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DISTRIBUTIONAL AND INCOME EFFECTS OF DIRECT PAYMENTS UNDER THE NEW CAP – THE CASE OF GERMANY

Introduction

After two and a half years of intensive policy negotiations, the post-2013 CAP was finally decided upon at the end of 2013. Under the objective of maintaining the global agriculture budget it was a consensus of proposals by many policy interest groups with steps forward with regard to new societal aims (greening) but also steps backwards with regard to decoupling and a re-nationalisation due to manifold implementation options at the Member State level.

In Germany, the national implementation of Pillar-I measures was finally decided upon in November 2013. In the following article proposals and final decisions with regard to direct payments are described and distributional and income effects analysed according to FADN data based simulations. One main element of the New CAP is the transformation of historical levels towards regionalized entitlement levels. This measure has been implemented in Germany under the Mid-term Review and Health Check of CAP. The German scheme will be taken as an example to show the distributional effects of the measure.

Model, data and scenarios

The analysis of the New CAP is not an easy task, as the links between the two Pillars change, too. In the past two reforms the compulsory Modulation was used to transfer budget from Pillar-I to Pillar-II. This measure will now be cancelled and therefore the former gross Pillar-I budget will be redefined as a net-budget. In the New CAP, Member States can optionally convert up to 20% of Pillar-I budget to Pillar-II, with the advantage that national co-financing is not required. On the other hand, it is also possible to convert some part of the Pillar-II to the Pillar-I budget, which has been negotiated in Poland, for example.

For the quantitative analysis a simulation tool using the statistical software package SAS has been developed. It is based on data of the German Farm Accounting Data Network (BMEL-Testbetriebe). A balanced farm sample over the economic years 2009/10 to 2011/12 has been selected. The full implementation of the regional model in 2013, the gross budget of Pillar-I and the amount of Modulation have been projected for 2013 and further periods. Policy measures of the New CAP affecting the level and distribution of direct payments were included in the model. All calculations were done at the individual farm level; weighted results were aggregated at the regional and farm type levels using the weighting factors and typology of 2011/12. The model is comparatively static, meaning that farm adjustments with regard to changing economic conditions are not considered.

In the **reference situation** (2013 and following years, post-reform) the gross Pillar-I budget for Germany was 5.85 billion €, of which 0.48 billion € transferred to Pillar-II via Modulation (Table 1). Payments were fully decoupled and implemented via regional flat rates with unified premium levels at the Länder level. In the **New CAP** only the net budget is determined; beside Modulation and a transfer of 0.34 billion € towards EU Member with area payments below the EU average, the net budget will be 5.02 billion €. Referring to a decision of the national court of justice regional flat rates will be converted into national unified flat rates in 2019. The 30% of the greening budget will be implemented beginning with 2015 based on national flat rates. The base premium of 70-x% will be implemented in 2015 with a transformation of regional into national flat rates in 3 steps from 2015 to 2019. The x-schemes – meaning former Pillar-II measures, deduced from budget ex-greening – differ between the proposal and final agreement of the Committee of Agricultural Ministers (AMK).

Table 1

Reference and Implementation of CAP 2013 in Germany (Pillar-I)

	Reference (2013)	New CAP AMK proposal	AMK agreement
Budget	Gross: 5.852 bn € Modulation -0.48 bn €	Transfer to MS below DP average -0.342 bn € Budget net (2019): 5.018 bn €	→
Direct Payments			
Decoupling	full	→	→
SFP	regional FlatRates	national FlatRates (2019)	→
Modulation	10 (+ 4%)	-	-
Greening		30%, nat FlatRate (>= 2015)[a]	→
Base premia		(70 - x)%, approaching nat FlatRate in 3 steps 2015 to 2019	→
(x) Schemes			
Additional payments First hectares		0-15 ha * 50 €/ha 15-30 ha * 30 €/ha	0-30 ha * 50 €/ha 30-46 ha * 30 €/ha
Young farmers		<=90 ha *50 €/ha (< 40 years old)	→
Grassland LFA		ha permanent grassland * 40 €/ha	4.5% of P-I budget → P-II implementation of measures
Grazing livestock mountain areas		Grazing LU * 80 €	by Länder

[a] Allowing production of food, non-food and feed (grazing livestock) on ecological focus areas.

Source: Own elaboration.

In the **AMK proposal,** additional payments for the first hectares were 50 €/ha up to 15 hectares and 30 €/ha for areas between 15 and 30 hectares. The young farmers' scheme will give a premium of 50 €/ha up to 90 hectares for farmers less than 40 years old. A premium of 40 €/ha will be paid for grassland on less favoured, mountain areas and islands; eligible regions are determined based on existing LFA categories. Grazing livestock on mountain areas will get a premium of 80 € / grazing LU (livestock unit).

In the **AMK agreement** of November 2013, premia for the first hectares will be enlarged as 50 €/ha for the first hectares and 30 €/ha for 30-46 hectares. The young farmers' proposal is maintained. Due to significant regional redistribution effects, the grassland and grazing livestock measures are abandoned. Instead, 4.5% of the budget will be transferred to Pillar-II; the referring measures will be determined at Länder level.

In the following, partial effects of these measures on payment levels as well as income effects are analysed referring to the reference situation.

Excursus: Effects of regional implementation of the Single Farm Payment Scheme (SPS) in Germany since 2005[1]

In Germany the SPS was implemented as a dynamic hybrid model combining area-based entitlements and farm individual top ups, being stepwise harmonized at the Länder level until 2013. Also, a regional equilibration of premium volume is carried out between the Länder, changing the former Länder budget by -5 to +14%.

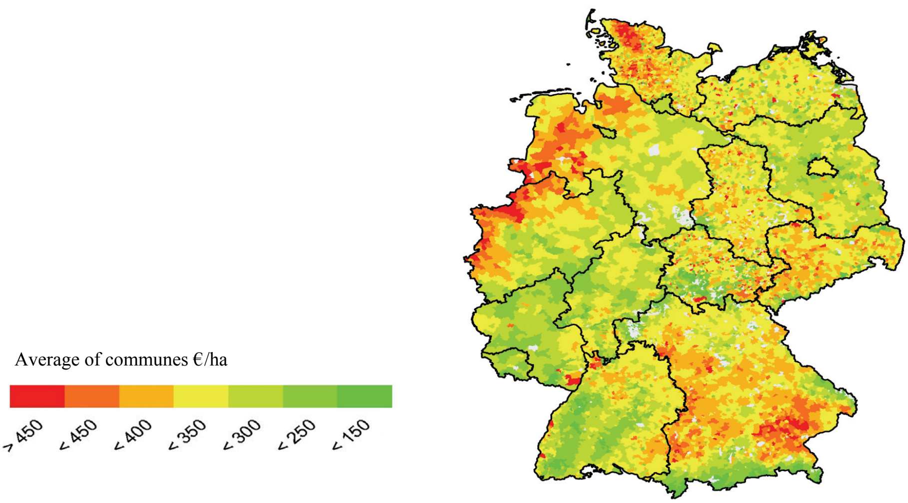

Figure 1. Regional entitlements levels in 2005
Source: Salhofer et al. (2009).

[1] This chapter is based on the paper 'Impacts of SPS implementation options on the distribution of support', presented at the OECD Workshop on the Disaggregated Impacts of CAP Reforms Paris, 10-11 March 2010.

The development of entitlements at the municipal levels in 2005 is shown in Figure 1 (Salhofer et al. 2009). Premium levels of less than 150 €/ha are to be ascertained in the low mountainous areas in the west and the south as well as in the pre-alpine area of Bavaria, which goes back to high shares of grassland and low livestock densities. Wide areas with high shares of arable land show a level of payment claims of 250 to 350 €/ha. The highest level of the payment claims of 450 €/ha and more are in areas with the high concentration of cattle fattening and milk production (the north, north-west and to southeast). Red spots in Eastern Germany point to the fact that specialised beef and milk production is often concentrated in large farms whose surface area can reach the area of a municipality.

Figure 2 shows the changes of payment claims due to the full transformation into the regional model in 2013. Premium increases of more than 100 €/ha are to be expected in mountainous regions. This can be traced back to the upgrading of the level of the payment claims for grassland. On the other hand, premium losses of more than 100 €/ha appear in areas with the high concentration of cattle fattening and milk production (northwest and south). In wide areas no significant premium changes are to be expected. Nevertheless, it was found that the direct payments are redistributed above all to the disadvantage of farms with intensive beef or milk production. Extensive cattle farms and farms located in less favoured areas are in a more advantageous position.

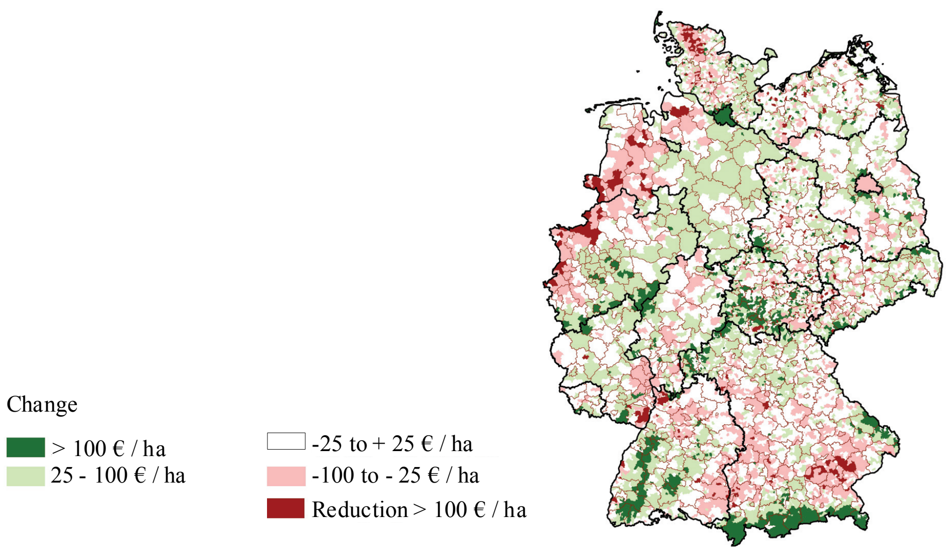

Figure 2. Change of entitlement levels until 2013

Source: Salhofer et al. (2009).

Partial effects of the New CAP on Pillar-I payments

The development of Pillar-I payments relative to the total in the reference is shown in Figure 3. In the existing CAP about 8% of gross budget is transferred to Pillar-II. Within the New CAP a further 4% is transferred to other Member States aiming at a better harmonisation of premium levels. The remaining net budget is about 85% of the former gross budget; this will be split into 30% for greening payment, about 7% for Pillar-II measures and the remaining as base premium.

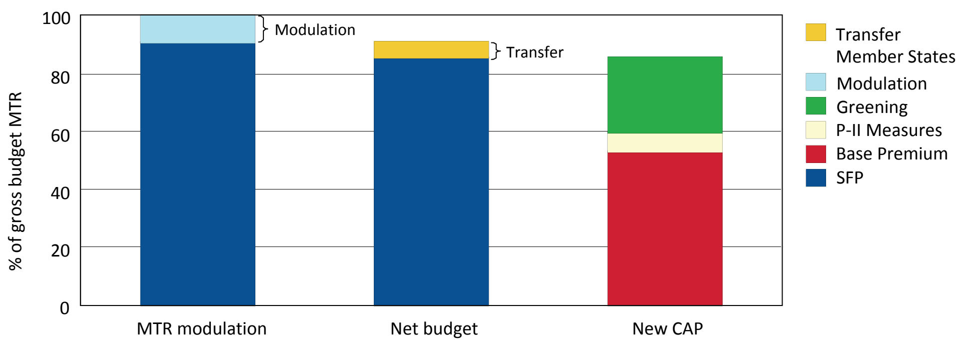

Figure 3. From gross budget (MTR) towards net budget (New CAP) – 1st Pillar
Source: Kleinhanss (2013), BMELV-Testbetriebe.

Payments for the first hectares should compensate for advantages of small farms in the former modulation scheme. Application is optional against a degression scheme of 5% premium reduction for farms with more than 150,000 € of direct payments. Although labour costs can be deducted from the underlying direct payments, each measure of degression or capping is opposite to agricultural policy objectives especially in Eastern Germany. In Figure 4 the past and new schemes are compared for three size classes and three regions[2].

With Modulation under existing CAP, the gross payment level of farms with up to 15 hectares is not affected, those of farms with 15 to 30 hectares is reduced by roughly 4%, while those of the larger farms is reduced by 8% in the West and 11% in the East, the latter due to additional Modulation of 4% for DP's >300,000 €. The switch from the gross budget to the net budget would induce a reduction of payments received by 9% for all farms, meaning that large farms would be in a better position compared to present CAP. Premiums for the 1st hectares referring to the AMK proposal would induce a rather moderate higher premium of 2% for small farms, with no effects on farms with 15-30 hectares, but a reduction of premiums similar to Modulation in the West and 1% more (12%) in larger farms in the East.

[2] CenSouth: HE, RP, SRL, BW, BY; North: SH, HH, NI, NRW; East: BB, MV, SN, ST, TH.

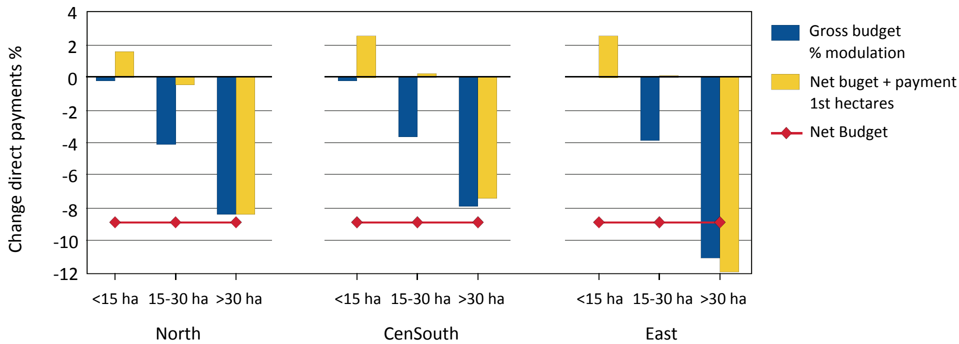

Figure 4. Balance DP Gross (-Modulation) to Net Budget and compensation via Payments for 1st hectares

Source: Kleinhanss (2013), BMELV-Testbetriebe.

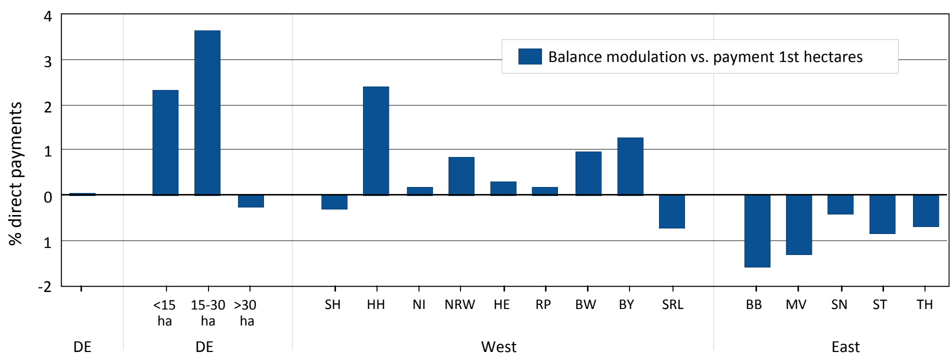

Figure 5. Balance gross vs. net budget incl. payments 1st hectares, by size/Länder

Source: Kleinhanss (2013), BMELV-Testbetriebe.

The balance of budget over the former and new scheme in Figure 5 includes the withdrawal of budget in favour of this measure at the Länder[3] level; it considers the net effects of the Modulation and the new scheme. In the western part of the country, Schleswig-Holstein and Saarland will be negatively affected, Hamburg, Baden-Württemberg and Bayern will have an upgrade of 2 and 1%, respectively, and of about 0.5% upgrade in the other Länder. All Länder in the East will be negatively affected by -0.5% in Sachsen and up to -1.5% in Brandenburg.

[3] SH: Schleswig-Holstein; HH: Hamburg; NI: Niedersachsen; NRW: Nordrhein-Westfalen; HE: Hessen; RP: Rheinland-Pfalz; BW: Baden-Württemberg; BY: Bayern; SRL: Saarland; BB: Brandenburg; MV: Mecklenburg-Vorpommern; SN: Sachsen; ST: Sachsen-Anhalt; TH: Thüringen.

Partial effects of the 3 other measures are summarized by Länder in Figure 6. The **young farmers' scheme** is more important in the West due to the dominance of small and medium sized farms. The average premiums increase by roughly 0.5%, while in the eastern part effects are insignificant. Top up premiums for **Grassland on LFA** will induce an increase on premiums by 4% in Hessen, Rheinland-Pfalz, Baden-Württemberg and Bayern, but of only 1% in the North and Saarland; in the East premiums increase by 0.5 to 2.5%.

Grazing Livestock premiums on mountain areas would increase premiums by 5% in Bavaria, by 2.5% in Baden-Württemberg and 1% in Nordrhein-Westfalen; it has no effects in the Länder in the East. It can be summarized, that the 3 measures would have rather significant redistribution effects between the Länder. As the Länder objectives were to avoid further regional redistribution effects, they decided a global budget transfer of 4.5% to Pillar-II and the use of this budget entirely by Länder specific measures.

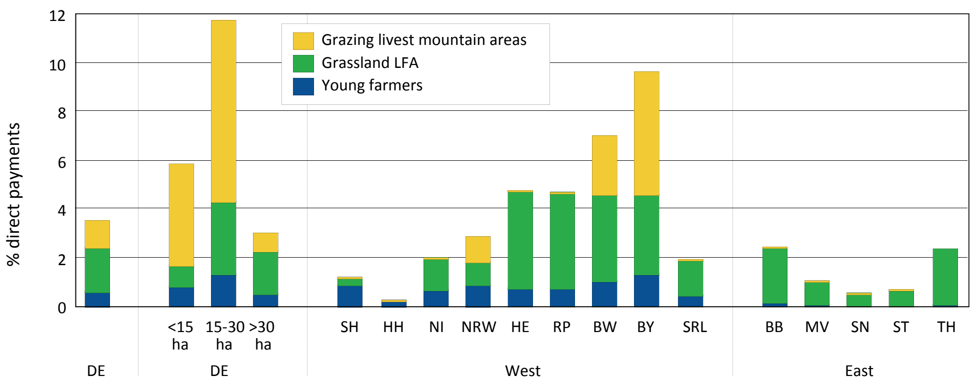

Figure 6. Partial effects of measures (young farmers, grassland LFA, grazing animals in mountain areas)

Source: Kleinhanss (2013), BMELV-Testbetriebe.

In the final **AMK agreement the 1st hectare scheme** has been extended in favour of small farms. Figure 7 shows the effects by three size classes and by Länder, comparing the proposal and final agreement; size classes are determined with regard to the latter. The balance would be +2% and 3.5% for size classes <30 and 30-46 hectares for the proposal, but 3.3 and 5.3% for the final agreement. For larger farms it will be negative of -0.4% under proposal and -0.8% by the agreement. Differences to Figure 5 are mainly determined by the effects of Modulation of the respective size classes. In the West only Saarland will have insignificant premium reductions, while they increased by about 2% in Nordrhein-Westfalen, Baden-Württemberg and Bayern and of about 1% in the others but Hamburg. In the case of Hamburg the premium increase of 1.5% is 0.7%-points lower than under the AMK proposal, indicating that there is no clear correlation of premium changes with farm size. In the East premiums will be reduced by 1.8 to 3% and Brandenburg, with rather unfavourable soil conditions, would be affected most. Effects of the young farmers' scheme have been shown in Figure 6 and will not be repeated here. Also the global budget transfer to Pillar-II by 4.5 will not be shown.

Finally the partial effects of national flat rates in 2019 against the former regional ones are shown in Figure 8. Compared to the previous effects, they are significant. In the North premium levels will decrease by 4 to 5.5% and also at the same level in Bavaria. In Baden-Württemberg premiums increase by 12% and of 15-17% in Hessen, Rheinland-Pfalz and Saarland. In the East premiums in Brandenburg will increase by 13%, while in the other Länder with much better soil conditions premiums will either increase less (4% in Mecklenburg-Vorpommern) or decrease by 1% in Thüringen and 3.5% in Sachsen and Sachsen-Anhalt.

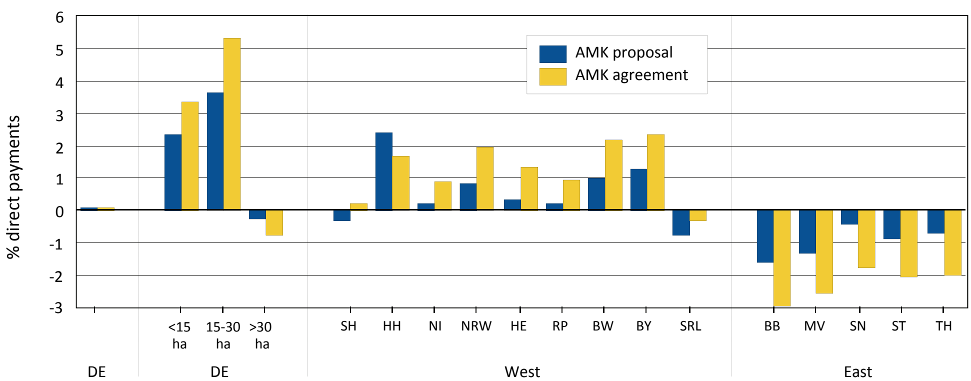

Figure 7. Balance payments 1st hectares – AMK agreement vs. proposal
Source: Kleinhanss (2013), BMELV-Testbetriebe.

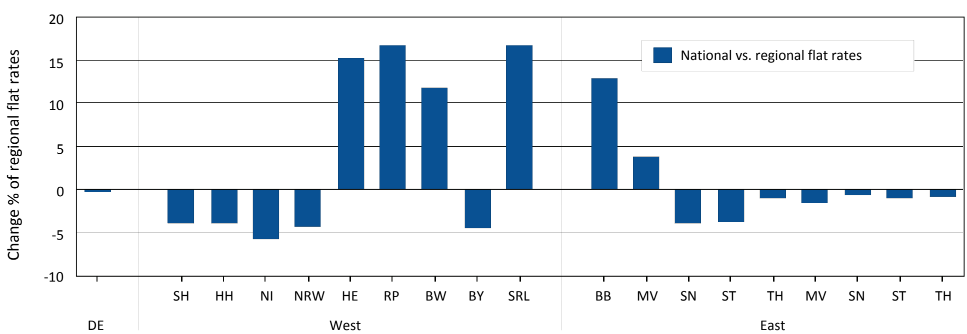

Figure 8. Redistribution national vs. regional flat rates
Source: Kleinhanss (2013), BMELV-Testbetriebe.

Income effects of these measures are only indicative by the underlying approach; instead of predicting incomes until 2019, we take average incomes in the reference as a proxy. In Figure 9 the direct payments and different income indicators are shown for the reference situation by farm types and regions. On average, farms receive about 23,000 € of **direct payments**. For the average of arable cropping farms it is about 40,000 €, and 15,000 to 20,000 € in dairy, beef and pig farms and about 25,000 € in other farm types. It is about 15,000 € in the aggregate of Centre and South (HE, RP, SRL, BW, BY), 20,000 € in the North (SH, HH, NI, NRW), but 140,000 € in the East (BB, MV, SN, ST, TH), due to the dominance of large sized farms organised as partnerships and legal entities. It has to be mentioned that income, expressed by the profit (Farm Net Income) is higher than direct payments on average of farm types and regions in the West. In contrast, it is only half in the East. This indicates that farms in the Eastern part are heavily dependent on direct payments and would be heavily affected by capping or significant degression schemes. However, Farm Net Income is not the appropriate income indicator for comparisons over different legal organisational forms. For that we use profit plus labour cost of salaried workers, divided by the number of agricultural working units. This indicator is shown as a red line and refers to the axis on the right. It is highest of 40,000 € AWU in arable cropping, only 25,000 €/AWU in beef farms and about 30,000 € in dairy and other farms. By regions, income is about 35,000 € in the North and East, and about 27,000 €/AWU in the Centre/South.

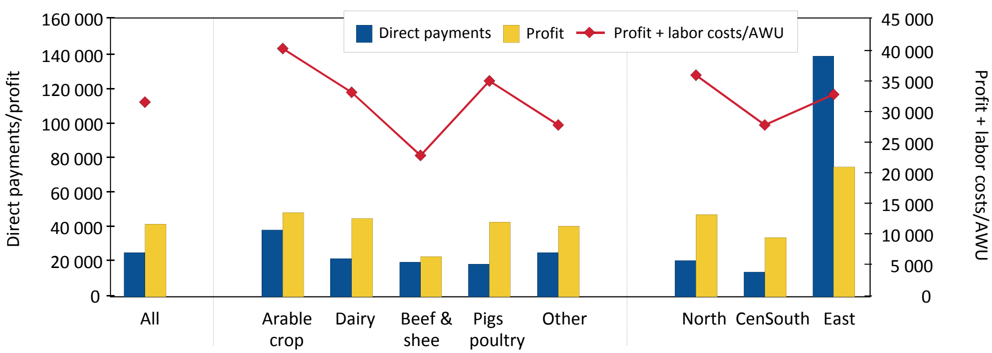

Figure 9. Direct payments and income indicators by farm type and regions
Source: Kleinhanss (2013), BMELV-Testbetriebe.

Relative changes of these indicators are shown in Figure 10. Direct payments will be reduced by 5.5% on average, varying by 2% for pigs and 7% for arable cropping and other farms. Payment levels will be 1% lower in the North, 5% in the Centre and South and 9% in the East. Effects on profit are closely correlated to direct payments for farm types but of about 2%-points less; with 15% they are significantly negative in the East. Reductions referring to profit plus labour costs/AWU are -2% on average, varying by -1.5 and -3% by farm types and by -0.5% in the North, -1.5% in Centre and South and -4.5% in the East. Finally it can be concluded that income effects are rather moderate.

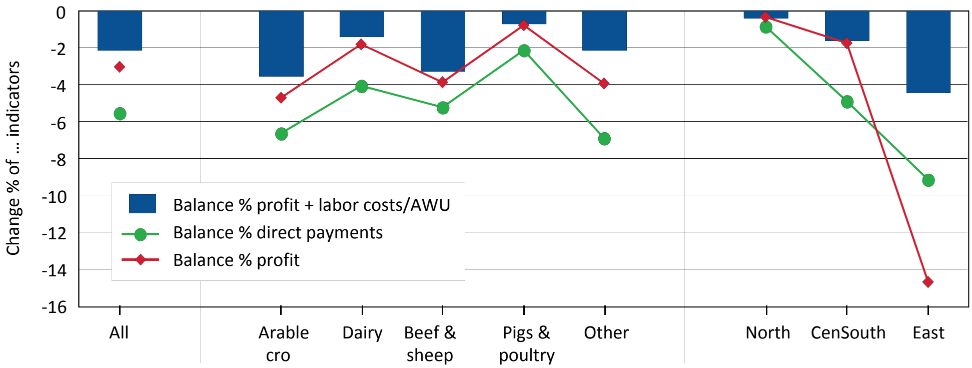

Figure 10. Effects of measures on direct payments and income (AMK agreement) by farm type and regions

Source: Kleinhanss (2013), BMELV-Testbetriebe.

Summary and conclusions

The CAP after 2013 was a success in terms of maintaining the budget of public transfers in favour of farmers, but is without clear orientation concerning a more efficient use of public funding and future societal goals, as well as not regarding the changing conditions of agricultural markets. The two years of negotiation ended in a consensus of a bundle of measures going forwards or backwards compared former CAP's and with manifold options of national implementation. Administrative burdens will become more important as previously.

Germany is an example of in-time implementation of the CAP reform measures, and also a leader in implementing principles of decoupling. The move from historical towards regional entitlement levels has been implemented in the previous two reforms, whilst other Member States are obliged to do that under the New CAP, although significant redistribution effects occur.

Although the first hectare premiums are critically discussed by German economists (Top Agrar 2014) there are good reasons to balance the effects between the former and the New CAP between size classes (Kleinhanss 2012). The Young Framers' scheme has some regional distribution effects, but much less than would be with the implementation of Grassland and Grazing Livestock premiums on disadvantaged regions. To avoid this, AMK finally decided upon a global Pillar-I budget transfer to Pillar-II and determination on measures entirely under the authority of the Länder.

Finally, the New CAP will have rather moderate negative income effects. Unresolved are the effects of CAP on land rental prices. There are clear indicators that the significant rise of rental prices is influenced by decoupling, especially the transparency coming-in by the regional entitlements. Other factors are the rise of agricultural commodity prices especially for crops, but also the heavy subsidization of bio-energies as biogas and bio-fuels based on national policies.

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