Introduction to González-Uribe and Mann (2018): “New Evidence on Venture Debt”

One fundamental, long-standing pattern in the funding of early-stage companies has been the use of equity-style investments by venture capitalists (VCs). As a result, the perception has been that debt contracts are a negligible component of the funding picture for VC-backed companies. This is often justified with the observation that startups do not feature the characteristics that traditionally support debt financing, such as significant free cash flow, tangible collateral, or reputation.

In a new paper, “New Evidence on Venture Debt,” we document that debt contracts are more common in this space than has previously been appreciated. Debt financing constitutes 15% of total venture capital reported in the Preqin database since 2010, and over 20% of Series B rounds are followed within three years by a loan to the same company. Loans are typically made not by the existing venture capitalist, but rather by an outside specialist (a bank or fund), which may explain why their importance is sometimes overlooked.

Using hand-collected data from 3 of the largest venture debt providers, we provide the first contract-level empirical analysis of venture debt. We show that these debt contracts are loans in the conventional sense: They are not convertible to equity, and interest charges are applied regularly (typically monthly), at yields exceeding those of junk corporate bonds. The average loan maturity is three years, but they are prepaid quickly – typically within two years – when borrowers raise a new equity round with a larger VC syndicate. In the meantime, the loan is collateralized by the borrower’s intellectual property (IP), either through an explicit lien or through a negative pledge agreement.

These findings show that venture debt is an important market, but also that this market is not well explained by the economics of capital structure for more mature companies. Venture loans do not confer tax benefits, since the borrowers are not profitable. They do not constitute financial leverage, since they are quickly repaid and even prepaid. Finally, they occur while the company’s investor base is highly concentrated, reflecting the borrower’s lack of reputation, and yet they entail bringing in a new investor who serves only to fund the loan. For all of these reasons, the structure of the venture debt market is puzzling at first glance.

In our analysis, we aim to understand these puzzles by modeling the interaction between the venture debt and equity markets. In our model, debt financing occurs when the company has not yet reached a milestone for a new equity round, meaning that the valuation of new outside equity

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1 Indeed, the SEC’s recent guidance regarding the definition of a “venture capital fund” explicitly states that these funds primarily make equity investments in their portfolio companies.
financing would not be attractive. A small infusion of capital serves to “extend the runway” until the milestone and higher valuation can be achieved.

This new capital could be provided through additional equity capital from the existing syndicate, but the resulting increase in their ownership stake of the company would make it difficult to grow the syndicate in future rounds, as established theoretically by Admati and Pfleiderer (1994) and investigated empirically by Lerner (1994). A debt contract avoids the mispricing incentives of existing VC investors studied in those papers, rationalizing the use of debt contracts for this short-term financing.

However, if debt capital were provided by an existing VC, negotiations over future equity rounds would be negatively affected by the perceived conflicts of interest facing an inside investor who holds both debt and equity securities in the same company. Such an investor would have incentives to underinvest in the company’s success relative to what outside equity investors would desire. For this reason, all parties are better off if the VC refers the borrower to an outside lender who funds the loan but has no other financial stake in the company. The lender may receive a small amount of warrant coverage to encourage workout in the event of default, but these equity-like claims do not lead to conflicts between stakeholders, because they carry no control rights until they convert. These patterns are consistent with the working of the venture debt market in practice.

Several other features of the venture debt market are also consistent with our narrative: Loans are more common while a borrower has pending patent applications, consistent with our assumption that debt helps the borrower time equity rounds after the release of new information. Also, borrowers with more intellectual property – either patents or trademarks – grant more warrants to their lenders. This might seem puzzling at first, as warrant coverage might seem to be a substitute for collateral value. However, as described above, warrants in this setting are a mechanism to align incentives of the lender and borrower in default, without granting undue control rights to the lender outside of default.

Overall, we conclude that venture debt plays an important and auxiliary role to traditional equity-based venture capital financing. Moreover, we rationalize the fact that venture debt comes from a special class of lenders, rather than existing venture capital firms. When uncertainty is high and outside equity is unattractive, outside venture debt mitigates two incentive problems that would arise for the existing VC under alternative financing methods: mispricing incentives with inside equity, and underinvestment incentives with inside debt. We thus explain not only venture loans, but also venture lenders, by explaining why loans come from specialized intermediaries who are highly dependent on equity funding conditions, rather than from the VC investors themselves. Our findings thus provide a valuable perspective on an under-appreciated aspect of the market for venture capital.

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References

