



The U.S. Dairy Margin Protection Program: *a simulation of the potential effects on dairy farms profitability in Veneto (Italy) and Wielkopolska (Poland)*

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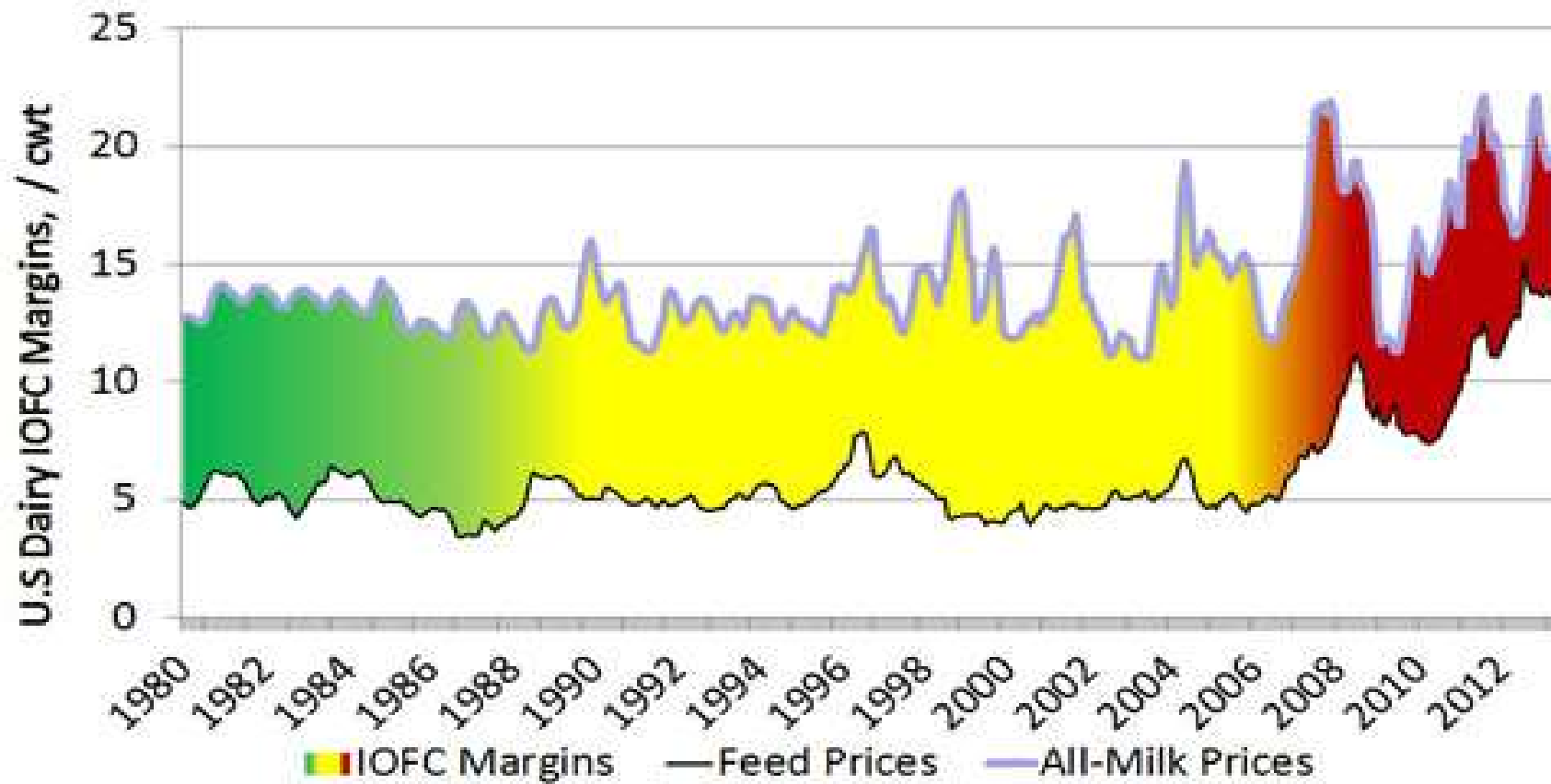


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What is the U.S. Dairy MPP?

- MPP is a National Voluntary «*safety net*» program
- Provides dairy producers with payments when the national dairy margin (the Income over feed cost - IOFC) is below the margin coverage levels choose by the farmers during a 2 month period (Jan/Febr, March/April, May/June, July/Aug, Setp/Oct and Nov/Dec)
- The producers enrolled in MPP annually choose the coverage level from 0,07 to 0,15 €/kg of milk and coverage quantity of milk from 25 to 95% of historical production
- Coverage levels and premiums are fixed
- The feed cost index includes alfalfa hay, corn, and soymeal, and the quantities of feed per kg of milk produced are fixed
- The objective is to protect the dairy farm from event of low or “catastrophic” margin levels for long periods of time

Why an U.S. Dairy - MPP?



Source: Usda, 2013

Example of IOFC Calculation in Veneto

Milk Price **30,0 €/100 kg**

Estimate Average Feed Cost **22,2 €/100 kg**

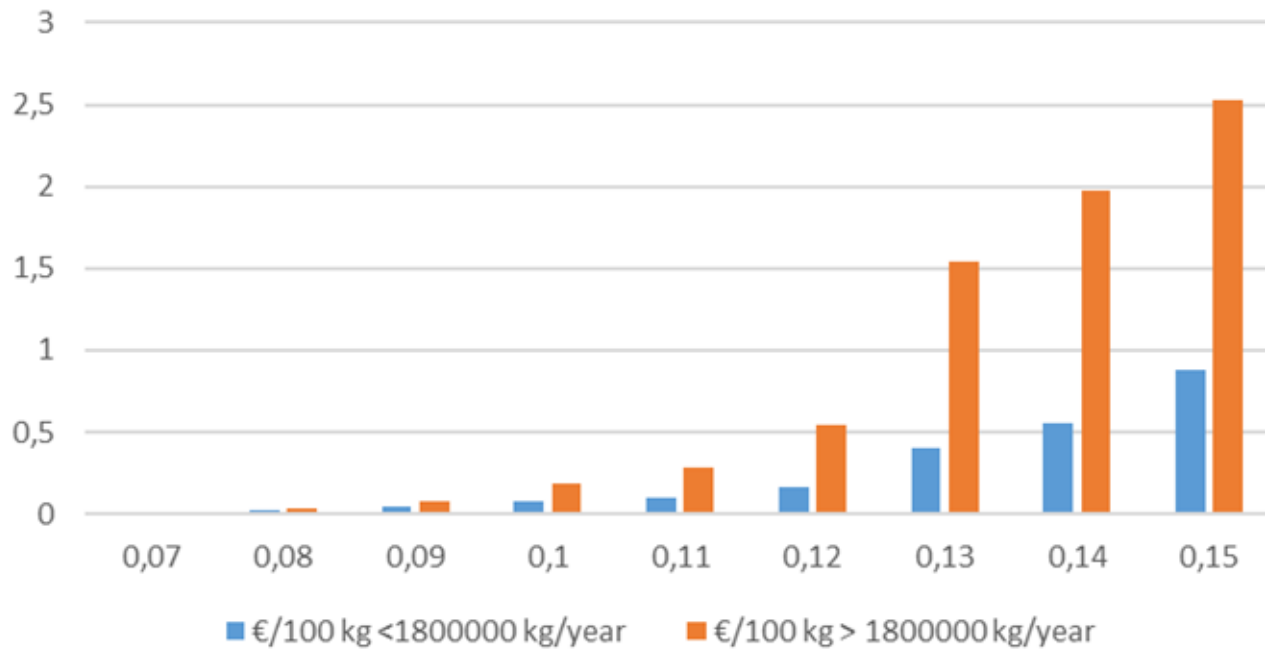
- *Corn:* $150 \text{ €/t} \times 0,06 = 9,0 \text{ €/100 kg}$
- *Soy meal:* $480 \text{ €/t} \times 0,01625 = 7,8 \text{ €/100 kg}$
- *Alfalfa Hay:* $180 \text{ €/t} \times 0,03 = 5,4 \text{ €/100 kg}$

IOFC **17,8 €/100 kg**

Margin Premiums by Coverage Level

	€/kg	€/100 kg < 1800000 kg per year	€/100 kg > 1800000 kg per year
1	0,07	0	0
2	0,08	0,01859	0,03718
3	0,09	0,046475	0,07436
4	0,1	0,07436	0,1859
5	0,11	0,102245	0,288145
6	0,12	0,16731	0,53911
7	0,13	0,403403	1,54297
8	0,14	0,5577	1,97054
9	0,15	0,883025	2,52824

Premiums by coverage level



Source: Usda, 2014

How the analysis was conducted

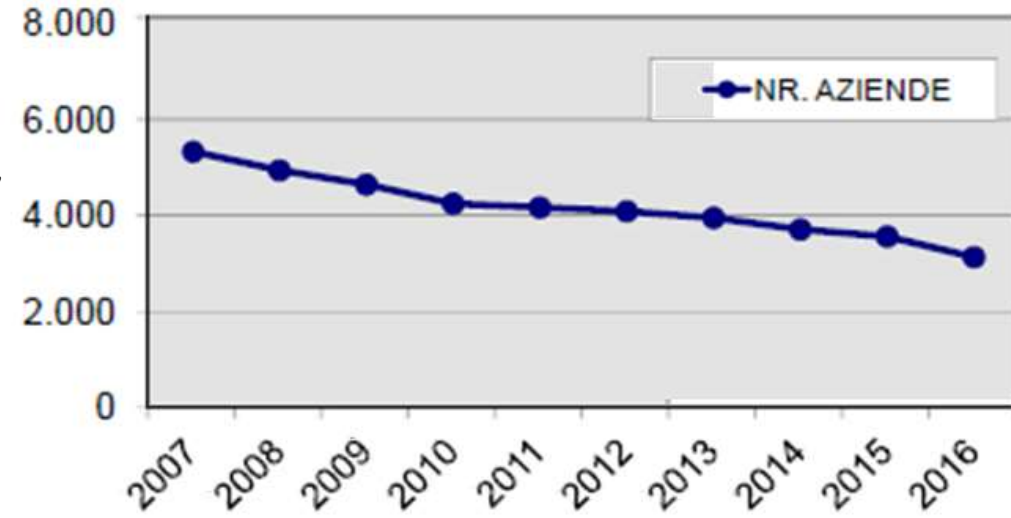
- Collected the monthly average price **2007 – 2017** of:
 - milk, corn, soybean meal and alfalfa hay in Veneto
 - milk, corn, soybean meal and meadow hay in Wielkopolska
- Calculation of the IOFC (Income over feed cost)
- Assessment of the margin (€/kg of milk produced) in small , medium and large farm assuming:
 - 0,07 protection level and 90 % of historical production
 - 0,15 protection level and 25% of historical production
 - 0,15 protection level and 90% of historical production
- Evaluation of the risk reduction by different coverage level

Comparison of number of recorded cattle farms

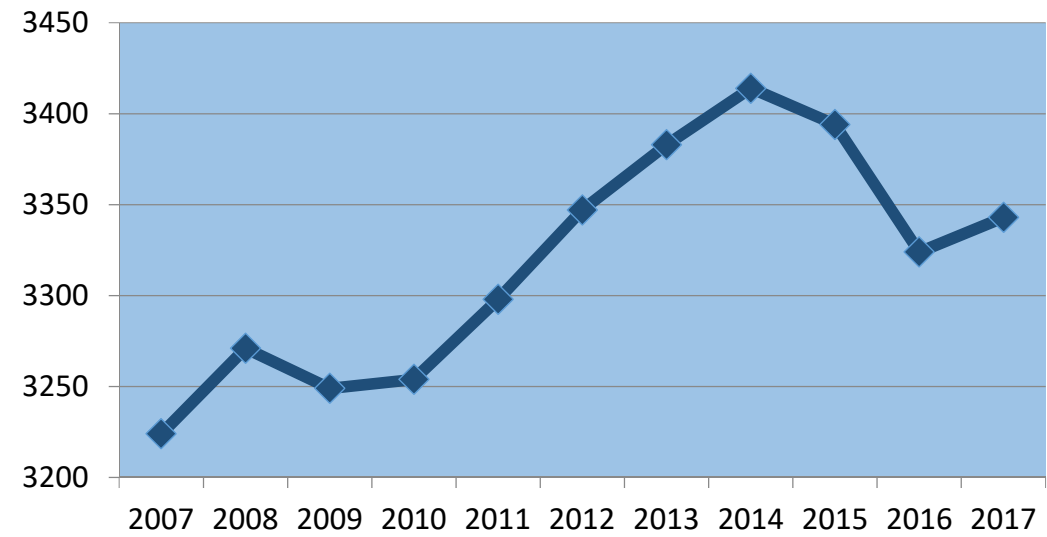
Veneto Region



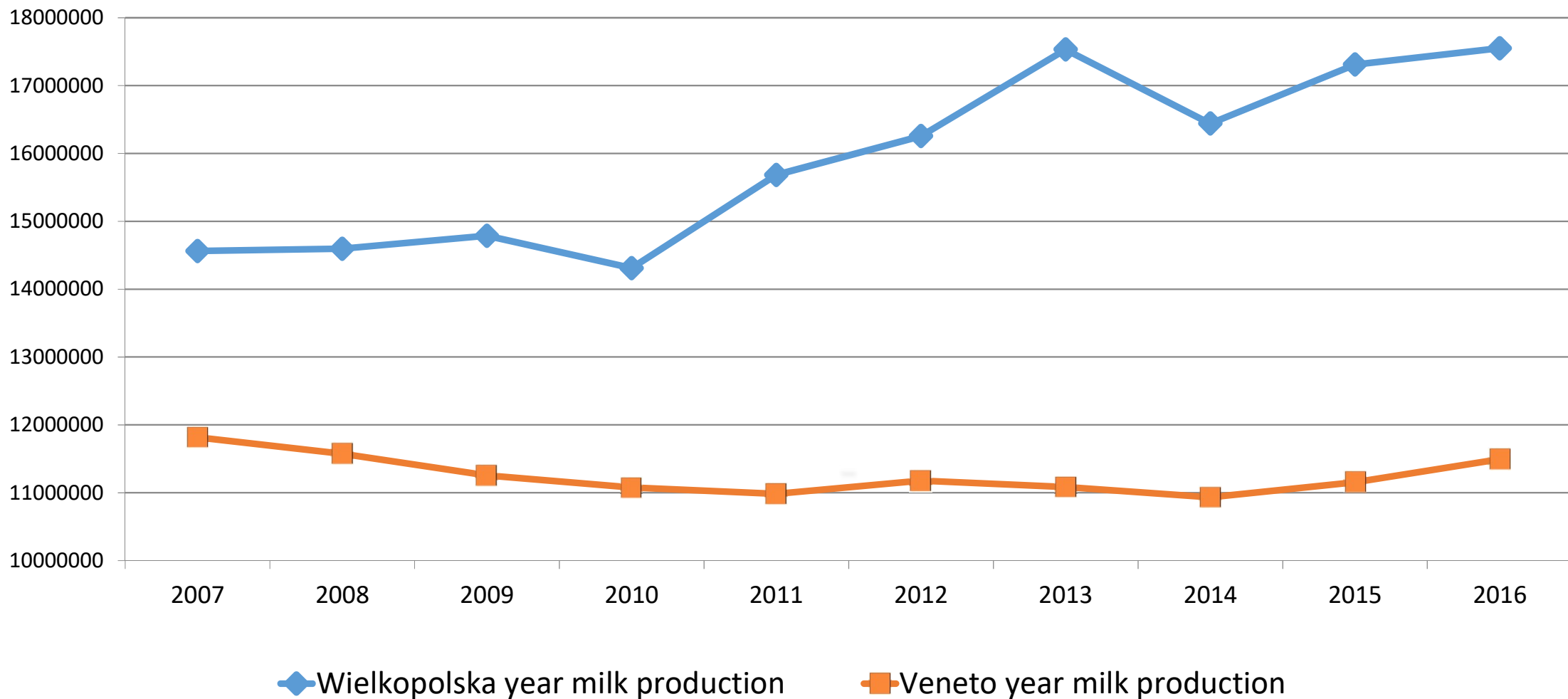
Source: A.pro.lav, 2017



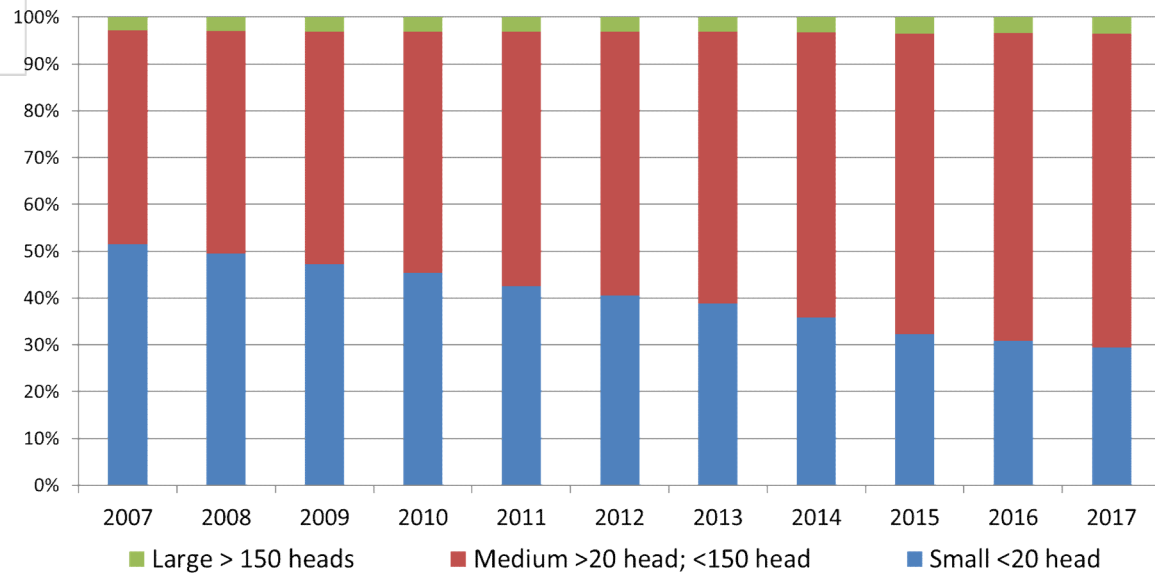
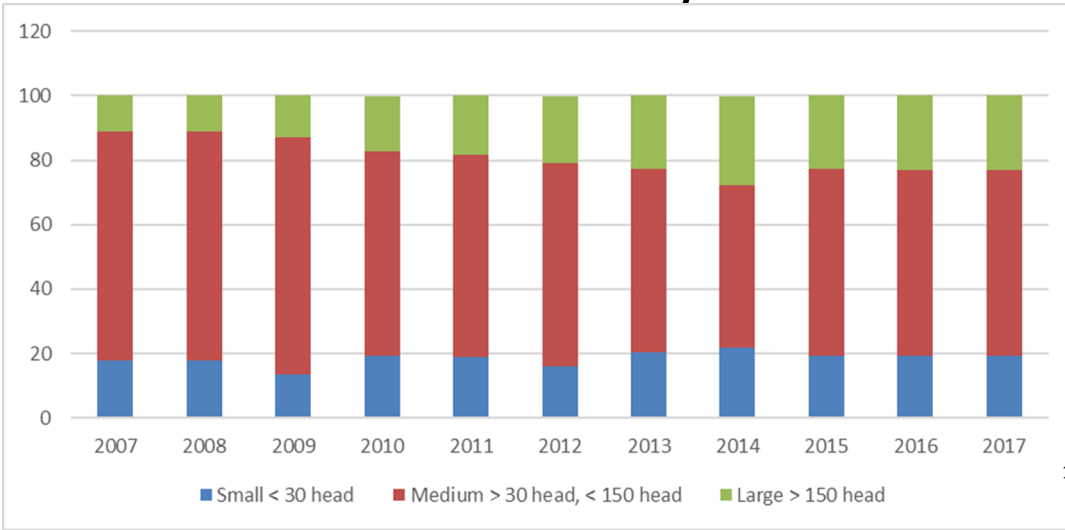
Wielkopolska Region



Comparison between Wielkopolska and Veneto annual milk production (in 100 kg)

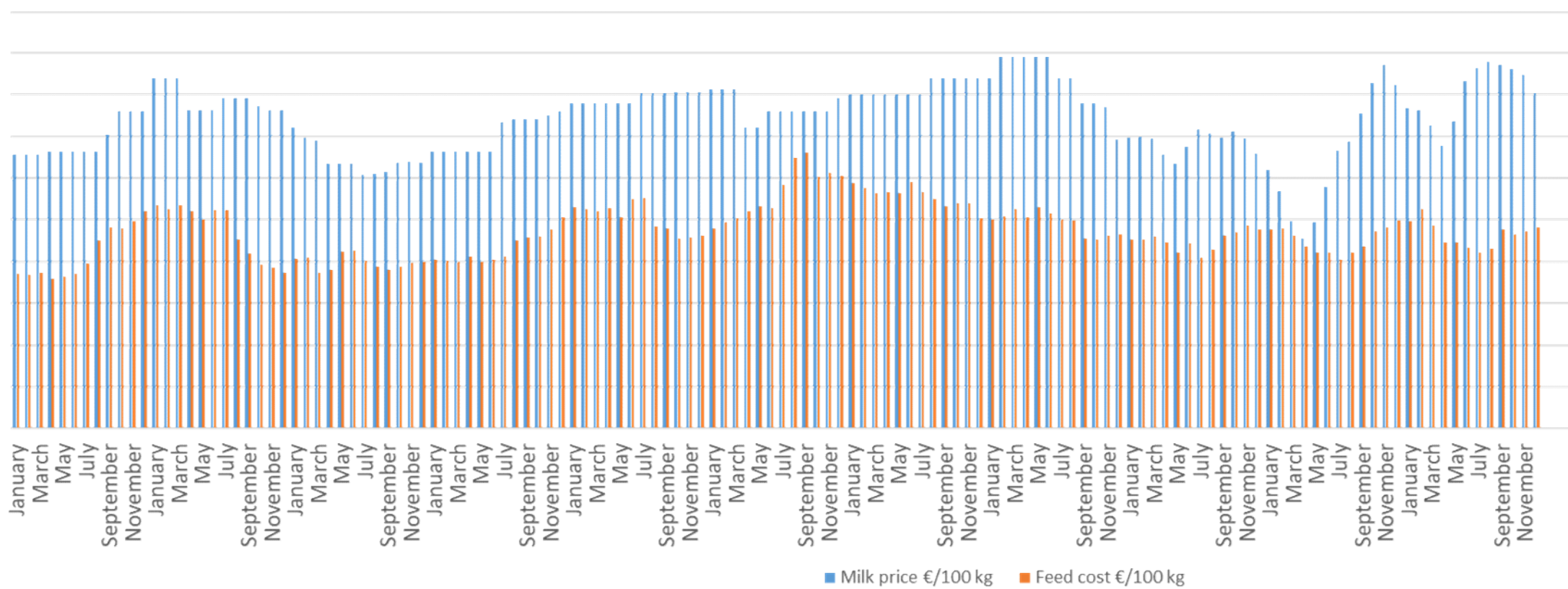


Comparison between percentage of cattle inventory by size of dairy farm in Veneto and Wielkopolska



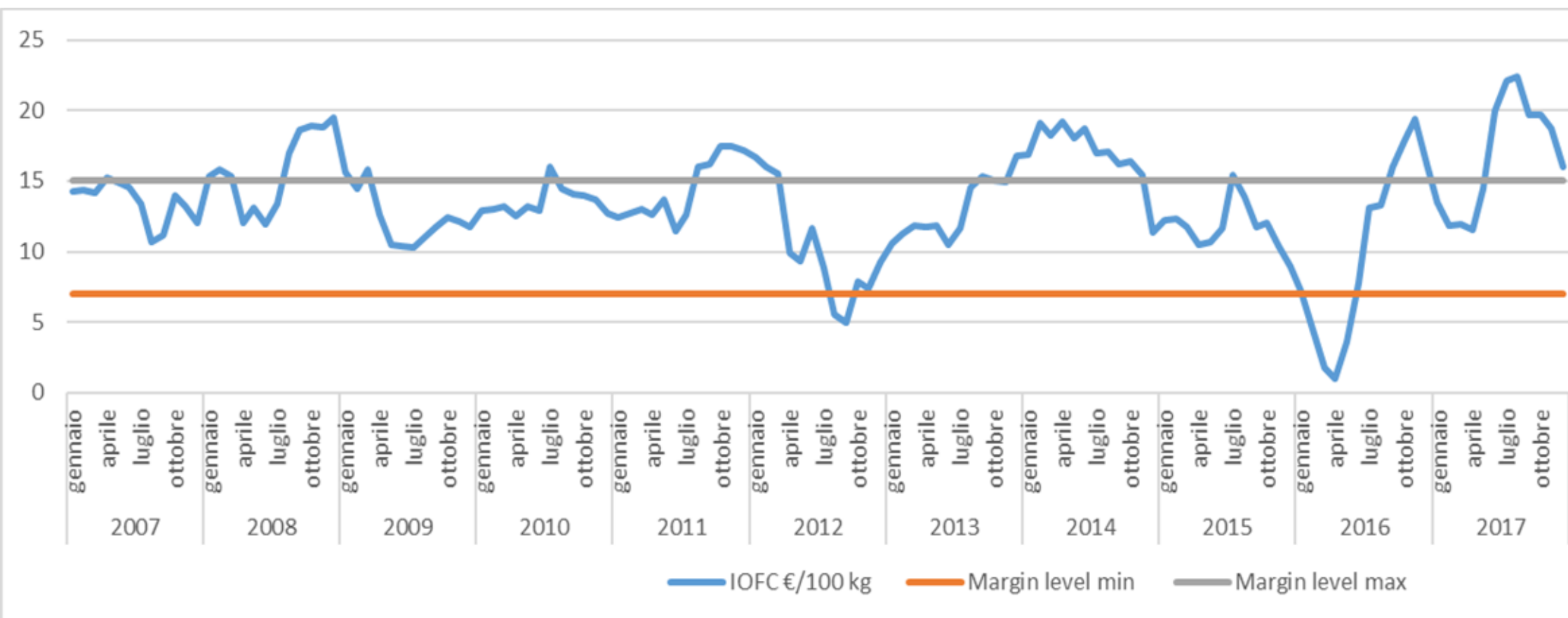
Results

Trend of milk price and feed cost 2007 - 2017 in Veneto Region - Italy



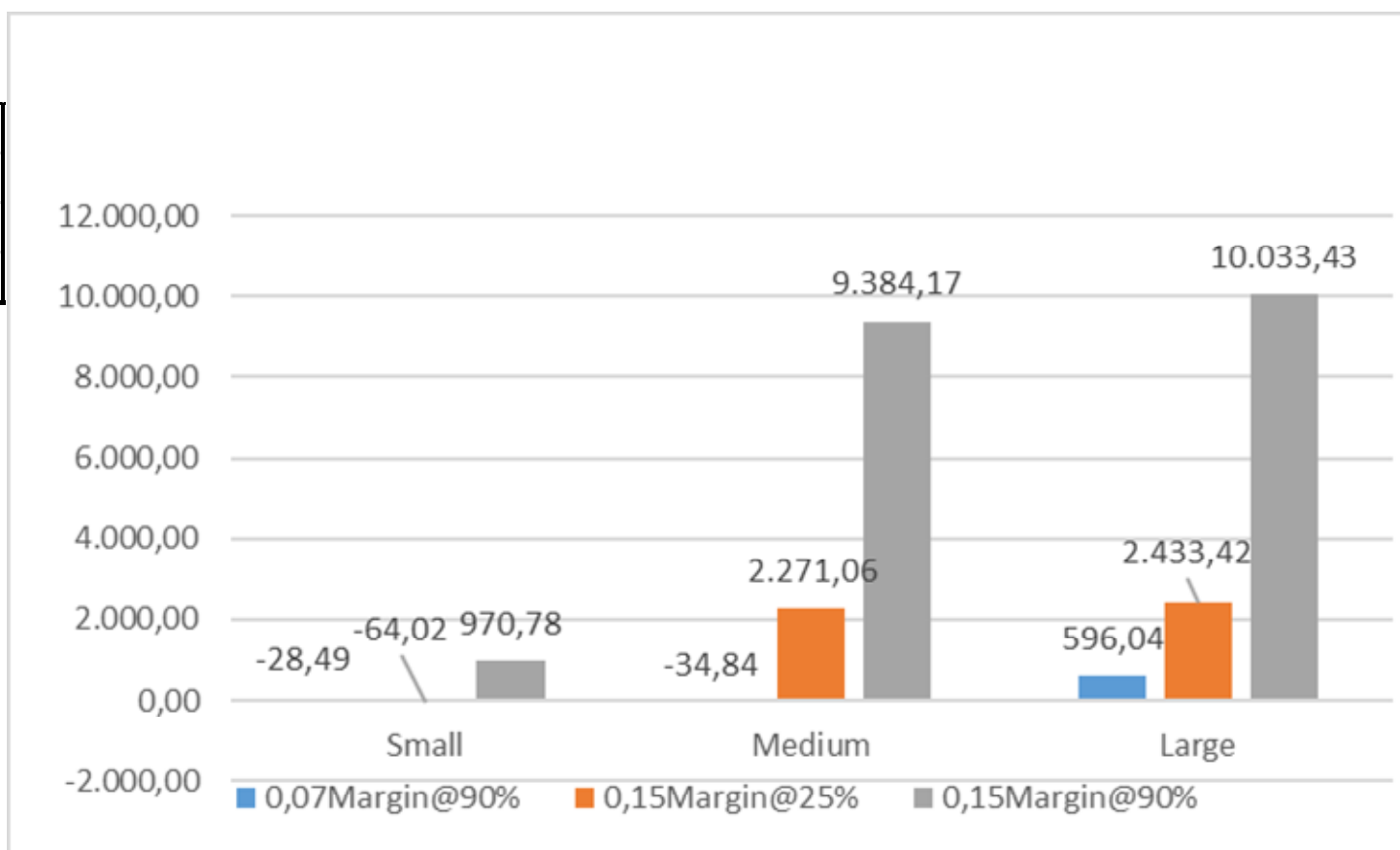
Sources: *Clal and Commerce Chamber of Verona*

IOFC Veneto 2007 - 2017

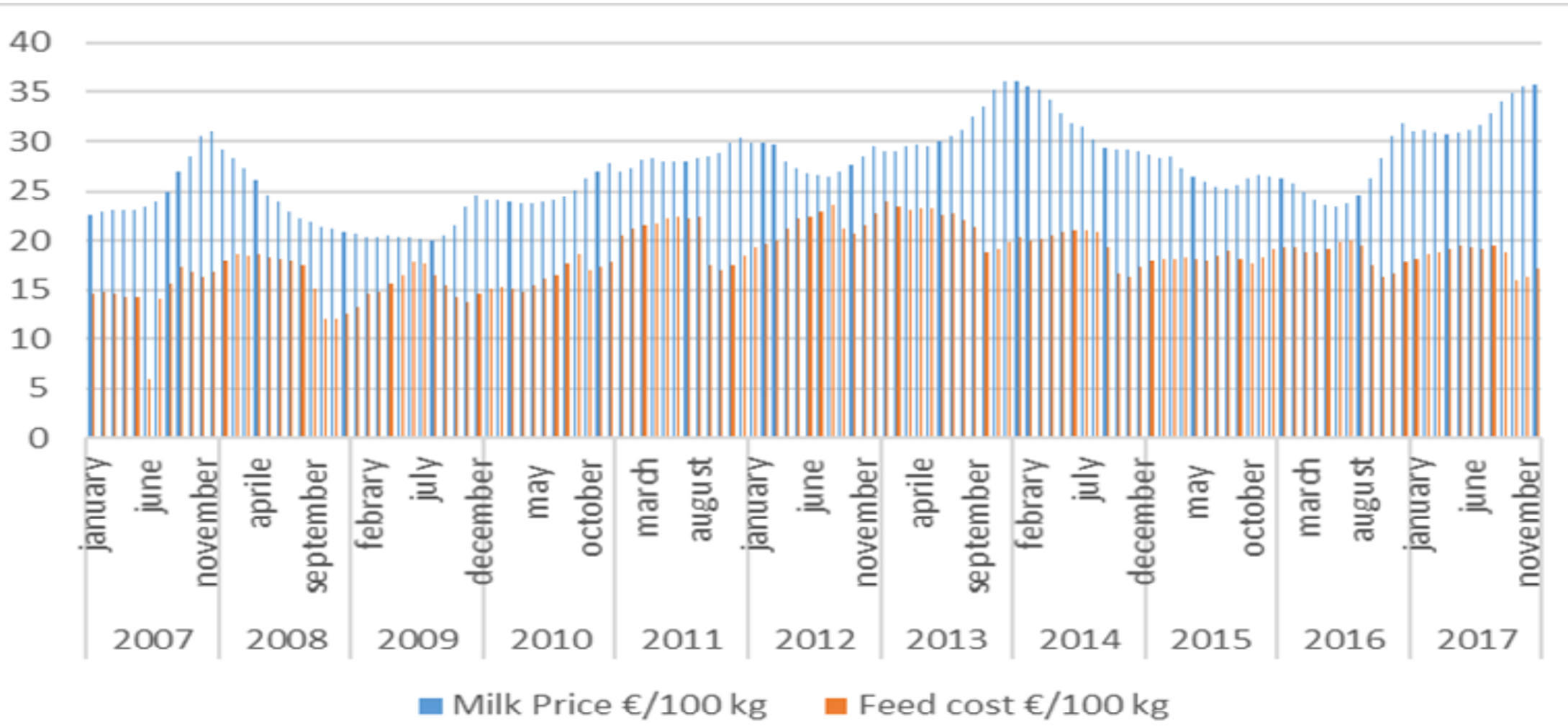


Average MPP net payment per farm size (€/year) - Veneto

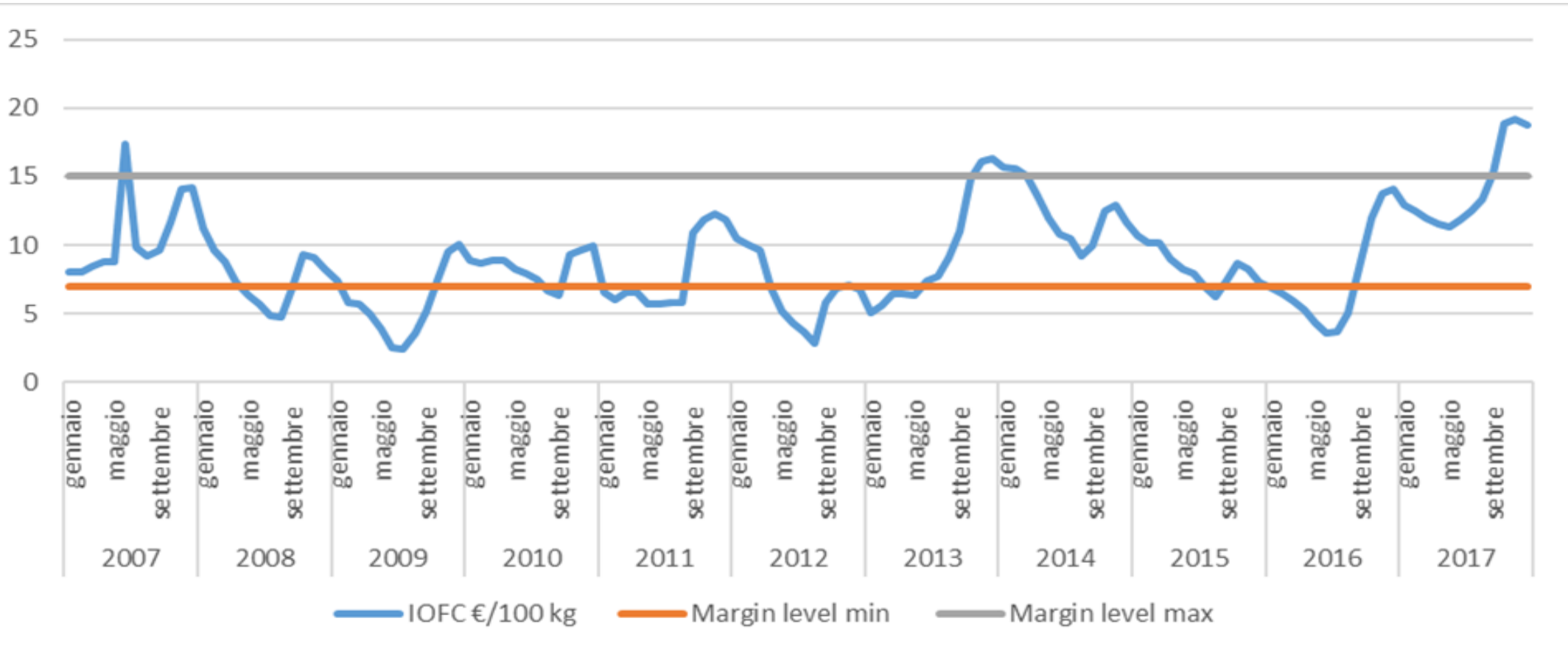
	Small	Medium	Large
0,07Margin@90%	-28,49	-34,84	596,04
0,15Margin@25%	-64,02	2.271,06	2.433,42
0,15Margin@90%	970,78	9.384,17	10.033,43



Trend of milk price and feed cost 2007 – 2017 – Wielkopolska Region - Poland

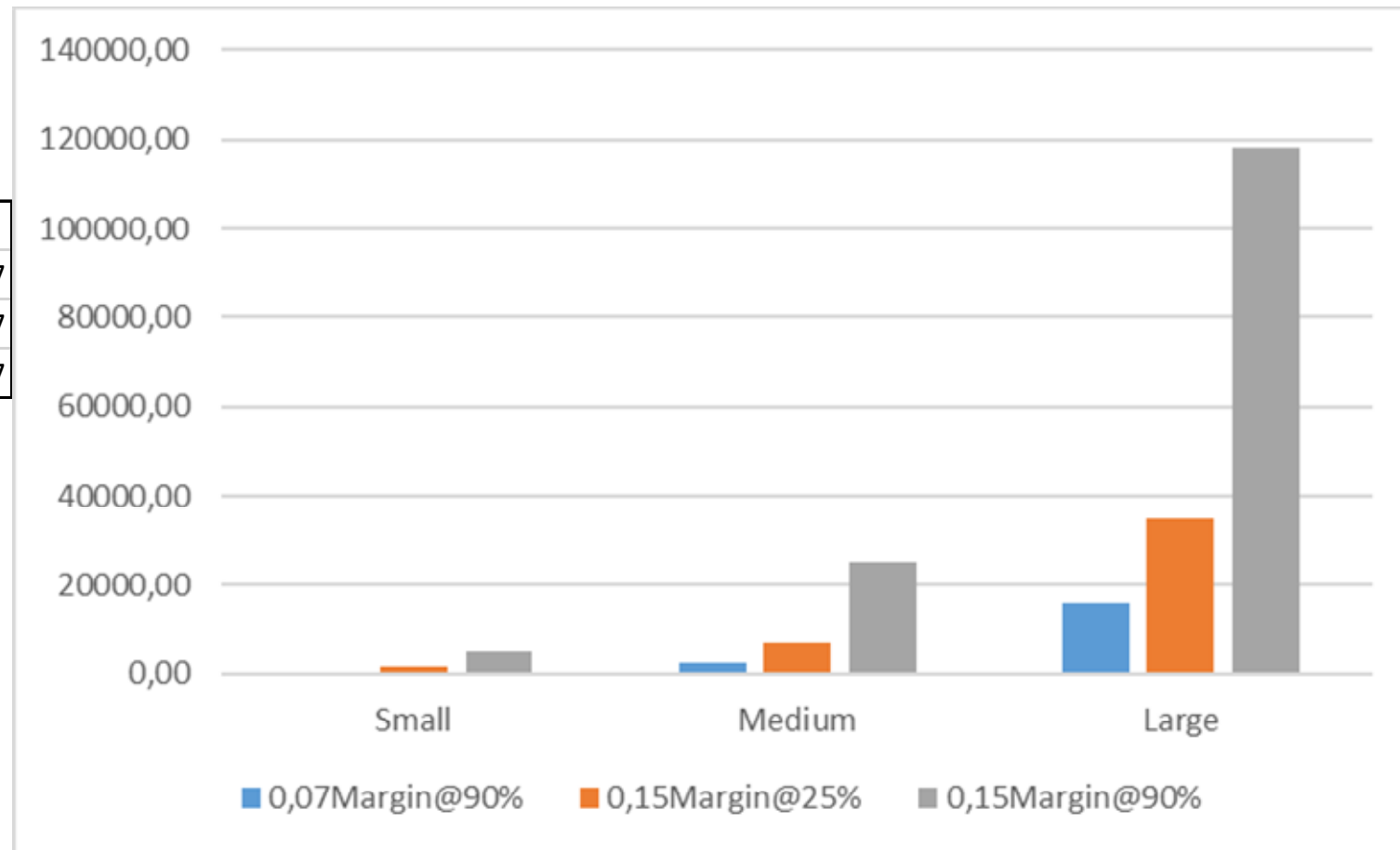


IOFC Wielkopolska 2007 - 2017

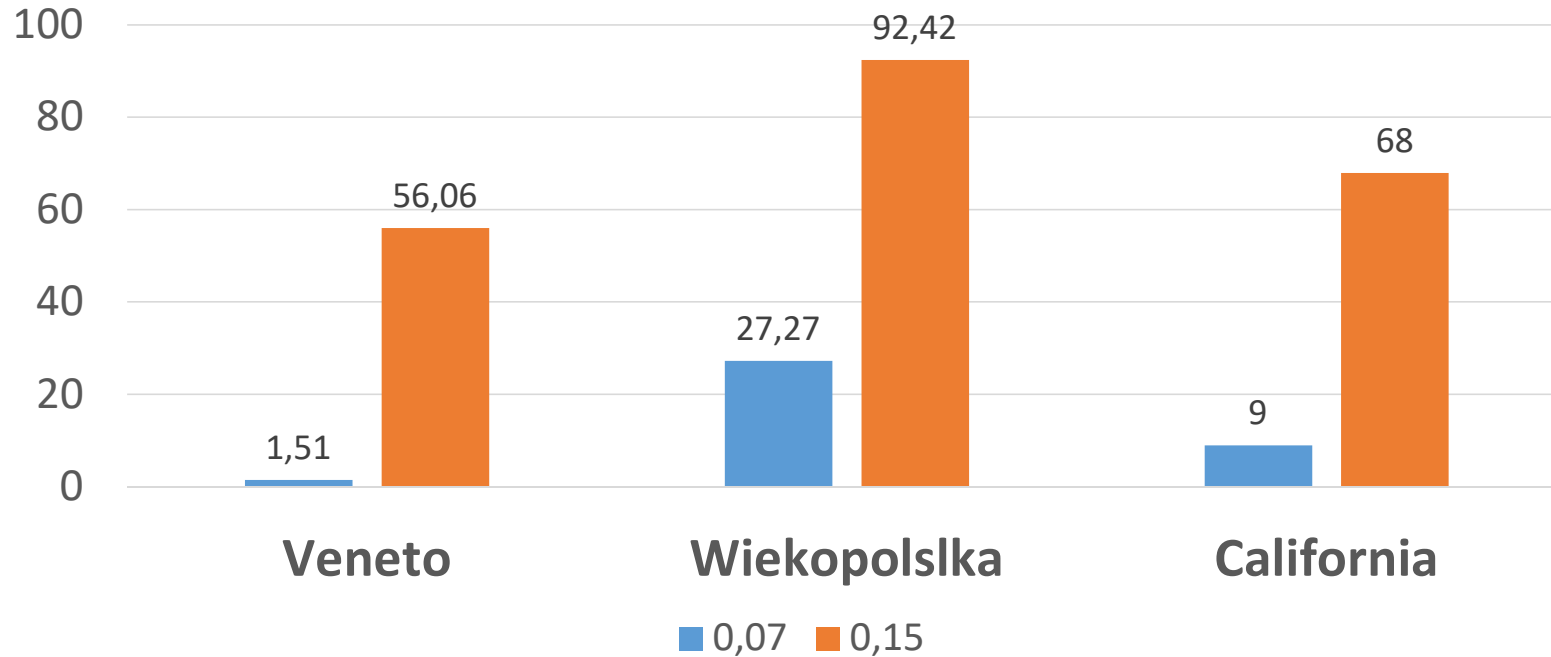


Average MPP payment per farm size (€/year) - Wielkopolska

	Small	Medium	Large
0,07Margin@90%	384,54	2278,95	15835,07
0,15Margin@25%	1343,56	6908,82	34726,07
0,15Margin@90%	5099,06	25130,78	118205,67



Comparison risk reduction (%) Veneto, Wiekopolska, California

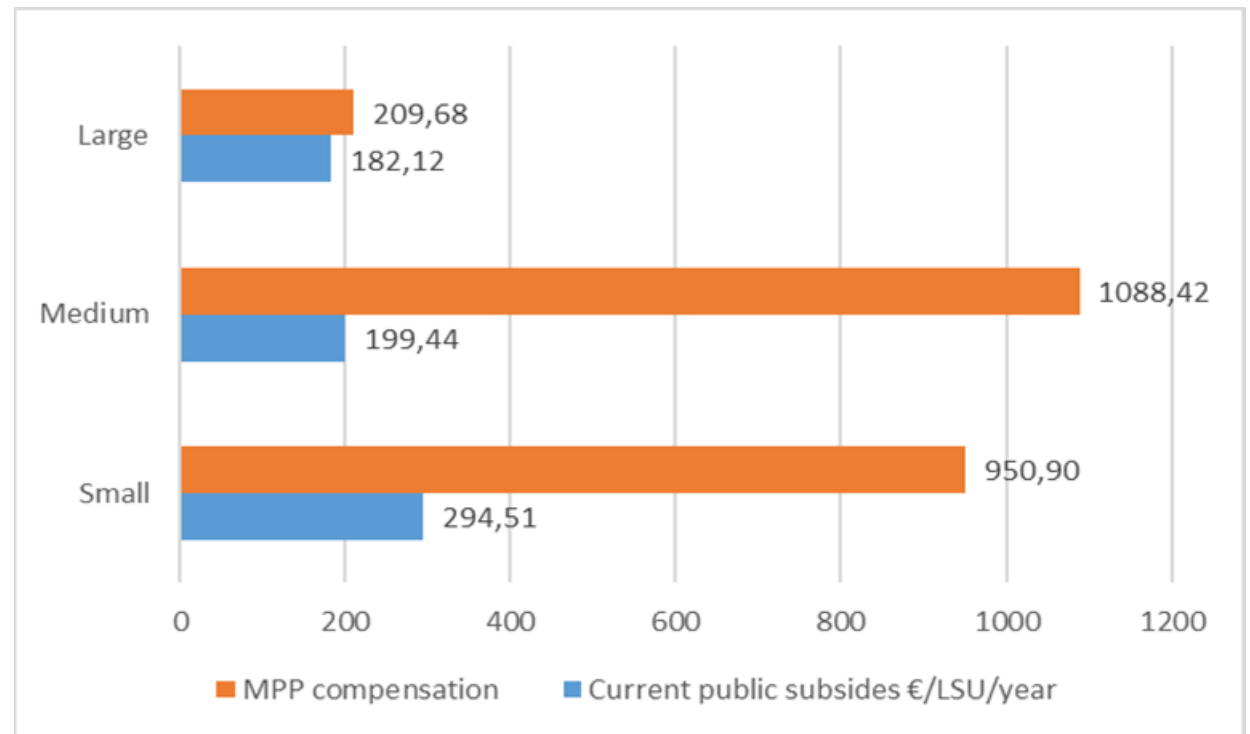


For reach the same level of California's risk, the minimum level of coverage have to be:

- 10 €/100 kg in Veneto **(+0,03 €/kg)**
- 5 €/100 kg in Wiekopolska **(-0,02 €/kg)**

Comparison between CAP subsidies and MPP compensation in Veneto

Farm Size	Current subsidies €/LGU/year	0,15 Margin@90%	€/LSU/year
Small	294,51	10678,58	950,9
Medium	199,44	103225,82	1088,42
Large	182,12	110367,75	209,68



Conclusion

- *Safety net* are provided in the first pillar of the CAP (reg. 1305/2013) but until today has not been applied (at least in Italy)
- Using the U.S. levels of coverage the risk reduction of margin is higher in Wielkopolska than Veneto due to the lower Wielkopolska's IOFC
- Comparison between CAP subsidies and the MPP compensation in Veneto shows similar results for large farms but a higher return for medium and small farms with MPP