DO WE NEED CUTOFFS?
From Matching Accept Rates to Maximising RORAC

ARCA Retail Credit Conference
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Gerard Scallan & Helen McNab
gerard.scallan@scoreplus.com
DO WE NEED CUTOFFS?
From Matching Accept Rates to Maximising RORAC

➜ From matching accept rates
➜ ... to RORAC
➜ Competitive Pricing
➜ Negotiating Price
➜ The Future
1980s: Strategy Curve

Trade-off Volume vs. Quality

![Strategy Curve Analysis Diagram]

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Do We Need Cutoffs?
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Strategy Curve
Volume vs. Risk Trade-off

**PROS**
- From scorecard development statistics
- No extra analysis needed
  - No financial analysis
- Simple to understand
  - Decision by top management
- “Everyone wins”
  - Marketing: same/greater AR
  - Risk: same/less BR
- Continuity in policies
  - → good organisational acceptance

**CONS**
- Same accept rate – but different profile
  - E.g. shorter loan term
  - E.g. lower balances
  - → less profit?
- No reference to profitability
  - Because no financials
- Not optimal
  - Need to define optimal

Quick and Dirty – but robust and fits organisation
Profit, Loss - and Risk

- **Loss-making customers**
  - Transactors
  - Surfers
  - Early repayment
  - No credit insurance
  - CHARGE OFFS

- **Most profitable customers**
  - Delinquent w/ penalty charges
  - Large loan amount/balance
  - High interest rate
  - Long loan term
  - Insurance taker
  - No charge off
  - LONG TERM SURVIVORS

Risk influences profit - but is not the sole driver

*Portfolio Example (Bank Cards)*
- 70% loss makers
- 24% offset loss
- 6% generate portfolio profit

→ Use profit to define acceptance criteria

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1990s: Profit-Based Cut-Off Setting

Focus on breakeven at the margin

Analysis of revenue and costs by score

Cost/Revenue

$0 $300 $600 $900 $1,200 $1,500 $1,800

Marginal Scoreband - Risk Score

233 253 263 273 277 283 293 303 313 323

Cut off 275

Based on “average” loan characteristics in score band of risk scorecard

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Break-Even Cut-off

Calculate Contribution by Risk Score

PROS

◆ Maximise profit – right goal
◆ Gives score cut-off
  ◆ Easy to implement
◆ Not constrained by previous policy
◆ Sensitive to changes in cost/revenue structure
  ◆ E.g. cost of funds, pricing

CONS

◆ Need models for revenue and loss components
◆ Component models less robust
◆ Based on “average” loan characteristics in score band
  ◆ Loan amount, term
  ◆ Early closure
◆ Not on each individual loan

Why should acceptance decisions be based on risk score only?
### PD Score Cut-off

**Project Profit in PD 1-Dimensional Space**

#### Loan Profile

<table>
<thead>
<tr>
<th></th>
<th>Bonnie</th>
<th>Clyde</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amount</td>
<td>$10,000</td>
<td>$2,000</td>
</tr>
<tr>
<td>Term</td>
<td>60 mos.</td>
<td>24 mos.</td>
</tr>
<tr>
<td>Interest Rate</td>
<td>9.90%</td>
<td>9.90%</td>
</tr>
<tr>
<td>Installment</td>
<td>$212</td>
<td>$92</td>
</tr>
</tbody>
</table>

#### Scores

<table>
<thead>
<tr>
<th></th>
<th>Bonnie</th>
<th>Clyde</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pr(Default 12 m.)</td>
<td>5%</td>
<td>3%</td>
</tr>
<tr>
<td>Est. LGD</td>
<td>70%</td>
<td>70%</td>
</tr>
<tr>
<td>Pr(Closure 12m.)</td>
<td>10%</td>
<td>30%</td>
</tr>
</tbody>
</table>

#### GENERAL PARAMETERS

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost of Funds</td>
<td>3.5%</td>
</tr>
<tr>
<td>Cost of Capital</td>
<td>15%</td>
</tr>
<tr>
<td>Set-up Cost</td>
<td>$50</td>
</tr>
<tr>
<td>Annual Running Cost</td>
<td>$20</td>
</tr>
<tr>
<td>Discount Rate</td>
<td>9%</td>
</tr>
</tbody>
</table>

#### Cut-off:

**PD ≤ 4%**

- **Bonnie**: Profitable – but declined
- **Clyde**: Loss maker – but accepted
## Profit-Driven Acceptance Policy

### No Scorecard Cut-Off: Switch Dimension!

<table>
<thead>
<tr>
<th>Loan Profile</th>
<th>Bonnie</th>
<th>Clyde</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amount</td>
<td>$10,000</td>
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<td>30%</td>
</tr>
</tbody>
</table>

### GENERAL PARAMETERS

- Cost of Funds: 3.5%
- Cost of Capital: 15%
- Set-up Cost: $50
- Annual Running Cost: $20
- Discount Rate: 9%

### Discounted Contribution

<table>
<thead>
<tr>
<th></th>
<th>Bonnie</th>
<th>Clyde</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interest Income</td>
<td>$1,821</td>
<td>$160</td>
</tr>
<tr>
<td>Funding Cost</td>
<td>-$645</td>
<td>-$57</td>
</tr>
<tr>
<td>Operations Cost</td>
<td>-$136</td>
<td>-$89</td>
</tr>
<tr>
<td>Bad Debt</td>
<td>-$380</td>
<td>-$36</td>
</tr>
<tr>
<td>TOTAL</td>
<td>$660</td>
<td>-$21</td>
</tr>
</tbody>
</table>

**Cut-off:**

**Contribution > 0**

- Bonnie: Higher risk – accepted
- Clyde: Low risk – declined

**More Complexity ➔ More Fragile**
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2000: Estimate Profit/Borrower

Expected Individual Contribution

SCORES USED

Accept if Contribution Positive

INTEGRATION

Financial Parameters
Interest rate
Cost of Funds
Discount rate
Operations Costs

Lifetime Net Profit Contribution

4R Expected Values
Interest Income
Insurance Income
Closure Profile
Risk Cost

Interest rate
Cost of Funds
Discount rate
Operations Costs

ScorePlus TRAINING

Accept if Contribution Positive
Profit Paradox
Limits of Simple Models

◆ Simple Profit Model
  ◆ Good outcome: Profit = 10% x Amount - $100
  ◆ Bad outcome: Loss = 40% x Amount + $400

◆ Maximize Profit = Accept if break-even or better

◆ Example – Loan Application
  ◆ PD = 10% Loan Amount: $2,000
  ◆ Expected Value =
    0.9 x $100 – 0.1 x $1200
    = -$30

◆ Up-sell
  ◆ PD = 10% Loan Amount: $5,000
  ◆ Expected Value =
    0.9 x $400 – 0.1 x $2400
    = +$120

◆ Decline for $2000 but accept for $5000
◆ What causes anomaly?
Solving the Profit Paradox

Possible explanations

- **PD under-estimated?**
  - Based on $2000 loan
  - Customer ready for repayment
  - $5000 → bigger payment
  - PD larger for $5000
  - But must push PD > 14.3%
  - → PDs not reliable on up-sell

- **Loss Given Default (LGD) formula is wrong?**
  - Higher loss on larger loans?
  - Repays more slowly
  - → Higher balance at default
  - Ignored by many “real” LGD models

<table>
<thead>
<tr>
<th></th>
<th>Goods</th>
<th>Bads</th>
</tr>
</thead>
<tbody>
<tr>
<td>% Profit/Loss</td>
<td>10%</td>
<td>-40%</td>
</tr>
<tr>
<td>Fixed Costs</td>
<td>$100</td>
<td>$400</td>
</tr>
</tbody>
</table>

**BREAK-EVEN ANALYSIS**

<table>
<thead>
<tr>
<th></th>
<th>$2,000</th>
<th>$5,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Loan Amount</td>
<td>$2,000</td>
<td>$5,000</td>
</tr>
<tr>
<td>Profit if Good</td>
<td>$100</td>
<td>$400</td>
</tr>
<tr>
<td>Loss if Bad</td>
<td>-$1,200</td>
<td>-$2,400</td>
</tr>
<tr>
<td>Break-even Bad Rate</td>
<td>7.7%</td>
<td>14.3%</td>
</tr>
</tbody>
</table>

- **Fixed costs – key explanation**
  - But reflects reality

**Conclusion:** Think through profit models carefully
### 2000s: Risk-Based Pricing

**Amount, Term, Risk**

<table>
<thead>
<tr>
<th>Loan Profile</th>
<th>Clyde 1</th>
<th>Clyde 2</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Amount</strong></td>
<td>$2,000</td>
<td>$2,000</td>
</tr>
<tr>
<td><strong>Term</strong></td>
<td>24 mos.</td>
<td>24 mos.</td>
</tr>
<tr>
<td><strong>Interest Rate</strong></td>
<td>9.90%</td>
<td>11.90%</td>
</tr>
<tr>
<td><strong>Installment</strong></td>
<td>$92</td>
<td>$94</td>
</tr>
</tbody>
</table>

**Scores**

<table>
<thead>
<tr>
<th></th>
<th>Clyde 1</th>
<th>Clyde 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pr(Default 12 m.)</td>
<td>3%</td>
<td>3%</td>
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<td>30%</td>
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**Discounted Contribution**

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<th></th>
<th>Clyde 1</th>
<th>Clyde 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interest Income</td>
<td>$160</td>
<td>$193</td>
</tr>
<tr>
<td>Funding Cost</td>
<td>-$57</td>
<td>-$57</td>
</tr>
<tr>
<td>Operations Cost</td>
<td>-$89</td>
<td>-$89</td>
</tr>
<tr>
<td>Bad Debt</td>
<td>-$36</td>
<td>-$36</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>-$21</td>
<td>$11</td>
</tr>
</tbody>
</table>

#### GENERAL PARAMETERS

- **Cost of Funds**: 3.5%
- **Cost of Capital**: 15%
- **Set-up Cost**: $50
- **Annual Running Cost**: $20
- **Discount Rate**: 9%

---

**Vary interest rate to reflect revenue and costs**
## Typical Pricing Matrix

**UK High Street Bank – Personal Loans 2011**

<table>
<thead>
<tr>
<th>Amount</th>
<th>Loan Term (months)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>12m.</td>
</tr>
<tr>
<td>From To</td>
<td></td>
</tr>
<tr>
<td>£5,000 £7,499</td>
<td>n/a</td>
</tr>
<tr>
<td>£7,500 £9,999</td>
<td>n/a</td>
</tr>
<tr>
<td>£10,000 £11,999</td>
<td>n/a</td>
</tr>
<tr>
<td>£12,000 £14,999</td>
<td>n/a</td>
</tr>
<tr>
<td>£15,000 £25,000</td>
<td>n/a</td>
</tr>
</tbody>
</table>

- **Is it worth varying by term?**
- **Penalize large and small values?**
- **Over £12k gets riskier?**

Is policy consistent? Optimising what? Reflects organisational differences?
Variable Pricing

**Notes**

**HOW TO**
- Dimensions
  - Loan Amount
  - Term
  - Risk = PD
- Look-up table in application processing software
  - Not calculated for each case

**ISSUES**
- What to advertise?
  - E.g. UK regulation (OFT)
  - “at least 51% of borrowers must be expected to get the advertised APR or better”
- Lack of transparency for borrower
  - Increases complexity
  - Especially if varies by risk
  - Why give lower rate than advertised?

Add Complexity ...
Sophisticated Strategies → Require Better Coordination

Risk Management

Strategic Management

Marketing

Finance

Will only work with common analytic framework

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Acceptance Strategies – 1995 to 2007
Business acquisition and regulation

Pricing up the risk curve vs Return on capital

Pay to buy market share – expecting future profitability
Innovative Credit Products 1995-2007

Pricing Up the Risk Curve

PERSONAL
- Sub-prime mortgages
  - “NINJA mortgages”
  - No Income, No Job, No Assets
- 120% LTV mortgages
- Sub-prime Credit Cards
- Payday Loans

BUSINESS
- Leveraged Buy-Outs
- Rollover commercial real estate
- Factoring
- Junk Bonds

Facilitated by Securitization

Macro-economics:
Increased Credit → More Dynamic Growth

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Credit Intensity
(personal and company)

Domestic Credit as % of Gross Domestic Product

Source: World Bank - World Development Indicators

Increasing use of credit \(\rightarrow\) Plateau around 200%
### 2004: Return on Capital

**Key Investment Criterion**

<table>
<thead>
<tr>
<th>TOY PORTFOLIO 1</th>
<th>Parameters 2013</th>
<th>Parameters 2014</th>
<th>Parameters 2015</th>
<th>Parameters 2016</th>
<th>Parameters 2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Available Capital</td>
<td>$1,000</td>
<td>$1,000</td>
<td>$1,159</td>
<td>$1,347</td>
<td>$1,568</td>
</tr>
<tr>
<td>Expected Loss</td>
<td>3.00%</td>
<td>3.00%</td>
<td>3.00%</td>
<td>3.00%</td>
<td>3.00%</td>
</tr>
<tr>
<td>Product Type</td>
<td>Other</td>
<td>Other</td>
<td>Other</td>
<td>Other</td>
<td>Other</td>
</tr>
<tr>
<td>Capital Requirement</td>
<td>11.48%</td>
<td>11.48%</td>
<td>11.48%</td>
<td>11.48%</td>
<td>11.48%</td>
</tr>
<tr>
<td>Capital Buffer</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0.00%</td>
</tr>
<tr>
<td>Total Lending</td>
<td>$8,714</td>
<td>$10,103</td>
<td>$11,738</td>
<td>$13,661</td>
<td>$15,792</td>
</tr>
<tr>
<td>Interest Income</td>
<td>9.90%</td>
<td>9.90%</td>
<td>9.90%</td>
<td>9.90%</td>
<td>9.90%</td>
</tr>
<tr>
<td>Cost of Funds</td>
<td>3.50%</td>
<td>3.50%</td>
<td>3.50%</td>
<td>3.50%</td>
<td>3.50%</td>
</tr>
<tr>
<td>Sales Cost</td>
<td>0.50%</td>
<td>0.50%</td>
<td>0.50%</td>
<td>0.50%</td>
<td>0.50%</td>
</tr>
<tr>
<td>Realized Losses</td>
<td>3.00%</td>
<td>3.00%</td>
<td>3.00%</td>
<td>3.00%</td>
<td>3.00%</td>
</tr>
<tr>
<td>Fixed Costs</td>
<td>$60</td>
<td>$60</td>
<td>$60</td>
<td>$60</td>
<td>$60</td>
</tr>
<tr>
<td>Gross Profit</td>
<td>$228</td>
<td>$268</td>
<td>$315</td>
<td>$371</td>
<td>$431</td>
</tr>
<tr>
<td>Tax</td>
<td>30%</td>
<td>30%</td>
<td>30%</td>
<td>30%</td>
<td>30%</td>
</tr>
<tr>
<td>Net Profit</td>
<td>$159</td>
<td>$188</td>
<td>$221</td>
<td>$260</td>
<td>$300</td>
</tr>
<tr>
<td>Return on Capital</td>
<td>15.94%</td>
<td>16.18%</td>
<td>16.39%</td>
<td>16.57%</td>
<td>16.75%</td>
</tr>
</tbody>
</table>

**Basel II: Capital Absorbs Unexpected Losses**

*Do We Need Cutoffs?*

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RORAC: Organizational Discipline

*Return On Risk-Adjusted Capital*

**CAPITAL ALLOCATION**
- Bank activity limited by capital
- Allocate across disparate units
  - e.g. Australia credit cards
  - Or UK credit derivatives
  - Or Sri Lanka corporate lending
  - New or existing business lines
- Business units compete for capital
  - Constraint on growth
- Maximize overall return on capital
- Same marginal return on capital across all activities

**RORAC**
- = Net Income/Economic Capital
  - Increasingly replaces RAROC
    - Risk-Adjusted Return On Capital
  - Net Income allows for Expected Loss
  - Risk-Adjusted Capital allows for maximum Unexpected Loss
  - Threshold target RORAC
    - Frequently 12% to 15%

---

Can $1 Extra Capital Get Better Return Elsewhere?
# Do We Need Cutoffs?

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## Economic Capital > Regulatory Capital

### Basel

- **Economic Capital** is the internal estimate of capital required for durable operation.
- **Unexpected Losses** eat into capital.

### Capital With Fluctuating Losses

<table>
<thead>
<tr>
<th>TOY PORTFOLIO 1 Parameters</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Available Capital</strong></td>
<td>$1,000</td>
<td>$1,000</td>
<td>$976</td>
<td>$1,132</td>
</tr>
<tr>
<td><strong>Expected Loss</strong></td>
<td>3.00%</td>
<td>3.00%</td>
<td>3.00%</td>
<td>3.00%</td>
</tr>
<tr>
<td><strong>Product Type</strong></td>
<td>Other</td>
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<td>Other</td>
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<tr>
<td><strong>Capital Requirement</strong></td>
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</tr>
<tr>
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<td>0.00%</td>
<td>0.00%</td>
<td>20%</td>
<td>20%</td>
</tr>
</tbody>
</table>

| **Total Lending**           | $8,714 | $8,508 | $8,217 | $8,049 |
| **Interest Income**         | 9.90% | $863 | $842 | $814 |
| **Cost of Funds**           | 3.50% | -$270 | -$263 | -$253 |
| **Sales Cost**              | 0.50% | -$44 | -$43 | -$41 |
| **Realized Losses**         | 6.00% | -$523 | -$255 | -$493 |
| **Fixed Costs**             | $60 | -$60 | -$60 | -$60 |
| **Gross Profit**            | -$34 | $222 | -$33 | -$33 |
| **Tax**                     | 30% | $10 | -$67 | $10 |
| **Net Profit**              | -$24 | $155 | -$23 | -$23 |
| **Return on Capital**       | -2.36% | 15.90% | -2.05% | -2.09% |

### Unexpected Losses eat into capital

### Capital buffer ensures business can continue

### Basel is not enough!
Sensitivity of RORAC

**Rate, PD**

**GENERAL PARAMETERS**
- Cost of Funds: 3.5%
- Cost of Capital: 15%
- Capital Buffer: 50%
- Set-up Cost: $250
- Annual Running Cost: $20
- Discount Rate: 9%
- Product Type: Other

**Loan Profile**
- Amount: $10,000
- Term: 60 mos.
- Interest Rate: 9.90%
- Installment: $212

**Scores**
- Pr(Default 12 m.): 3%
- Est. LGD: 70%
- Pr(Closure 12 m.): 10%

**RORAC by Interest Rate**

Δ rate 1% → Δ RORAC 11%

**RORAC by PD**

Δ PD 1% → Δ RORAC -6.0%
### Goal: RORAC = 20%

**Revised Pricing Strategy**

<table>
<thead>
<tr>
<th>Amount</th>
<th>Loan Term (months)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>12m.</td>
</tr>
<tr>
<td><strong>From</strong></td>
<td><strong>To</strong></td>
</tr>
<tr>
<td>£5,000</td>
<td>£7,499</td>
</tr>
<tr>
<td>£7,500</td>
<td>£10,000</td>
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<tr>
<td>£10,001</td>
<td>£12,000</td>
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<tr>
<td>£12,001</td>
<td>£15,000</td>
</tr>
<tr>
<td>£15,001</td>
<td>£25,000</td>
</tr>
</tbody>
</table>

**General Parameters**
- Cost of Funds: 4.5%
- Capital Buffer: 50%
- Set-up Cost: $250
- Annual Running Cost: $20
- Discount Rate: 9%

**Loan Parameters**
- Pr(Default 12 m.): 5%
- Est. LGD: 70%
- Pr(Closure 12m.): 10%

*Minimum price to give desired RORAC*

*Coherent Pricing Strategy*
DO WE NEED CUTOFFS?
From Matching Accept Rates to Maximising RORAC

 שיש להשוות אaukee תמות
 الجيش
 התחזוקה
 התחזוקה

 stratégית תיבוב

✔️ ◆ From matching accept rates
✔️ ◆ ... to RORAC
➔ ◆ Competitive Pricing
◆ Negotiating Price
◆ The Future
Competitive Pricing

- Some customers very price sensitive
  - minimum price to get acceptable RORAC
- Others sensitive to other parameters
  - E.g. customer service, flexibility, brand
- Why give low price if borrower has other priorities?

→ Model Price Sensitivity

**Approach 1:**
Low Risk = Price Sensitive
→ Vary price by risk score

**Approach 2:**
Competition Score
Take-up vs. NTU
Measures price sensitivity directly
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## Competition Score: Use of Model

**First col – Pr(Response)**
- to any mailing

**Subsequent columns**
- Pr(Response) to higher price mailings
- Should reduce across row

**Example:**
- Prospect 7 with 8% offer
- Pr(Response | 7%+) = 1.3%
- Based on variables in cols. 1, 2
- Ignore predictive terms in Col 3+

**Faster reduction on price-sensitive customers**

<table>
<thead>
<tr>
<th>Prospect</th>
<th>5%+</th>
<th>7%+</th>
<th>9%+</th>
<th>11%+</th>
<th>13%+</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.2%</td>
<td>0.1%</td>
<td>0.1%</td>
<td>0.1%</td>
<td>0.0%</td>
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<td>2</td>
<td>1.5%</td>
<td>1.1%</td>
<td>0.6%</td>
<td>0.4%</td>
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<td>3</td>
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<tr>
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<tr>
<td>7</td>
<td>1.8%</td>
<td>1.3%</td>
<td>0.7%</td>
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<tr>
<td>8</td>
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</tr>
<tr>
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<td>0.8%</td>
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</tr>
<tr>
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<tr>
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<td>0.2%</td>
<td>0.1%</td>
<td>0.1%</td>
</tr>
</tbody>
</table>

**Pr(Response | offer 7-9%)**
Measuring Results: Strategy Curve by Price Offer

Rank ordering may change with changing price
Artificial data!
State of the Art

**Composite Pricing Strategy**

- **RORAC Model**
  - Maximum revenue (in $)
  - Subject to acceptable RORAC
  - Assume risk behavior not affected by offer price
    - E.g. PD = 5% for APR = 8% or APR = 12%
  - But early closure is price-sensitive

- **Price Sensitivity Model**
  - Optimal offer price trading-off Revenue and Response

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DO WE NEED CUTOFFS?
From Matching Accept Rates to Maximising RORAC

✅  ◆ From matching accept rates
✅  ◆ ... to RORAC
✅  ◆ Competitive Pricing
➡️  ◆ Negotiating Price
◆ The Future
SME Pricing Behavior

Negotiated by Relationship Managers

Keep existing margin \(\rightarrow\) Return \(>\) Threshold

Sacrifice business if return not acceptable

Little risk differentiation – match market prices
New SME Lending Strategy

Relationship Driven

- Minimum price calculated per customer by system
  - Communicated to relationship manager
  - Minimum price and (higher) “target” price
  - Manager’s profit share depends on margin over minimum
    - Incentive to negotiate higher price
    - Manager assesses price sensitivity subjectively

- Results
  - Quantified as take up, PD, contribution, RORAC

"Rapid, flexible re-pricing was key to remaining profitable through the financial crisis"
- Head of SME Risk Management
New Pricing Behavior
Positive response to bonus incentive

- Existing margin kept → Return > Threshold
- Improved returns

- Work in progress

<table>
<thead>
<tr>
<th>Grade driven by score (PD)</th>
<th>Best</th>
<th>Worst</th>
</tr>
</thead>
<tbody>
<tr>
<td>Avg. Actual Margin</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RORAC Target Margin</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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DO WE NEED CUTOFFS?

From Matching Accept Rates to Maximising RORAC

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✅  ◆ Negotiating Price
➡  ◆ The Future

Strategy Toolbox
2013: Acceptance Strategy Design
Optimally Priced Offers

SCORES USED
Application Risk (PD)
Loss Given Default
Balance Model
Early Closure Model
Basel EL
Price Sensitivity

INTEGRATION
Financial Parameters
Interest rate
Cost of Funds
Discount rate
Operations Costs

4R Expected Values
Interest Income
Insurance Income
Closure Profile
Risk Cost
Economic Capital
Regulatory Capital

RORAC

Offer Selection Module

Goal: Most profitable offer for each customer

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Lessons Learned

Where do we go from here?

Strategy
- Scarce capital → Better use
- Price sensitivity increasing
- Focus on price/risk/capital trade-off

Technology
- Application Processing 5/10
- Analysis/Ops integration 4/10

Analytics
- PD models 7/10
- Balance projections 4/10
- Attrition models 3/10
- Measuring RORAC 3/10

Organisation
- Credit Committee 3/10
- Financial Reporting 4/10
- Operational Discipline 6/10
- Staff management 2/10

Competitive Advantage for Responsive Organisation!
DO WE STILL NEED CUTOFFS?

Yes, but...

CHANGE DIMENSION

PD → Contribution → RORAC

... and optimal pricing

Extreme PD cut-off still used

NEW MANAGEMENT MECHANISMS

Re-define staff objectives ... and bonuses
Change credit committee structure
Re-invent management reporting
Sophisticated Strategies → Require Better Coordination

Risk Management

Marketing

Finance

Strategic Management

Will only work with common management framework