Management od Natural Disturbances

Financial Resources Management

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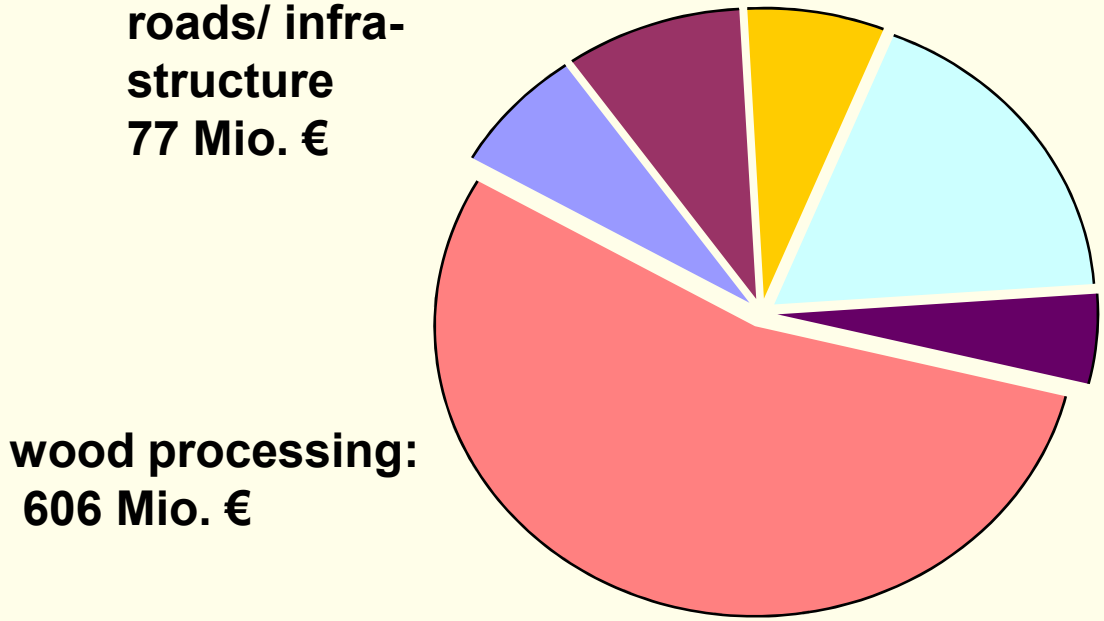
Outline

- Total Costs
- Revenues
- Long-Term Financial Aspects of Natural Disturbances
- Liquidity State Forest
- Costs
  - Overview
  - Details
- Small-Scale and Communal Forestry Issues
- Harvesting Costs
- **Questions and Discussion**

Total Costs



Costs for the elimination of storm damages (appr. 30 Mio. m³)
in Baden-Württemberg: 1,113 Mio. €

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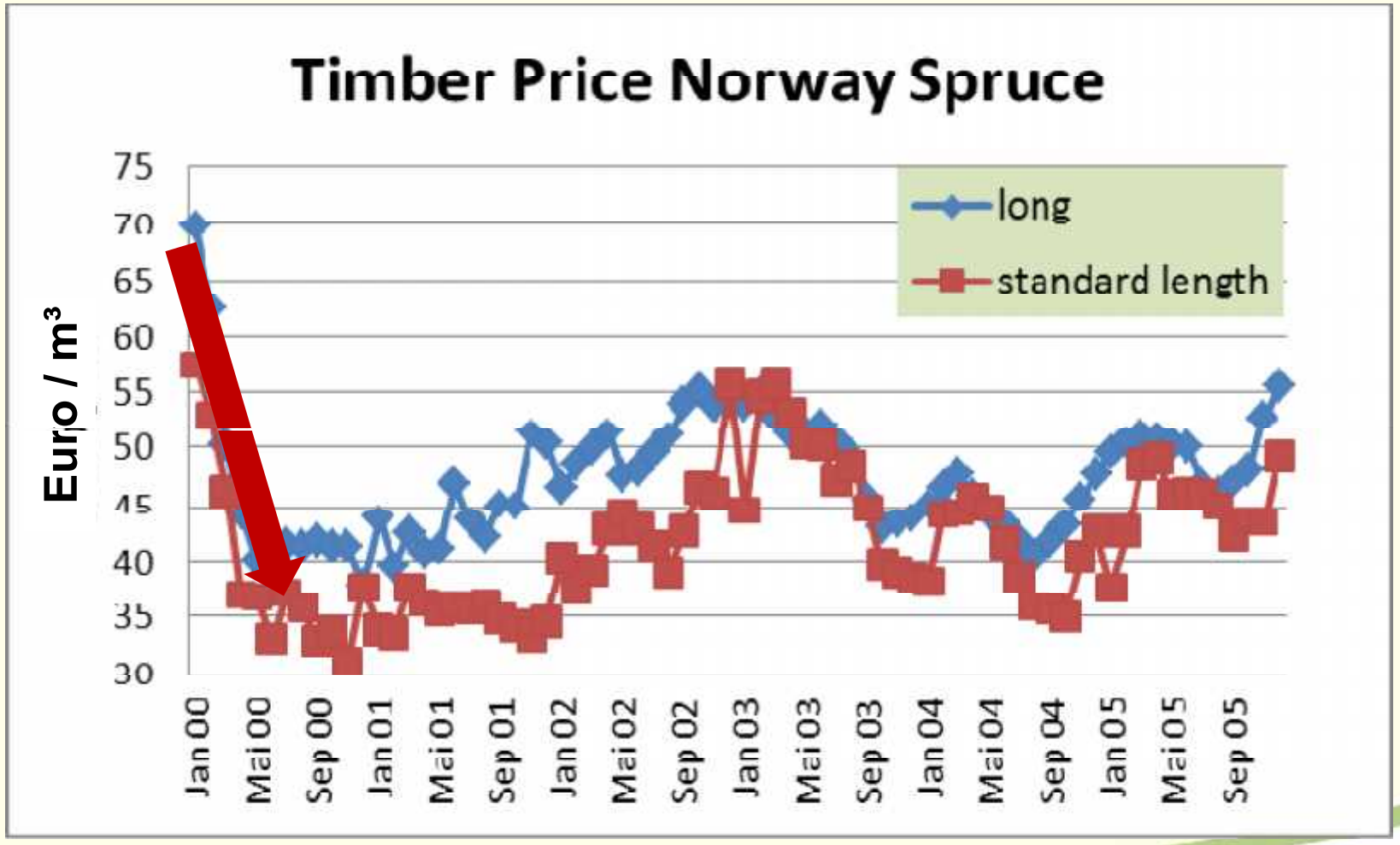
Revenues I



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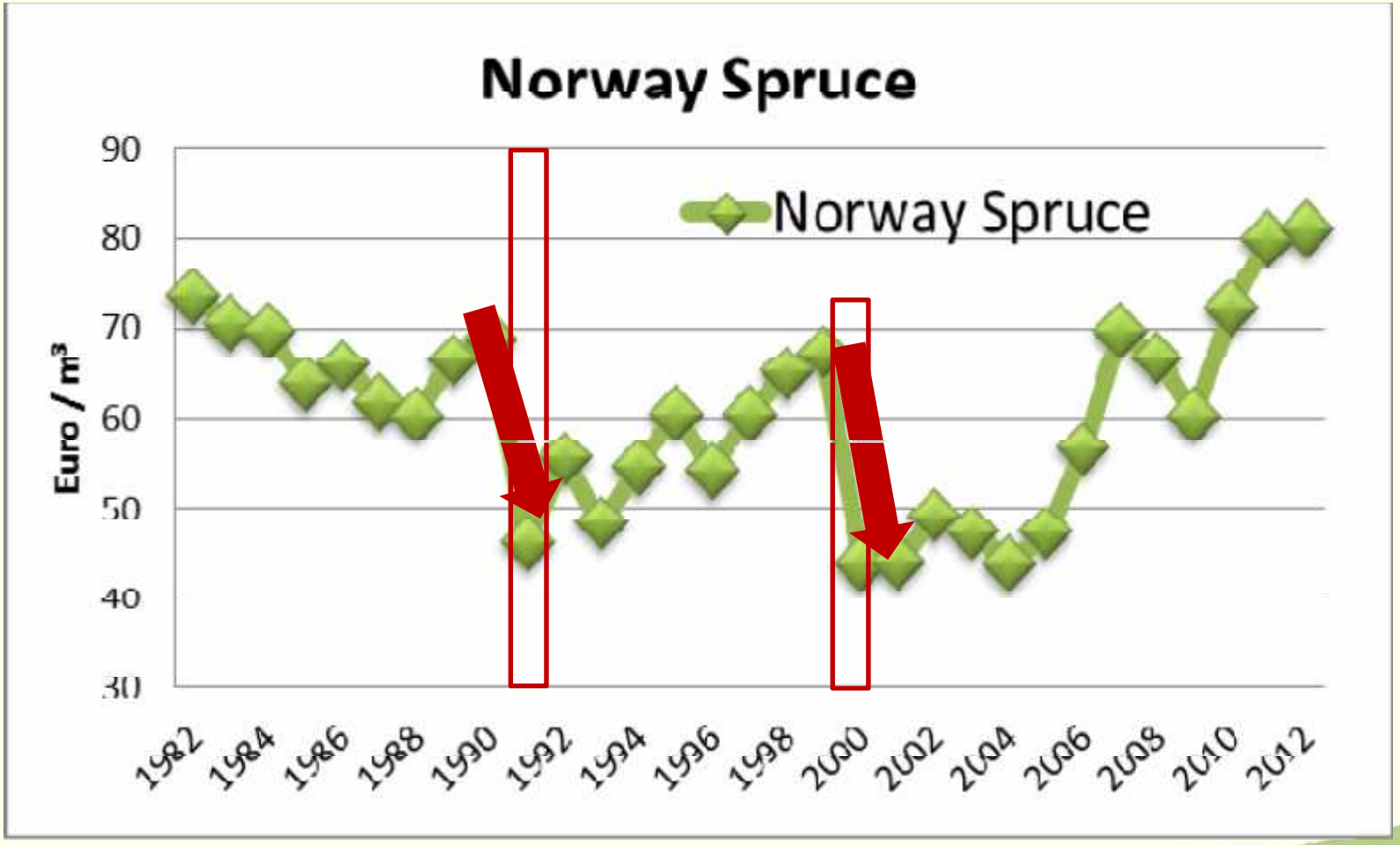
Revenues II



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Revenues III

Intense negotiations with the sawmilling associations in order to stabilize the timber prices

Almost no success, unless there was a strong interest from the sawmills to keep the timber in the state
→ Storage concept
→ No willingness to pay for any kind

2007 Kyrill: North Rhine-Westphalia
Contracts with higher prices for timber than actual market price, but to fixed for eight years
This approach failed widely, after a few years prices much lower than market prices → severe financial loss
Anti trust agencies are inquiring, court hearings

Long-Term Finacial Aspects of Natural disturbances I

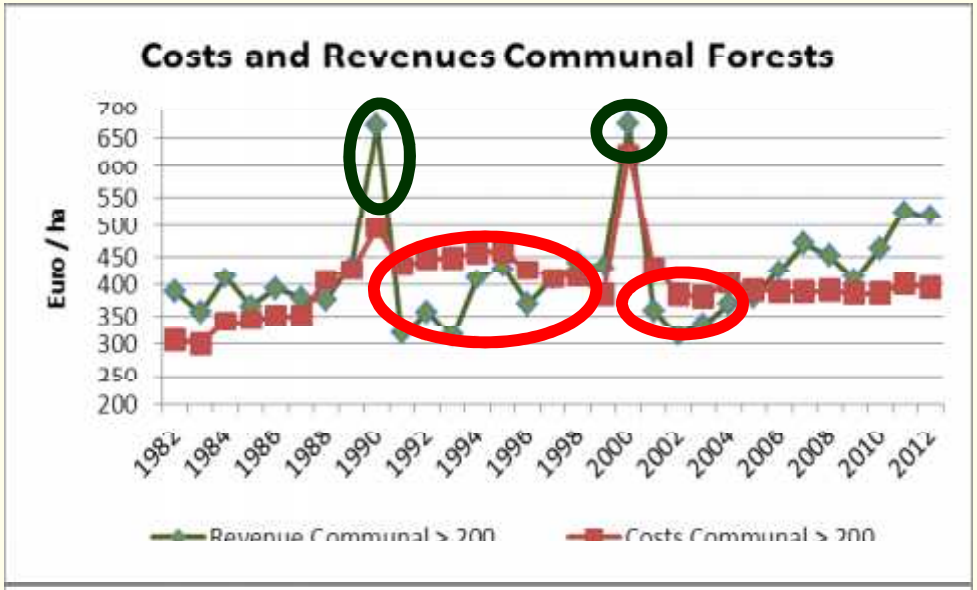
Economic Issues I

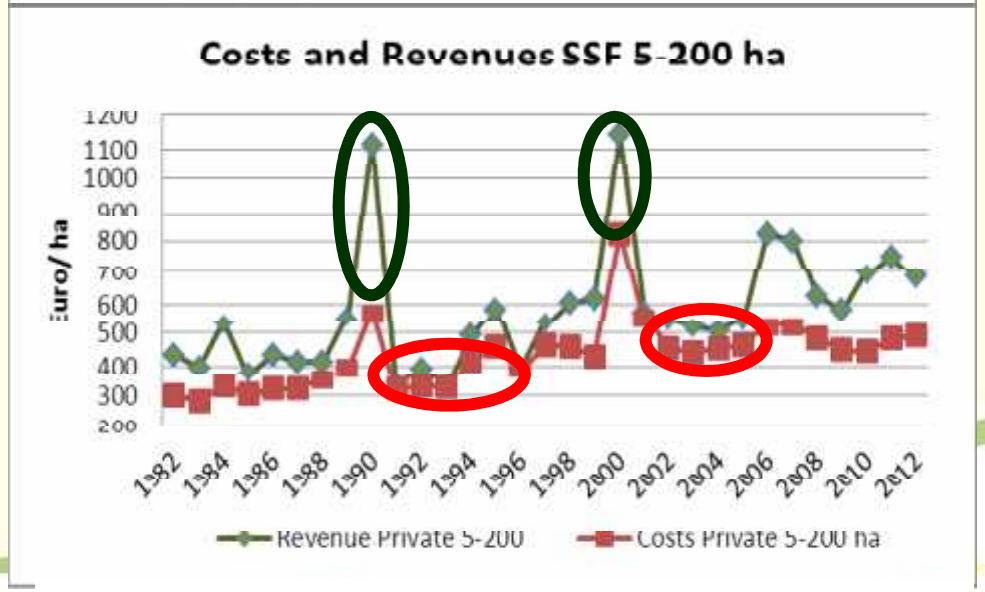
Standard pattern:

First year after event:
Revenues can mostly compensate the direct costs of salvage logging

2 to 3-5 years after event:
Reduced timber prices, reduced harvest in order to stabilise timber markets and sell damaged timber plus creationg additional costs for regeneration, repair of forest infrastructure etc.
→ Liquidity is missing

Consolidation starts mostly after the last timber from the catastrophic event is sold.





Prohibition of deficits only as a result of subsidies !!!

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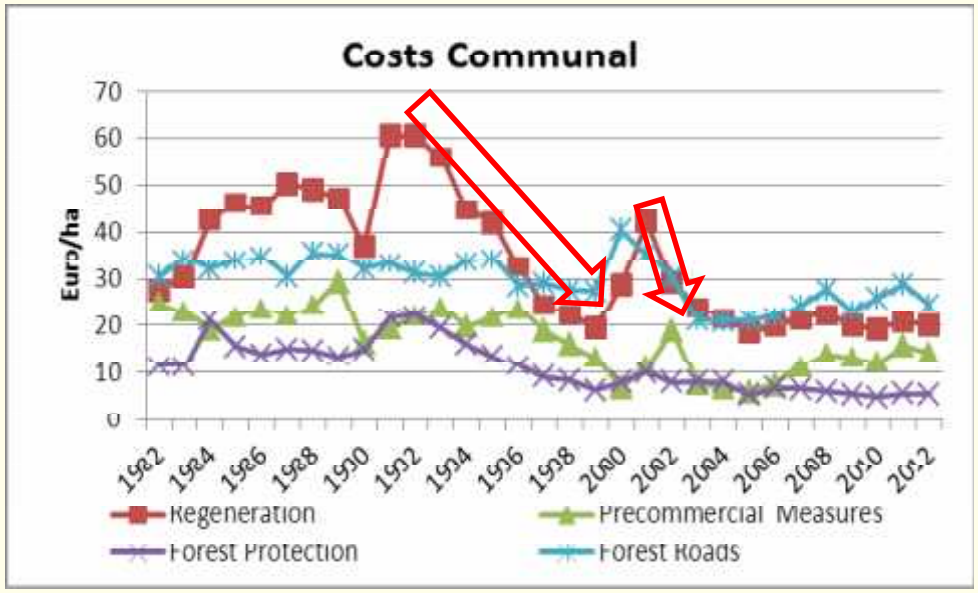
Long-Term Financial Aspects of Natural Disturbances II

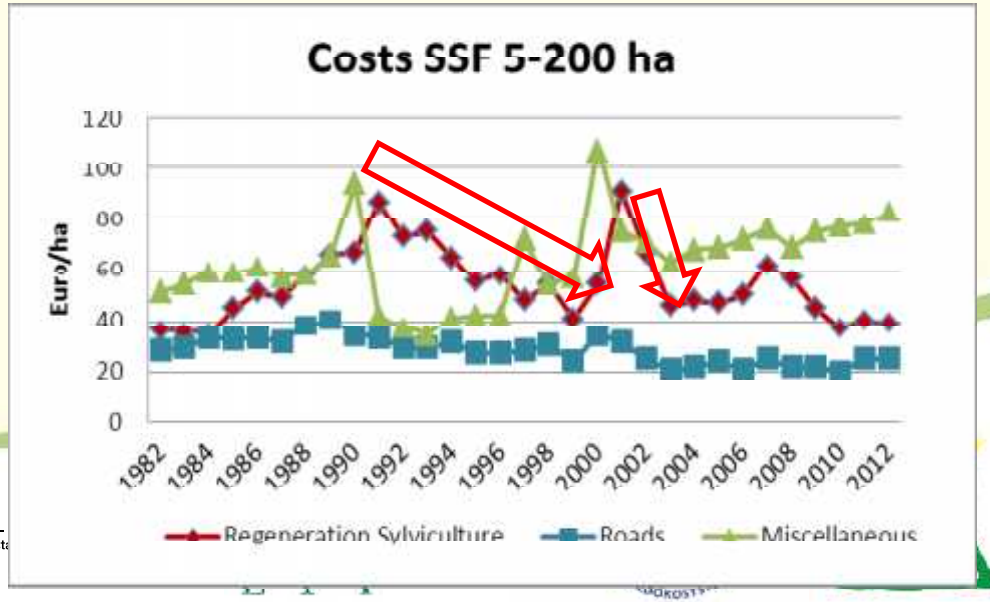
Economic Issues II



Lower costs for regeneration and its faster decrease is mainly explicable by a higher share of natural regeneration

Increasing costs after natural disturbances

However: Loss of income mostly more severe.



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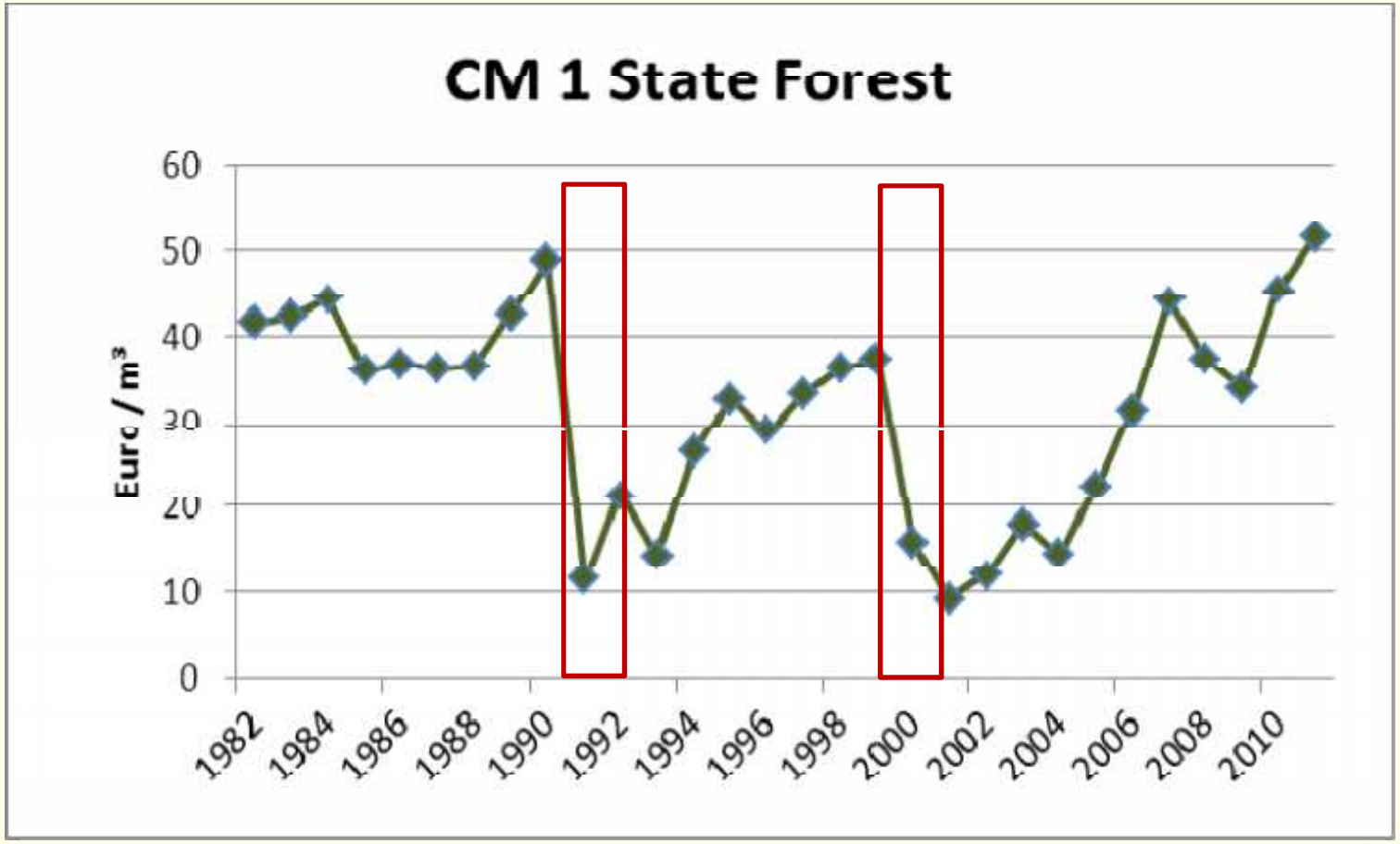
Contribution Margin 1 as Driver for Liquidity



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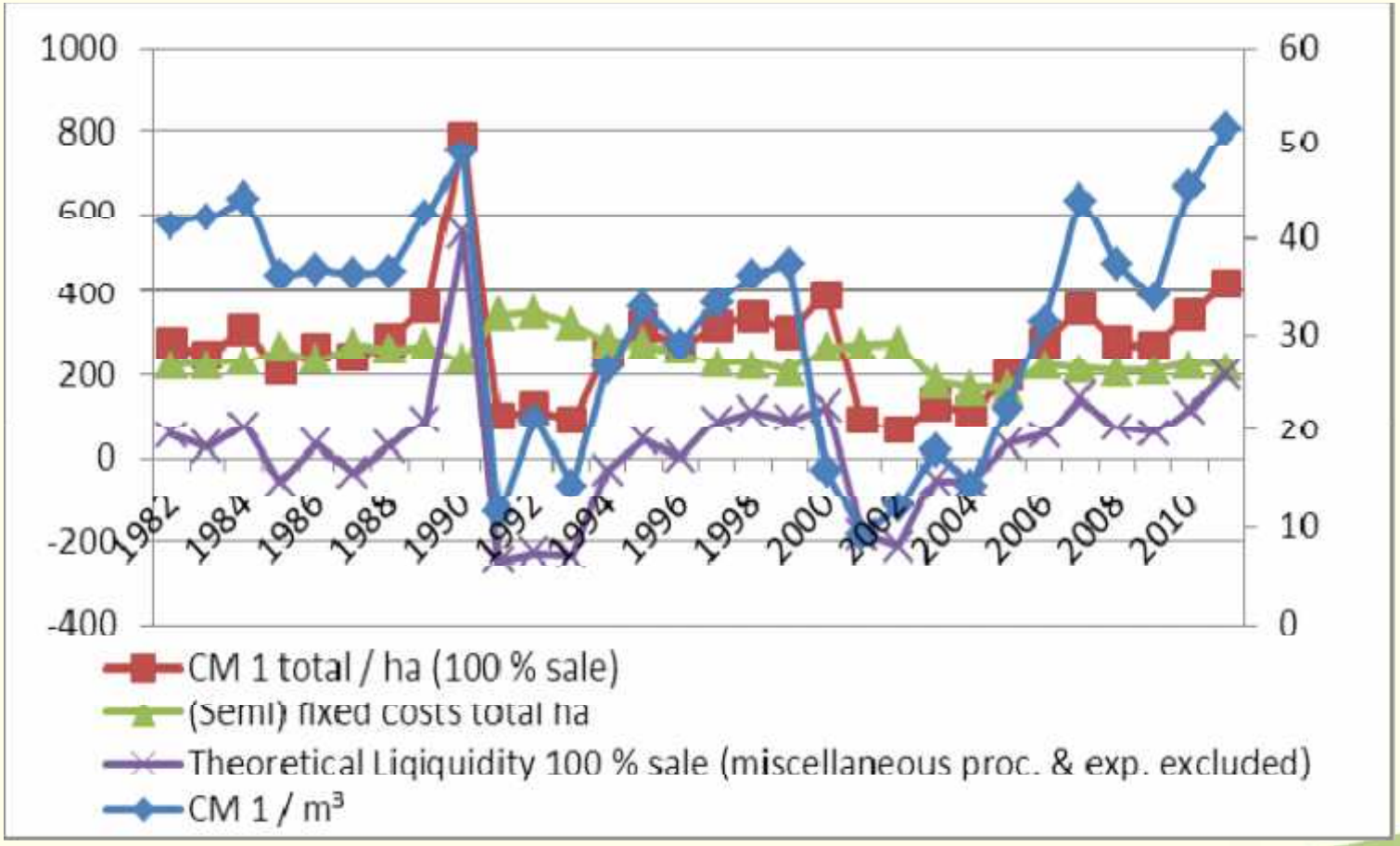
Liqudity I



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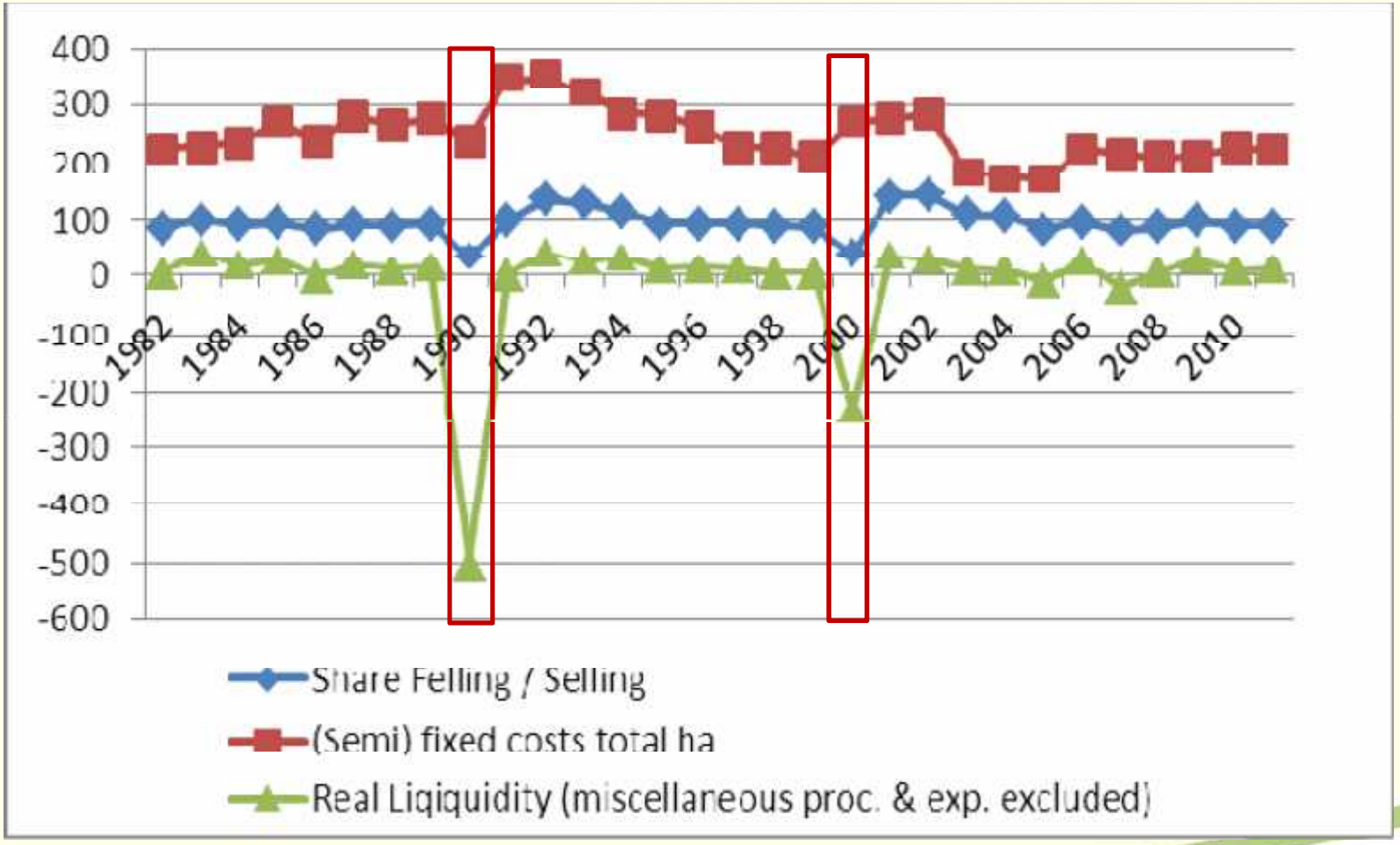
Liqudity II



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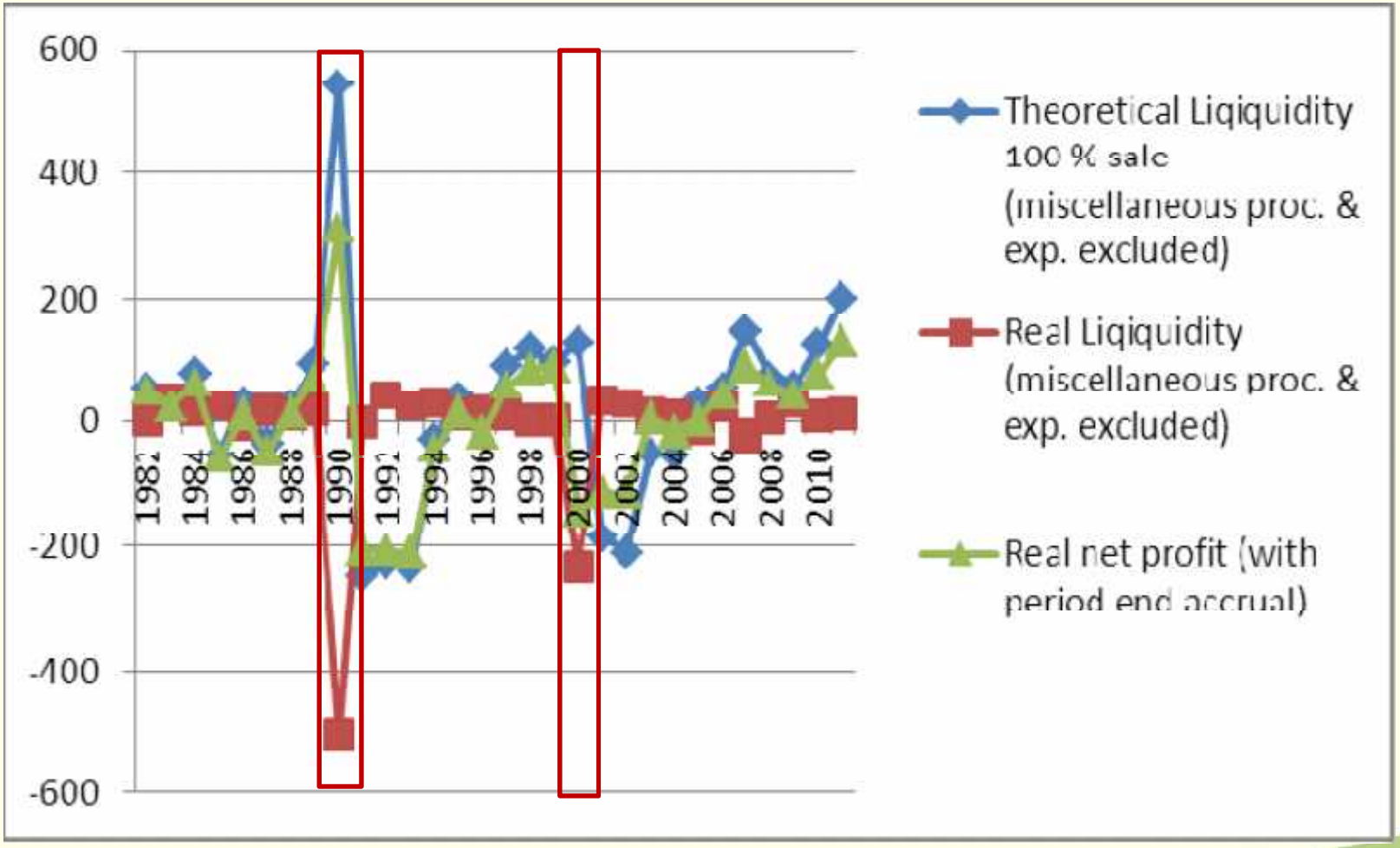
Costs - Overwiew



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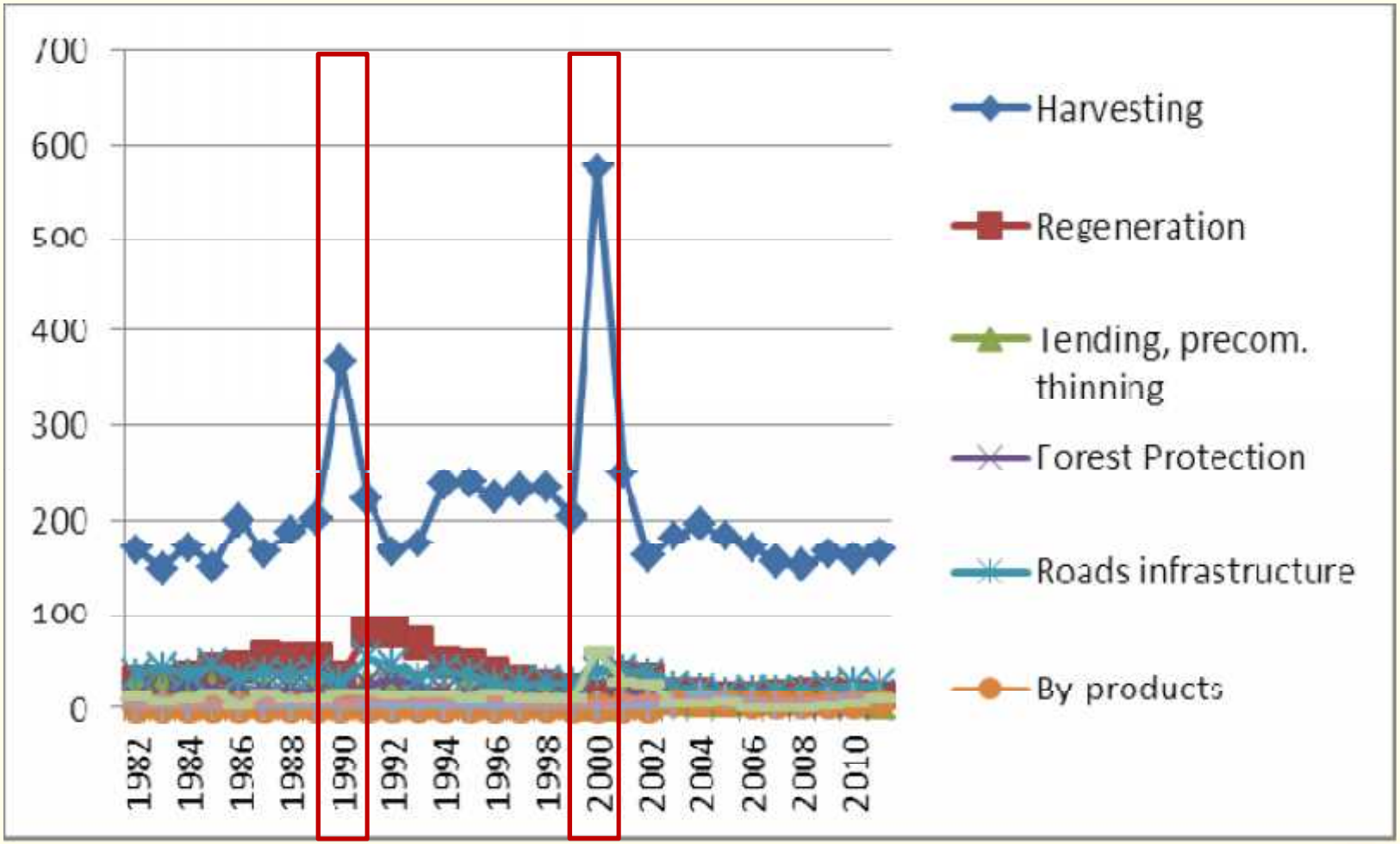
Costs Details I - Overview



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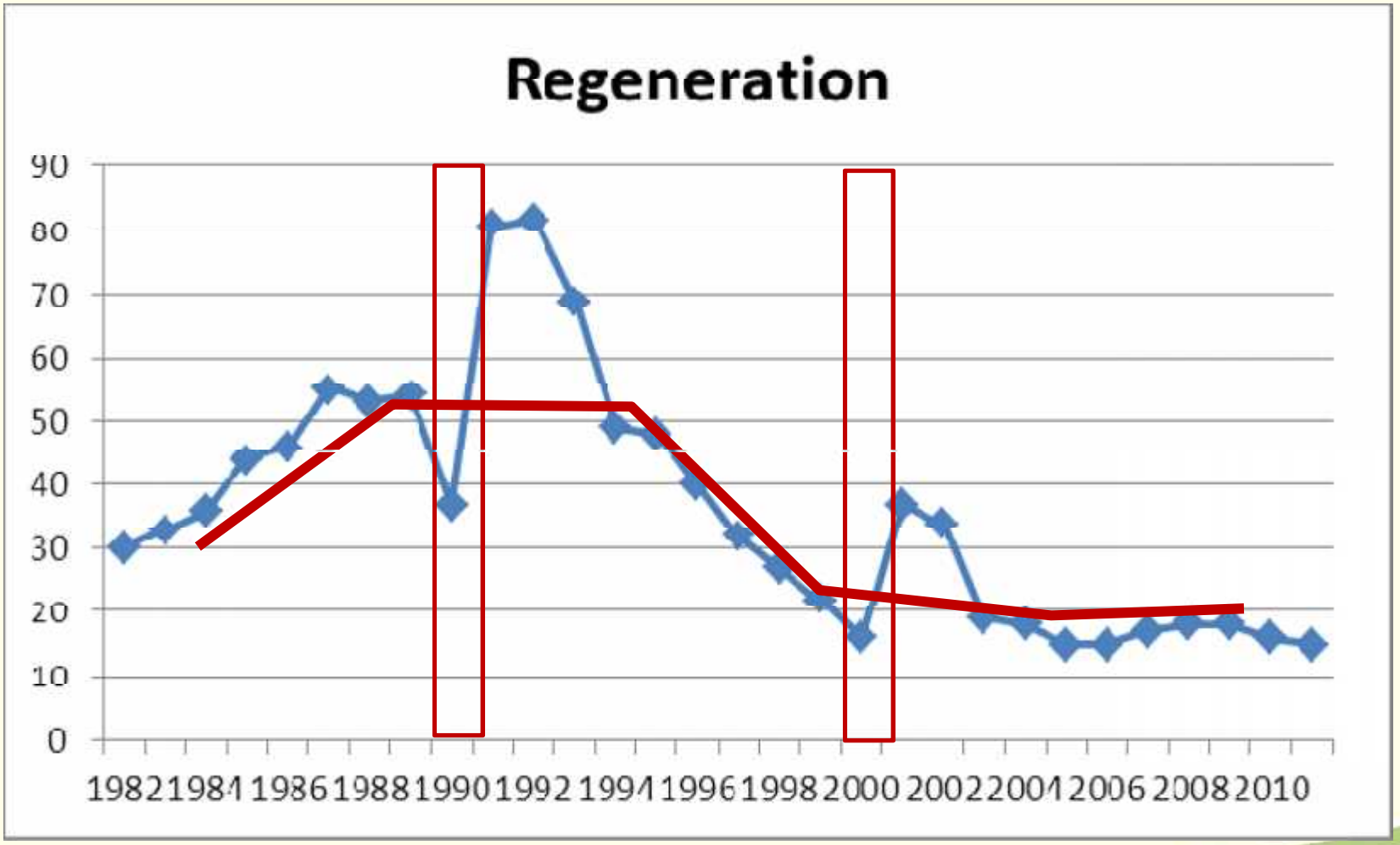
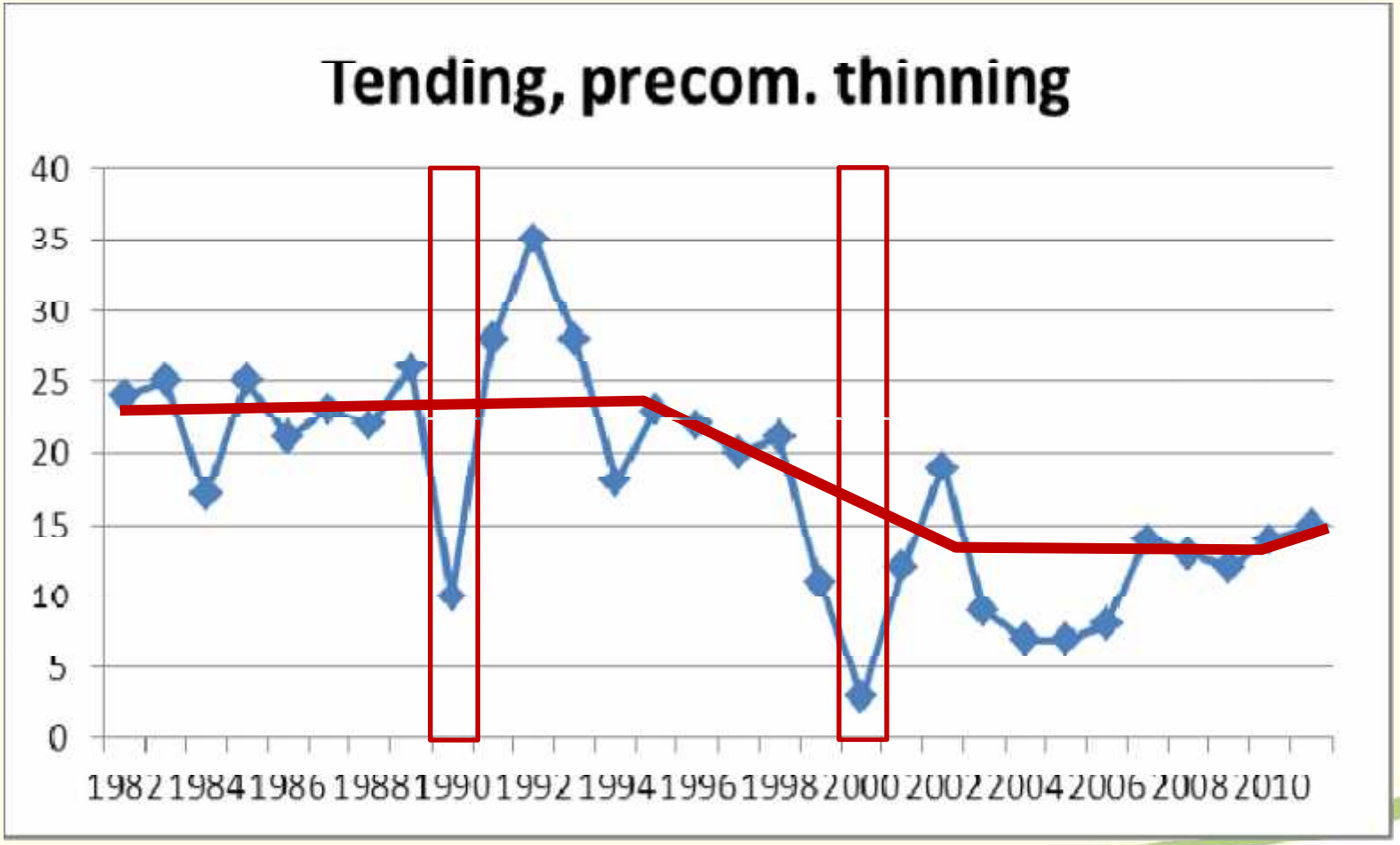
Costs Details I - Regeneration



Costs Details I – Tending, Thinning



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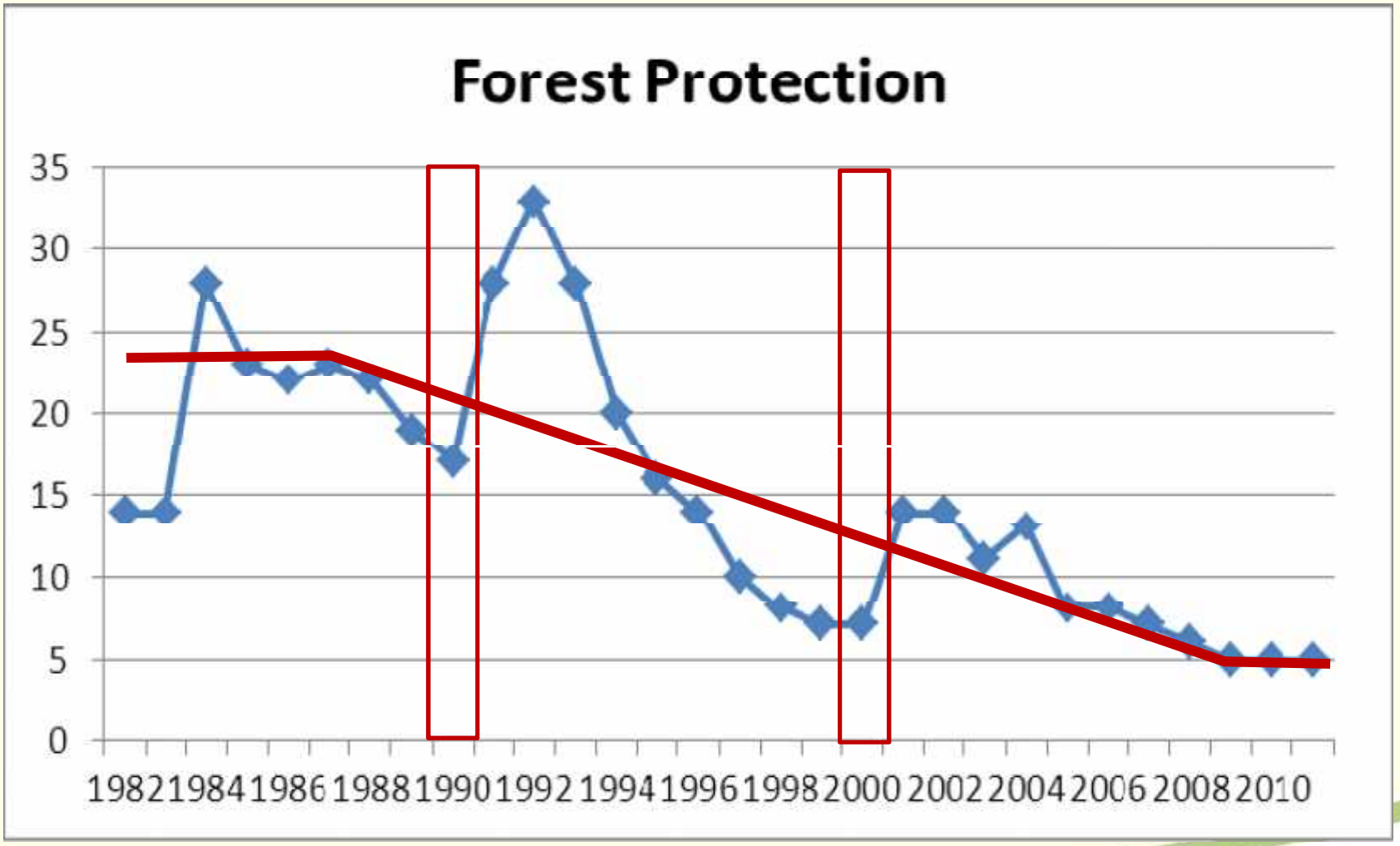
Costs Details I – Forest Protection



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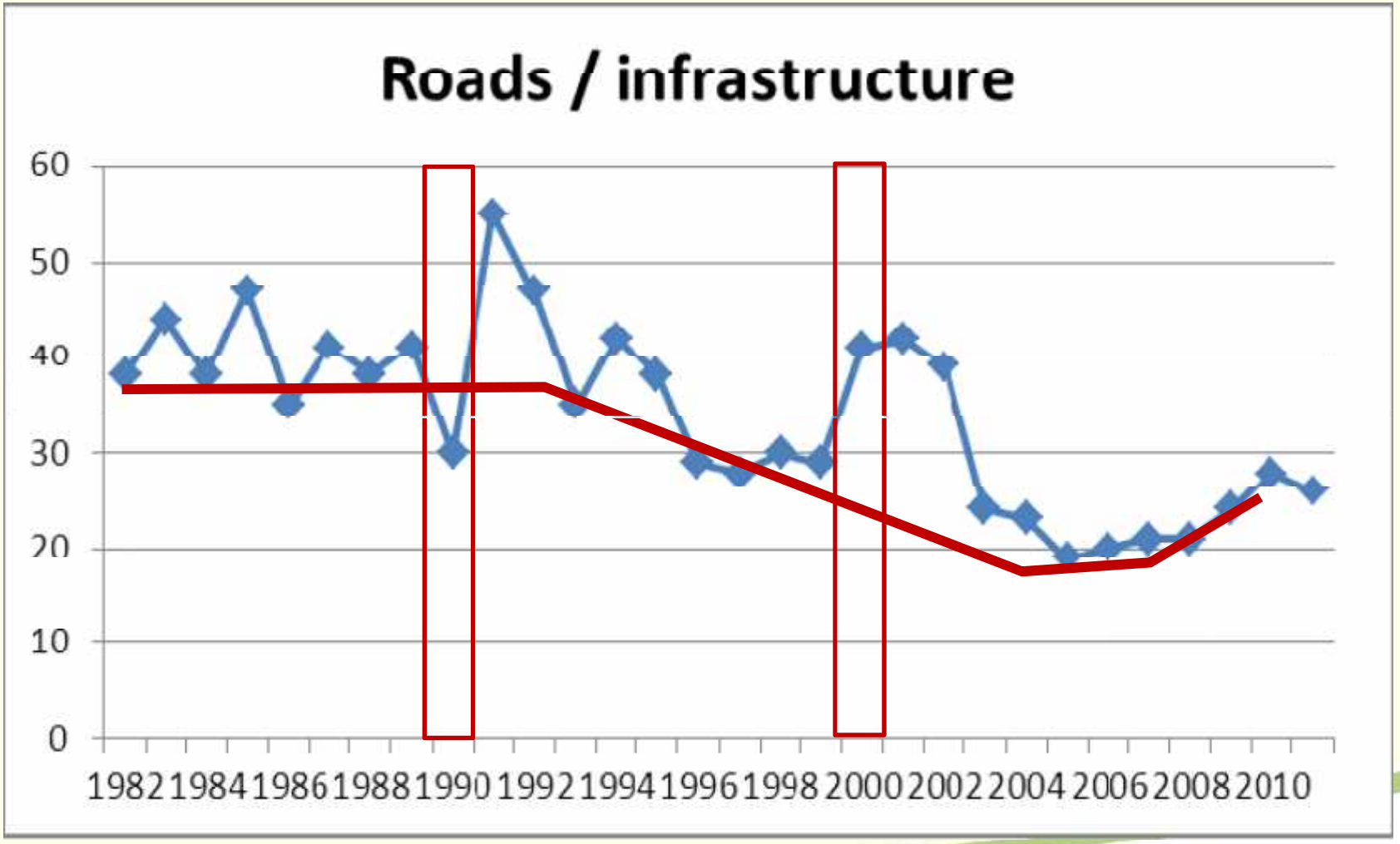
Costs Details I – Road Infrastructure



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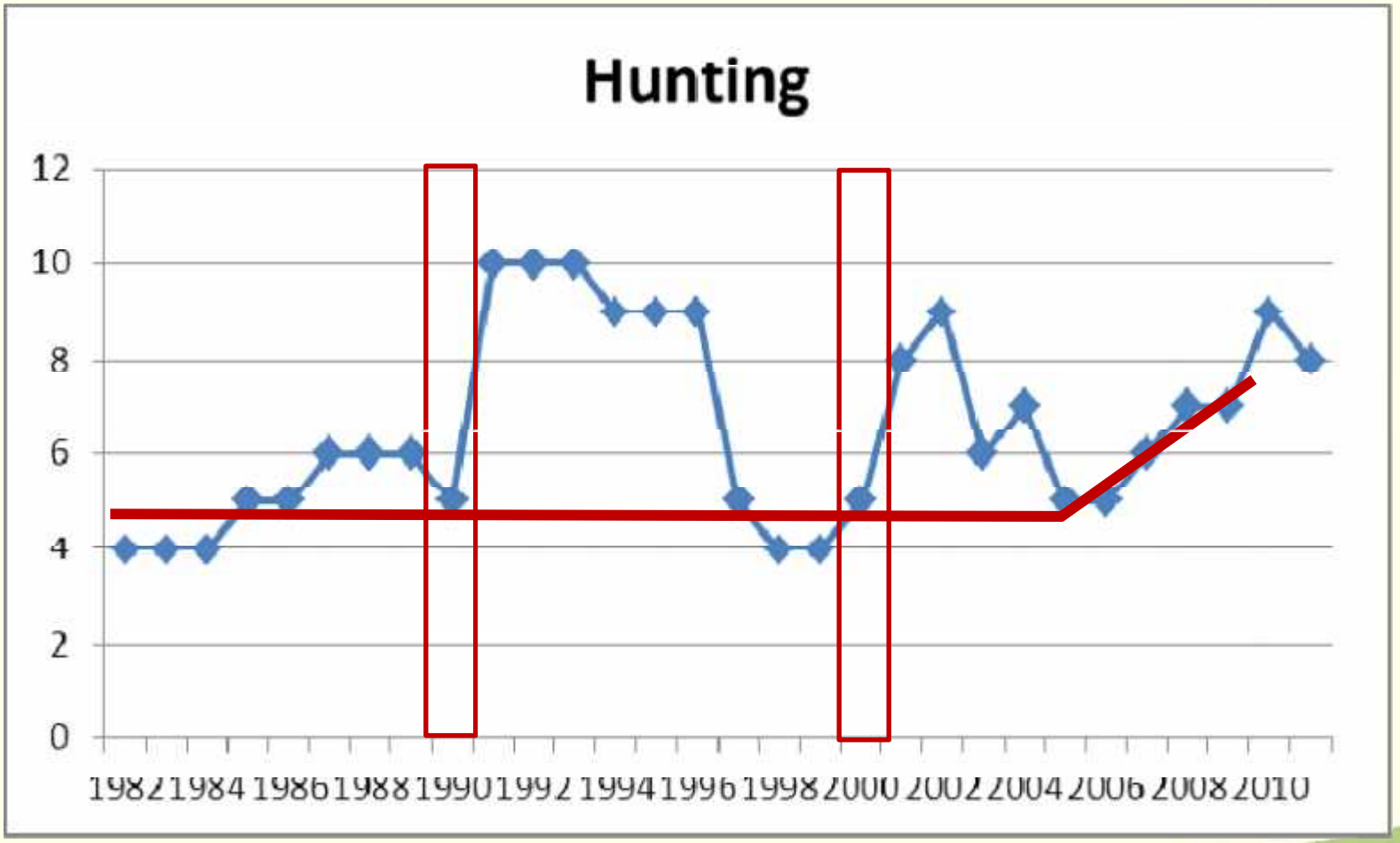
Costs Details I - Hunting



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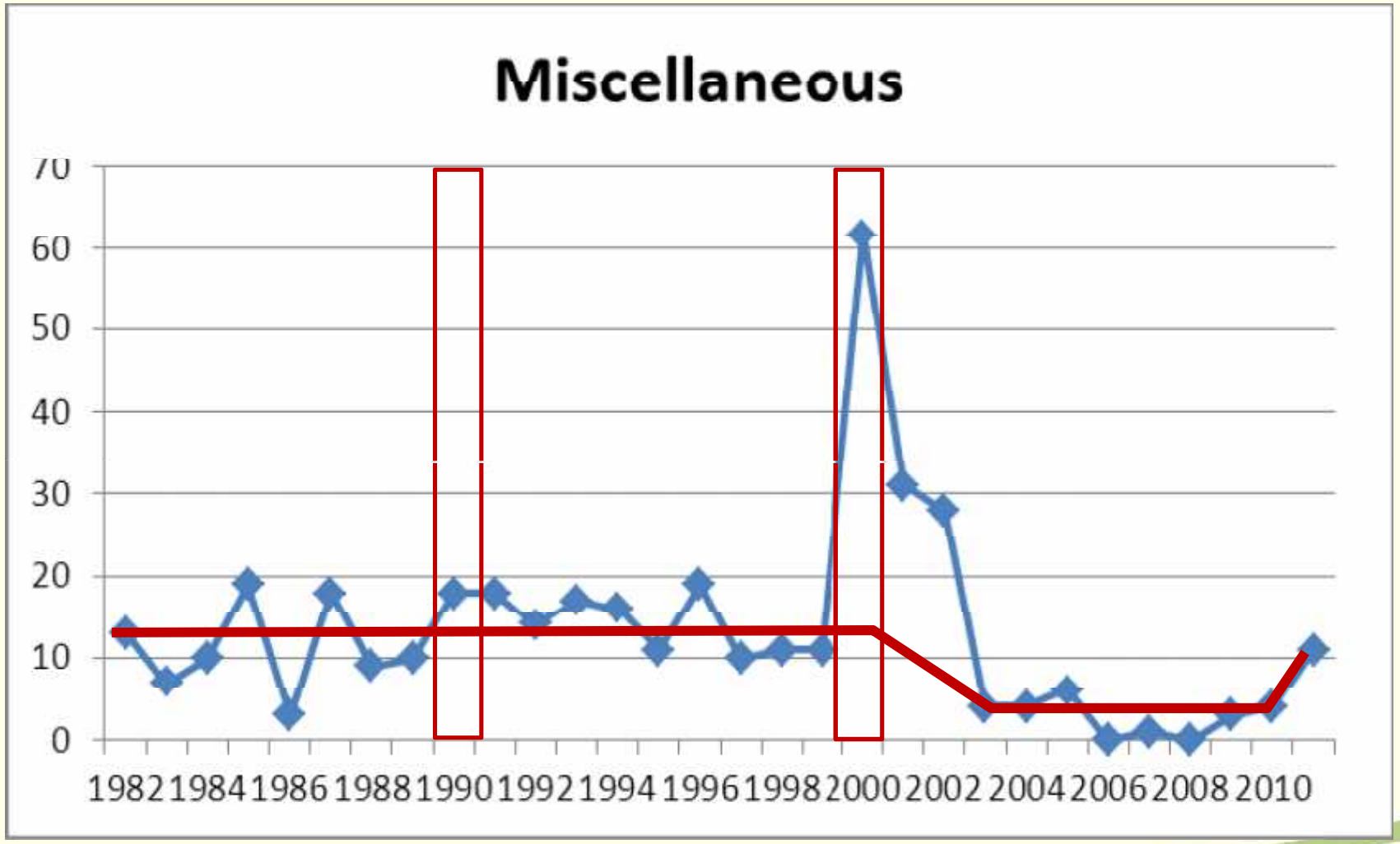
Costs Details I - Miscellaeous



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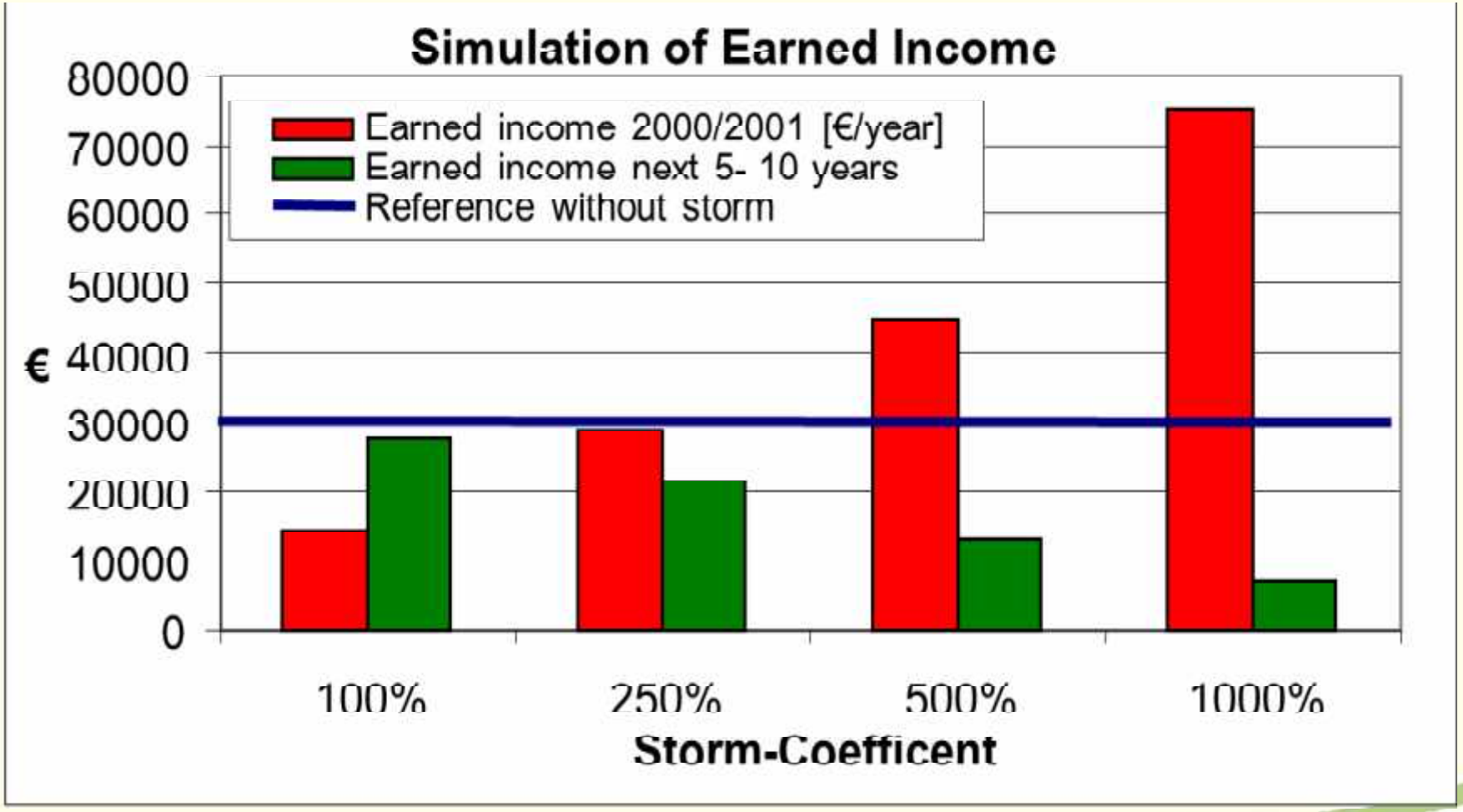
Small Scale and Communal Forestry I

	Amount of storm felled timber				
	30-50 Efm/ha	50-70 Efm/ha	>70 Efm/ha	threat to existance	Sum
Administrative Region Freiburg					
Number of Enterprises	281	84	140	59	505
ha	6532	2026	3715	1604	12273
Ortenau County					
Number of Enterprises	126	56	96	46	278
ha	3197	1456	2939	1424	7592

Small Scale and Communal Forestry II



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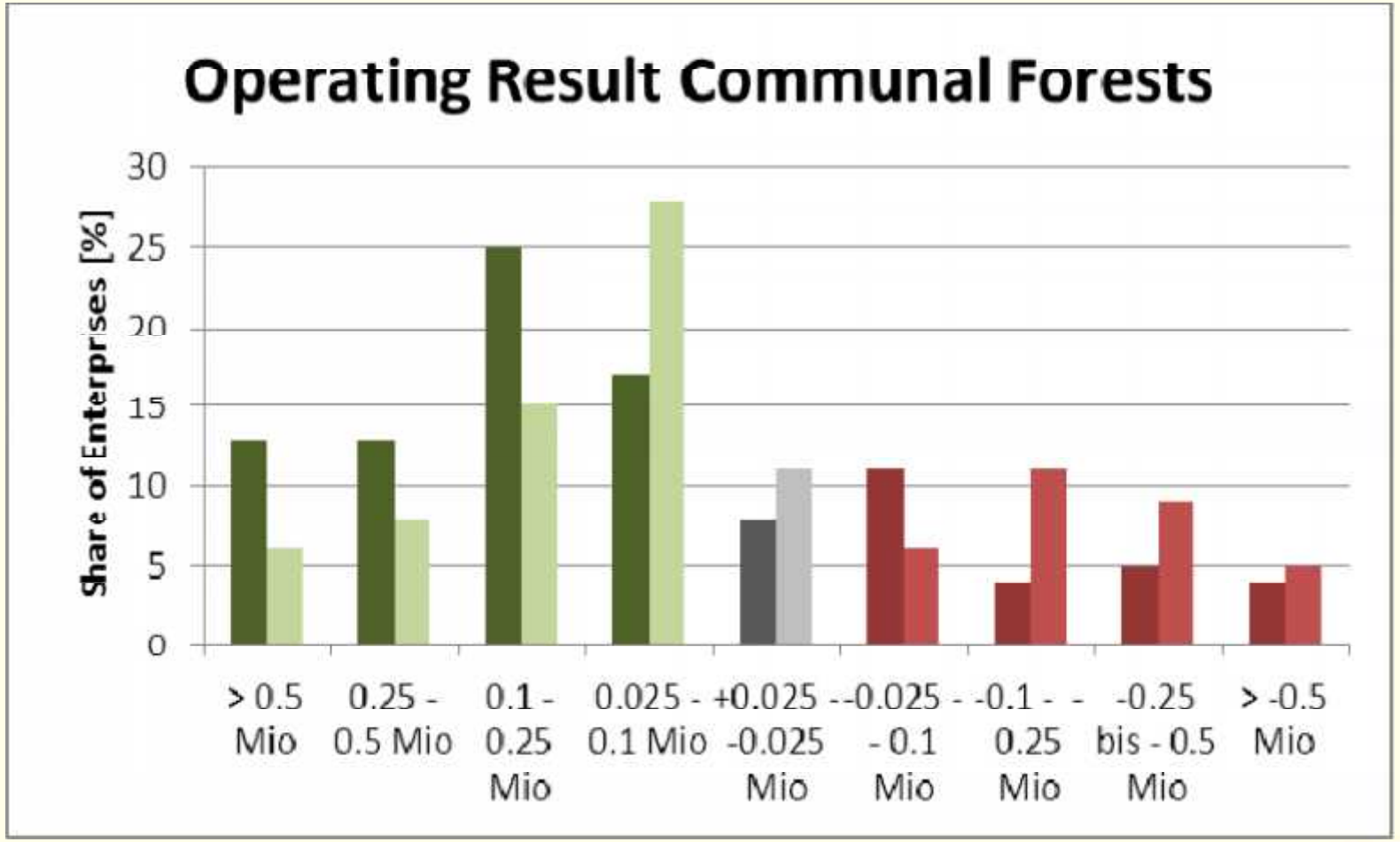
Small Scale and Communal Forestry III



Harvesting Costs I

It was known from the event 1990 that harvesting costs have the highest significance
Therefore a reserach project on harvesting costs was established

- Costs
- Performance of Harvesting

Qualitative study on cost for contractors

Unfortunately no detailed results possible

→ Tremendous amount of influencing factors

Harvesting Costs II

BHD	Procedure				
	Nr. 1, 8		Nr. 2, 3, 4, 5, 6, 7, 9, 10		Nr. 11, 12, 13
	chainsaw		Harvester / combined		Cable crane
	Gradient %		Gradient %		Gradient %
	-30	31-50	-30	31-50	>50
	Euro / m³				
21-30	22	28	21	29	51
31-40	24	25	23	24	36
>40	23	20	25	25	38
Mittelwert	23	22	22	25	42

Chainsaw = Harvester → prices paid for contractors too high (especially at the beginning of the campaign.
BHD = insignificant
Gradient = only very steep slopes matter.

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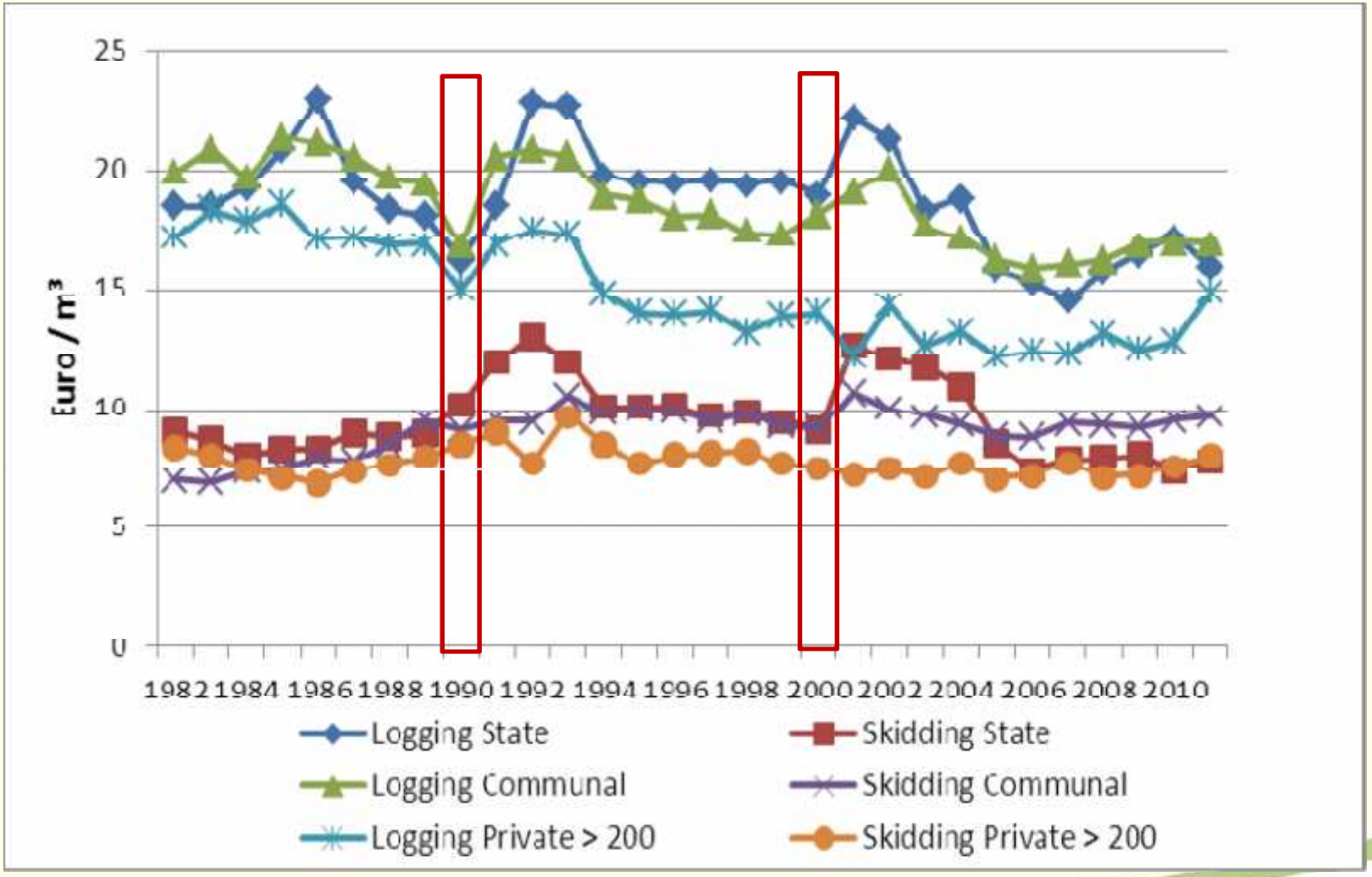
Harvesting Costs III – Long Term Oberservations



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Miscellaneous

Special accounting rules to secure funding for a controlling by the EU bodies