



AGRICULTURE AND FOOD DEVELOPMENT AUTHORITY

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CAP Reform Outcome:

Teagasc National Farm Survey Analysis



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Teagasc & AESI Seminar:
CAP 2014: Impetus, Impact and Implementation
March 7th 2014



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Overview

- Background & Objectives
- Methods overview
 - Approach & limitations
- NFS farm level ‘MIN’ scenario outcome
 - Family Farm Income
 - ‘Possible’ production impacts
 - Greening costs & opportunity costs
- Conclusions, limitations & what next.....



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Background & Objectives

- Kevin’s ppt on administrative data analysis
 - Output from this feeds into NFS farm level analysis
- Using NFS data
 - Average sector income
 - Income by farm system
 - Proportion of output generated by farms losing/gaining
 - Greening costs



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Methods

NFS Analysis of CAP Reform

- Why use the National Farm Survey (NFS)?
 - Details on farm income and importance of SFP
 - Details on production and profit levels
 - Can show impact on profitability and overall farm income
- Disadvantages
 - About 30,000 small farms excluded, eg. less than 3 dairy cows, 3 hectares of crops or 7 suckler cows
 - BUT 98% of output still represented by the NFS

Limitations of the NFS analysis...

- **Still lack of information**
 - Mostly in the form of Legislative Acts
 - Precludes analysis of some aspects of the reform
- **Young Farmers' Scheme**
 - Distributional impact depends on extent of take up &
 - Extent to which young farmers taking over farms lose/gain
 - Analysis presented does not take into account the 2% allocation
- **Coupled protein crop payment**
 - Use 2% of Pillar I envelope?
 - Analysis presented does not take account of allocation



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Summary of MIN Scenario

	Basic	Green	Coupled	Redistributive
MIN	70%	30%	None	None

- **Convergence model**
 - Min. 60% of the BPS
 - Proportional Greening
- **Focus on 2019 income outcomes**
 - No market dynamics accounted for
 - Excludes consideration of National Reserve
- **Previously zero cost 'Greening' was assumed**
 - Now an estimate of the no. of farms affected & cost for 'affected' farms



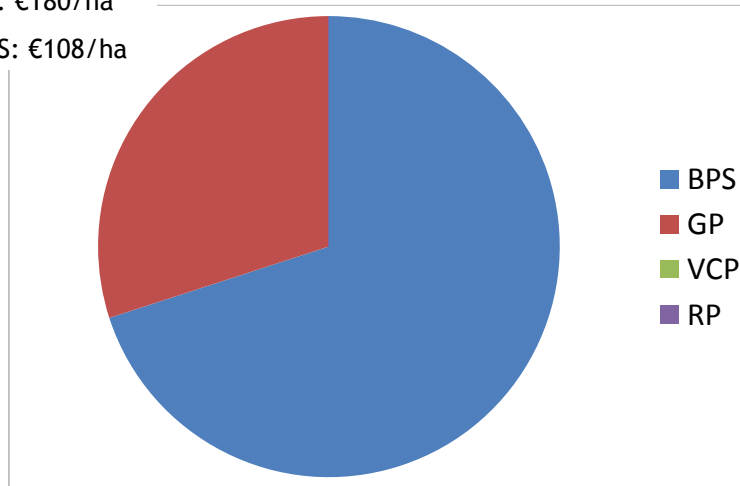
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National Direct Ceiling allocation

MIN

Average BPS: €180/ha

Minimum BPS: €108/ha



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Results



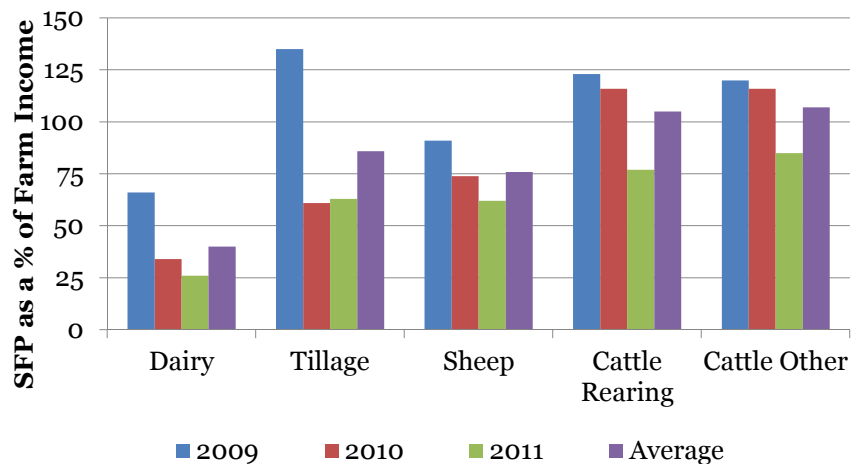
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Recap: Analysis conducted

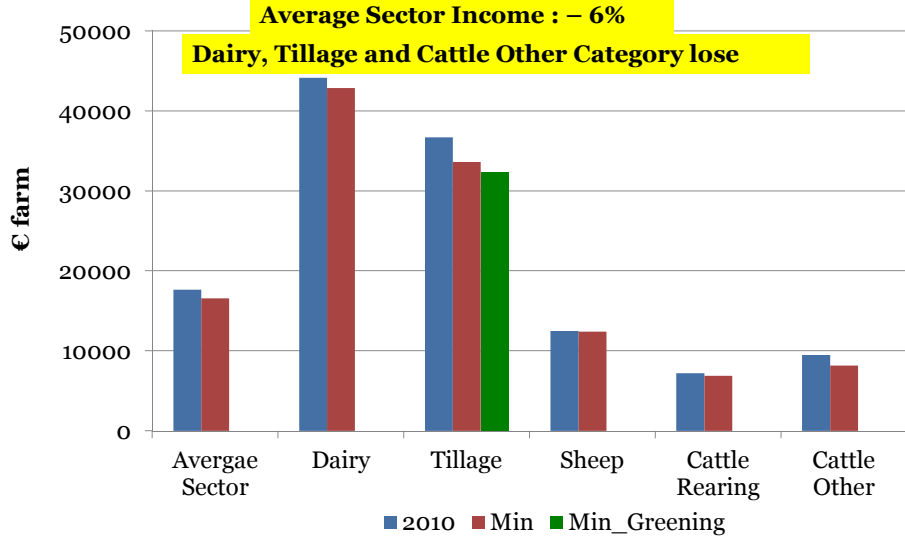
- Impact of MIN scenario on the distribution of:
 - Family Farm Income
 - ‘Possible’ production impacts
 - Greening costs & opportunity costs

Importance of the Single Farm Payment

2010 a representative year



Average income by system



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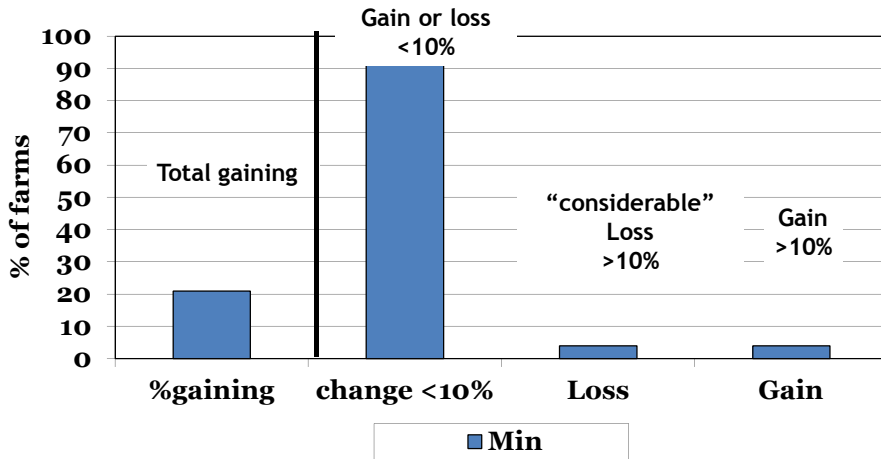
Dairy



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Dairy Farm Income Changes

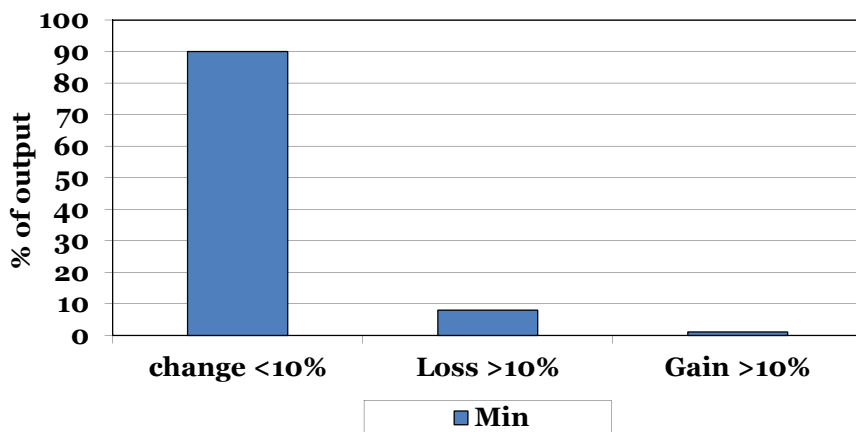
In general dairy farms lose



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Milk Output

Most milk produced on farms experiencing smaller change in payments



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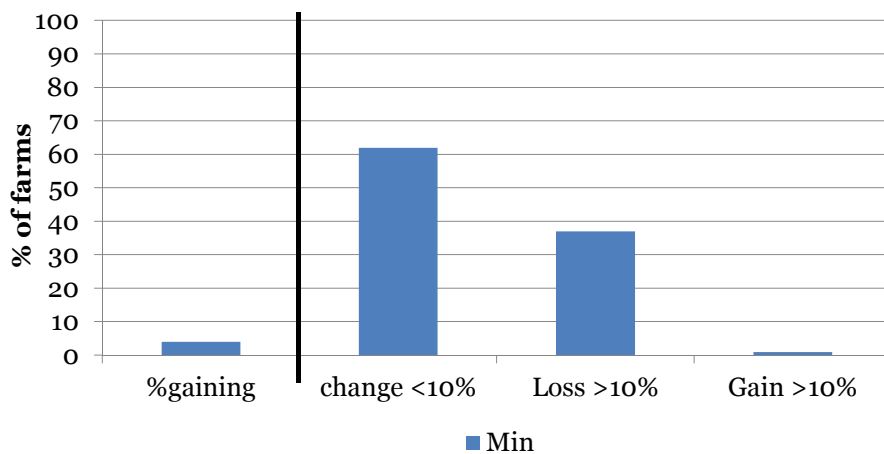
Tillage



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Tillage Farm Income Changes

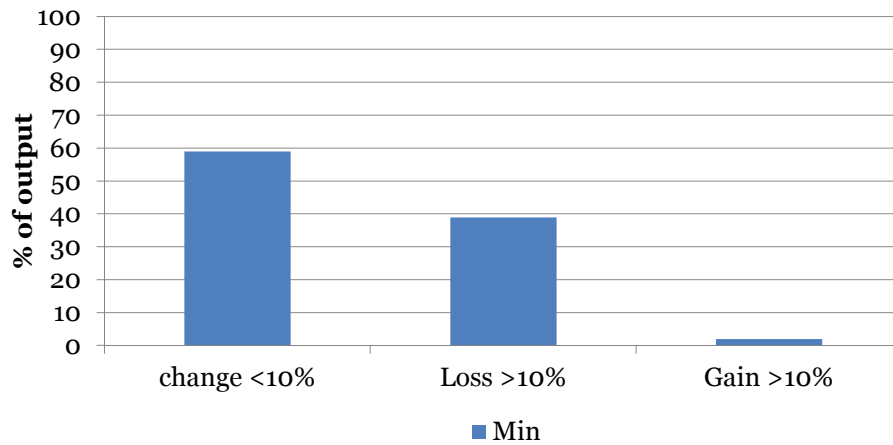
In general tillage farms lose, with large share in loss >10% category



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Crop Output

Large volume of crop output on farms experiencing bigger reductions in income



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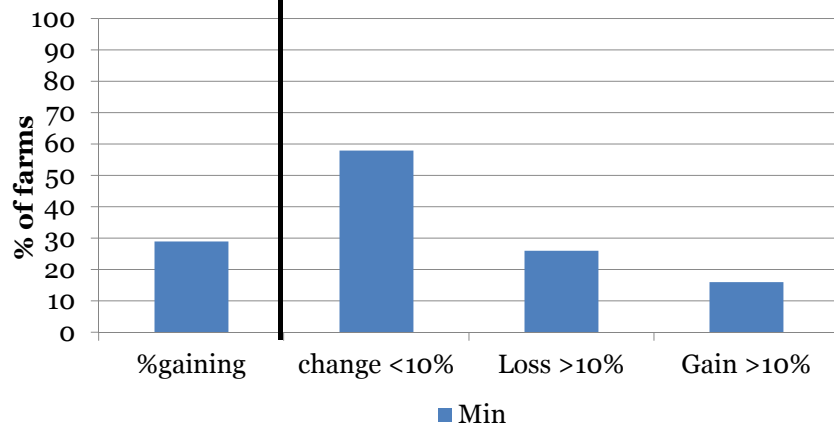
Sheep



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Sheep Farm Income Changes

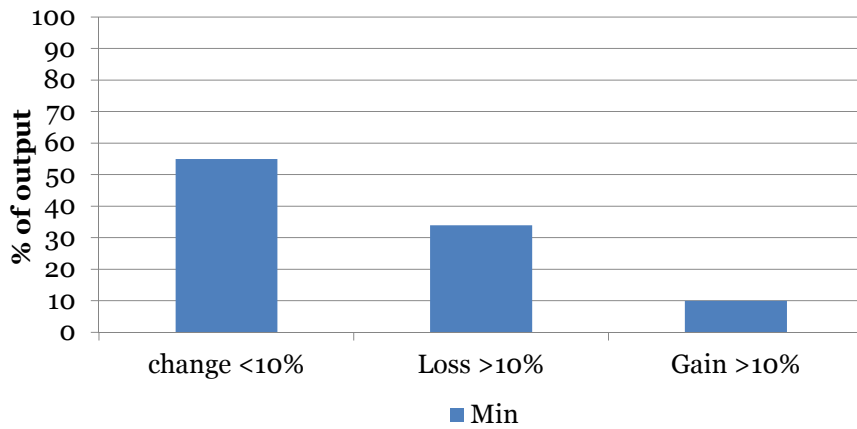
Limited gainers but more substantial than tillage or dairy systems



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Sheep Output

Appreciable volume of production in Loss >10% category
But not as bad as the crops story



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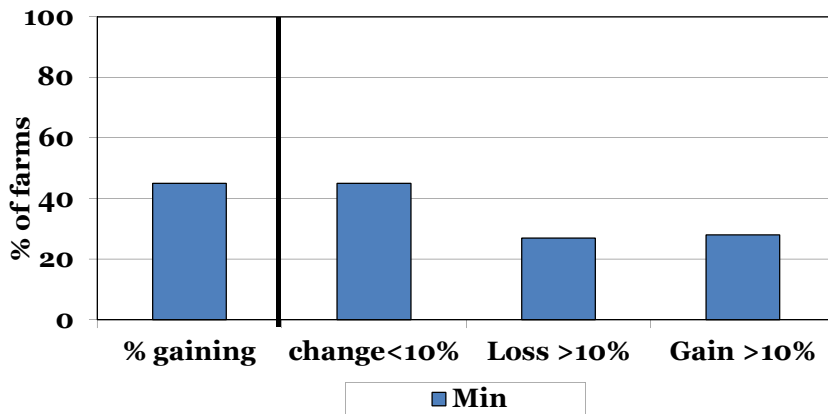
Beef



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Cattle Rearing Farm Income Changes

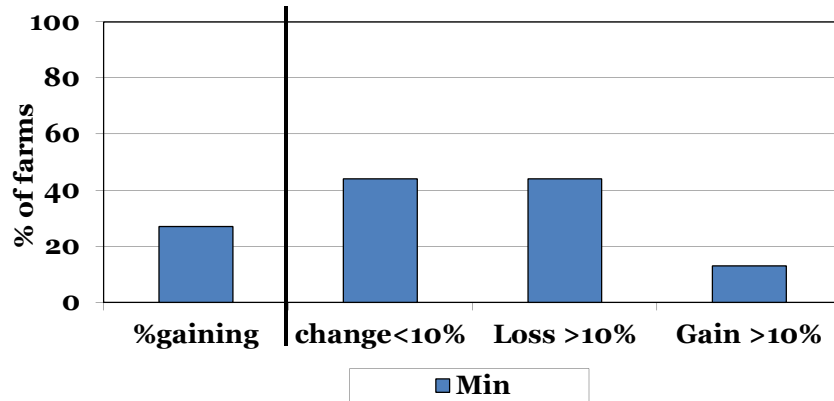
More gaining farms than previous sectors examined



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Cattle Other Farm Income Changes

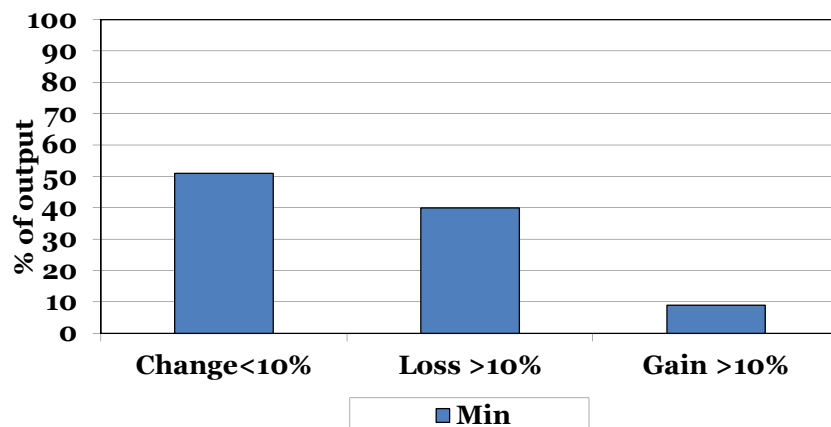
Much less gaining farmers than we saw for beef rearing



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Beef Output

Significant volume of beef output in loss >10% category



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Implications of Coupling for Beef Production

- Coupling increased the profitability of suckler production
 - But at €83 per cow the increase was marginal
 - Problem of ‘chronic’ loss making activity in the sector
- Coupling over ‘MIN’ impacts all sectors income
 - Cattle rearing + €750
 - Tillage - €1,000
 - Dairy - €750
 - Cattle Other - €200
- Not a free pot of money



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Greening Costs



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Green Pillar 1 Payments

- Greening measures
 - Crop diversification
 - Maintenance of permanent pasture
 - Ecological focus areas
- Effect on farm income determined by:
 - The increase in the costs of farming either directly or indirectly
 - The impact on supply and thus market prices
- FADN – Impact analysis:
 - Average EU-wide cost to farmers ~ 2% of input costs (€33/ha)
 - But very variable across farms



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NFS Greening Impact Analysis

- Taking most up to date information on Greening into account
 - Crop Diversification (Spring, Winter crops)
 - Ecological Focus Areas (Eligible areas)
 - Permanent Pasture (National, regional level)
- Specialist tillage farming sector
- Using assumptions for previous FADN analysis
 - Income forgone due to diversification & area set aside
 - Short term costs, no long term environmental benefits
 - BUT, no market impacts projected
- Still work in progress....



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Numbers Affected (Crop Diversification)

	No. of farms
No of farms with Arable Land	19,281
Farms 10-30 with only 1crop	3,629
Farms 10-30 with 2 crops or more	2,724
Farms >30 with less than 3 crops	882
Farms >30 with 3 or more crops	2,398
Total Unaffected	14,770
Affected	4,511


Source: Teagasc NFS, 2010 The Irish Agriculture and Food Development Authority

Numbers Affected (Ecological Focus Area)

	No. of farms
No of farms with Arable Land	16,823
Farms more than 15 Ha	7,085
Total Unaffected	9,738
Affected	7,085

Source: Teagasc NFS, 2010


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Ecological Focus Area– Example Farm

- Continuous winter wheat ~ GM = €1,000
- 5% EFA applicable

Example - winter wheat	GM €1000 per ha
GM forgone @ 2/3's average	GM €666
Total arable area	43 ha.
Applicable EFA ha.	2.15 ha. EFA
Average additional EFA area (based on NFS calculations)	1.4 ha.
Income forgone per arable hectare	€22 per ha.
Income forgone per farm	€929 per farm

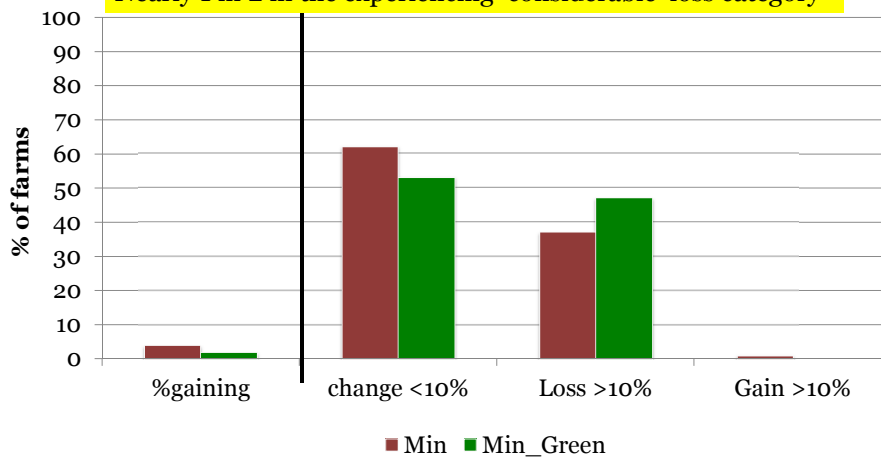


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Effect of Greening on Income on Tillage Farms

Much larger share in loss >10% category

Nearly 1 in 2 in the experiencing 'considerable' loss category



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Effect of Greening on Income on Tillage Farms

- Now an additional 10% of tillage farmers in the considerable loss category
- BUT, further look at data shows that many farms were just at the margin anyway of 'considerable loss'
- Look at average opportunity cost of 'Greening'
 - Average FFI 2010: €36,704
 - Average FFI 2019 (MIN): €33,629
 - Average FFI 2019 (MIN with greening cost): €32,324
- Greening costs an additional €20 per hectare for the average tillage farmer (versus €95 previously estimated)



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Conclusions

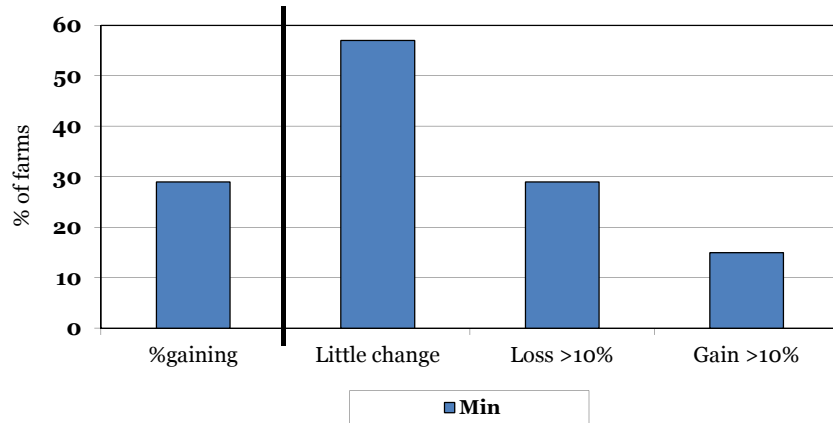


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Income Impacts All Farms

The majority of farms are worse off than in 2010

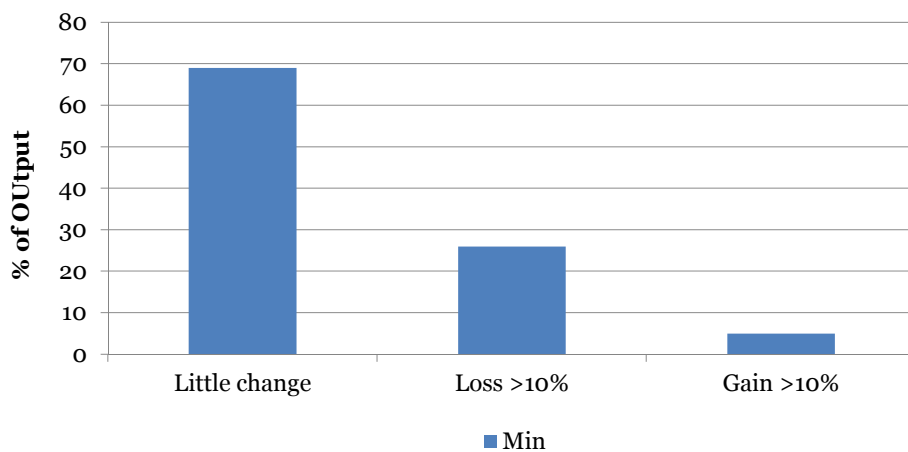
Majority of farms see little change in income as a result of reform



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All Output

Majority of Output is on farms that see income changes of less than 10%



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Take Home Message (1)

- The majority of farmers are worse off relative to 2010
 - But the status quo wasn't available as a policy choice
- Tillage farms particularly exposed to losses under the reform
 - But opportunity costs of Greening are less than originally talked about
 - Exemptions agreed have had a positive effect on potential associated opportunity costs



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Take Home Message (2)

- 'MIN' scenario does what it sets out to do
- Limited re-distribution of income & 'possibly' minimizes the affect on production
- More redistributive scenarios might have had a greater number of 'gainers' but:
 - More substantial loses in some categories
 - Possibility for negative affect on production



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Thank-you



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Other issues for future analysis

- **Young Farmers' Scheme**
 - Distributional impact depends on extent of take up & extent to which young farmers are taking over farms which lose/gain from convergence
 - Analysis presented does not take into account the 2% allocation
- **Coupled protein crop payment not accounted for**
 - Unlikely to use 2% of Pillar I envelope
- **Analysis does not account for the distributional impact of Pillar II ANC scheme**
- **Empirical analysis of the production impact of limited redistribution will have to wait until we see what farmers do**
 - Experience with decoupling suggests that conservatism in forecasting impact of policy change in Irish agriculture is probably wise!



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Overall Impact on Beef

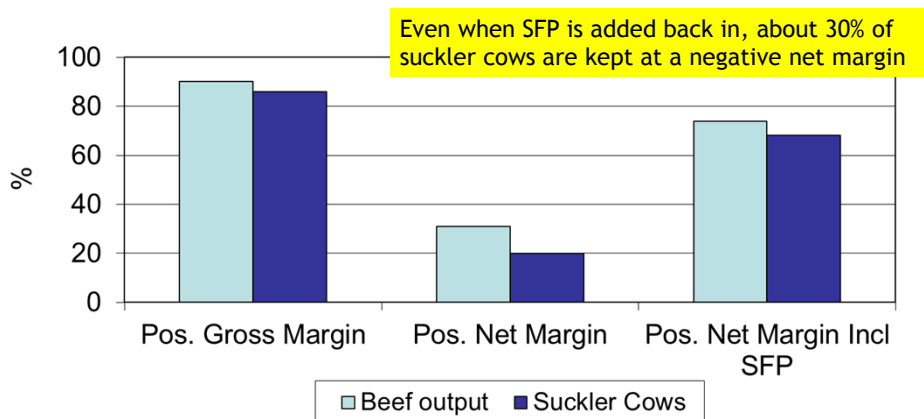
- Coupling Scenarios
 - favour cattle rearing farms but penalise cattle finishers
- In general more output is produced on farms that are losing considerably than on farms that are gaining considerably
- Coupling only marginally reduces the amount of output that is produced on farms that are losing substantially
 - Next we investigate why?



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Beef Production with Positive Margins

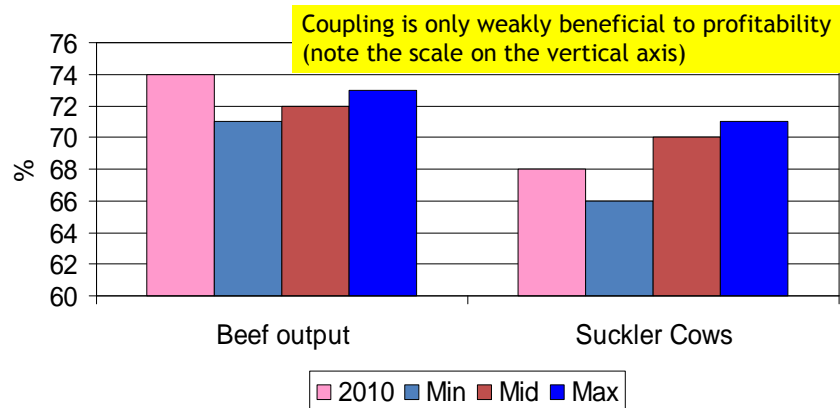
% profitable in 2010



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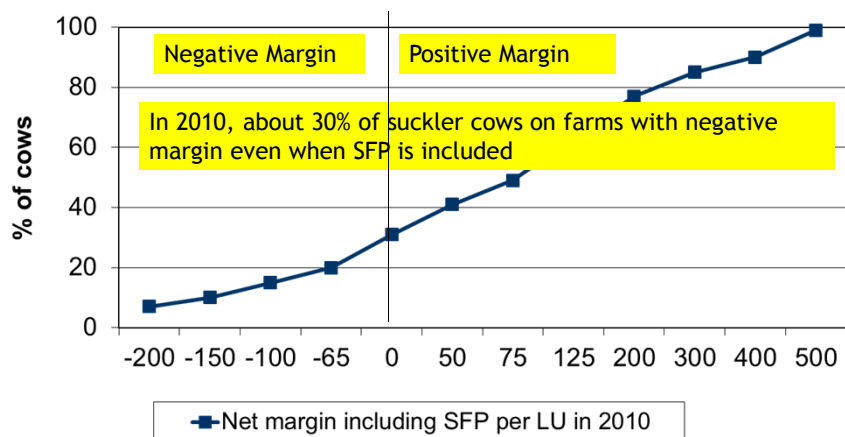
Beef profitability

% profitable - "coupled net margin"



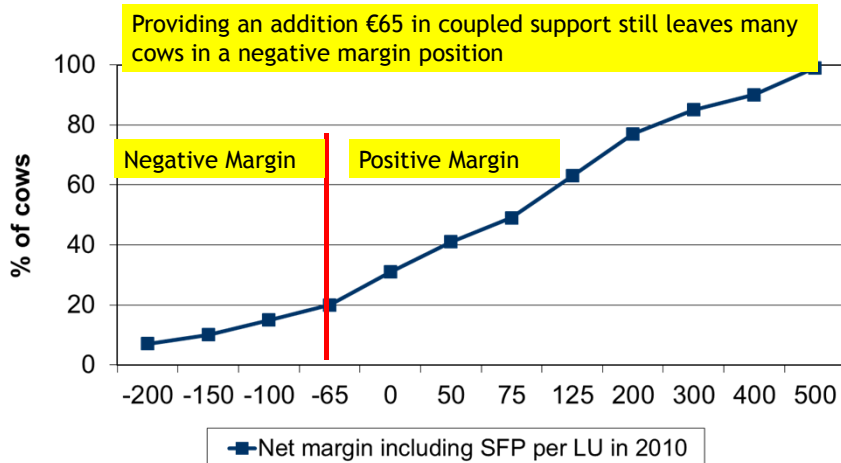
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The profitability of suckler production



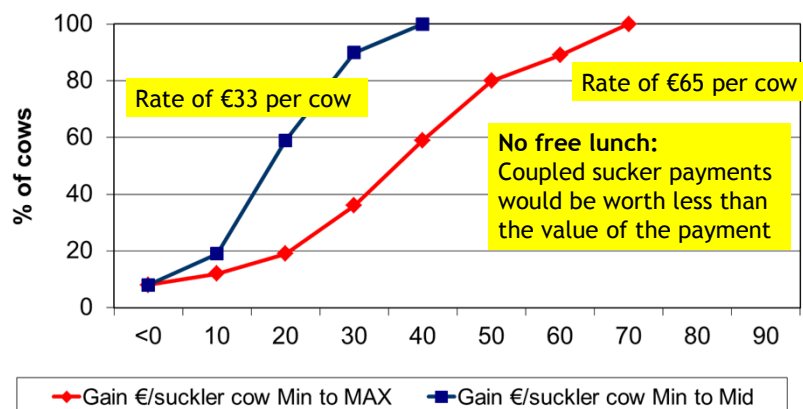
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The profitability of suckler production



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The marginal gain per suckler cow going from Min to Max and from Min to Mid

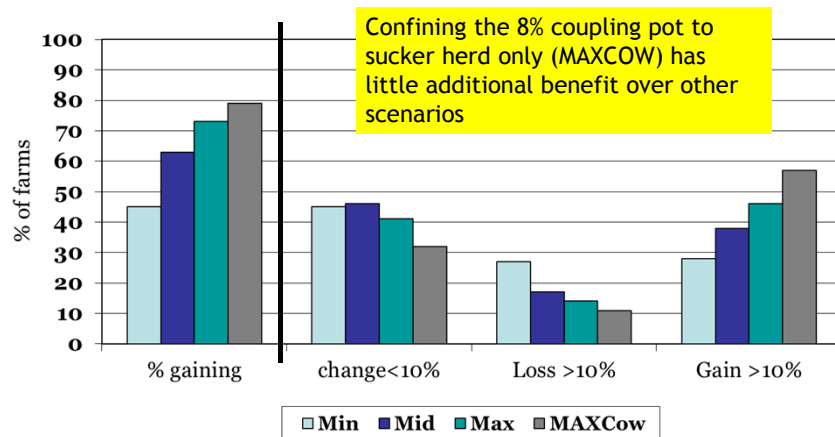


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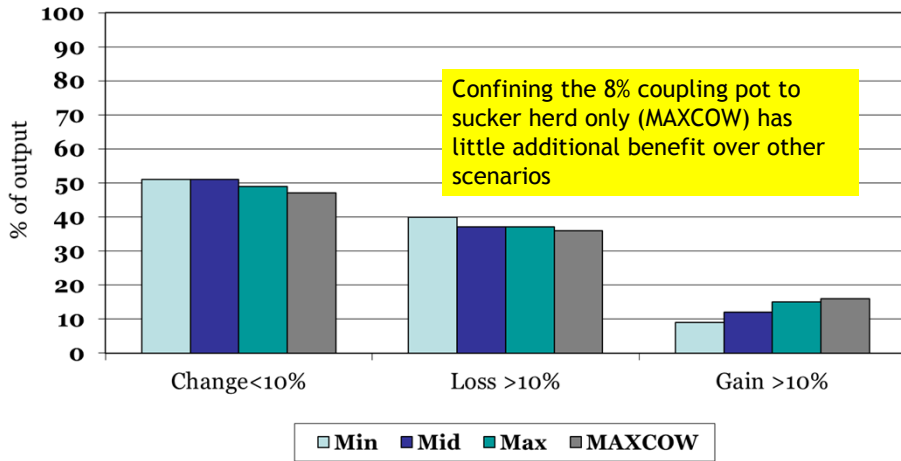
Will coupling improve beef profitability?

- It's not free money
- 8% of sucklers cows are on farms that are more profitable under MIN than MAX
- 20% of suckler cows on chronic loss making farms
 - €65 per cow insufficient to make them profitable
- Would €83 per cow & no ewe premium improve beef profitability?

Cattle Rearing Farms - €83 per cow



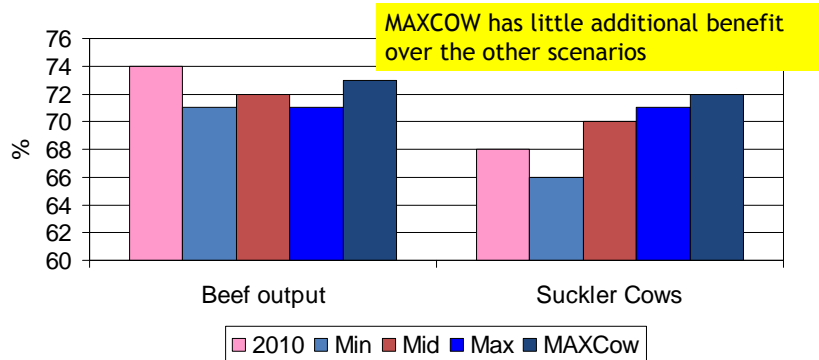
Beef Output



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Beef profitability

% profitable - "coupled net margin"



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