Andreas Krause

Relationship banking

- Companies often have a long-term relationship with their bank and the bank gets to know their customers very well.
- This allows the bank to build up information that other banks have no access to.
- We will see the impact this informational advantage has on lending by looking at something called relationship lending.

Informational advantage

- Customers are loyal to their banks for long periods of time, switching banks is not common
- Banks can accumulate information on customers, especially soft information such as management skills or reliability
- This gives the bank an informational advantage over competitors
- This is referred to as relationship banking

Informational advantage

→ Banks can obtain an informational advantage if they repeatedly interact with the same company.

- Customers rarely change banks, even if this might be advantageous with other banks offering better terms and conditions for loans or deposits. This might be due to the costs involved in switching banks, but we will see here that staying loyal to a bank might have its benefits.
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  - Given that customers stay loyal to banks, they can accumulate information from the repeated interactions their customers have with them. Every time customers reveal information, whether a voluntary disclosure to obtain a loan or a payment is made or received.
  - For companies this information is often so-called soft information, like the ability of management, but also how reliable management is to keep to informal agreements that have been made.
- Having accumulated this information, the bank has a distinct informational advantage over its competitors.
- This informational advantage is the key aspect we consider here and is generally referred to as relationship banking. This is in contrast to transaction banking, where no additional information is collected and the customer only seeks a single product at a single time (a transaction) with the bank.

→ We will explore in this topic how relationship banking affects the lending decisions of banks.

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Implications of relationship banking

- Relationship banking will affect the loan conditions, especially the loan rate, as competition will be limited
- With an existing loan, it may also affect the willingness of a bank to provide new loans to their existing customer
- Increased competition between banks might affect the ability to engage in relationship banking

Implications of relationship banking

- → We will focus our attention on some key issues that are affected by relationship banking.
- Firstly, relationship banking will affect the loan rate as the informational advantage will allow banks to reduce competition.
- Secondly, we will look at the willingness of banks to extend new loans to company, considering the case of a company that is distress and how relationship banking might affect this decision.
- Thirdly, we will investigate how competition will impact the feasibility of relationship banking.
- → For each of these three themes, we will look at a model to evaluate its results in more detail.

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Using the informational advantage

- If banks accumulate information, they are able to price a loan better than their competitors, making excess profits
- Once in a relationship, banks can exploit their advantage and charge loan rates above their costs
- Knowing this, banks will take this into account when attracting new customers

Using the informational advantage

→ We will first consider the impact the informational advantage has on loan rates.

- - Banks accumulate information and by that are able to price loan more accurately than other banks. This might especially benefit low-risk companies who can obtain lower loan rates, while high-risk companies might be worse off.
  - Having this additional information about companies they are lending to, banks should be able to make additional profits.
- These excess profits arise because banks have the informational advantage and they can charge loan rates that are higher than the risks imply; other banks now knowing the low risk of the company, can then not provide a better loan rate. This stifles competition and allows banks to earn excess profits.
- However, if banks make excess profits from their existing customers, they might compete more to attract them in the first place.

→ We will look at how this competition affects loan rates for the same company over time.

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Chapter 10.1.2
Exploiting informational advantage

→ The model we are going to discuss is based on Chapter 10.1.2 of the book 'Theoretical Foundations of Banking'. A more detailed description of the model, additional steps for its solution, and a more in-depth discussion of results can be found there.

Discussion of model results

- Banks exploit their informational advantage by charging non-competitive loan rates and make excess profits
- These excess future profits lead to more intense competition to attract customers through low initial loan rates

? Can banks make excess profits by offering introductory offers for the first loan and then charge higher loan rates for many loans afterwards?

! The future profits from these higher loan rates will be taken into account when making the introductory offer, eroding any excess profits

→ Now that we have derived the main results of the model, as far as relevant for us, we will briefly discuss some implications as well as limitations of this model. This will allow us to interpret the model in its context of the initial problem and enables us to apply it appropriately in a realistic context.

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  - Having gained the informational advantage, banks will charge loan rates above competitive levels as they do not face competition from other banks.
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  - Having excess profits in the future, will induce banks to compete even more for customers in the first place. The future profits these will generate, make it attractive for banks to seek out new customers.
  - They attract customers by offering low initial loan rates and these loan rates might even be loss-making. Banks are compensated for these initial losses by future profits when exploiting their informational advantage.
- ▶ With banks offering low initial loan rates and then recovering these losses once an informational advantage has been built, can they make overall excess profits?
- ▶ If banks are competing, the initial loan rate will take into account all future profits and overall the bank would not be able to make excess profits.

→ Relationship banking affects the setting of loan rates in that very attractive introductory offers are made, but then as the informational advantage is realised, the loan rate will increase and more surplus be extracted by the bank.

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- - Having gained the informational advantage, banks will charge loan rates above competitive levels as they do not face competition from other banks.
  - This allows them to extract additional profits from their customers and make excess profits that competition cannot affect.
- - Having excess profits in the future, will induce banks to compete even more for customers in the first place. The future profits these will generate, make it attractive for banks to seek out new customers.
  - They attract customers by offering low initial loan rates and these loan rates might even be loss-making. Banks are compensated for these initial losses by future profits when exploiting their informational advantage.
- With banks offering low initial loan rates and then recovering these losses once an informational advantage has been built, can they make overall excess profits?
- If banks are competing, the initial loan rate will take into account all future profits and overall the bank would not be able to make excess profits.

→ Relationship banking affects the setting of loan rates in that very attractive introductory offers are made, but then as the informational advantage is realised, the loan rate will increase and more surplus be extracted by the bank.

Discussion of model results

- Banks exploit their informational advantage by charging non-competitive loan rates and make excess profits
- These excess future profits lead to more intense competition to attract customers through low initial loan rates

? Can banks make excess profits by offering introductory offers for the first loan and then charge higher loan rates for many loans afterwards?

! The future profits from these higher loan rates will be taken into account when making the introductory offer, eroding any excess profits

Discussion of model results

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Extending loans

- A company facing bankruptcy after a bad investment might not be able to repay its existing loan
- A bank could provide a new loan and hope that the profits from this loan reduces their losses
- Banks could extend loans to otherwise bankrupt companies in the hope of recovering more monies in the future
- This is referred to a evergreening

Extending loans

→ Relationship banking can also affect the decision to grant a loan to an existing customer.

- We focus on the case where a bank might not necessarily provide a loan, a company who has an outstanding loan that it might not abe able to repay.
- The idea is that a bank might provide an additional loan to allow the company to make new investments, generating profits, and then these profits repay the new and the existing loan.
- In such a situation we see that banks would extend a loan to a company that without this loan would default.
- Extending a loan by a bank that has another loan outstanding with the same company that other banks would not grant, is known as evergreening.

→ We will explore under which conditions evergreening happens.

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Andreas Krause

Chapter 10.2.3

Evergreening

→ The model we are going to discuss is based on Chapter 10.2.3 of the book 'Theoretical Foundations of Banking'. A more detailed description of the model, additional steps for its solution, and a more in-depth discussion of results can be found there.

Discussion of model results

- Provided the outstanding loan is not too large, existing banks would advance new loans to recover any losses while new banks would not do so.
- Relationship banks may advance loans to companies that will generally be seen as not creditworthy

? In what way can extending a loan to a not-creditworthy company be negatively affecting other creditors?

! Extending loans by the existing bank can be interpreted as a signal that the loan is sufficiently safe and a less sophisticated creditor might follow the lead of the bank. The higher claim of the bank in a final default may dilute the claims of other creditors.

→ Now that we have derived the main results of the model, as far as relevant for us, we will briefly discuss some implications as well as limitations of this model. This will allow us to interpret the model in its context of the initial problem and enables us to apply it appropriately in a realistic context.

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  - With a higher bank loan, the claims of other creditors will be diluted as there are more loan that need to be serviced in liquidation, reducing the fraction of assets that other creditors obtain, causing them losses.

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Costs of relationship banking

- Accumulating information is costly and banks need to be able to recover such costs
- If competition between banks increases, their profits should decrease, making the recovery of such costs more difficult
- But as relationship banking also provides an informational advantage, the overall effect may be ambiguous

Costs of relationship banking

→ We can now turn to assessing the impact competition has on relationship banking. Thus far we assumed that the additional information banks have on companies are free, but the collection and processing of such information will be costly. We will see how costly information and competition affect the feasibility of relationship banking.

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  - Collecting and processing information is costly and hence relationship banking will be more costly than transaction banking.
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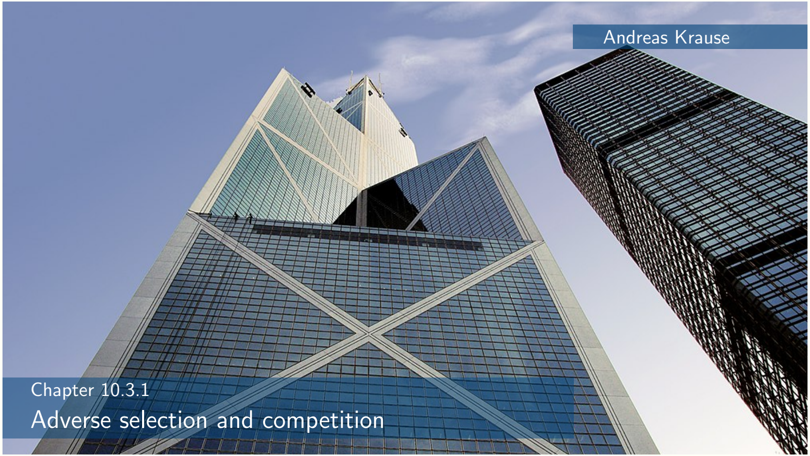
Andreas Krause
Chapter 10.3.1
Adverse selection and competition

→ The model we are going to discuss is based on Chapter 10.3.1 of the book 'Theoretical Foundations of Banking'. A more detailed description of the model, additional steps for its solution, and a more in-depth discussion of results can be found there.

Discussion of model results

- Increased competition makes profits from relationship banking more important for banks as they cannot be competed away
- More intense competition should increase the prevalence of relationship banking

? Would more competition affect loan rates in relationship banking?

! The informational advantage is retained and therefore not affected by competition; competition will reduce loan rates to attract new customers

Discussion of model results

→ Now that we have derived the main results of the model, as far as relevant for us, we will briefly discuss some implications as well as limitations of this model. This will allow us to interpret the model in its context of the initial problem and enables us to apply it appropriately in a realistic context.

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→ We this see that competition increases the importance of relationship banking.

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Summary of key results

- Relationship banking allows banks to make excess profits in such a relationship, but it will also increase competition for new customers
- Banks may extend loans to companies that are not credit-worthy with the aim of reducing losses from existing loans
- Competition between banks increases the importance of relationship banking to generate profits
- Relationship banking makes an important contribution to the profits of banks

Summary of key results

→ We can now summarize the key results we have obtained about relationship banking.

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  - The informational advantage of relationship banks over other banks allows them to make excess profits by extracting more surplus from their customers as the customer cannot switch banks; given they have less information, they are unlikely to offer a better loan rate, hence the company is trapped with their existing bank.
  - The effect of having this excess profit once a relationship has been established is that banks compete for companies in the first place, offering very attractive initial conditions that are later eroding.
- Having granted loans that are now at risk, might induce these banks to grant additional loans that otherwise would not be given; the aim of these loans is for the company to generate additional profits that reduce the losses to the bank.
- We have also seen that due to maintaining the profits from the informational advantage, relationship banking become more important as competition erodes other sources of profits.
- This informational advantage of banks, accounts for a sizeable fraction of the profits banks make.

→ We have thus seen that relationship banking affects the pricing of bank services, loans in our case, but also the provision of follow-on loans to companies in distress. Thus relationship banking cannot be dismissed when analysing the banking market.

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