
1. General Remarks

I believe that this is an excellent PhD Thesis parts of which should publish in top field macro journals like JME, AEJ-Macro, RED, JMCB and so on. With some luck and with a good editor, the work on shadow banking could also have a good shot at a top general journal.

I think that, overall, the thesis is written very well and it is very clear. I have not noticed anything that must be changed. Therefore I would very strongly support Martin in obtaining his PhD as soon as possible and without compulsory corrections. All the comments which follow below are purely advisory. If Martin finds them useful, he can use them to improve his papers for publication in the future. But for the purposes of the PhD itself, I am very happy with the thesis as it is right now.

2. Specific Remarks: ‘Securitization under Asymmetric Information over the Business Cycle’

a. Paper summary

In the first, and in my view, best chapter of Martin’s thesis, he takes a variant of Kiyotaki and Moore (1997) and Kiyotaki and Moore (2011) and adds asymmetric information. There exist three types of firms: those without investment opportunities, those with ‘low-productivity’ investment opportunities and those with ‘high-productivity’ investment opportunities. In the first best, only the most productive firms should invest, the rest should lend or buy the capital goods produced by those who actually invested.

In Martin’s model, borrowing is not allowed and sales of securitised cash flows from the investment are subject to a ‘skin-in-the-game constraint’ (hereafter SGC) which states that the producer must retain a minimum fraction of all securitised assets. In equilibrium, the presence of the SGC limits the production of capital goods and this results in a price of capital which is above physical production cost (as in Kiyotaki...
and Moore (2011)). This means that even firms with low productivity investment opportunities would find it profitable to sell securitised assets as long as the economy finds itself in a pooling equilibrium.

In the equilibrium Martin focuses on, asset buyers demand protection against asset under-performance from asset sellers. Sellers give implicit guarantees: when assets do not pay off well, they compensate the buyer even though they are not contractually obliged to do so. Asset sellers only do this because they are threatened with permanent exclusion from the securitisation market if they default on the implicit contract with the asset buyers.

High productivity asset sellers of course have a stronger incentive to offer implicit guarantees and the economy can find itself in a separating equilibrium in which only high quality assets trade. But if the difference between the productivities of ‘high’ and ‘low’ productivity projects is small, we can find ourselves in a situation where ‘low’ productivity agents can mimic ‘high’ productivity ones and the economy can end up in a pooling equilibrium in which both types of assets are issued with some implicit recourse.

The paper shows that when the cross-sectional productivity variance moves in a counter-cyclical fashion (as the evidence in Bloom and others suggests), this can give rise to a boom-bust cycle. In booms, the market is in a pooling equilibrium and ‘bad’ assets accumulate. Once the recession hits, the difference between different asset productivities jumps and the market switches to a separating equilibrium and a ‘shake-out’ of inefficient producers.

Attempts to regulate the market by forcing issuers to retain a larger share of securitised assets are likely to be counter-productive because they limit the ability of good firms to issue and this helps to ‘crowd-in’ bad issuers.

b. Remarks

- I really like this paper. It is not easy to introduce asymmetric information in a GE model and this model does it in a relatively elegant and simple way.
- Where it could be improved is in the way the market for securitised assets is set up. While I am not an expert on models of signalling and asymmetric information, some aspects of the set up feel ad hoc. If I am wrong, then the author needs to do more work in convincing readers (especially referees, editors, etc) that the model is not set up in a contrived way. This would be
especially important in the better journals or in more theoretical journals. Let me give some examples:

- Why can’t issuers of securitised assets retain a first loss piece rather than a fraction of all assets? What better way to signal quality than to say that you would retain the ‘equity tranche’ of the securitised asset? Of course here the issue is how to tranche the loan. A good issuer can tranche very conservatively by retaining a large first loss piece. This is good because it reassures investors that the asset is high quality but is bad because it provides less liquidity to the seller. Then the tension is between signalling quality and raising funds. Then the wealth of investors would move the economy between pooling and separating equilibria. This (I think) is actually the mechanism in Alberto Martin’s work so I am not saying that this paper should do the same. But it should think harder about how to justify some of the restrictive assumptions made. And if no restrictive assumptions have actually been made, the paper should be bolder and clearer in stressing that it takes a general set up and uses an ‘optimal’ contract.

- The paper rules out borrowing. Of course this is understandable from the point of view of keeping the model exposition and solution manageable. But is it innocuous? Wouldn’t the high productivity agent prefer to borrow and retain possession of the assets? At the same time wouldn’t the low productivity agent prefer to get rid of its exposure to a bad asset?

- Welfare analysis

The paper does not do explicit welfare analysis but I think the author should, perhaps in a future paper. In his introduction, Martin talks about ‘inefficient assets’ but he never actually shows whether the model is constrained inefficient. Adverse selection certainly involves redistribution between good and bad asset sellers. This redistribution endogenously worsens the ability of the best investors to invest and helps to keep average TFP low. But could the social planner do any better than the private market? This is a very important policy discussion at present and I urge Martin to write a paper about this issue.
3. Specific Remarks: Adverse Selection on Re-sale Markets for Securitized Assets

   a. Paper summary
This paper extends the set up in the first chapter by adding a secondary market. In the first chapter, all trade of securitised assets took place in the primary market. There, all sellers were informed giving rise to an adverse selection problem. However, primary market sellers needed liquidity which limited the adverse selection problem. Even high quality asset sellers are willing to trade because they value liquidity more than the asset buyers.

Adding the secondary market changes all that. The majority of ‘legacy asset’ owners are savers who do not need immediate liquidity in order to produce. Hence, such owners of good assets would rather hold on to those assets when the market price is depressed due to adverse selection problems. In contrast, savers who own bad assets would want to sell in any eventuality. This is why the presence of purely strategic sellers (as opposed to liquidity sellers as in the first chapter) makes the adverse selection problem worse and more time-varying in response to changes in economic conditions.

In the recession, the difference between ‘good’ and ‘bad’ projects increases and securitisation issuers default on implicit guarantees. The owners of such assets then learn about true cash flows and become ‘informed sellers’. Under the crucial assumption that buyers cannot distinguish between primary and secondary market sellers, this makes the adverse selection problem much more severe limiting the ability of productive investors to raise funds through securitisation issuance.

It seems to me that the pure secondary market dislocation (ignoring its impact on primary issuance) also matters because some savers switch to being investors and try to sell assets in order to fund investment. But the really important source of liquidity for new investors is the primary market and this is why the presence of the secondary market really amplifies the crisis in this model compared to the one in the first chapter.

   b. Remarks

   - Again, a very nice paper which extends the first chapter in an interesting and useful way.
- It is a harder read compared to the first chapter, probably because Martin has had less of a chance to polish it. The model section in particular is not very easy to follow. Too much space is given to the justification of the fact that defaulting issuers are not excluded in the recession and to the arbitrage between islands. To be clear, these are important technical details that need to be worked out and justified. But to me they are just that – technical details. They shouldn’t be allowed to disturb the flow of the model description.

- I am more than fine with the assumption that primary and secondary issues are indistinguishable (Provided that this is what is being assumed of course – see previous comment.). But this mechanism may attract some criticism. Primary and secondary issues can be distinguished very easily in practice. And in the model, separating the primary and secondary market would have a huge benefit in terms of reducing adverse selection costs for new investors. I am not sure the author should do anything about this right now apart from think of a good answer if such a criticism arises in a seminar or in a referee report.

- My understanding of what is happening in the paper is summarised in the paper summary section but I am not confident that it is correct because the key mechanism is explained very badly in the paper. If my description is correct, then it’s a very nice and intuitive mechanism which should be really highlighted in the writing of the paper and not hidden under all kinds of details. If it’s not correct, then again, this is a problem for the author when he submits to a journal. Most referees and editors reject papers they do not understand especially when the author is not someone who is very established.


   a. Paper summary

   The paper generalises the Campbell-Cochrane consumption habit model by allowing for durable goods services in the consumption aggregator. The model is then estimated using GMM using data on non-durable and durable goods consumption and using data on the returns from the 6 Fama-French portfolios. The paper finds that the inclusion of durables requires greater curvature of utility in order to fit the data.
b. Remarks

- This is a fine final chapter of Martin’s thesis. It demonstrates his knowledge of an important theoretical and empirical methodology in the asset pricing literature.

- I am not an expert in this literature and therefore not the best to provide detailed and specific feedback on how this paper can be improved. On a more general level, the only thing I can say is that the motivation for the paper seems rather weak at the moment. In its current form therefore I think that the paper will struggle at good journals. It is not clear why the reader should read the paper and care about the exercise performed in it. The result also seems rather negative – durables do not add much to the ability of the basic Campbell-Cochrane model to fit the data. My main suggestion is that Martin rethinks carefully the way he positions this paper in the literature in order to provide more of a ‘hook’ for the reader.