

The loan tape and KIRB

Chapters 2 to 4. Compute KIRB before reading any term sheet, and mark it on the capital structure. The tape shows ratings and exposures; everything else is diligence.

Transaction		Prepared by	
Reference portfolio		Date	

Grade	EAD	PD	LGD (do wnturn)	M	Sales (SME)	Names	K	RWA	EL
1									
2									
3									
4									
5									
6									
7									
8									
Total									

Portfolio figures	Value	Portfolio figures	Value
RWA density (RWA / EAD)		Capital held at the internal target	
Expected loss, one year (PD x LGD x EAD)		Expected loss per euro	
Capital component: RWA x 8 % / EAD		KIRB = capital component + EL per euro	
Effective number N = (sum EAD)^2 / sum EAD^2		Computed name by name, or from buckets?	
Weighted average PD		Weighted average LGD	

Against the structure	Value	Comment
Detachment point of the sold tranche		
Clearance above KIRB, points		
PD migration that would use the clearance up (Case 1: about 1.2x on the book's pool)		
Relief if KIRB rises 50 basis points		

Item	Answer	Evidence / note
What the tape does not show (Chapter 3)		
Sector distribution		
The twenty largest exposures, by name		
Vintage of the internal ratings, and when each was last refreshed		
The bank's own default and recovery history on this book		
The eligibility criteria that govern additions during replenishment		

A bucketed tape overstates N, and a higher N lowers p and raises the relief the bank reports: ask for N computed name by name, and expect it to be lower (a real corporate book of this size rarely scores above about 120).

Significant risk transfer: the tests, and the monitoring

Chapter 5 and Chapter 25. Passing on day one is necessary and not sufficient: the transfer must keep passing, and someone must own the quarterly test.

Transaction		Prepared by	
Reference portfolio		Date	

Test (CRR Article 245(2))	Requirement	This transaction	Result
Mezzanine test (a): retained share of mezzanine RWEA	at most 50 %		
First-loss test (b): retained share of the first-loss tranche	at most 20 %		
First-loss thickness	exceeds expected loss substantially		
Expected loss, one year	—		
Cover against one year of EL	—		
Expected loss over the life	—		
Cover against the life of the transaction	—		
Case-by-case route (Article 245(4)), if neither test passes	slower, less certain		

Quarter	KIRB	Clearance	Retained share	Test margin	Senior weight	Notified?	Owner

Item	Answer	Evidence / note
Features a supervisor reads as giving the risk back (Chapter 25)		
Any support beyond the contract: repurchases, generous replacements (voids the whole programme)		
Leverage to the investor provided by the bank or an affiliate		
A call priced so that not exercising it would be irrational		
Synthetic excess spread: how much, and how it is capitalised		
Eligibility criteria that let the pool change character		
The notification package		
Transaction documents and tranching		
The capital calculation, with the SRT test and its arithmetic		
Retention form and analysis		
Commensurateness: EL and UL transferred against relief obtained		
Self-assessment of features that could undermine the transfer		
Lead time agreed with the supervisor, not assumed		

Tranching and SEC-IRBA

Chapters 7 to 9 and Appendix A. Two numbers define a tranche; KIRB decides what each weighs. The p-factor and the floor are conventions, not measurements.

Transaction		Prepared by	
Reference portfolio		Date	

Tranche	Attach	Detach	Thickness	Notional	Held by	vs KIRB	Risk weight	RWA if retained
Junior								
Mezzanine								
Senior								
Total								

p-factor term	Coefficient	Input	Contribution
A, constant			
B / N			
C x KIRB			
D x LGD			
E x M (tranche maturity)			
p before the 0.30 floor			
p used (halved and floored again if STS senior)			

SEC-IRBA for a tranche above KIRB	Value
$a = -1 / (p \times \text{KIRB})$	
$u = D - \text{KIRB}; l = \max(A - \text{KIRB}, 0)$	
$K = (e^{(a \cdot u)} - e^{(a \cdot l)}) / (a \cdot (u - l))$	
Risk weight = $\max(\text{floor}, 12.5 K)$; floor 15 %, or 10 % for an STS senior	
Straddling KIRB: thickness-weighted blend of 1250 % and the formula	
Article 267 cap on the senior (pool average weight), used?	
Article 268 cap on the originator's total, used?	

Coefficient row used	A	B	C	D	E
Senior, granular (N >= 25): 0.00 / 3.56 / -1.85 / 0.55 / 0.07					
Senior, non-granular: 0.11 / 2.61 / -2.91 / 0.68 / 0.07					
Non-senior, granular: 0.16 / 2.87 / -1.03 / 0.21 / 0.07					
Non-senior, non-granular: 0.22 / 2.35 / -2.46 / 0.48 / 0.07					

The second and third coefficient rows are the ones most often transposed. The European hierarchy is SEC-IRBA, then SEC-SA, then SEC-ERBA (Article 254), not the Basel order.

STS: the label, and the treatment

Chapter 10. Two sets of conditions, not one: Articles 26a to 26e give the label, Article 270 CRR gives the capital treatment. A transaction can pass the first and get nothing from the second.

Transaction		Prepared by	
Reference portfolio		Date	

Item	Answer	Evidence / note
Articles 26a to 26e of the Securitisation Regulation: the label		
Homogeneous exposures, originated under consistent standards		
No re-securitisation; no exposures in default or to credit-impaired obligors at inclusion		
Eligible credit protection: guarantee, credit derivative or CLN meeting the CRM rules, collateral in the specified form		
Synthetic excess spread capped and capitalised		
Third-party verification agent appointed (eligibility, data, loss calculations)		
Replenishment conditions documented, early termination events defined		
STS notification to ESMA; the transaction on the public register		
Article 270 CRR: the treatment		
The position is the senior securitisation position		
It is held by the originator		
Protection on the non-senior tranches in a specified form: eligible public-sector guarantee, or collateral held as prescribed (cash with the originator, or qualifying securities with a third party)		
Current text confirmed (amended in 2021; the earlier version was restricted to SME exposures)		

What the label is worth	Non-STS	STS	Difference
p-factor, senior			
Senior risk weight			
Capital released			
Cost per euro of capital			
Return on equity			
Margin the bank can afford			
Of the capital gain: the halved p / the lower floor			

Before the term sheet: can this pool be homogeneous, and can a verification agent be appointed in time? If this is not the first trade in the programme, what specifically is still missing?

The bank's side: cost, capital and return

Chapters 11 to 15 and 26. The cost is the margin, not the coupon; the test is value creation, not a ratio; and every figure assumes the risk-based ratio binds.

Transaction		Prepared by	
Reference portfolio		Date	

Capital	Before	After	Change
Risk-weighted assets			
RWA density			
Capital held (retained slice deducted)			

Cost, first year	Amount	Return on equity	Before	After
Coupon paid (reference + margin) x sold		Net interest and fee margin		
Return on the collateral held		Operating costs		
Net cost = margin x sold notional		Expected loss (provisions: unchanged)		
Cost after tax		Cost of protection		
Cost per euro of capital released		Post-tax profit / capital employed		
Is the collateral return earned in full? (SPV, bonds)		Return on RWA		

The two ceilings (Chapter 15)	Margin
Value creation: cost of equity x capital released / (1 - tax) / sold notional	
Return-neutral: (profit before protection - RoE before x capital after / (1 - tax)) / sold notional	
Ceiling used: the stricter of the two	
Agreed margin, and the room kept below the ceiling	

Item	Answer	Evidence / note
Before any of it applies (Chapters 14 and 26)		
Which constraint binds, before and after the trade: risk-based ratio or leverage ratio? (Case 3)		
Where the released capital goes: returned, redeployed, or idle		
The accounting timing: provisions when credit deteriorates, protection when the loss is determined		
How the relief decays in a downturn as KIRB rises (Case 1)		

Retention: weight it, deduct it, or select it

Chapter 13 and Article 6 of the Securitisation Regulation. Equivalent at 8 percent, not at the bank's target. One box on a return, and a choice of form that should be made on purpose.

Transaction		Prepared by	
Reference portfolio		Date	

The retained slice	Value
Retained notional	
Its risk weight under SEC-IRBA	
Internal CET1 target	
Capital if risk-weighted: notional x weight x target	
Capital if deducted: the notional	
Difference: the cost of the wrong box	
Election made on the regulatory return, and by whom	

Retention form	Capital cost	Operational cost	Supervisor	Chosen?
Vertical slice: 5 % of every tranche				
Random selection: 5 % of the underlying pool, kept outside				
Retention of the first-loss tranche				
Other permitted form				

The first-loss test with this retention	Value
Retained share of the first-loss tranche (limit 20 %)	
Capital the retention prevents from coming back	
Relief bought: the sold share only	

Chapter 13: random selection keeps 5 percent of the pool, not of the tranche, outside the structure at its ordinary weight; on the book's transaction that saves about EUR 2.1 million against the vertical slice, an order of magnitude less than the deduction election.

The investor's side, and leverage

Chapters 16, 17 and 21. The loss is the write-down of principal and not also a payment. Quote the unlevered return first; leverage amplifies around the cost of borrowing, not around zero.

Transaction		Prepared by	
Reference portfolio		Date	

Year	Reference pool	Opening balance	Coupon	Written down	Principal repaid	Closing balance	Cash flow
0							
1							
2							
3							
4							
5							

Return	Value	Parameters	Regulatory	Best estimate
Coupons received / written down / repaid		PD		
Internal rate of return, unlevered		LGD		
Control: repaid + written down = notional		Expected loss a year		
Return at the bank's regulatory parameters		Ratio of the two		
Value of the conservatism, points		As a share of: total / over cash / over hurdle		

Leverage	Value
Convention: debt / equity, or assets / equity? (they differ by one turn)	
L, and the cost of borrowing c	
$r + L \times (r - c)$, floored at -100 %	
Cushion: $r - c$	

Item	Answer	Evidence / note
Four questions for the fund's leverage (Chapter 21)		
Advance rate, and who determines the mark: lender, third party, formula?		
What triggers a margin call: a price move, or portfolio performance?		
Does the facility mature before the position? What if it is not renewed?		
Who provides it? If the originating bank, the risk has gone round in a circle		

The bargaining range

Chapter 18. Two reservation prices computed from opposite sides; the range between them, at every hurdle you find plausible; and what each lever is worth in one unit, return on equity.

Transaction		Prepared by	
Reference portfolio		Date	

	Margin	What it represents
Bank's return-neutral ceiling		above this the reported return on equity falls
Bank's value-creation ceiling		above this the trade costs more than the capital it frees
Agreed margin		where it cleared
Investor's floor		below this the fund misses its hurdle
Width of the range		everything there is to negotiate

Fund's unlevered hurdle	Investor's floor	Width	Range exists?	Agreed margin still clears?

Lever	Worth, return on equity	Who decides it
Fifty basis points on the margin		the other side, across a table
The entire bargaining range		the other side, and it never happens
The STS label		a list of conditions
Getting the thickness right		the structurer, before anyone is called
Label and thickness together (they interact)		the structurer

Item	Answer	Evidence / note
When the range is empty, say so in week one		
Thin lending margins: the bank has no ceiling		
Regulatory parameters already close to best estimate: the fund has no floor it can live with		
Detachment far below KIRB: too little capital released to pay for itself (on the book's pool the range closes below about 5.2 %)		

Stress: six scenarios, and the break-evens

Chapter 22. Stress defaults and recoveries together: the same conditions that make companies fail make their assets worth less. Then ask what a multiplier stress cannot show.

Transaction		Prepared by	
Reference portfolio		Date	

Scenario	Default multiple	LGD	Losses charged	Tranche consumed	Coupons	Return	Levered
Best estimate							
Regulatory parameters							
Mild recession							
Severe recession							
Severe + LGD stressed							
2008-style							
Your own							

Break-evens (nominal, undiscounted)	Multiple
Coupons less losses: the whole coupon counted	
Margin less losses: beating cash (the honest one for a committee)	
With recoveries stressed as well	
Principal surviving in the worst row; and under sequential amortisation?	

Item	Answer	Evidence / note
What the table cannot show		
Sector concentration: which single driver could fail together?		
Common funding channel across borrowers		
Largest names: does a handful decide the outcome?		
Mark-to-market and margin calls before any loss is determined		

Thickness: the structure the bank did not do

Chapter 23. Price every thickness at the margin the investor would require for it; compute the optimum; then explain the deviation. Do not skip the first step because the second will be needed.

Transaction		Prepared by	
Reference portfolio		Date	

Detachment	Position vs KIRB	Tranche	Margin required	Senior weight	Capital released	Cost per euro	Return on equity

	Executed, agreed margin	Executed, required margin	Optimal, required margin
Detachment			
Tranche size			
Margin			
Capital released			
Return on equity			
Bank's ceiling / investor's floor			

Item	Answer	Evidence / note
Why not the optimum?		
Placement capacity: can a single first-loss ticket of that size be placed on this bank's paper?		
Investors' concentration limits		
Larger retained slice under the retention rule, deducted at par		
Supervisory attention; first trade in a programme		

Two thresholds to find, not assume: the detachment where capital released turns negative (about 3.5 % on the book's pool, well below KIRB), and where the senior reaches its floor (9.74 %): the optimum sits there.

Replenishment, amortisation and the call

Chapters 19 and 20. The eligibility schedule is the negotiation when it is loose; the amortisation convention decides who holds the valuable option.

Transaction		Prepared by	
Reference portfolio		Date	

Item	Answer	Evidence / note
A serviceable eligibility schedule (Chapter 19)		
Maximum rating or PD for any addition, and a cap on the pool's weighted average PD (the second matters more)		
Sector and single-name limits, tested after each addition		
Minimum remaining maturity for additions		
Exclusion of watchlist, forborne and recently downgraded exposures		
Same origination standards and units as the original pool		
Regular composition reporting, investor's right to verify, consequence if it does not match		
The worst pool the schedule permits (Case 2)		
Weighted average PD at the cap, and how fast the bank can get there		
Fund's return on that pool at the agreed margin		
Margin at which that pool earns the hurdle		
Does the drift cost more than the whole bargaining range?		

Amortisation and the call (Chapter 20)	Pro rata	Sequential
Return at 3 / 5 / 7 / 8 years		
Two extra years are worth		
Who holds the valuable option		
Step-up if the call is not exercised?		

Item	Answer	Evidence / note
Other termination rights, and the tail		
Regulatory call: tied to a change in law or a specific supervisory determination		
Clean-up call threshold		
Credit events before termination: covered after it? For how long? Determined how?		
Holdback for unresolved workouts in the fund's own model		

The term sheet, annotated

Appendix B and Chapter 24. The clauses that decide the economics; disputes in this market are almost never about credit, but about whether an event occurred, when, and how much it cost.

Transaction		Prepared by	
Reference portfolio		Date	

Clause	What to check	What it says here	Our position
Reference portfolio	tape reconciles to regulatory reporting		
Attachment / detachment	clearance above KIRB; what if KIRB rises		
Retention	form; deducted or weighted		
Margin and reference rate	funded or unfunded; compare margins		
Collateral	where it sits, what it earns, who gets it		
Replenishment	worst permitted pool, priced		
Credit events	restructuring vs commercial amendment; who decides		
Loss determination	true-ups both ways; long-stop		
Servicing standard	a genuine comparison set		
Call	step-up; workout tail at termination		
Regulatory call	change in law, not reassessment		
Verification agent	that there is one; STS condition		
STS status	Articles 26a-26e and Article 270		
Amortisation	pro rata or sequential		
Maturity mismatch	Article 252; the call is the protection's maturity		
Reporting	definitions, restatement, history		

Item	Answer	Evidence / note
Protection that counts (Articles 249 to 252)		
Explicit, irrevocable, unconditional; no clause letting the seller escape or the buyer reduce it		
No cost increasing as credit quality deteriorates; no yield step-up on pool deterioration		
Residual maturity at least one year; adjustment $(t - 0.25) / (T - 0.25)$ if shorter than the pool		
Guarantee or derivative: the accounting follows the drafting		

Questions before you sign

Appendix C. The bank's answers, and its willingness to answer, are information. None of these requires a borrower's name.

Transaction		Prepared by	
Reference portfolio		Date	

Question	Answer	Source / date
The portfolio		
KIRB, and how it has moved over three years		
Weighted PD; when were ratings last refreshed?		
Downturn LGD against realised workout recoveries		
Recent supervisory model review? Did estimates move?		
Sector distribution; twenty largest exposures		
Effective number of exposures, name by name		
Drawn share; conversion factors on the undrawn		
Realised default and loss experience, by vintage		
Representative, or selected? On what criterion?		
Share on watchlist or in forbearance today		
The structure		
Clearance above KIRB; relief if KIRB rises 50 bp		
SRT test relied on, and its margin		
Retention form; deducted or weighted		
Funded or unfunded; where the collateral sits and what it earns		
Synthetic excess spread, and its capital		
STS notified? Article 270 met? If not, what is missing		
Pro rata or sequential; maturity mismatch; tranche maturity in p		
Supervisor notified; first trade or established programme		
Replenishment and mechanics		
Cap on weighted PD; limits tested after each addition		
Minimum maturity; exclusions; same origination units		
Who verifies; consequence of failure; worst pool priced		
Restructuring vs amendment; who decides a credit event		
Final workout or determined loss; true-ups both ways; long-stop		
Cases in workout at termination; servicing comparison set		
The economics		
Unlevered return; at regulatory parameters		
Default multiple before principal is lost; with recoveries stressed		
Leverage: amount, cost, terms, margin triggers, maturity		