

Derivative Products in Global Financial Supply Chains

A Research Initiative of

Parasuram Balasubramanian,
Founder & CEO, Theme Work Analytics, Bangalore

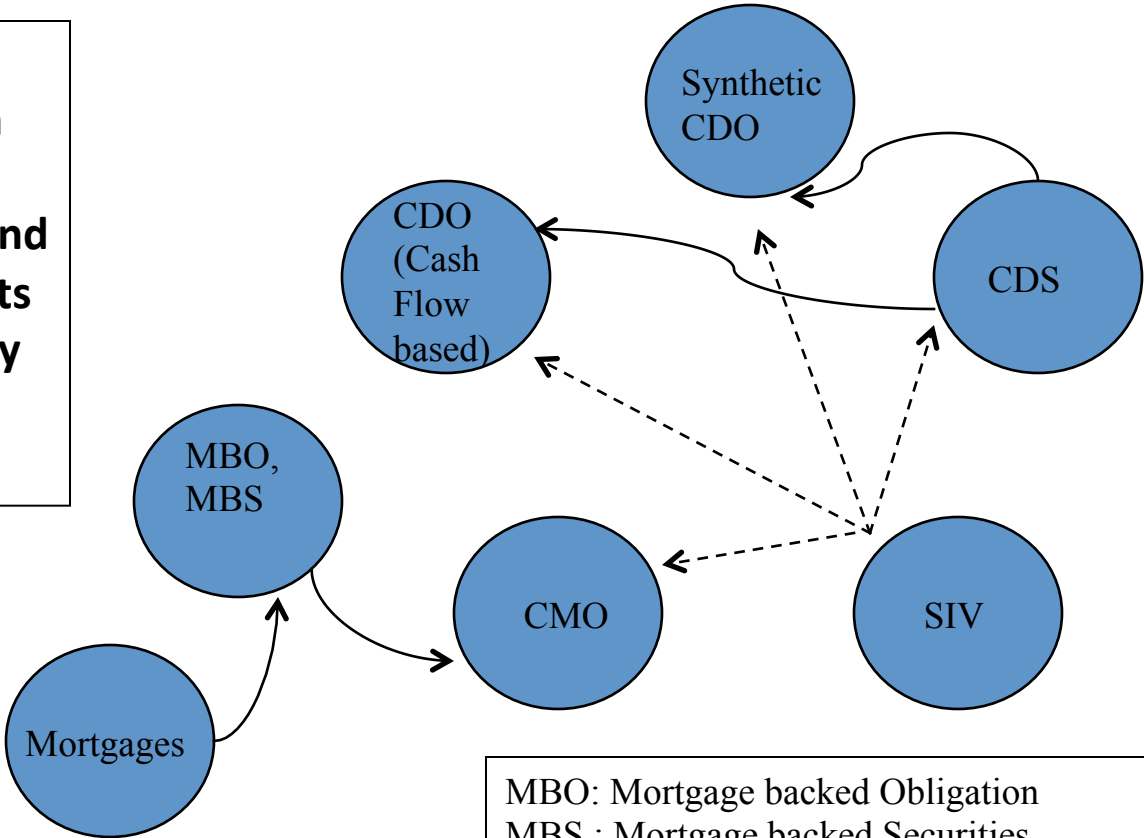
Jan 2016

balasubp@gmail.com



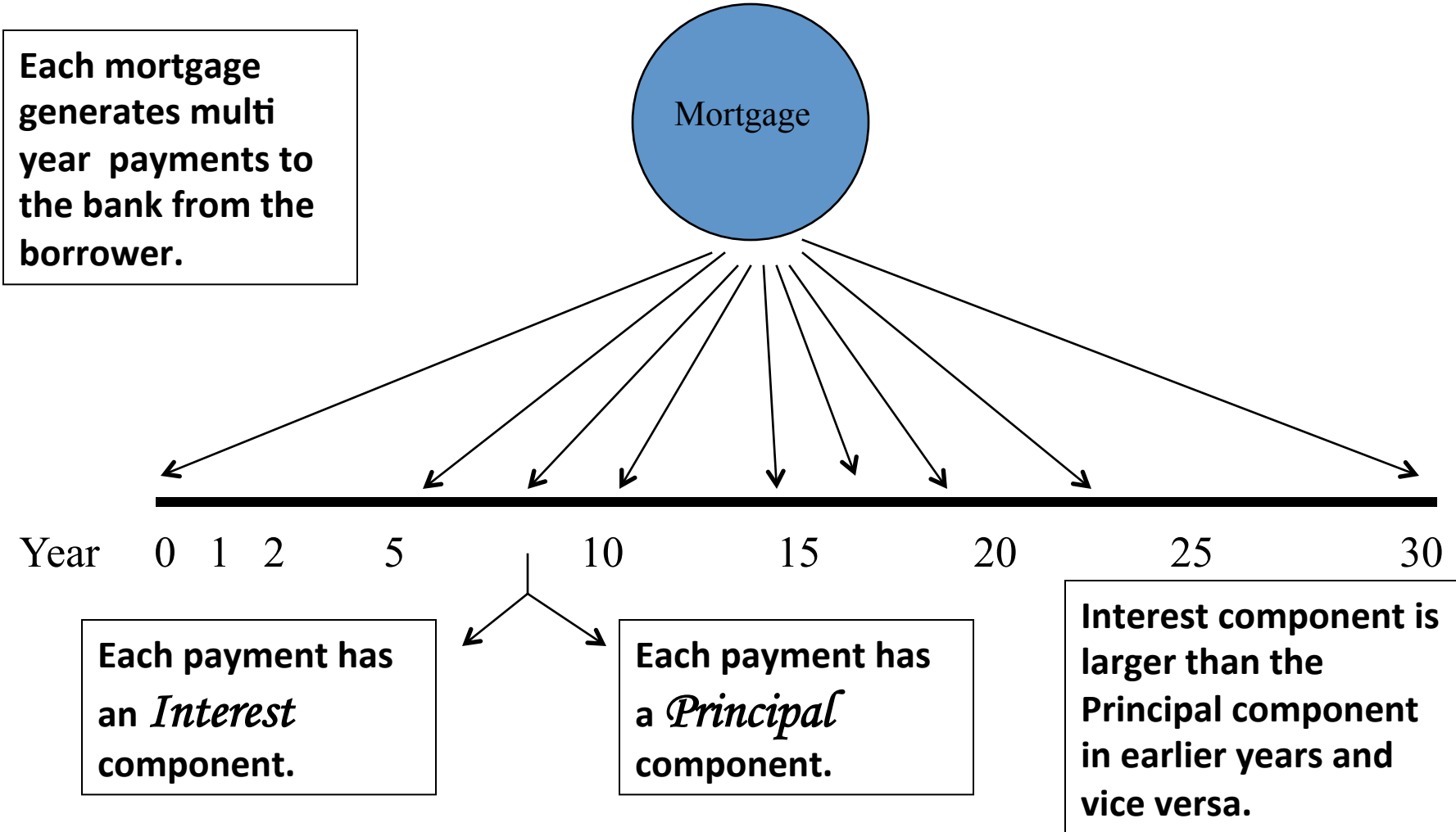
MBS, CMO, CDO, CDS, SIV et al

Complex financial products have been constructed out of simple mortgages and other financial assets such as Home Equity and Business Receivables

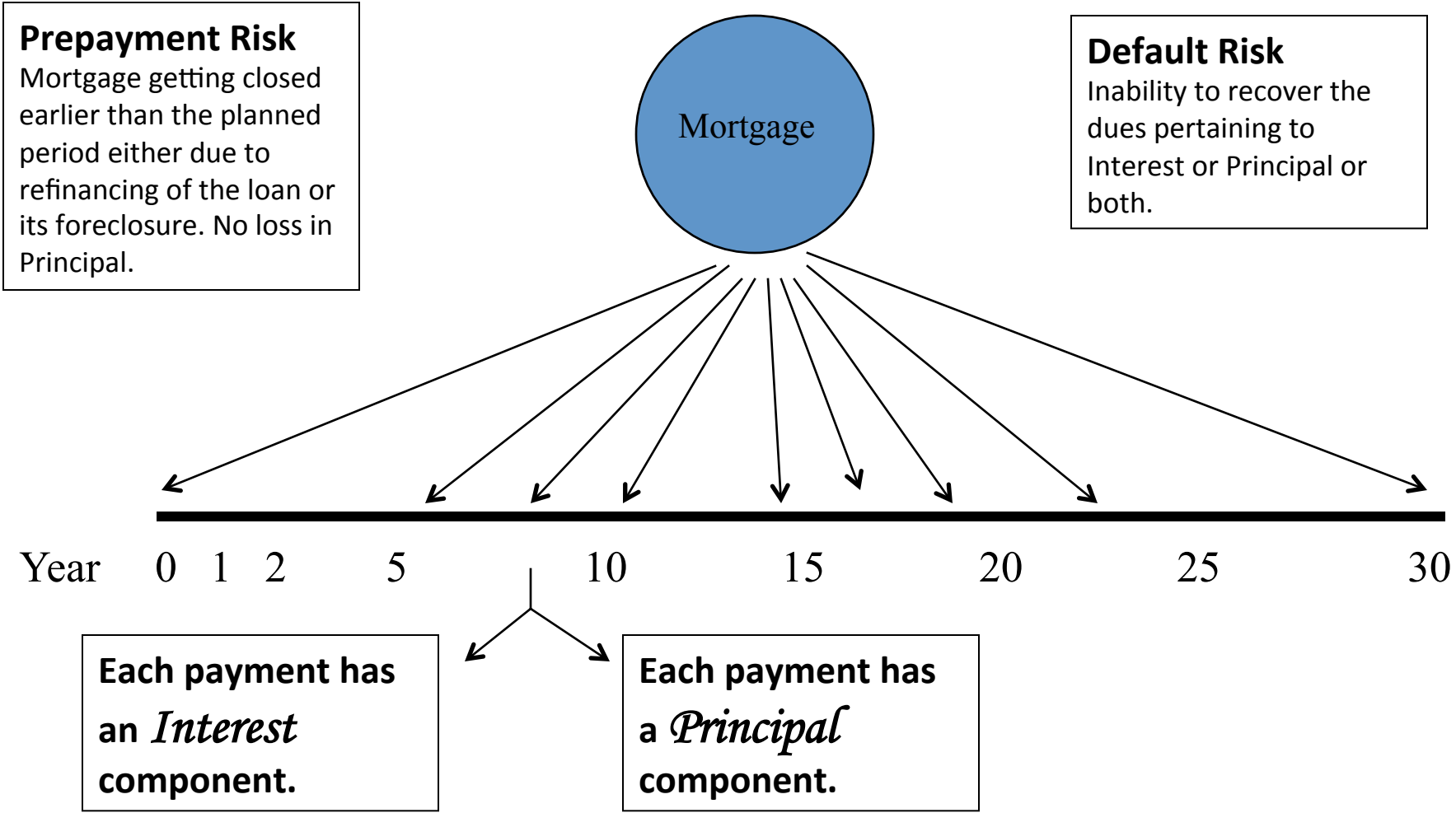


MBO: Mortgage backed Obligation
MBS : Mortgage backed Securities
CMO : Collateralized Mortgage Obligation
CDO : Collateralized Debt Obligation
CDS : Credit Default Swaps
SIV : Structured Investment Vehicle

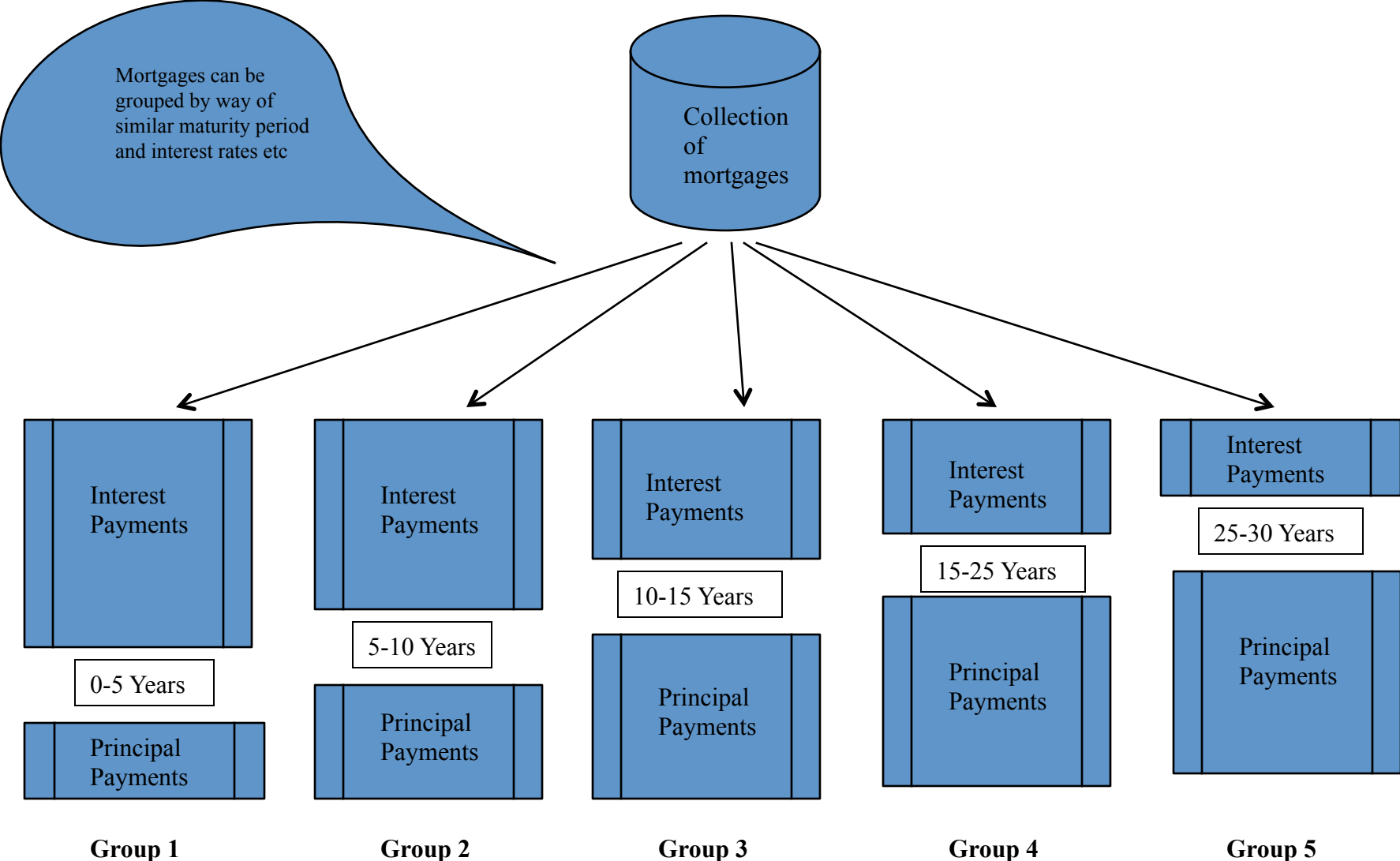
MBS, CMO, CDO, CDS, SIV etal



MBS, CMO, CDO, CDS, SIV etal

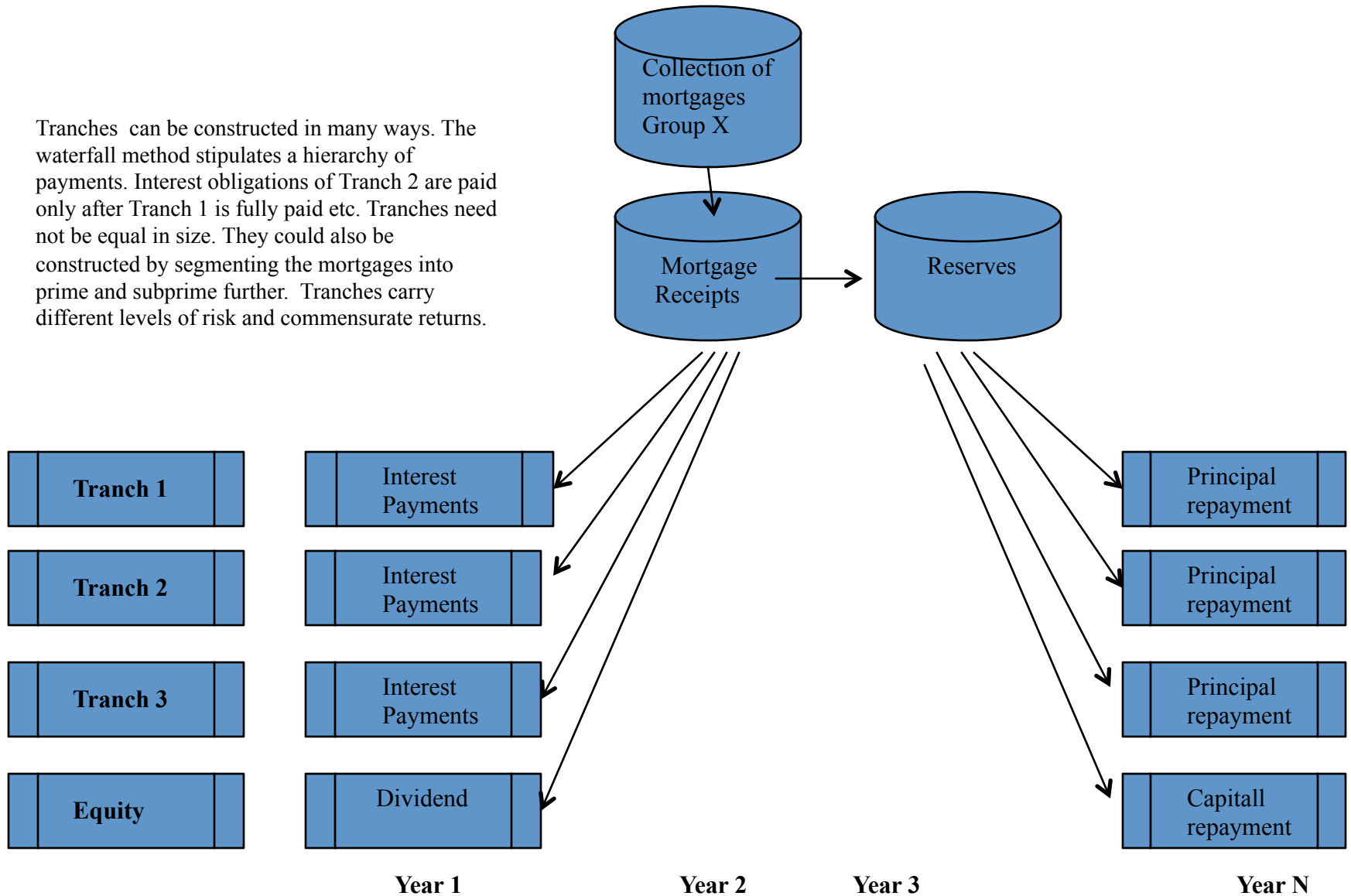


MBS, CMO, CDO, CDS, SIV etal



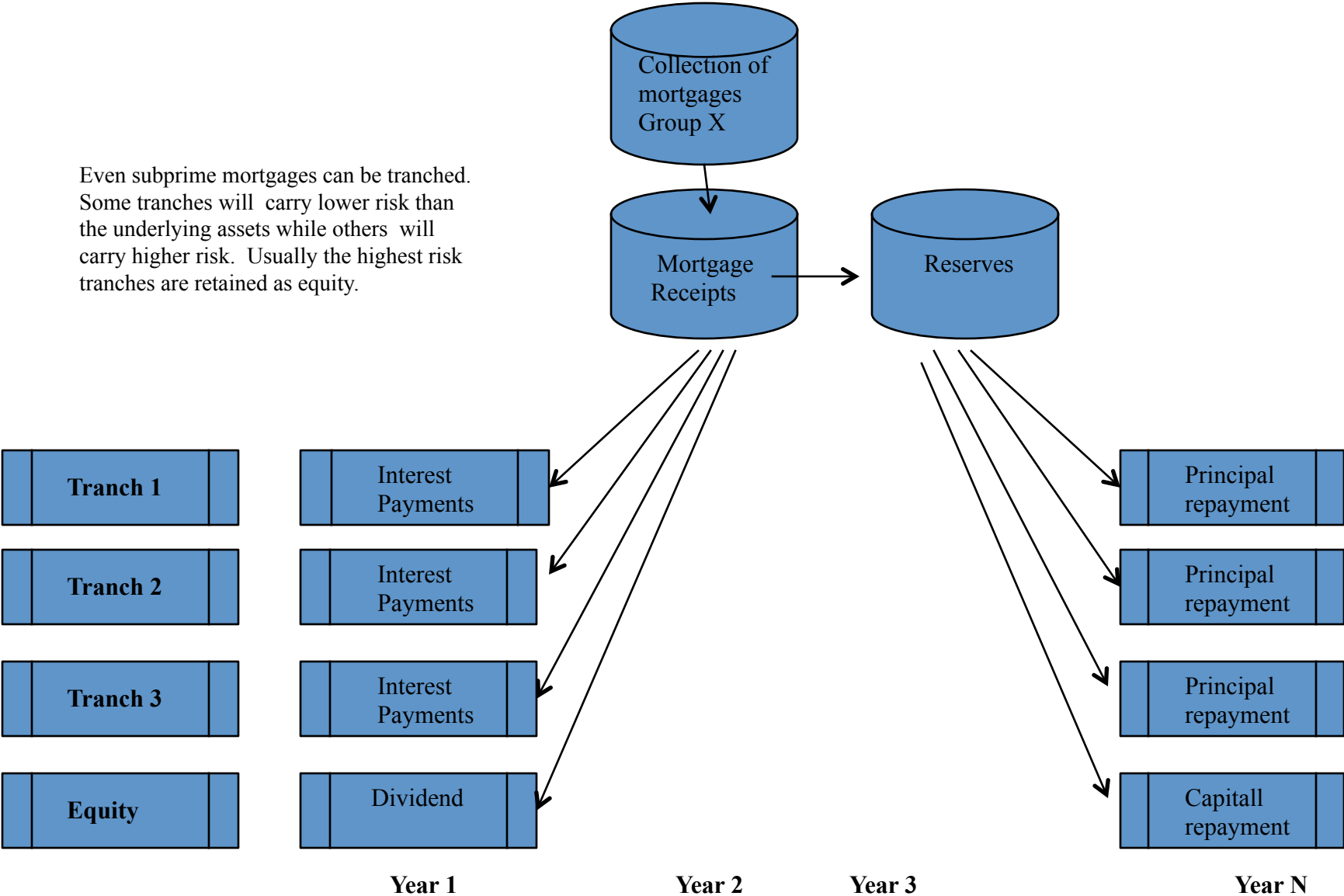
MBS, CMO, CDO, CDS, SIV etal

Tranches can be constructed in many ways. The waterfall method stipulates a hierarchy of payments. Interest obligations of Tranch 2 are paid only after Tranch 1 is fully paid etc. Tranches need not be equal in size. They could also be constructed by segmenting the mortgages into prime and subprime further. Tranches carry different levels of risk and commensurate returns.



MBS, CMO, CDO, CDS, SIV etal

Even subprime mortgages can be tranced. Some tranches will carry lower risk than the underlying assets while others will carry higher risk. Usually the highest risk tranches are retained as equity.



MBS, CMO.CDO,CDS etal

MBS :: A Bond created by securitizing a pool of mortgages

CMO :: A tranchd MBS

CDO :: (Cash Flow Based) :: A tranchd Asset Backed Security
where the asset can be a Home Equity Loan or
Credit Card Dues etc.

CDO :: (Synthetic) :: No Asset backing exists but is based on a
pool of Credit Default Swap (CDS)

CDS :: Credit Default Swap :: Protection against a loss or
default, like insurance

MBS, CMO, CDO, CDS, SIV et al

CMO is tranching based on the returns (interest and principal repayment) from underlying mortgage assets. CMO can be a protection against the Prepayment risk inherent in mortgages. (Superior tranches get this benefit at the cost of inferior tranches)

CDO (Cash flow based) is tranching on the pool of loans or other assets such as credit card receivables. Superior tranches offer protection against the credit risk while the inferior tranches exacerbate the risk.

CDO (synthetic) is created from a pool of securities (like Credit Default Swaps) that are contingent upon the occurrence of a default event. They are a form of protection against the default risk.