Caselet #54 – Sparky Builds a Planned Amortization Class [PAC] Bond

Learning Outcome Statement

After completing this caselet, students and trainees should be able to explain how to construct a planned amortization class CMO (PAC bond) and to explain companion bond risks and ‘busted’ PACs.

Caselet #54

Congratulations, Sparky, your sequential pay CMO analysis and graph were just right. They should help you get to the job you covet, once you graduate.

“The next step is to build and analyze a PAC bond. Do you know what that is, Sparky?”

“Yes, Ms. Gotzrox, PACs are planned-amortization-class CMO tranches. They have reduced prepayment uncertainty because the risks have been transferred to the ‘support’ or ‘companion’ bonds.”

"Great answer, Sparky. Now I want you to build a PAC bond. Choose a lower speed, say 75, and an upper speed, say 275. Calculate the total principal flows from each speed and, as you know, the lower principal flow is the PAC target. Once you have the PAC principal payments, I want you to graph them against time and then, overlay the total principal payments from the pool. If you have done the calculations correctly, all speeds from 75 to 275 will work and speeds slower than 75 or faster than 275 will lead to a ‘busted PAC.’”

“This example will be even more impressive in your caselet portfolio, so get going!”