Brexit. To date, the economics literature uses different methodologies, makes a variety of assumptions about the future UK-EU relationship (see below), and analyzes different government responses, which result in a wide-range of estimates, as shown below.



Methodology—In an attempt to quantify the economic implications of the UK's vote to leave the EU, most of the studies use either a Computable General Equilibrium or econometrics-based (gravity) model.

Assumptions about the Future UK-EU Relationship— Until the UK leaves the EU, the UK has full access to the EU's single market and customs union, but the post-Brexit structure of the UK-EU relationship is expected to change. The literature broadly examines three possible scenarios for this potential relationship. The first scenario is a European Economic Area (EEA) arrangement, as the EU currently has with Norway. In that scenario, the UK would be granted tariff and quota-free trade with the EU (as well as the entire EEA) and would be part of the single market. However, the UK would be outside the customs union, which means it would fall outside the EU's trade agreements, such as FTAs, and would be subject to antidumping duties, rules of origin regulations, and a small increase in nontariff barriers, such as customs checks. EEA status would require that the UK contribute to the EU budget, allow free movement of people, and follow EU single market regulations. A second scenario is a negotiated bilateral agreement such as the EU-Switzerland agreement. Though such negotiations are possible, they are highly complex and can take years to finalize. A third scenario is a World Trade Organization (WTO) Most Favored Nation (MFN) arrangement. In this scenario, the UK would be outside the customs union and thus subject to the EU's common external tariffs. Also, the increase in

nontariff barriers could be much larger due to the loss of access to the single market, particularly for services. However, these costs could be offset by regulatory reform in the UK over time, since the UK would no longer be subject to EU single market regulations.

Findings of Brexit analysis—The estimated effects of Brexit on the UK's GDP covers a broad range, from a 9.5 percent decline in GDP to a 4 percent increase in GDP by 2030 (see figure). Almost all studies estimate a negative impact on GDP over the long run, but a few analyses (that are affiliated with the UK Independence Party) find positive effects. The differences in these estimates largely stem from the different assumptions that are made regarding the future relationship of the UK with the EU and its impact on trade. However, some of this literature also examines channels of impact on the GDP other than trade, including migration, regulation, and fiscal or budgetary impact, depending on the scenario being analyzed. For example, Oxford Economics, a global advisory firm, examines all four channels to find GDP growth to be higher when there is more open trade with the EU, fewer restrictions on migration, more aggressive deregulation, and lower taxes. In particular, factors that influence the impact of Brexit on the UK economy include:

Trade—The vast majority of the literature—nine of ten studies—finds that the increased cost of trade through increased tariff and nontariff barriers with the EU and other former FTA partners after Brexit could hurt UK GDP. However, according to Minford/Economists for Brexit (2015) the EU is a protectionist customs union that erects a wall of tariffs and other trade barriers around its "single market" in agriculture and manufactured products, which raises UK prices in both sectors on the global market. Therefore, unlike other economists, Minford assumes that exiting the EU, as well as all other trade agreements, will lead to a drop in trade costs and result in the UK's GDP growth.

Regulation—Regulation is another channel addressed by most studies. Depending on the scenario, the degree of UK regulatory reform can differ. In the EEA scenario, the UK would stay part of the single market and maintain EU regulations. However, in the WTO scenario, the UK could change its regulations, such as on labor. Either way, most studies observe a small impact of regulation on GDP.

Migration—Free movement of people promotes growth and competition within the EU but also dictates the UK 's border policy. From a trade perspective, if the UK limited the free movement of people, the lower supply of labor might lead to a fall in productivity, reducing GDP. For example, PwC finds limits on migration could have a negative impact of 1–1.6 percent on UK GDP by 2030.

Fiscal—Under the WTO scenario, the UK is not likely to contribute to the EU budget. In its analysis, PwC suggests that half of the savings from the reduction in net EU budget contributions can be used for debt repayments, and the rest can be allotted as capital investment. In this scenario, PwC estimates the impact of the reduction in EU contributions on total UK GDP to be around 0.1 percent.

Sources: Bertelsmann Stiftung, "Costs and benefits of a UK exit from the EU," Apr 2015; Open Europe, "What if...? The Consequences, challenges and opportunities facing Britain outside EU," Mar 2015; NIESR, "The Referendum Blues: Shocking the System," Aug 2016; LSE and CEP, "The Costs and Benefits of Leaving the EU: Trade Effects," Mar 2016; NISER, "The long-term economic impact of leaving the EU," May 2016; HM Treasury, "HM Treasury analysis: the long-term economic impact of EU membership...," Apr 2016; Ian Mansfield, "A blueprint for Britain: openness not isolation," 2014; OECD, "The Economic Consequences of Brexit: A Taxing Decision," Apr 2016; Minford, "Brexit and trade: what are the options?" Apr 2016; Oxford Economics, "Assessing the economic implications of Brexit," Mar 2016; PwC/CBI, "Leaving the EU: Implications for the UK economy," Mar 2016.