Bank Business Model Migrations in Europe: Determinants and Effects

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What about the paper

- **<u>Objective</u>: identifying the determinants of business model changes for European banks and the effects of such migrations on bank performance.**
- **Large dataset of European banks: 3,287 banks from 32 EEA countries and Switzerland; 22,787 bank-year observations spanning from 2005 to 2016.**
- **Steps:**
  1. Classify banks according to their BM
  2. Evaluate changes of BM
  3. Identify the determinants of BM switches
  4. Evaluate the effects of changes in BM category

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Methodology and results

1. **Classify banks according to their BM**
   - Based on the definition and methodology (cluster analysis, Ward method) implemented by Ayadi and de Groen (2014) and Ayadi et al. (2016)
   - 5 classes of BM: focused retail, diversified retail (type 1), diversified retail (type 2), wholesale and investment
2. **Evaluate the changes of BM: transition matrix**
   - Complex analysis by period, characteristics of banks (size, ownership structure), belonging to the EA
   - About 10% of the sample migrate during the study period (~1400 changes)
3. **Identify the determinants of BM switches**
   - Logit regression to identify drivers of the decision to migrate
4. **Evaluate the effects of changes of BM category on performance**
   - Employ propensity score matching to assess the effect of migration on performance
   - Detailed methodology, explaining limits and advantages of this approach

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Conclusion: take-away

- Lower diversity in the banking system in the post-crisis period.
- Main drivers of business model changes: low profitability, high risk, capitalization.
- Banks that received state aid during the crisis period have more easily changed their business model.
- Migration positively affects the performance of banks in the year following the event.

Conclusion of discussion

- Nicely written, policy-oriented, I learned a lot !
- Tractable framework to answer key regulatory questions, strong policy implications
- Compared to existing literature
- Detailed methodologies
- Nice robustness checks
- But some minor remarks

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Comments (1)

- **Sample:**
  - **Unconsolidated ?**
  - **Important shifts in the number of banks in the sample between 2009 and 2010** (Table A in the Appendix) *see here*
  - **What correlation between SNL (?) classification** (ie. 815 commercial banks, 692 savings and loans banks, 1,702 cooperative banks, and 78 public banks) **and your BM classification ?**
- **BM classification:**
  - Clarify the list of variables included in the cluster analysis
  - Important shifts in the share of banks according to their BM (Figure A in the Appendix) *see here*

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Comments (2)

Methodology:

- An important factor that could drive changes in banks' business models is regulation (also identified by Ayadi et al. (2016)).
- Absence of regulatory standards in your identification strategy → **Why regulation is not explicitly considered on your framework ?**
- **Macroeconomic environment** should also be considered when evaluating the drivers of BM switches (logistic regression)
- Furthermore, banks' performance could also be affected by changes in macroeconomic conditions

"*banks have to deal with a challenging macroeconomic environment; and that includes low interest rates. Hence, banks have to adjust. They have to become more cost-efficient and diversify their revenues" (S.Lautenschläger, ECB Board Member)*

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Comments (3)

Results:

- Unclear results with regard to differences between migrating and non-migrating banks → **are these differences significant?**

  "migrating banks show lower profitability, lower cost efficiency, higher capitalization, and higher risk appetite. These banks also display a lower credit portfolio quality, showing a higher loan loss provision ratio than non-migrating banks" (section 2)

- Acquisitions, state aids and migration → what relationship?

  "migrating banks are more involved in M&A operations and they benefit more from ad hoc state aid than their non-migrating counterparties" (section 2)

- At first glance, some results might be counterintuitive:

  "*banks that adopted the focused retail and the wholesale business models are less willing to migrate*" *(section 4.1)*

  "*banks that decide to change their business models during a period of financial crisis are usually smaller, involved in an M&A operation, and have received ad hoc state aid or have been nationalized" (section 6)*

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Comments (3)

Other comments:

- Review the references to the tables and figures (corresponding to references in the main text, appendix) since not self-evident to identify
- Some findings may deserve more attention, for example the effects of state aids and acquisitions
- Redrafting to avoiding duplicates could also allow to slightly reduce the size of the paper
- Some structures overstate the conclusions (*"unique definition and a novel clustering model"*)
- Correct typos: "*migrated ~~moved~~"* (page 11), 22 000 bank-year observations, double dots, etc.

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Appendix 1
Table A Distribution of banks by countries and years

Country/Year	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	Total
AT	9	12	16	16	16	245	245	246	246	245	241	82	1619
BE	4	4	6	6	6	22	22	22	22	21	21	21	177
BG	3	3	4	4	4	9	9	9	9	9	8	8	79
CH	16	20	27	27	27	118	135	139	137	132	126	114	1,018
CY	4	5	5	5	5	10	12	13	13	13	13	12	110
CZ	-	-	-	-	-	8	8	8	8	8	8	7	55
DE	38	43	55	56	58	1,554	1,562	1,568	1,562	1,551	1,484	1,356	10,887
DK	29	30	33	33	32	71	71	69	67	66	64	62	627
EE	-	-	-	-	-	5	5	5	6	6	6	6	39
ES	24	28	36	36	37	58	67	62	65	63	60	60	596
FI	2	2	3	3	3	20	20	22	22	23	23	21	164
FR	6	6	6	6	6	62	67	70	70	70	68	63	500
GB	16	20	21	21	21	143	152	158	155	157	155	144	1,163
GR	10	10	10	10	10	19	15	15	14	13	12	12	150
HR	3	5	7	7	7	14	14	14	14	13	13	13	124
HU	3	3	3	3	3	9	9	9	9	9	6	6	72
IE	6	6	6	6	6	13	12	12	12	12	12	10	113
IS	-	-	-	3	3	6	6	6	6	4	4	4	42
IT	20	26	30	29	29	337	361	391	429	421	408	368	2,849
LI	-	-	1	1	1	6	7	7	7	6	6	6	48
LT	1	1	3	3	3	5	4	3	3	3	2	2	33
LU	1	3	3	3	3	33	33	34	36	33	33	29	244
LV	-	-	-	-	-	4	5	6	14	13	13	12	67
MT	1	1	3	3	3	9	9	10	9	9	9	9	75
NL	7	7	8	9	10	31	32	33	32	32	31	30	262
NO	16	17	25	26	26	99	99	100	97	96	96	90	787
PL	3	4	5	6	7	12	13	12	12	12	11	9	106
PT	4	6	6	6	6	24	24	24	24	25	23	22	194
RO	1	1	2	2	2	5	6	7	7	7	7	7	54
SE	5	5	5	6	6	55	55	57	56	55	55	56	416
SI	-	3	3	3	2	11	11	11	11	11	9	7	82

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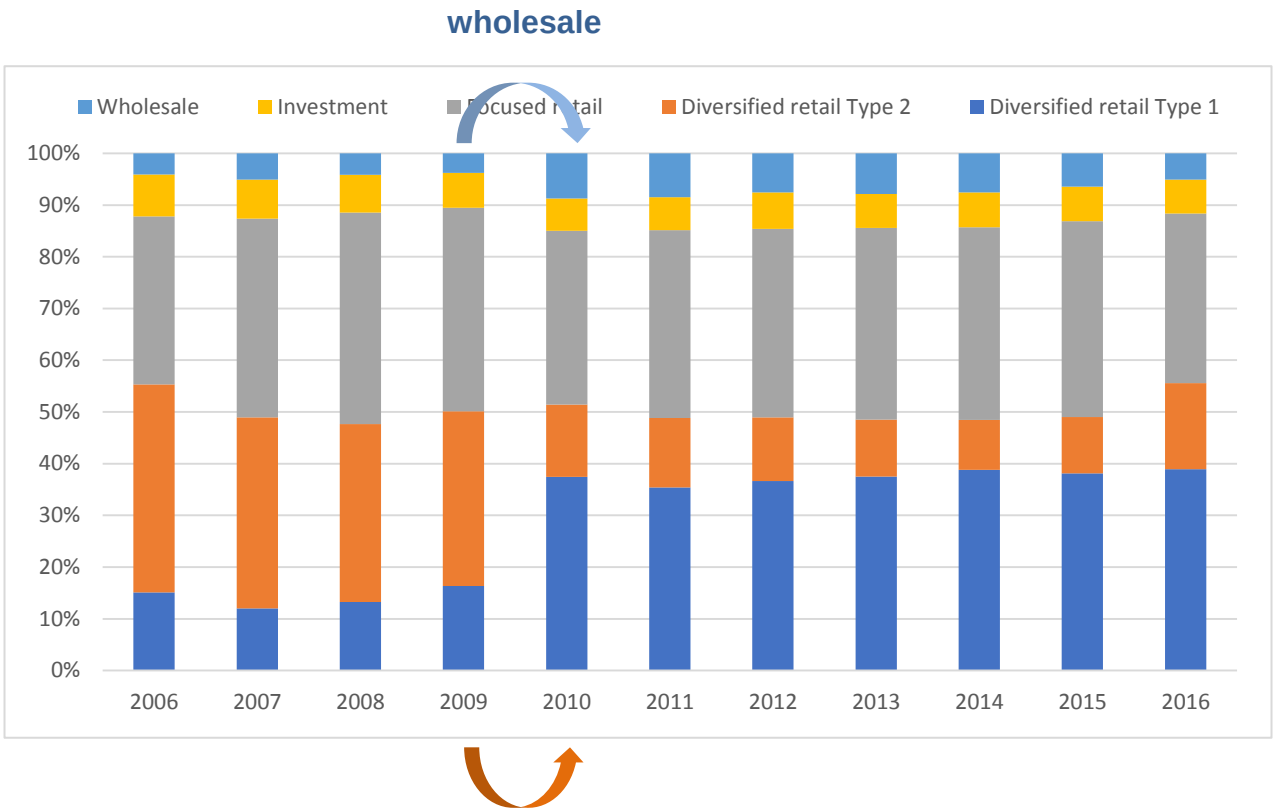
Appendix 1
Figure A Distribution of banks for years and business models



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