PREDICTING REGULATORY APPROVAL OF EUROPEAN MERGERS & ACQUISITIONS

Project Proposal

Prepared for: Metis Staff Instructors: Rita Biagioli, Chris Bruehl

Prepared by: Rahul Raju

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EXECUTIVE SUMMARY

Opportunity

The landscape of corporate mergers and acquisitions is a high stakes game, with nearly 790,000 deals since 2000 valued at over 57 trillion. There are numerous obstacles to any deal, however, from shareholder approval to combative board directors. The greatest of these obstacles is approval from government regulators. Once a merger or acquisition is approved by both companies, any adverse rulings by governing authorities can result in significant cost to the acquiring company. These costs include wasted time, loss of focus from normal business operations, legal fees, repercussions from shareholders and damage to the reputations of management. Also, if a merger is denied, the acquirer will typically have a to pay a “break-up” fee to the target company. These fees can be extremely expensive, typically ranging from 100 million to 1 billion dollars. Being able to better predict regulatory decisions and the factors employed in making them would enable acquiring companies the opportunity to prescreen potential target takeovers and therefore avoid the cost associated with choosing poorly.

Impact

Companies involved in m&a transactions employ high powered law firms to guide them in navigating through legal and regulatory hurdles. With so much money at risk, law firms need as much information as possible in order to advise their clients as to the likelihood of a m&a approval. This advice can either come after an acquisition target has been selected or as part of a prescreening process of a list of potential acquisition targets. Providing clients with more insight as to which transactions would likely be approved would save acquiring companies enormously in the cost previously mentioned. Some metrics that can be used in measuring the success of such advice could include total break-up fees as a percentage of total proposed transaction volume, as well the number of companies that have either been approved or disapproved as a percentage of total applications.

Solution

A Classification algorithm could provide the ability to better predict wether an m&a transaction will be approved or not. Specifically, logistic regression would provide a scale that implies the likelihood an approval decision would fall into the approval or disapproval category. Certain features of all past regulatory m&a decisions could be used to determine what factors have had the greatest impact on their respective decisions. Some of these features would be items such as company and industry size, market share, number of competitors and each company’s respective home country.

Project Data

The Directorate-General of Competition's of the European Commission maintains a data set of all mergers and acquisitions decisions in Europe from 1990-2014. The set contains a total of 5,196 merger decisions, with 31,451 observations.

Website: https://www.diw.de/en/diw_01.c.670982.en/pages/research_data_center_for_business_and_organizational_data__rdc-bo.html#c_809915

Project Tools

Exploratory Data Analysis: Google sheets

Visualization: Tableau, Google sheets

Minimum Viable Product Vision

Components of a minimum viable product(MVP) would include;

1. A list of all selected target features and their coefficients
2. Visualizations of grouped features and/or their underlying distributions via Excel.
3. Dashboard of various visualizations via Tableau
4. Preliminary insights