

Fading of mechanical productivity enchants the need of new business models

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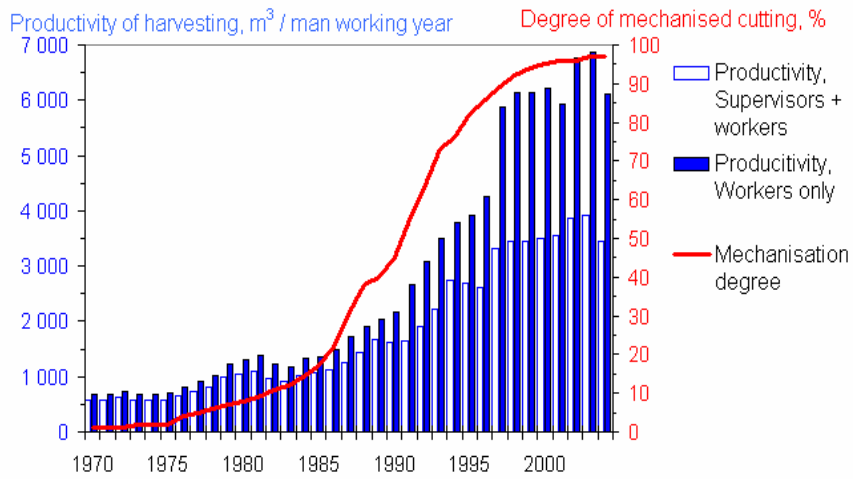
Contents

- *Productivity development = excellent ?
- * Cost pressures, profitability decrease, debt burden
- * New organisational models: cases and restructuring
 - Partnership in timber harvesting and transportation-case
 - Regional harvesting = key entrepreneurship -case
 - Especially industry will increase the size*
 - New business models
- Future challenges:
 - lack of loggers and education
 - profitability and heavy debt load
 - new requirements and developments

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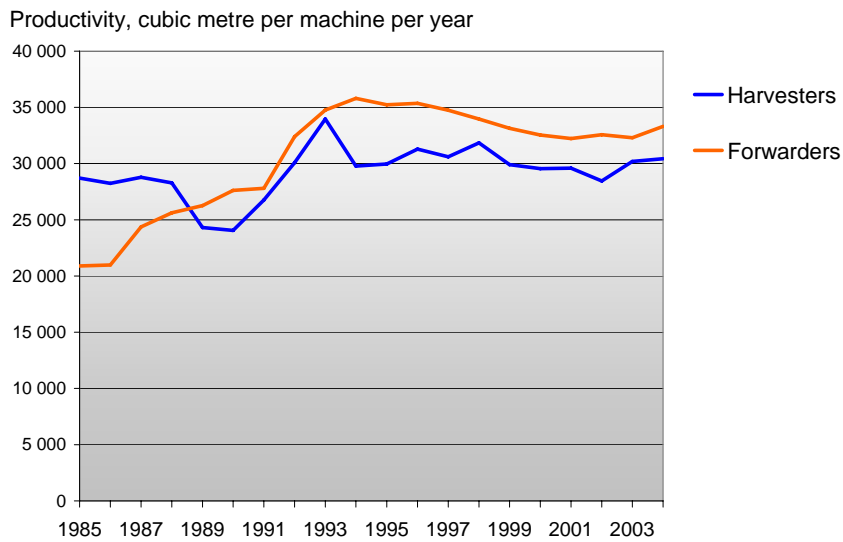
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Mechanisation No more help for productivity per worker



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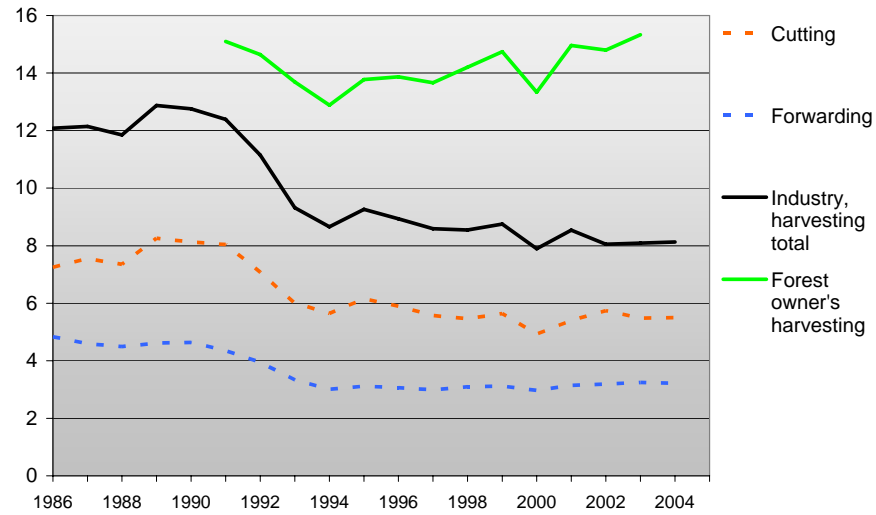
Poor conditions eat machine productivity growth



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Steady cost, pressures to increase

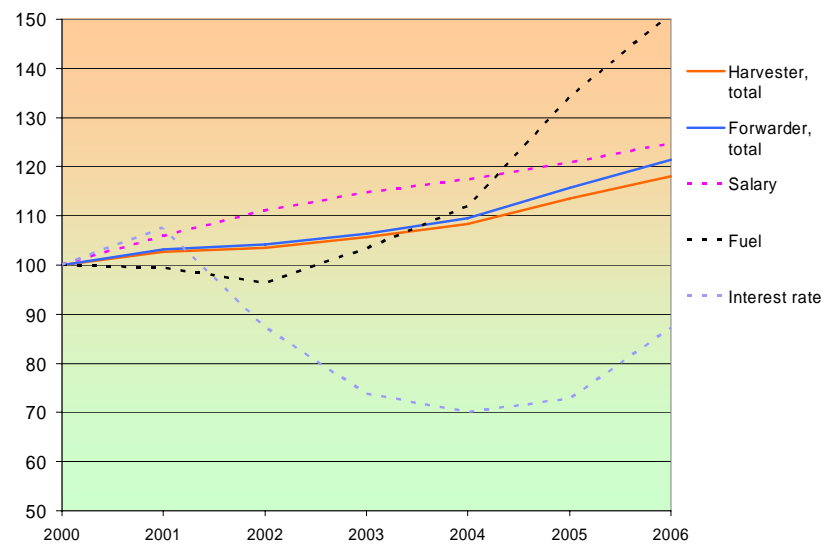
Cost, € / m³ (over bark) Deflated by wholesale index



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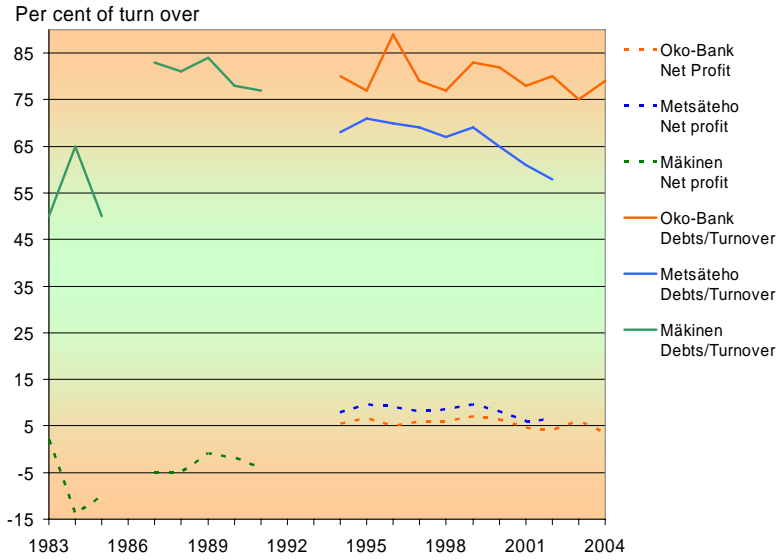
Cost pressures grow

Forest machine business cost index, Year 2000 = 100



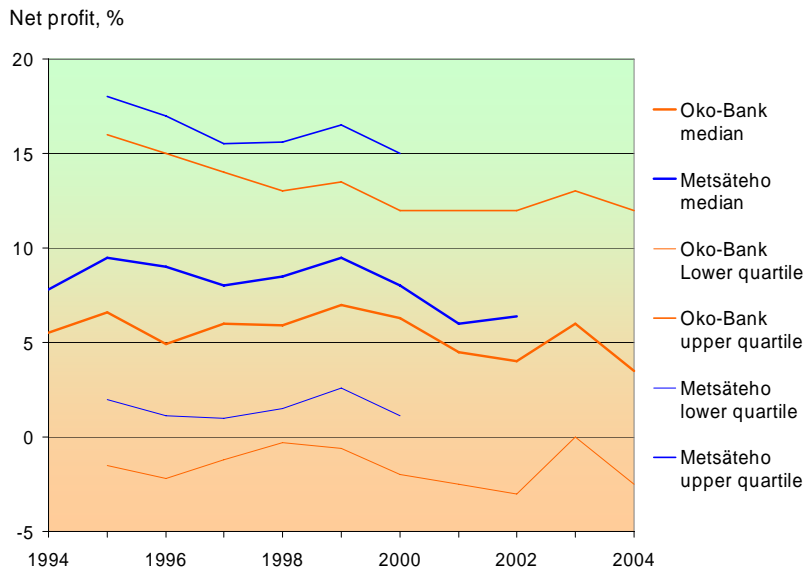
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Low net profits, high debts



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Net profits decrease



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Organisational developments

*Outsourcing of employees (& risks & investments) some 30 years

+ Narrow scope: 64% have one customer, 6% four or more
+ Geographical focus: range < 60 km

- Mechanisation and ICT implementation; but also
- working procedures and organisation of work; even
- environmental and quality issues new challenges
- increasing amount of thinning a trend

* Partnership: Finnish Forest and Park Service (State forests)
Transaction cost theory explained to a large degree
Trust-based control but supplier's certain skills → control

* Regional entrepreneurship: Metsäliitto Group & UPM

! Recruiting skilful operators problem in 75% of enterprises!

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Rapid development of timber supply and the contracting policy => partnership

• Increasing *specific investments* and greater *uncertainty* and/or *complexity* such as new logistic control systems, quality and environment management, changed logistic patterns => partnership-type relationships

Note: temporaries ↔ regulars ↔ partners

* Power-controlled relationship => partnership => better atmosphere => new values and norms => more balanced dependence between the parties

* Concentrated customer base, small company size, narrow scope of business => partnership even more interesting for a supplier

* Continuity, interaction, less control, development of supplier relationship, ...; balanced scorecard at the supplier level

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Experiences

- Criteria in the contracting: 1) co vision & strategies, 2) quality & env. issues 3) adm. 4) financial performance 5) training & experience, 5) vehicles & equipment, 6) invest. in learning
 - Targets and measures: 1) customer, 2) process, 3) learning, 4) financial perspectives
 - 'The lower the transaction costs associated with a particular contractual assembly of inputs the more likely selfinterested individuals will choose that method of organizing production'
 - Entrepreneurs +, activate+, price increases-, development projects cause costs and work even the entrepreneurs –
? still a star model of organising wood procurement
- ? Competition Council: contracts max 3 years & competition !

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Regional or key entrepreneurship

- Industry will increase the size and scope of contracts
- A response to economic and qualitative challenges ?
- In search of improvement and effectiveness
- Now 50% and target 70% of all actors in Metsäliitto Group, regional and key entrepreneurs: cover 1/3 of the volumes
- From star-shape to a pyramid model
- Incompatible ISs of the industry limits the development
- Requires sufficient marked standing reserve – for 6 months preferred - and economic resources
- Subcontractors afraid for the quality of marked stands and profitability
- What: Fusion+, cooperation models +?, main & subcontractor–
- When: longer contracts, better marked standing reserves, paid for extra work, rules to be clarified, regions not too big, ownership and update of ICT programs

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Business models

- From capacity business model (body & machine shop) to
 - ⇒ partnership business model: regional entrepreneur / partner
 - service product business model (product platform)
 - solution business model
- * Development reminds that of shipyards (Jouko Toivonen) and metal industry (Ulla Lahtinen)
- * Forest cluster: extensive outsourcing & better productivity
- Transaction cost theory: minimise transaction costs "friction"
- Every even sub-activity creates value to the customer
- Value destruction (Tapio Ranta)

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Summary

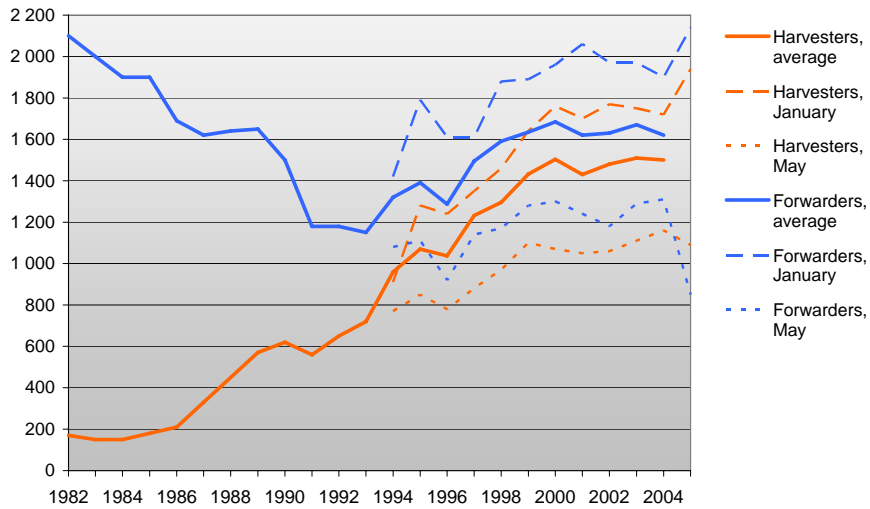
- 1500 harvesters, 1600 forwarders, 4 machines / enterprise
- Productivity studies e.g. thinning with alternative machines
- Profitability, productivity, cost and debt development known
- ICT quite heavily applied, few studies
- Vertical co-operation: all entrepreneurs with more than 4 forest machines interested in regional entrepreneurship; enterprises more in charge of planning and control
- Horizontal integration: only few examples
- Regional entrepreneurship only inter-period (Contractors)

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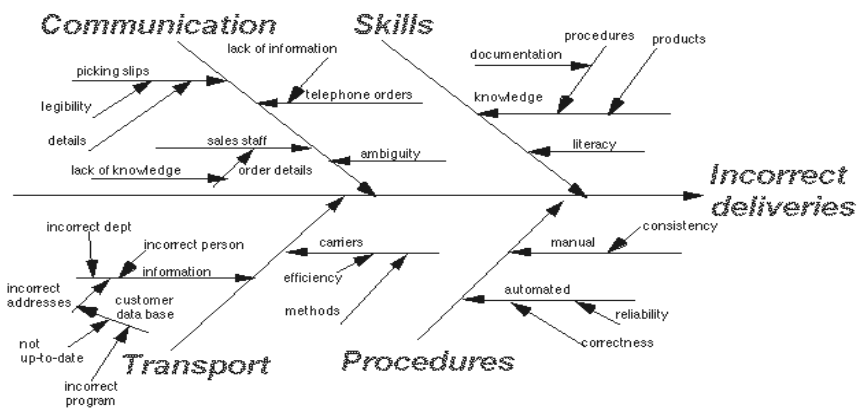
Number of machines steady Monthly variation big

Number of working machines



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Summary



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