

The Persistence of Small Dairy Farms in Austria from an Economic Perspective

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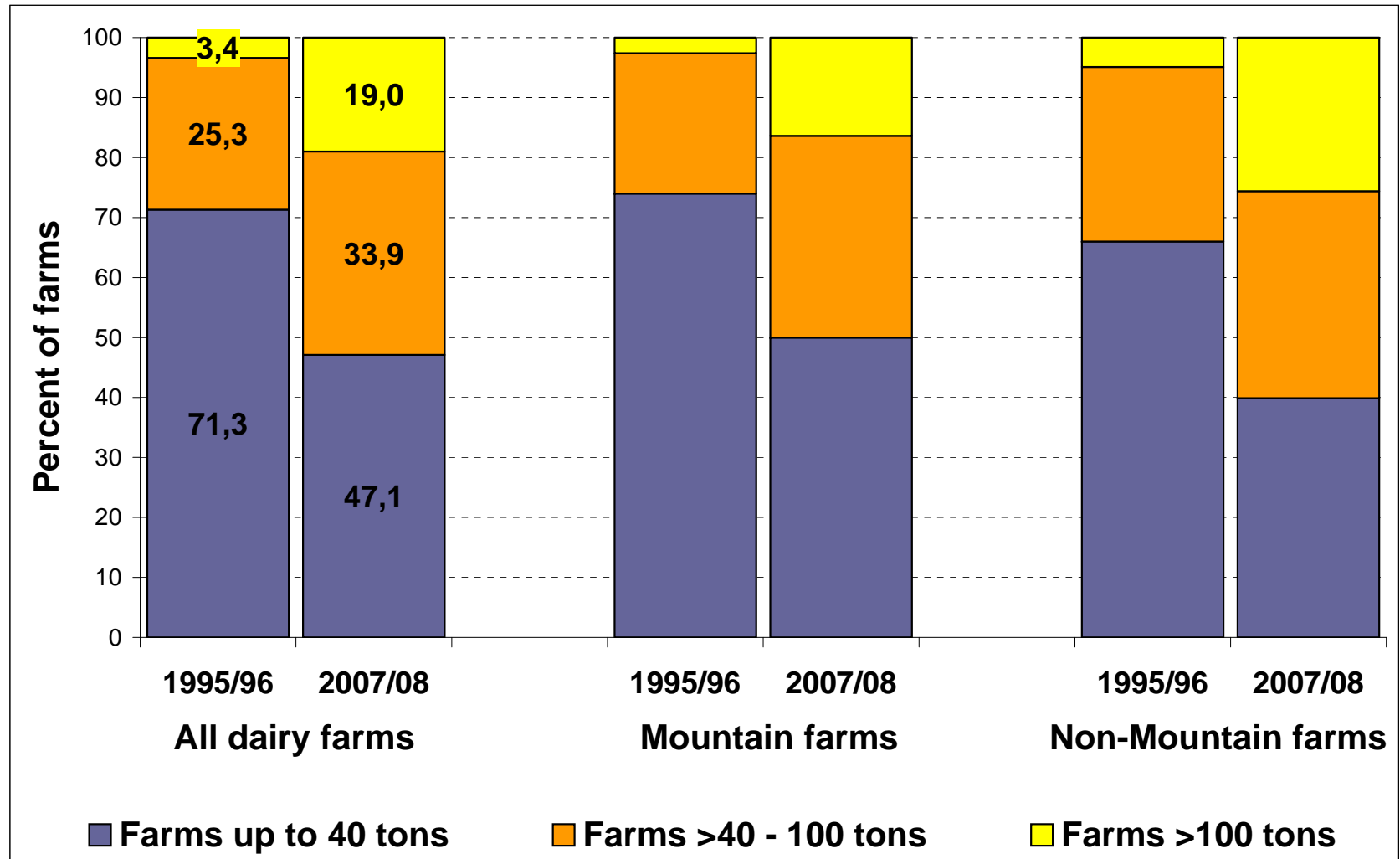
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Introduction

- Dairy farms in Austria are rather small
 - 64 tons of milk quote per farm in 2008
 - Half of the dairy farmers held less than 40 tons of milk quota
 - Definitely less milk cows than in many other EU-countries
- Smaller farms show higher production costs
- Conclusion: smaller farms are less competitive and quit farming in a liberalised environment
- Evidence: small dairy farms play still a dominant role

- Why do small farmers still milk their cows?
 - Explanations from theory and empirical data

Proportion of dairy farms by size classes in tons of milk quota in 1995/96 and 2007/08



Dairy farms 2007/08 by their change in milk quotas since 1995/96

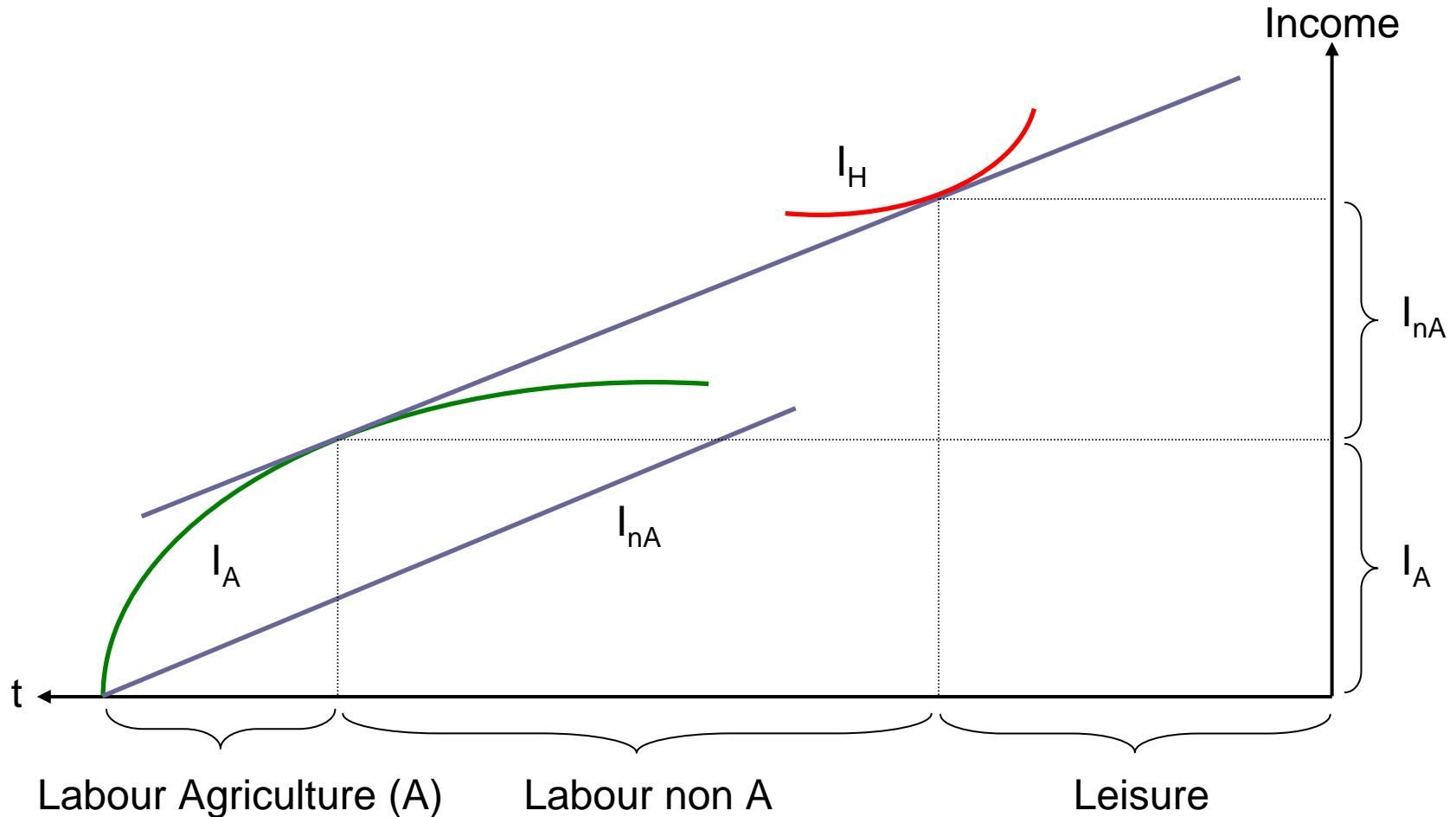
Change in milk quota	Dairy farms with		
	<= 40t	>40 <=100t	>100t
Negative	24.2	7.2	2.1
0 to 25 percent	54.5	33.9	10.5
>25 to 50 percent	10.5	20.8	13.9
>50 to 100 percent	7.1	22.0	25.6
>100 percent	3.7	16.0	47.9

Source: Invekos-Data (own calculation)

Theoretical Background and Method

- ❑ „Long-run milk is produced in competitive farms“
- ❑ Costs of production are often evaluated by production costs
 - Small farms usually exhibit higher production costs due to high opportunity costs (mainly for labour)
 - Analysis often use an uniform wage rate for a whole region
 - Different employment opportunities of family labour should be evaluated critically
- ❑ The role of the farm household
 - Characteristics of small family farms
 - Variable possibilities of income acquisition
 - => Theory of the farm household

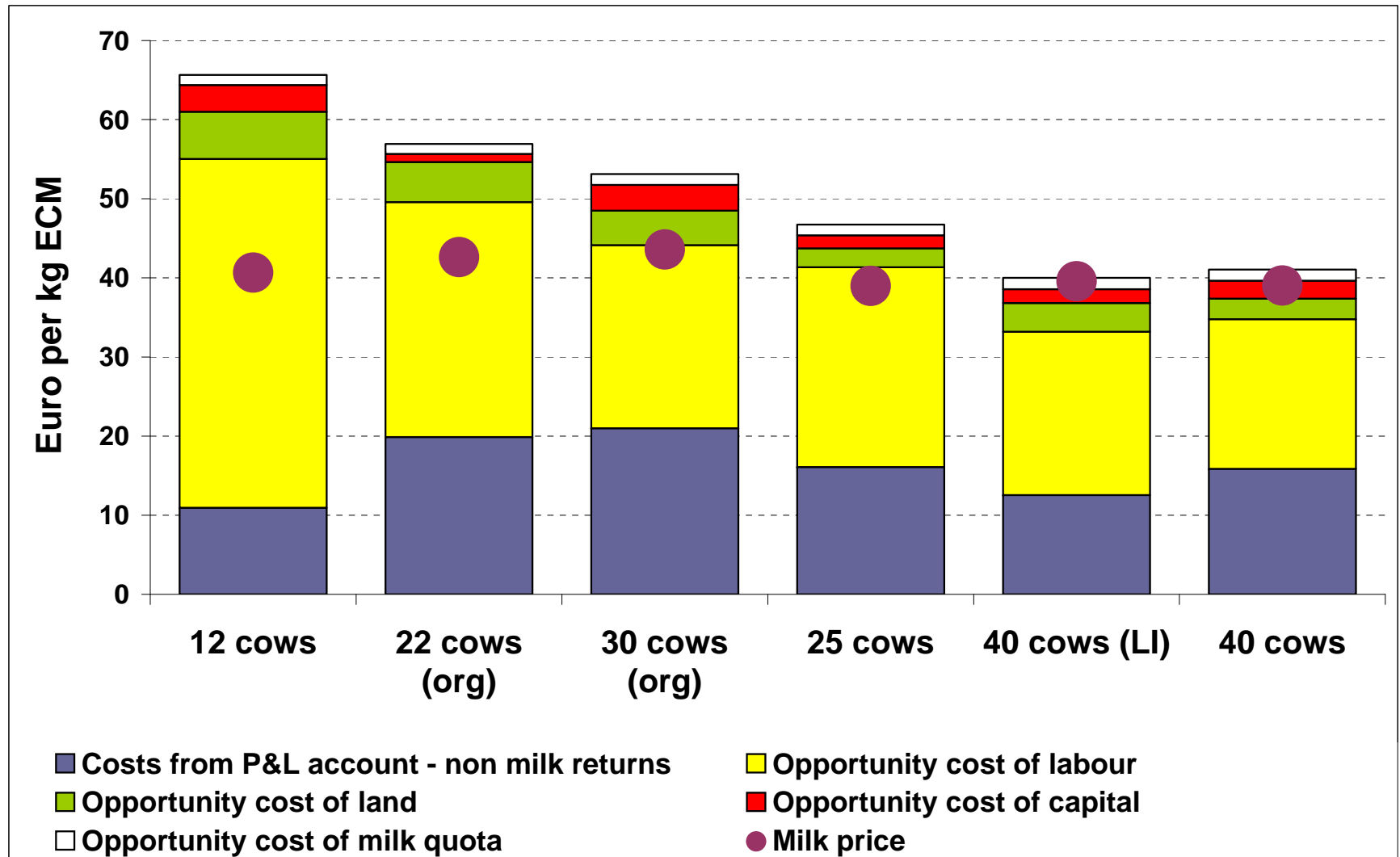
Theory of the farm household



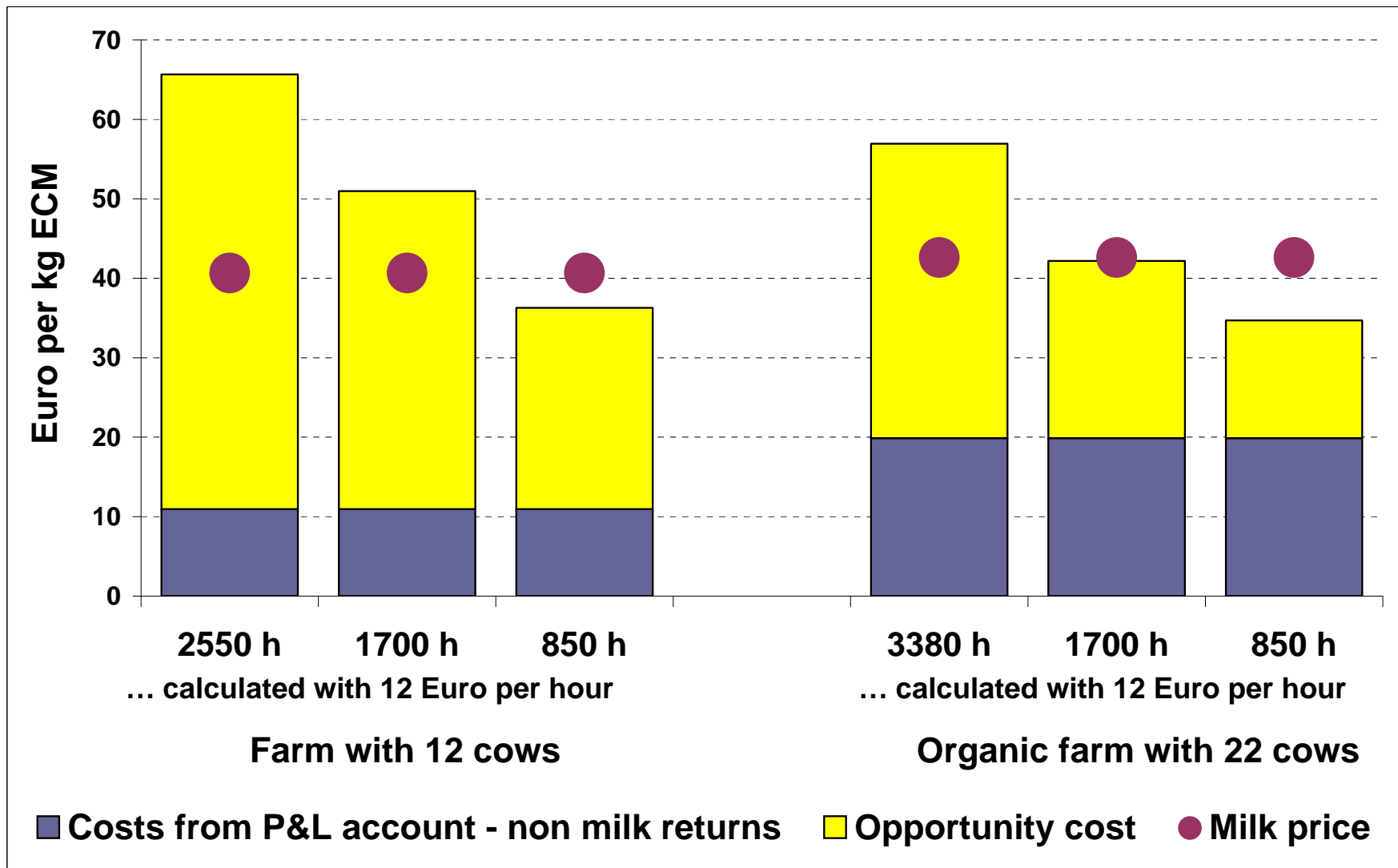
Source: according to Schmitt, Schulz-Greve und Lee 1996

Production costs and the role of individually assessed opportunity costs

Costs of milk in dairy farms in Austria

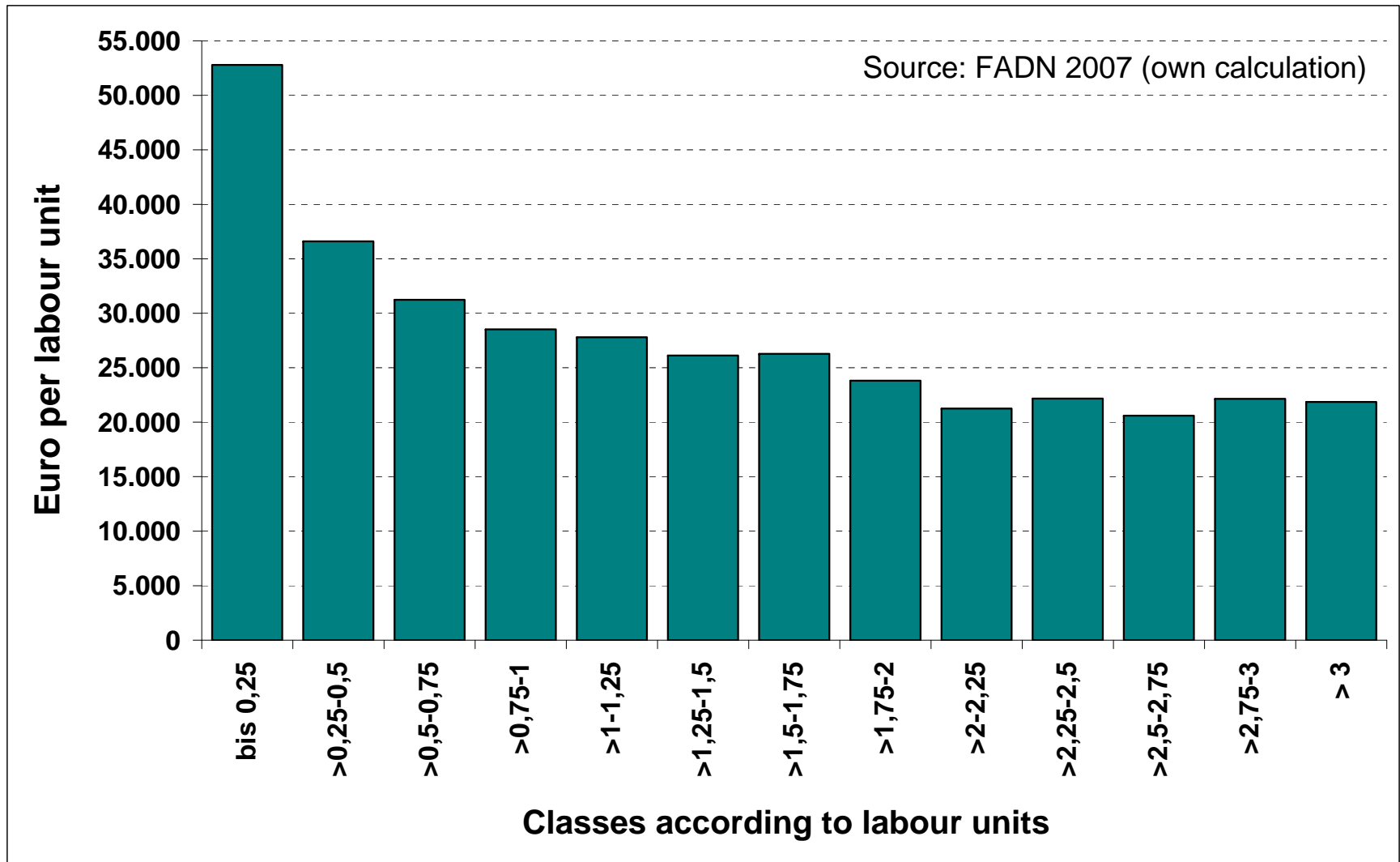


Costs of milk as a function of labour hours

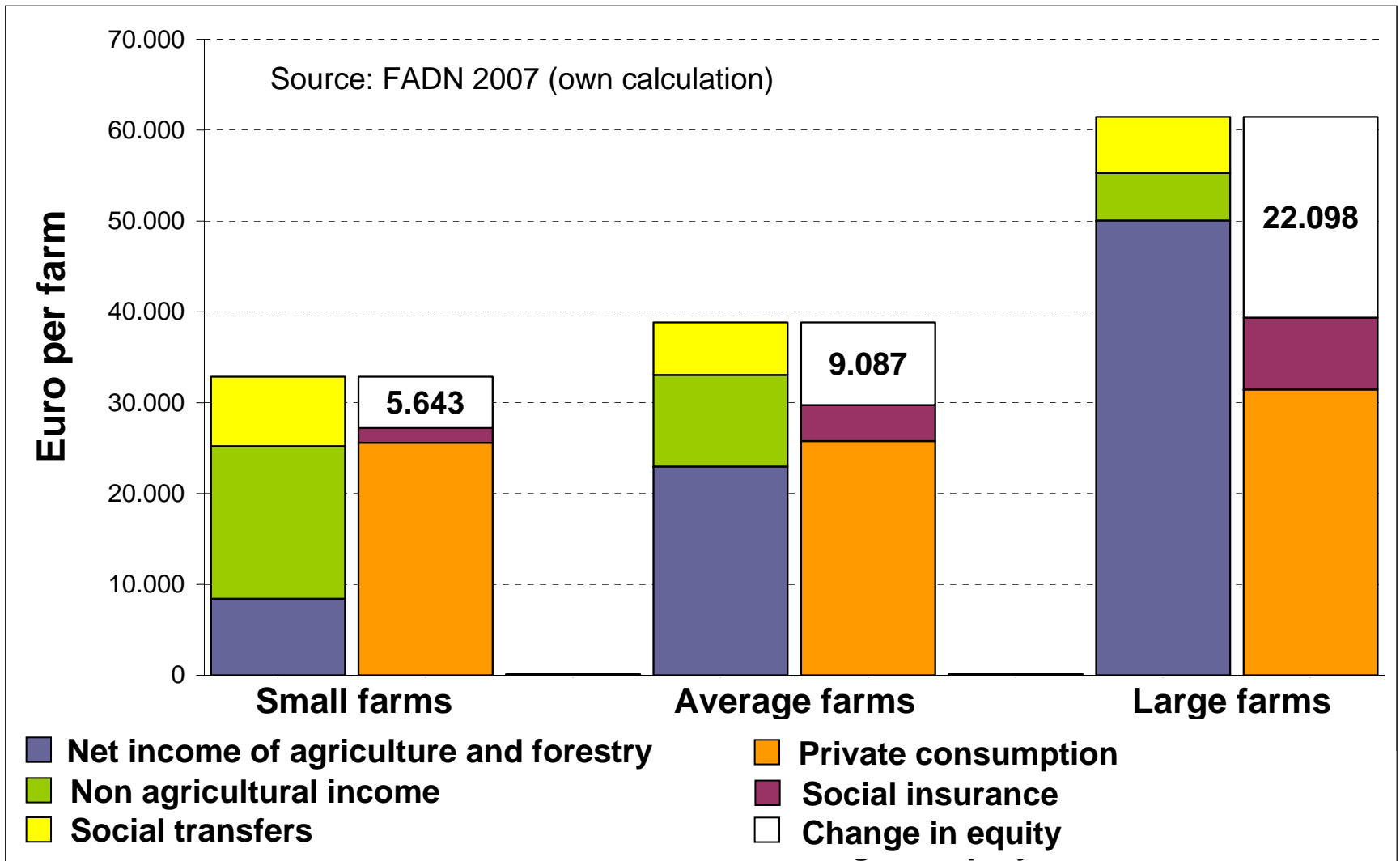


Indicators of farms and households (farm-household model)

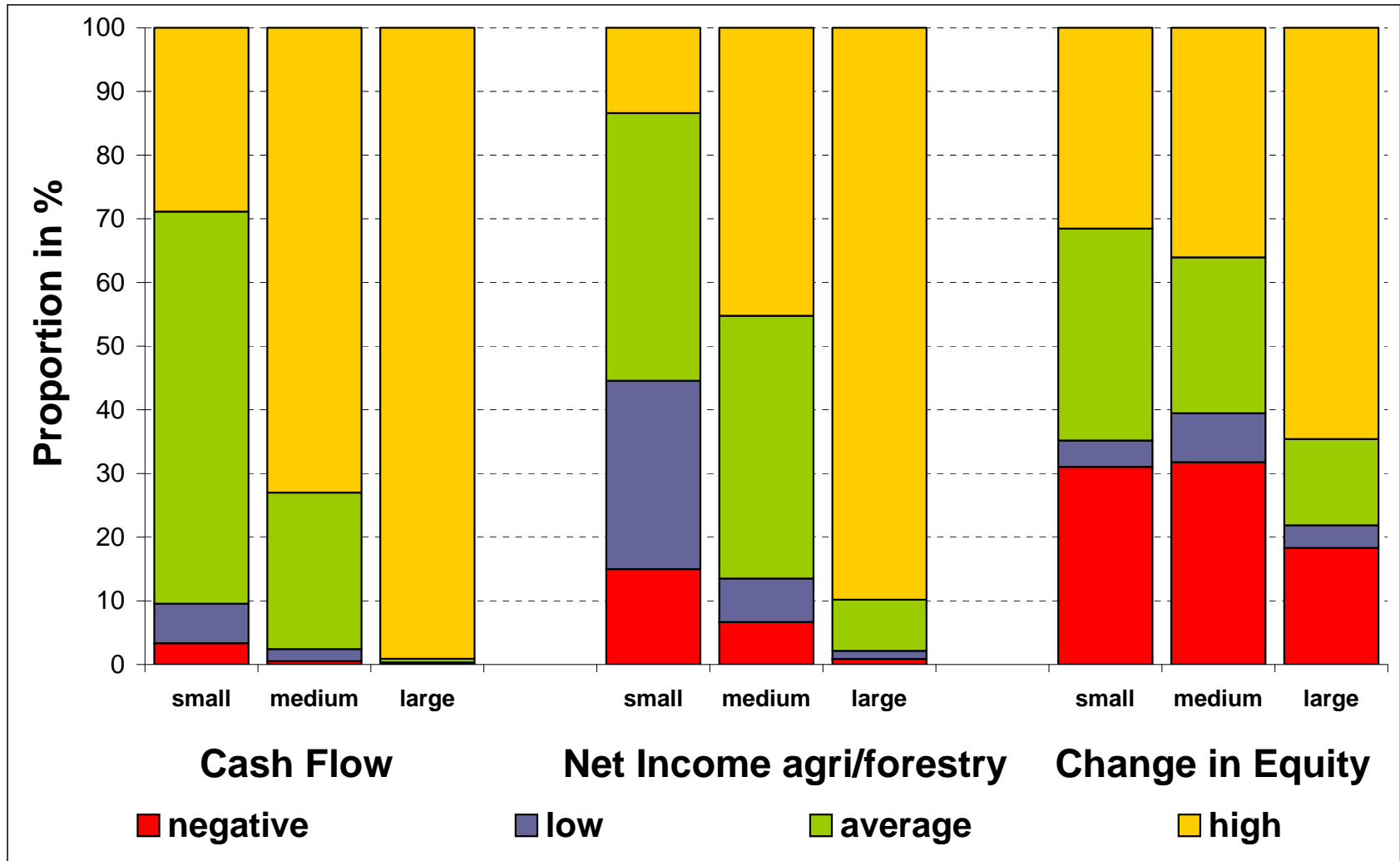
Income from Agriculture per labour unit



Change in equity by farms sizes



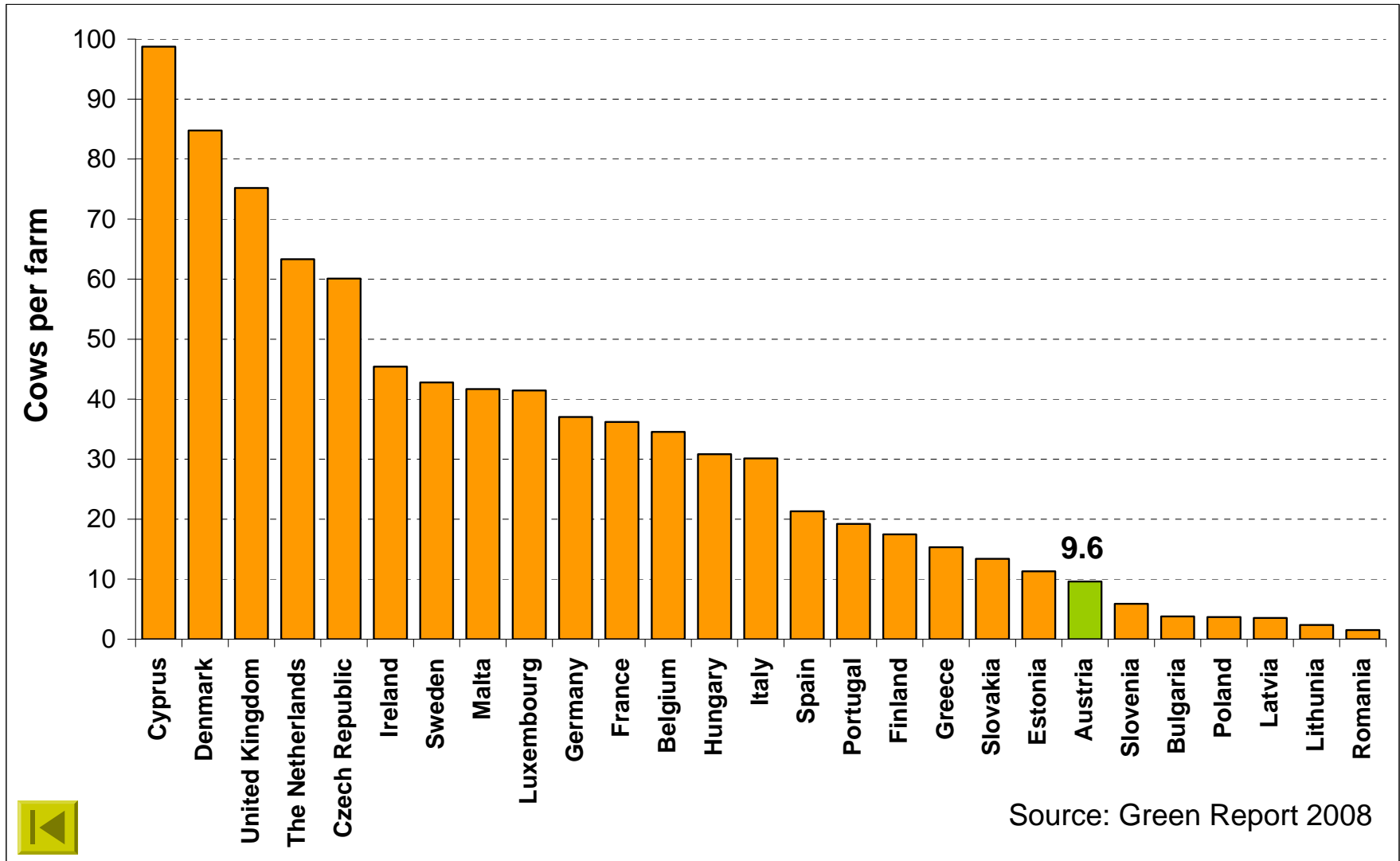
Share of farms exhibiting different levels of indicators by farm size



Discussion and conclusion

- ❑ The bulk of dairy farms operate at a small scale (today and in future)
- ❑ One explanation is provided by the opportunity cost principle
 - The costs for own factor inputs might be overestimated
 - Individual opportunities must be assessed
- ❑ The role of the household
 - Contribution to the household income
 - Household income outcompetes agricultural income
- ❑ The impact of non-economic aspects

Cows per Farm in the EU in 2008



Source: Green Report 2008

