Attendance:

• Ross Rutledge, Alex Nongard, Susan Singer, David Hixson, Ashlie Tarpley, Bill MacLeod

Ross:

• We're trying to assess the competitive landscape of various markets.

Susan:

- There are two sides to this the firm side and the consumer side. The consumer side may drive firm behaviors.
- Consider: what are the products or services, and then what are the substitutes for those products?
 - Ex: when a consumer is getting a mortgage, what are the consumer's options?
 - Going to a local bank vs. rocket mortgage vs. etc.
- Questions like these get get very, very broad. Too broad for you to do a full competitive analysis of a whole market, let alone multiple.
- Consider bundling in a market
 - Overdraft is innately bundled with having an account.
 - Maybe this matters for assessing competition in your model, or maybe it doesn't. If it does, how and why?
 - A telecoms example: bundling cable services with internet services. It's not a la carte channels, it's all bundled together.
 - What is that bundle competing with? Do other companies have a similar bundle? Or are they all heterogeneous?
 - Are there marginal cost savings for the telecom? If so, are they passed on to the customer or not? Necessary to assess player power.
- For you, I would start with very broad strokes:
 - What specific products in what markets am I interested in?
 - Then, who offers the product or close enough substitutes that the consumer might consider buying it?
- Doing an empirical exercise for one full market would be a huge endeavor multiple would be impossible at this point.
 - Ex. What is a bank? What services do they provide? Who do they compete with? Wells
 Fargo may exist in hundreds of different markets, each of which they have different
 power and concentration in with different players. Each of these markets behaves
 differently. Can't do a whole 'banking' sector analysis at this level.

Ross:

• Do you have thoughts on lit reviews on this subject?

Susan:

- It's worth a look, but I'm not sure how much you'll find.
- It may give you insights into how parts of each market function.
- We just put up a paper on auto loans this includes helpful background details on the market that
 make it understandable for doing this kind of exercise (Located in Research Docs/Competitive
 Markets folder of the Z: drive).

Ross:

 You seem to think that doing a hypothetical full market test is very involved and would take many more resources than we have. Correct?

Susan:

- Yes for sure, but you could approach it in a softer way. You might look at a specific product type for a specific type of customer.
 - Ex. Mortgages for subprime borrowers what do their market options look like? Different than superprime.
 - VA mortgages for subprime borrowers even more niche but a more definable market boundary.
 - Jumbo vs. conforming loans for a certain group

Ross:

• So we could look at variance in competitive conditions by consumer segment.

Susan:

- Think about these things and how choice sets are restricted. Make some decisions on what you
 want to pursue and then analyze. You won't be able to do it for a whole market let alone all of
 them.
- Do this where your concern is greatest.
- In some telecoms mergers, we focused hard on specific products, like lifeline telephone service.
 When the only two providers merge, or if there's only one provider who is getting acquired, how does that affect things?
- It's perfectly normal to aggregate segments of interest up.

Ross:

• Can you recommend resources on court cases or standards/estimates of concentration/power set there?

Susan:

- Yes, look at DOJ. They do a nice short expose of the market, with definitions, geography, product, etc. and define the problem.
- You will never get the data you need to calculate HHIs or concentration measures.
 - If you define a broad market, you've got public and privately traded firms. You can get numbers for public firms, but you likely can't get anything on private firms.
 - If they're private (like debt collection firms), you can't get the numbers you need.
 - Variance by geography really matters you can't get info to compare Wells Fargo with a community bank.
 - It's extremely difficult to understand and compare market share at geographic regions lower than nationwide.
 - If they're all public and nationwide, then that's perfect, go for it.

Ross:

• If we can't do HHIs or concentration ratios, what could we do?

Susan:

- You could do a 4-firm concentration ratio. Take the four largest firms and calculate it. They're more likely to be publicly traded and nationwide this information will tell you something.
- For mortgage, our HMDA data has geography, bank, number of applications and number of originations.
 - Doesn't tell you anything about servicing tho. We have no data to help you on that.
 - This is your best bet to get a share in the applications/originations markets

- You must figure out who is an affiliate company you otherwise will think you're in a much less concentrated market than you are.
 - Looking at manufactured homes You must roll those affiliations up and decide if they're attributable to one player or not.
 - HMDA affiliate flag criteria might not be the most appropriate criteria for a concentration assessment.

Ross:

• How do you decide if a market looks concerning to you?

Susan:

- Take a concentrated market. We ask: is the concentration normal because of the inherent nature of the market itself? If not, why aren't there more firms?
 - High sunk costs like physical/regulatory/brands/advertising/etc. all play a role
- Next key question what about entry or exit into the market?
 - o Has there been exit recently? Why?
 - Mergers?
 - Going belly up / can't turn a profit?
 - Economic downturn?
 - If no, what about entry?
 - Foundational in antitrust is entry possible?
 - To what extent is entry possible?
 - What are the burdens? Cost, infrastructure, regulatory hurdles, etc.
 - Collusion with other firms to foreclose entry?

Ross:

- In the credit markets space, are you aware of any anticompetitive behavior that you can flag?
- Any raising rivals' costs?

Susan:

- Certainly credit unions have a view that regulations are disproportionately burdensome on them. They claim they're anticompetitive, but who knows?
- We see the innovation space as interesting here with disparate financial products, we see the
 rise of apps like Mint that tie everything together for consumers. This requires consumers to hand
 over credentials so that the apps can scrape the screens once they log on. This is a huge
 cybersecurity issue, so some service providers don't allow it. Instead, they make the apps sign API
 agreements to get consumer permission for data without the password collection.
- However, now banks are getting together to create their own apps to manage this finance.
- So now if banks have agreements with individual app providers to access the data, banks might have incentives not to let the app connect if independent apps are a competitor to the bank's app.
- Watch and read content from the Symposium on access to consumer financial records held earlier this year for more:
 - https://www.consumerfinance.gov/about-us/events/archive-past-events/cfpb-symposiumconsumer-access-financial-records/

Ross:

• It seems like you're saying that banks might be concentrating in certain industries in a certain way to exclude smaller banks and credit unions or financial providers.

Susan:

- Yes. If consumers actually shopped, or just shopped on price, this would be fine. Competition would restore itself. But consumers don't shop, and they don't shop on price.
- They find value in relationships, trust, ease of doing business, etc.
- We have another paper on competition in mortgage market shopping that you can see (Located in Research Docs/Competitive Markets folder of the Z: drive).
- Plus, there are issues around switching costs.
- Firms closely study search and switching costs to customers to take advantage of consumer inertia.
 - Lawrence Ausubel "The Failure of Competition in the Credit Card Market" paper in AER on consumer credit card costs is very helpful (Located in Research Docs/Competitive Markets folder of the Z: drive)

Ross:

• Are you aware of licensing or certification requirements that might reduce competition in various jurisdictions?

Susan:

- Title insurance is regulated at the state level, and there are varying regs and requirements about that.
- In some places you don't have to have a license or anything, you just get registered by a company.
- There are only 4 major firms actually providing title insurance. A series of mergers in the 1990s made this happen.
 - There are thousands of title insurance 'agent' companies, but they all work for top 4-5 companies.
 - They're all affiliates
 - Can share a public source for market shares for this market.
- IL has no licensure requirements, KY has a robust class certification thing.
- We can set you up with Chuck Romeo, an OR Economist, to talk about variance in bankruptcy laws tied to debt collection (*Dave also worked on this, talk to him first*).

Ross:

• Are you aware of any research on how competition affects price/quality/quantity?

Susan:

- That would be extremely hard to disentangle. I don't think you've got the time to try to figure it
- You could just look at prices across borders and do a diff in diff regression for something super rough.

Susan:

- TV competes only on price. Wireless competes on everything.
- FCC has a statutory report on competition on wireless pricing.
 - ATT with iPhone exclusive not competitive at all.
- Airlines once competed on amenities, but now solely on price
 - o Tons of literature on this
 - Tons of literature on airline mergers too

Bill:

Have you seen any competitive concerns in credit reports or credit scores?

Susan:

- I don't think I've heard or seen anything on lack of competition. Mostly I see dissatisfaction complaints rather than direct complaints about competition.
- I don't know a lot about the furnishing side of things, but we connect you with people to talk about this.
- With the three bureaus, I've never heard anyone talk about it being anticompetitive.

Bill:

- One of the reasons FICO is so large for credit scores is that Fannie and Freddie required them until recently.
- FICO claims to produce scores for 90% of all credit applicants
- We know other companies and other bureaus create their own credit score (i.e. Vantage)
- How does FICO stay in that dominant position?

Susan:

• It might just be brand recognition. FICO is synonymous with credit score. People don't realize there are alternatives.

Bill:

• For a sophisticated customer, I wonder why, if Experian offers a better price, they don't jump ship entirely to Experian.

Susan:

- Maybe the most sophisticated user will look at more than FICO, but who knows?
- Then we also get into the realm of alt data, which adds even more layers.

Bill:

- It might be a good idea to do a side-by-side look at two states in one market, like KY/IL in title insurance like Susan mentioned.
 - Are there more agents? Less overhead?
 - What are the changes in outcomes?

Susan:

- I've spent most of my time looking at IL.
- Most of the title agents in IL are attorneys working the closings
- There may be issues with real estate companies using affiliated title insurance companies and cutting out some folks from the market.
- There's a market share grab by the title insurance companies.
- IL ALTA (American Land Title Association) is now proposing that they create a rating bureau that they would run themselves.

Bill:

• Are there public reports on this?

Susan:

• Yes, and I'll be happy to send them. (Located in Research Docs/Competitive Markets folder of the Z: drive)