



Do we need cut offs?

Pricing for Profit

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The profit conundrum

Parameters

Cost of Funds	3.5%
Cost of Capital	15%
Set-up Cost	£50
Admin Cost pa	£25

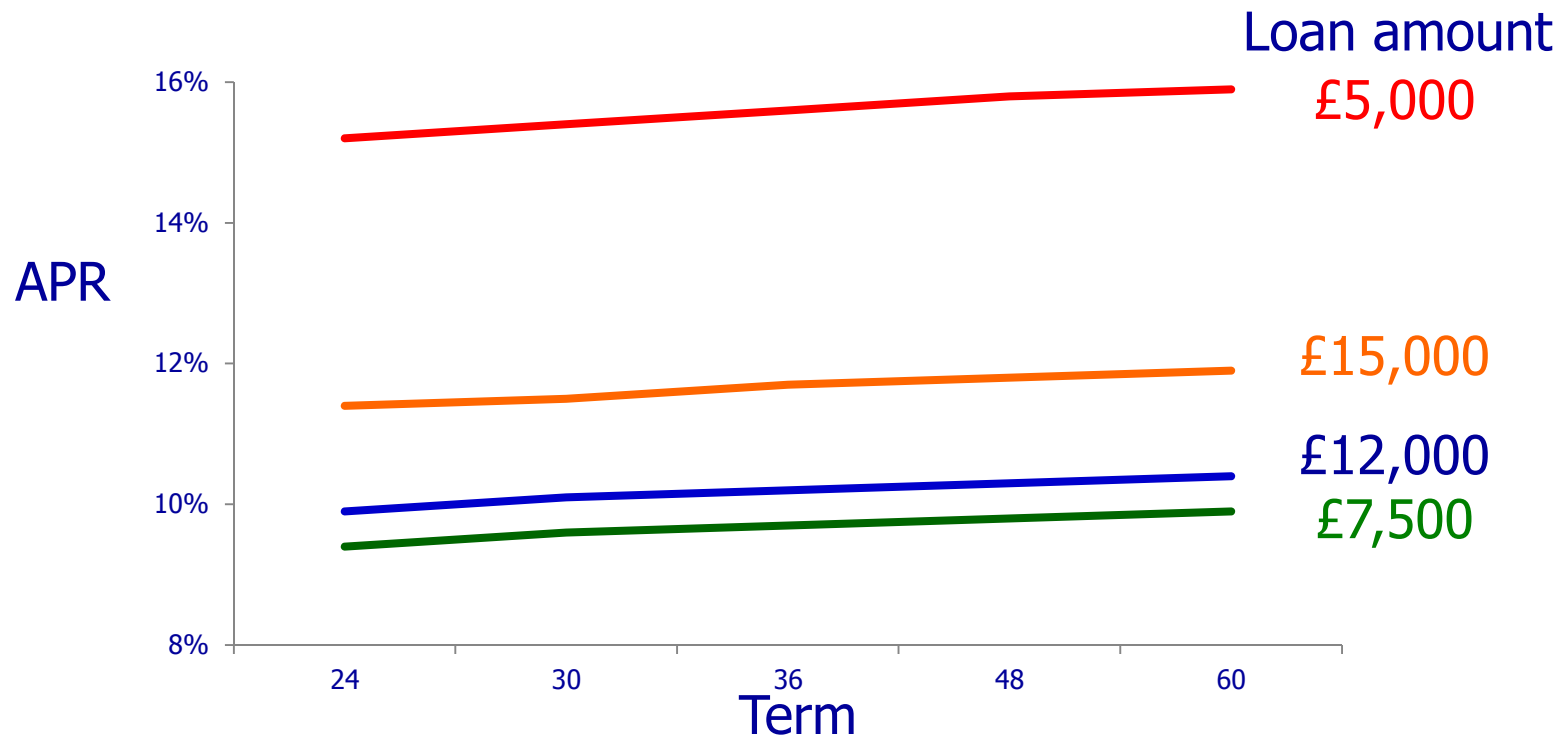
Cut-off:
PD ≤ 7%

Outcomes after 1 year

Loan	Gerard	Helen
Amount	£10,000	£2,000
Term (mos.)	60	24
Interest Rate	10%	10%
PD	8%	6%
LGD	40%	40%
Instalment	£212	£92
Contribution	£219	-£12

Gerard: Profitable – but declined
Helen: Loss maker – but accepted

Typical pricing UK High Street Bank – July 2011



**How to explain this policy?
Does it make sense?**

Source: internet

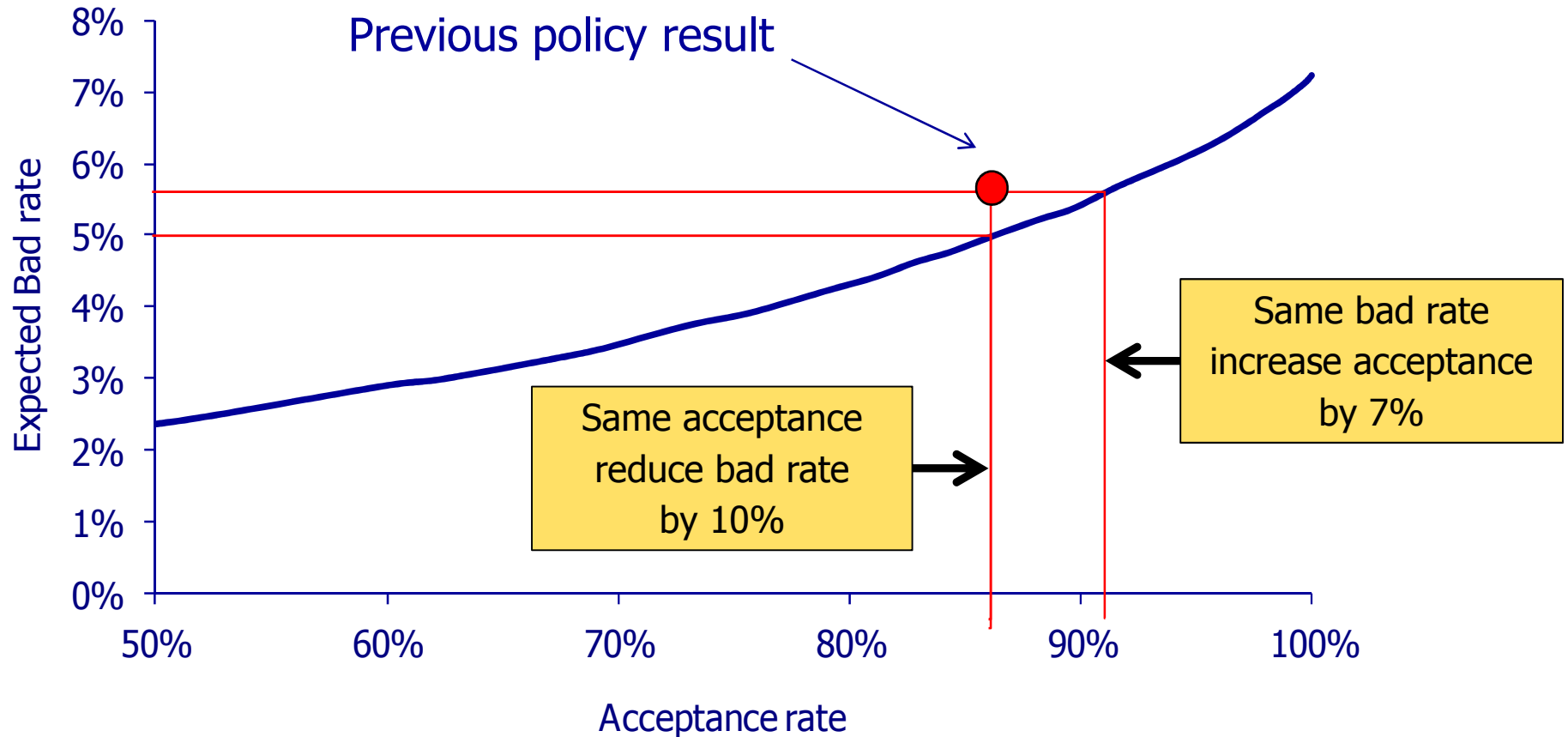
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Presentation road map

- ◆ Strategy evolution
- ◆ RORAC based strategies
- ◆ Competition based pricing
- ◆ Management challenges

Cut off setting - 1980s

Strategy curve: Overall risk vs acceptance

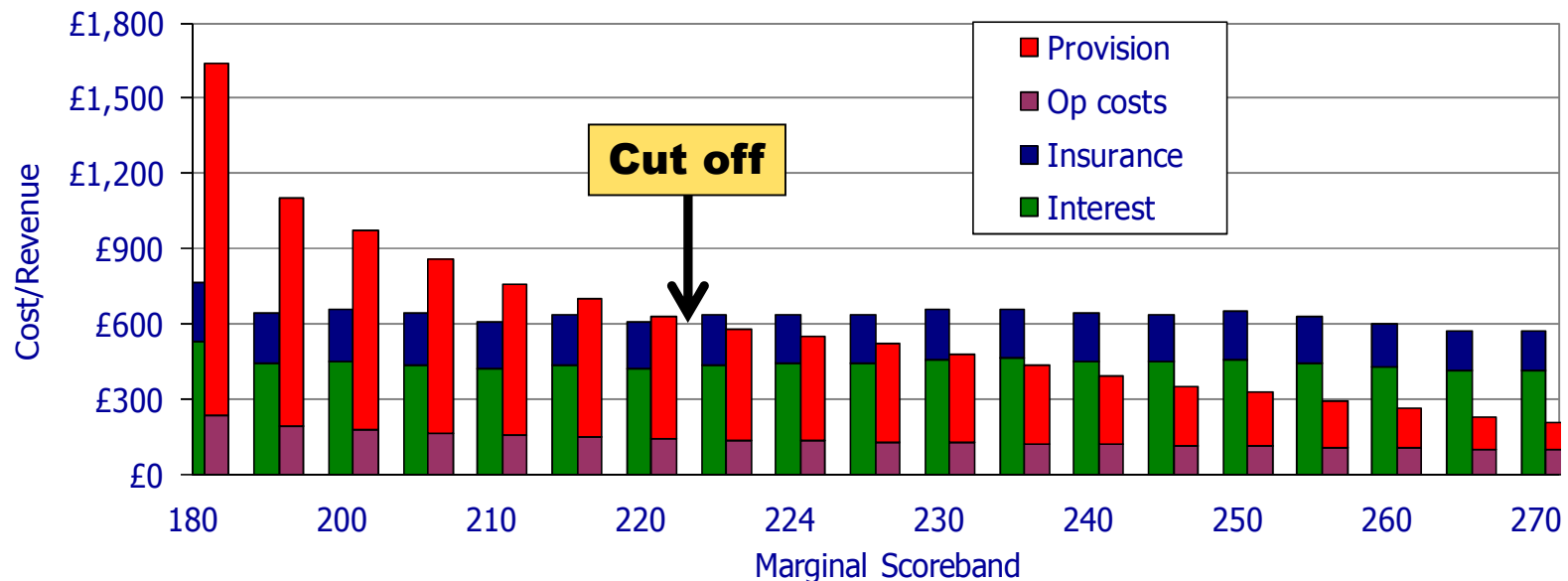


No financials – No marginal analysis

Cut off setting - 1990s

Focus on breakeven at the margin

Analysis of revenue and costs by score



Based on "average" loan characteristics in score band
Ignores differences in individuals - e.g. loan amount

Cut off setting – 2000 to 2007

Business acquisition and regulation

Pricing up the risk curve vs Return on capital



Ignores impact of price on risk vs “What’s a downturn?”

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RORAC: Return on Risk Adjusted Capital

Calculating RORAC

Net income / average capital

Parameters

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Cost of Capital	15%
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Admin Cost pa	£25

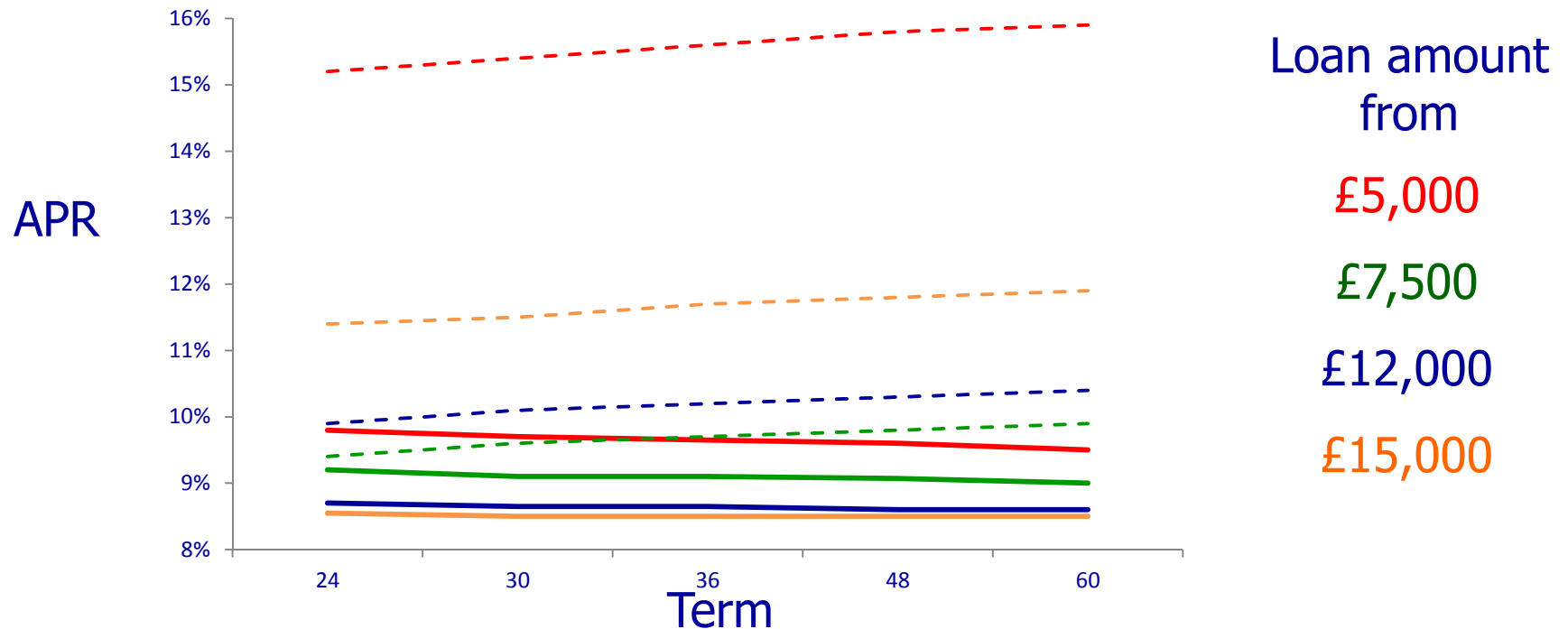
Outcomes after 1 year

Loan	Gerard	Helen
Amount	£10,000	£2,000
Term (mos.)	60	24
Interest Rate	10.0%	10.0%
PD	8%	6%
LGD	40%	40%
Instalment	£212	£92
Interest Income	9.3%	7.9%
Cost of Funds	3.2%	2.8%
Operating Cost	0.8%	3.8%
Expected Loss	3.1%	1.9%
Contribution %	2.2%	-0.6%
Contribution	£219	-£12
Avg. Capital	5.0%	4.0%
Cost of Capital	0.7%	0.6%
RORAC	59.2%	0.5%
Return on AvBal	2.4%	-0.7%

Calculations are % av. balance o/s

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Revised pricing strategy To achieve consistent RORAC



**For candidate PD 8%
RORAC ≈ 35%**

Page 3 findings – dashed lines

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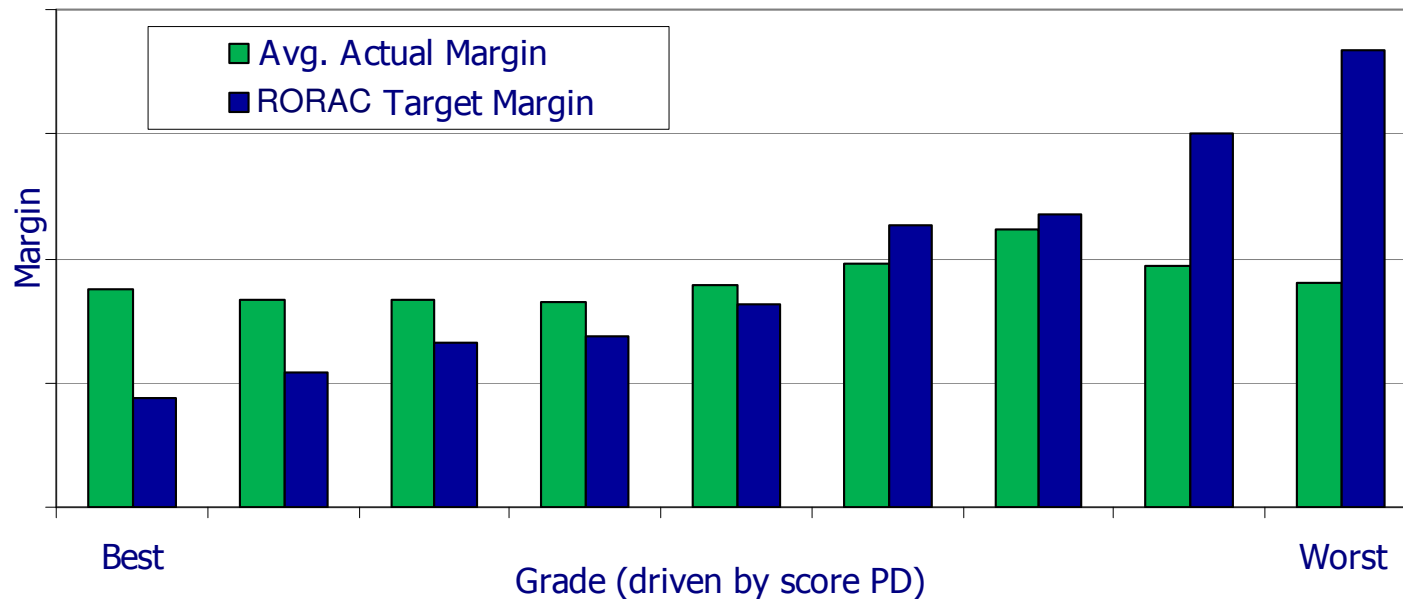
Acceptance policy focus 2010s

Competitive pricing – for threshold RORAC

- ◆ Increasing focus on allocation of capital - Basel III
 - ◆ → competition for capital
- ◆ Banks under pressure to increase supply
 - ◆ e.g. UK Merlin targets for SME business
 - ◆ internet → increased transparency
 - ◆ → customers more price sensitive
- ◆ Impact of differential pricing
 - ◆ over price → lower market share
 - ◆ under-price → reduced income
 - ◆ → improved portfolio shape

→ Model price sensitivity

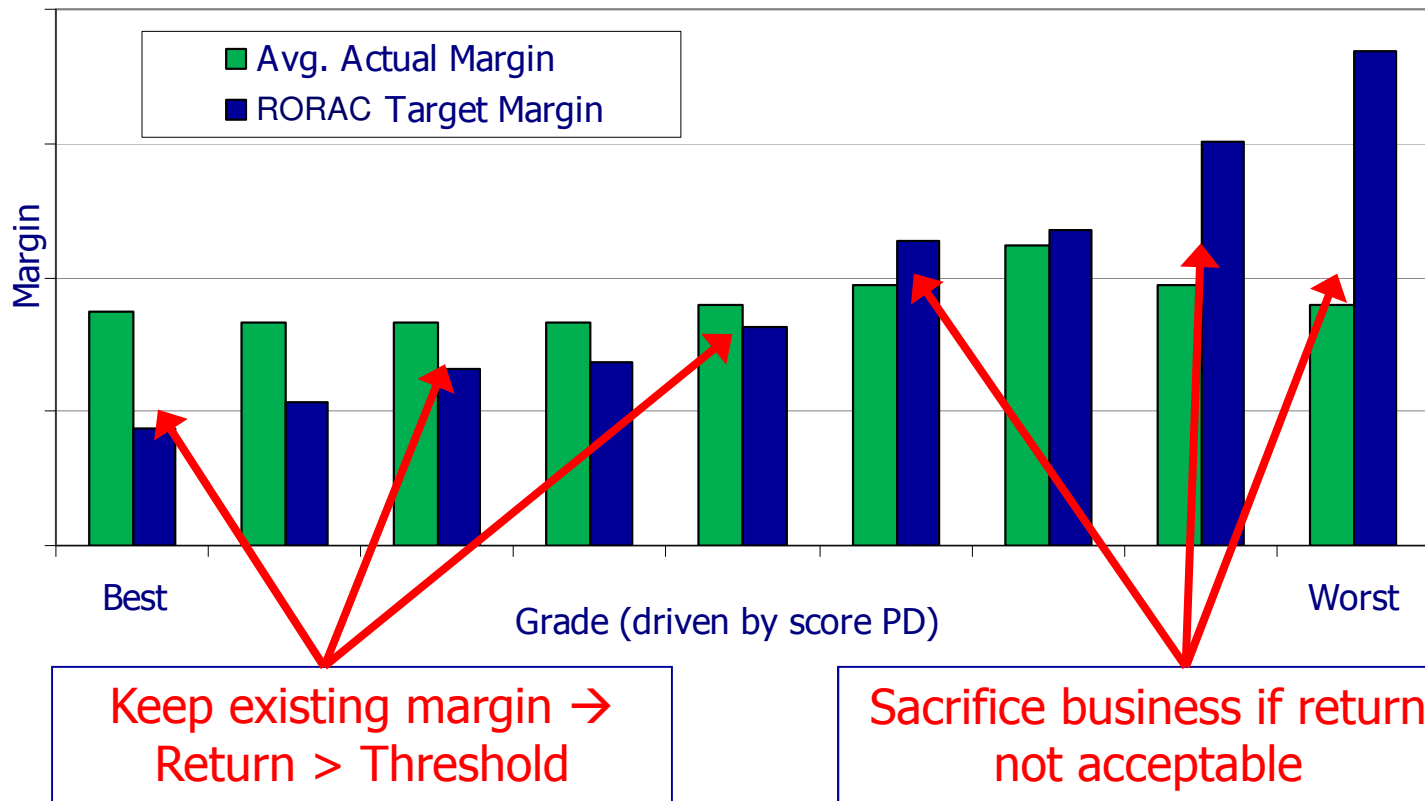
Previous pricing behaviour SME Lending



**Little risk differentiation
Matching market prices not individual risk**

RORAC threshold approach

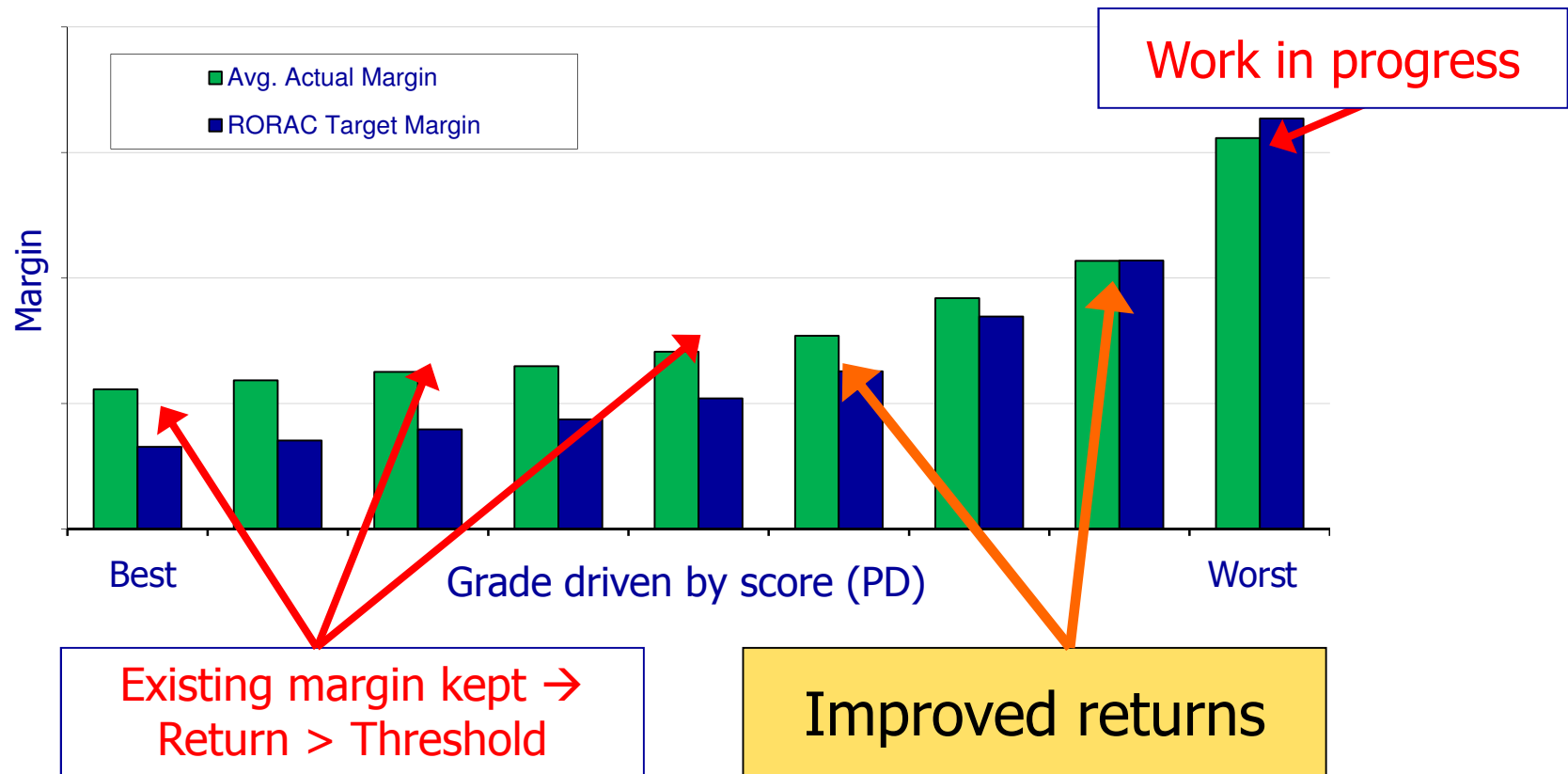
Calculate minimum price > threshold



Incentivise staff based on margin above minimum

New pricing behaviour

Positive response to bonus incentive



Negotiators use local information on price sensitivity

Summary and outcomes SME lending

- ◆ Evaluation
 - ◆ Take up, PD, contribution, RORAC
 - ◆ Branch and lender performance
- ◆ Results
 - ◆ Improves portfolio risk
 - ◆ Faster policy change

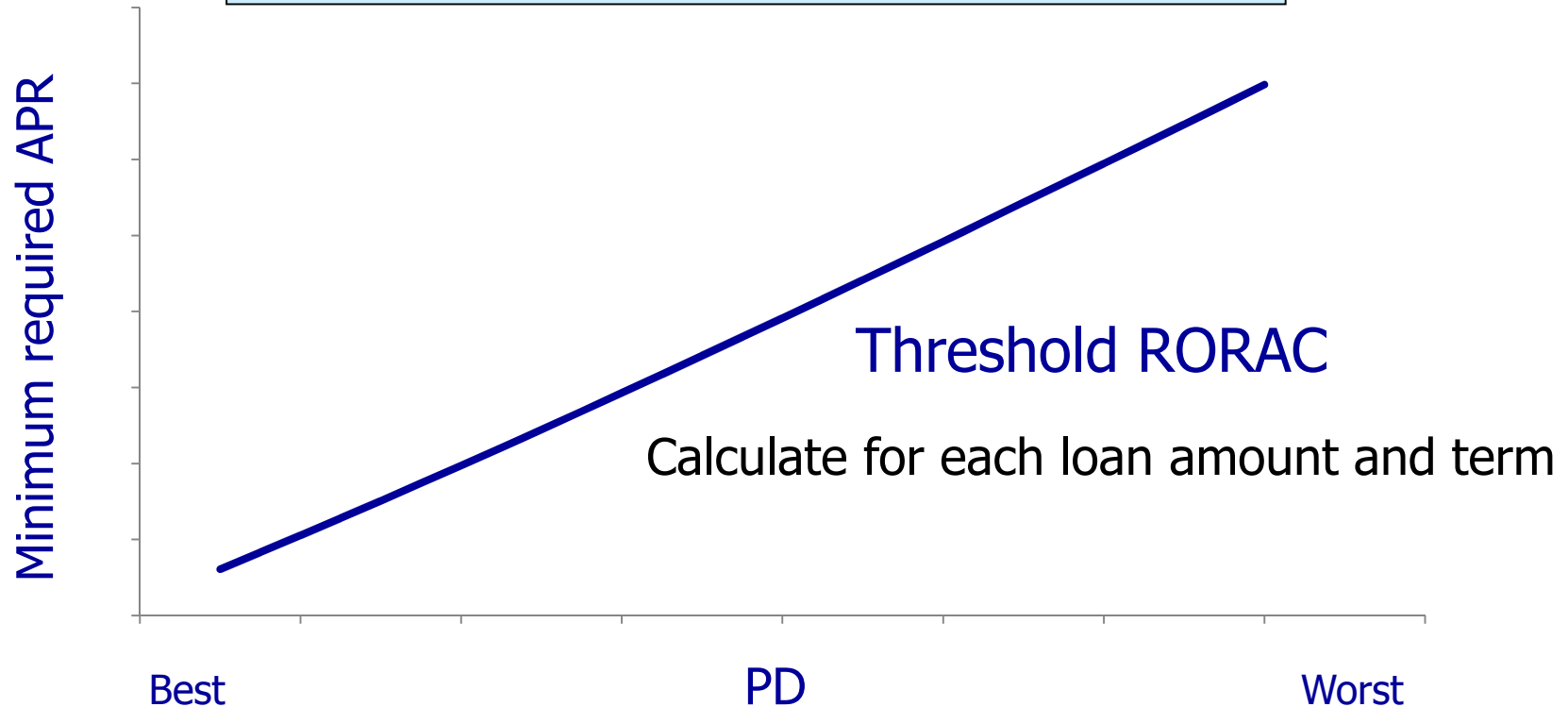
**“Rapid, flexible re-pricing was key to remaining profitable through the financial crisis”
- Head of SME Risk Management**

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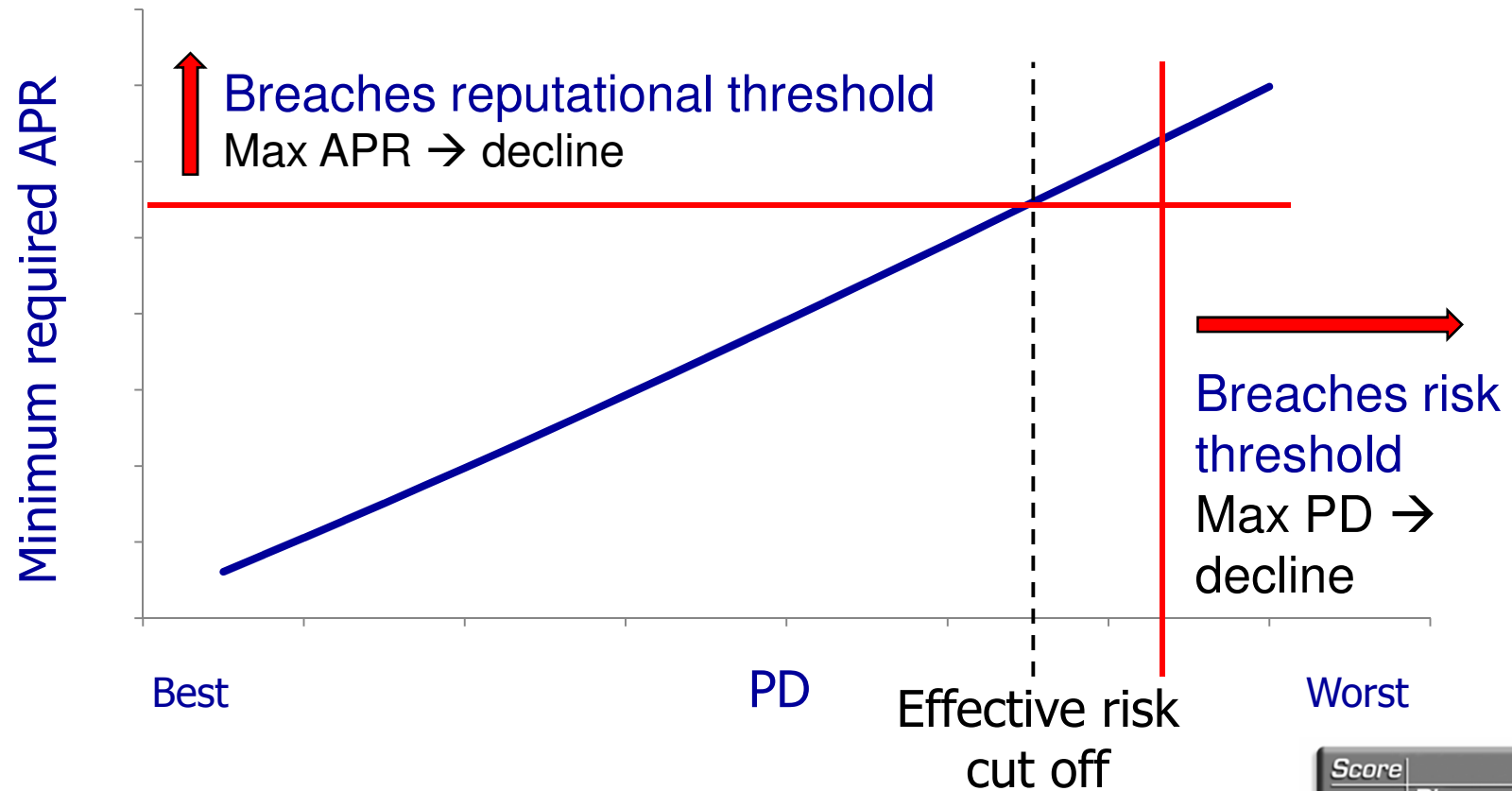
Do we need cut offs (1)?

**Primary Acceptance Criterion:
RORAC > Threshold value**



Do we need cut offs (2)?

Secondary Criterion: Maximum APR (and Risk)



Do we need cut offs (3)?

Final decision: function of price sensitivity
Cover cost of incentive and return to shareholders



Management challenges



- ◆ Minimum price: RORAC validation
- ◆ Maximum price: test and learn
- ◆ Anticipating market shift
- ◆ Monitoring and re-calibration

Do we need cut offs?

Yes ... but not as we know them

**Primary Acceptance Criterion:
RORAC > Threshold value**

Threshold value measures risk appetite

Secondary Criterion: Maximum APR

If threshold RORAC APR > Max APR then decline ...

→ Reputational risk

→ Effectively an “extreme” PD/EL cut off

Tertiary Criterion: Price sensitivity

Final price f (take up probability)

→ Sacrifice unprofitable business