The Impact of Introducing a (Nearly) Redundant Security: Evidence from Malaysian Corporate Bonds

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Discussion
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Summary

Main question

Under what conditions can redundant securities coexist?

Setting

Islamic and conventional bond issuance in Malaysia.

Finding

Issuance depends on prices of two bonds, issuance costs of bonds, and liquidity shocks of investors.

Broad context

Literature has studied, both theoretically and empirically, the impact of introduction of a redundant security (e.g., an option) on the original security's price/volatility.

- Authors' setting is arguably better because their securities' pair is closer to being redundant than options/stocks.

The paper is closer to the literature that studies how the introduction of a redundant security (e.g., a green bond) expands the investor base, to cater to specific clienteles, and improves risk sharing.

Notation

Two kinds of investors:

1. R are Religious investors.
2. NR are Non-religious investors.

Two kinds of bonds:

1. Islamic bonds.
2. Non-Islamic (conventional) bonds.

	R investors	NR investors
Islamic bonds	✓	✓
Conventional bonds	✗	✓

Q: From NR investor perspective: Why invest in both kinds of bonds?

Q: From firm perspective: Why issue conventional bonds at all?

Theoretical model provides guidance

Islamic bond advantages:

- More liquid (because they have both R and NR investors).
  - This enhanced liquidity, especially in stress times, might be attractive to NR investors; they might prefer Islamic bonds over conventional bonds.

Islamic bond disadvantages:

- Less collateral value.
- Higher issuance costs.

… and answers the previous questions

Q: (From NR investor perspective) Why invest in both kinds of bonds?

A: Because Islamic bonds provide liquidity benefits but, at the same time, non-Islamic bonds might be cheaper.

Q: (From firm perspective) Why issue non-Islamic bonds at all?

A: Because non-Islamic bonds are cheaper to issue, even if they attract limited clientele.

Testable hypotheses

H1: If issuance costs are high for Islamic bonds, firms will not issue them.

H2: If issuance costs are similar, firms might issue both kinds of bonds. Or only one of them. (depends on parameters)

H3: Say that a firm was issuing only non-Islamic bonds. After it issues Islamic bonds, it might still issue non-Islamic bonds, in either the same amount or less. (depends on parameters)

H4: $\text{Price}_{\text{Islamic bond}} \approx \text{Price}_{\text{Non-Islamic bond}}$. But could be higher or lower. (depends on parameters)

H5: Non-religious investors hold more Islamic bonds when Islamic bonds are cheaper to trade than non-Islamic bonds.

H6: In the presence of many religious investors, firm can raise more money by issuing Islamic bonds.

H1: Who issues Islamic bonds?

H1: If issuance costs are high for Islamic bonds, firms will not issue them.

Table 2: Islamic bond issuance

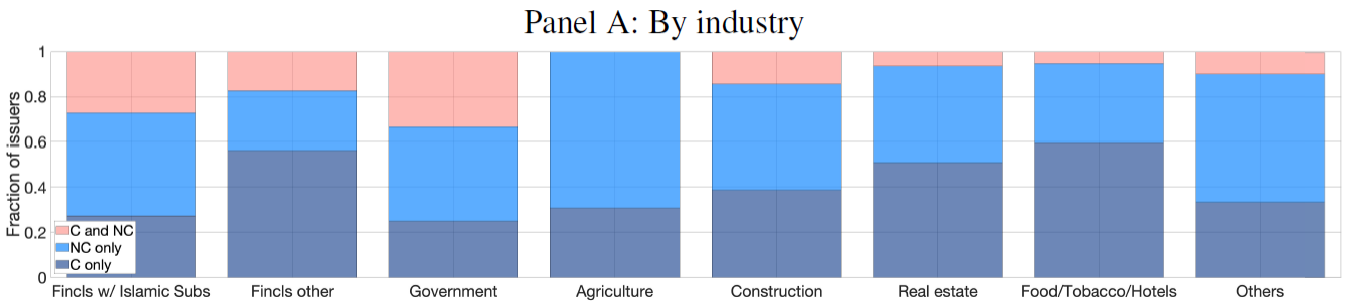
	(1)	(2)	(3)	(4)	(5)
High issue cost	-2.024**	-1.909**	-1.834**	-2.001**	-2.289**
	(0.168)	(0.177)	(0.181)	(0.246)	(0.263)

Dependent variable: Ratio of Islamic bonds to total bonds.

High issue cost: Firms in commercial banking, alcohol, tobacco, or insurance; not Islamic banks; foreign issuers.

It is indeed the case that high issuance costs deter Islamic bond issuance.

H1: Who issues Islamic bonds? …



Regression, as is run, is basically an industry FE. The result is to be expected given the summary statistics. Is there a way to get a finer classification of issuance costs?

By the way, even in food/tobacco, there are firms that do issue Islamic bonds. Which firms are these?

H2: Issue both kinds of bonds

H2: If issuance costs are similar, firms might issue both kinds of bonds. Or only one of them. (depends on parameters)

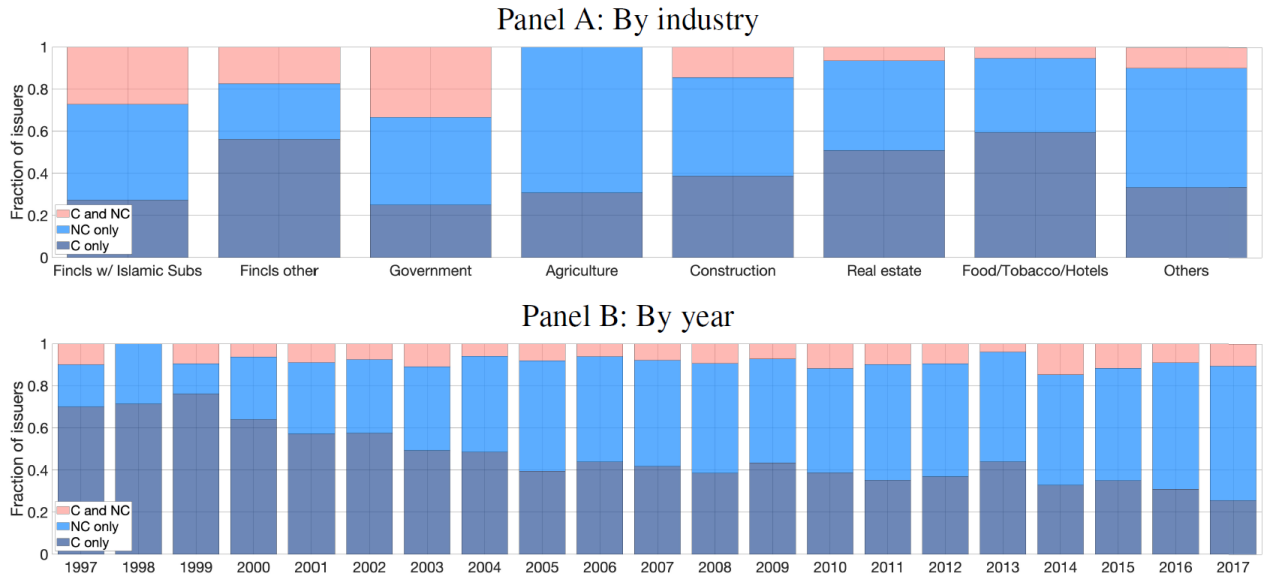


Figure 3: Issuer preferences over time and across sectors

Small pink bars are misleading. Mixed issuers are big.

H2: Issue both kinds of bonds …

Model shows under which conditions firms will issue:

- Only Islamic bonds.
- Only non-Islamic bonds.
- Both types of bonds simultaneously.

These conditions involve, for example, collateral and liquidity benefits of non-Islamic bonds.

The authors have proxies for these 'parameters.' (see later discussion of H5)

Why not test these specific predictions more deeply?

H3: Issuance of non-Islamic bonds

H3: Say that a firm was issuing only non-Islamic bonds. After it issues Islamic bonds, it might still issue non-Islamic bonds, in either the same amount or less. (depends on parameters)

Table 4: Conventional bond issuance after Islamic bonds are introduced

	(1)	(2)	(3)	(4)	(5)	(6)
	New issuance amount			Number of new issues		
Mixed issuer x post	112.64	-389.46	-37.54	0.00	-2.07*	-2.23*
	(163.66)	(334.26)	(273.22)	(0.81)	(0.97)	(0.92)

Firms issue non-Islamic bonds in similar amount as before.

H3: Issuance of non-Islamic bonds …

Model shows under which conditions firms will issue more or less non-Islamic bonds. Why not test these specific predictions more deeply?

The test looks at issuance of non-Islamic bonds some time after Islamic bonds were issued. But market conditions/funding needs might have changed later. Therefore, this is not a clean test of H3. What we need is the sample of mixed issuers who issue both types of bonds at the same time.

- Even then, we need a counterfactual of what the issuance would have been if the firm had issued only non-Islamic bonds.
  - Not sure where to get this hypothetical.

H4: Price differences

H4: $\text{Price}_{\text{Islamic bond}} \approx \text{Price}_{\text{Non-Islamic bond}}$. But could be higher or lower. (depends on parameters)

Table 5: Primary market yield spreads

	1–2 yrs	2–3 yrs	3–5 yrs	5–7 yrs	7–12 yrs	> 12 yrs
Panel A: ETP primary market yield spreads						
Islamic	-0.033**	-0.025*	0.035**	0.002	0.009	-0.008
	(0.011)	(0.010)	(0.009)	(0.005)	(0.018)	(0.031)

It is indeed the case that $\text{Price}_{\text{Islamic bond}} \approx \text{P}_{\text{conventional bond}}$.

H4: Price differences …

Model shows under which conditions the prices will differ. Why not test these specific predictions more deeply?

Model intuition should apply to prices not only at issuance but also during the lifetime of the bonds. If the difference in prices switches sign after issuance, these could be interesting situations to study.

H5: Non-religious investors buying Islamic bonds

H5: Non-religious investors hold more Islamic bonds when Islamic bonds are cheaper to trade than non-Islamic bonds.

Non-religious investors do buy more Islamic bonds when these bonds offer more liquidity than non-Islamic bonds.

One suggestion on pricing

Does the introduction of an Islamic bond change the price of the non-Islamic bond?

The current H4 is structured around the price differences of the two bonds, when issued simultaneously.

I am more interested in whether the equilibrium price of an already existing security changes when a redundant security is introduced.

Not sure if the authors have the data for this but if they do, this will help place the findings better in the context of prior literature.

Another suggestion on informativeness

Does the existence of both types of bonds change the informativeness of prices?

- There are two kinds of investors who each engage in information gathering; leading to increased information collection.
- Given the existence of the second investor, the first investor free-rides and collects less information; leading to less overall information collection.

Overall

Very nice paper and very cool setting.

There is a rich theory section. Exploiting more of its predictions in the empirical section will strengthen the paper.