# Calculation of Redistribution Payment Models based on Austrian FADN-Data

**PACIOLI Workshop**

**1st of October 2018**

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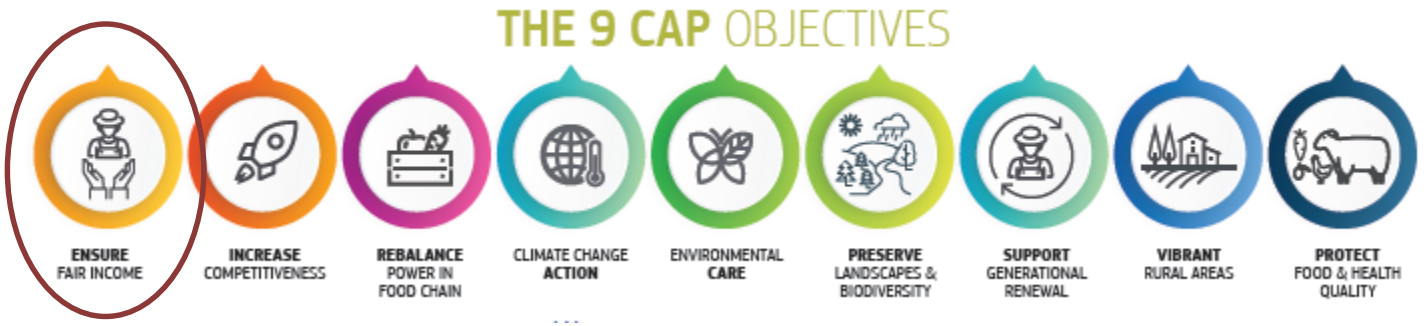
# Introduction

1st of June 2018: European Commission (2018) presented legislative proposals on the Common Agricultural Policy (CAP) beyond 2020



# Initial situation

- The historical model of direct payments (pillar 1) applied in Austria will gradually be converted to a so-called "regional model" by 2019
- In addition, coupled support (cattle raising for sheep, sheep and goats) and financial support from young farmers are paid
- In the agricultural policy discussion for the CAP from 2020 following topics are addressed:
  - a redistribution payment toward smaller farms
  - the capping of direct payments
  - coupled payments for certain products (e.g. suckler cows, sugar beet)

# Fact based agricultural policy using

- IACS data
  → to display the changes +/- in **payments** per farm (static)
- Multiannual FADN data
  → to display changes +/- in **income** per farm and labour unit (static)
- Modelling of changes in agricultural policy and prices of products with the objective to maximize farm income (dynamic, in progress)

# Data and their sources

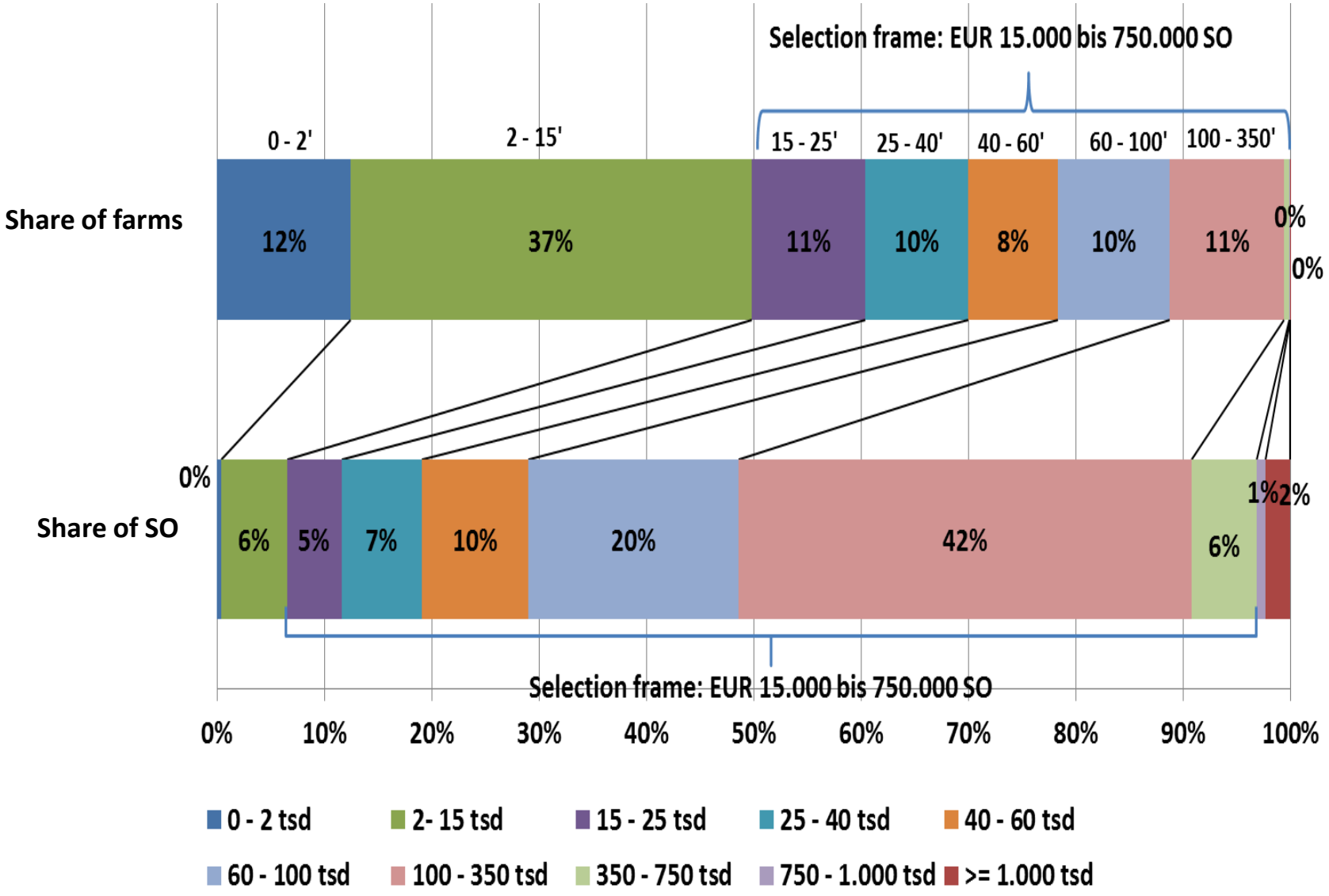
- Individual annual accounts (accounting results) of the 2.000 sample farms (2013 – 2016) (Source: LBG Austria, Efile 2016)
- IACS data 2016 (direct payments data 2016, broken down by basic premium, greening premium, top-up young farmers and coupled payments on pasture land) (source: BMNT)
- ASS 2016: calculation of the sampling plan and the operating weights (Source: Statistics Austria, calculated by AWI)
- Link file between FADN- and IACS farms
- Extrapolation results of accounting data for the years 2013 to 2016 for the determination of average income from agriculture and forestry

# Status quo analysis FADN 2013-16

- Using structural data of 2016
- Recalculation direct payments to the value of 2019 (adjustment of the premiums in the 1st pillar)
- Consideration of yield and price fluctuations using correction factors
- New extrapolation of „farm income results“ for the (fictional) year 2019

**Results of these 2019 „farm Income results“ will be used for modelling of agricultural policy measures**

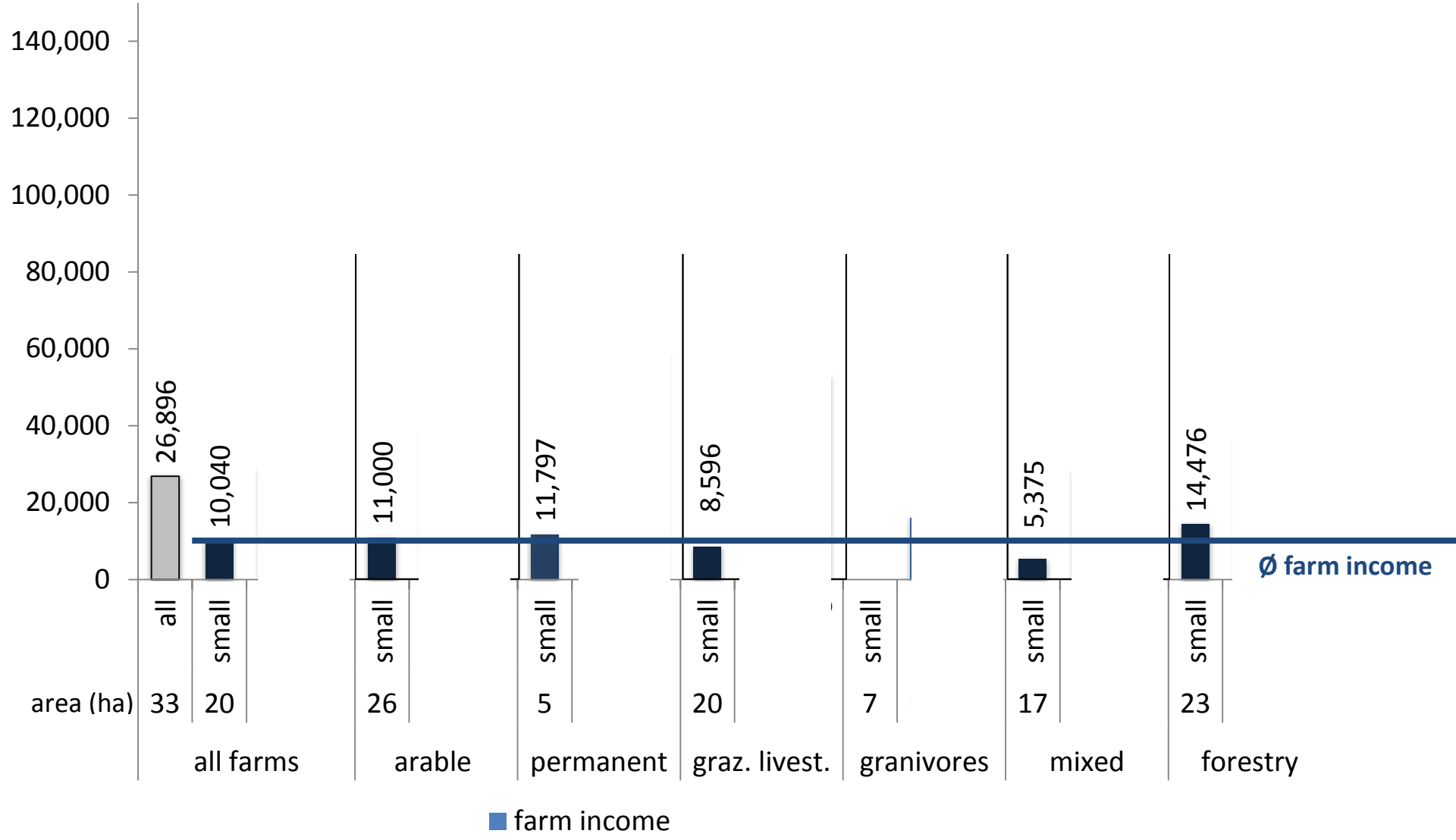
# Structural data of the population




Source: Statistik AUSTRIA, Calculation: Federal Institute of Agricultural Economics

Status Quo

## Modell 1 - 20 ha / EUR 100 redistributive payment (= 21,04 %) in EUR/farm




small: SO 15‘-40‘ medium: SO 40‘-100‘ big: SO 100‘-350‘



Source: FADN Data, Calculation: Federal Institute of Agricultural Economics

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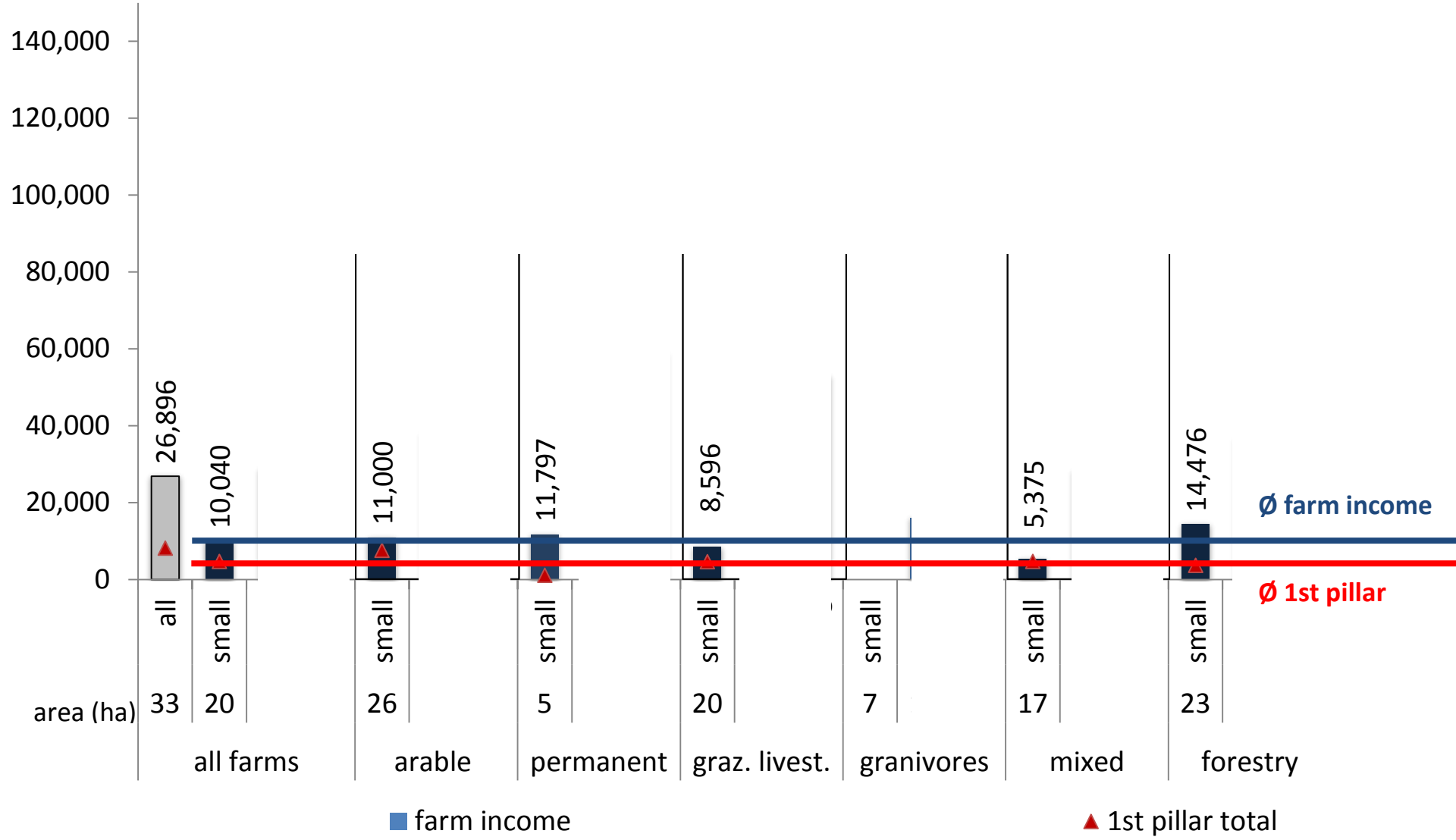


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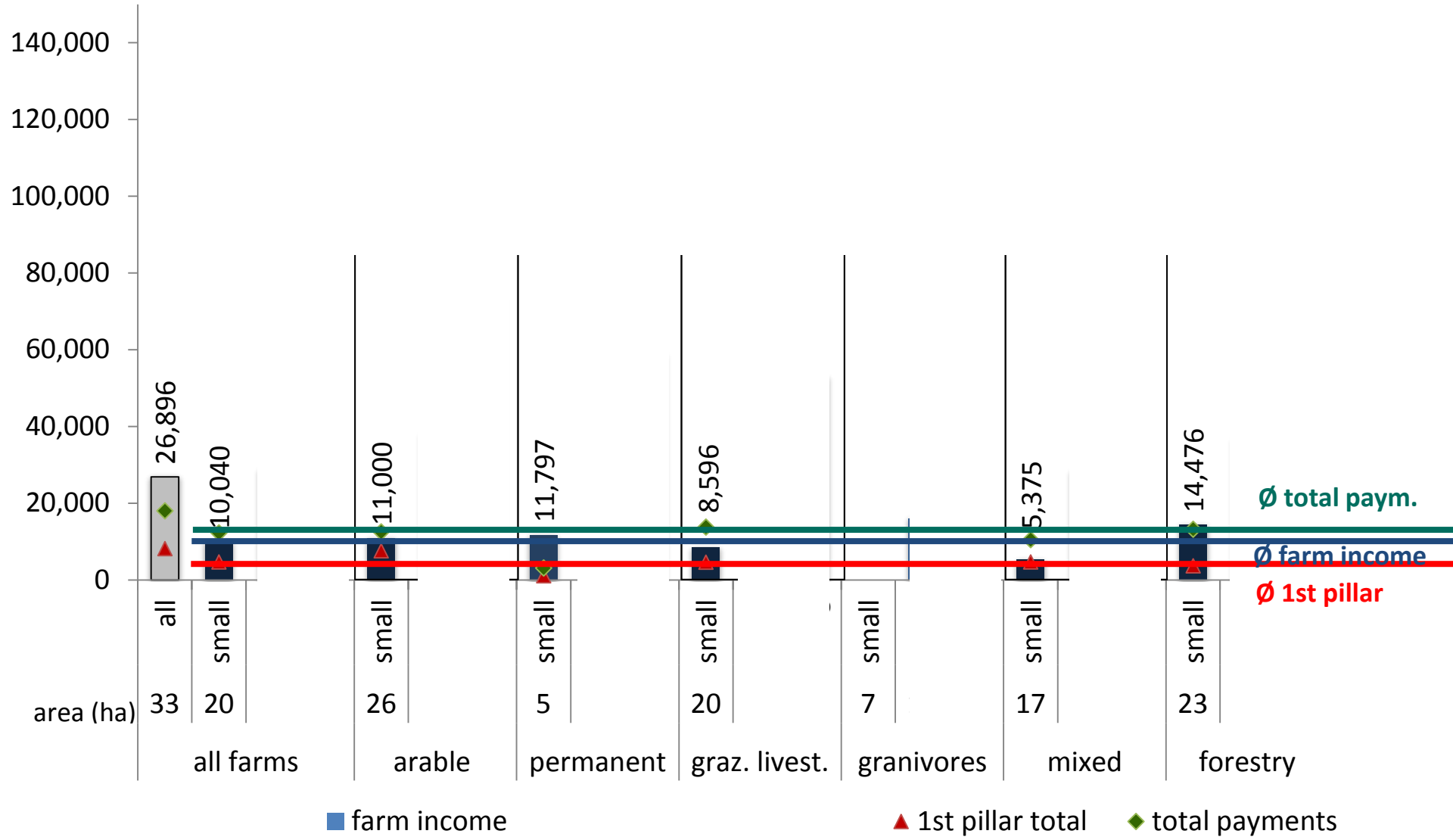


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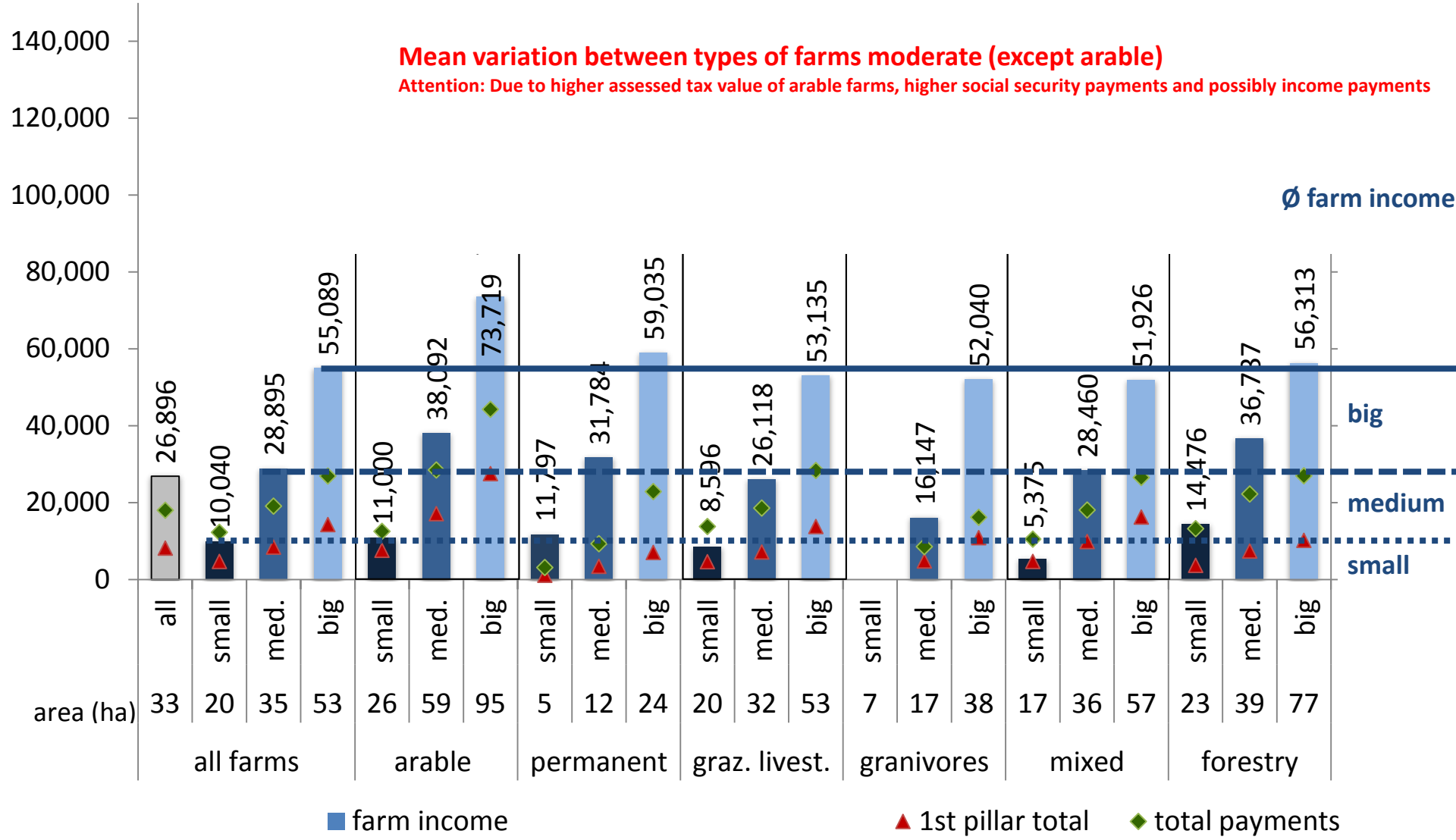


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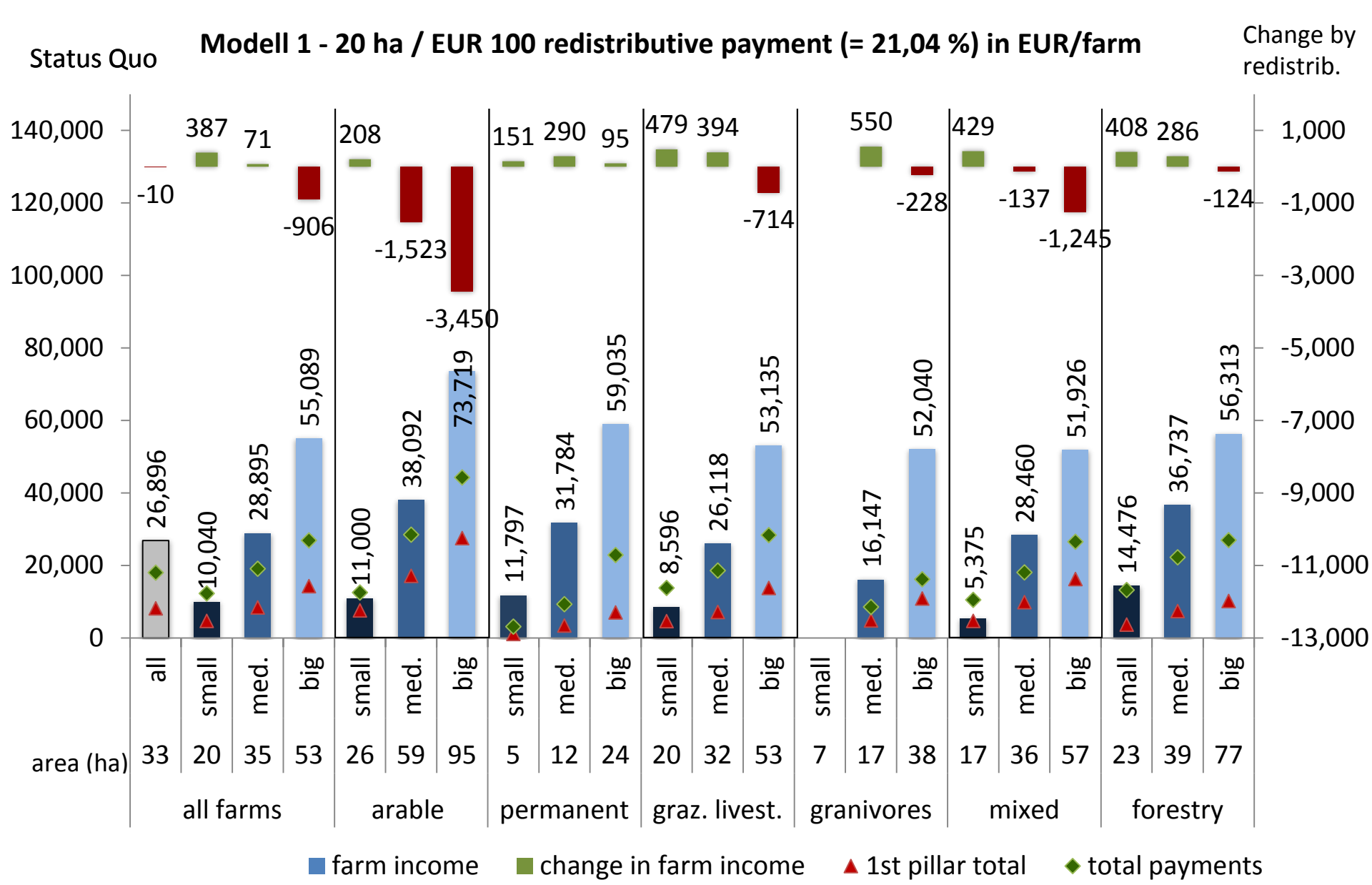


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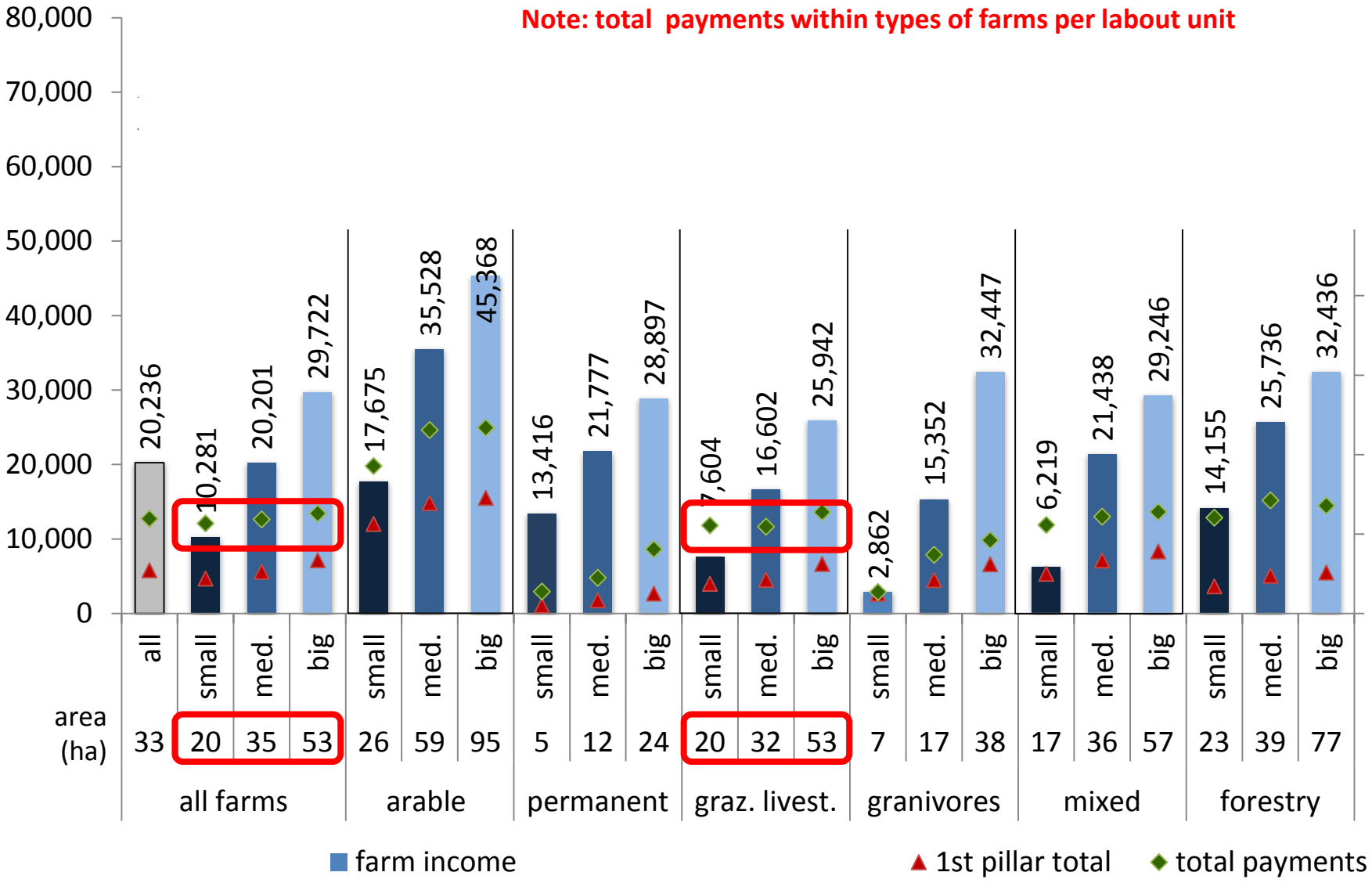
**Note: total payments within types of farms per labout unit**

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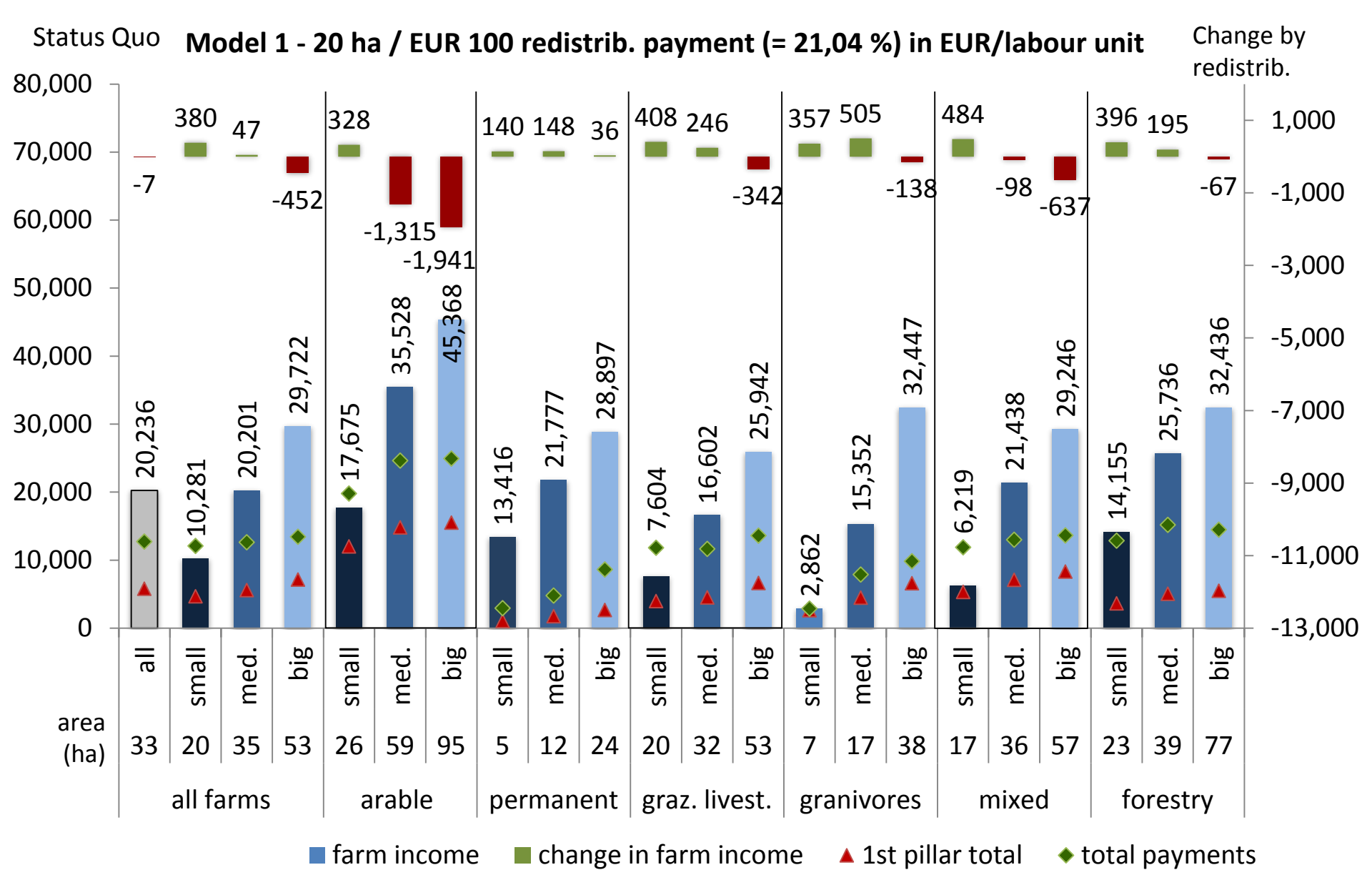


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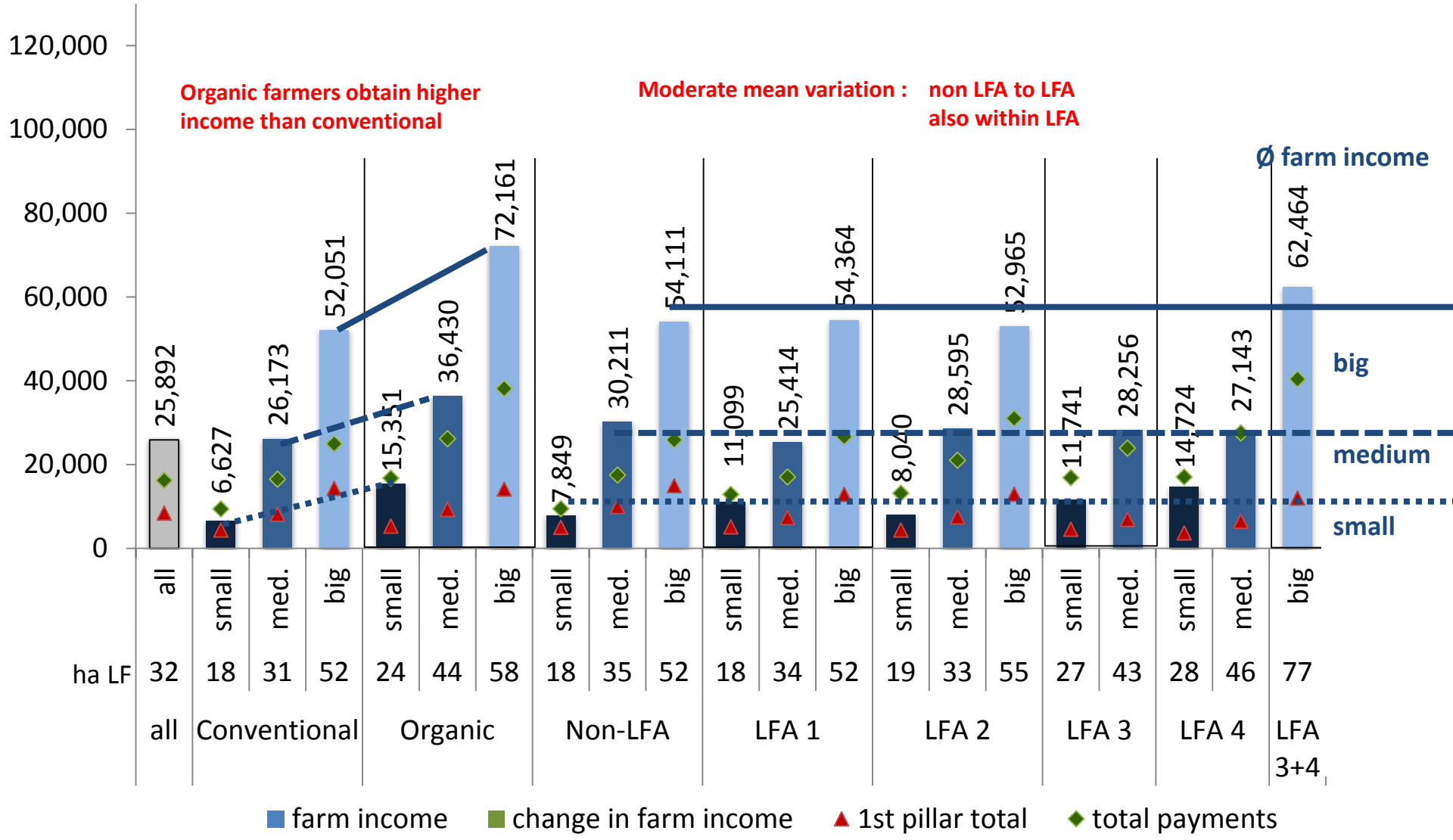


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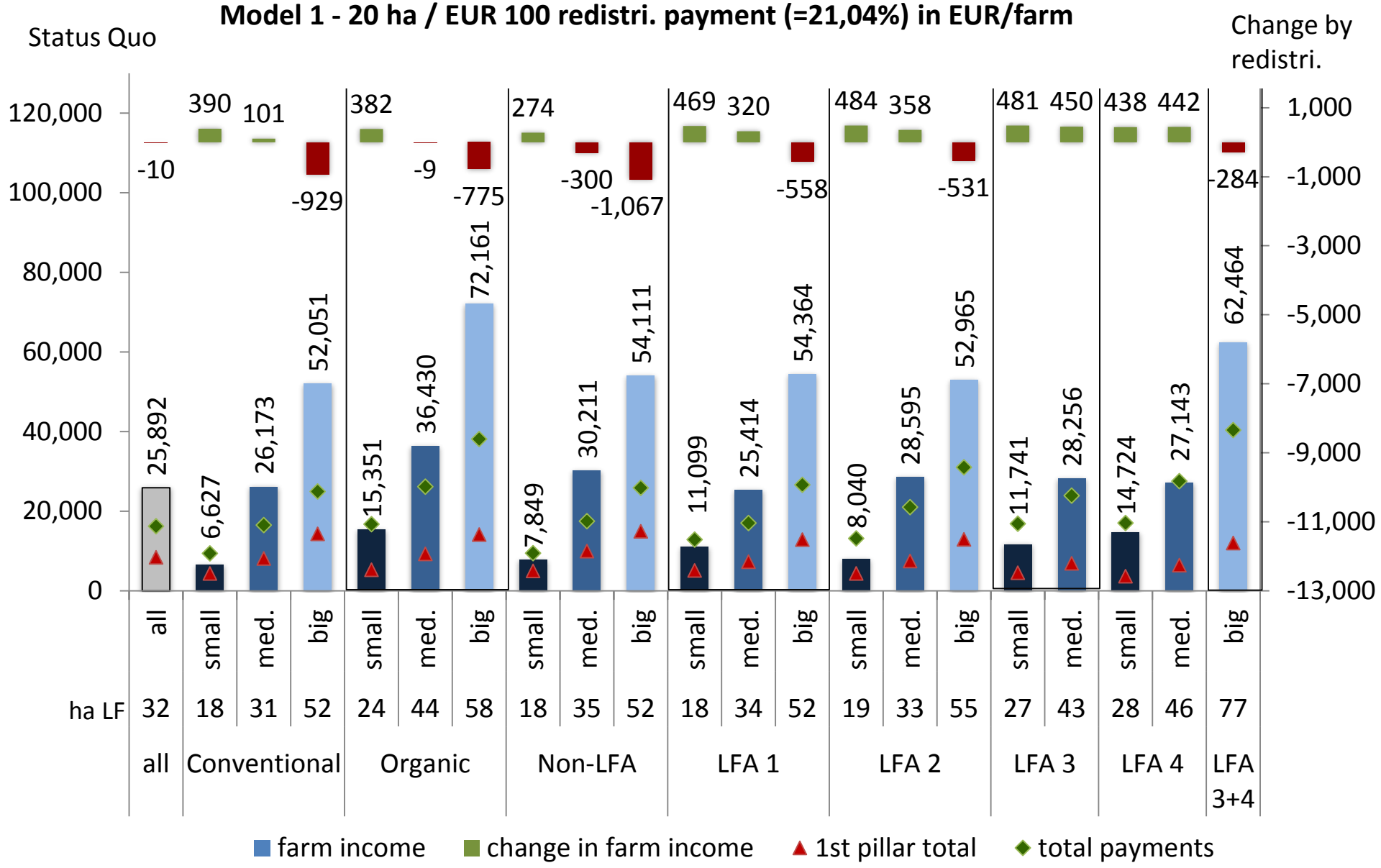


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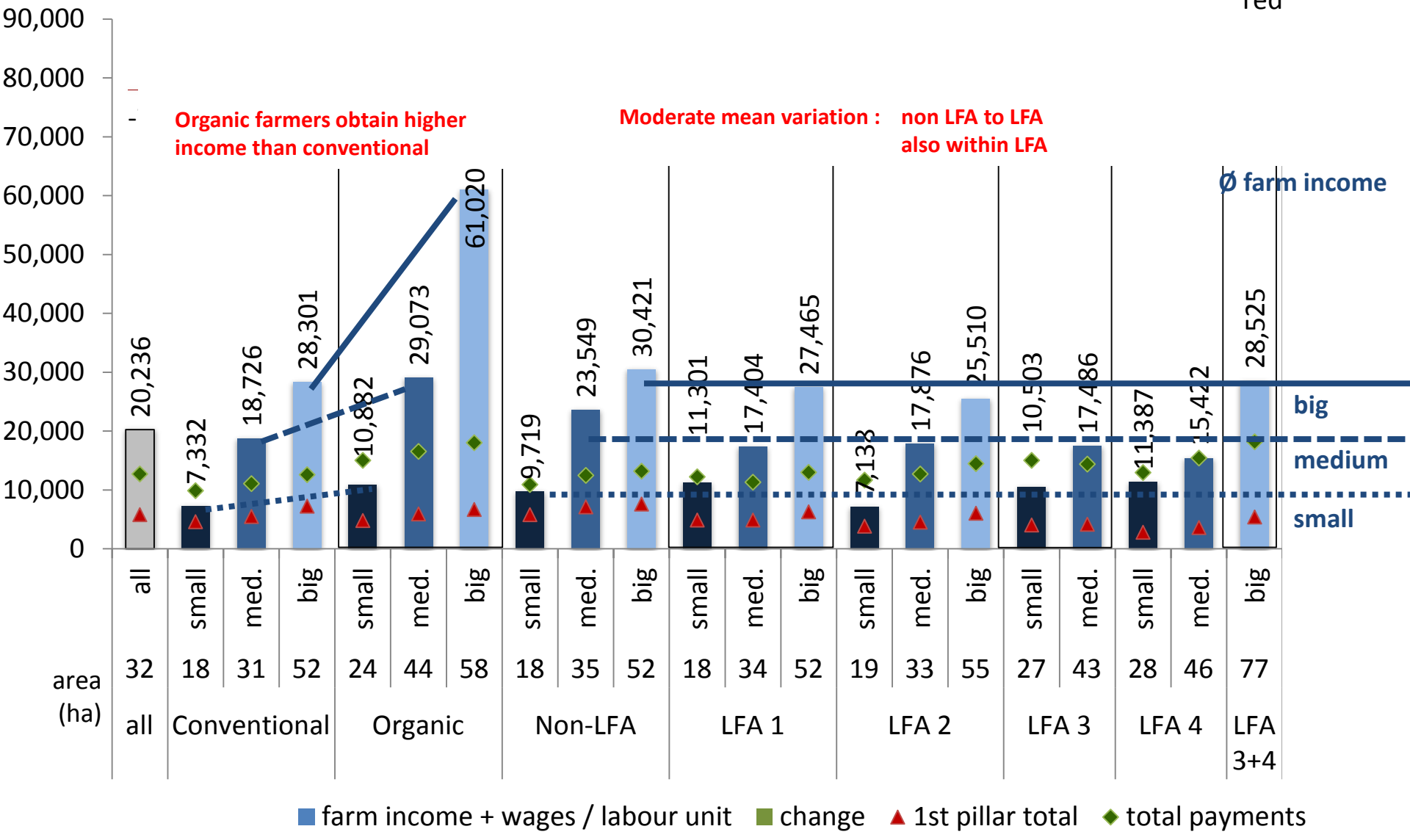


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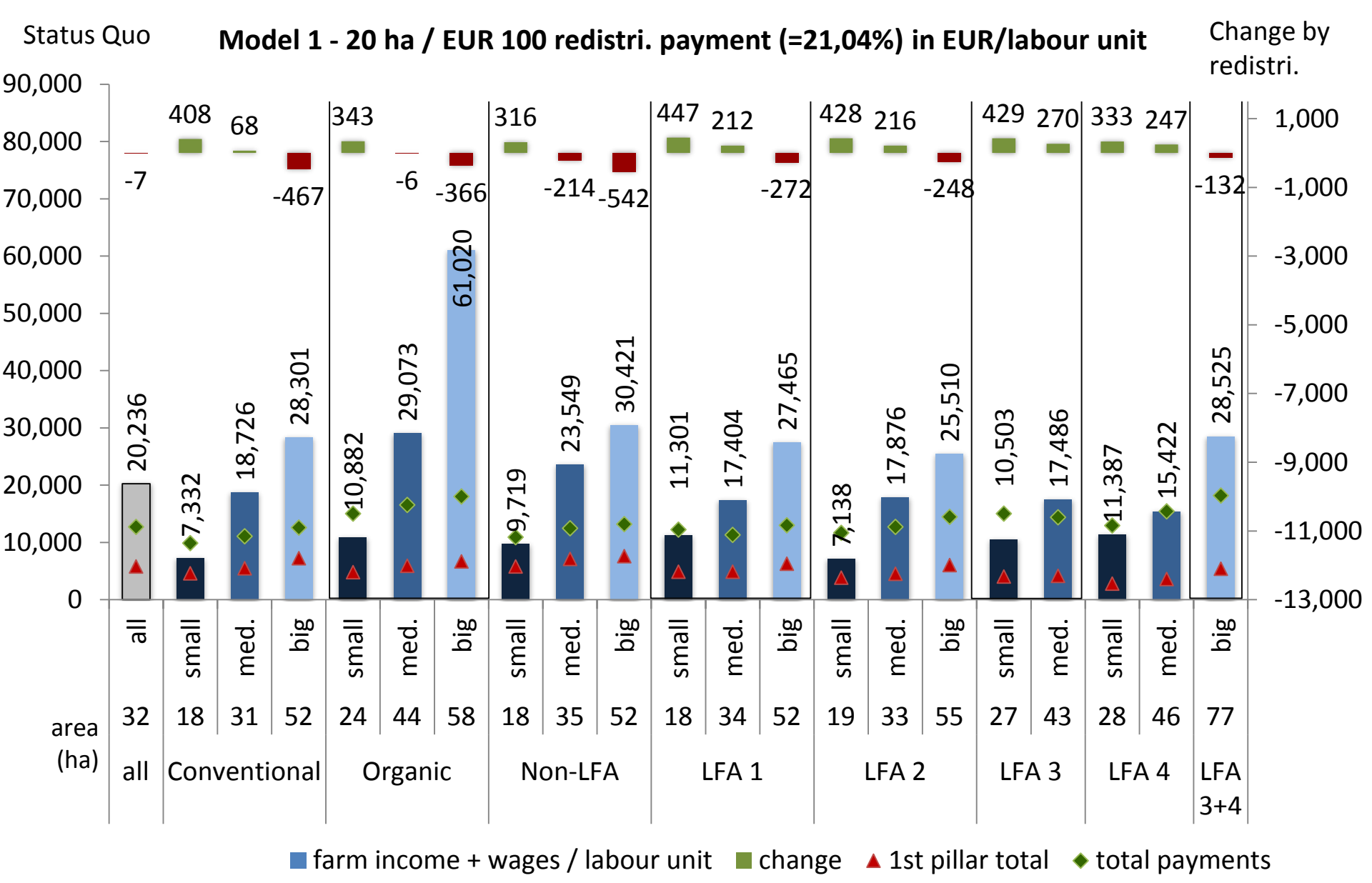


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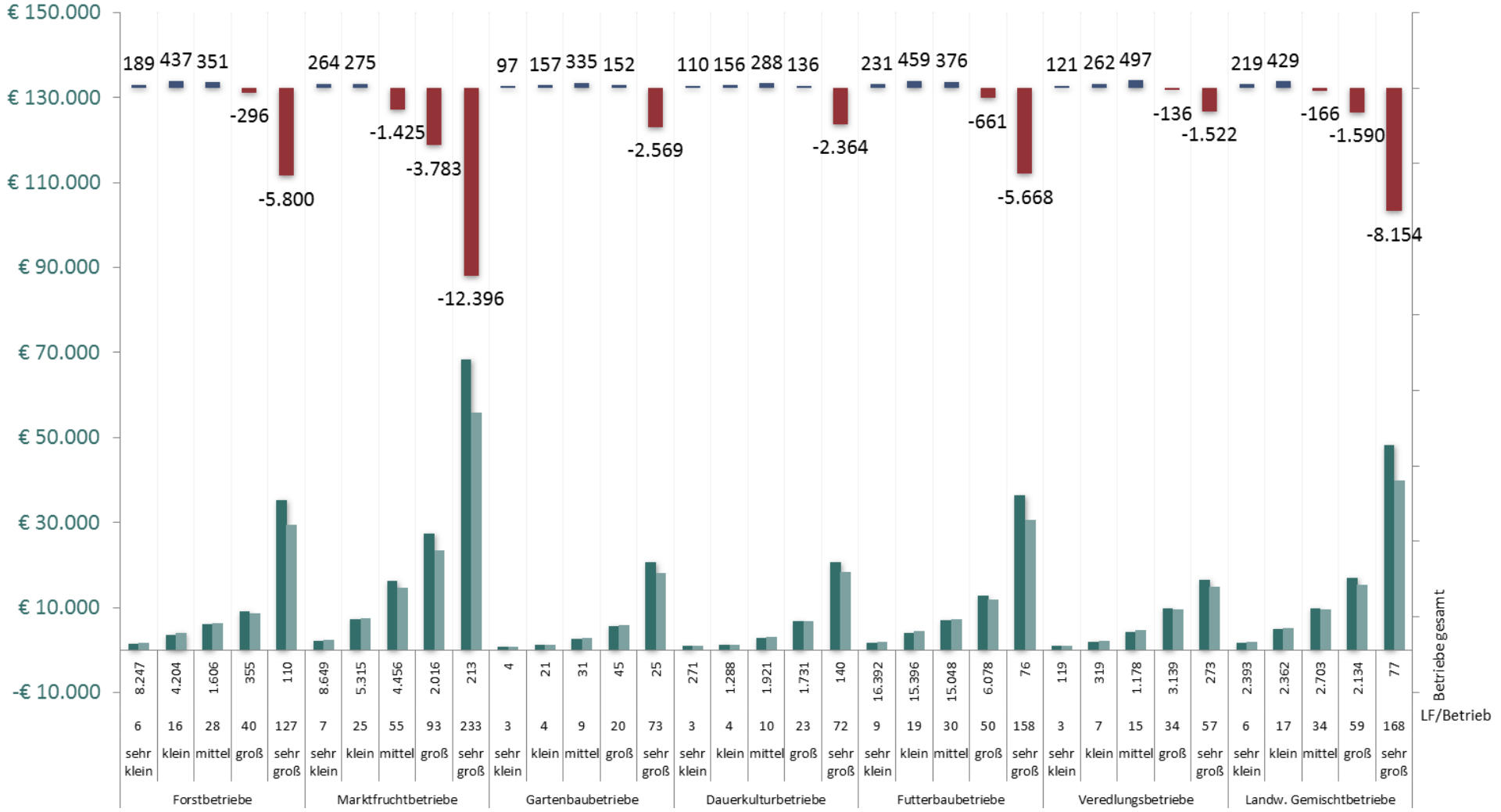
# IACS-Data: Model 1 - 20 ha / EUR 100 redistri. payment (=21,04%) in EUR/labour unit

Grenze in ha **20**
Top-Up in € **100**
Break Even Point in ha **32,9**
Umverteilung in % **20,1%**

DZ 2019 ohne Umverteilung je Betrieb
DZ 2019 mit Umverteilung je Betrieb
Änderung je Betrieb

| | |
|---|---|
| sehr klein: | SO bis 15.000 € |
| klein: | SO 15.000 bis 40.000 € |
| mittel: | SO 40.000 bis 100.000 € |
| groß: | SO 100.000 bis 350.000 € |
| sehr groß: | SO größer 350.000 € |






Source: IACS Data, Calculation: Federal Institute of Agricultural Economics

# Discussion

- FADN-Data are a useful tool to model farm income changes caused by changes in agricultural policy measures
- Main problem – smalest and biggest farms are not covered in the FADN Sample – but the major changes will appear within these groups

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# INVEKOS Betriebe 2016
## Anteil Betriebe/SO/DIZA/AZ nach Größenklassen

| Betriebsgröße | Betriebe % | SO-LW % | DIZA % | AZ % | DIZA+AZ % ohne Capping |
|---|---|---|---|---|---|
| sehr klein | 33,4 | 4,0 | 9,4 | 21,4 | 12,7 |
| klein | 26,6 | 11,8 | 19,5 | 33,6 | 23,3 |
| mittel | 24,8 | 29,7 | 33,7 | 31,8 | 33,2 |
| groß | 14,3 | 44,9 | 32,5 | 12,7 | 27,1 |
| sehr groß | 0,8 | 9,6 | 5,0 | 0,4 | 3,7 |
| Summe | 100,0 | 100,0 | 100,0 | 100,0 | 100,0 |

**Quelle:** INVEKOS Datenpool, Auswertungen: AWI