

Asset-Backed Securities

**Asset-Backed Securities:
Managing the Cash Flow Risks
with Swaps**

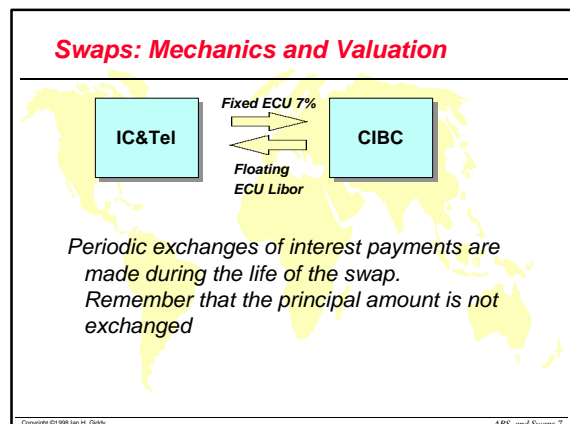
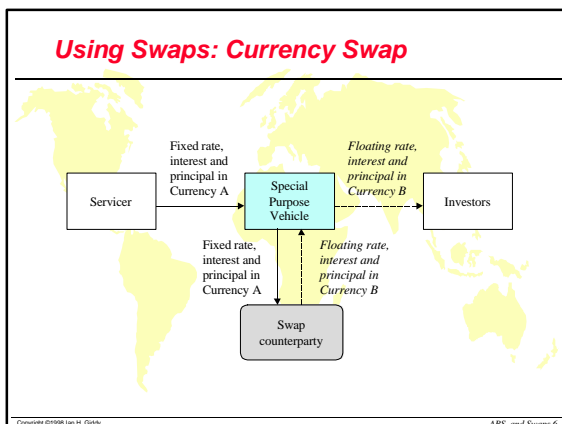
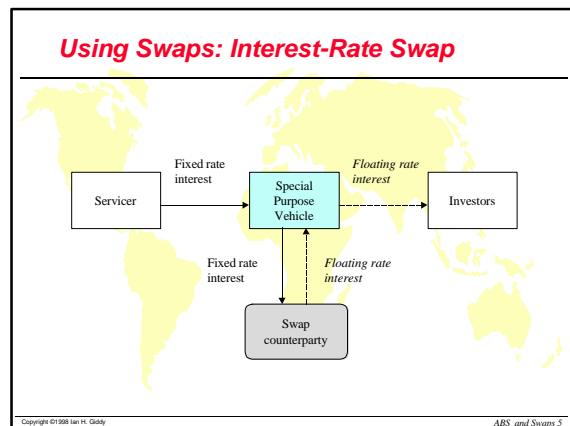
Prof. Ian Giddy
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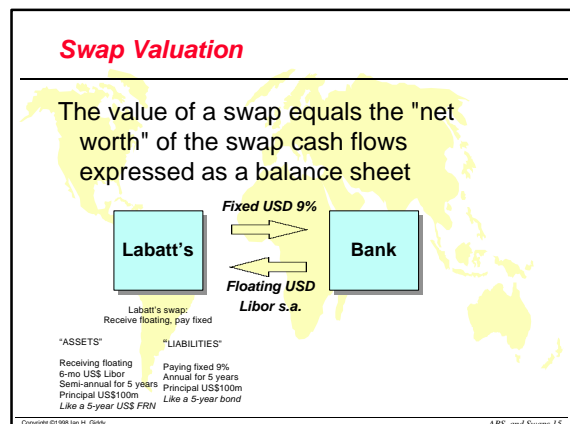
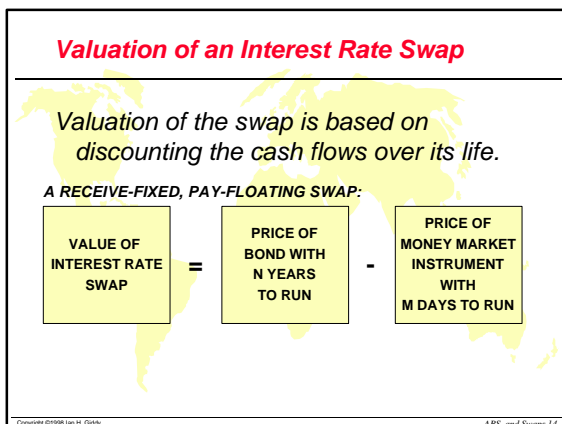
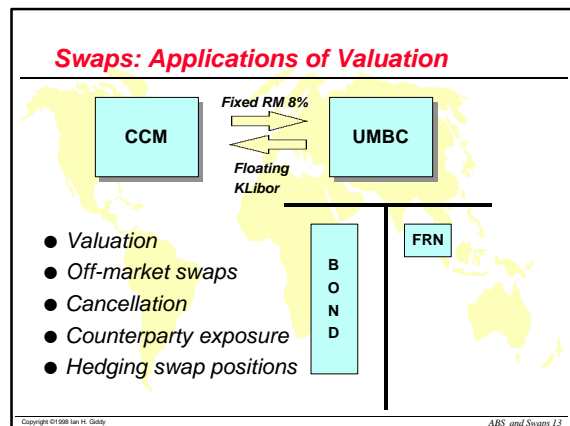
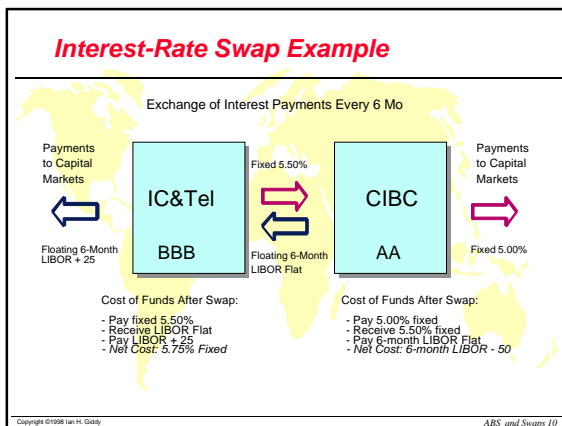
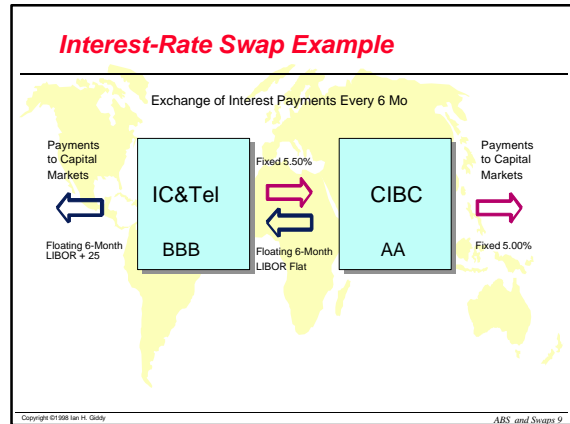
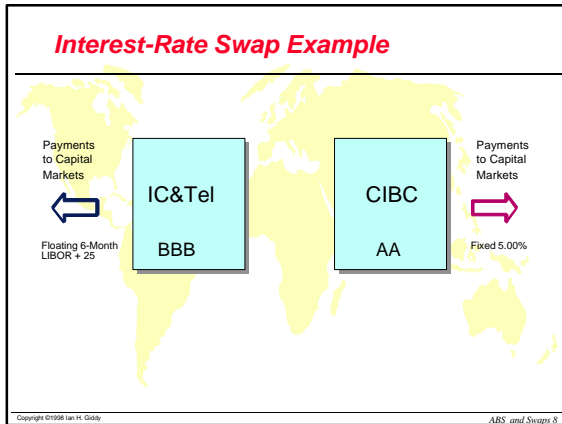
**Asset-Backed Securities:
Managing the Risks**

- Identifying the risks
- Restructuring the cash flows with swaps and other techniques
 - ◆ Interest-rate swaps
 - ◆ Currency swaps
- Reallocation of cash flows

Swaps and Cash Flow Reallocation

- Restructuring the cash flows with swaps and other techniques
 - ◆ Interest-rate swaps
 - ◆ Currency swaps
 - ◆ Reallocation of cash flows





At Inception, Standard Swap is Worth Zero

Labatt's swap:
Receive floating, pay fixed

"ASSETS"	"LIABILITIES"
Receiving floating 6-mo US\$ Libor Semi-annual for 5 years Principal US\$100m Like a 5-year US\$ FRN Value=\$100m	Paying fixed 9% Annual for 5 years Principal US\$100m Like a 5-year bond Value=\$100m

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Two Years Later, Rates Have Fallen...

Labatt's swap:
Receive floating, pay fixed

"ASSETS"	"LIABILITIES"
Receiving floating 6-mo US\$ Libor Semi-annual for 3 years Principal US\$100m Like a 3-year US\$ FRN Value still \$100m	Paying fixed 9% Annual for 3 years Principal US\$100m Like a 3-year bond Swap rate = 6% Value=\$108m

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Termination of Swaps

- Basic principle: cancel or neutralize all future swap cash flows
- What are the alternative ways in which this can be done?
 - ◆ Offsetting swap with same counterparty
 - ◆ Offsetting swap with new counterparty
 - ◆ Cancel swap
 - ◆ Reassign swap.

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Default Risk in Swaps

- In-the-money swaps entail credit risk—the value of the swap is the amount owed
- At initiation, credit risk exposure is based on the potential value of the swap, which depends on potential changes in interest rates and currencies
- Credit risk can be mitigated by collateralization and by netting of bilateral exposure.

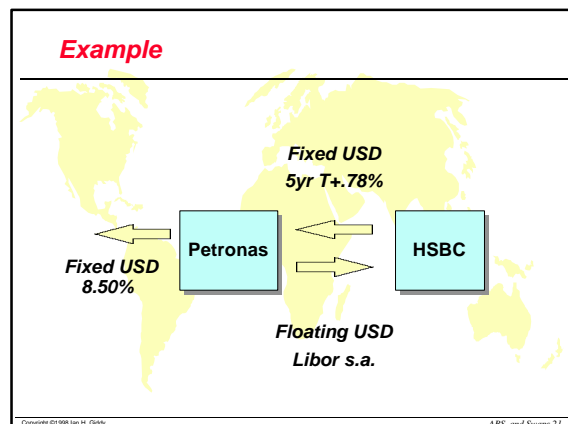
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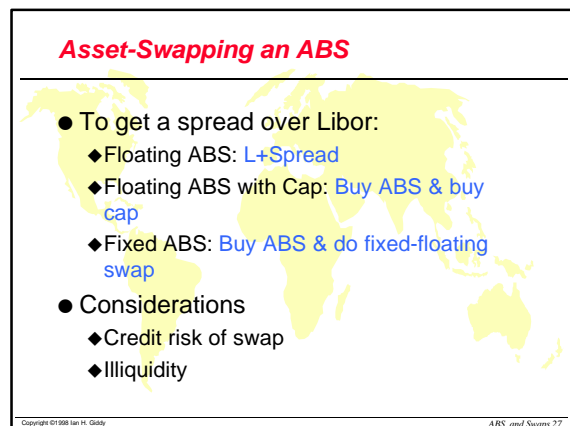
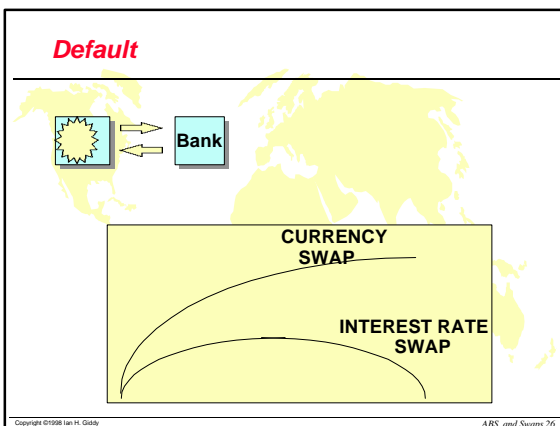
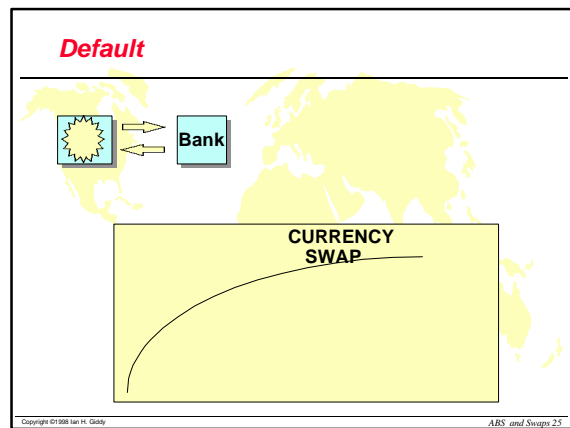
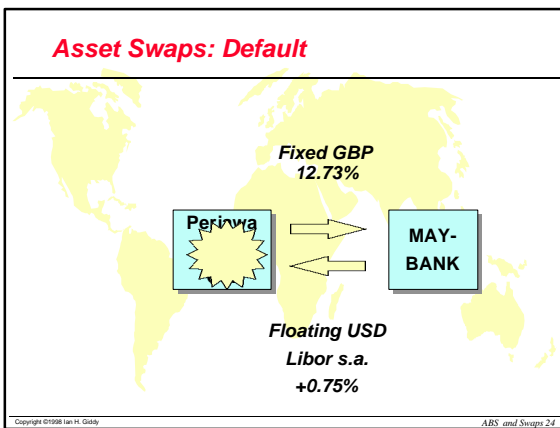
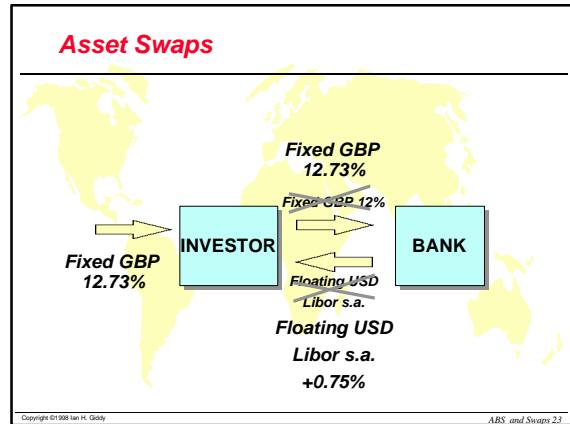
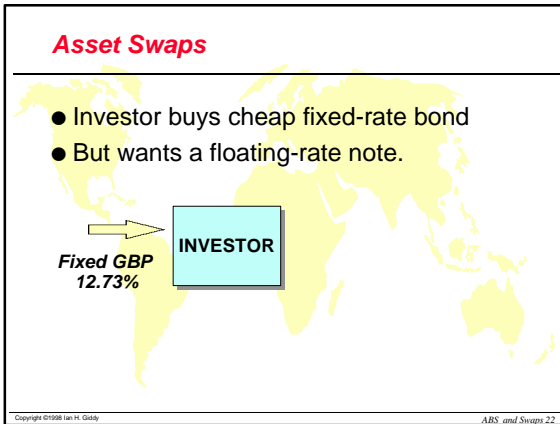
How Swaps are Quoted

US\$ INTEREST RATE SWAPS				CURRENCY SWAPS	
Years	Treasury Curve Benchmark	Spread [b.p.] to AA Counterparties	DEM/USD Annual	JPY/USD Annual	
2	8.02	62-66	7.00-7.10	5.35-5.45	
3	8.01	70-75	7.00-7.10	5.35-5.45	
4	8.01	72-76	7.00-7.10	5.35-5.45	
5	8.02	78-81	7.00-7.10	5.35-5.45	
7	8.13	77-81	7.02-7.12	5.40-5.50	
10	8.14	78-81	7.02-7.12	5.45-5.53	

CURRENCY SWAPS				
Years	CHF/USD Annual	GBP/USD Annual	ECU/USD Annual	AUD/USD Annual
2	6.60-6.70	12.80-12.90	9.20-9.30	15.65-15.80
3	6.20-6.30	12.35-12.45	9.15-9.25	15.25-15.40
4	6.05-6.10	11.90-12.00	9.10-9.20	15.15-15.30
5	6.00-6.10	11.75-11.85	9.05-9.15	14.78-15.13
7	5.95-6.05	11.50-11.60	9.05-9.15	NA
10	5.95-6.05	11.25-11.36	9.05-9.15	NA

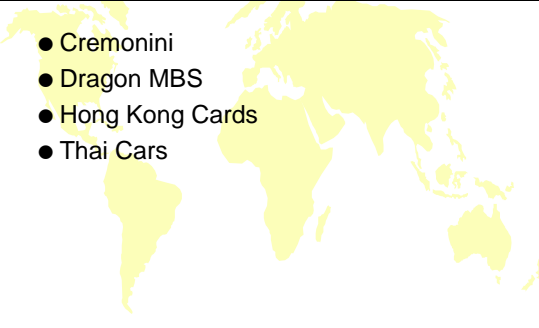
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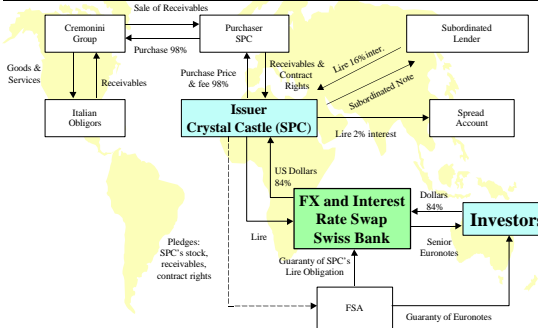
Swaps and ABS: Case Studies

- Cremonini
- Dragon MBS
- Hong Kong Cards
- Thai Cars



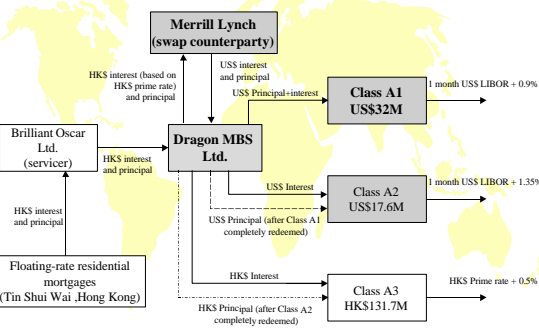
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Using Swaps: Cremonini Case Study



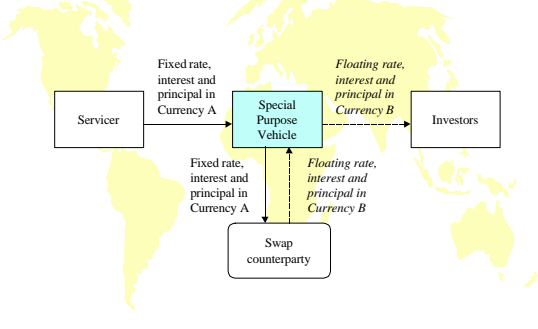
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Mortgage Securitization: Dragon MBS



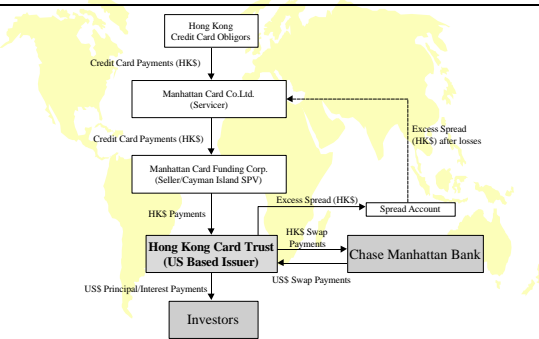
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Dragon MBS: The Swap



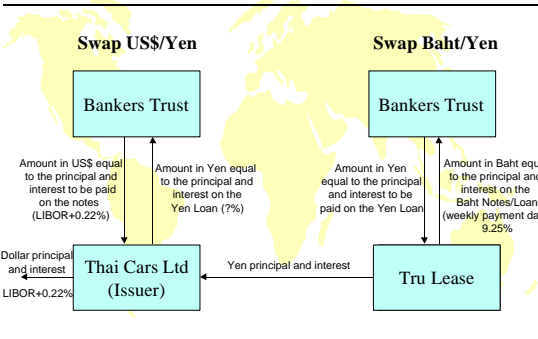
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Chase Manhattan Hong Kong

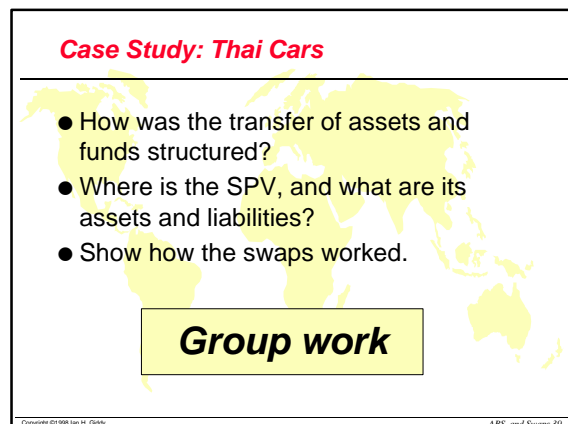
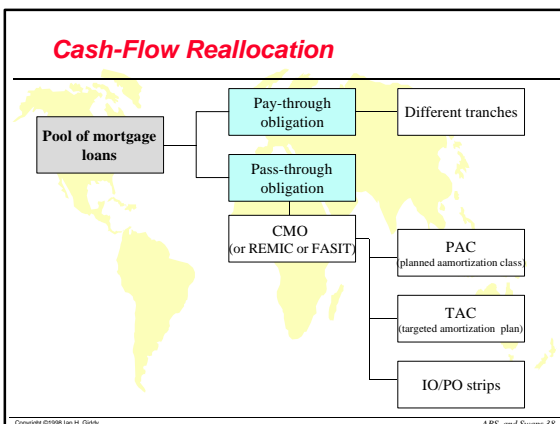
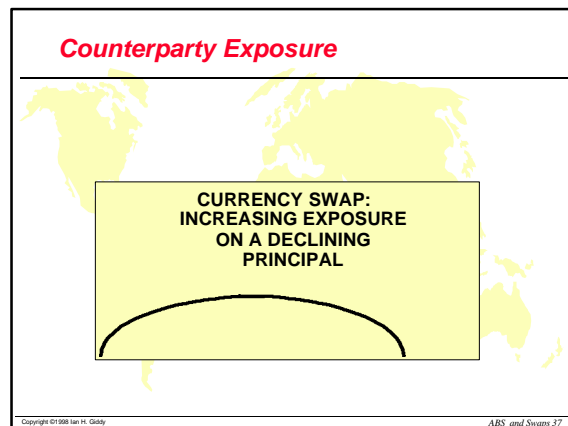
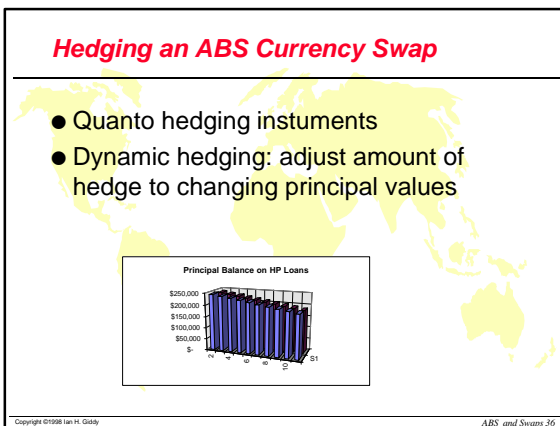
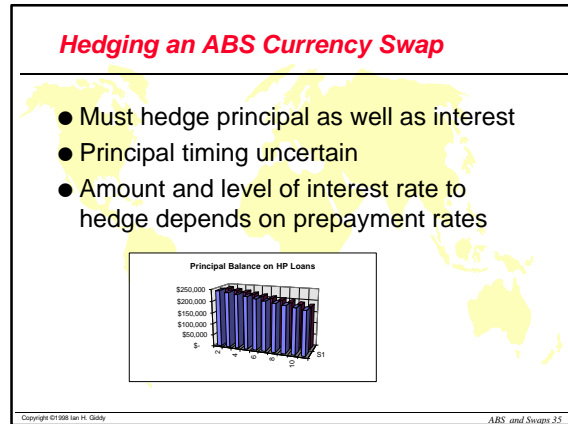
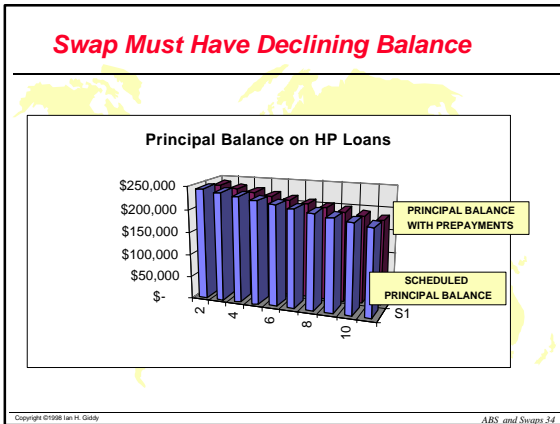


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Thai Cars: Dual Swap



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Case Study:
Hong Kong Card Master Trust

- What is the relationship among the parties in this deal? (Draw a diagram)
- How are investors protected? And FSA?
- How are the interest rate and currency risks managed?
- Can you quantify the costs and benefits to Chase?

Group work

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