

3º Workshop Duxus de Risco

Uma questão de controle.



Resolução CMN 4.966

Rodrigo Leme de Oliveira





Manchetes Internacionais Sobre o IFRS9

Ásia, Austrália e a Realidade Brasileira

0 50 100 200 km
PROJEÇÃO DE ROBERTS

● País com representação
significativa brasileira
● País com mais de 500
● País com mais de 1.000 mil
brasileiros em 2024

Australia's large banks face rising credit risk as at-risk loans surged in 2023

At-risk loans have risen for Australia's four largest banks, indicating an escalation in credit risk due to elevated interest rates.

IN THIS LIST

Australia's large banks face rising credit risk as at-risk loans surged in 2023

BLOG

Banking Essentials
May 29th Edition

BLOG

Managed Services Insights:
The client lifecycle management solution

BLOG

Technology & Automation Insights:
Elevating KYC and onboarding efficiency

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Banking Essentials
Newsletter: May 15th Edition

due to elevated interest rates.

Aggregate stage 2 loans, classified under the International Financial Reporting Standard 9 (IFRS 9) accounting standards, at Commonwealth Bank of Australia, National Australia Bank Ltd., ANZ Group Holdings Ltd. and Westpac Banking Corp., increased to 17.93% in the 12 months ended Sept. 30, 2023, compared with 15.87% a year earlier. This also marked a significant increase from 12.03% in the year ended September 2019, according to S&P Global Market Intelligence data. Stage 2 loans, as defined by IFRS 9, are loans where credit risk has substantially increased since initial recognition.

The banks' aggregate stage 3 loans also grew to 0.90% in 2023 from 0.83% in 2022. Market

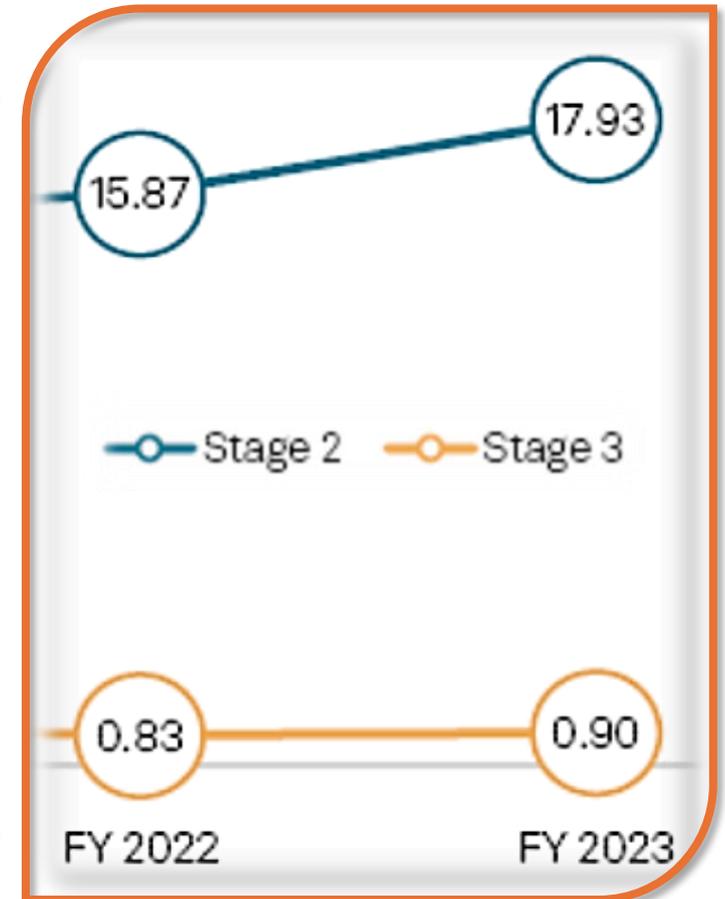
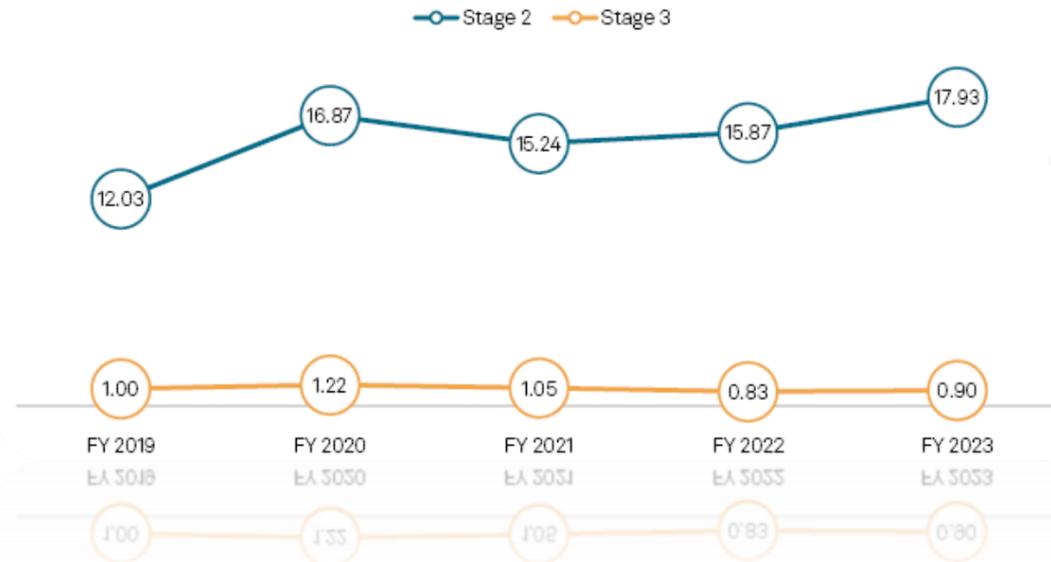


Author
Ranina Sanglap,
Cheska Lozano

Theme
Healthcare &
Pharmaceuticals,
Real Estate, Banking,
Fintech, Insurance

"Australia's Large Banks in 2023"

Aggregate stage 2 and stage 3 gross customer loans at large Australian banks
As a proportion of total gross customer loans (%)



"Australia's Large Banks in 2023"

Aggregate stage 2 and stage 3 reserves at large Australian banks

As a proportion of Stage 2, Stage 3 customer loans (%)

— Stage 2 — Stage 3



EA 5018 EA 5050 EA 5051 EA 5055 EA 5053



EA 5055 EA 5053



20.41

17.49

— Stage 2 — Stage 3

— Stage 2 — Stage 3

1.98

1.85

FY 2022

FY 2023

REGULATION

IFRS 9 poses credit risk model dilemma for Asian banks

IFRS 9 poses credit risk model dilemma for Asian banks

New accounting standard requires tough data upgrade, but capital incentives are weakening

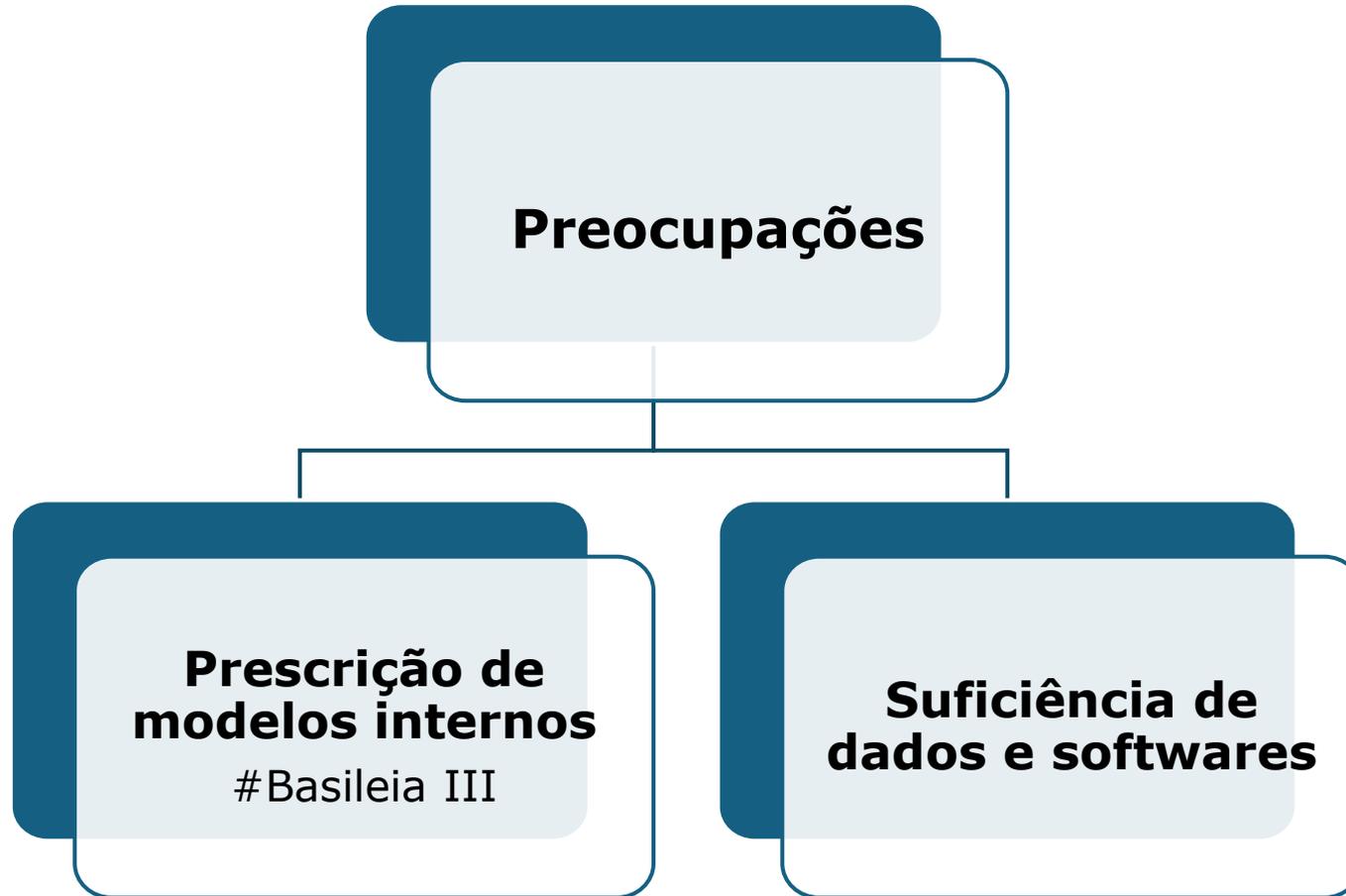


Tall order: IFRS 9 requires sufficient historical data in a usable format that can be compared regularly

The direction of travel at the Basel Committee in recent years has been to reduce the capital incentives for banks to invest in internal models, but new accounting standards are pushing in the opposite way. In Asia, the problem is whether the historical data and internal infrastructure are sufficient to allow



"IFRS 9 Poses Credit Risk Model Dilemma for Asian banks"



Paralelo Nacional?

Manutenção de Grande Parte do IFRS9



Suficiência dos Dados e Softwares



Modelo de Perda Esperadas

Resolução 4.966

Conceituação inicial e os porquês da mudança

Conceituação Inicial

Classificação e Reclassificação de Instrumentos Financeiros

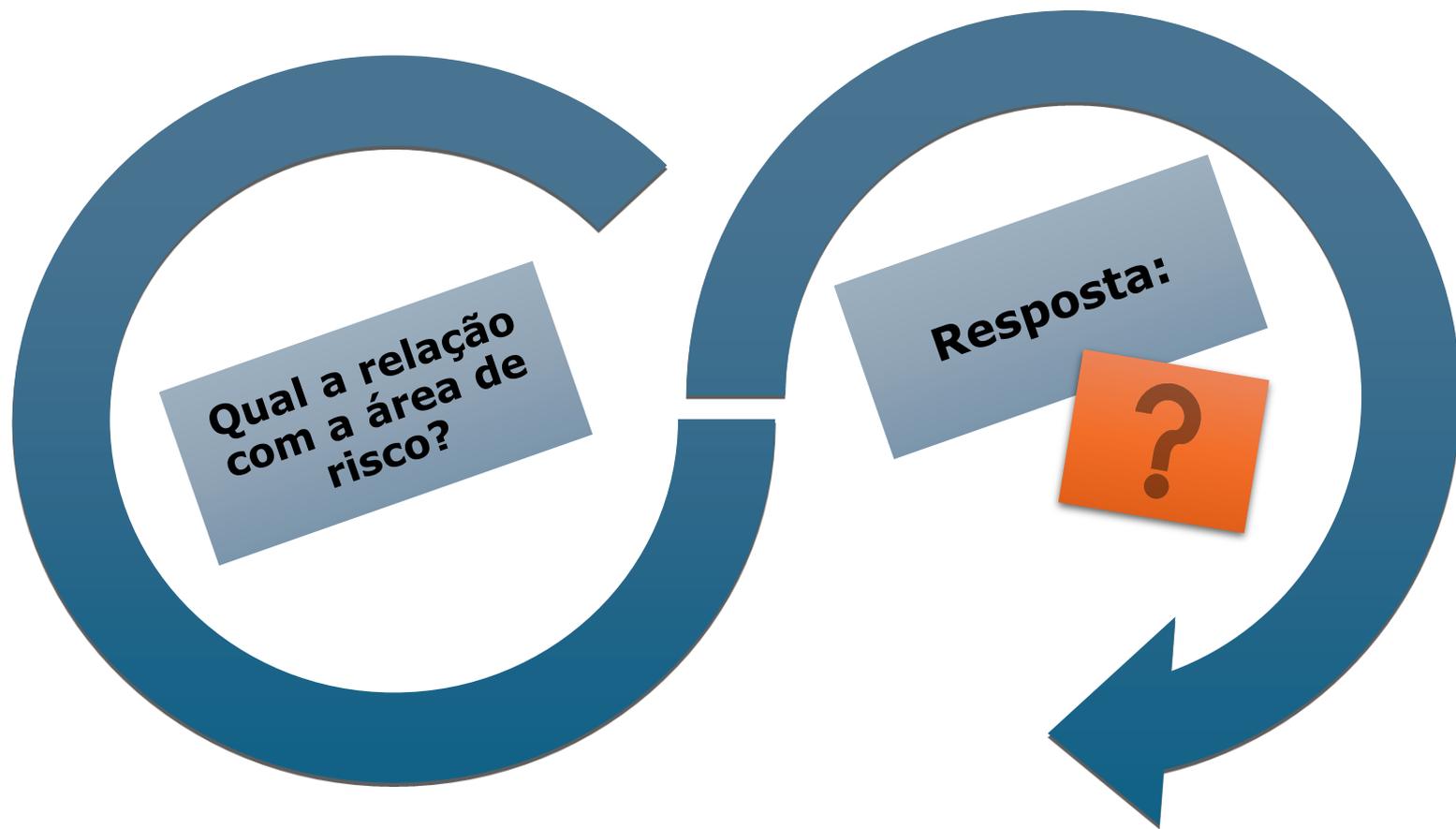


Contabilidade de Hedge

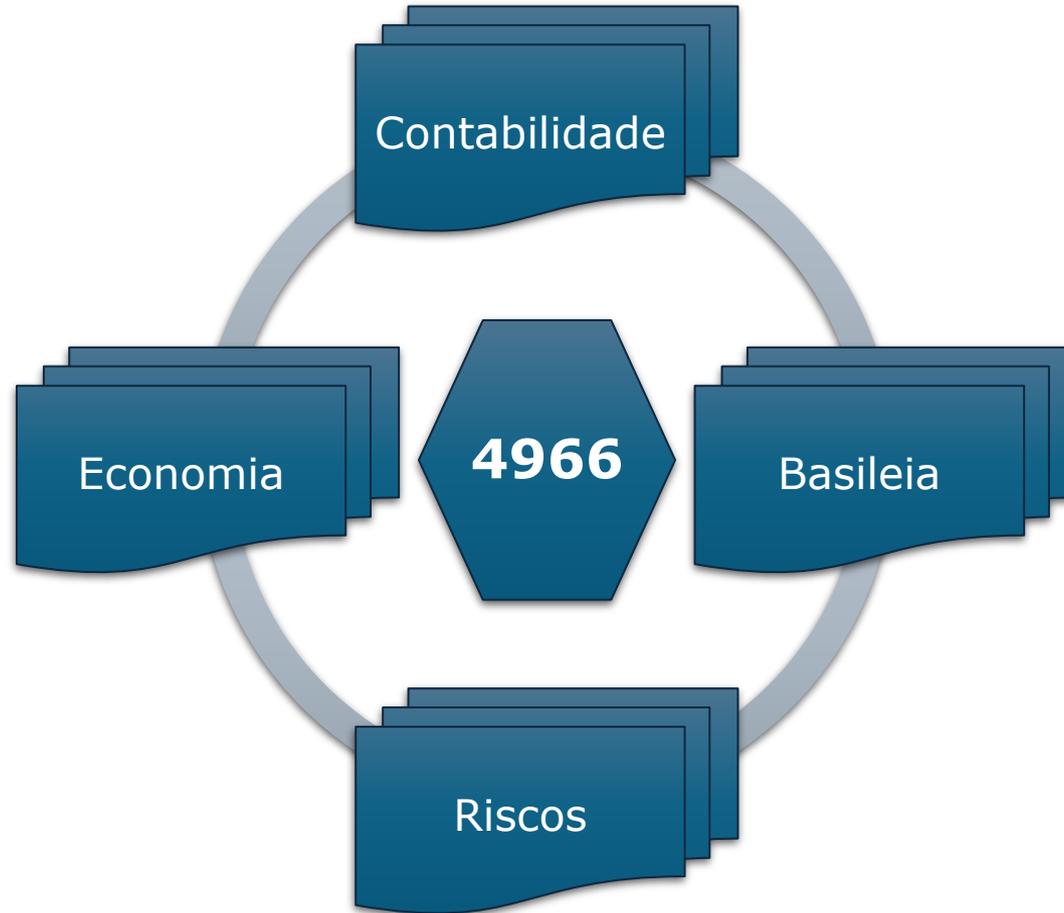


Teste de Impairment

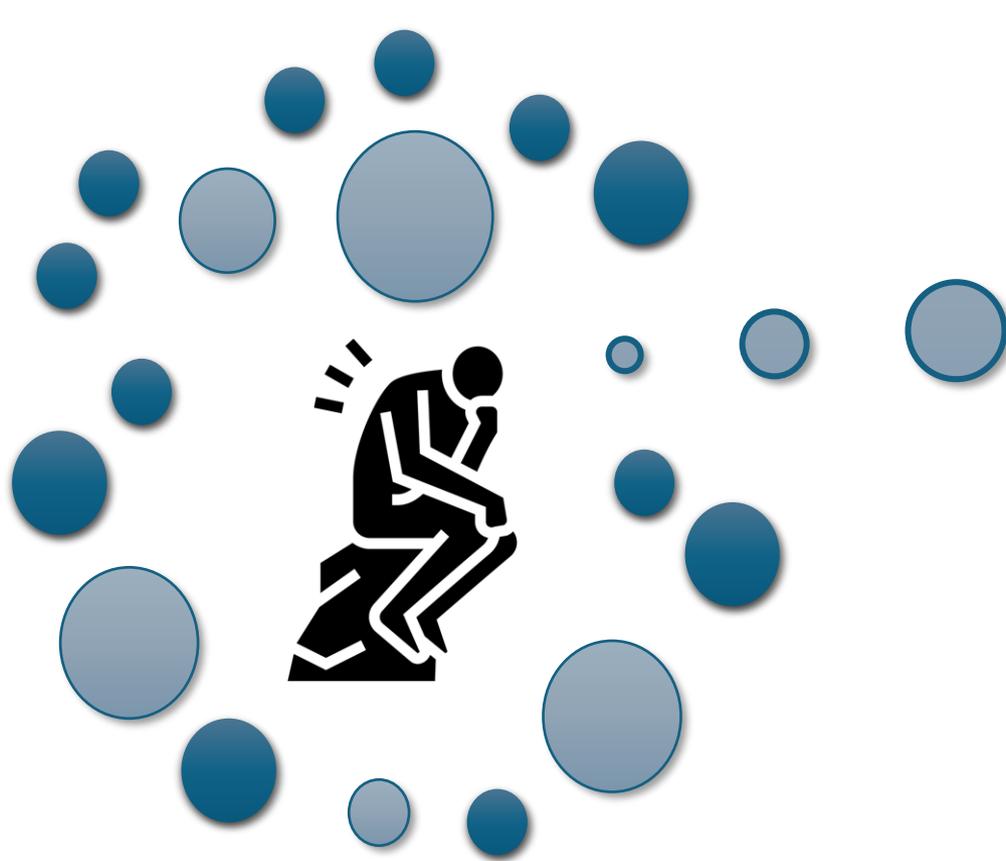
Conceituação Inicial



Necessidade de Sinergia

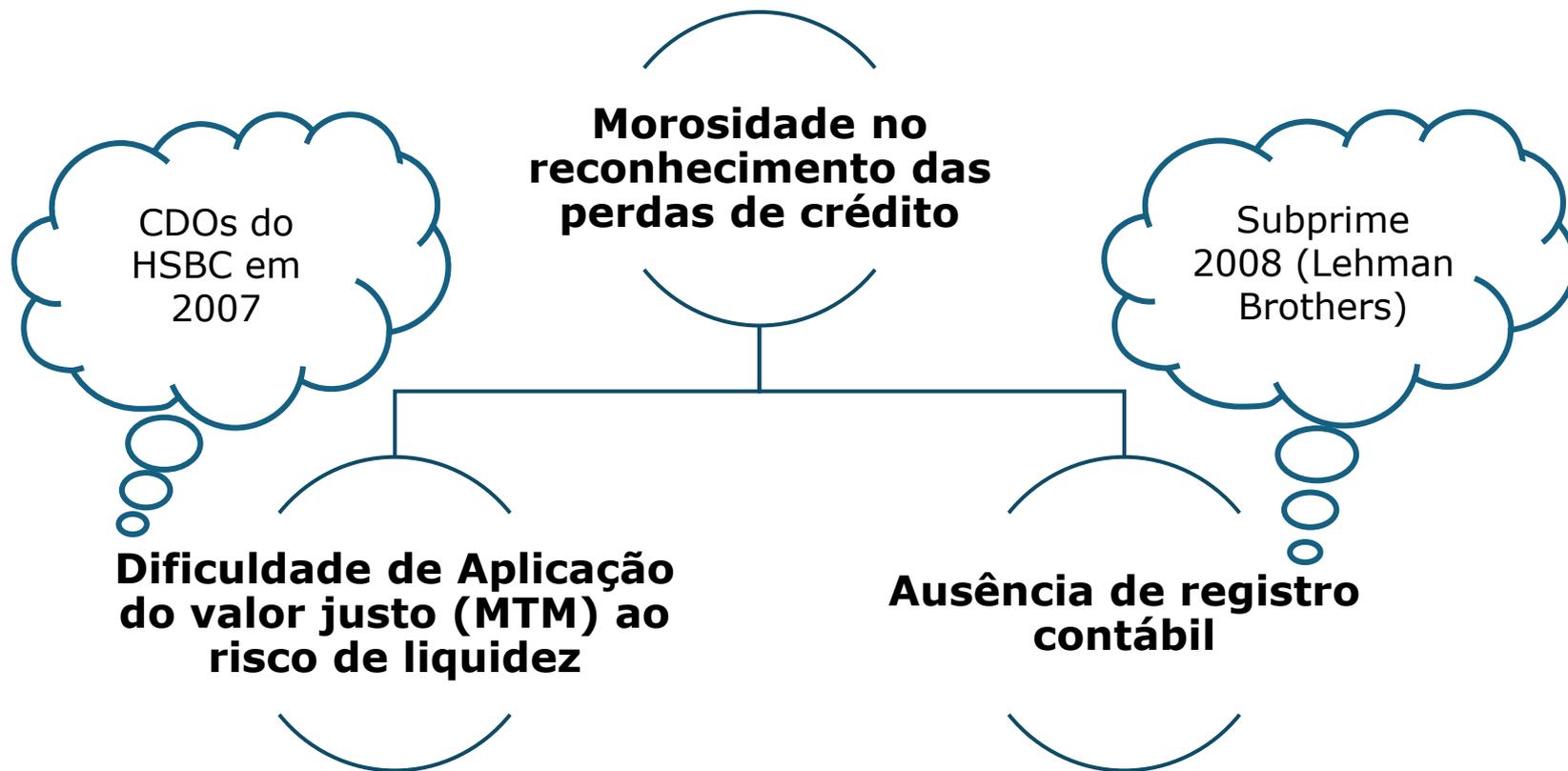


Necessidade de Sinergia

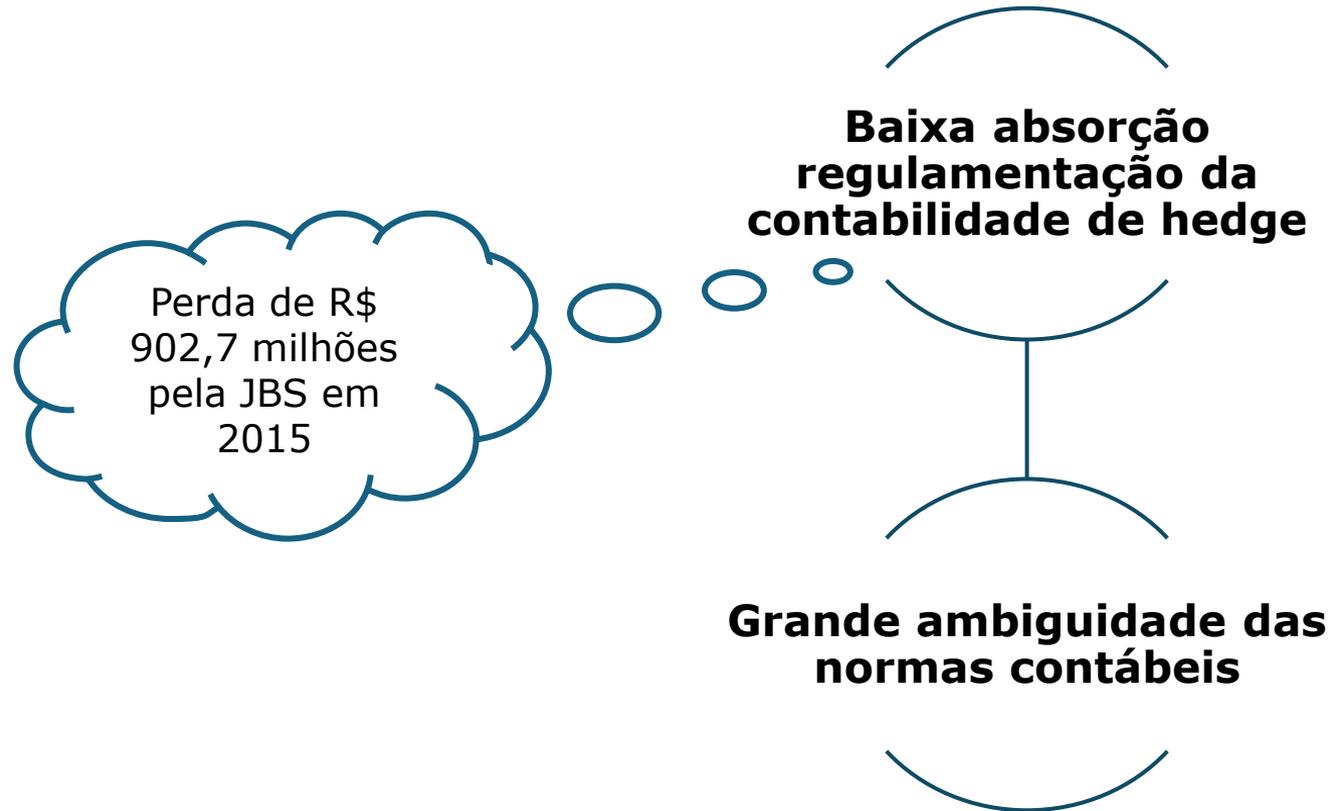


Por que desenvolver um normativa tão robusta?

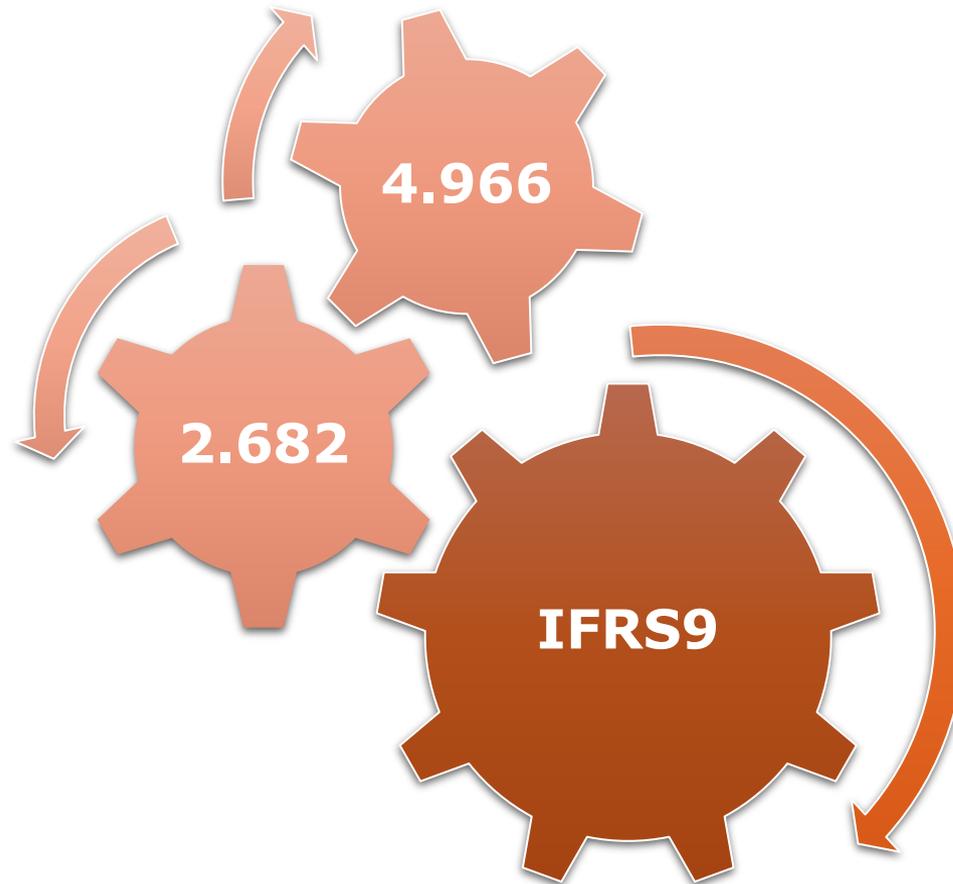
Fragilidades do IAS39 e Origens do IFRS9



Fragilidades do IAS39 e Origens do IFRS9



Fragilidades do IAS39 e Origens do IFRS9



Ditames das nova regulamentação

Classificação de instrumentos financeiros

Hedge accounting

Provisionamento por perdas esperadas

Classificação de Instrumentos Financeiros

Custo Amortizado (CA)

- Modalidade acruada (carteira banking)

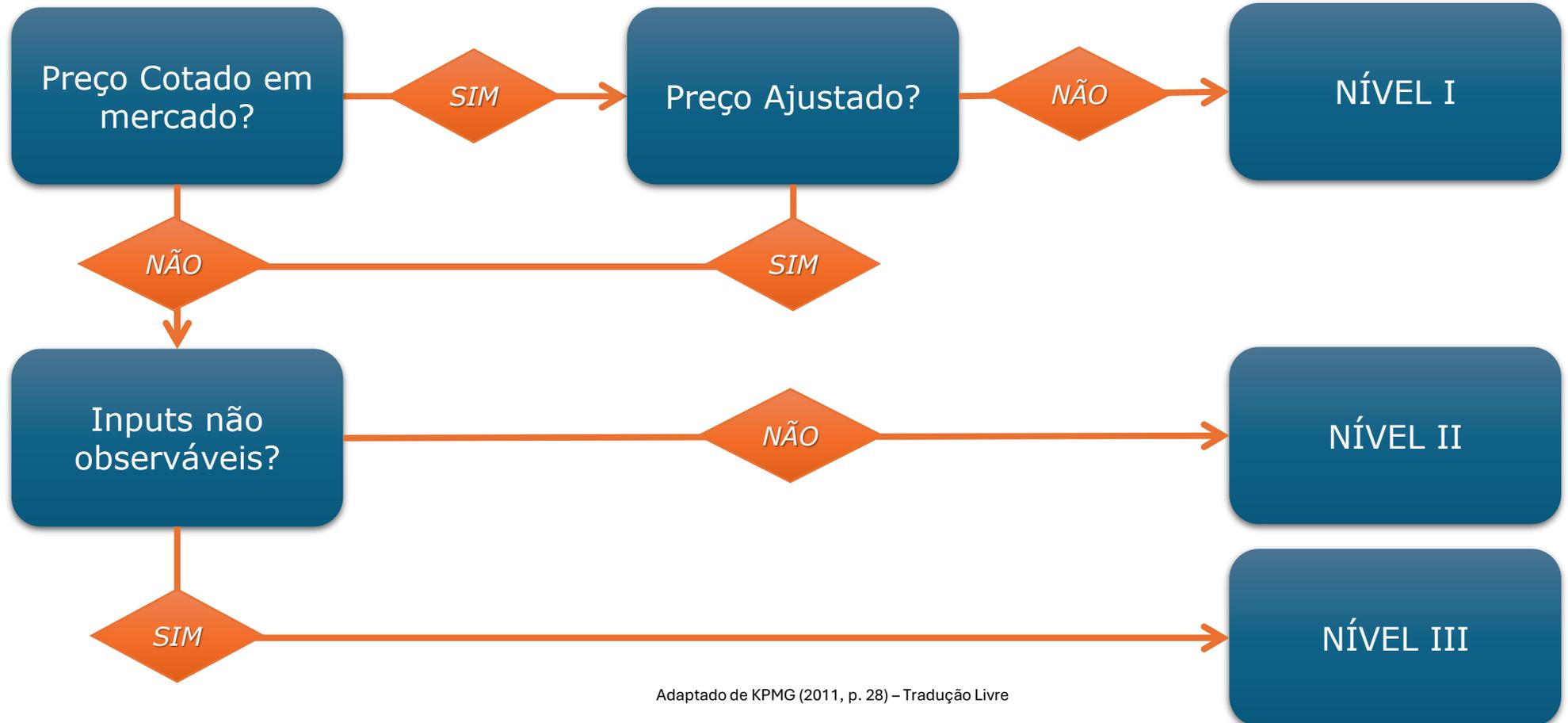
Valor Justo por Meio do Resultado (VJR)

- Modalidade MTM (carteira trading)

Valor Justo por Meio de Outros Resultados Abrangentes (VJORA)

- Modalidades acruada (carteira banking)
- MTM (carteira trading)

Classificação de Instrumentos Financeiros



Adaptado de KPMG (2011, p. 28) – Tradução Livre

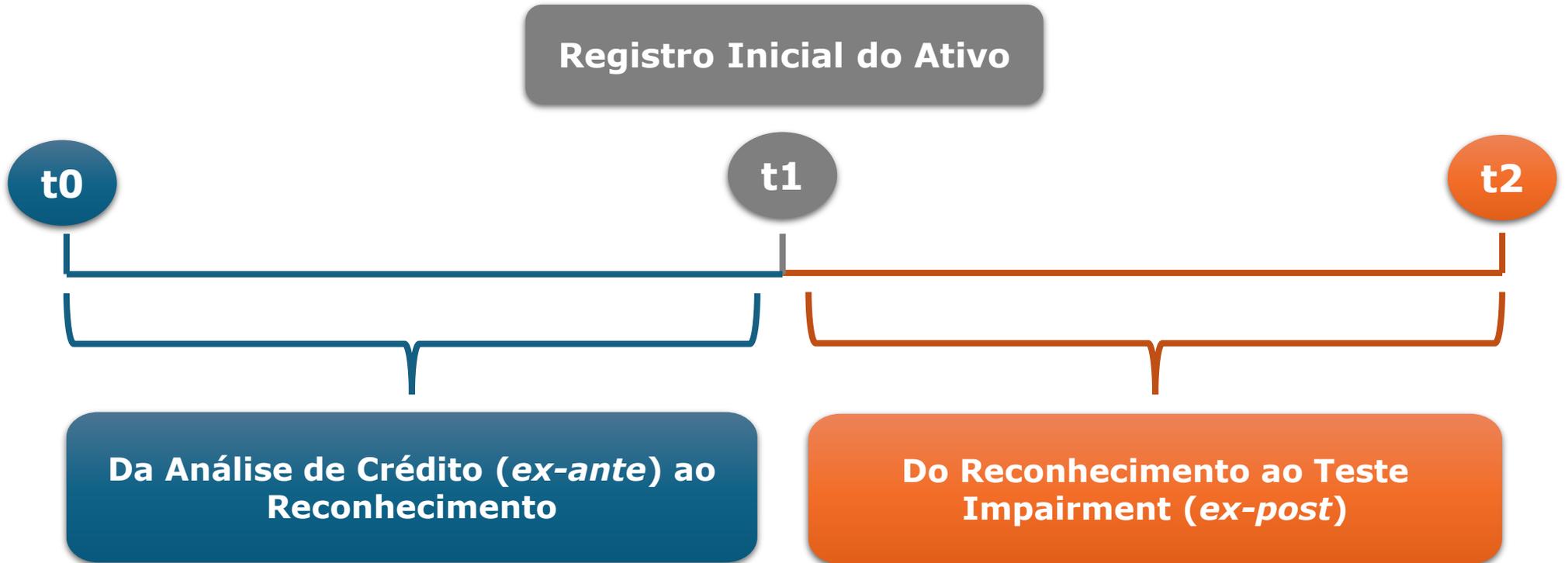
Hedge Accounting

Hedge de Valor Justo (MTM)

Hedge de Fluxo de Caixa

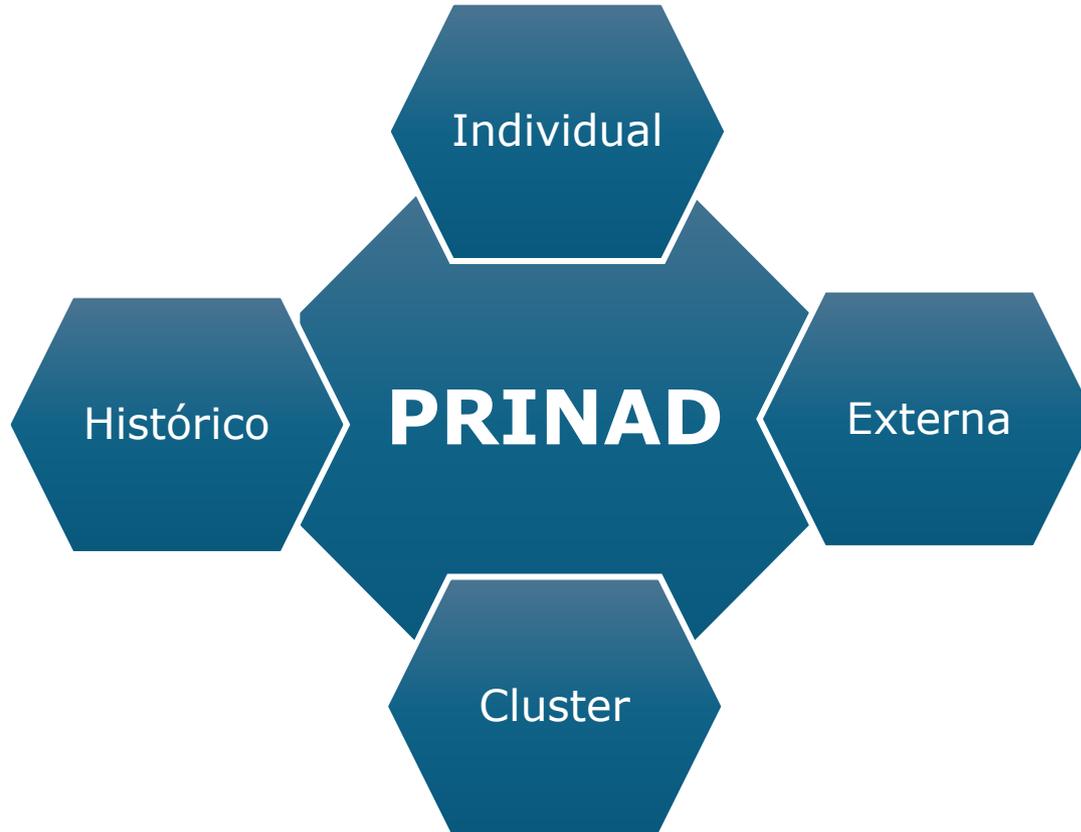
Hedge de Investimentos Líquido no Exterior

Teste de Impairment



Adaptado de Galbi, Barreto e Flores (2018, p. 25)

Teste de Impairment



Teste de Impairment

Estágio 1 (Performing)

➤ $PECLD = PRINAD\ 12\ meses * (1 - TR\%) * EAD$

Estágio 2 (Incremento de Risco)

➤ $PECLD = PRINAD\ Life\ Time * (1 - TR\%) * EAD$

Estágio 3 (Operações problemáticas)

➤ $PECLD = (1 - TR\%) * EAD$

**Determinação
De Estágios**

Confecção PRINAD 12 Meses

*PRINAD*_{12 Meses}

$$PRINAD_{Cliente} \times \sigma_{PRINAD} \times \sqrt{\text{Mínimo}((12 - 1); \text{Prazo Residual} - 1)} \times Z_{\alpha\%}$$

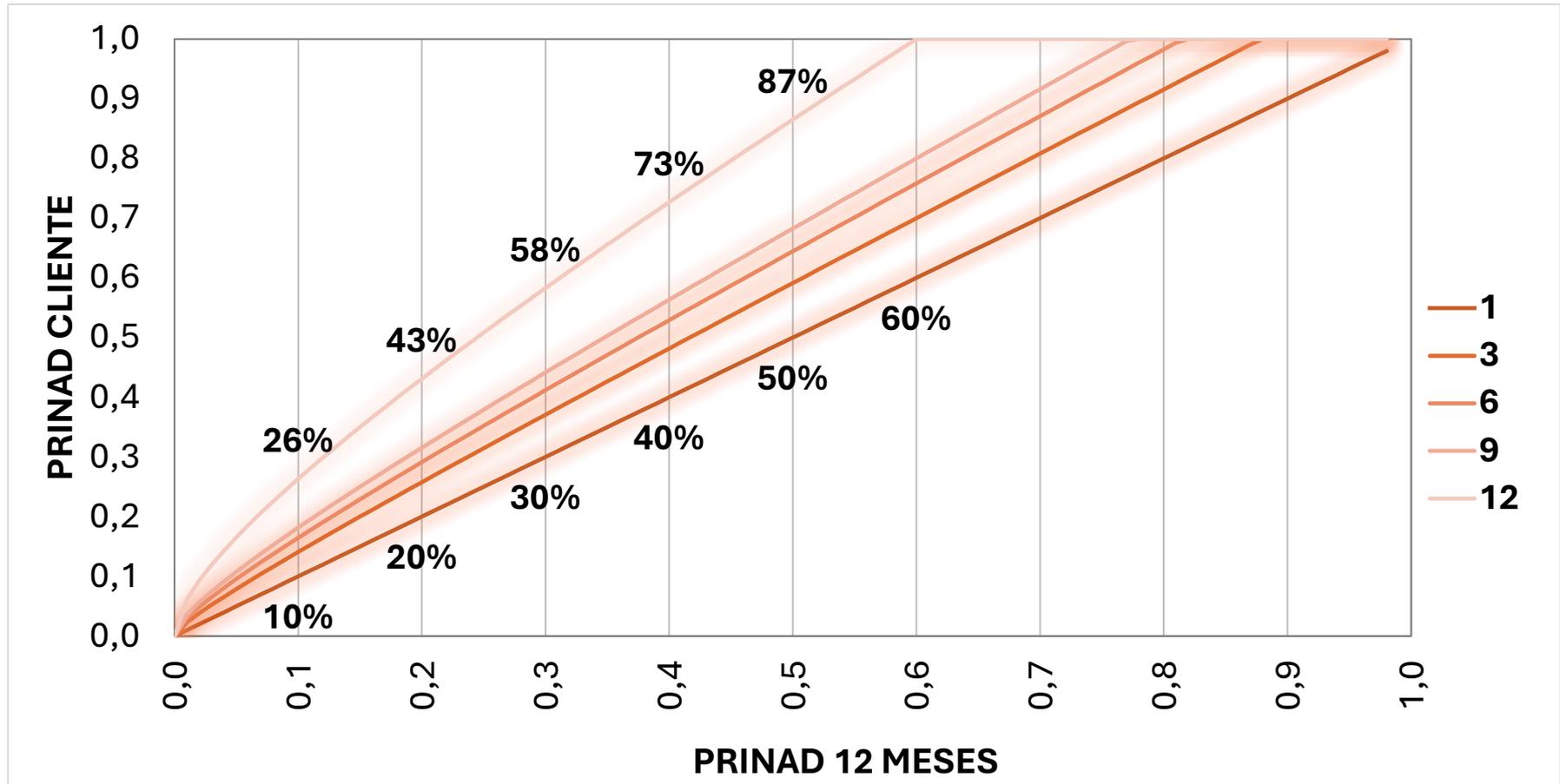
Onde

$$PRINAD_{Cliente} = \frac{\sum_{i=1}^{i=n} (\text{Peso}_i \times PRINAD_i)}{\sum_{i=1}^{i=n} (\text{Peso}_i)}$$

e

$$\sigma_{PRINAD} = \frac{\sum_{i=1}^{i=n} (\text{Peso}_i \times \sigma_i^2)}{\sum_{i=1}^{i=n} (\text{Peso}_i)}$$

Convergência PRINAD 12 Meses



Confecção PRINAD Life Time

PRINAD Life Time

$$PRINAD_{Cliente} \times \sigma_{PRINAD} \times \sqrt{\text{Máximo}(0; \text{Prazo Residual} - 1)} \times Z_{\alpha\%}$$

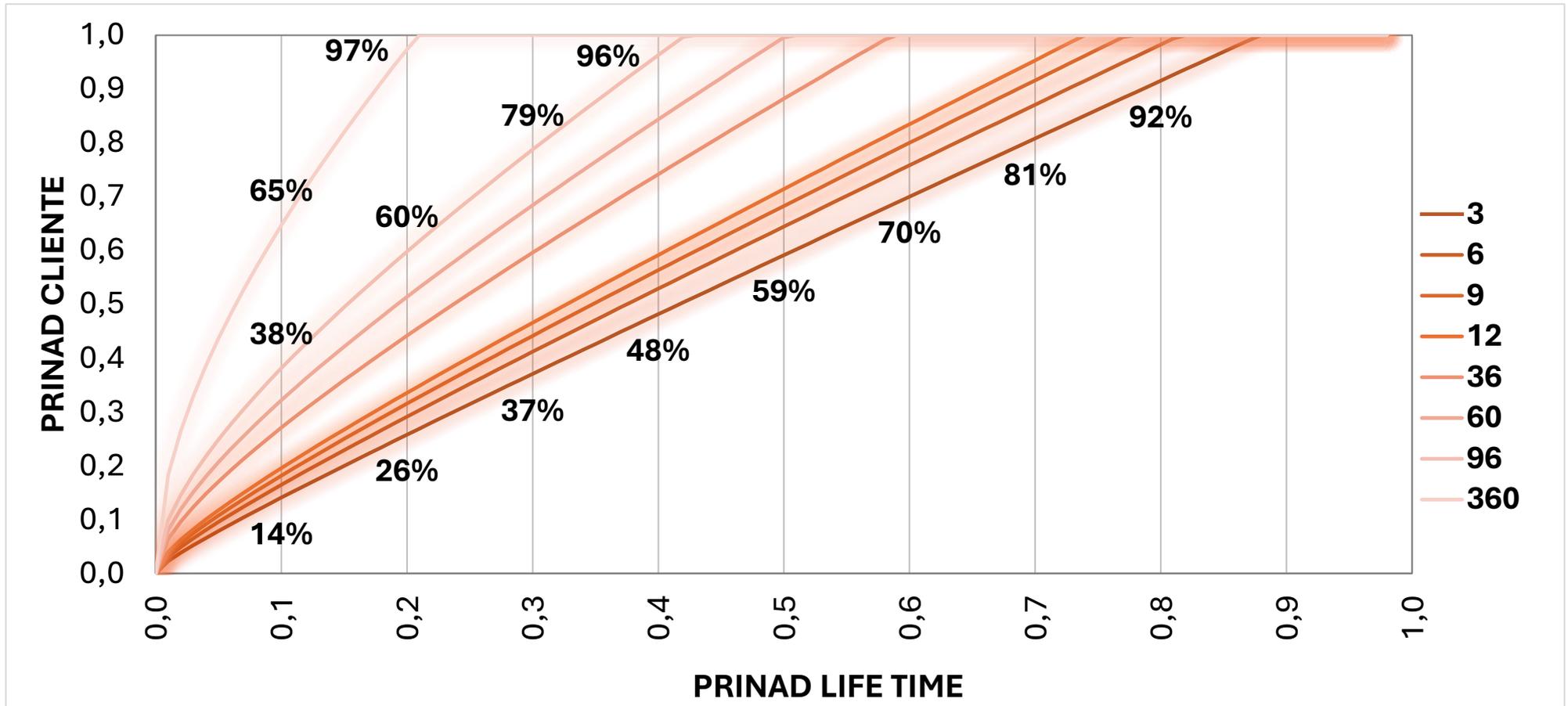
Onde

$$PRINAD_{Cliente} = \frac{\sum_{i=1}^{i=n} (\text{Peso}_i \times PRINAD_i)}{\sum_{i=1}^{i=n} (\text{Peso}_i)}$$

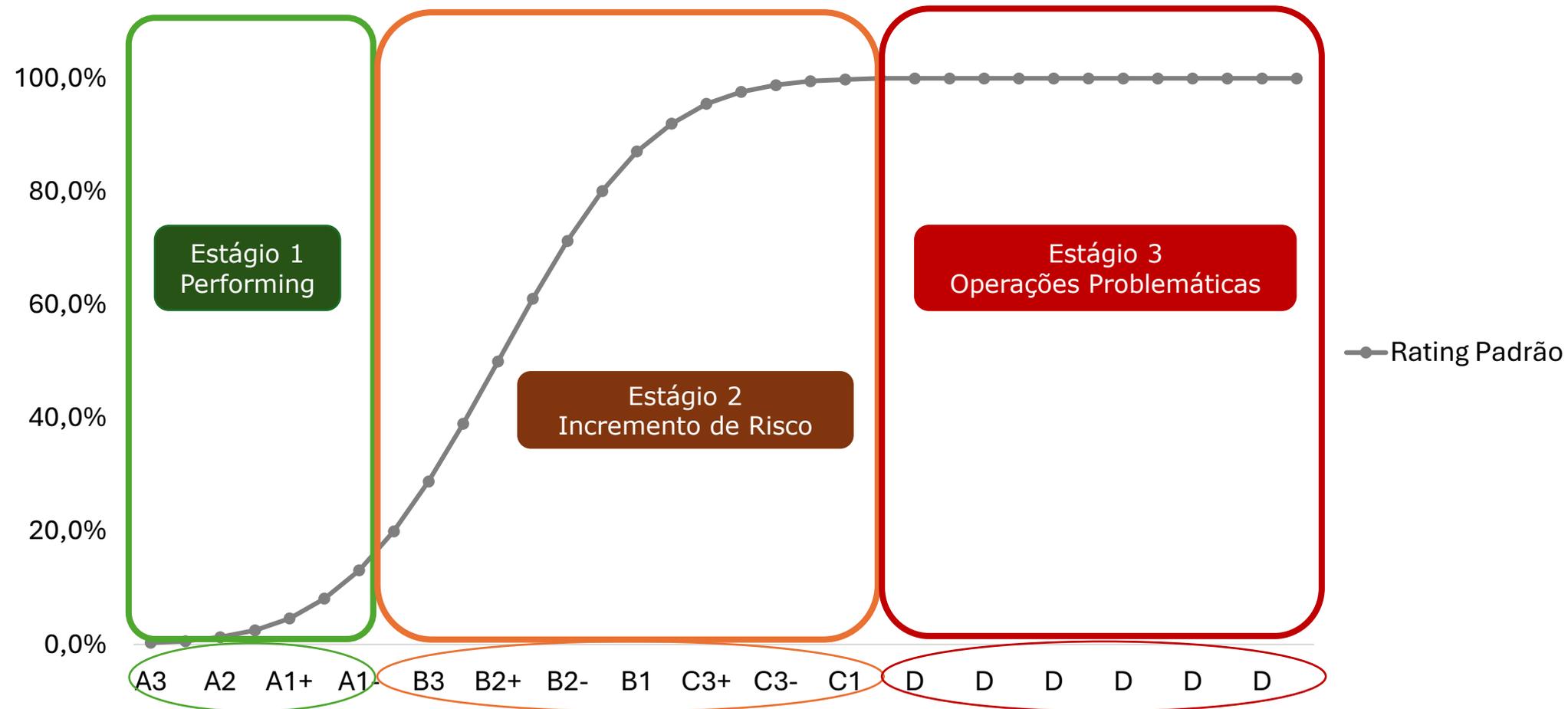
e

$$\sigma_{PRINAD} = \frac{\sum_{i=1}^{i=n} (\text{Peso}_i \times \sigma_i^2)}{\sum_{i=1}^{i=n} (\text{Peso}_i)}$$

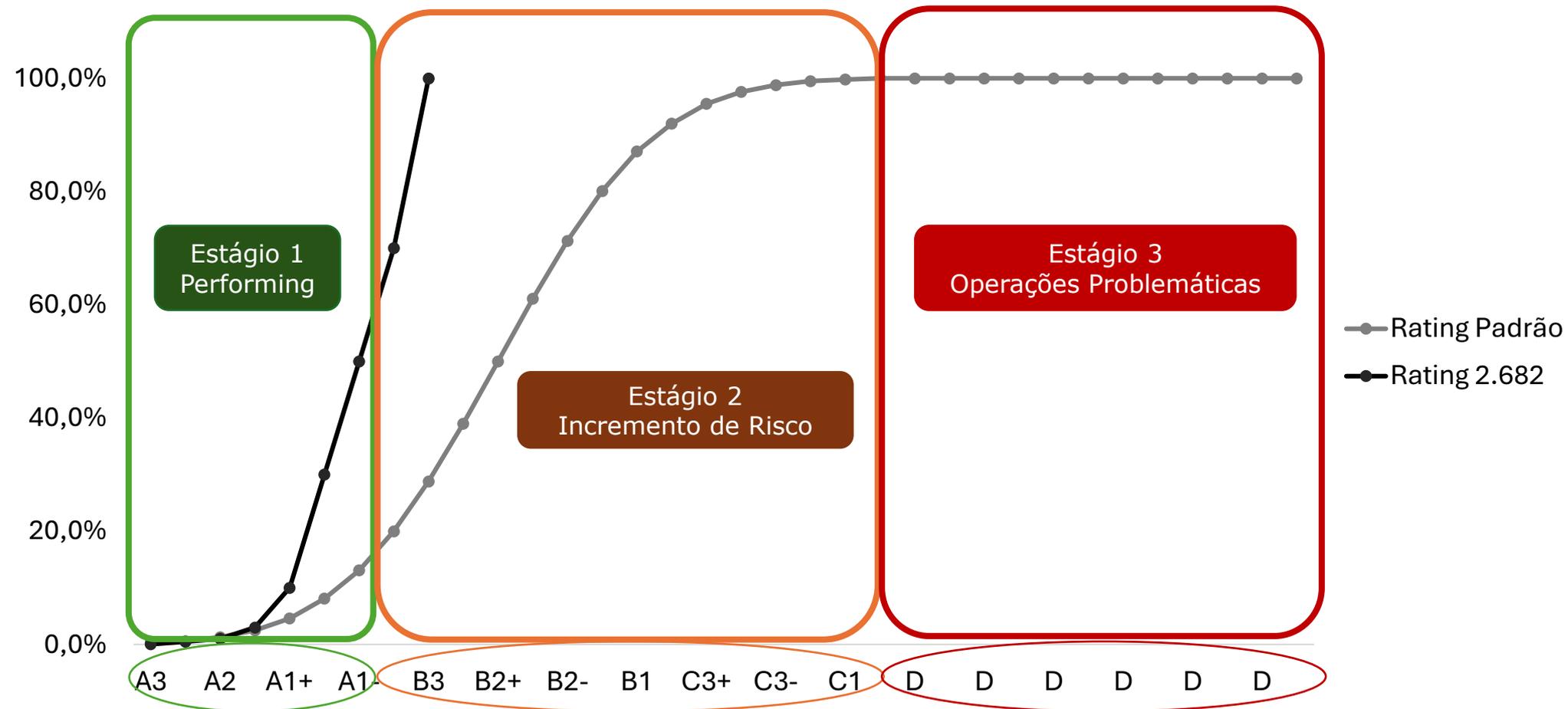
Convergência PRINAD Life Time



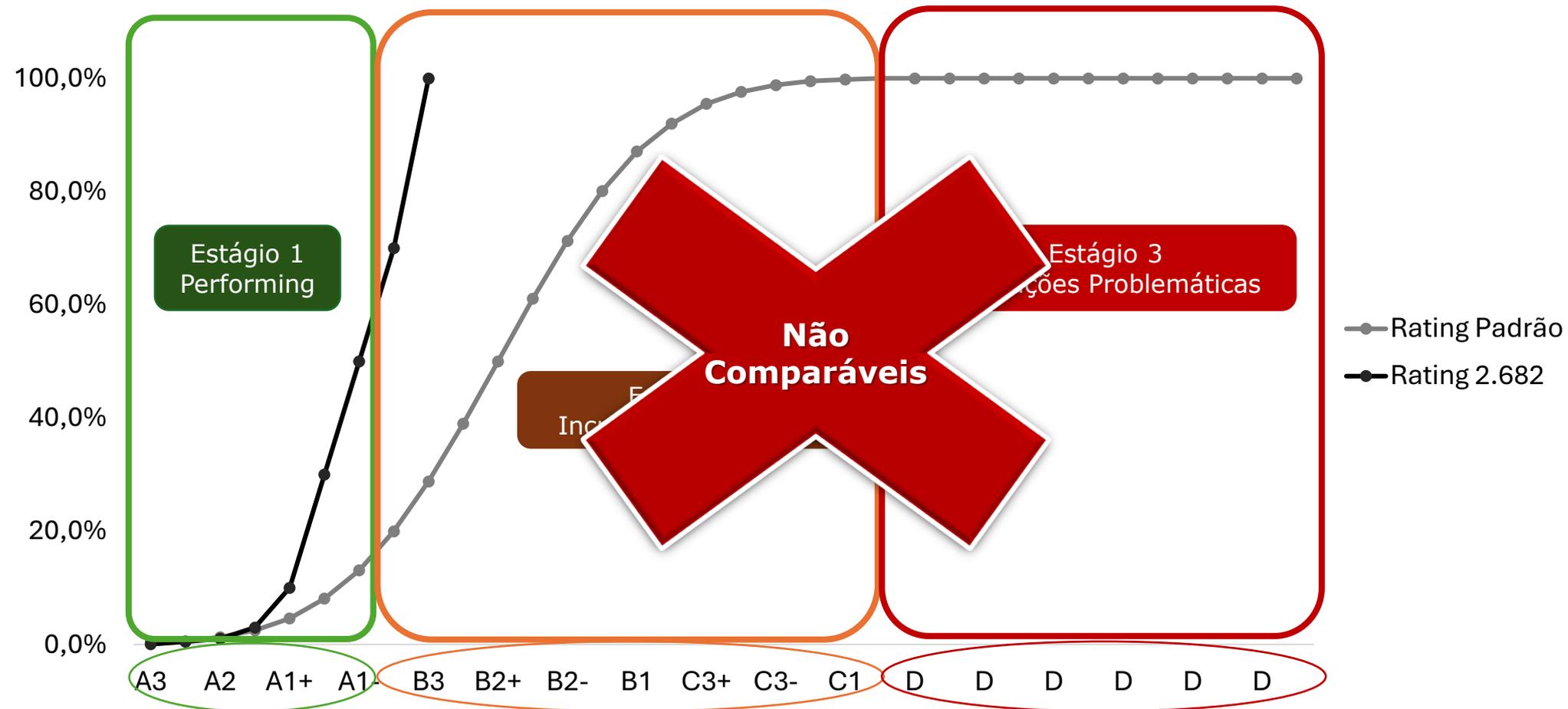
Teste de *Impairment* - Determinação dos Estágios



Teste de *Impairment* - Determinação dos Estágios



Teste de *Impairment* - Determinação dos Estágios



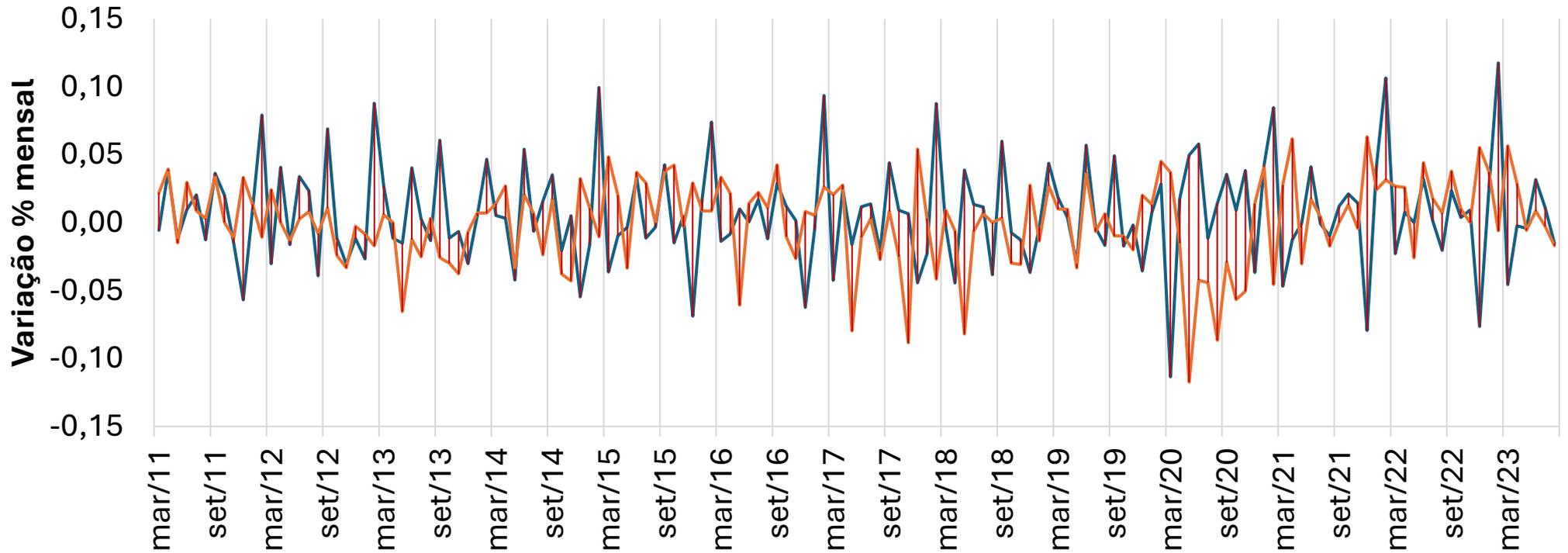
Modelo de Forward-Looking para Sensibilidade ao Stress Macroeconômico

Modelo série temporal de vetor de correção de erros (VEC)

Cointegração - Equilíbrio de Longo Prazo

Cointegração Delta PIB e Delta Inadimplência

— Delta PIB - 2011-2023 — Delta Default - 2011-2023



Modelo de Impulso-Resposta - VECM

$$y_{t-1} = \Theta \sum_{i=1}^t \Theta_j \mu_j + \Theta \sum_{i=1}^{\infty} \Theta_j \mu_{t-j} + \Delta_{Default_t} + y_t$$

Onde

$$\Delta_{Default_{t+1}} = M_{\Delta_{Default}} \sum_{i=1}^t \mu_j + \sum_{i=1}^{\infty} M_{\Delta_{PIB}} \mu_{t-j} + \Delta_{Default_t}$$

Portanto

$$\Delta_{Default_{t+1}} = \text{efeito final da variação do PIB sobre a inadimplência.}$$

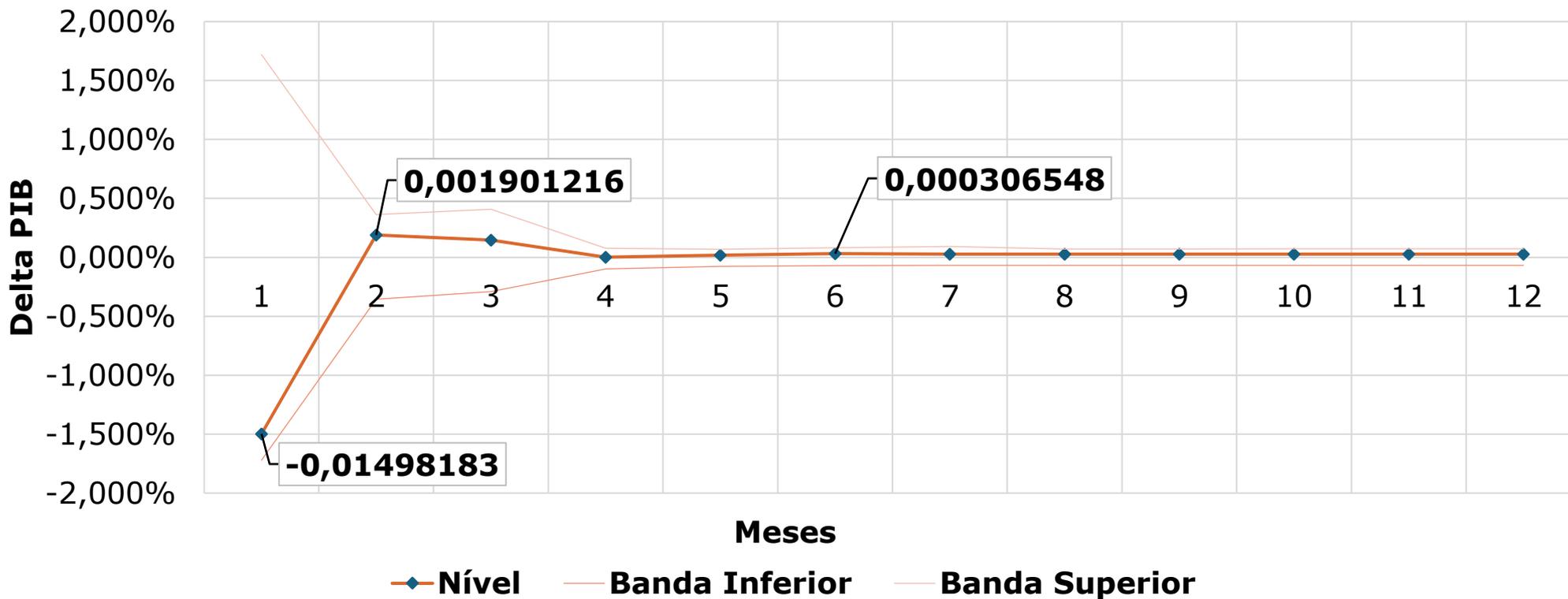
Resultados do Modelo - VECM

SVEC Estimation Results:

Estimated contemporaneous impact matrix:	Delta Inadimplência	Delta PIB
Delta Inadimplência	0.00000	-0.036572
Delta PIB	0.01498	0.003496
Estimated long run impact matrix:	Delta Inadimplência	Delta PIB
Delta Inadimplência	0.0021069	-0.025234
Delta PIB	-0.0002733	0.003273
Covariance matrix of reduced form residuals:	Delta Inadimplência	Delta PIB
Delta Inadimplência	0.13375	-0.01278
Delta PIB	-0.01278	0.02367

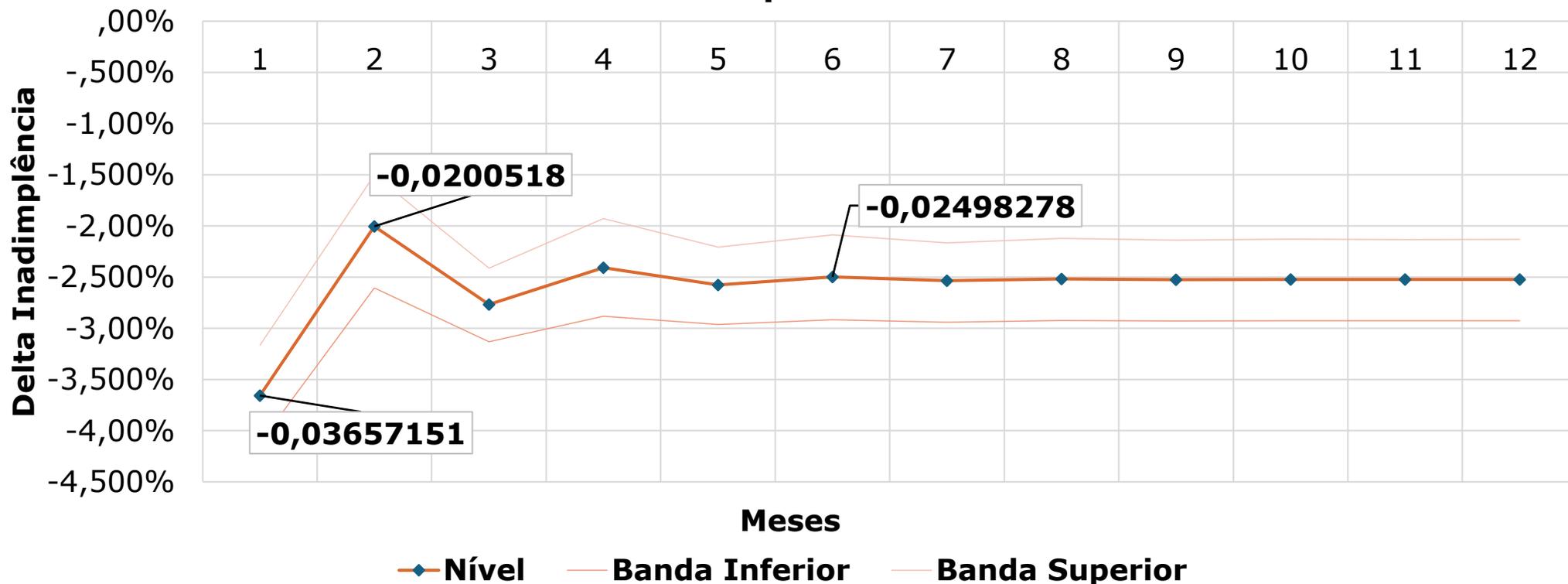
Modelo Impulso-Resposta

Resposta do choque em Delta Inadimplência sobre a variação da PIB



Modelo Impulso-Resposta

Resposta do choque em Delta PIB sobre a variação da Inadimplência



Resumo de Impactos – Forward-Looking

$\Delta 0.015$ no PIB

$\Delta 1\%$ no PIB

$-\Delta 0.025$
Inadimplência

$-\Delta 1,6\%$
Inadimplência

$t = 6$ Meses

Comentários Finais

Modelo PE 4.966

- Mais instável
- Melhores resultados

Stress Macroeconômico

- Modelo VAR/VEC: boa alternativa

Sinergia entre Áreas

- Conceitos: Riscos, Contábeis e Econômicos

Obrigado

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Uma questão de controle.

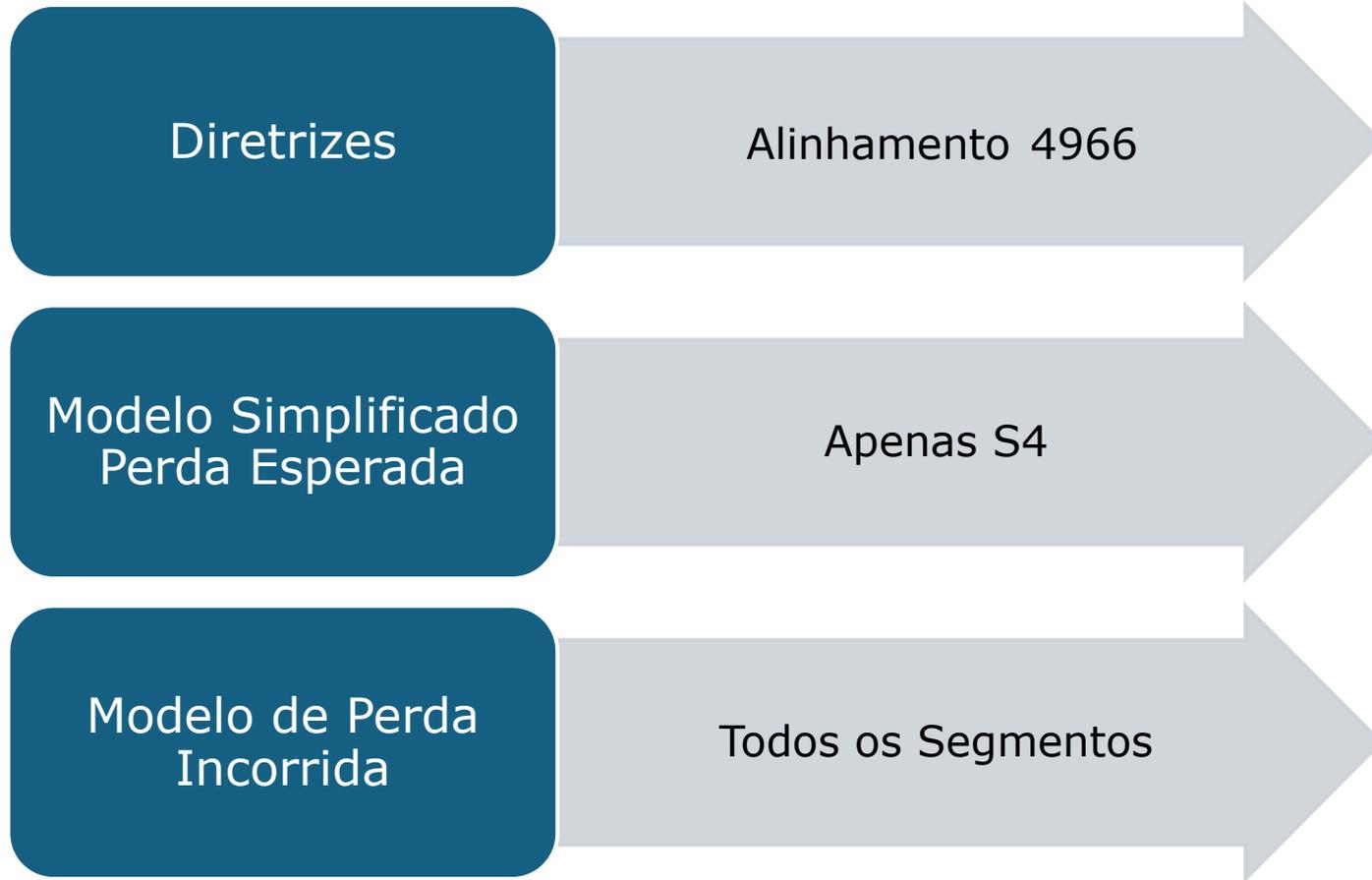


Resolução BCB 352

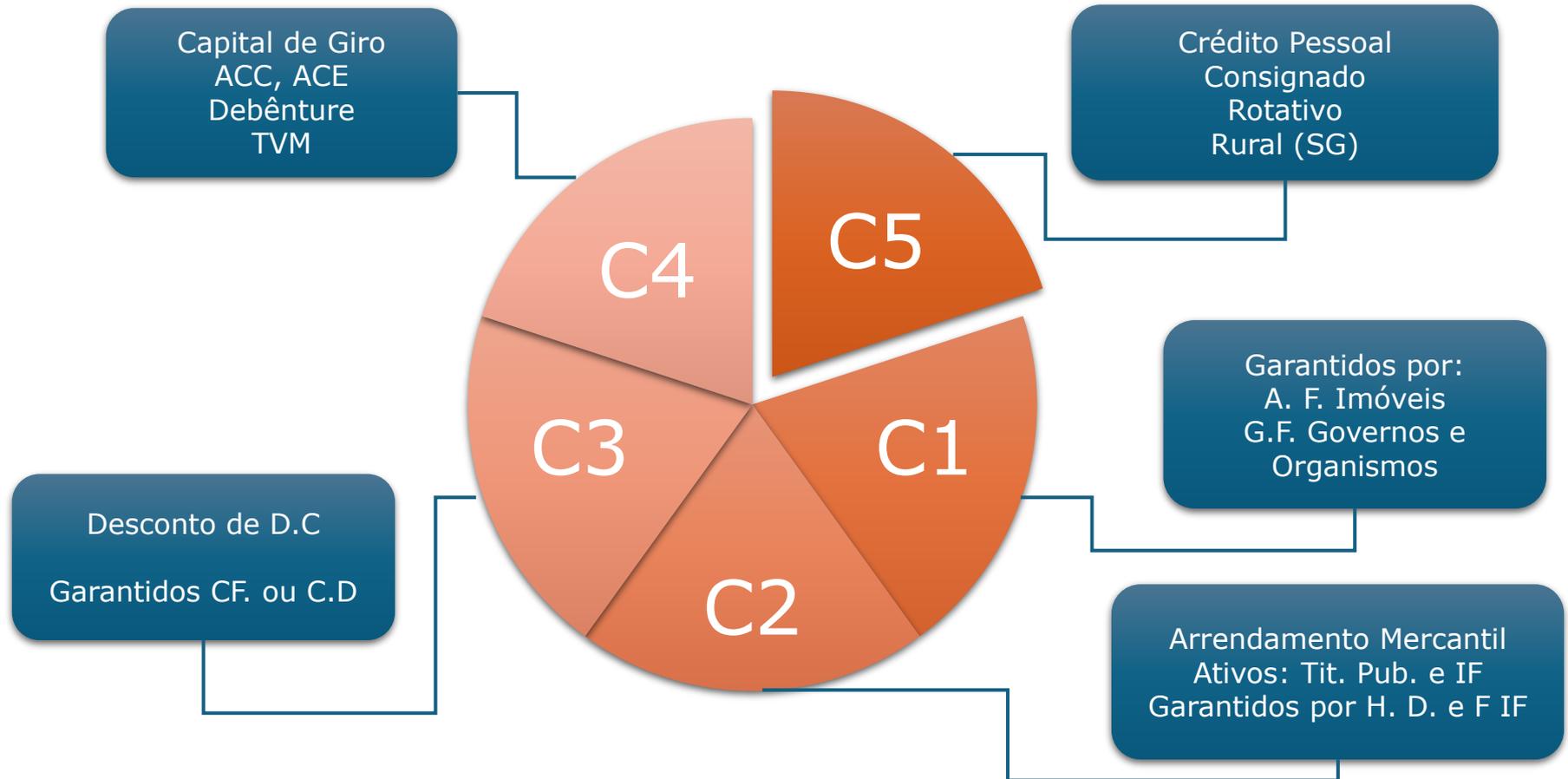
Samuel Rodrigues Rios



Conceituação Inicial



Definição das Carteiras



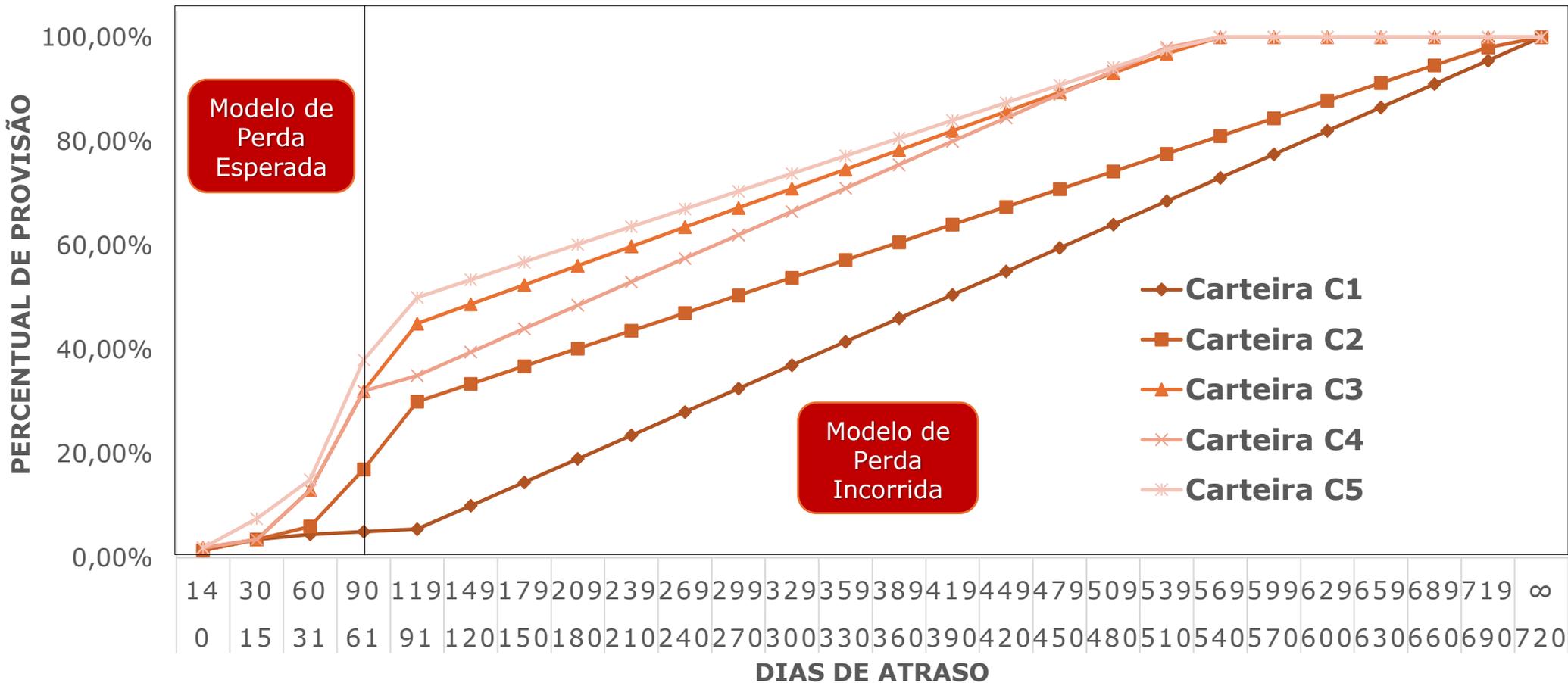
Modelo Simplificado de Perda Esperada

Dias de atraso		Carteira				
		C1	C2	C3	C4	C5
0	14	1,40%	1,40%	1,90%	1,90%	1,90%
15	30	3,50%	3,50%	3,50%	3,50%	7,50%
31	60	4,50%	6%	13%	13%	15%
61	90	5%	17%	32%	32%	38%

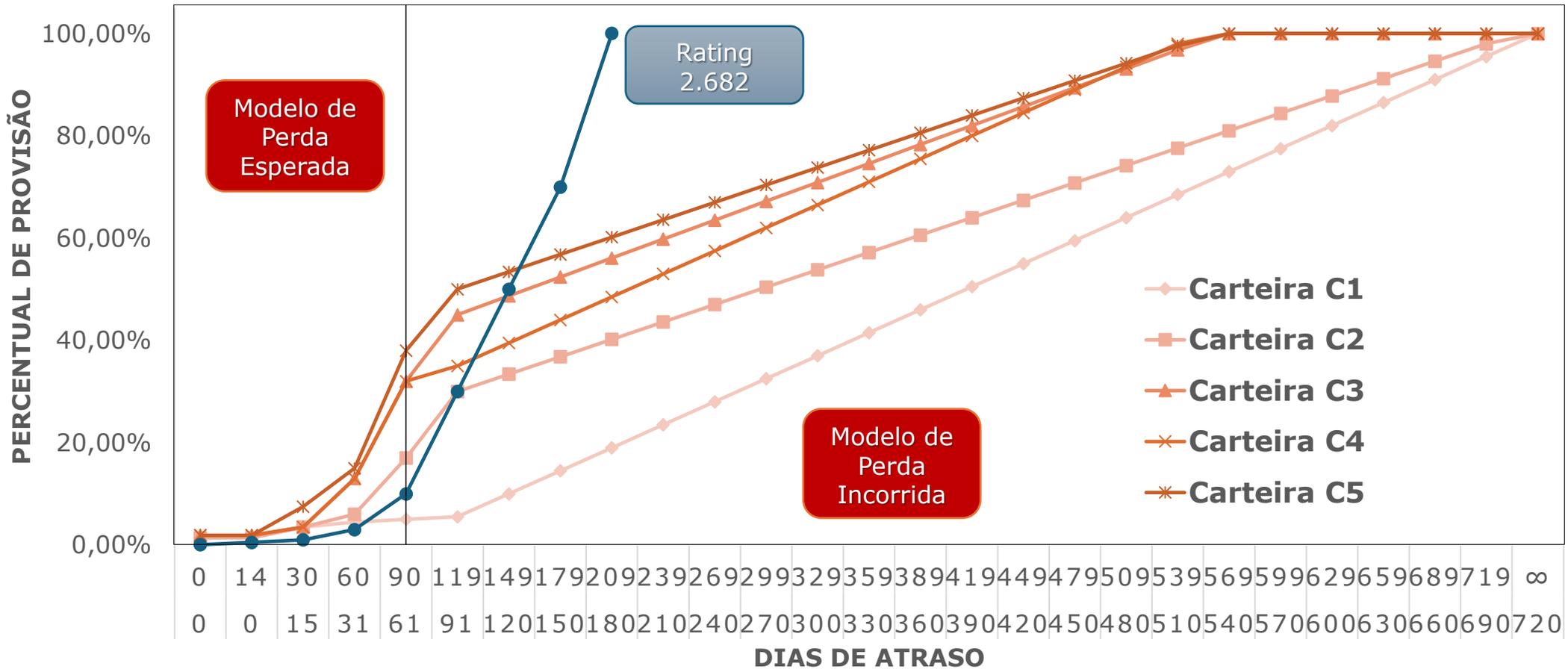
Modelo de Perda Incorrida

Dias de atraso		Carteira				
		C1	C2	C3	C4	C5
91	119	5,50%	30,00%	45,00%	35,00%	50,00%
120	149	10,00%	33,40%	48,70%	39,50%	53,40%
150	179	14,50%	36,80%	52,40%	44,00%	56,80%
180	209	19,00%	40,20%	56,10%	48,50%	60,20%
(...)						
660	689	91,00%	94,60%	100,00%	100,00%	100,00%
690	719	95,50%	98,00%	100,00%	100,00%	100,00%
720	∞	100,00%	100,00%	100,00%	100,00%	100,00%

Convergência de Percentuais de Provisão S4



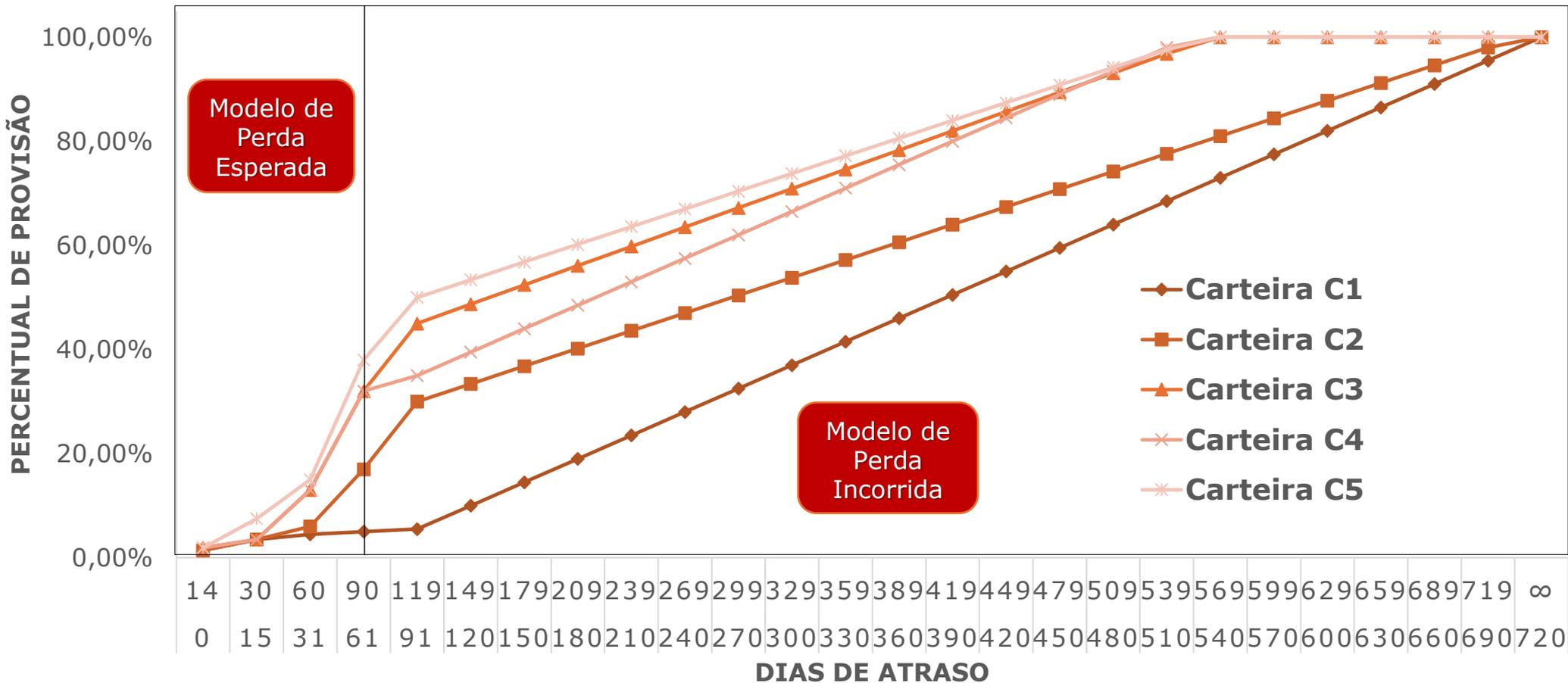
Equiparação Percentuais de Provisão S4 - Resoluções 2.682 x 352



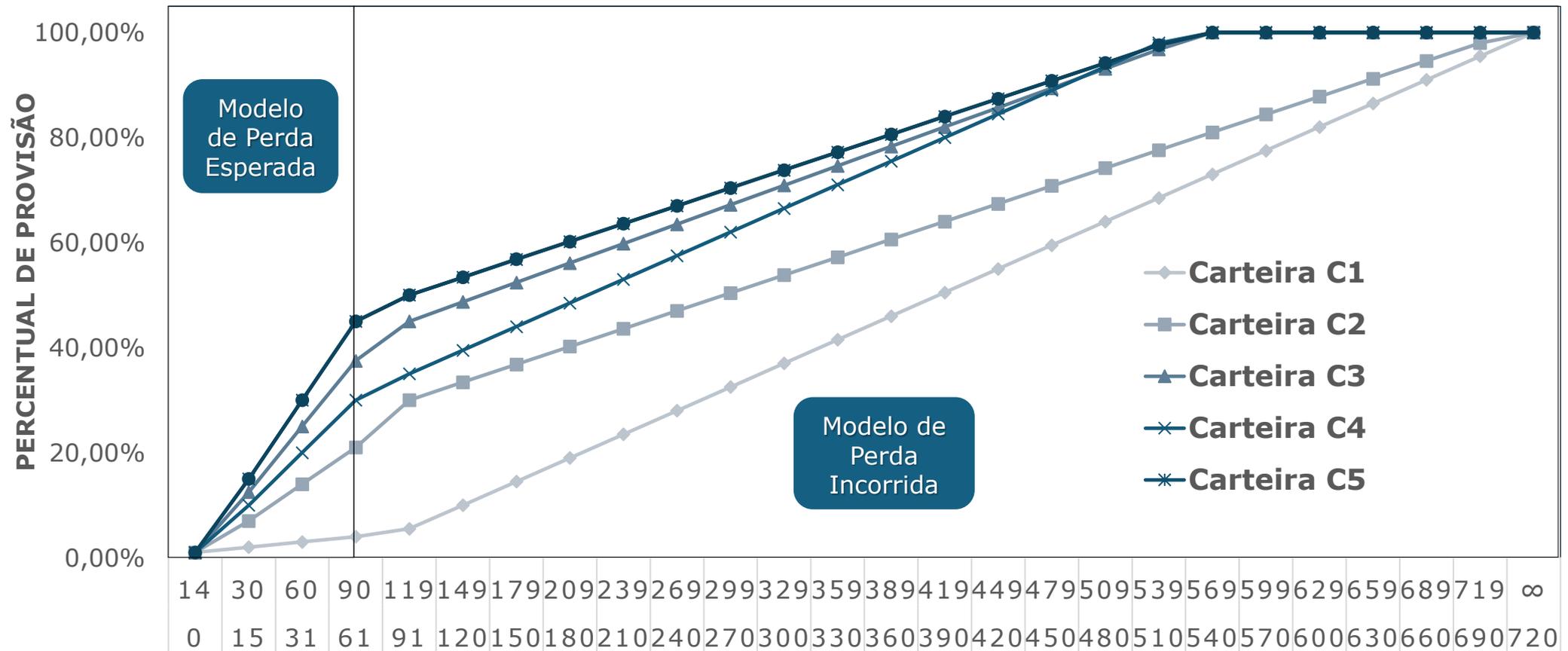
Modelo de Perda Incurrida

Dias de atraso		Carteira				
		C1	C2	C3	C4	C5
91	119	5,50%	30,00%	45,00%	35,00%	50,00%
120	149	10,00%	33,40%	48,70%	39,50%	53,40%
150	179	14,50%	36,80%	52,40%	44,00%	56,80%
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720	∞	100,00%	100,00%	100,00%	100,00%	100,00%

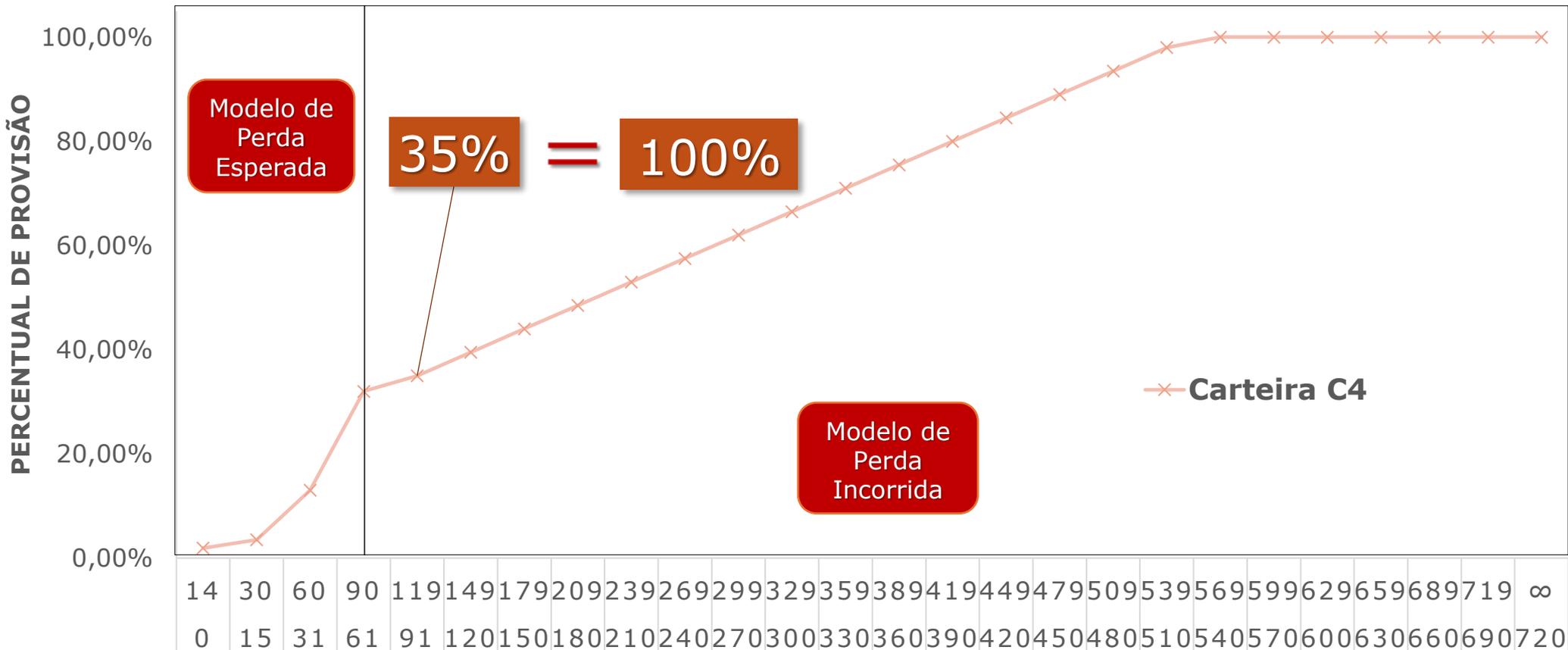
Convergência de Percentuais de Provisão S4



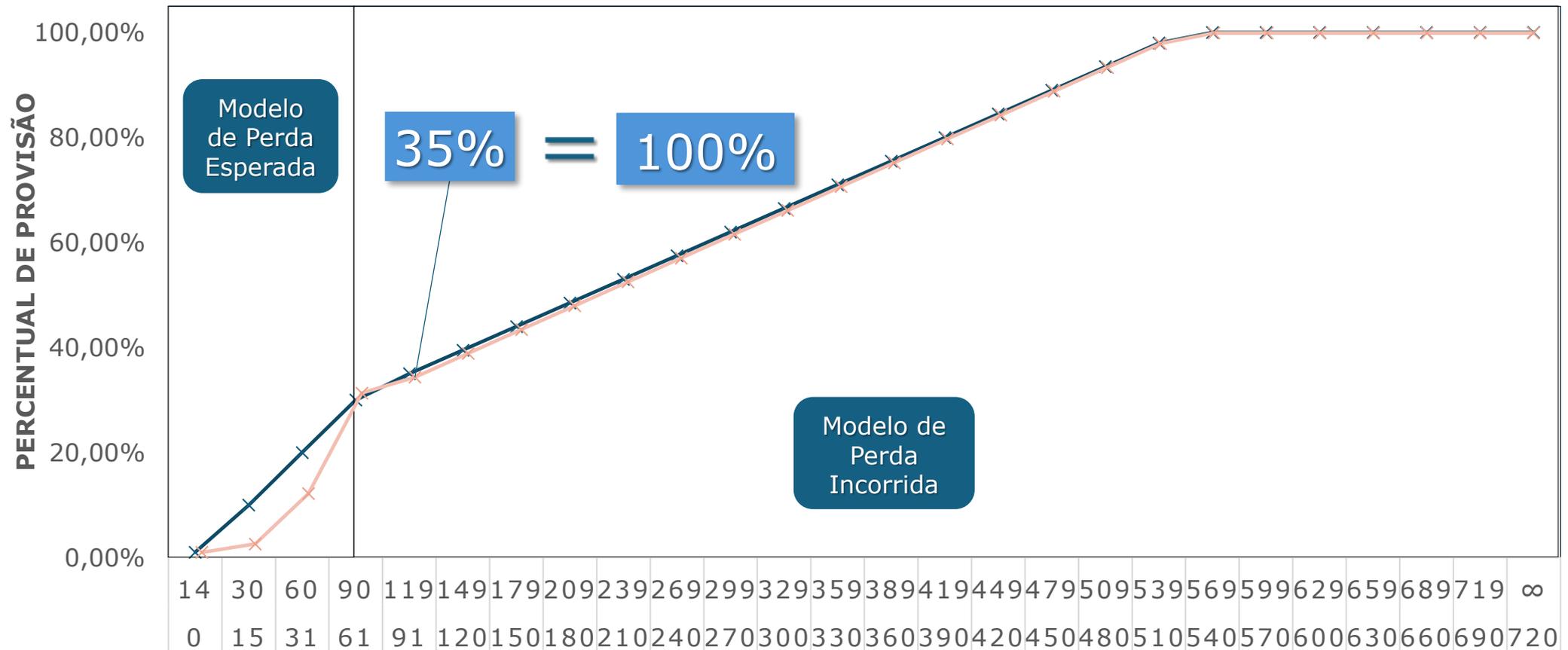
Encaixe de Provisão S1, S2 e S3



Convergência de Percentuais de Provisão S4



Encaixe de Provisão S1, S2 e S3



Comentários Finais

Modelo Simplificado do PE

- Mais simples
- Mais punitivo em relação à 2.682

Para IFs dos Segmentos 1, 2 e 3

- Deve-se ajustar o modelo interno (PE) ao legal (PI)

Modelo PE 4.966

- Evento de inadimplência \neq 90
- Calibragem inadequada = provisões menores

Obrigado

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Uma questão de controle.



Debate CVM 4.966 e BCB 352

Rodrigo Leme de Oliveira
Samuel Rodrigues Rios

Aléssio Resende

