Excellent — this image outlines the Spanish legal framework that governs mortgage recovery, borrower liability, and creditor claims. Let's map each of the four LTV calculation methods to the relevant Spanish laws, and explain how legally aligned (or misaligned) each method is.

## Legal Mapping of LTV Methods (Spain)

LTV	Legal Alignment	<b>Detailed Legal Mapping</b>
Method	Summary	(Articles)

### 1. Proportionate Allocation (Conservative LTV)

Alignment: Fully aligned with Spanish lien law and foreclosure doctrine.

Explanation: This method reflects actual recoverability from mortgaged assets where multiple loans are involved.

#### Mapped Articles:

• Article 119 – Ley Hipotecaria (LH):

- "When multiple properties secure a single loan, the mortgage deed must state how much each property is responsible for."
- Proportionate allocation follows this by computing fair AV share.
- Article 121–122 LH:
  - Mortgages survive until full repayment. Proportional LTV ensures only partial AV is used until full lien is cleared.
- TRLC Article 270–273:
  - Shortfall beyond allocated AV becomes unsecured.
    Conservative LTV makes this visible in the model.
- Código Civil Article 1911:
  - Remaining debt after AV recovery still applies proportionate LTV isolates secured vs unsecured recovery potential.

Verdict: Legally enforceable, preferred for investor risk modeling.

### 2. Aggressive Loan-Level LTV (Non-Proportionate)

Alignment: Not aligned with Spanish lien and foreclosure principles.

Explanation: Treats each loan as if it has full access to collateral, ignoring overlapping claims — which contradicts Spanish property law.

#### Mapped Articles:

- Article 119 LH:
  - Violated when multiple loans secured by same asset all assume full AV without allocation.
- Article 121–122 LH:
  - Mortgage coverage ends with specific asset foreclosure; aggressive LTV wrongly assumes it remains for all loans.
- TRLC Article 270–273:
  - Mortgage shortfalls must be treated as unsecured;
    aggressive LTV may understate shortfall likelihood.

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Verdict: Operationally convenient, but legally misleading — not suitable for formal risk disclosures or securitization.

### 3. Borrower-Level Aggregation LTV

Alignment: Partially aligned, only if cross-collateral clauses exist.

Explanation: This method pools all borrower assets as if every loan has access to them — legally valid only with universal guarantees or cross-default clauses.

#### Mapped Articles:

- Código Civil Article 1911:
  - "The borrower is liable with all present and future assets."
  - Supports borrower-level aggregation for unsecured residuals, but not for specific mortgage enforcement.

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- Ley de Enjuiciamiento Civil (LEC) Articles 578 & 579:
  - Allow for post-foreclosure enforcement on other borrower assets — this is personal not mortgagebased recovery.

• Article 121 – LH:

 Collateral rights don't automatically extend across all borrower assets unless explicitly agreed.

Verdict: Legally weak unless backed by legal structure. Valid for personal liability, not for secured claim modeling.

## 4. Linked Group-Level Aggregation LTV

Alignment: Fully aligned with Spanish mortgage enforcement structure.

Explanation: Models loan—collateral links explicitly, forming groups only where legal lien data supports the connection.

Mapped Articles:

- Article 119 LH:
  - Allows recovery proportionally or fully within the mortgage deed's defined scope. Linked groups follow these scopes exactly.
- TRLC Article 270–273:
  - Group-level aggregation ensures secured shortfall modeling happens per asset group, not globally.
- LEC Articles 578–579:
  - Post-foreclosure shortfalls can be pursued legally via unsecured claim if LTV exceeds AV in a group.

Verdict: Most legally accurate method. Aligns with foreclosure, lien, and insolvency law.

# **Summary Verdict Table**

LTV Method	Legally Aligned?	Best Fit Spanish Laws	Suitability for Legal Risk Models
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Proportionate Allocation	Yes	LH 119, LH 121–122, TRLC 270–273	High – Standard method
Aggressive (Loan-level)	No	Conflicts with LH and TRLC	Low – Use for internal
Borrower-Level Aggregation	Partial	Civil Code 1911, LEC 578– 579	Medium – Valid for unsecured chase
Linked Group-Level Aggregation	Yes	LH 119–122, TRLC 270–273, LEC	High – Best for default modeling

Let me know if you want this formatted as a 2-slide legal-risk alignment deck or compliance note for your presentation.