1)

How does market competition affect drug pricing?

2)

I have so far found three studies that closely relate to my topic. The first of these is a case study by Granlund and Bergman (2018) of 1303 Swedish pharmaceutical markets. It looks at the reaction of drug prices to the introduction of large amounts of generic brands and how the prices are affected in the long and short terms. This paper helps to provide a fundamental background and understanding of how competition affects the industry. They find major decreases in price for generics as more are introduced and significant, but less drastic, changes to the price of the original drug as well. A second paper that I looked at is specific to mergers and their impact which is something that I am interested in exploring. Gagnon and Volesky (2017) look at the changes in trends of pharmaceutical mergers and see that as 2017 approached, more and more mergers were occurring in the industry. A major limitation is that this study only looks up to 2017 and does not specifically identify correlations between mergers / market shares and outcomes like price which I would like to do. Finally, I looked at a working paper by Conti and Berndt (2014) that investigates the relationship between loss of patent and drug prices. They find that drug prices fall differently after generic entry based on the type of drug, and also that name brand drugs actually have an increase in price after generic entry that likely is meant to cater to brand loyal customers.

3)

Some of the data that I will need and attempt to gain access to is information on mergers in the pharmaceutical industry which I would look to obtain from a governmental organization like the FTC or SEC as I would be more likely to be able to obtain it without licensing than with private

sources often used in papers like the ones discussed above. For drug prices and patent information, I would like to use an FDA or CMS database to avoid subscription conflicts as well.

4)

The closest study to my idea is the Granlund and Bergman (2018) case with Swedish markets. They utilize a partial adjustment model to emphasize their focus on the short vs long run changes to drug pricing with the introduction of generics. I am more interested in the causality of shifts in drug prices are with respect to market share, patent expirations, and mergers, so I will most likely look to use a simpler model that will emphasize that such as a panel regression or a diff in diff for specific cases of large mergers that may be interesting to look into more closely.

5)

My desired contribution is that I will be able to generate empirical study on the effect of the mergers outlined in the Gagnon and Volesky (2017) paper, while also incorporating patent expiration to provide a more complete picture of what causes shifts in drug prices. I will likely tweak my question slightly and potential contribution as I continue to dive deeper into research and better understand the data that I can collect.

1)

How do changing geopolitical factors affect asset prices globally?

2)

I think that there are four research papers that play a large role in the answering of my question that fall under two main ideas: economic policy's effect on stability and political conflicts on commodity pricing.

With the first idea, Beltratti, Bortolotti, and Milella (2007) look into the idea of a firm's stability based on changes in governmentally controlled economic factors and create a metric to measure the magnitude of the effect of governmental changes on a firm. I likely can not access their data as it takes into account individual level data on private firms that I would be unable to locate. Additionally on this idea, Baker, Bloom, and Davis (2016) create a means to measure how uncertainty within an area affects the stability of regional markets. These two papers in conjunction form a good basis on how political changes and instability may affect financial variables in a region.

With respect to the second idea, Abadie and Gardeazabal (2003) perform a case study in the Basque Country in Spain which underwent a terrorist conflict. They compare the economic and financial performance within the region with relation to otherwise similar places not actively engaged in a terrorist conflict. Their overall findings display the correlation between political unrest and negative market effects. Another paper by Brückner and Ciccone (2010) looks at the idea from the opposite angle. They perform a case study on conflicts in Sub-Saharan Africa and how civil war outbreaks relate to commodity pricing. They find that high volatility in asset prices leads to civil unrest within many of the highly resource dependent countries in this region. With both of these papers, the specificity of the case studies and their data would be difficult to utilize

and apply to a grander scale; however, the ideas are relevant to form the foundation of a thesis.

3)

The data that I have readily available is split between three categories: asset prices, geopolitical factors, and controls. For asset prices, I would use a stock tracker such as yahoo finance or bloomberg to take data on regional stock indices and I would use the world bank data on commodity prices. For geopolitical factors, I would use data on casualties of war, trade restrictions, and changes in leadership which can be found on websites such as correlates of war, world trade organization, and polity. For controls, I would use basic macro data from each country sourced from FRED.

4)

The paper by Abadie and Gardeazabal (2003) is very closely related to the research that I would want to conduct. They use a diff-in-diff approach. They are looking to compare the changes in a control region that does not undergo conflict and compare with a treatment region that does undergo a conflict. I think that this is a very strong way to approach this, but if I pursue this research question, I would be interested in finding a more robust conclusion using a panel-VAR analysis.

5)

My contribution would be creating a very robust study across many different countries and regions that tracks asset pricing with respect to political events. There is a lot of literature that operates with case studies in specific regions, but my attempt would be to find conclusions that can be applied much more generally and potentially at a global scale.