

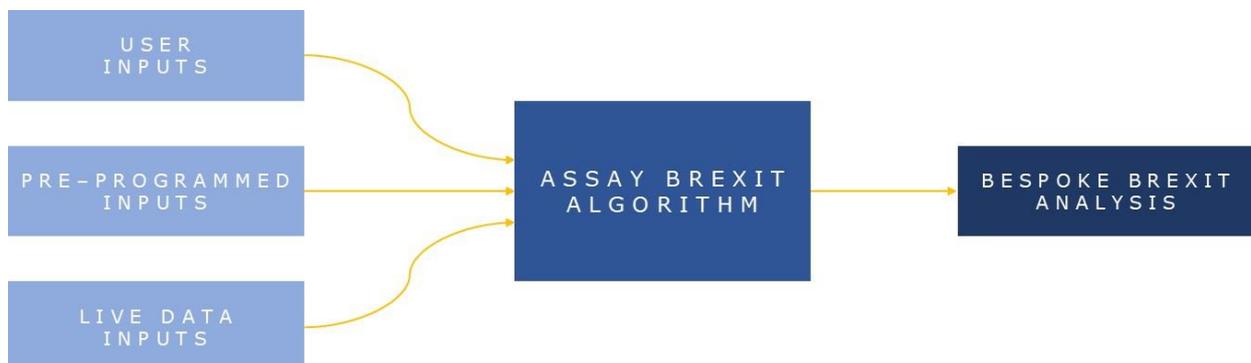


Assay's Brexit Algorithm

Assay's Brexit algorithm quantitatively analyses the financial impact of 6 different Brexit scenarios and the relative merits of different future business strategies. With an intuitive, fully interactive front-end that can be used to change the algorithmic analysis, it is a complete solution to navigating the Brexit uncertainty.

Algorithms Explained

An algorithm is a precise set of rules given to a computer to allow it to make calculations and process data. An algorithm typically performs a set of logical and mathematical operations on a set of inputs to produce a set of outputs. The Brexit algorithm understands how different businesses operate and uses this understanding to make decisions about the financial impact of various factors.





EU Relationship Models

HARD
BREXIT



- Norwegian Model
- Swiss Model
- Canadian Model
- Customs Union
- No Agreement

The analysis starts with developing models of the UK's future relationship with the EU. Some of the most talked about are the Norwegian Model, the Swiss Model and the Canadian Model. The different models see different levels of integration with the European Single Market and different national responsibilities.

Most recently, David Davis, the Secretary of State for Exiting the European Union, has talked about his ambitions for a "Canada Plus Plus Plus" deal for the UK. Whatever a "Canada Plus Plus Plus" relationship may look like, it would be overly simplistic to think

Europe's Ties That Bind

The U.K.'s plan to leave the European Union has focused attention on long-standing pacts that govern trade, immigration and the common currency

European Union

28-nation single market of free trade and shared regulation; includes "free movement" of goods, services, capital and people

Euro Zone

19 countries using the euro currency

European Economic Area

provides access to single market in exchange for payments; has "emergency brake" on free movement of people

European Free Trade Association

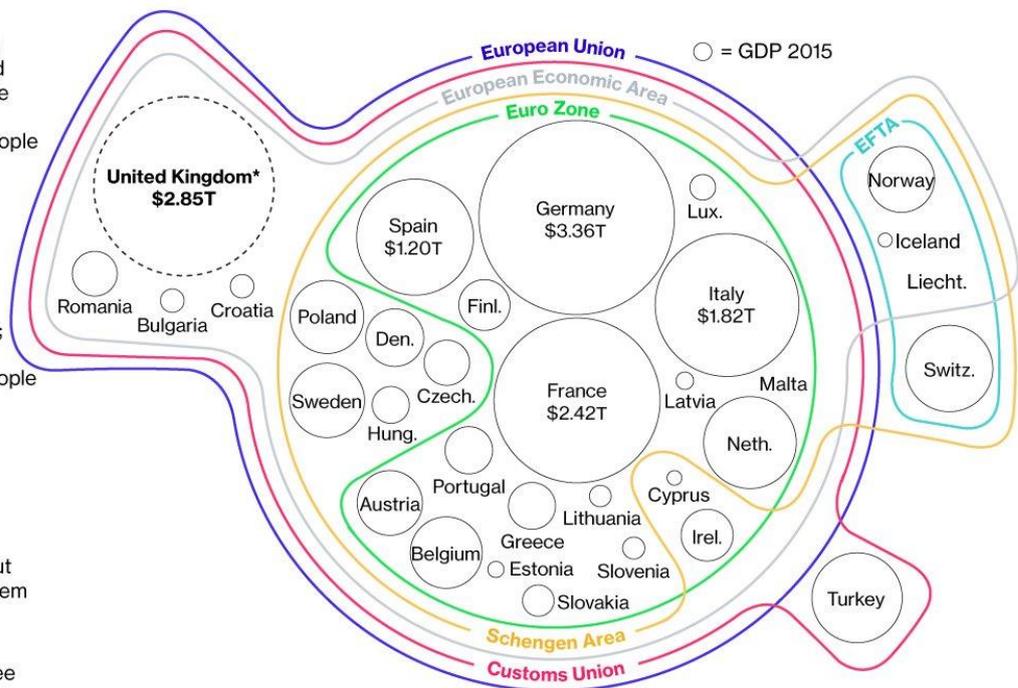
Free-trade zone and network of agreements with other countries

Customs Union

Circulates goods without duties, has uniform system for handling imports

Schengen Area

26-country passport-free travel zone



No GDP figures available for Liechtenstein and Malta. Channel Islands and the Isle of Man are part of the Customs Union (No GDP figures available). Sources: EU, ETRA, The World Bank.



about it as a close relation of the Canada model. Our analysis quickly revealed that the existing models of EU membership were insufficient for analysing the Brexit impact.

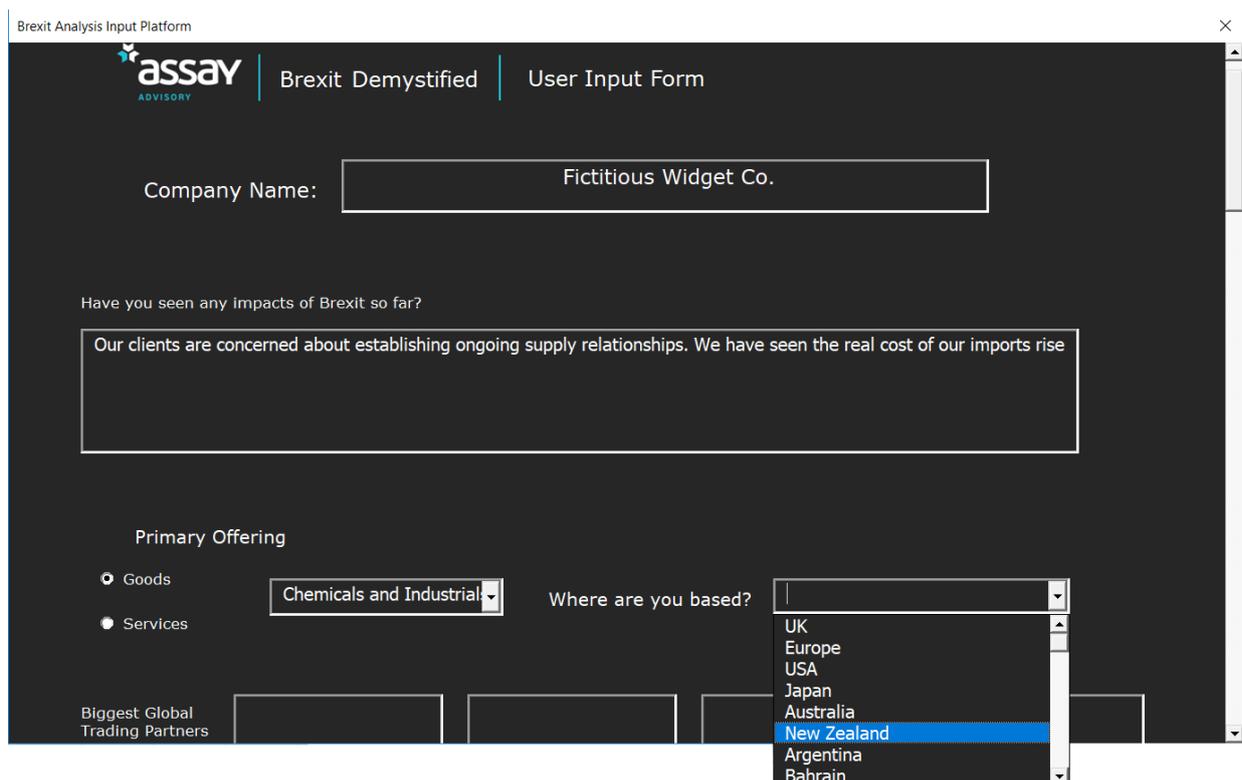
Assay's analysis takes the existing models of EU membership as a start point from which to build up an analytic framework embodying the key variables of an EU-third country relationship. The algorithm however, is programmed to analyse the Brexit impact of 6 key scenarios that are developed primarily using the laws codifying the EU-UK relationship as the variable metrics.

The Brexit scenarios modelled are flexible and draw on expert opinion and the algorithms quantitative analysis. They can be updated to reflect the individual thoughts of the model's user and then reverted back to the algorithmically developed scenarios with the click of a button.

Algorithmic Inputs

The algorithm's inputs are an income statement and high-level company operational information. From the high-level information and the income statement's global distribution the algorithm makes decisions about the impact of various factors and then quantitatively analyses those impacts. The algorithm's decision-making process is informed by extensive research and numerous computational feedback loops that have been built in during the algorithm's iterative development and stress-testing.

The algorithm's inputs are fed in through an easy to use input form.



Brexit Analysis Input Platform

assay
ADVISORY

Brexit Demystified | User Input Form

Company Name:

Have you seen any impacts of Brexit so far?

Primary Offering

Goods

Services

Where are you based?

- UK
- Europe
- USA
- Japan
- Australia
- New Zealand
- Argentina
- Bahrain

Biggest Global Trading Partners



Algorithmic Outputs

The algorithm's outputs can be broadly categorised into five key areas: exposure analysis, income statement analysis, cost change analysis, strategic recommendation analysis and a quantitative comparative summary.

Exposure Analysis

Use the Assay exposure surface to see the key exposures and opportunities faced due to the changing UK-EU relationship in different Brexit scenarios.

Income Statement Analysis

Graphical demonstration of the changes seen to revenues, expenses and profits under the 6 analysed Brexit scenarios.

Cost Change Analysis

The cost changes broken down and analysed in terms of their short and long-term impact as well as to what extent they may be addressed to ensure continued profitability.

Strategic Recommendation Analysis

A look at various ways the business could seek to mitigate any risks or maximise any opportunities presented by Brexit. The recommendations include analysis of numerous currency hedging strategies and a fully interactive platform where the end-user can explore the financial implications of pursuing various global business strategies.

Quantitative Comparative Summary

An intuitive visual to allow the end-user to compare the algorithm's outputs at a glance.

Interactivity

The Brexit landscape is ever-changing, with new information every day, one of the most common questions we are asked is "How can you possibly predict the outcome of Brexit?".





Our answer is simple: we are not trying to. Our aim is to provide businesses with all of the tools they need to understand the quantitative impacts of a range of possible Brexit scenarios.

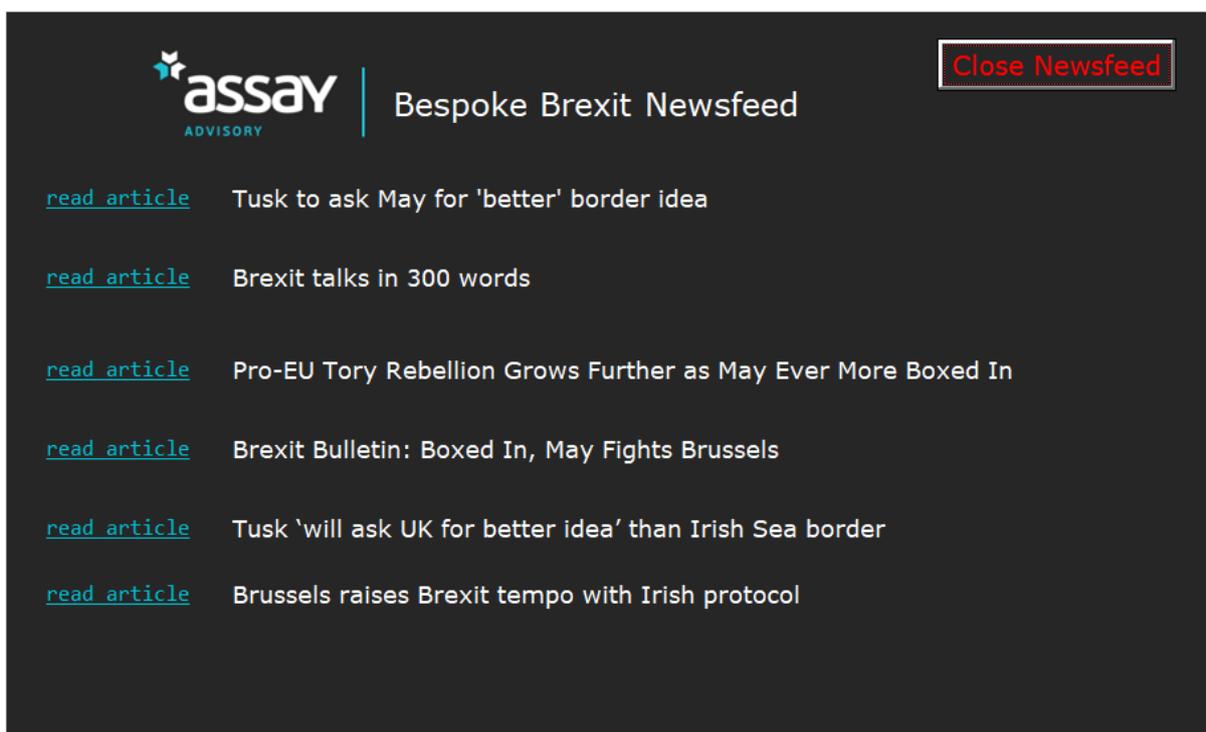
This is why it is essential that the algorithm's operation is fully interactive. End-users manipulate the algorithm through an intuitive front-end platform that allows them to explore a full range of Brexit outcomes. Through the interactivity, the analysis can maintain its relevance throughout the negotiations and act as a point of debate for those with different opinions over the shape of the UK's eventual relationship with the EU.

The interactive platform also provides a full global business strategy scenario modelling tool. End-users can explore the financial implications of changing how their business operates around the world.

Live Information Integration

The algorithm is also programmed to periodically scan the internet for live prices of different currencies, commodities and labour such that its analysis is conducted with the most up-to-date information and its outputs are accurate.

The algorithm also reads key news sources to suggest changes to its analytic process. The algorithm also uses its analysis to highlight key stories that may be of interest to the model's end-user. The bespoke Brexit newsfeed allows users to stay on top of the key developments that may affect their business.



The screenshot shows a dark-themed interface for the 'Bespoke Brexit Newsfeed'. At the top left is the Assay Advisory logo. At the top right is a red button labeled 'Close Newsfeed'. Below the header, there is a list of six news items, each consisting of a blue 'read article' link followed by the article title:

- [read article](#) Tusk to ask May for 'better' border idea
- [read article](#) Brexit talks in 300 words
- [read article](#) Pro-EU Tory Rebellion Grows Further as May Ever More Boxed In
- [read article](#) Brexit Bulletin: Boxed In, May Fights Brussels
- [read article](#) Tusk 'will ask UK for better idea' than Irish Sea border
- [read article](#) Brussels raises Brexit tempo with Irish protocol



Brexit Demystified

Brexit poses a period of protracted uncertainty that could be detrimental to UK businesses if they don't take a proactive approach to navigating the Brexit landscape. The uncertainty is two-fold, it exists around the shape of the UK's post Brexit relationships and around the financial impacts of those changes.

Assay's Brexit algorithm provides all the tools needed to shed light on the Brexit impact and then explore risk mitigation and opportunity maximisation strategies.

For more information please [contact Brett Stacey](#) or [register your interest](#) for one of our upcoming events.