What are you trying to do? Articulate your objectives using absolutely no jargon.

Many products are subject to trade restrictions either through sanctions, anti-dumping duties or tariffs levied by governments on countries and/or products. Our objective is to examine the impact of trade restrictions on trade rerouting; “a type of indirect exporting with a change of C/O[[1]](#footnote-1) illegally from the true originating country to a third country/region, often motivated by tariff evasion.[[2]](#endnote-1)” We focus on the US case for the period of XXXX-XXXX. We will use import/export data combined with tariff, export control regime, and sanctions data to uncover possible illicit activity where restrictions are circumvented by the re-routing of goods from restricted countries and re-export through third non-restricted countries.

How is it done today; what are the limits of current practice?

Export controls are typically enforced at the point of departure through the Certificates of Origin (C/O) process. Though the rules of origin, which regulate the issuance of C/O, are covered by some WTO agreements[[3]](#endnote-2), there remains large variances between the various governmental regulations [[4]](#endnote-3). These variances can be exploited to reroute the goods as an inexpensive means for avoiding restrictions. Such exploitations are recognized by exporting and importing countries alike. Recently, for example, the Vietnamese Ministry of Industry and Trade acknowledged that “The phenomenon of trade fraud through labeling of the origin of goods as being produced in Vietnam is increasing.[[5]](#endnote-4)” For its part, US Customs and Border Protection Agency launched investigations into such violations[[6]](#endnote-5).

What's new in your approach? Why will it be successful?

We plan to build a tool that visualizes the international flow of goods over time and the effects of trade restrictions by examining the multilateral changes in trade patterns between countries directly and indirectly. We will perform a network analysis to uncover possible rerouting activities and establish means for differentiating them from proper trade diversion effects (when increased domestic prices due to trade restrictions encourage more imports from third countries[[7]](#endnote-6).

Our tool will leverage the “Base pour l’Analyse du Commerce International” (BACI) database for import and export data. The BACI database performs a large amount of cleanup and reconciliation on the data from the UN COMTRADE database. Information on international tariff rates is available from and will be based on the World Trade Organization (WTO). Finally, sanctions imposed by the US will be based on data from the Bureau of Industry and Security (BIS).

We believe that our approach will be successful because despite that the effects of trade restrictions on bilateral trade is well researched and documented[[8]](#endnote-7) [[9]](#endnote-8) [[10]](#endnote-9), and though “anecdotal evidence has appeared in the news,” there is not “a research paper that systematically studies these [rerouting] kinds of evasions.[[11]](#endnote-10)” Yet all the data necessary to perform such analysis, from global imports and exports from (1995 - 2017), to international tariff rates to US sanctions, are readily available.

Who cares? If you're successful, what difference and impact will it make…

First and foremost this tool aides governmental efforts to enforce trade rules and restrictions, whether in the form of restricting flow of sanctioned goods or collecting higher (more accurate) tariffs. Depending on the scale of illicit activity, congress could be interested in investigating the phenomenon and the tool could be used to help shape new laws and regulations preventing such behavior.

The tool would also enable business executives to make better informed decisions and mitigate risks associated with their supply chain. Though research suggests that tariffs up to 100% can be passed on to customers, higher costs associated with tariffs are a competitive disadvantage. Two of the possible long term solutions available for executives are localization - bringing their supply chain home - or relocation - moving their supply chain to another foreign country. Both alternatives require significant investments. If nefarious actors can cheaply circumvent trade barriers by rerouting goods through a third - exempt - country, this can significantly distort the investment calculus. On the other hand, there is a high likelihood that restrictions are eventually levied on a country that is commonly used as an avenue for trade rerouting. Hence, relocating to such countries entail higher risks even if these countries enjoy true competitive advantages.

Finally, this tool can assist research efforts into international trade in general and in restriction evasion in specific. This tool will provide insights into the dynamics of changes in the balance of trade between countries, and how much of it can be attributed to economic fundamentals and how much of it is due to trade policies.

… and how do you measure them?

We can measure this by the evolution of balance of trade between countries over time and correlating it to specific trade policies (sanctions, anti-dumping duties and tariffs).

What are the risks and payoffs?

The payoffs are better enforcement of international trade policies and deterrence of nefarious actors circumventing trade restrictions. This should improve the effectiveness of the larger economic objectives these trade policies were meant to achieve, or - at a minimum -  generate more revenues for governments. Another payoff is mitigating the risks of supply chain investments by companies associated with trade restrictions.

The main risk associated with this project is the integrity of data. Trade data is primarily self-reported and it is not unusual to find discrepancies and inconsistencies between import and export records.

How much will it cost?

The trade flow data is currently an open source dataset under the CEPII data program. This organization gathers and harmonizes data from different sources to produce a database that can fuel insights on the world economy flows. Under the open source data set clause, this information is free of charge. Other secondary data sources such as BLS and US Census that our team plans to use are also free of charge.

How long will it take?

This project will take around the maximum allotted time at 6.5 weeks. During this time period, we are planning to leverage an AGILE approach to this project by splitting work into 1 weeks sprints beginning the 2nd of March. These one week sprints will have clear targets and goals that every team member will need to hit for the project to stay on track for the deadline. At the end of every sprint, we will have a check in to report back the work that has been completed and any impediments team members might have come across.

What are the midterm and final "exams" to check for success? How will progress be measured?

To ensure we are tracking in the right direction, we will leverage the weekly check-ins to make sure we are hitting key milestones to keep our project on track. In addition, we will use the progress report due date,Fri, Mar 27, as our midterm check. Using this date will put us about half way to our official project deadline. Our final check for success will occur on our last sprint week, April 13-17. During this time we are planning to be in the final checks of our project.

The anti‐dumping data are from the Global Antidumping Database (GAD; Bown, 2010), available through the World Bank Temporary Trade Barriers Database (TTBD).15 GAD covers more than 30 anti‐dumping‐using countries from the 1980s through 2015 (as of February 2017). In the GAD

1. Certificates of Origin [↑](#footnote-ref-1)
2. Anti‐dumping duty circumvention through trade rerouting: Evidence from Chinese exporters [↑](#endnote-ref-1)
3. <https://www.wto.org/english/news_e/news18_e/presentation_1_wto_relevant_wto_provisions.pdf> [↑](#endnote-ref-2)
4. <https://www.wto.org/english/tratop_e/roi_e/roi_info_e.htm> [↑](#endnote-ref-3)
5. Yap – WSJ - 2019 [↑](#endnote-ref-4)
6. <https://www.cbp.gov/sites/default/files/assets/documents/2018-Nov/Notice-of-Investigation_Interim%20Measures-Final_Signed-PV.pdf> [↑](#endnote-ref-5)
7. Bown, C. P., & Crowley, M. A. (2007). Trade deflection and trade depression. Journal of International Economics, 72, 176–201. https://doi.org/10.1016/j.jinteco.2006.09.005 [↑](#endnote-ref-6)
8. Besedes, T., & Prusa, T. (2017). The hazardous effects of anti‐dumping. Economic Inquiry, 55(1), 9–30. https://doi. org/10.1111/ecin.12345 [↑](#endnote-ref-7)
9. Durling, J. P., & Prusa, T. J. (2006). The trade effects associated with an antidumping epidemic: The hot‐rolled steel market, 1996–2001. European Journal of Political Economy, 22(3), 675–695. https://doi.org/10.1016/j.ejpoleco. 2005.08.006 [↑](#endnote-ref-8)
10. Lu, Y., Tao, Z., & Zhang, Y. (2013). How do exporters respond to antidumping investigations? Journal of International Economics, 91, 290–300. https://doi.org/10.1016/j.jinteco.2013.08.005 [↑](#endnote-ref-9)
11. Anti‐dumping duty circumvention through trade rerouting: Evidence from Chinese exporters [↑](#endnote-ref-10)