Retail banking. 1960s to 2020s

Friday, 25 November 2016

Bethmann Bank AG
Bethmannstraße 7-9
60311 Frankfurt am Main
SURVIVING CLIMATE CHANGE

European Retail Banking’s Uncertain Future Interpreted from its Past

EABH/GUG, Frankfurt, 25 November 2016

Joost Jonker

IISH/University of Amsterdam
Contents

1. The problem

2. Goldsmith’s guess

3. Three phases

4. What next?
Wells Fargo to pay $185m for aggressive, illegal sales tactics

- Employees opened unauthorized accounts to hit sales quotas for bonuses
- Settlement is largest in Consumer Financial Protection Bureau history

Deutsche Bank shares fall to new low after another turbulent day

Bank denies it has asked for help from German chancellor Angela Merkel over potential fine from US Department of Justice penalty

Commerzbank to scrap dividend and cut 9,600 jobs

Fast FT
Thousands of job cuts and axed branches

In 2015 there were more than 27,000 fewer bank branches in the Eurozone than in 2007, a drop of 13 per cent. There were 212,000 fewer people employed in banking, a 10 per cent drop since before the crisis according to the ECB.

The downsizing was particularly dramatic in France – where the number of banks halved to 360 – and Spain where it was exacerbated by a poor recovery in overall employment.
EU banks downsizing
Domestic credit institutions, % change 2007-2015

France (employees)
France (branches)
Germany (employees)
Portugal (branches)
Italy (branches)
Eurozone (employees)
Italy (employees)
UK (branches)
Eurozone (branches)
Portugal (employees)
Germany (branches)
UK (employees)
Spain (employees)
Spain (branches)

2007-2014 for UK branches
Source: ECB/Thomson Reuters Datastream - Valentina Romel
Financial Structure and Development (Study in Comparative Economics)

Goldsmith, Raymond W.
Goldsmith’s guess

- Modern growth diversifies financial structure
- Commercial banks’ role to shrink
- Bank assets: GDP will decline
Goldsmith’s guess

• What were banks supposed to do?
  – Pool and allocate savings
  – Bridge information asymmetries
  – Finance business
Bank assets: GDP in the Netherlands, 1900-1990 (DNB/CBS)
Bank assets : GDP in five countries, 1950-1990
(Source : IMF (assets) Maddison (GDP)
Bank assets : GDP in five countries, 1950-1990
(Source : World Bank: Financial Structure Database)
Three phases

• 1870-1950s

• 1950s-1990s

• > 1990s
Three phases

• 1870-1950s: Banking for the few
  – Companies and High Networth Individuals
  – Low risk, fairly low profitability
  – Highly respectable business for insiders
  – No retail business to speak of
  – Concentrate on three core functions
Three phases

• 1950s – 1990s: Consumers first
  – Riding the wave of rising incomes
<table>
<thead>
<tr>
<th>NAME</th>
<th>Sparkes</th>
</tr>
</thead>
<tbody>
<tr>
<td>WAGES</td>
<td></td>
</tr>
<tr>
<td>50 Hours at</td>
<td>6 11 3</td>
</tr>
<tr>
<td>Tool Money</td>
<td>2 8</td>
</tr>
<tr>
<td>Dirty Money</td>
<td>4 6</td>
</tr>
<tr>
<td>Fares</td>
<td></td>
</tr>
<tr>
<td>Subsistence</td>
<td></td>
</tr>
<tr>
<td>Petty Cash</td>
<td></td>
</tr>
<tr>
<td>I.T. REFUND</td>
<td></td>
</tr>
<tr>
<td>TOTAL DUE</td>
<td>6 19 5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>DEDUCTIONS</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>National Insurance</td>
<td>1 11</td>
</tr>
<tr>
<td>Income Tax</td>
<td>1 9</td>
</tr>
<tr>
<td>Subs.</td>
<td></td>
</tr>
<tr>
<td>G.E.F.</td>
<td></td>
</tr>
<tr>
<td>Special</td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td>1 3 8</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Date</th>
<th>5 MAR. '46</th>
</tr>
</thead>
</table>

| AMOUNT ENCLOSED | £ 5 15 9 |

**A. KIRSTEN, HAMBURG 11**

Abrechnung für Mats. Krüger D. Fressida

Heuervom 1.4. bis 30.4. Mon. Tage DM 280,-

Überstunden 93 Stunden à DM 1.36 DM 126.48

Verpflegungsgeld 25g. q. 4.50 DM 9,-

Sonstiger Verdienst  

Urlaub  

<table>
<thead>
<tr>
<th>Abzüge:</th>
<th>Barverdi-nst DM 415.48</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lohnsteuer</td>
<td>DM 42.75</td>
</tr>
<tr>
<td>Kirchensteuer</td>
<td>3.50</td>
</tr>
<tr>
<td>Berliner Notopier</td>
<td>4.85</td>
</tr>
<tr>
<td>Sozial-Versicherung</td>
<td>36.83</td>
</tr>
<tr>
<td>Vorschüsse in Hamburg Kroll</td>
<td>59.60</td>
</tr>
<tr>
<td>Manchester</td>
<td>11.76</td>
</tr>
<tr>
<td>Vorschüsse auf der Reise</td>
<td></td>
</tr>
<tr>
<td>Sonstige Abzüge</td>
<td>104.99</td>
</tr>
</tbody>
</table>

Auszuzahlendes Guthaben DM 250.49

Hamburg, den 30.4. 1950.

Sofort nachzählen! Spätere Reklamationen werden nicht anerkannt.
Three phases

• 1950s – 1990s: Consumers first
  – Riding the wave of rising incomes
  – Retail becomes central, rapid branch expansion
  – Cross-selling via current accounts
  – Consumer credit: from HNWI to all
  – Fourth core business: consumers and payments
Three phases

• >1990s: Losing direction
  - Disintermediation: first companies, then consumers
  - Rise of shadow banking and fintech eats into core business
  - Rising costs, declining profitability
ABN AMRO Bank, Cost : income ratio, 1950-2000 (annual reports)
Average cost : income ratio, 2000-2010 (World Bank, Financial Structure Database)
Three phases

• >1990s: Losing direction
  – Disintermediation: first companies, then consumers
  – Rising costs, declining profitability
  – Restoration efforts through increasing risk
  – Crisis hits consumer confidence
Three phases

• New strategies: more miss than hit
  – Bank assurance (ING, Fortis)
  – Investment banking (Barclays (2x), ABN AMRO (2x), Deutsche Bank, UBS, Crédit Suisse…)
  – Rapid international expansion (ABN AMRO, Fortis, RBS, Santander)
  – Internet banking (ING, ABN AMRO (3x))
  – Aggressive selling (BoA)
Three phases

• Key issues:
  – Legacy IT handicaps change, start-ups nimbler
  – Branch closures, bonus scandals, miss selling alienate customers
  – Cross-selling increasingly difficult
  – Regulatory demands increase cost of capital
What next?

- The future of retail banking
  - Strength: payments and client network, if allied to low-cost solutions
  - Weakness: legacy systems, bureaucracy and delusions about rewards
  - Opportunity: cross-selling
  - Threats: Fintech and shadow banking
bunq
bank of the free.

Imagine your bank, wallet and card, all in one.

bunq app
bunq for me
bunq for my business
Spanish Retail Banking Industry After de Crisis: Historical developments and new challenges

J. Carles Maixé-Altés
University of A Coruña, Spain

GUG eabh Workshop
Retail banking 1960s to 2020s

Friday, 25 November 2016,
Bethmann Bank AG
Frankfurt am Main
1. European retail banking, a short review

The European three pillar banking system: a sample

Sources: OECD, Banks profitability, and ECB
1. European retail banking, a short review

CR5 - Share of the 5 largest Credit Institutions in total assets (as a %)

Source: European Central Bank (ECB)

Relevant elements to analyze the Spanish case

- Persistence of the 3-pillar system
- Impact of the savings banks
- Global impact of some Spanish large banks
- The failure of the savings banks caused by the 2008 crisis
2. Spanish banking in the sixties:
the traditional three-pillar system in a framework of ‘financial repression’

Banking Acts of 1946 and 1962:
- New entry barriers for banks (1942 banking status quo)
- Strong regulation in financial sector: banks and savings banks
- Regulation stabilised privileged funding channels to finance public sector

Financial repression. Credit system coefficients in Spanish banking system before deregulation in 1977

Note: all banking system include credit cooperatives and industrial banks
The traditional three pillar system in a framework of ‘financial repression’

- **Private Banks** ➔ Commercial banks + Industrial banks
- **Public Banks**: state owned banks ➔ Post Office Saving Bank, Mortgage Bank, etc.
- **Savings Banks**
  - Non profit orientated private foundations
  - Self-regulating character
  - Local, provincial or regional scope
  - No owners (savings banks lacked alienable property rights)
- **Credit Cooperatives**: Mutual banks in rural areas (local and provincial)

Despite the multiplicity of regulations in force, the banking system grew and favored the level of financial intermediation, which came closer to that in other Western European economies.
3. Banking crisis and banking reform in the early eighties: Adapting the three pillar system in the age of globalization

A new scenario:
- Political transition processes to democracy
- International economic crisis and Spanish industrial crisis
- Financial reform (Fuentes-Quintana Reform) - 1977
- Banking crisis 1977-85

The causes of the Banking Crisis (1977-85):
- Early 1970s → banking expansion →
  - Excess capacity
  - Δ Intermediation costs
  - ↓ Profitability
- The role of the banking executives
- The lack of legal framework and banking oversight

The consequences:
- Disappearance of the industrial banking
- Restructuration of commercial banks branches networks
- Desregulation of Savings Banks → equal legal status as the commercial banks

Polarization of the 3-pillar system around banks and savings banks
Spanish savings banks: concentration ratio, market share and number of banks (1880-2008)

Notes: not including State owned Postal Saving Bank. Number of savings banks in every year in brackets. From 1928 number of savings banks affiliated in CECA.
4. The 2007 financial crisis: The evidence of the failure of the Spanish 3-pillar system

I. SAVINGS BANKS
problems of excess of capacity

Difference between default ratio in commercial banks and savings banks, 1969-2009

II. SAVINGS BANKS
risk and business model

Distribution of Savings banks and commercial banks branches, 1986-2005 (Index: 1992 = 100)
### III. SAVINGS BANKS capitalization problems

<table>
<thead>
<tr>
<th>Year</th>
<th>Core Equity Capital (thousand €)</th>
<th>Other Supplementary Capital in Savings Banks (as % of core capital)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Social Works Fund</td>
</tr>
<tr>
<td>1962</td>
<td>11 323</td>
<td>97.0</td>
</tr>
<tr>
<td>1965</td>
<td>37 233</td>
<td>44.8</td>
</tr>
<tr>
<td>1970</td>
<td>140 547</td>
<td>21.4</td>
</tr>
<tr>
<td>1975</td>
<td>404 794</td>
<td>32.9</td>
</tr>
<tr>
<td>1980</td>
<td>1 739 371</td>
<td>8.7</td>
</tr>
<tr>
<td>1985</td>
<td>3 916 844</td>
<td>8.7</td>
</tr>
<tr>
<td>1990</td>
<td>8 465 869</td>
<td>9.8</td>
</tr>
<tr>
<td>1993</td>
<td>11 454 437</td>
<td>8.4</td>
</tr>
<tr>
<td>1994</td>
<td>12 599 654</td>
<td>7.9</td>
</tr>
<tr>
<td>1995</td>
<td>13 875 368</td>
<td>7.5</td>
</tr>
<tr>
<td>1996</td>
<td>15 853 179</td>
<td>7.1</td>
</tr>
<tr>
<td>1997</td>
<td>18 203 526</td>
<td>6.6</td>
</tr>
<tr>
<td>1998</td>
<td>20 255 548</td>
<td>6.4</td>
</tr>
<tr>
<td>1999</td>
<td>22 511 254</td>
<td>6.2</td>
</tr>
<tr>
<td>2000</td>
<td>25 103 838</td>
<td>6.0</td>
</tr>
<tr>
<td>2001</td>
<td>27 664 240</td>
<td>5.9</td>
</tr>
<tr>
<td>2002</td>
<td>30 340 200</td>
<td>5.6</td>
</tr>
<tr>
<td>2003</td>
<td>32 955 892</td>
<td>5.5</td>
</tr>
<tr>
<td>2004</td>
<td>36 041 092</td>
<td>5.3</td>
</tr>
<tr>
<td>2005</td>
<td>43 688 352</td>
<td>4.9</td>
</tr>
<tr>
<td>2006</td>
<td>49 444 416</td>
<td>4.9</td>
</tr>
<tr>
<td>2007</td>
<td>59 207 096</td>
<td>4.8</td>
</tr>
<tr>
<td>2008</td>
<td>63 855 968</td>
<td>4.7</td>
</tr>
<tr>
<td>2009</td>
<td>64 697 996</td>
<td>5.0</td>
</tr>
</tbody>
</table>

Sources: Bank of Spain and CECA

### IV. SAVINGS BANKS corporate governance problems

- Politization of governing bodies
- Lack of market valuation and discipline
5. What lessons we can learn from the Spanish case, and what are our conclusions with respect the future of retail banking?

- The disappearance of the 3-pillar system in Spain is an operation with no return
- “Back to the basics” but in a new scenario: to find added value and risk diversification
- The search for new niche businesses: to expand the relationship with customers and increase service-related revenue
- It remains to be seen whether the commercial banks and the banks resulting from the savings banks maintain or are capable of recovering some of the idiosyncrasies that had characterized savings banks for decades
- The loss of diversity, and concentration is not leading to improvements in the financing conditions for households and SMEs
- Financial exclusion is affecting increasing segments of the population in some European countries
Pierre Mounier-Kuhn
CNRS & Université de Paris-Sorbonne
mounier@msh-paris.fr

Computerization of retail banking in France (1950s – 1990s)

Retail Banking. 1960s to 2020s
Tagung, EABH, GUG,
Bethmann Bank, Frankfurt am Main
Why is a historian of computing interested in banks?

• A major market (10 to 16% of world IT market throughout the XXth century)
• Banks as “clients-innovators’
• “Bancarization” in the XXth century
• -> investment in rationalization and productivity (+ banks as investors in the computer industry)

BNP Paribas trouve son racine au cœur de l'histoire économique, comptenique et financière de nombreuses banques ayant progressivement vu leurs débuts. Son histoire et sa vocaction en font un acteur majeur de la révolution informatique. Entre les murs de la banque, on reprend une grande part du matériau de l'informatique, et de nombreuses technologies universelles. Les banques ont été répétées. Elles furent la source de multiples innovations.

Cette avancée en la foi humanoïde et technologique est restituée à partir du témoignage des acteurs, d'une vision documentaire et de quelques images historiques conservées par le Group BNP Paribas. En fut établie un rapport qui réunit en un livre des témoignages 25 banques, passionnés par les « ordinateurs » à l'intérieur des entreprises et par l'utilisation de l'informatique. Il est de cette histoire que sont nées les "mémoires vives". Elles fusionnent entre les éditeurs, les agents, les partenaires et les clients, les choix des dirigeants et l'interprétation permanente des innovations et des collaborateurs de la banque dans un mouvement d'expression de l'histoire électronique avec le futur.

P. Mounier-Kuhn Retail banking Frankfurt
2016
XIXth century: manual processing (here at CNEP, Paris 1882)
Banks as “clients-innovators”: bank employees became inventor-entrepreneurs

• William S. Burroughs (1880s)
• Gustav Tauschek (1920s)
• ‘RoBaVer’, H. van Duyl -> Kamatec (1923)
• Banque d'Alsace-Lorraine, Georges Vieillard : Powers -> Bull (1928-1931)

(plus the many computer experts, later, who worked in banks, then created software houses)
1. “Bancarization” in the XXth century

- Retail banks and their policy of expansion
- Social change: Middle class, employees/wages
- Role of regulation/legislation
  1955: French banks-EDF-GDF agreements => automated bill payment
  1968: Grenelle agreements => salaries, pensions, retirement fees, and other *prestations sociales* through banks (virements & prélèvements).
- Economic policy
  1966: Debré-Haberer reform / re-liberalization of the bank sector
  ⇒ Growing competition, hunt for clients, spread of branches.
  Mid-1980s: new wave of liberalization (“3 D”)

⇒ Long trend to improve productivity in accounting & data processing
sous le signe du rendement

Après les tabulatrices à vitesse minimale de 40 cartes à la minute, Bull ajoute à sa gamme une poinceuse automatique Standard. En outre de sa fonction normale, elle peut être utilisée en série à la vitesse de 200 cartes à la minute.

Documentez-vous sur les avantages de cette poinceuse automatique en demandant des enseignements complémentaires à la COMPAGNIE DES MACHINES BULL

92 bis, avenue Gambetta, Paris (10) Téléph. (4 lignes groupées) Monéli: 02 85

HANGA ROE A L'ETRANGER :

Bull Rhône, 1, place du Commerce, Bruxelles,
Traders, Kahr, Ebersh, 50, Bahnersand, Düsseldorf,
Sauter, C. Cty. G. Gs. et Co. (S. A.) via Palermo, Milan
Acceptée au Louvre. Roth, Ltd., Bournemouth.

La poinceuse automatique et sa série Bull servent à la préparation préalable de la carte à imprimer. Avec facilité de contrôle, la comparaison des cartes prédéfinies est assurée. La saisie de la carte est effectuée à la machine, et une vérification ultérieure de modèle peut être effectuée en série. La vitesse est de 200 cartes à la minute.

P. Mounier Kuhn, Retail banking, Frankfurt
Adoption of punch-card machines => batch processing (taylorism in office automation) and centralization
1950s: investments in DP

Electronic calculators
“Big Data” on cards
1957-1959: French banks switch to computers

• Banque de France & most large retail banks acquire mid-size IBM or Bull computers: Crédit Lyonnais, Caisse nationale d’Epargne, CCF, Société nancéenne de crédit, Société Générale ≥ 1963

• BNCI, CNEP, CIC chose the largest computers
Same timing as German banks
Years ahead of most British or US banks

IBM 709
at BNCI
(1959)
Why this early move?

• Facing expansion of operations and costs
• Size of French banks (≠ USA)
• Banks already equipped with large punch-card systems (=> data on cards, centralization)
• Managers: *polytechniciens* (feeling for technology?)
• Nationalized sector: driving modernization
Technology as prestige booster
(Bull Gamma 60 at Comptoir national d’escompte de Paris, 1963)
+ Prestige: computers as symbols of modernity & efficiency
BNCL internal report, 1955-1957, rationale for the acquisition of an IBM 709

- Improving processing of applications already done on punch-card machines; mechanizing still manual operations
- Normal evolution of bank organization
- Not likely that a substantial economy will result...
- ... but opens possibilities of investigation and exploration of new products & techniques
- “Le danger de paralysie qu’entraînerait une indisposition ou un sabotage du monstre. [...] Mais je ne pense pas que ce risque soit plus grand que ceux que nous courons aujourd’hui”

In short, a calculated risk to support the bank’s expansion.
2. Banks’ influence / innovation in data-processing

1930s: 4-operation arithmetic -> Tabulators & Calculators
Cheque sorters (proof machines)
Echelles bancaires (interest rate computation) embedded in Bull electronic calculator
Crédit Lyonnais/SEA: “Calculateur bancaire” (1960) -> compatible
Alternate data recording techniques: optical or magnetic characters
• E13B (NCR & General Electric)-> USA
• CMC 7 (caractère magnétique codé 7) (Bull patents, 1963) -> Europe + specific banking peripherals
ATM Cash machines & magnetic cards
Transaction software: IBM CICS, Honeywell-Bull TDS

P. Mounier-Kuhn Retail banking Frankfurt
2016
Cheques processing systems

NCR “Proof”
(sorting-> Clearing house)
Early 1960s: US & European efforts toward automatic cheque reading
Automatic cheque sorters ≥ 1962
« Evolution, not revolution? »

- 1950s: Electronics enters digital DP
- 1960s: Computers enhance traditional « scientific management » and « taylorist » batch procedures
- 1970s: Towards online, interactive DP
- Transition dilemma ± 1970:
  Batch processing vs. Real time online?
  « Remote batch »
  Networking or véloprocessing?
Driving forces

• More efficiency / safety / reliability
• Reducing operating costs + “social risk” (strikes)
• Ideal of “cashless society”
• Reducing / eliminating cheques
• New possibilities offered by the computer industry:
  - Digital networks (SWIFT 1975, etc.)
  - Credit cards, ATM connected to computers

-> 1970s-1980s: grand IT plans -> “building cathedrals”
Continued growth of accounts, operations, employees at BNP in the 1970s

P. Mounier-Kuhn
Retail banking
Frankfurt 2016
P. Mounier-Kuhn Retail banking Frankfurt
2016
From magnetic stripe to microchip
10 years of development & negotiations
Clients online: Minitel (1982 -)

1980 : early experiments with BNP, Cr. Lyonnais, etc.
1982 : Free distribution of Minitel terminals to public
      First use: corporate and commercial information
1984 : Transactions allowed
      500,000 Minitel terminals
1990:  5 million Minitel terminals
Converging technologies: toward the “cashless society”

New Minitel + Smart Card (1990s)
Warnings…

Computerization -> de-staffing

“banks will be the steel industry [or coal mines] of the late XXth century”

⇒ Triggered social unrest, negotiations => compromise
“The programmed euthanasia of bankers”

1991, Cl. Porcherot (head of IT at BNP) in *Les Echos*:
- Banks are expanding on other professions (insurance…)
- With digital technologies, and the growing exchange of digital data (EDD) between companies, telecom operators can offer banking services to their clients
- … provided they comply to specific constraints of the banking profession.
- Bankers must recognize the new opportunity to offer best EDD services: reduce paperwork + gather information on their clients.
Clients online (followed): Internet (≥ 1993)

1993 : early Internet experiments at Paribas
1995 : All major banks create websites
    First use: information pages
1997 : All major banks allow online transactions
    ... same innovation timing as Minitel
2000s: going online

- Grand plans to re-build network infrastructures (multichannel bank)
- Adjust to growing volume of data
- Adjust to new digital media (micro-computers, then smartphones & tablets)
- Crucial problem: compromise between “digital openness” and safety/ secrecy constraints
# Number of cheques / year / person in Europe

<table>
<thead>
<tr>
<th>Country</th>
<th>1990</th>
<th>2010</th>
<th>2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>France</td>
<td>80</td>
<td>48</td>
<td>46</td>
</tr>
<tr>
<td>Royaume-Uni</td>
<td>56</td>
<td>18</td>
<td>15.5</td>
</tr>
<tr>
<td>Belgique</td>
<td>21</td>
<td>0.6</td>
<td>0.6</td>
</tr>
<tr>
<td>Italie</td>
<td>15</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Allemagne</td>
<td>10</td>
<td>0.6</td>
<td>0.5</td>
</tr>
<tr>
<td>Pays Bas</td>
<td>17</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Espagne</td>
<td>7</td>
<td>2.5</td>
<td>2</td>
</tr>
<tr>
<td>UE 25</td>
<td><strong>28</strong></td>
<td><strong>10</strong></td>
<td><strong>9</strong></td>
</tr>
</tbody>
</table>
Cheques in France, 2010: a steady, orchestrated decline

- 18% of bank transactions (beside currency)
- =1,828 billion €.
- 3.12 billion cheques > 4,000 tons of paper (an economic, managerial and environmental problem)

Main reason: no charge on cheques, and consumers have succeeded in keeping them free
Conclusions

• “Longue durée” history : from invention to broad adoption (ex: networks)
  (cf. Raymond Cummings: “time is what keeps everything from happening at once”)

• French banks “social compromise”

• Banks’ role in shaping innovation

• Banks’ role in social engineering

• Banks’ role in shaping innovation policies?
Continuity and change in Swedish banking since the 1960s

(For how long can Swedish commercial and retail banking prosper?)
The Swedish financial system and banking sector

- Bank-oriented financial system
- Commercial banks, universal banks, house banks
- Close relations between banks and industry: bank-industry groups, bank-industry networks – Wallenberg group and the Handelsbanken group
- Stability and robustness, successful crisis management
- Government regulation, supervision and intervention
- Public and private cooperation and interaction
- Oligopolistic banking system
- “The big four”: SEB, Handelsbanken, Nordea and Swedbank
## Largest companies in Sweden 2015, ranked according to turnover

<table>
<thead>
<tr>
<th>Rank</th>
<th>Company</th>
<th>Sector</th>
<th>No. of employees</th>
<th>Banking group</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Volvo</td>
<td>Trucks</td>
<td>95 000</td>
<td>Handelsbanken</td>
</tr>
<tr>
<td>3</td>
<td>Ericsson</td>
<td>ICT</td>
<td>118 000</td>
<td>Handelsbanken &amp; Wallenberg</td>
</tr>
<tr>
<td>5</td>
<td>Skanska</td>
<td>Construction</td>
<td>58 000</td>
<td>Handelsbanken</td>
</tr>
<tr>
<td>6</td>
<td>Electrolux</td>
<td>Appliances</td>
<td>60 000</td>
<td>Wallenberg</td>
</tr>
<tr>
<td>8</td>
<td>SCA</td>
<td>Forest &amp; hygiene products</td>
<td>44 000</td>
<td>Handelsbanken</td>
</tr>
<tr>
<td>11</td>
<td>Atlas Copco</td>
<td>Engineering</td>
<td>44 000</td>
<td>Wallenberg</td>
</tr>
<tr>
<td>13</td>
<td>StoraEnso</td>
<td>Paper&amp;pulp</td>
<td>29 000</td>
<td>Wallenberg</td>
</tr>
<tr>
<td>14</td>
<td>Sandvik</td>
<td>Engineering</td>
<td>47 000</td>
<td>Handelsbanken</td>
</tr>
<tr>
<td>15</td>
<td>ICA</td>
<td>Trade</td>
<td>23 000</td>
<td>Handelsbanken</td>
</tr>
</tbody>
</table>
"The big four": SEB, Handelsbanken, Nordea and Swedbank

SHARE OF BALANCE SHEET TOTAL

- SEB: 22%
- Handelsbanken: 22%
- Nordea: 21%
- Swedbank: 16%
- Other banks: 19%
"The big four": SEB, Handelsbanken, Nordea and Swedbank

MARKET SHARES ON THE SWEDISH CREDIT MARKET

- SEB: 14%
- Handelsbanken: 22%
- Swedbank: 22%
- Nordea: 13%
- Other banks: 29%
"The big four": SEB, Handelsbanken, Nordea and Swedbank

**MARKET SHARES ON THE SWEDISH DEPOSIT MARKET**

- SEB 16%
- Handelsbanken 19%
- Nordea 15%
- Swedbank 19%
- Other banks 31%
"The big four": SEB, Handelsbanken, Nordea and Swedbank

SHARE OF HOUSEHOLDS' SAVINGS IN MUTUAL FUNDS

- SEB 13%
- Handelsbanken 11%
- Nordea 12%
- Swedbank 24%
- Other banks 40%
"The big four": SEB, Handelsbanken, Nordea and Swedbank

SHARE OF BANK EMPLOYEES IN SWEDEN

- Other banks 24%
- SEB 19%
- Handelsbanken 18%
- Swedbank 22%
- Nordea 17%
"The big four": SEB, Handelsbanken, Nordea and Swedbank
Phases in the development of the Swedish banking system 1965-2015

• 1960s and 1970s: regulation, status quo
• 1980s: deregulation and growth
• 1990-1995: crisis, turbulence and reorganization
• 2000-2015: growth and profitability, internationalization, diversification, focus on human capital
Market shares on the deposit market 1965-1990

1965: Cooperative banks = 10, Savings banks = 90, Commercial banks = 0
1970: Cooperative banks = 10, Savings banks = 90, Commercial banks = 0
1975: Cooperative banks = 10, Savings banks = 90, Commercial banks = 0
1980: Cooperative banks = 10, Savings banks = 90, Commercial banks = 0
1985: Cooperative banks = 10, Savings banks = 90, Commercial banks = 0
1990: Cooperative banks = 10, Savings banks = 90, Commercial banks = 0

Legend:
- Green: Cooperative banks
- Red: Savings banks
- Blue: Commercial banks
Market shares on the credit market
1965-1990

<table>
<thead>
<tr>
<th>Year</th>
<th>Cooperative banks</th>
<th>Savings banks</th>
<th>Commercial banks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1965</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1970</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1975</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1980</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1985</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1990</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
No. of banks and bank branches 1965-1990
The deregulation of the Swedish banking market

1978
• Elimination of the regulation of interest rates on deposit accounts

1980
• Introduction of bank certificates

1983
• Elimination of the regulation of interest rates on lending
• Introduction of market certificates

1985
• Elimination of regulation of banks lending

1986
• Foreign banks are allowed to establish subsidiary companies in Sweden

1987
• Banks were allowed to integrate with other financial companies

1989
• Abolishment of regulations on international currency transactions

1990
• Foreign ownership in banks and finance companies were allowed
Annual growth of total credit volumes in Swedish banks 1985-1989, percent
Crisis and reorganization, 1990-95

- Governmental aid and crisis management
- Reorganization of savings banks and cooperative banks into Swedbank
- Formation of Nordbanken (Nordbanken + Gota)
Market shares on the deposit market 1990-2015

- Cooperative banks
- Savings banks
- Commercial banks
Market shares on the credit market
1990-2015
No. of banks and bank branches, 1995-2015
Swedish banks’ balance sheets
total 1992-2015, SEK billion
Swedish banks’ operating profits and loan losses, SEK billion
## Internationalization

<table>
<thead>
<tr>
<th>Bank</th>
<th>No. of employees (% in Sweden)</th>
<th>Lending to the public, SEK billion (% to Swedish market)</th>
<th>Deposits from the public, SEK billion (% from Swedish market)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nordea</td>
<td>29815 (22)</td>
<td>3133 (23)</td>
<td>1777 (20)</td>
</tr>
<tr>
<td>SEB</td>
<td>16599 (50)</td>
<td>1353 (56)</td>
<td>884 (42)</td>
</tr>
<tr>
<td>Swedbank</td>
<td>15293 (55)</td>
<td>1413 (83)</td>
<td>748 (60)</td>
</tr>
<tr>
<td>Handelsbanken</td>
<td>11819 (61)</td>
<td>1866 (62)</td>
<td>754 (59)</td>
</tr>
</tbody>
</table>
Annual changes in percent of employment in Swedish banks 1992-2010
Educational level, employees in Swedish banks 1986-2010

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Upper Secondary School</td>
<td>84.9</td>
<td>76.9</td>
<td>68.4</td>
<td>57.7</td>
<td>45.7</td>
</tr>
<tr>
<td>Post Secondary School &lt;3 year</td>
<td>5.3</td>
<td>11.5</td>
<td>16.2</td>
<td>15.1</td>
<td>17.4</td>
</tr>
<tr>
<td>Post Secondary School ≥ 3 year</td>
<td>9.8</td>
<td>11.6</td>
<td>15.4</td>
<td>27.3</td>
<td>37.0</td>
</tr>
<tr>
<td>Total number</td>
<td>65052</td>
<td>53689</td>
<td>46654</td>
<td>41795</td>
<td>44262</td>
</tr>
</tbody>
</table>
Education profiles, number and percent of employees with university degrees in Swedish banks 1986-2010

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Business/Economy</td>
<td>2,663</td>
<td>3,297</td>
<td>4,166</td>
<td>7,336</td>
<td>10,784</td>
</tr>
<tr>
<td>Law</td>
<td>1,254</td>
<td>1,218</td>
<td>1,086</td>
<td>1,188</td>
<td>1,399</td>
</tr>
<tr>
<td>Social Science</td>
<td>1,404</td>
<td>308</td>
<td>449</td>
<td>721</td>
<td>1,432</td>
</tr>
<tr>
<td>Science &amp; IT</td>
<td>398</td>
<td>907</td>
<td>1,016</td>
<td>1,415</td>
<td>1,704</td>
</tr>
<tr>
<td>Other</td>
<td>654</td>
<td>504</td>
<td>487</td>
<td>745</td>
<td>1,037</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>6,373</td>
<td>6,234</td>
<td>7,204</td>
<td>11,405</td>
<td>16,356</td>
</tr>
</tbody>
</table>

Percent: 100

SU
The number of licensed financial advisers in Swedish banks 2001-2010
The no. of internet customers in Swedish banks 1997-2008
Historical strengths and current challenges

• Interaction and cooperation with government and public authorities
• Technology
• Human capital
• SEB & Handelsbanken: continuity – market segments, management, ownership and governance, financial centers of business groups, cautious internationalization, high ranking in customer satisfaction surveys
• Nordea and Swedbank: change and turbulence – new market segments and geographical markets, new owners, new management, new business and management culture, low ranking in customer satisfaction surveys
Retail banking in Europe: Current performance & future drivers

Frankfurt, 25 November 2016
Agenda

1. Where we stand today
2. Future retail banking challenges
High – and often rising – private-sector debt levels in Europe

**Credit to households**

% of GDP

<table>
<thead>
<tr>
<th></th>
<th>FR</th>
<th>DE</th>
<th>UK</th>
<th>US</th>
<th>Euro area</th>
<th>IT</th>
<th>ES</th>
<th>PT</th>
<th>GR</th>
<th>IE</th>
<th>SE</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>60</td>
<td>80</td>
<td>60</td>
<td>40</td>
<td>80</td>
<td>60</td>
<td>40</td>
<td>80</td>
<td>60</td>
<td>80</td>
<td>60</td>
</tr>
<tr>
<td>2015</td>
<td>80</td>
<td>100</td>
<td>80</td>
<td>60</td>
<td>100</td>
<td>80</td>
<td>60</td>
<td>100</td>
<td>80</td>
<td>100</td>
<td>80</td>
</tr>
</tbody>
</table>

Source: BIS

**Credit to non-financial corporations**

% of GDP

<table>
<thead>
<tr>
<th></th>
<th>FR</th>
<th>DE</th>
<th>UK</th>
<th>US</th>
<th>Euro area</th>
<th>IT</th>
<th>ES</th>
<th>PT</th>
<th>GR</th>
<th>IE</th>
<th>SE</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>120</td>
<td>160</td>
<td>120</td>
<td>80</td>
<td>160</td>
<td>120</td>
<td>80</td>
<td>160</td>
<td>120</td>
<td>160</td>
<td>120</td>
</tr>
<tr>
<td>2015</td>
<td>140</td>
<td>200</td>
<td>140</td>
<td>100</td>
<td>200</td>
<td>140</td>
<td>100</td>
<td>200</td>
<td>140</td>
<td>200</td>
<td>140</td>
</tr>
</tbody>
</table>

Source: BIS
Credit quality has stabilised/improved (from a poor level)

**NPLs in selected countries**
Non-performing loans as % of total loans

**Total NPLs**
in billions of national currency

* No data available for Q1 and Q3, data for Germany only available for Q4.

Sources: IMF, Banco de España, Banco de Portugal, Deutsche Bank Research
... thanks to record-low interest rates, which has relieved banks

Retail lending rates in the euro area

<table>
<thead>
<tr>
<th>%, new business</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.5</td>
</tr>
<tr>
<td>4.0</td>
</tr>
<tr>
<td>3.5</td>
</tr>
<tr>
<td>3.0</td>
</tr>
<tr>
<td>2.5</td>
</tr>
<tr>
<td>2.0</td>
</tr>
<tr>
<td>1.5</td>
</tr>
</tbody>
</table>

- Mortgages
- Loans to self-employed & non-corporate businesses
- Consumer credit

Source: ECB

9M loan loss provisions of the large European banks

<table>
<thead>
<tr>
<th>% yoy</th>
</tr>
</thead>
<tbody>
<tr>
<td>15</td>
</tr>
<tr>
<td>10</td>
</tr>
<tr>
<td>5</td>
</tr>
<tr>
<td>0</td>
</tr>
<tr>
<td>-5</td>
</tr>
<tr>
<td>-10</td>
</tr>
<tr>
<td>-15</td>
</tr>
<tr>
<td>-20</td>
</tr>
</tbody>
</table>

Sources: Company reports, Deutsche Bank Research
But banks are suffering from lack of growth, shrinking interest margins and inefficiencies.

**Total revenues**

Q1 2006 = 100, up to Q2 16

**Net income**

USD / EUR bn, up to Q2 16

Sources: FDIC, company reports, Deutsche Bank Research
Hence, building up capital has been painful.

Core Tier 1/Common Equity Tier 1 ratio* of Europe's 20 largest banks

<table>
<thead>
<tr>
<th>Year</th>
<th>Fully loaded</th>
<th>Current/transitional rules</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q2 08</td>
<td>7.0%</td>
<td></td>
</tr>
<tr>
<td>Q2 09</td>
<td>8.2%</td>
<td></td>
</tr>
<tr>
<td>Q2 10</td>
<td>9.1%</td>
<td></td>
</tr>
<tr>
<td>Q2 11</td>
<td>10.1%</td>
<td></td>
</tr>
<tr>
<td>Q2 12</td>
<td>11.3%</td>
<td></td>
</tr>
<tr>
<td>Q2 13</td>
<td>12.2%</td>
<td></td>
</tr>
<tr>
<td>Q2 14</td>
<td>13.2%</td>
<td></td>
</tr>
<tr>
<td>Q2 15</td>
<td>14.0%</td>
<td></td>
</tr>
<tr>
<td>Q2 16</td>
<td>14.8%</td>
<td></td>
</tr>
</tbody>
</table>

* Basel II; Basel 2.5 applied from Q4 11 on, Basel III from Q1 14 on

Sources: Company reports, Deutsche Bank Research

Euro-area banks' leverage ratio

<table>
<thead>
<tr>
<th>Year</th>
<th>Total assets / equity capital</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jun 07</td>
<td>20</td>
</tr>
<tr>
<td>Dec 07</td>
<td>19</td>
</tr>
<tr>
<td>Jun 08</td>
<td>18</td>
</tr>
<tr>
<td>Dec 08</td>
<td>17</td>
</tr>
<tr>
<td>Jun 09</td>
<td>16</td>
</tr>
<tr>
<td>Dec 09</td>
<td>15</td>
</tr>
<tr>
<td>Jun 10</td>
<td>14</td>
</tr>
<tr>
<td>Dec 10</td>
<td>13</td>
</tr>
<tr>
<td>Jun 11</td>
<td>12</td>
</tr>
<tr>
<td>Dec 11</td>
<td>11</td>
</tr>
<tr>
<td>Jun 12</td>
<td>10</td>
</tr>
<tr>
<td>Dec 12</td>
<td>9</td>
</tr>
<tr>
<td>Jun 13</td>
<td>8</td>
</tr>
<tr>
<td>Dec 13</td>
<td>7</td>
</tr>
<tr>
<td>Jun 14</td>
<td>6</td>
</tr>
<tr>
<td>Dec 14</td>
<td>5</td>
</tr>
<tr>
<td>Jun 15</td>
<td>4</td>
</tr>
<tr>
<td>Dec 15</td>
<td>3</td>
</tr>
<tr>
<td>Jun 16</td>
<td>2</td>
</tr>
</tbody>
</table>

Sources: ECB, Deutsche Bank Research
Agenda

1. Where we stand today
2. Future retail banking challenges
Challenge 1: Continuing deposit glut, anaemic lending

Loan-deposit ratio with non-banks

<table>
<thead>
<tr>
<th></th>
<th>1999</th>
<th>2006</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>DE</td>
<td>120</td>
<td>110</td>
<td>100</td>
</tr>
<tr>
<td>FR</td>
<td>130</td>
<td>120</td>
<td>110</td>
</tr>
<tr>
<td>IT</td>
<td>140</td>
<td>130</td>
<td>120</td>
</tr>
<tr>
<td>ES</td>
<td>110</td>
<td>100</td>
<td>90</td>
</tr>
<tr>
<td>EMU</td>
<td>120</td>
<td>110</td>
<td>100</td>
</tr>
</tbody>
</table>

Sources: ECB, Deutsche Bank Research

Euro-area banks' business with households

<table>
<thead>
<tr>
<th></th>
<th>1999</th>
<th>2006</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>DE</td>
<td>2</td>
<td>2.5</td>
<td>3</td>
</tr>
<tr>
<td>FR</td>
<td>2</td>
<td>2.5</td>
<td>3</td>
</tr>
<tr>
<td>IT</td>
<td>2.5</td>
<td>3</td>
<td>3.5</td>
</tr>
<tr>
<td>ES</td>
<td>2</td>
<td>2.5</td>
<td>3</td>
</tr>
<tr>
<td>EMU</td>
<td>2.5</td>
<td>3</td>
<td>3.5</td>
</tr>
</tbody>
</table>

Source: ECB
Challenge 2: Even tighter (retail banking) regulation

Leverage ratio
→ Rise in requirements up to 5% possible
→ Massively more problematic for European than for US banks
→ Hurts low-risk, high-volume business such as mortgages in particular

Interest rate risk in the banking book (IRRBB)
→ Potentially significant increase in capital requirements (e.g. for fixed-rate mortgages)

IFRS 9
→ Shift towards “expected loss” (rather than “incurred loss”) provisioning
→ Substantial increase in mortgage-related loan loss provisions/reduced profitability likely
Challenge 3: New competitors

**Global FinTech investment**

<table>
<thead>
<tr>
<th>Year</th>
<th>Investment USD bn</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>1</td>
</tr>
<tr>
<td>11</td>
<td>2</td>
</tr>
<tr>
<td>12</td>
<td>3</td>
</tr>
<tr>
<td>13</td>
<td>5</td>
</tr>
<tr>
<td>14</td>
<td>12</td>
</tr>
<tr>
<td>15</td>
<td>25</td>
</tr>
</tbody>
</table>

Sources: CB Insights, Deutsche Bank Research

**Investment in FinTechs by country**

<table>
<thead>
<tr>
<th>Country</th>
<th>Investment USD bn</th>
</tr>
</thead>
<tbody>
<tr>
<td>US</td>
<td>12</td>
</tr>
<tr>
<td>China</td>
<td>3</td>
</tr>
<tr>
<td>India</td>
<td>6</td>
</tr>
<tr>
<td>UK</td>
<td>9</td>
</tr>
<tr>
<td>Germany</td>
<td>12</td>
</tr>
<tr>
<td>Ireland</td>
<td>15</td>
</tr>
</tbody>
</table>

Sources: Accenture, Innovate Finance, Deutsche Bank Research
Challenge 4: Large investment needs, low efficiency

**Share of online banking users**

<table>
<thead>
<tr>
<th>Country</th>
<th>2007</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>DE</td>
<td>50%</td>
<td>70%</td>
</tr>
<tr>
<td>FR</td>
<td>40%</td>
<td>60%</td>
</tr>
<tr>
<td>UK</td>
<td>30%</td>
<td>50%</td>
</tr>
<tr>
<td>IT</td>
<td>10%</td>
<td>20%</td>
</tr>
<tr>
<td>NL</td>
<td>80%</td>
<td>90%</td>
</tr>
<tr>
<td>EMU</td>
<td>45%</td>
<td>65%</td>
</tr>
</tbody>
</table>

Sources: Eurostat, Deutsche Bank Research

**Cost-income ratio of European banks**

<table>
<thead>
<tr>
<th>Year</th>
<th>Germany</th>
<th>France</th>
<th>UK</th>
<th>Italy</th>
<th>Spain</th>
<th>Sweden</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2007</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2008</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2009</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2010</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2011</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2012</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2013</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2014</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2015</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Sources: ECB, Deutsche Bank Research
Contact

Jan Schildbach
Deutsche Bank Research
Head of Banking, Financial Markets and Regulation

Taunusanlage 12
D-60325 Frankfurt/Main
Phone: +49 69 910-31717
E-mail: jan.schildbach@db.com
Internet: www.dbresearch.com
The Inventors of Retail Banking

Historical Success Factors and Current Challenges for the German Savings Banks
## Market shares in deposit business

<table>
<thead>
<tr>
<th>Total Customer Deposits</th>
<th>Regional Banks, other Credit Banks and other Banks</th>
<th>Big Banks</th>
<th>Cooperative Sector</th>
<th>Savings Banks Finance Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>€1,043.5 Bn.</td>
<td>37.7</td>
<td>22.0</td>
<td>17.1</td>
<td>23.2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sight Deposits</th>
<th>Regional Banks, other Credit Banks and other Banks</th>
<th>Big Banks</th>
<th>Cooperative Sector</th>
<th>Savings Banks Finance Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>€615.9 Bn.</td>
<td>34.7</td>
<td>20.9</td>
<td>17.3</td>
<td>27.1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Fixed-Term Deposits (under two years)</th>
<th>Regional Banks, other Credit Banks and other Banks</th>
<th>Big Banks</th>
<th>Cooperative Sector</th>
<th>Savings Banks Finance Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>€87.0 Bn.</td>
<td>26.8</td>
<td>12.5</td>
<td>28.5</td>
<td>32.2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Savings Deposits</th>
<th>Regional Banks, other Credit Banks and other Banks</th>
<th>Big Banks</th>
<th>Cooperative Sector</th>
<th>Savings Banks Finance Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>€310.0 Bn.</td>
<td>51.2</td>
<td>31.0</td>
<td>11.1</td>
<td>16.7</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Savings Bonds</th>
<th>Regional Banks, other Credit Banks and other Banks</th>
<th>Big Banks</th>
<th>Cooperative Sector</th>
<th>Savings Banks Finance Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>€30.7 Bn.</td>
<td>48.0</td>
<td>16.2</td>
<td>9.3</td>
<td>26.5</td>
</tr>
</tbody>
</table>

Status 31.12.2015
Content

1. The Invention of Retail Banking
2. The Development of Retail Banking since the 1950s
3. Historical Success Factors
4. Current Challenges
The Invention of Retail Banking
Savings accounts ...

Savings book of Ploener Spar- und Leihkasse (1826)
… and loans

Loan contract of Kreis-Sparkasse Bielefeld (1862)
Introduction of the giro system

A crucial step to modernization

Imperial Cheque Act of 1908:
Savings Banks were allowed to execute cashless payments (cheques and transfers)

Start of the giro system in 1909

- Modern service for customers of all kind (private households, enterprises, municipalities)
- Providing capital for short-term lending to SMEs („Mittelstandskredit“)
- Driving force to build up an umbrella organization with clearing banks (Girozentralen) and clearing associations (Giroverbände)
„Bank-like“
development
and formation
of the Savings
Banks Group

Inception of securities business (war bonds) in the First World War

1919: Founding of insurance companies

1921: Elimination of existent restrictions for cheque, deposit and current account transactions

Permission to conduct bank operations (with a „special revocable approval“)

1924: Founding of the Deutsche Sparkassen- und Giroverband (DSGV)

1929: Founding of regional building societies (Landesbausparkassen)
Developing the brand „Sparkasse“

„Hermes-Kopf“ (1925) and „Sparkassen-S“ (1938)
Savings banks became legally independent institutions (Anstalten des öffentlichen Rechts) guaranteed by the municipalities

Legal protection of the name „Sparkasse“

Recognition as credit institutions with the same right as banks (National Banking Act – Reichs-Kreditwesengesetz -, 1934)
The Development of Retail Banking since the 1950s
The triumph of current accounts

Savings banks became market leaders.

Number of giro accounts:
1958  4,7 millions
1960  6 millions
1970  over 12 Millionen

In the 1950s wages were mostly payed out cash.

Since ca. 1957 companies began to transfer wages and salaries.

Employees were compelled to open current accounts.

Wage packet of a joiner's shop

Advertising poster for „Spargiro“, 1958

Finanzgruppe
Deutscher Sparkassen- und Giroverband
Expansion of the branch network

In 1958, the regulation that restricted the opening of new branches was eliminated.

Banks and savings bank could set up branches wherever they liked.

Number of savings banks‘ branches:

1955: 9,057*
1960: 11,959
1965: 13,621
1970: 15,875
2015: 14,451 incl. self-service branches

*FRG & West Berlin, without Saarland

Savings bank’s branch in Munich-Fürstenried, built 1961/62
Savings Banks have the densest branch network

Source: Acxiom, OpenStreetMap
Status: 2013
At the end of the 1950s the big banks discovered the normal population as a new target group.

They offered consumer credits (Persönliche Kleinkredite), a product that was neglected by most savings banks.

The savings banks increased their efforts to sell consumer credits.

They built up a new image: Savings banks are institutions for all kind of banking.
„Wenn‘s um Geld geht … Sparkasse“
Savings banks's claim since 1963
Innovations in Retail Banking

Drive-in counter (Saarbrücken 1957) and ATM (Tübingen 1968)
Pioneer in self-service banking

Bezirks-Sparkasse Heppenheim (1961)
New products in the era of „market orientation“
Sharpening of the brand „Sparkasse“

New Corporate Design by Otl Aicher (1971/72)
The challenge of new technologies

Direct banks as new competitors with comparative advantages:

- No expensive branches
- Less (skilled) personnel

Heterogeneous client base of the savings banks.

Multi-channel-strategy: Integration of new media within the proven distribution system.

Customers decide which means of contact they use.
Historical Success Factors
Key factors for the success of the savings banks

• Independent companies
• Limited business district
• Excellent knowledge of the local market
• Part of a network (*Verbund*): Savings Bank Finance Group
• Specialised suppliers for banking products
# The Savings Banks Finance Group

Status 31.12.2015

### Sparkassen

**Status 31.12.2015**

<table>
<thead>
<tr>
<th>Number of Institutions</th>
<th>409*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Assets</td>
<td>€1,145 Bn.</td>
</tr>
<tr>
<td>Employees</td>
<td>233,742</td>
</tr>
</tbody>
</table>

* as at 01.06.2016

### Landesbanken/ Girozentralen

<table>
<thead>
<tr>
<th>Number of LB Companies</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Assets**</td>
<td>€965 Bn.</td>
</tr>
<tr>
<td>Employees</td>
<td>36,214</td>
</tr>
</tbody>
</table>

**Excluding Deka**

### Regional Building Societies (Landesbausparkassen)

<table>
<thead>
<tr>
<th>Number of Institutions</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Assets</td>
<td>€65 Bn.</td>
</tr>
<tr>
<td>Employees - Internal</td>
<td>4,189</td>
</tr>
<tr>
<td>Employees - External</td>
<td>3,668</td>
</tr>
</tbody>
</table>

### Regional Public Insurance Groups

<table>
<thead>
<tr>
<th>Number</th>
<th>11</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gross Premium Income</td>
<td>€21.3 Bn.</td>
</tr>
<tr>
<td>Employees - Internal</td>
<td>18,400</td>
</tr>
<tr>
<td>Employees - External</td>
<td>9,500</td>
</tr>
</tbody>
</table>

### Equity Investment Companies

<table>
<thead>
<tr>
<th>No. of Institutions</th>
<th>68</th>
</tr>
</thead>
<tbody>
<tr>
<td>Investments</td>
<td>1,519</td>
</tr>
<tr>
<td>Total Vol.</td>
<td>€1.2 Bn.</td>
</tr>
<tr>
<td>Employees</td>
<td>225</td>
</tr>
</tbody>
</table>

### DekaBank Deutsche Girozentrale

<table>
<thead>
<tr>
<th>Total Assets</th>
<th>€108 Bn.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employees</td>
<td>4,277</td>
</tr>
</tbody>
</table>

### Investment Companies of the Landesbanken

<table>
<thead>
<tr>
<th>No. of Institutions</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vol. of Trade</td>
<td>€6.4 Bn.</td>
</tr>
<tr>
<td>Employees Internal</td>
<td>132</td>
</tr>
<tr>
<td>Employees External</td>
<td>503</td>
</tr>
</tbody>
</table>

### Regional Building Society Property Companies

<table>
<thead>
<tr>
<th>No. of Institutions</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td>Purchase Price</td>
<td>€27.4 Bn.</td>
</tr>
<tr>
<td>Employees Internal</td>
<td>2,313</td>
</tr>
</tbody>
</table>

### Deutsche Leasing

<table>
<thead>
<tr>
<th>No. of Contracts</th>
<th>136,988</th>
</tr>
</thead>
<tbody>
<tr>
<td>Purchase Price</td>
<td>€18.5 Bn.</td>
</tr>
<tr>
<td>Employees</td>
<td>178</td>
</tr>
</tbody>
</table>

### Other Leasing Companies

<table>
<thead>
<tr>
<th>No. of Institutions</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annual Turnover</td>
<td>€25.6 Bn.</td>
</tr>
<tr>
<td>Employees</td>
<td>317</td>
</tr>
</tbody>
</table>

### Factoring Companies

<table>
<thead>
<tr>
<th>No. of Institutions</th>
<th>4</th>
</tr>
</thead>
</table>
Key factors for the success of the savings banks

- Independent companies
- Limited business district
- Excellent knowledge of the local market
- Part of a network (Verbund): Savings Bank Finance Group
- Specialised suppliers for banking products
- Outsourcing, e.g. IT-services
- Support by associations
  - Business organisation
  - Education and training
  - Market research
  - Advertisement
- Openness for product and process innovations
- “Sparkasse” strongest brand in the German banking market
<table>
<thead>
<tr>
<th>Bank</th>
<th>gesamt</th>
<th>Männer</th>
<th>Frauen</th>
<th>4-29 Jahre</th>
<th>30-49 Jahre</th>
<th>50 Jahre und älter</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sparkasse</td>
<td>44</td>
<td>21</td>
<td>23</td>
<td>41</td>
<td>52</td>
<td>51</td>
</tr>
<tr>
<td>Volks-/Raiffeisenbank</td>
<td>25</td>
<td>11</td>
<td>14</td>
<td>27</td>
<td>20</td>
<td>22</td>
</tr>
<tr>
<td>Sparda Bank</td>
<td>8</td>
<td>4</td>
<td>4</td>
<td>10</td>
<td>6</td>
<td>5</td>
</tr>
<tr>
<td>ING-Diba</td>
<td>8</td>
<td>4</td>
<td>4</td>
<td>8</td>
<td>14</td>
<td>10</td>
</tr>
<tr>
<td>Deutsche Bank</td>
<td>6</td>
<td>2</td>
<td>4</td>
<td>5</td>
<td>11</td>
<td>4</td>
</tr>
<tr>
<td>Postbank</td>
<td>6</td>
<td>2</td>
<td>4</td>
<td>5</td>
<td>8</td>
<td>4</td>
</tr>
<tr>
<td>Commerzbank</td>
<td>5</td>
<td>2</td>
<td>3</td>
<td>5</td>
<td>8</td>
<td>4</td>
</tr>
<tr>
<td>Targobank</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Hypo-Vereinsbank</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Consorsbank</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Keine davon</td>
<td>15</td>
<td>6</td>
<td>9</td>
<td>15</td>
<td>5</td>
<td>15</td>
</tr>
<tr>
<td>Weiß nicht / Keine Angabe</td>
<td>6</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td>5</td>
<td>8</td>
</tr>
</tbody>
</table>

Quelle: Forsa-Survey on behalf of HORIZONT (October 2016)
Current Challenges
Current challenges

• Regulation
• Low interest rates
• Digitization
• Demographic change
• Sustainability
Taking up the challenge of digitization

Online consultation (Kreissparkasse Köln) and Sparkassen-App
Many thanks.

Contact:
Dr Thorsten Wehber
Documentation Centre on
Savings Banks History

Tel: 0049 228 204 5750
E-Mail: thorsten.wehber@dsgv.de