ACTUARIAL SOCIETY OF SOUTH AFRICA

Profit Recognition:
A Banker's Dilemma

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Agenda

ACTUARIAL SOCIETY OF SOUTH AFRICA

Introduction

- What is profit recognition

Accounting Standards

- IAS 39 and incurred loss concepts
- IFRS 9 and expected loss concepts

Projection of Profits:

- Overview of approach
- Comparison of cashflows under IAS39 and IFRS 9
- What does this mean for a Bank's profits

Value prospects to investors

Introduction

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What is profit recognition

Introduction
What is profit recognition

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Profitability is a key indicator of the performance of financial institutions, and drives the behaviour of market participants.

True and accurate reflection of performance, and are not incorrectly reported.

Profit recognition over time can be done in line with some of the following factors:

- Time (e.g. recognise profit linearly over time)
- Cashflows (e.g. interest portion on contractual payments)
- Risk (e.g. recognise profits in line with reducing expected losses)

Accounting Standards

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IAS39 and Incurred Loss concepts

IFRS9 and Expected Loss concepts

Accounting Standards

IAS39 Incurred Loss – The past (and present)

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IAS39 aims to establish principles for recognising and measuring financial assets, financial liabilities and some contracts to buy or sell non-financial items.

Assets are impaired only once there is sufficient objective evidence to indicate that the assets have incurred a loss event.

- Loss events include financial difficulty by the borrower, missing payments on a loan, restructuring of the credit facility and bankruptcy / insolvency
- Occurrence of the event should have an impact on the estimated future cashflows

Impairment calculation is based on:

- Only the outcome of loss events that have already happened
- Practically recent historic experience is used to set point-in-time estimates

Accounting Standards

IFRS9 Expected Loss – The future

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IFRS 9 Financial Instruments sets out the recognition and measurement requirements for financial instruments and some contracts to buy or sell non-financial items

IFRS 9 recognises **all losses** resulting from **defaults over the next 12 months** for accounts with **no identified loss events**. For all other accounts **full lifetime expected losses** are allowed for.

Accounting Standards
IAS39 vs IFRS9

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IAS 39 uses a 3 bucket approach to the classification of loans

Bucket 1

- Most financial assets initially classified as Bucket 1
- Losses due to events already incurred but the finance provider is unaware of (IBNR)

Bucket 2

- Loss event has been incurred
- Expected losses originating from incurred loss event

Bucket 3

- Defaulted loans
- Expected losses originating from incurred loss event

Accounting Standards
IAS39 vs IFRS9

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IFRS 9 proposes to keep using a 3 bucket approach to the classification of loans

Bucket 1

- Most financial assets initially classified as Bucket 1
- Losses due to loss events in next 12 months

Bucket 2

- More than insignificant deterioration in credit quality since initial recognition AND
- Likelihood of default is such that it is at least reasonably possible that the contractual cash flows may not be recoverable
- Full future expected loss

Bucket 3

- Expected losses can be identified for individual losses
- Purely for presentation purposes (full future expected losses)

Accounting Standards
IAS39 vs IFRS9

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Key differences

- Much higher impairment required for "performing loans"
  - Although this still isn't truly expected loss…
- Unclear when exactly loans move from Bucket 1 to Bucket 2
  - Quite possibly sooner…
- Once out of Bucket 1, expected loss i.e. all future loss events
  - May be materially different
  - Not easy to model
- Estimates should use "all available, reasonable and supportable" information
  - PDs should be forward-looking
- Changes in provisions will impact capital
  - Increase in provisions will lead to decrease in capital under Basel III
- Tax?

Accounting Standards
IFRS9

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Next steps

- Another exposure draft?
- Final standard?
- Implementation?
- FASB?

Projection of Profits

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Overview of Approach

Profit cashflow profiles

- Defaulted loans which are written-off
- Defaulted loans which cure

Comparison of Cashflows under IAS39 and IFRS9

- Loan balances and profits
- Summary of impacts

What does this mean for a Bank's profits?

Projection of Profits
Aside

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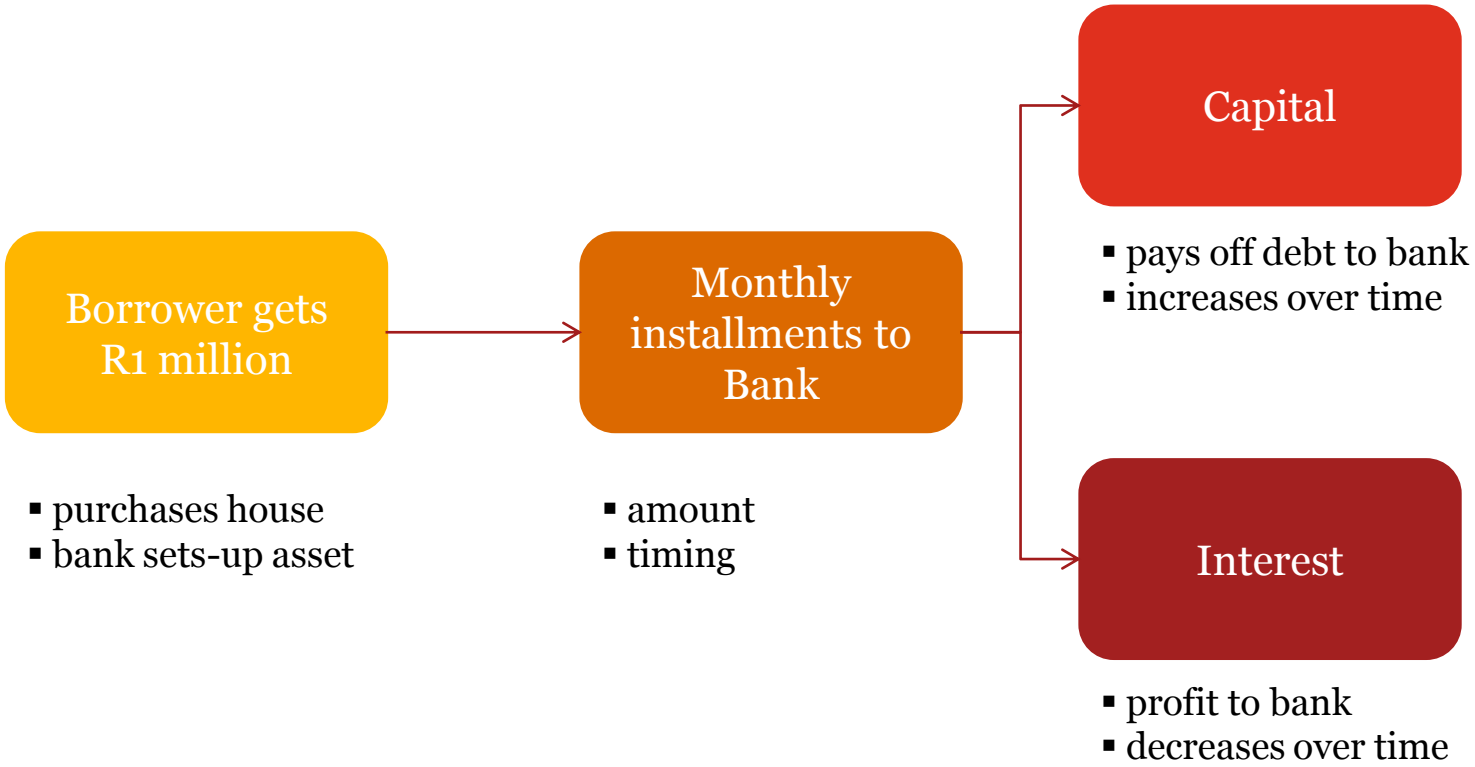
How banking products work:



Projection of Profits
Aside

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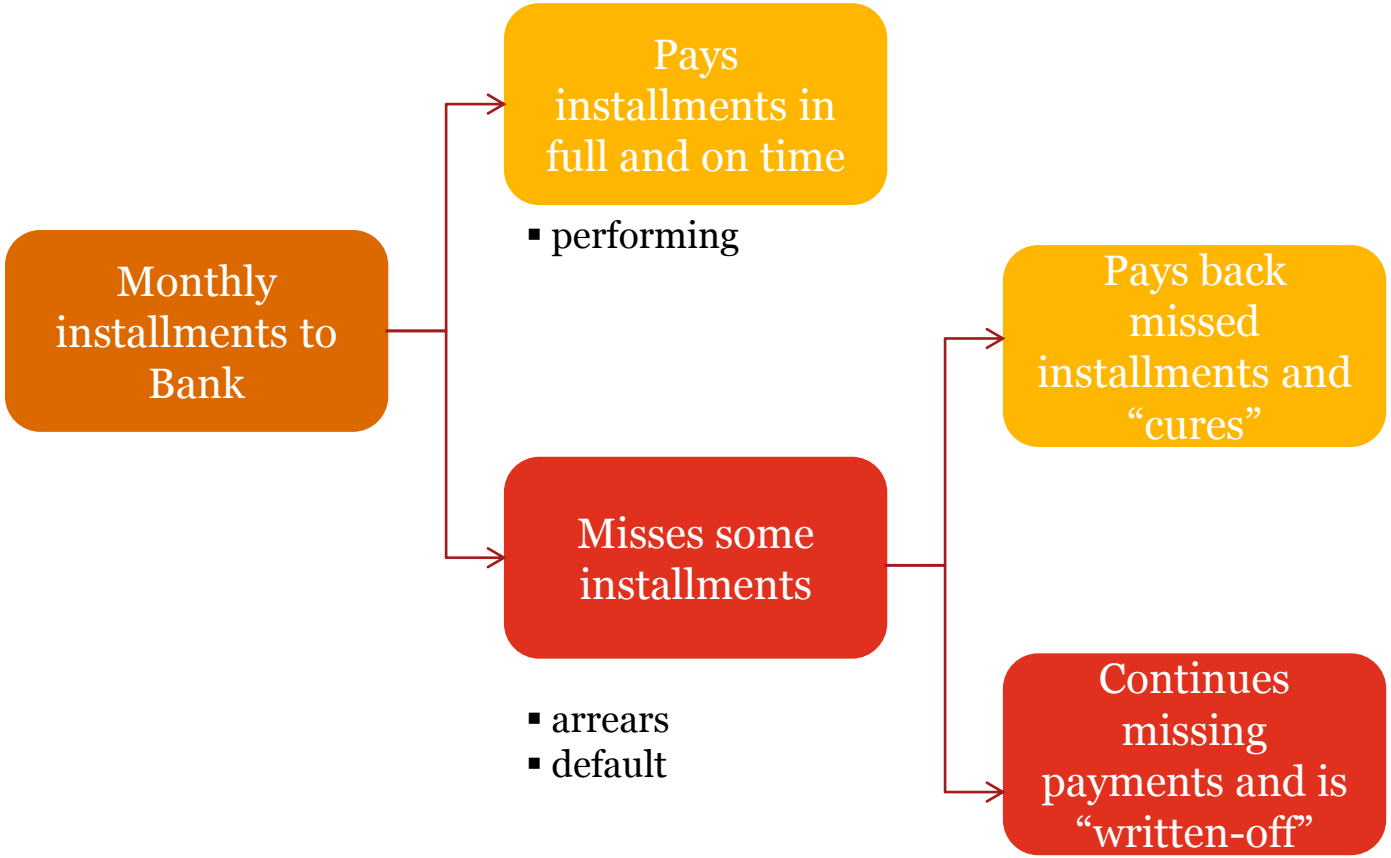
How banking products work:



Projection of Profits
Overview of Approach

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Product features:

- 25-year home loan product
- no extension to product term in event of default / cure
- installments rebased following default to allow for accumulation of interest

Assumptions:

- loan interest rate of 8.50%, cost of funding of 5.50% and Risk Discount Rate ("RDR") of 9.00%
- write-off after 36 consecutive missed payments
- 1000 stochastic simulations
  - Term structure of PDs

Projection of Profits
Overview of Approach

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Profits were assumed to occur at the end of each month according to the following formula:

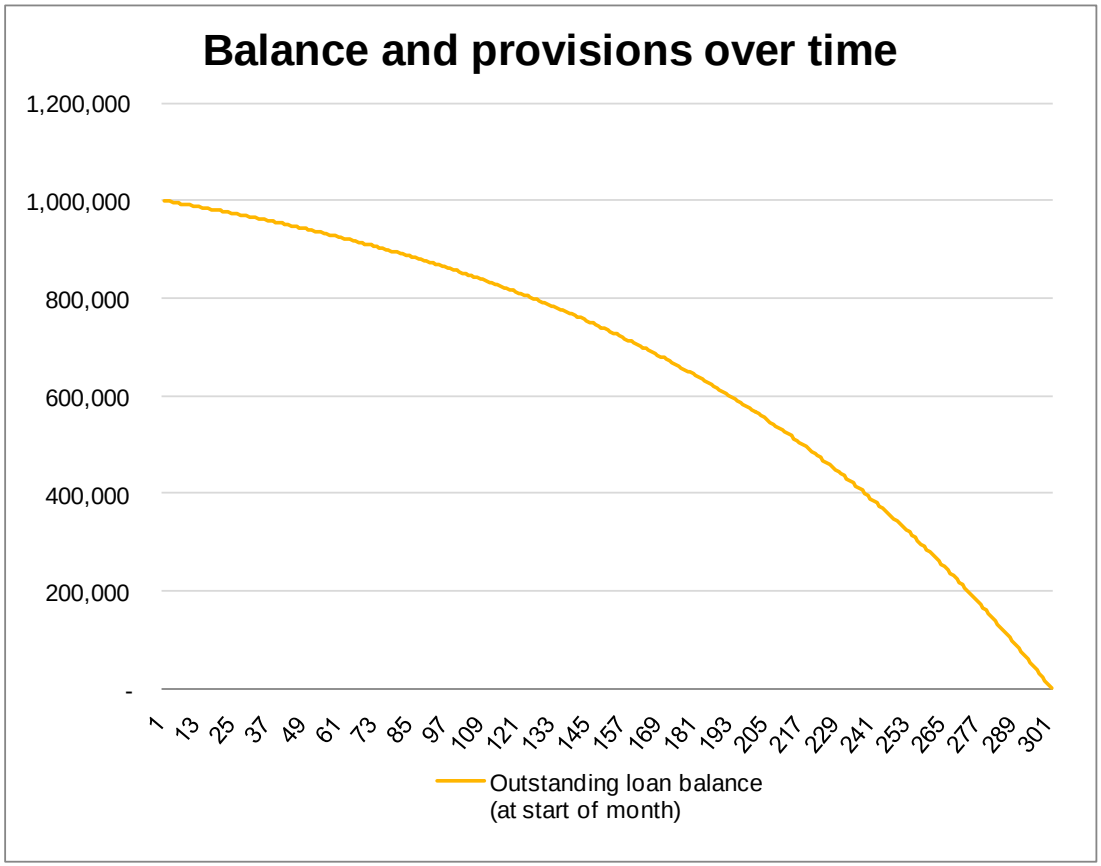
$$Profit = Interest - \Delta Impairment - Expenses + Fees - Cost\ of\ Funding$$

Where:

- Interest – interest component of monthly installment
- Impairment – provision against bad debts
- Expenses – direct and indirect expenses
- Fees – based on monthly bank charge
- Cost of Funding – pre-defined percentage of loan amount

Projection of Profits
Profit cashflow profiles

Defaulted loans which are written-off (1)



The loan outstanding reduces over the duration of the loan as the loan is paid-off.

Projection of Profits
Profit cashflow profiles

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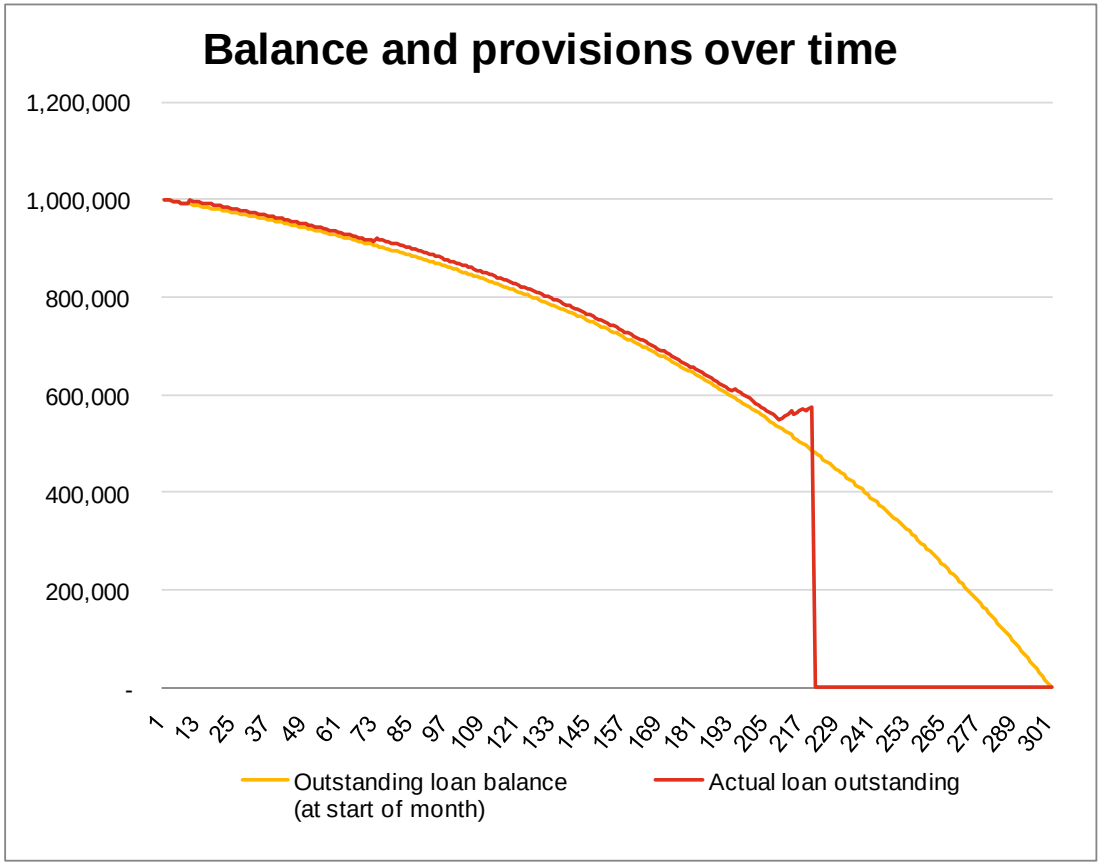
Defaulted loans which are written-off (2)



The actual loan balance outstanding increases over time as the loan remains in arrears

The loan outstanding reduces to zero at the point of write-off (after missing 36 consecutive payments)

Projection of Profits
Profit cashflow profiles

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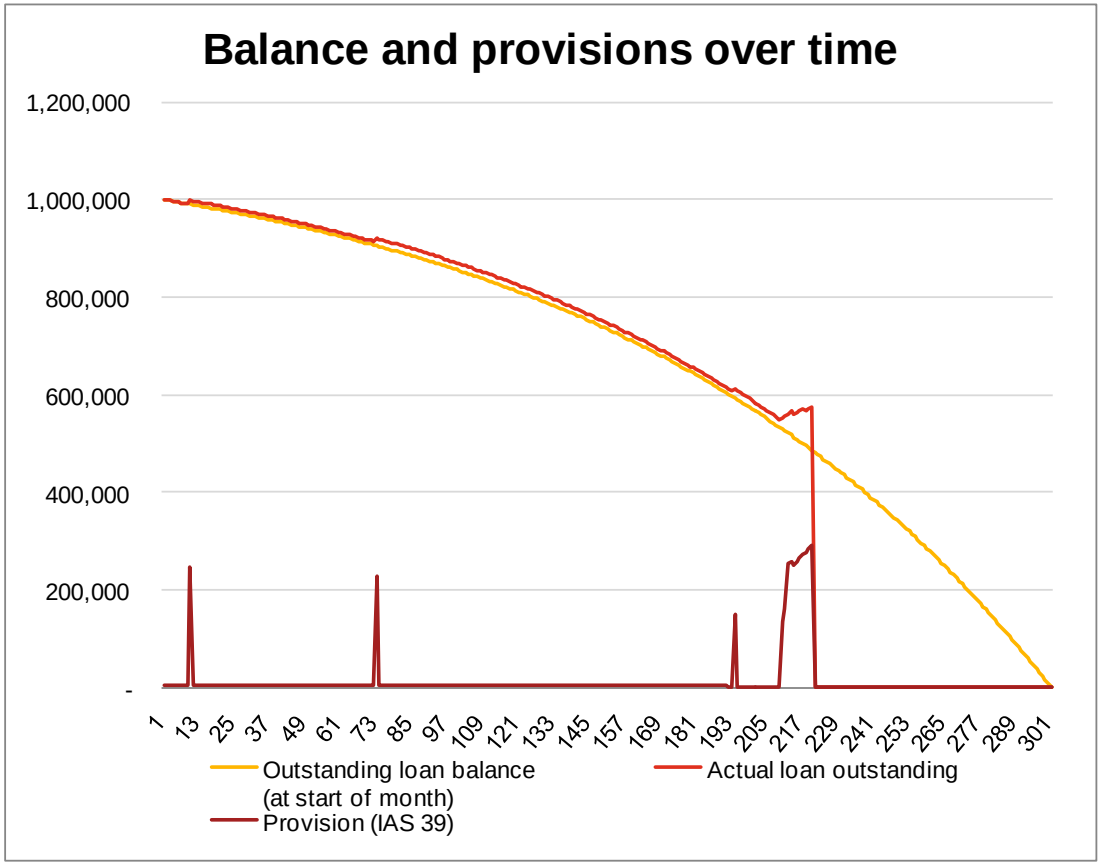
Defaulted loans which are written-off (3)



The provision amount shows a "large" increase once the loan enters default. This is released when the loan cures.

The provision is fully released at the point of write-off.

Projection of Profits
Profit cashflow profiles

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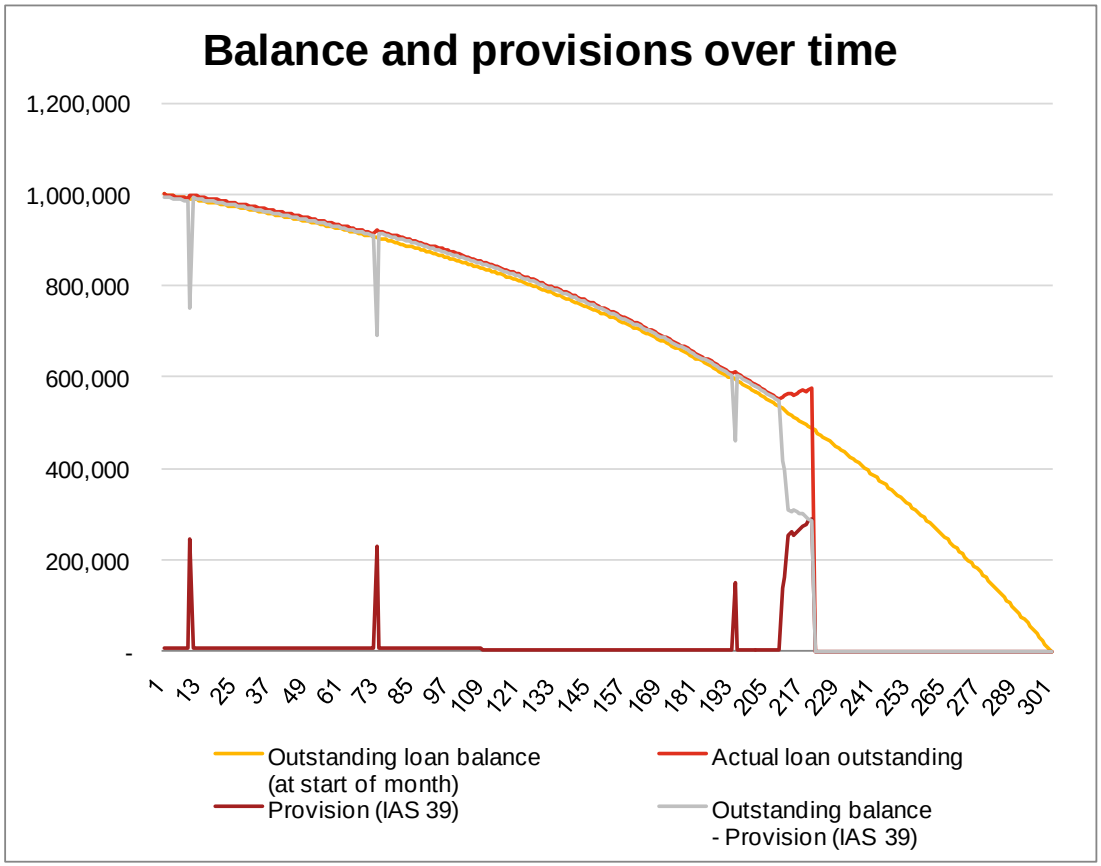
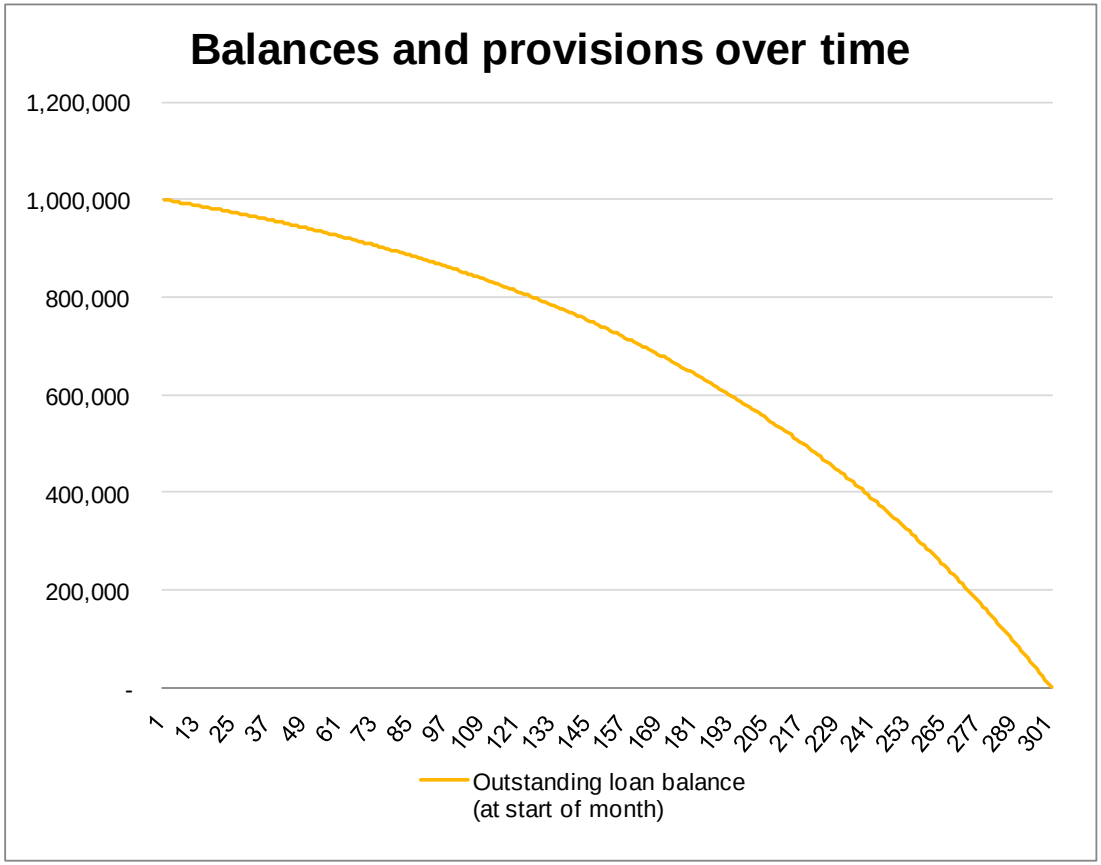
Defaulted loans which are written-off (4)



The balance less provision set-up gives an indication of the size of the profits that are expected to emerge at any point in time.

Projection of Profits
Profit cashflow profiles

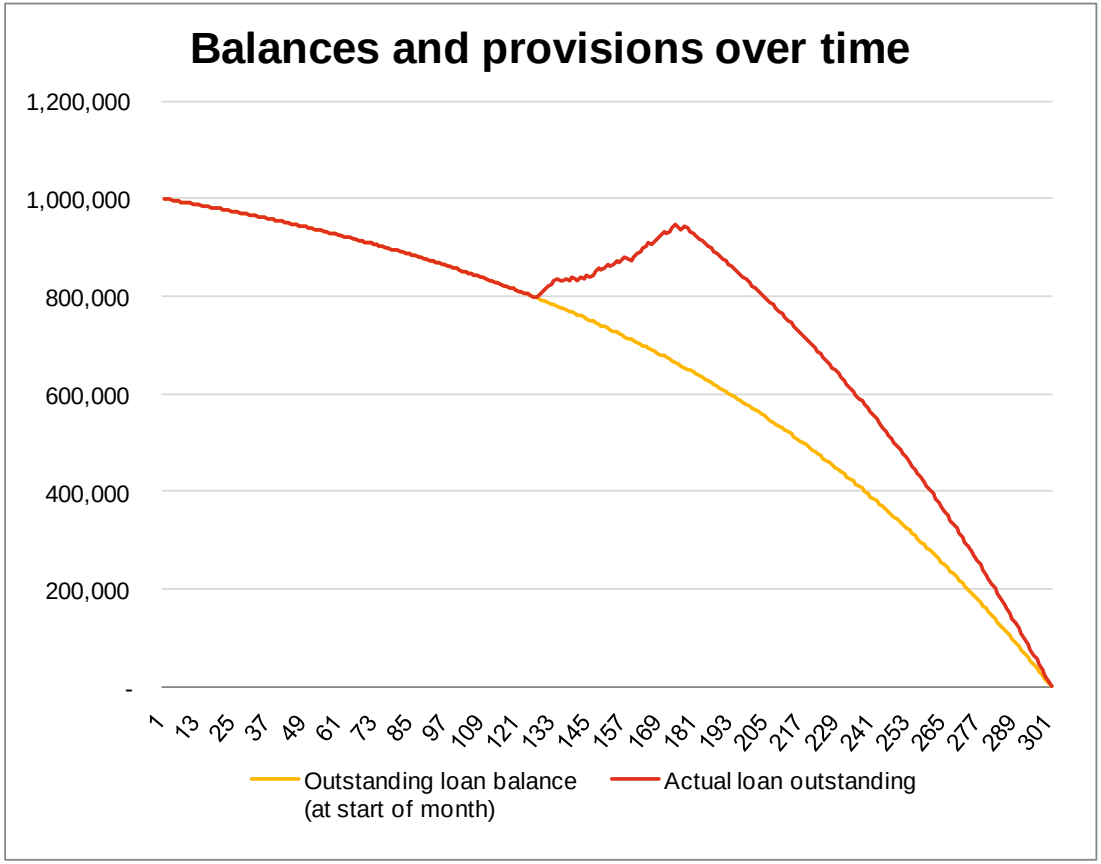
Defaulted loans which cure (1)



The loan outstanding reduces over the duration of the loan as the loan is paid-off.

Projection of Profits
Profit cashflow profiles

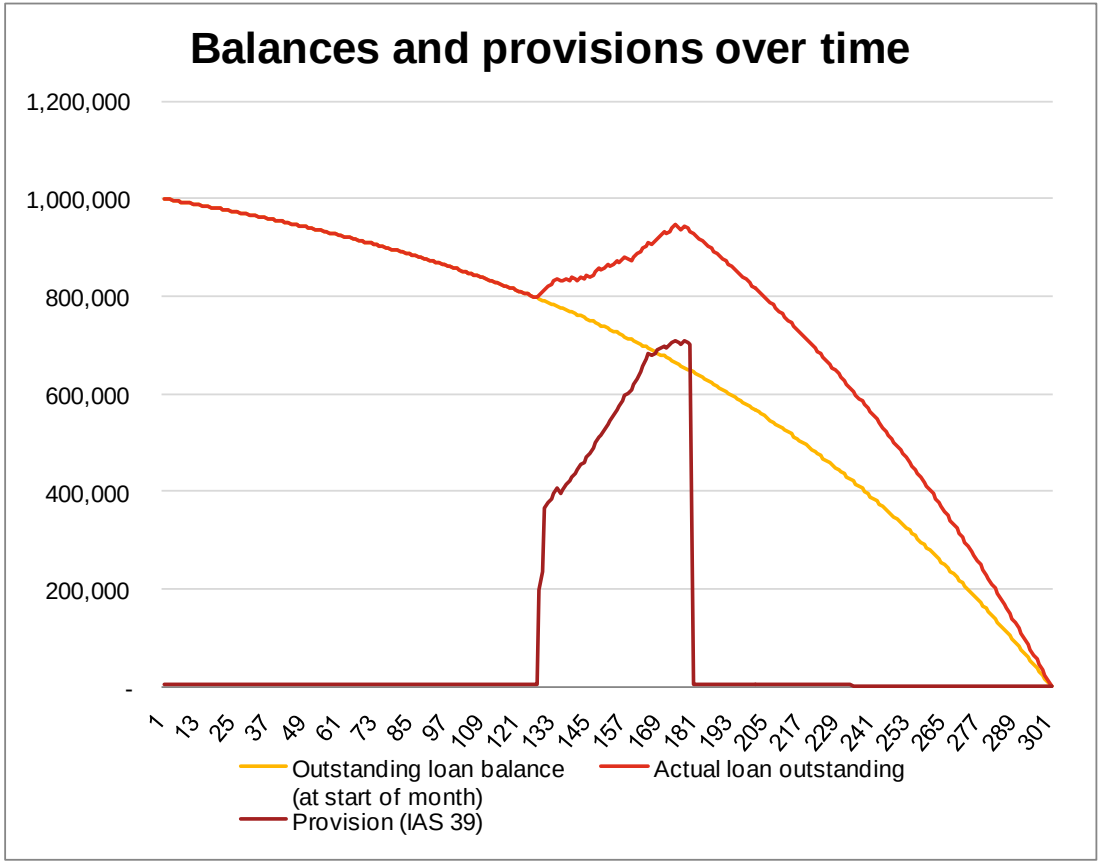
Defaulted loans which cure (2)



The loan outstanding increases subsequent to default, however decreases once the loan is cured.

Projection of Profits
Profit cashflow profiles

Defaulted loans which cure (3)



The provision amount increases over time as the loan remains in default.

The provision is released once the loan cures.

Projection of Profits
Profit cashflow profiles

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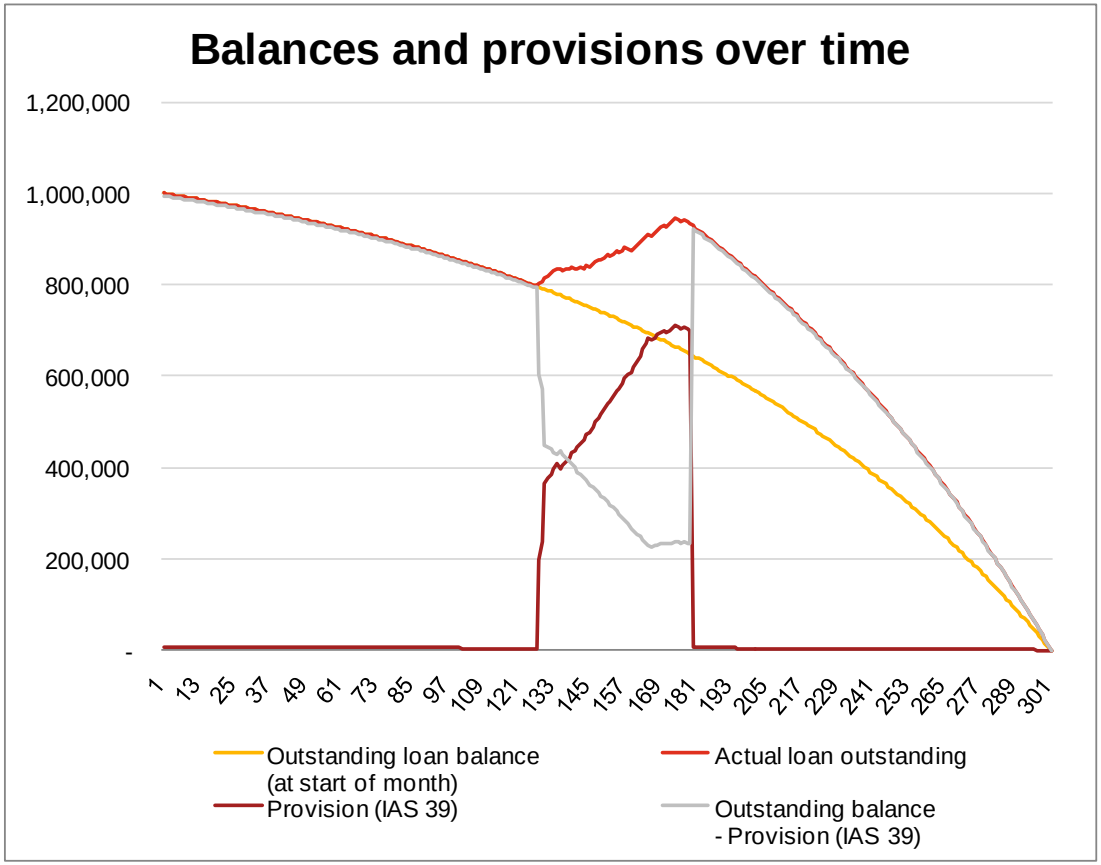
Defaulted loans which cure (4)



The balance less provision set-up gives an indication of the size of the provision required at any point in time.

Projection of Profits
Profit cashflow profiles

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Summary of Results

	Scenario 1 - Write-off	Scenario 2 - Cure
Total ideal repayments	2,352,493	2,352,493
Total profits (ideal)	**457,392**	**457,392**
Total repayments	1,657,402	2,539,355
Total amount written off	311,494	-
Total expenses	19,900	23,500
Total indirect expenses	6,343	54,438
Total cost of funding	804,575	1,009,095
Total banking fees	10,400	13,300
Total "profits"	**95,452**	**465,623**

Projection of Profits
Cashflows under IAS39 and IFRS9

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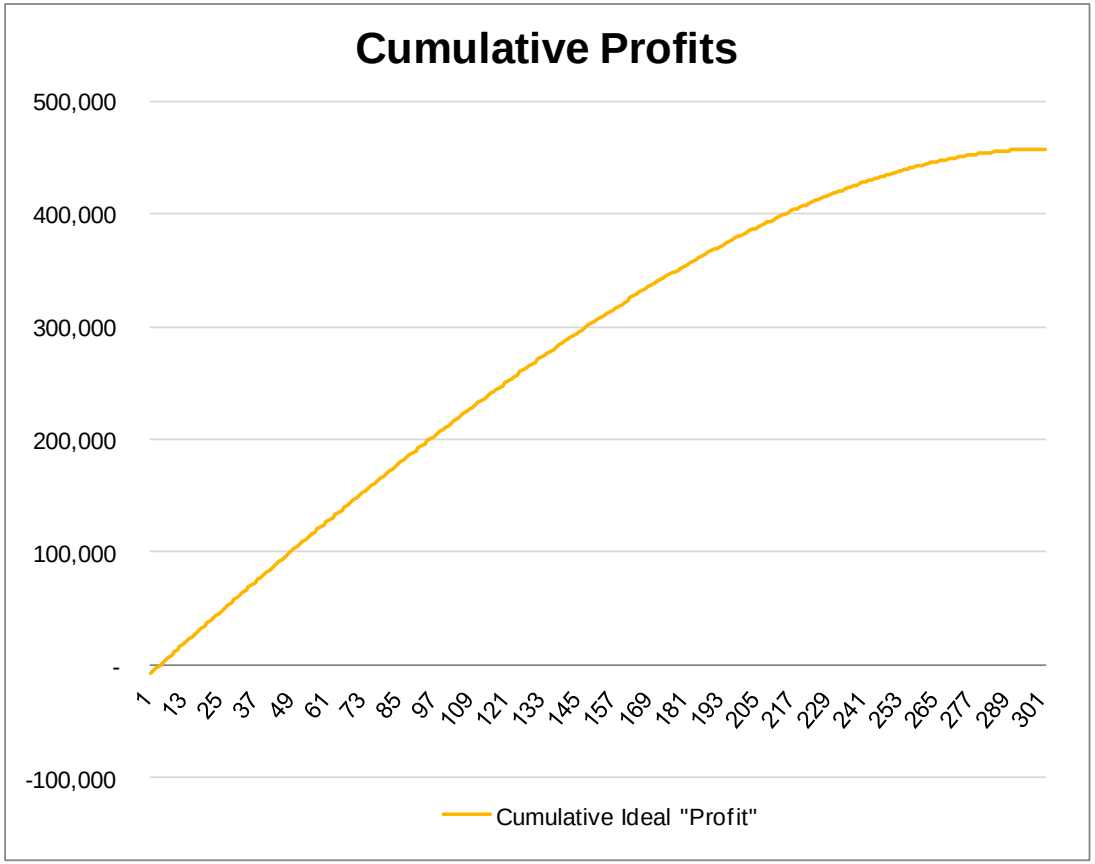
Cumulative Profits - cure (1)



Under the "ideal" scenario, cumulative profit increases at a decreasing rate.

Projection of Profits
Cashflows under IAS39 and IFRS9

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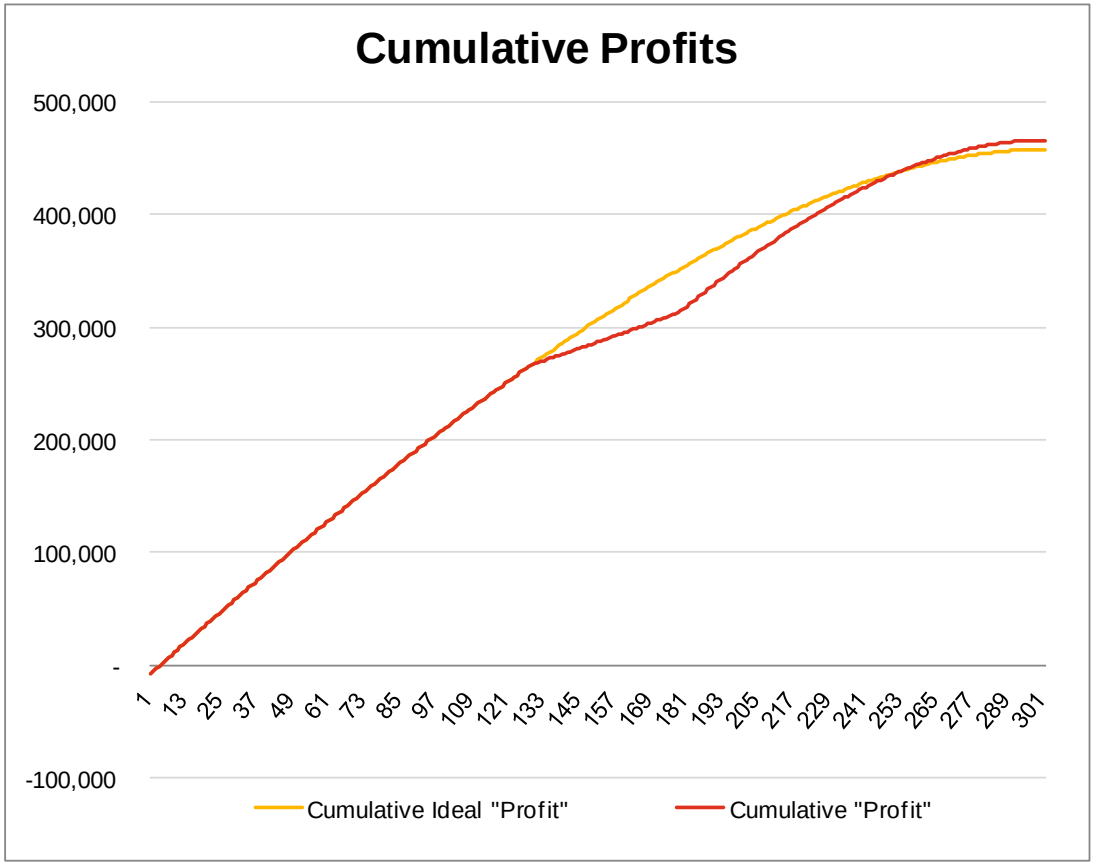
Cumulative Profits - cure (2)



Once the loan cures, the cumulative profit increases at a faster rate than under the ideal case.

Projection of Profits
Cashflows under IAS39 and IFRS9

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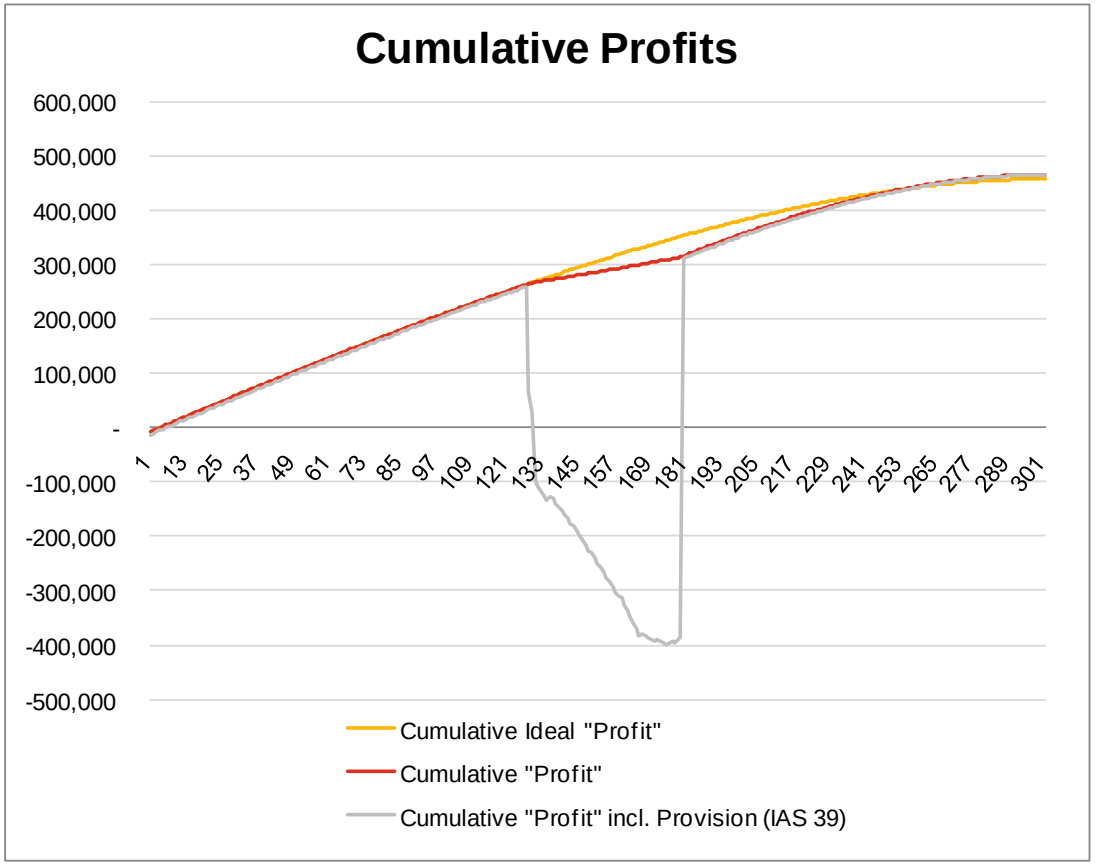
Cumulative Profits - cure (3)



Under IAS39 provisions are held as:

- IBNR for performing loans
- 12 month PD for arrears
- Specific provision for default

Projection of Profits
Cashflows under IAS39 and IFRS9

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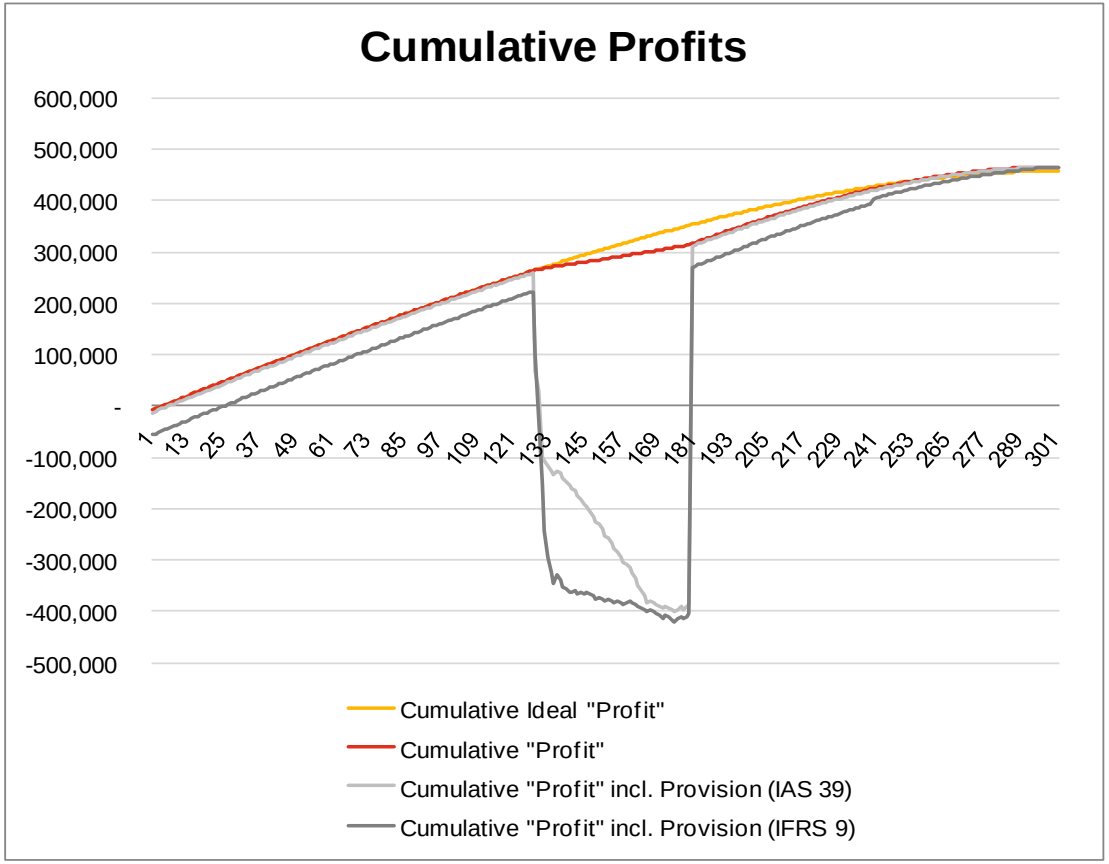
Cumulative Profits - cure (4)



Under IFRS9 a larger provision is set-up from outset (hence profits deferred for longer).

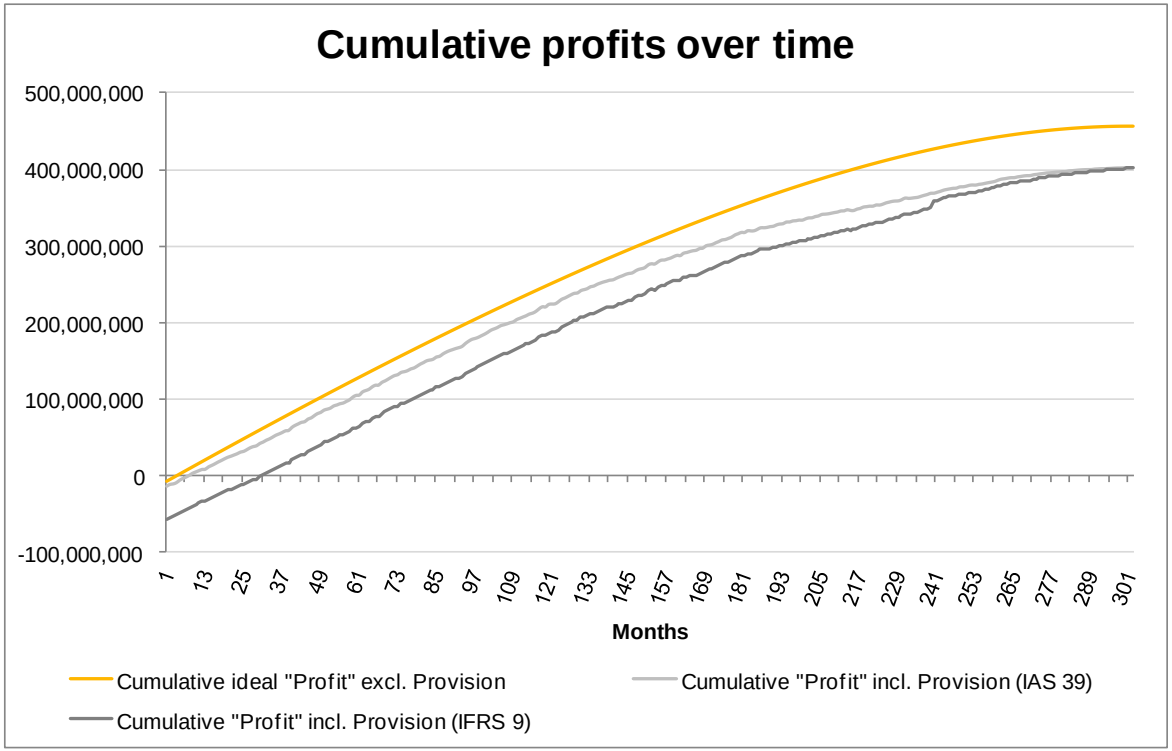
IFRS9 requires a larger provision on moving into arrears.

Larger release of provision on cure under IAS39.

Projection of Profits

What does this mean for a Bank's Profits

Projected portfolio of 1000 mortgages



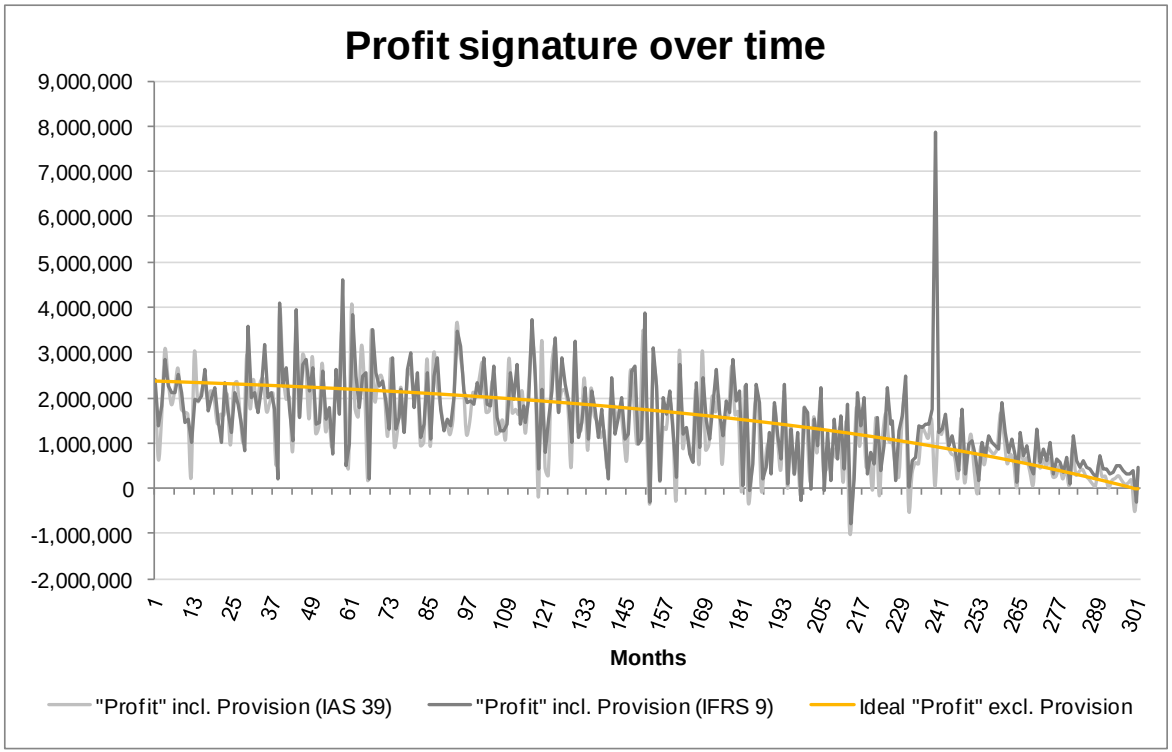
Ideal profit increases over time.

IFRS 9 results in greater deferral of profit

Projection of Profits

What does this mean for a Bank's Profits

Profit signature for portfolio of 1000 mortgages



Profits decrease greatly at the point where a mortgage is written off.

This creates volatility in the overall profit signature. The provisions offset these spikes by releasing on the point of write off.

Projection of Profits
What does this mean for a Bank's profits

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Conclusions and Limitations

Conclusions:

- IFRS9 raises larger provisions from outset of the loan
- IFRS9 is expected to delay the recognition of profits for longer than under IAS39
- Profit recognition patterns more similar to "ideal" case

Limitations:

- Current results based on latest exposure draft
- Considered single cohort of similar loans (no new business)
- Assumptions made at the start could affect conclusions

Value Prospects to Investors

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Comparison to conventional insurance

- Life Insurance Company

Value Prospects to Investors

Comparison to a conventional insurance

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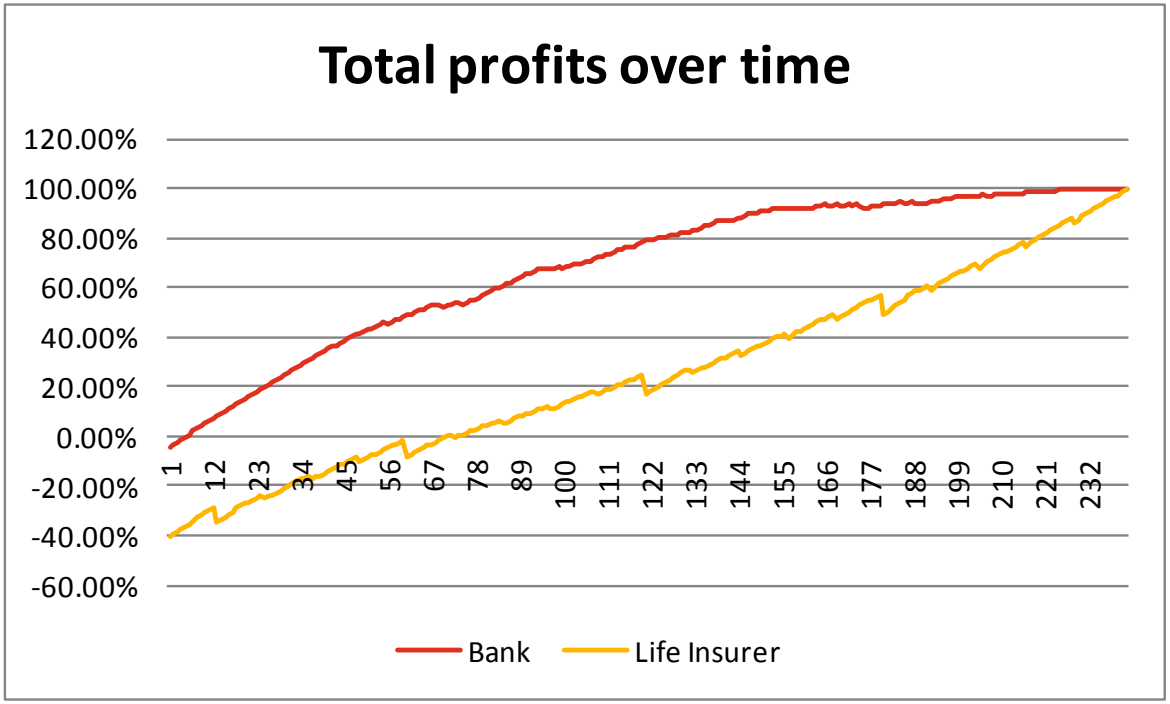
Life Insurance



Graph illustrates percentage of total profit realised at each point in time.

There is greater deferral of profits for a life company than for a Bank.

Value Prospects to Investors
Comparison to a conventional insurance

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Comparison to conventional insurers

Conclusions:

- IFRS9 more similar to insurance concepts of expected loss
- Greater deferral of profits for life insurers than for banks
- Products not like-for-like which makes comparison difficult
- Short-term companies currently do not calculate embedded values

Discussion

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Thank you:

Michel Mouton

Jonathan Havemann

Corne Conradie