Earning Capacity

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Earning Capacity- introduction

- ▶ Farm Net   Result
- ▶ EU definition of Farm Size
- ▶ Farm Earning Capacity
- ▶ Some results

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Scheme Net Farm Result (source LEI Wageningen)

Revenues (base for SO)	Margin (base for SGM)			Factor costs	Net value added (base for SEC)
		Net farm result			
		Labour	Entrepreneurs		
			Family		
			Paid labour		
		Interest and rent	Own assets		
			Debts		
			Rent		
	Direct costs	Depreciation		Non factorcosts	
		Maintenance, fuels, energy, contract work, overhead costs			
		Feeding stuff, animal health			
		Seed and seedlings, mineral costs, crop protection			
		Other direct costs			

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Farm Net Result: example

▸ Results from 2017
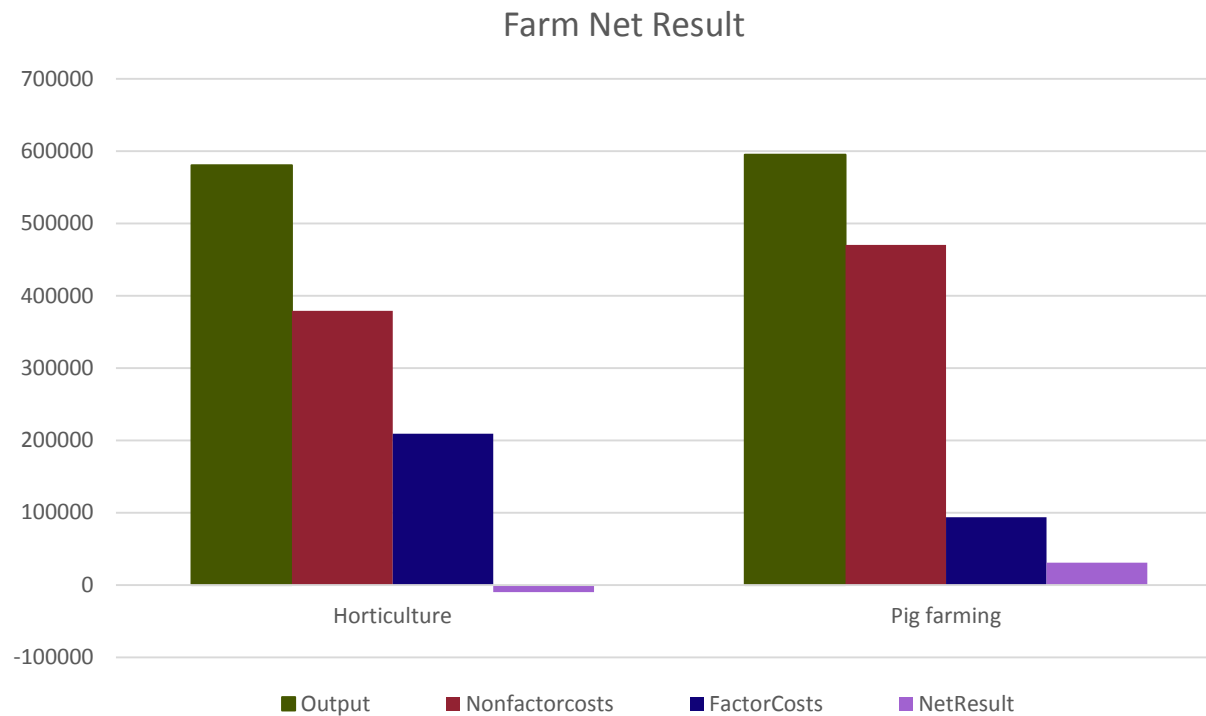
Farm Net Result

Farm Net Result : example

▸ Horticulture
→ 580000 Euro output
→ 65% of output are non factorcosts
→ 35% remains for factor costs
→ 4,75 AWU

▸ Pig farming
→ 595000 Euro output
→ 78% of output are non factor costs
→ 22% remains for factor costs
→ 1,75 AWU

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What about Farm Size?

▶ Use
→ Reporting on agricultural income
→ Region , Type of farming and Farm Size

▶ Type of farming and Farm Size
→ < 2010 Standard Gross Margin
→ > 2010 Standard Output

▶ Difficulties SO
→ Not strongly realated with labour and Farm Net Value added
→ Farm Size 'not comparable different Farm types

▶ Can farm size be based on earning capacity ?
→ Back to the example

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Data and methodology

▶ FADN Farm results
▶ LMN2 Activities mapped to SO EUcode
▶ SO EUcode grouped to EC code
▶ Output from crops, livestock and products
▶ Non factorcosts
▶ Earningcapacity

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SEC grouping

- Should allign with SO groupings
  - → Easier calculation
- Examples of SEC grouping:
  - → P15
    - ✕ 2.01.01.01   1926   Common wheat and spelt
    - ✕ 2.01.01.03   1160   Rye
    - ✕ 2.01.01.04   1688   Barley
    - ✕ 2.01.01.05   1522   Oats
    - ✕ 2.01.01.06   1528   Grain maize
    - ✕ 2.01.01.99   1614   Other cereals

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Calculation of the coefficients

▶ Individual farm activity
  → Output
  → Non factor costs=direct costs + depreciation + maintenance costs + overhead costs
    ✕ Allocation of these costs to the agricultural activities
  → Net value added=output-non factor costs
  → Earning capacity=output-non factor costs/output
▶ Statistics
  → Linear Regression
  → Descriptive , weigthed average

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Regression analysis cereals

▸ Earningcapacity, 2013-2017, cereals
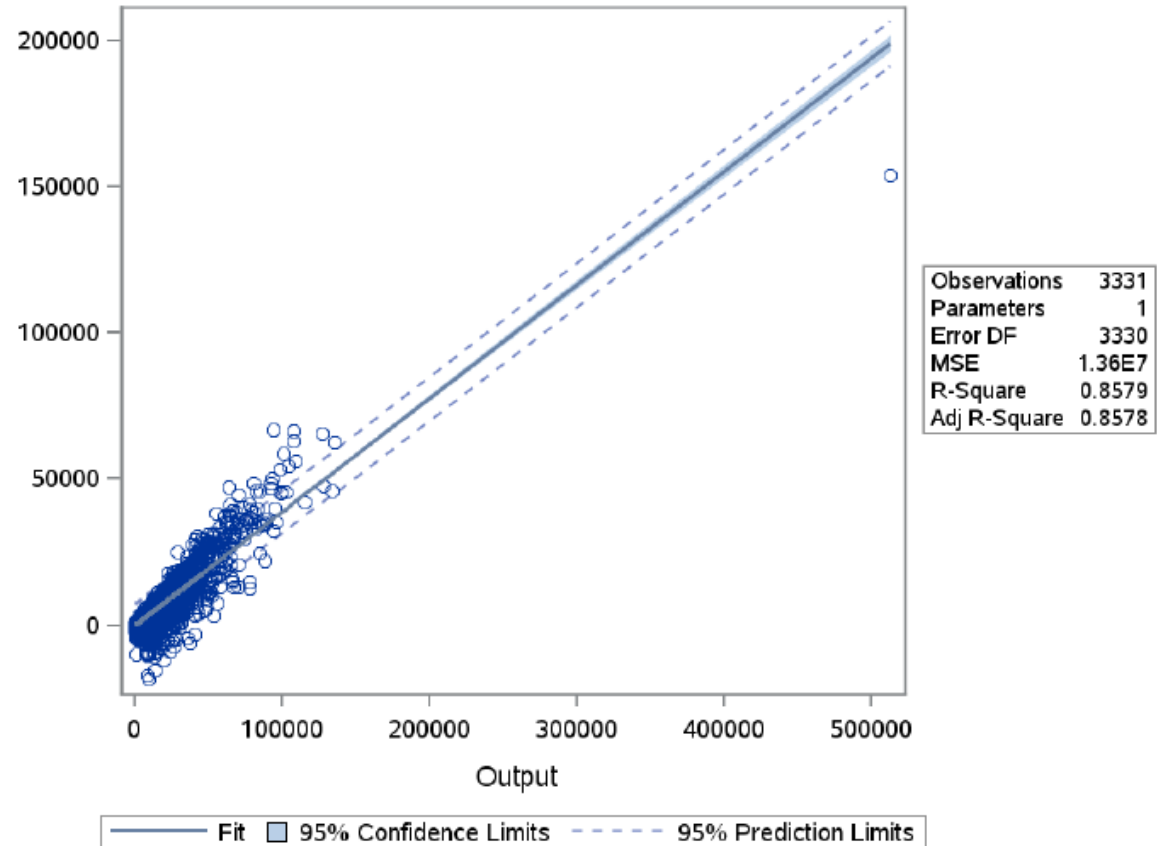
Crop production, earning coefficents

Description	ECode	ECoefficient
→ Cereals	P15	0,379
→ Oil crops	P16	0,293
→ Potatoes and sugar beets	P17	0,522
→ Vegetables - outdoor - open field	P1GR	0,291
→ Fodder crops	FC	0,173
→ Other arable fieldcrops	P1	0,239
→ Mushrooms	P2CH	0,246
→ Vegetables -under glass	P2GG	0,121
→ Vegetables - outdoor - market gardening	P2GR	0,301
→ Flowers - under glass	P2SG	0,211
→ Flowers - under glass	P2ST	0,454
→ Fruit and berry plantation	P3F	0,31

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Results animal production

Description	ECode	ECoefficient
→ Dairy cattle	P4MV	0,173
→ Other cattle	P4RV	0,05
→ Fattening calves	P4VK	0,137
→ Goats	P4G	0,414
→ Sheep	P4S	0,102
→ Breeding pigs	P5FV	0,207
→ Fattening pigs	P5VV	0,115
→ Laying hens	P5LPV	0,203
→ Broilers	P5SPV	0,172

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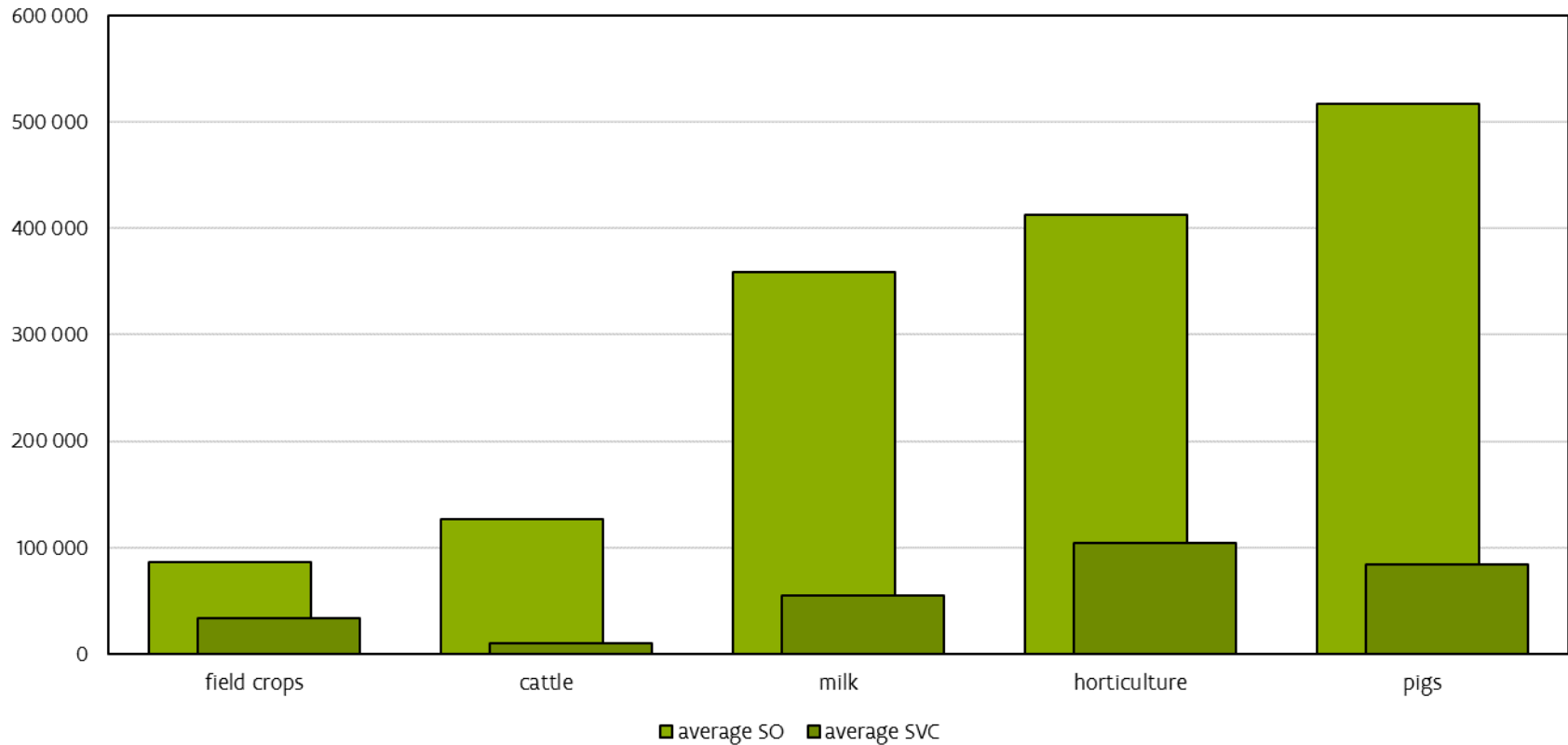
Calculation Standard Earning Capacity

▸ SEC= sum of Intermediate SO-groupresult X Earningcoefficient

▸ Example   farm mixed crops – livestock

→	SO (Euro)	ECoeff	SEC (Euro)
→ P15- Cereals	75000	x0,379	28425
→ P5FV– Pigs	75000	x0,207	15525
→ TOTAL	150000 Euro		43950 Euro

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Standard earning capacity

SO >= 25.000

Results on agricultural farms in the FSS

Farmtype	n	SO >	SEC >		
		25.000	5.000	10.000	20.000
Field crops	10.764	30%	40%	28%	17%
Dairy	2.685	100%	100%	98%	88%
Granivores	2.929	99%	98%	95%	86%
Cattle	4.214	65%	29%	17%	8%
TOTAAL	32.293	59%	58%	50%	40%

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Farms with direct payments

Farmtype		SO >	SEC>		
	n	25.000	5.000	10.000	20.000
Field Crops	6.376	48%	64%	46%	27%
Milk	2.676	100%	100%	98%	88%
Granivores	1.930	100%	99%	98%	92%
Cattle	3.590	73%	33%	20%	9%
TOTAAL	21.727	76%	73%	63%	50%

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Age of the farmer (average)

	Age	SEC <			SEC >		
		5.000	10.000	20.000	5.000	10.000	20.000
Field crops	59,6	60,7	60,7	60,6	57,9	56,7	54,5
Milk	47,9	62,3	60,2	55,5	47,9	47,7	46,9
Granivores	50,0	54,2	55,0	55,6	49,9	49,8	49,2
Cattle	58,0	59,9	59,4	58,8	53,2	51,2	48,7

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Conclusions

▶ Can farm size be based on earning capacity ?
  → First impressions: yes

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