

Investment and Debt on Irish Farms

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RERC

Teagasc National Rural Development
Conference 2009



Why we are here?

- *'If you keep your eyes shut you are likely to find the place you are going is far far behind'*

Dr Seuss





The voice of Ireland's farming industry
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IRISH FARMERS JOURNAL

INSIDE
 Fermanagh girl Tara Maguire on working with the Irish Dairy Board in the USA and representing Washington DC in this year's Rose of Tralee

Detailed weather forecast for 20 to 26 August Page 43

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MILKING EQUIPMENT
 Edited by Jack Kennedy

NEWS
Export trade drives up mart prices
 Livestock editor Justin McCarthy reports
 PAGE 3

Record farm debt

LIAM O'NEILL
 BUSINESS EDITOR

FINISHING LINE for Combines 4 Charity

DEBTS on Irish farms have hit a record level of €5.5bn at the end of 2008.

plus Brian Cowi and milking

The voice of Ireland's farming industry
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IRISH FARMERS JOURNAL

J3
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RESEEDING

THE INTERVIEW
 News editor Pat O'Keeffe gets the frank views of former IFA general secretary Michael Berkery
 Pages 6 - 7

CREDIT CRUNCH

JUSTIN MCCARTHY & PAT O'TOOLE

The credit crunch is impacting across agriculture, with livestock marts imposing

marts are guaranteed payment under the Livestock and Auctioneers Act of 1968. Farmers selling privately have no such assurance, and should be very careful.

plus Brian Cowi and milking

NEWS
Land price slump
 Average prices halve within two years

The average price paid for land in Leitrim during the first six months of the year was €10,975/acre, down by a massive 52% when compared to the same period last year. Average values in Munster

SIMPLY THE VEST
 Pictured at the launch of the Road Safety Authority/FBD/ Irish Farmers Journal hi-vis vest initiative were Bronagh Twomey, group marketing manager FBD; Noel Brett, CEO, Road Safety Authority and Matt Dempsey, Editor, Irish Farmers Journal. For the third year running, 40,000 hi-vis vests will be distributed from the Irish Farmers Journal stand at the National Ploughing Championship.

Be Safe Be Seen
 FBD

12 September 2009 5 Irish Farmers Journal

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Be Safe Be Seen
 FBD



Overview

- Measuring and Monitoring Farm Financial Performance
 - Ratio Analysis
 - Liquidity
 - Solvency
 - Profitability
 - Inter country relative performance
- Determinants of Investment
 - Impact of investment on productivity
- What the role of Teagasc is in the current debate?
- Conclusions



Farm Financial Performance

- Measuring and monitoring over time is critical
- You can't change the past
- But, you can make decisions based on past trends
- Analysis is most useful when conducted over a period of time
- One year's figures by themselves have limited use

Average Farm Liabilities ('00-'09*)



Source: NFS various years, authors estimates for 2009

Average Farm Assets ('00-'09*)



Source: NFS various years, authors estimates for 2009



Main Categories of Analysis

- Solvency
- Liquidity
- Profitability

- Each category takes most of its information from the balance sheet and income statement



Solvency

- Solvency is a long run term
- Indicates whether a business can pay all its debts if it sells all its assets
- $\text{Assets} > \text{Liabilities} = \text{Equity or Solvency}$
- $\text{Liabilities} > \text{Assets} = \text{Bankrupt}$

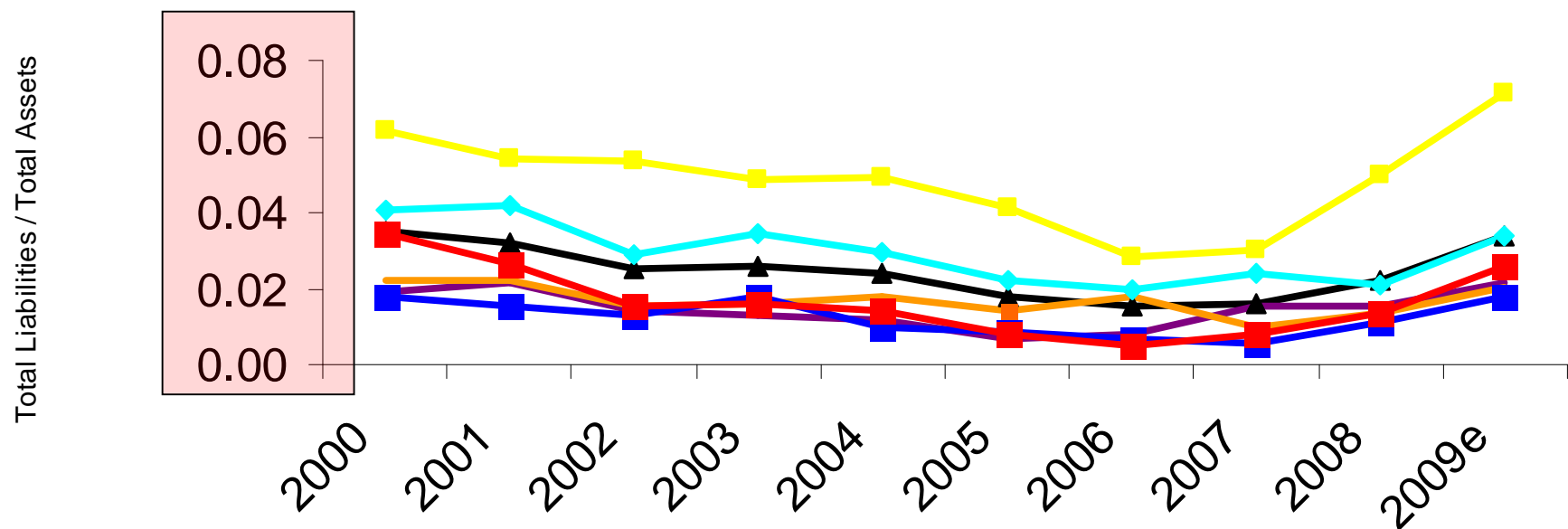


Solvency Measures

- Debt to Asset ratio
- Equity to Asset Ratio
- Debt to Equity ratio

- Note: Solvency ratios provide equivalent information.

Solvency: Debt/Asset Ratio ('00-'09*)



	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009e
▲ Average	0.03	0.03	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.03
■ Dairy	0.06	0.05	0.05	0.05	0.05	0.04	0.03	0.03	0.05	0.07
◆ Dairy Other	0.04	0.04	0.03	0.03	0.03	0.02	0.02	0.02	0.02	0.03
■ Cattle Rearing	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.02
■ Cattle Other	0.02	0.02	0.02	0.02	0.02	0.01	0.02	0.01	0.01	0.02
■ Sheep	0.02	0.02	0.01	0.02	0.01	0.01	0.01	0.01	0.01	0.02
■ Tillage	0.03	0.03	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.03

▲ Average ■ Dairy ◆ Dairy Other ■ Cattle Rearing
 ■ Cattle Other ■ Sheep ■ Tillage

Source: NFS various years, authors estimates for 2009



Liquidity

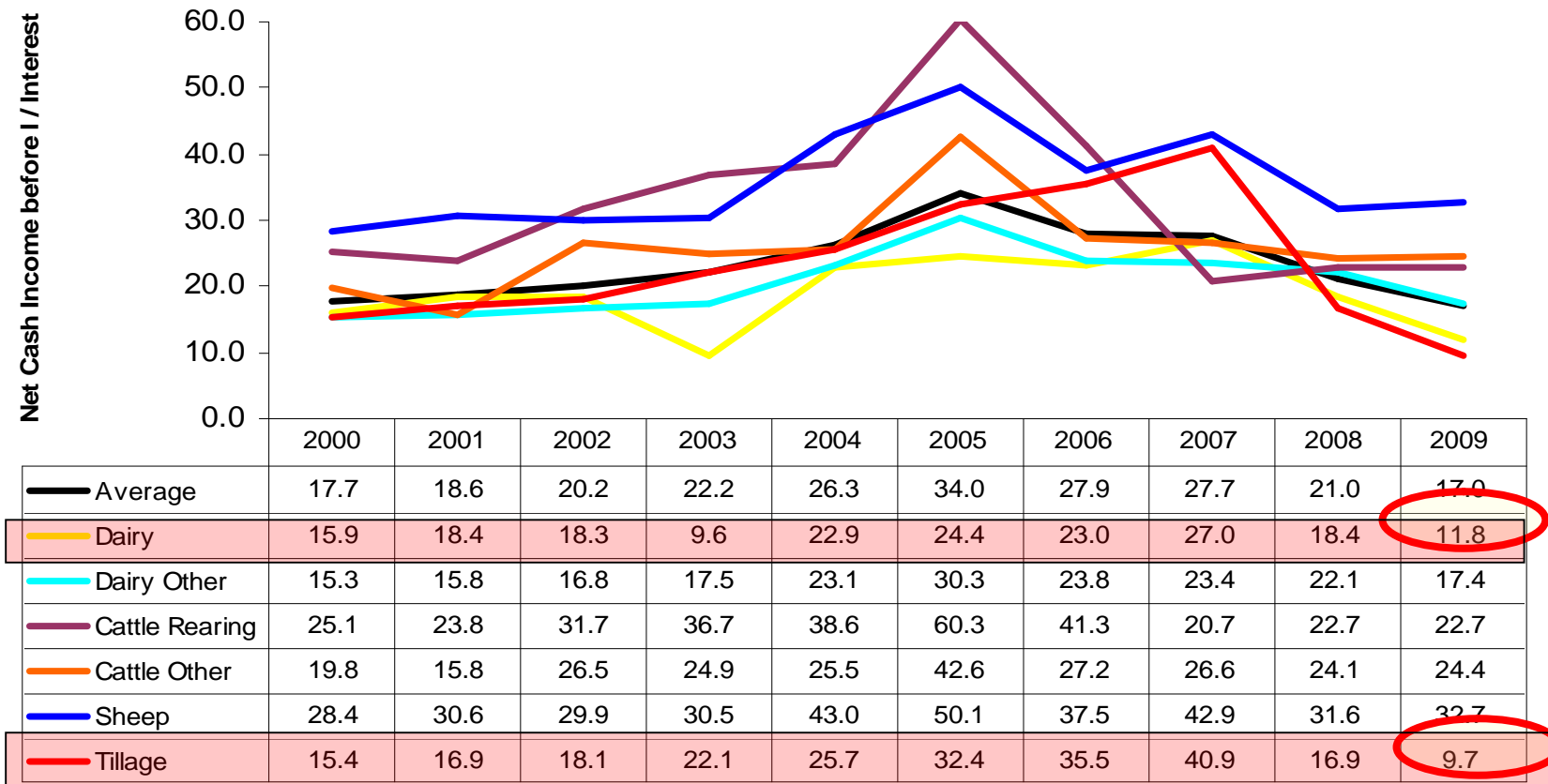
- Liquidity is the ability of a business to meet debt obligations when they become due
- If sufficient cash is available to cover liabilities, a business is liquid
- Liquidity measures:
 - Working capital
 - Current Ratio
 - Farm Debt Service Coverage Ratio
 - Times Interest Ratio



Times Interest Ratio

- $$\frac{\text{Net Cash Income} + \text{Interest}}{\text{Interest}}$$
- Measure of the relationship between net cash income and interest repayments
- The higher the ratio, the more liquid the business

Liquidity: Times Interest Ratio



Average
 Dairy
 Dairy Other
 Cattle Rearing

Cattle Other
 Sheep
 Tillage

Source: NFS various years, authors estimates for 2009



Profitability / Financial Efficiency

- Measures the extent to which a business generates a profit from the factors of production
- Focus on relationship between revenue and expenses
- Gross Efficiency Ratio



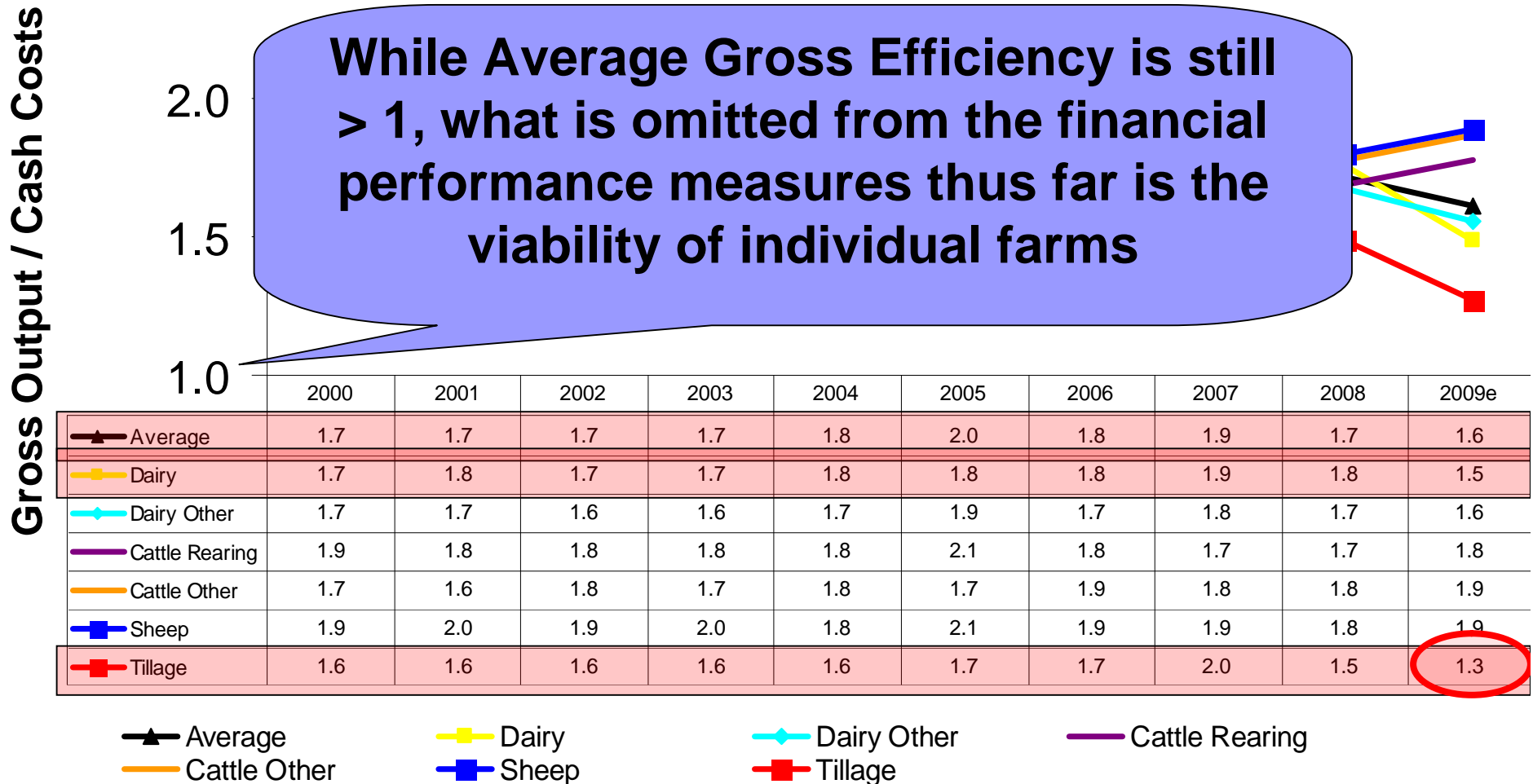
Financial Efficiency Ratio

- Gross Cash Farm Income

Cash Expenses

- The gross efficiency ratio measures the proportion of gross cash farm income absorbed by cash operating expenses
- Higher the ratio, more financially efficient the business is

Financial Efficiency: Gross Efficiency Ratio ('00-'09*)



Source: NFS various years, authors estimates for 2009



Classifying the farm population

- Three broad groups
 1. Economically viable
 2. Not economically viable but 'sustainable'
 3. Transitional (farm not viable neither farmer nor spouse working off farm)



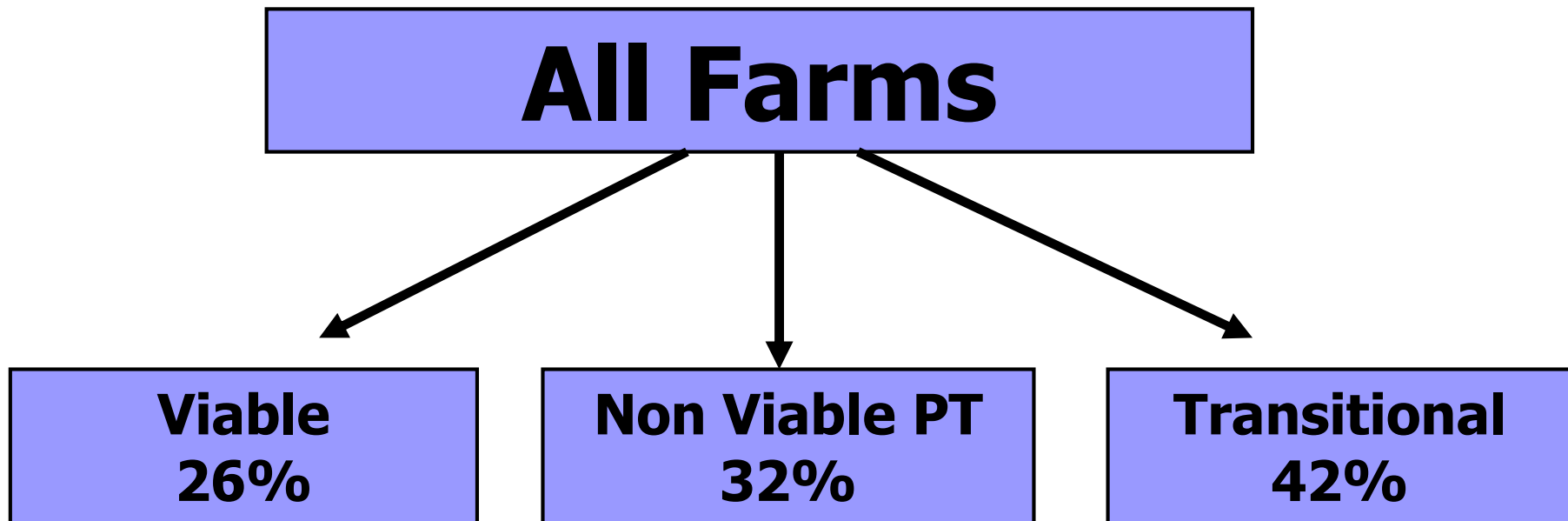
Viability

A farm is economically viable if it can

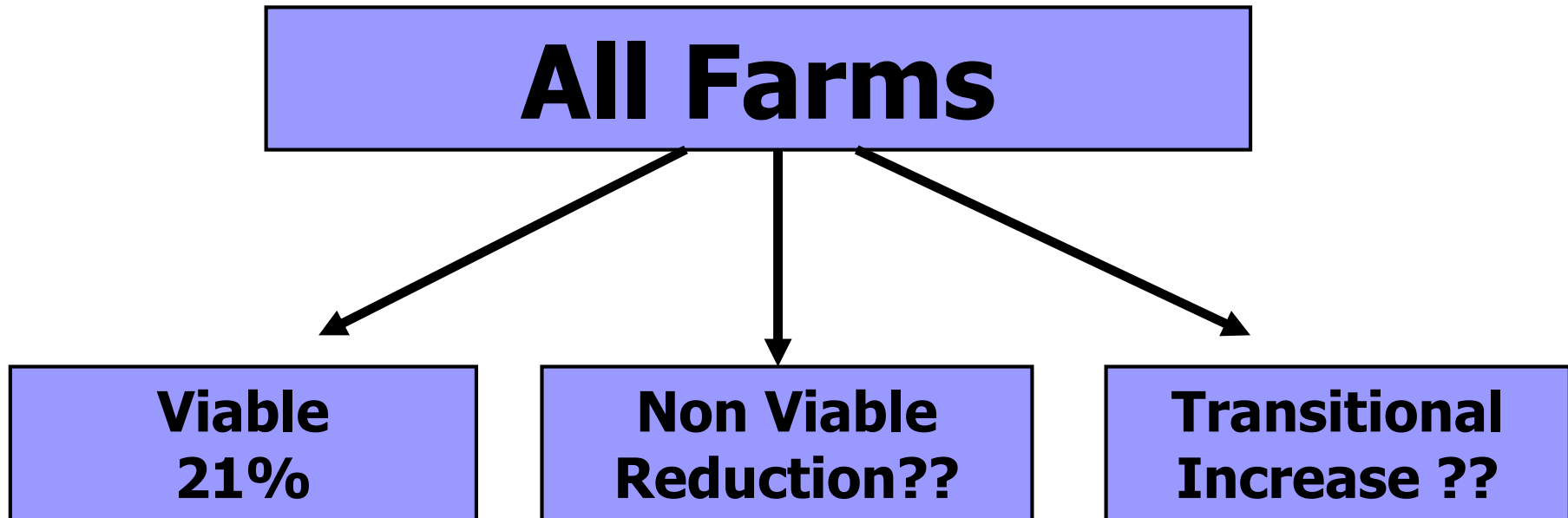
***(a) remunerate family labour at the
average agricultural wage, and***

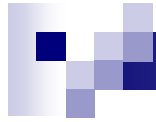
***(b) provide a 5 per cent return on non-land
assets, (Frawley and Commins 1996).***

Classifying the 2008 farm population



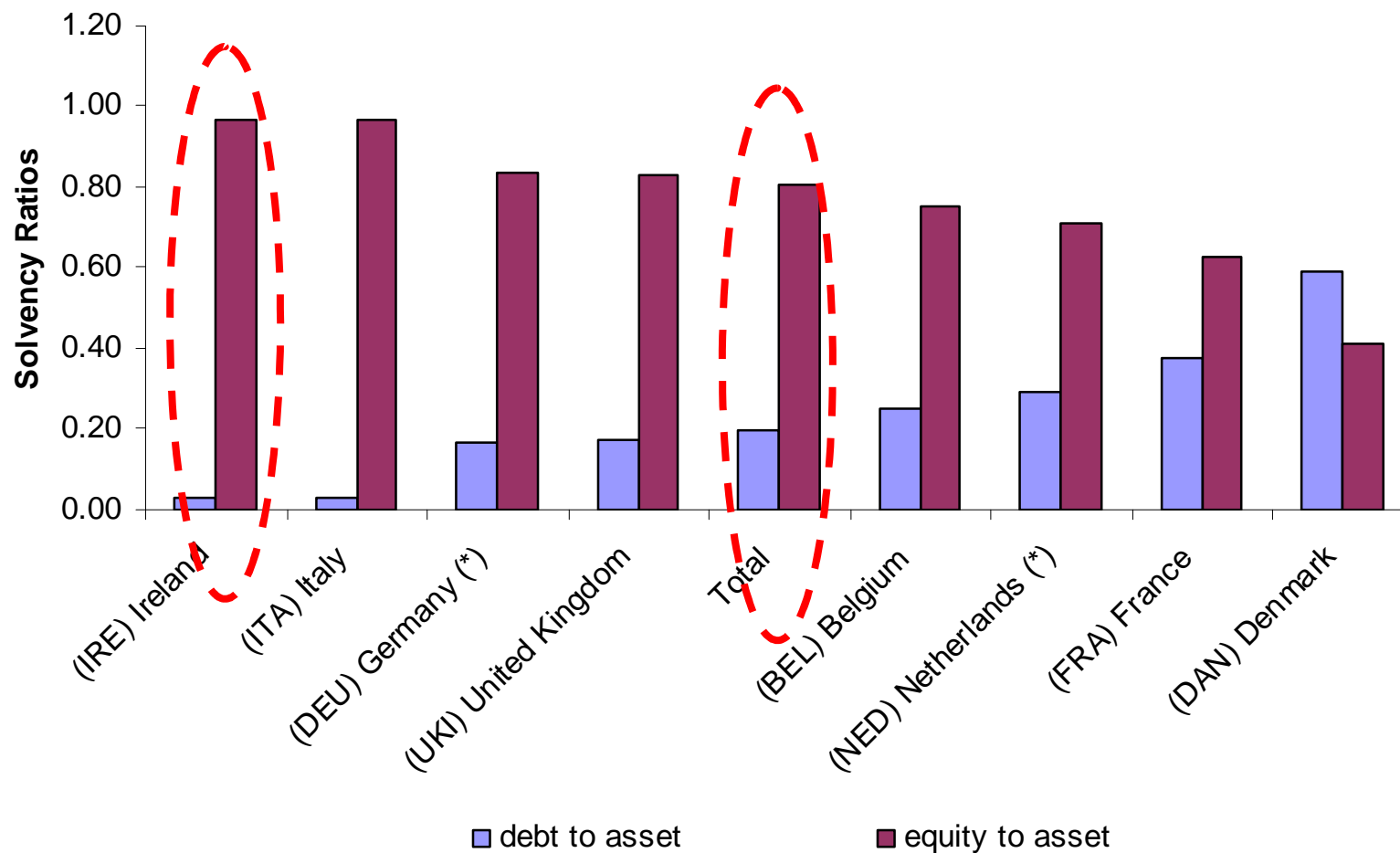
Classifying the 2009 farm population





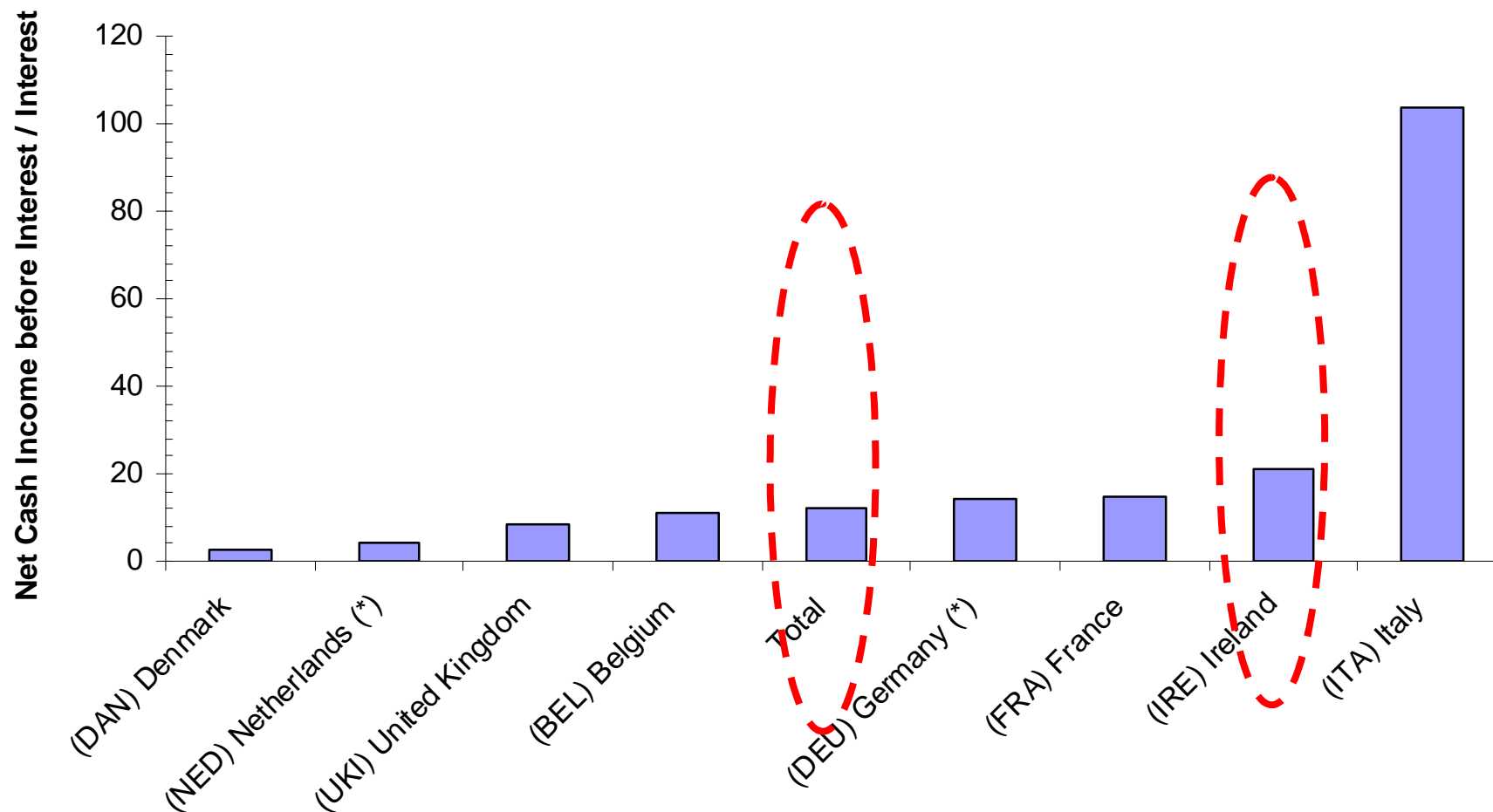
Inter Country Financial Performance

Solvency (^06 – Spec. Milk Producers)



Source: Based on authors estimates from FADN data

Liquidity: Times Interest Ratio ('06)



Source: Based on authors estimates from FADN data

Financial Efficiency: Gross Efficiency Ratio ('06)



Source: Based on authors estimates from FADN data



Determinants of On-Farm Investment

- Farm Investment remains buoyant despite
 - Declining incomes
- NFS data shows from 2000 to 2008
 - Real farm incomes declined by 7%
 - Net New Investment increased from average €4,500 to €15,500 per farm



Hypothesis

The buoyancy of farm investment is due to the increase in part-time farming as farmers use non-farm income to invest in labour saving devices to maximise total farm income and grant aid.



Farm Investment

- NFS data on gross investment and net new investment
- Net new investment

Investment (purchases & repair) in buildings, land improvement, machinery and quotas less capital sales and grants or subsidies. EXCLUDES land purchases

- Good measure - excludes speculative investment (land) and incentive based investment (grants)



Results (2004)

- ❑ The presence of off-farm income earned by the farm operator reduces the probability of farm investment.
- ❑ Off-farm income earned by the spouse increases the probability of investment.
- ❑ Other significant variables included: system, size, no. of household members, farm income.



Results (2008)

Variable	Coefficient (Z values)	Marginal Effects
Intercept	0.08044	
System***	0.65839 (6.09)	.2238647
Size***	0.01407 (5.39)	.0051155
Size2***	-0.00004 (-4.59)	-.0000156
Age**	-0.00983 (-2.50)	-.0035736
No.*	0.04262 (1.49)	.0155003



Results (2008)

- When size, system, age and successor are controlled for, the presence of off-farm job and on-farm income do not remain significant
 - So the presence of off-farm income earned by the farm operator or spouse is no longer significant in determining investment
 - And FFI is no longer significant in determining investment reduces the probability of farm investment

- Implications for productivity and competitiveness
 - Larger, younger, dairy farms with successors were more likely to invest
 - But repayment ability not the driving factor



Teagasc Advisory Service

- Financial Health Check Service
- Assist farmers in decisions related to:
 - Liquidity
 - Solvency
 - Profitability



Financial Health Check

Estimate of Level of Difficulty

1. + Single Farm Payment + REPS
2. + Off Farm Income
3. + Farm Income
4. - Living Expenses and Tax
5. = Surplus/Deficit to service borrowings

Financial tools like profit monitor, options living expenses calculator may be used to improve the accuracy of the financial health check.



Financial Health Check

- Actions to get out of difficulty
 - Moratorium on principal payments
 - Moratorium on all loan payments
 - Working capital loan to be repaid in say three years time
 - Restructuring of short term loans for large capital investment into longer term loans
 - Farm Assist or other income source
 - Deferment of major farm and personal expenditure
 - Sale of assets

Talk to adviser, accountant and Bank for the best option the sooner the better



Financial Health Check

- Feedback to date

- Farmers slow to come forward
- Some very serious problems exist and are not taking action
- Acceptable solutions are possible in almost all cases
- Early intervention is essential to protect the credit rating



Conclusions

- Solvency levels still good, despite asset decrease in '08/'09
- But....
 - liquidity, financial efficiency and viability a problem in '09
 - Estimated that only 1 in 5 farm businesses are viable
 - But, on the other hand inter country comparisons provides some reassurance
- Investment in recent years is not heavily guided by farm and non farm income levels
 - Implications for productivity and competitiveness



Final Thoughts.....

- Financial measures help ask the right questions, not provide the answers
- Teagasc Financial Health check is available to help farmers in decisions related to aforementioned issues