# Introduction

# Literature Review

Alexakis et al. ([2023](#ref-alexakis2023animal))

# Data and Methodology

# Results

# Conclusion

# References

Alexakis, Christos, Antonios Chantziaras, Fotini Economou, Konstantinos Eleftheriou, and Christos Grose. 2023. “Animal Behavior in Capital Markets: Herding Formation Dynamics, Trading Volume, and the Role of COVID-19 Pandemic.” *The North American Journal of Economics and Finance* 67: 101946.

# Appendix :

## Data sources

|  | Description | Availability | Source |
| --- | --- | --- | --- |
| BA900 | Banking sector balance sheet data at a bank level | Public data | South African Reserve Bank |
| BA930 | Banking sector lending rates at a bank level | Aggregated data is public.  Bank specific data is private | South African Reserve Bank |
| Controls | Banking sector performance data at a bank level | Aggregated data is public.  Bank specific data is private | Prudential Authority |
| GDP | Nominal gross domestic product in a calendar year | Public data | Statistics South Africa |
| BA700 | Regulatory capital buffer requirements | Aggregated data is public.  Bank specific data is private | Prudential Authority |
| Repo rate | Policy rate of the South African Reserve Bank | Public data | South African Reserve Bank |

**?(caption)**

## Aggregation scheme

| BA 900 Categories | Item Number | Sector | Aggregation Key |
| --- | --- | --- | --- |
| Installment sales | 141 | Financial corporate sector | - |
|  | 142 | Non financial corporate sector | a |
|  | 143 | Household sector | c |
|  | 144 | Other | a |
| Leasing transactions | 146 | Financial corporate sector | - |
|  | 147 | Non financial corporate sector | a |
|  | 148 | Household sector | c |
|  | 149 | Other | a |
| Farm mortgages | 152 | Non financial corporate sector | b |
|  | 153 | Household sector | b |
|  | 154 | Other | b |
| Residential mortgages | 156 | Non financial corporate sector | b |
|  | 157 | Household sector | d |
|  | 158 | Other | b |
| Commercial and other mortgages | 160 | Public financial corporates | - |
|  | 161 | Public non-financial corporates | - |
|  | 162 | Private financial corporate | - |
|  | 163 | Private non-financial corporates | b |
|  | 164 | Household sector | b |
|  | 165 | Other | b |
| Credit cards | 167 | Financial corporate sector | - |
|  | 168 | Non financial corporate sector | a |
|  | 169 | Household sector | c |
|  | 170 | Other | c |
| Overdrafts | 178 | Public sector (includes public corporations and local government) | - |
|  | 181 | Financial corporate sector | - |
|  | 182 | Non financial corporate sector | a |
|  | 183 | Unincorporated business enterprises | e |
|  | 184 | Other Household sector | c |
|  | 185 | Non-profit organisations serving households | c |
| Factoring debtors | 187 |  | a |
| Other loans and advances | 189 | Financial corporate sector | - |
|  | 190 | Non financial corporate sector | b |
|  | 191 | Unincorporated business enterprises | e |
|  | 192 | Other Household sector | - |
|  | 193 | Non-profit organisations serving households | - |
|  |  |  |  |

**?(caption)**

The following aggregation scheme which results in six categories was followed based on **?@tbl-scheme**, with unincorporated enterprise credit as part of household unsecured lending.

1. Non-financial corporate sector secured credit: Items 142 + 147
2. Non-financial corporate sector unsecured credit: Items 168 + 182 + 187+ 190
3. Non-financial corporate sector mortgages (commercial and other mortgage advances): Items 152 + 153 + 154 + 156 + 158 + 163 + 164 + 165
4. Household sector secured credit: Items 143 + 148
5. Household sector unsecured credit: Items 169 + 184 + 185 + 192 + 193 + 183 + 191 (note includes unincorporated business enterprise credit last two items)
6. Household sector residential mortgages: Item 157

## Bank lending rates weighting scheme

The loans quantities from the BA900s are then linked to the lending rate data from the BA930s using table to create six lending rate categories the schema on **?@tbl-scheme1**.

| Sector | BA 930 Categories | Item Number | Weighting Key |
| --- | --- | --- | --- |
| Corporate sector | Overdrafts | 48.00 | b |
|  | Instalment sale agreements flexible rate | 49.00 | a |
|  | Instalment sale fixed rate | 50.00 | - |
|  | Leasing transactions flexible rate | 51.00 | a |
|  | Leasing transactions fixed rate | 52.00 | - |
|  | Mortgage advances flexible rate | 53.00 | c |
|  | Mortgage advances fixed rate | 54.00 | - |
|  | Credit cards | 55.00 | b |
|  | Other | 56.00 | b |
| Household sector | Overdrafts | 58.00 | e |
|  | Instalment sale agreements flexible rate | 59.00 | d |
|  | Instalment sale fixed rate | 60.00 | - |
|  | Leasing transactions flexible rate | 61.00 | d |
|  | Leasing transactions fixed rate | 62.00 | - |
|  | Mortgage advances flexible rate | 63.00 | f |
|  | Mortgage advances fixed rate | 64.00 | - |
|  | Credit cards | 65.00 | e |
|  | Other | 66.00 | e |

**?(caption)**

The six categories, therefore, are as follows:

1. Non-financial corporate sector secured credit rate: Weighted average of items 49 + 51
2. Non-financial corporate sector unsecured credit rate: Weighted average items 48 + 55 + 56
3. Non-financial corporate sector mortgage rate: Item 53
4. Household sector secured credit rate: Weighted average of items 59 + 61
5. Household sector unsecured credit rate: Weighted average of items 58 + 65 + 66
6. Household sector residential mortgages: Item 63

## Competition narrative indexes

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| Figure 1: Competition narrative indexes |

## Macroprudential narrative indexes

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| Figure 2: Macroprudential narrative indexes |

## Aggregated bank lending

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| Figure 3: Total aggregated bank lending |

## Weighted bank interests rates

## Aggregated bank controls

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| Figure 4: Aggregated bank controls |