Ondrej Vychodil's Dissertation

Overall, I thought that the dissertation is very promising and definitely deserving of a Ph.D. after some revisions. Chapter 1 seems in good shape, but Chapter 2 needs some substantial revision and Chapter 3 also seems rather rough. See the specific comments.

Chapter 1:

This chapter examines how bankruptcy law affects entrepreneurs' incentive to engage in risky investment projects when their firms may go bankrupt. The idea is that bankruptcy law can be either soft or tough—in the latter case equityholders receive no payment in bankruptcy unless creditors are fully repaid, while in the former case, equityholders get something even though creditors are not fully repaid. This is a well-known problem, but the authors have a somewhat different take on it. In particular, they analyze an asymmetric information model in which lenders finance a project in period 0 and entrepreneurs receive a signal concerning whether the project is good or bad in period 1 (lenders don't receive the signal). Entrepreneurs then decide whether to liquidate the project or continue it until period 2, where the first-best outcome is to shut down projects that receive a bad signal and continue those that receive a good signal. However entrepreneurs may choose to continue projects that receive bad signals and creditors can't stop them because they don't know the signal. In period 2 if the project continues, it either succeeds or fails and, if it fails, the bankruptcy rule is applied. The loan terms are set such that lenders always make zero expected profit. The authors show that if entrepreneurs and lenders can contract in advance on the bankruptcy procedure to be used, then the outcome is economically efficient, meaning that lenders lend the efficient amount of capital and entrepreneurs make efficient liquidation decisions in period 1. But if bankruptcy law is exogenously determined and fixed, then outcomes are inefficient both because entrepreneurs sometimes continue projects that receive bad signals in period 1 and because lenders may not lend the economically efficient amount of capital.

The framework differs from that of Povel by eliminating an effort-level decision by entrepreneurs, and by making the size of the project variable. But I wasn't sure how the model relates to the paper by Bebchuk, which gets some of the same results in an even simpler framework without asymmetric information. There are also some papers on bankruptcy contracting by Schwartz and others—see my Handbook of Law and Economics survey of bankruptcy law for references. Some of Patrick Bolton's papers may also be relevant.

One issue is the assumption in the paper that investing more capital in the project has decreasing returns, so that part of the problem becomes whether the efficient amount of capital is invested in the project. I thought that the assumption of decreasing returns was implausible, since it ends up implying that the efficient bankruptcy law depends on whether projects are big versus small. I wondered if the basic results/tradeoffs of the

model would be retained if the amount of capital needed for the project was assumed to be fixed rather than variable or if the diminishing returns assumption was dropped. Doing this would make the model clearer and more intuitive.

The paper is too long and the results aren't explained as well as they could be. For it to become a publishable journal article, it needs to be shortened and the explanations need to be improved. The figures should be combined. The propositions should be explained intuitively, rather than just presenting the mathematics. Rather than giving many results, the paper should focus on the one or two most important results. Proofs except for the most important ones should be put in an appendix. It would also be helpful to present an example or two, rather than a full simulation. The example should illustrate both the efficient and inefficient results by varying just one parameter. The verification results aren't very helpful, since getting rid of asymmetric information always improves efficiency.

Chapter 2:

This chapter estimates an empirical model of the duration of bankruptcies and how it depends on local unemployment. I like the hypothesis being tested—that bankruptcies last longer in areas with higher unemployment. But the paper needs a lot of clarification—it's unclear whether the data is panel data or a single cross-section and the discussion of the estimation method is very vague. If a single cross-section is used, how is the unemployment rate computed? Also, I wasn't sure if firms in bankruptcy were always in operation—alternately they might have already shut down. Using equity as a measure of firm size seems very problematic for a sample of bankrupt firms, since firms are selected because they are losing money. These issues need to be resolved before readers will believe the results.

Specific comments:

Is there a way to distinguish empirically between courts keeping failing firms in operation because of a bias in favor of workers versus in favor of equity and managers?

p. 62-63. The description of the law is confusing. During the bankruptcy procedure, do all firms continue to operate or are they in the process of shutting down or could they have already shut down? (In the US, most small firms that enter bankruptcy have already shut down.) Do they pay any of their debts during bankruptcy (such as secured debts)? Do firms ever continue operating after bankruptcy ends, i.e., reorganize? Are the firm's assets liquidated during the bankruptcy procedure? Does partial liquidation ever occur, with part of the firm continuing? What happens to old managers during the bankruptcy— are they always replaced by the trustee?

p. 67. Equity is a pretty bad measure of firm size, since large firms can be unprofitable and v.v. Also, all of these firms are in bankruptcy, so that they should have negative

equity. This means that the equity measure is likely capturing something other than size. Would it be possible to get number of employees from some other source?

p. 68. Is the data a panel? Are the observations yearly? For individual firms, do you know if the firm is still operating at a particular date? This section needs to be explained much more clearly. Also, how is censoring dealt with (there is a lot of right-censoring)?

It would be a good idea to select only those firms that are still in operation during bankruptcy for the estimation. Many of the firms in the sample have probably shut down.

p. 69. I didn't understand (2.3). Does this mean that firms that eventually liquidate remain in bankruptcy longer?

p. 70. It would be good to reduce the number of tested hypotheses and concentrate on just the hypothesis that bankruptcies last longer when unemployment is higher.

There is a nice article by Weiss and Wruck in JFE on Eastern Airlines, which is the bankruptcy case in the US that is associated with the waste from inefficient firms continuing to operate in bankruptcy for a long time.

Chapter 3:

This chapter pursues a somewhat quixotic topic for a dissertation, a kind of interpretive survey of the literature on corporate bankruptcy. The idea is to survey all of the objectives of bankruptcy and put them into a single framework. But the survey doesn't cover all aspects of bankruptcy law that are part of the framework given at the beginning of the chapter—it mainly focuses on ex ante inefficiencies and neglects ex post inefficiencies such as the reorganization versus liquidation choice. Does this mean that the author intends to add another section? I also thought that the discussion was somewhat confusing in some areas. In general the chapter needs to be revised to improve the interpretation of the results and explain the intuition.

In the listing of the framework on p. 99, I think that the goal of preserving the viability of credit markets by increasing creditors' payoff in bankruptcy should be made more explicit. When this choice is introduced, preserving the APR in bankruptcy isn't always desirable. This is because creditors may receive more when the APR is violated than when it is followed, since the firm's earnings in reorganization can exceed its liquidation value and creditors' payoff may therefore be higher in reorganization even if they are forced to share the firm's earnings with equity.

P. 110-111. I found this discussion confusing. I thought that Bebchuk's paper argued that managers' incentive to gamble on resurrection became weaker rather than stronger when the APR is violated in bankruptcy, since managers/shareholders get a positive return even when the firm goes bankrupt. I also found the discussion of strategic default on pp. 112-113 confusing.