Network Industries, Spring, 2014 Exam No. _____

Question 1: Key Missing Issues

Issues and Points: 39 point baseline (40 max) 39

1. **Failure to address ("FTA") multi-sided market characterization of credit card processing industry** (credit card processing platform ("CCPP") consisting of stripes and card readers (point-of-sale terminals ("POSTs")) will sit between credit card issuers, on the one hand, and merchants, on the other): **-3**	
2. **FTA standardization questions on stripes and POSTs** (we are told stripes is a small N situation but not told anything directly on the need to have a single stripe technology; the number of stripe technologies matters for how that alters the POSTs; having multiple POSTs, one for each stripe tech, would be expensive and would consume a great deal of space; having a multi-stripe POST, we are told, raises costs relative to a single-stripe POST): **-3**	
3. **FTA desired scope of competition in standard setting** (given the above, this is a natural situation for an effort at private standard setting; we frequently see private standards created to support particular industries; we don't have full information here on the trade-offs between limiting competition and allowing the group to choose a single standard (loss of diversity in magnetic stripe tech) vs reduced installation costs from having single stripe POSTs): **-3**	
4. **FTA comparison to DVD standard setting letters** (DVD process was about blessing patent pool and that isn't raised in this question; DVD letters left open the question of the choice of the format itself and that is really the issue raised in this question; the different stripe technologies look like direct substitutes and the DVD pool letters focused on not allowing substitutes to limit competition through the pools): **-3**	
5. **FTA comparison to DTV process** (FCC blessed a private standard for DTV; given the role of the federal government in the payments system could imagine that CCPP would seek fed blessing to minimize potential antitrust issues from standard setting): **-2**	
6. **FTA CCPP access issues** (we need to make some guesses here about the likely dynamics of coalition formation just as we did in discussing the *SONAT* example; one strong possibility is that the three general purpose credit cards ("GPCCs") would have a shared interest in excluding the single-merchant credit cards ("SMCCs"); those cards compete with the GPCCs and the GPCCs would like to limit that competition and a natural way to do that would be by denying the SMCCs access to a new CCPP; the standard setting materials make clear that governments will focus on access issues to essential standards and will look for access controls ala FRAND and RAND to make sure that other firms are not disadvantaged by the new standards; SMCCs will seek to treat CCPP as common carrier, but CCPP will claim not offering a telecommunications service but instead just an information service ala *Brand X*; this could be spot for new congressional interconnection regime but new laws of this sort come slowly): **-6**	
7. **FTA data processing center design issues** (very little information here; we don't know enough about the technical scale issues of the systems to know how many we could support; as to detecting fraud—the purpose of the centers—there could be real advantages to having a single database though that could raise many other issues (privacy and the like): **-2**	
8. **FTA access issues for CCPP to underlying telephone network** (the CCPP would want to rely on the existing telephone infrastructure for communications between a POST and a credit card data processing center; that would mean either negotiating for access contractually, as we saw at early stages of cable industry (pole attachments material), express companies and railroads or in data roaming; could seek to claim that the phone network has common carrier obligations re CCPP; that is always tricky; *Express Cases* suggest that those are hard to find and definition in telecommunications act is self-referential (circular); different approach would be to try to take advantage of access rules under 1996 Act (assuming something like that existed in the early 1980s): **-5**	
Total Deductions	

Additional Points	

Final Score	

Question 2: Key Missing Issues

Issues and Points: 29 point baseline (30 max) **29**

1. **FTA two-sided financial structure of modern virtual communication networks** (key distinction between traditional physical networks like the telephone system and Google/Facebook/Twitter ("GFT") is that telephone system charged cash prices to users, while GFT charge zero cash price to consumers but make them consume ads, while cash prices are charged to advertisers): **-3**	
2. **FTA natural monopoly status of GFT** (no info in problem, but we should understand that we need to distinguish natural monopoly question on consumer facing part of the market from that on the advertising side of the market; on that side, GFT are competitors and compete with many other forms of advertising; on the consumer side, natural monopoly characteristics easier to see: as to F and T, connected individual want to be on same platform as other connected individuals; friends need to exit as a group but can't exit easily individually and remain connected; F and T are probably consumer competitors but not clear how much switching between them we see rather than multihoming but seemingly a small N situation; as to G, search learning algorithm may benefit from search volume (the more link clicks seen the more G understands) and that may push towards sustainable advantage over competitors): **-6**	
3. **FTA communications principles seen in post office and DTV materials** (both of those materials emphasize universal communications and making sure that basic tools of communication are widely available; that goes to possibilities raised by GFT making independent and unreviewable decisions to exclude individuals from participating on their platforms; also see explicit and implicit subsidization of news as an important tool for an informed democracy; fear is that subsidy between news and GFT is currently running the other direction) : **-4**	
4. **FTA issues raised by net neutrality (open internet) materials** (these materials emphasize two ideas that cut in different directions here; first, GFT are currently edge providers and face ways in which they could be blocked from the network or forced to pay for higher priority; the integrated phone system of the 1920s didn't face anything like that; but second, and this goes the other way, the NN materials emphasize the generative capacities of open platforms for other businesses and GFT currently have almost unbridled authority to block other businesses that want to interconnect with their platforms; GFT can use that control over interconnection to advantage their own products): -6	
Total Deductions	

Question 2 Additional Points	

Question 2 Final Score	

Question 3: Key Missing Issues

Issues and Points: 29 point baseline (30 max) **29**

1. **FTA vagueness by Congress** (many of the core concepts that we saw all quarter are quite vague and undefined; that starts with the constitutional framing we saw in *Smyth* (though Congress can't be blamed for that), but it is also true of the just and reasonable framework that permeates the course (in telcom, in electricity and elsewhere); the role of "necessary" and "impair" in the 1996 telcom act): **-4**	
2. **FTA vagueness and grand visions at state level** (we saw similar levels of vagueness at the state level (fair returns in the *Thornburg* cases) and the California electricity reform (AB 1890) is key example of a grand vision without any real guidance as to how it might be accomplished): -4	
3. **FTA inevitable complexity** (the evolution of the Supreme Court doctrine on constitutional protections is a good example of this; *Smyth* made sense on paper and turned out to be almost impossible to implement in practice, hence the evolution of the doctrine and the abandonment of a particular test; the price cap regulation was another example where the regulation constantly changed given the ways that the regulators seemed to misunderstand how the industry would evolve in response to the new regulatory structure): **-4**	
4. **FTA address incentives to resist changes** (the decade long fight over the unbundling provisions of the 1996 telcom act is a good example of this resistance; given the money at stake and the way in which the incumbents perceived TELRIC, the incumbents had strong incentives to resist change; and we are in the middle of a similar arc on the open internet provisions): **-4**	
5. **FTA pace of technology and what that means for regulators** (regulators certainly need to be sensitive to how tech is changing as they are regulating; perhaps the FCC has done that reasonably effectively—meaning they accomplished what they sought to accomplish—as the mobile market has shifted from a voice-dominated system to a data-dominated system (*Cellco*) and there are ways in which the price cap strategy worked, given the industry collective action problems, though whether that was luck or strategy is hard to know): **-4**	
6. **FTA overall utility of policies in these areas** (yes there is lots of legal churn here, but that isn't surprising given that we have political actors at work (Congress and state legislatures), a complex and changing technological and economic environment, and regulatory learning in complex areas; given the stakes for the public, even given the genuine mistakes, it is hard to imagine abandoning regulation in these areas): **-2**	
Total Deductions	

Question 3 Additional Points	

Question 3 Final Score	