

Economics of Irish Land Markets

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Rural Economy Research Centre,

Teagasc National Rural Development
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Overview

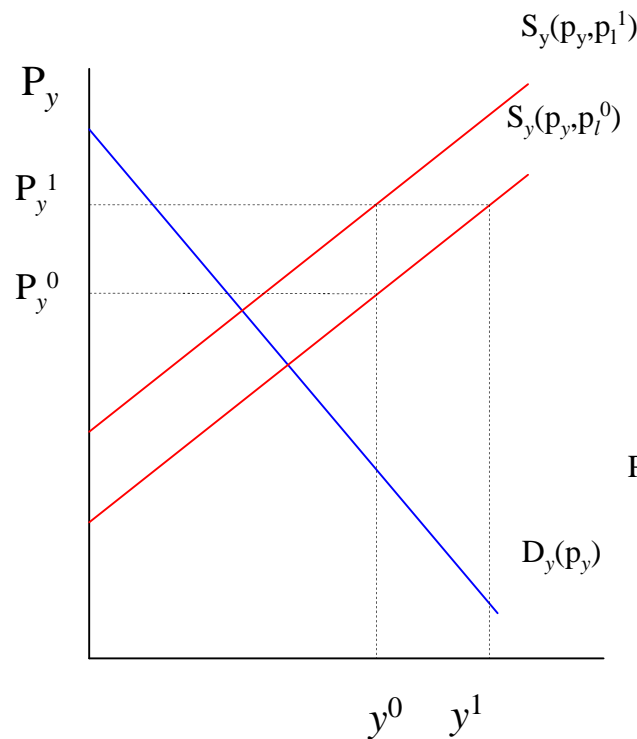
- What economists think should determine agricultural land prices and rents
- Why land use and farming structure is important
- What data do we have on Irish agricultural land prices and rents
- Research and policy agendas?



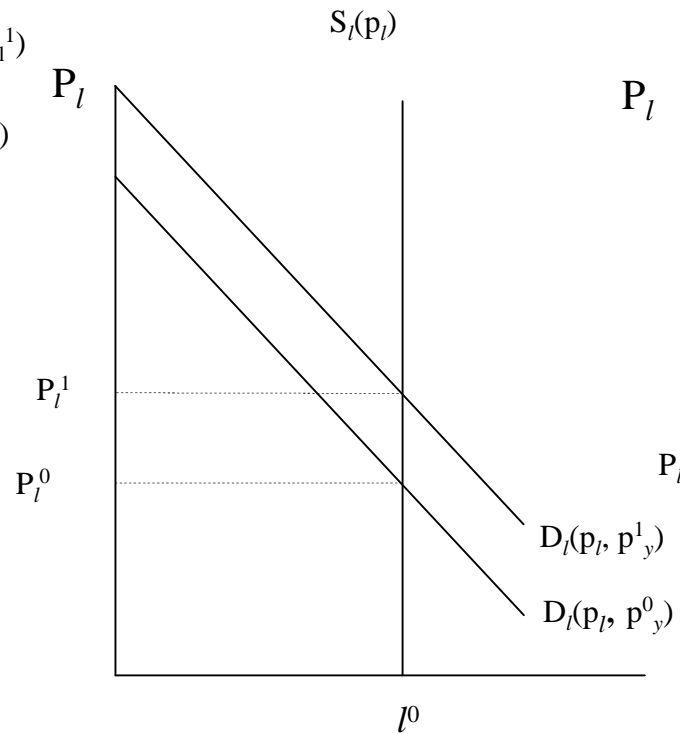
Economics of agricultural land

- Floyd (JPE, 1965) “The effect of farm price supports on the returns to land and labor in agriculture”
 - Agricultural land is a factor whose supply is inelastic
 - Agricultural land is imperfectly substitutable with other factors of production in agriculture
- Implication:
 - Agricultural price supports, coupled direct payments and direct payments coupled to land will bid up the rental rate of land (and the price)
- Degree to which price supports and/or direct payments are bid into the price of land depends on the elasticity of land supply and the substitutability of land for other factors of production
- The more inelastic the supply elasticity of land and the less elastic the substitution elasticity between land and other factors of production the greater the degree to which price supports and direct payment supports will get bid into the price of land

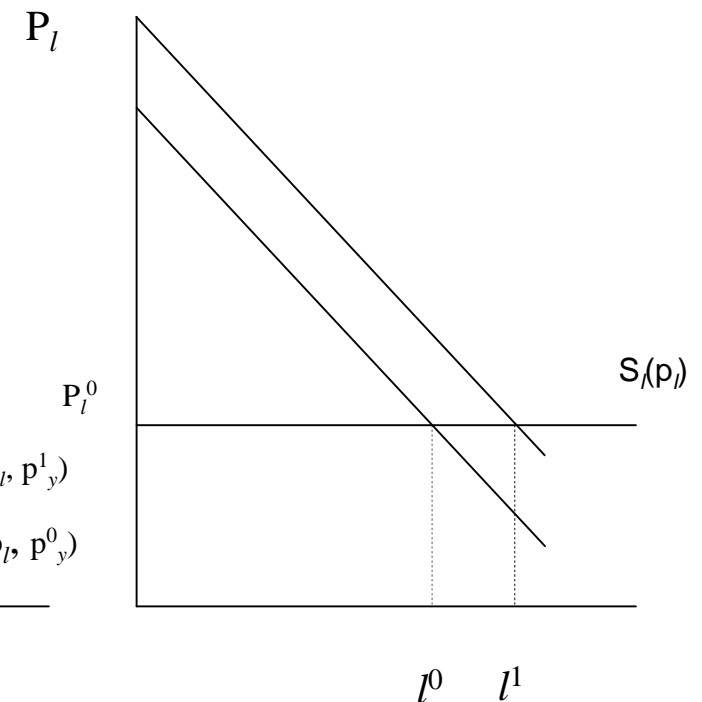
One output one factor model



Output market y

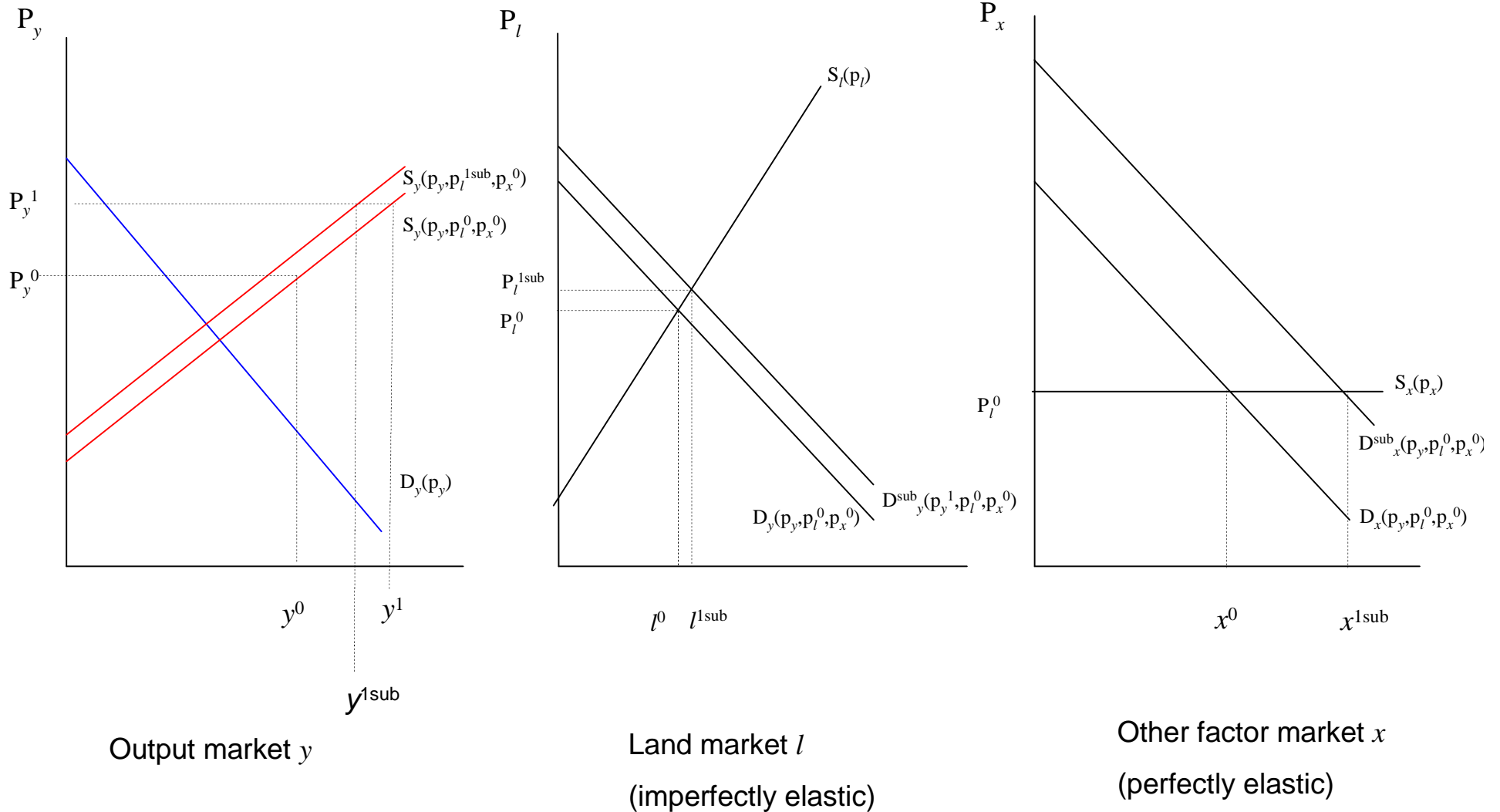


Factor market I
(perfectly inelastic)

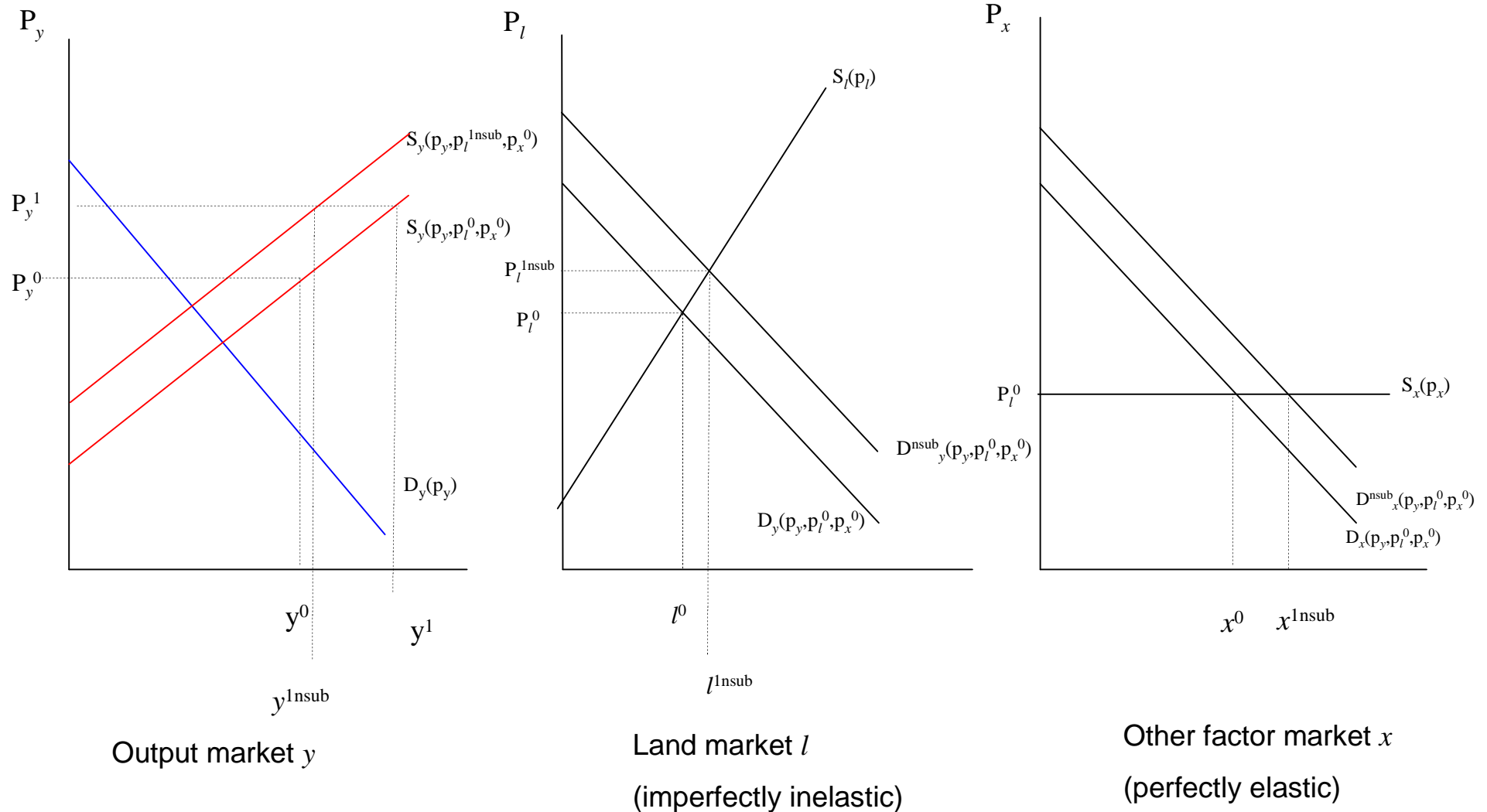


Factor market I
(perfectly elastic)

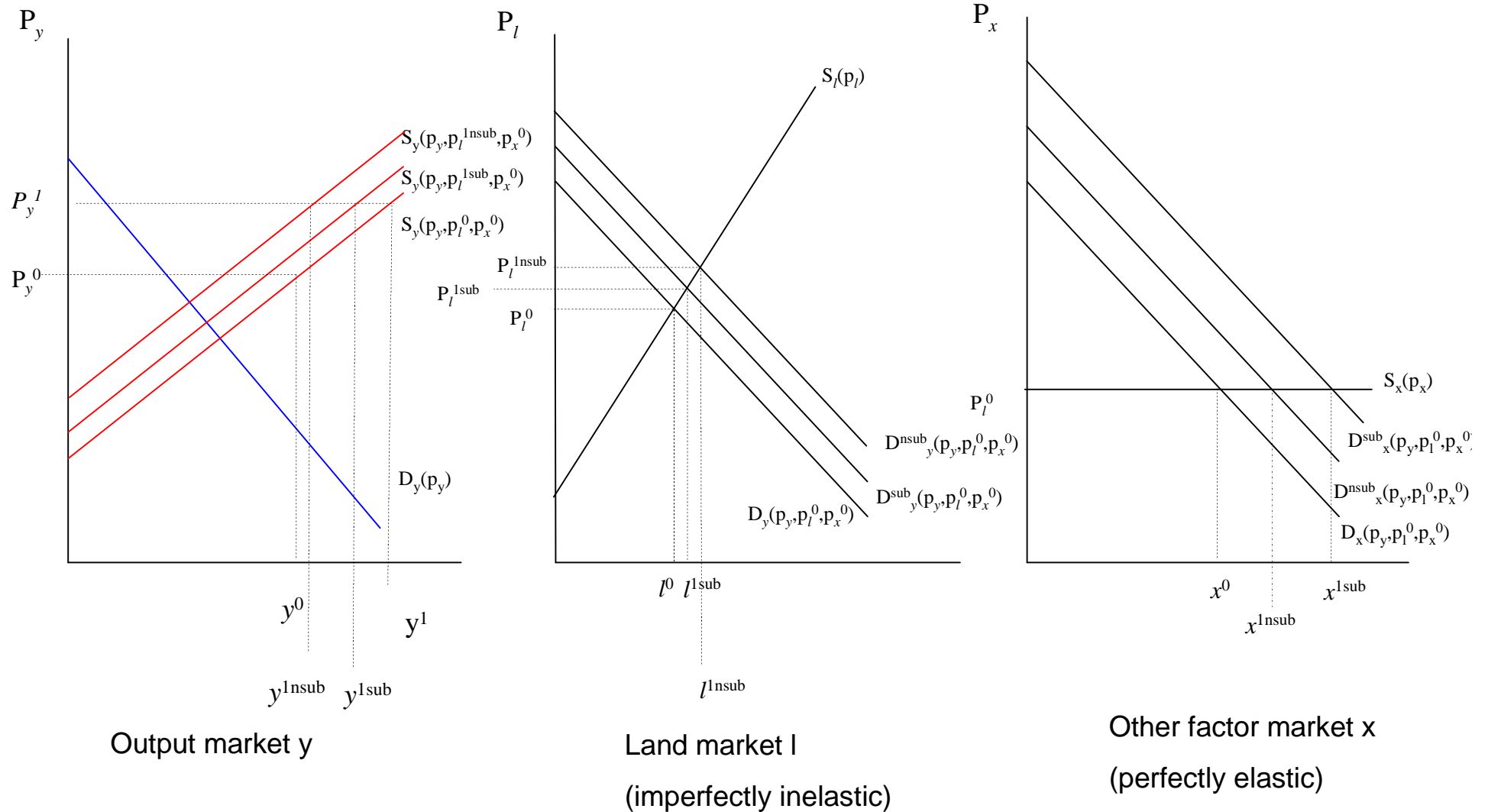
One output two factor model: land and other factor substitutable



One output two factor model: land and other factor less (not) substitutable



One output two factor model





Land rents and land prices

- Present value model (PVM)
 - *price of an income earning asset (land) is equal to the discounted expected stream of future net returns or rents to this asset*
 - Means that we should expect a relationship between rents and sale prices of agricultural land
- Basic model underlying majority of empirical work on land price determination
- Different empirical models have used different expectations schemes, incorporated the influence of differential tax treatment of rents and capital gains, impact of inflation, interest rates, agricultural policy)
 - Conclusions from a vast literature
 - Agricultural policy and agricultural output value affects land prices and rents (agricultural marginal value product of the land)
 - But that other factors are also important



Fads or Bubbles

- Fads versus bubbles

- Bubbles

- “A sharp rise in the price of an asset ... in a continuous process, with the initial rise generating expectations of further rises and attracting in new buyers – generally speculators interested in profits from trading in the asset rather than its use or earning potential” (Eatwell et al., 1998)

- Fads

- Slower increase in prices, with the mean price slowly reverting to market fundamentals

- Which characterises the Irish agricultural land market?

- Roche and McQuinn (2001) found that Irish land prices in the period 1911-1996 could be characterised as a bubble

- Does the rapid increase in the price of agricultural land since the mid 1990s suggest that another bubble in land prices emerged?

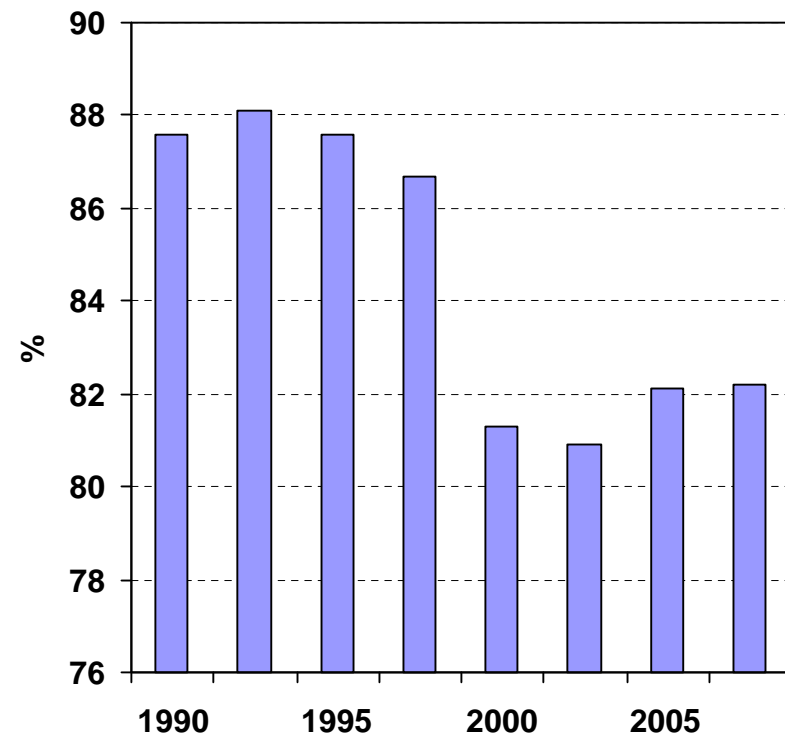


Why is all this important?

- Agricultural policy that bids up the rental price of land and the sales price of land makes it harder for farmers to expand the size of their enterprise
- Restructuring of Irish agricultural land ownership (through sales) or control (through rental markets) could be an important factor in determining future competitiveness

Share of farmed land owned by the farmer

- In Ireland majority of land that is farmed is owned land
- 2007: 17.8% of total UAA was rented-in
- 33% of farms rented in land
- Average of 17.9 ha per farm rented in
- Majority of land rented in was by larger farmers
 - 2007 average ESU was 19,000
 - 69% of land rented by farms > 16,000 ESU
 - 2007 average farm size was 32.3 ha
 - 82% of land rented in was by farms > 30 ha



Source: CSO Farm Structures Surveys



Land control versus land ownership

- Land sales are very rare in Ireland
 - Agricultural land sales in 2004 accounted for 0.02% of UAA
- Ireland an outlier in the EU in the small share of farmed land rented-in
 - The very small share of farmland that is sold on a yearly basis is not unusual
- Changing land structure will more than likely arise from growth in proportion of land rented-in
- Could begin to break the link between land ownership and land use and allow for the emergence of larger farms with a mix of owned and rented-in land

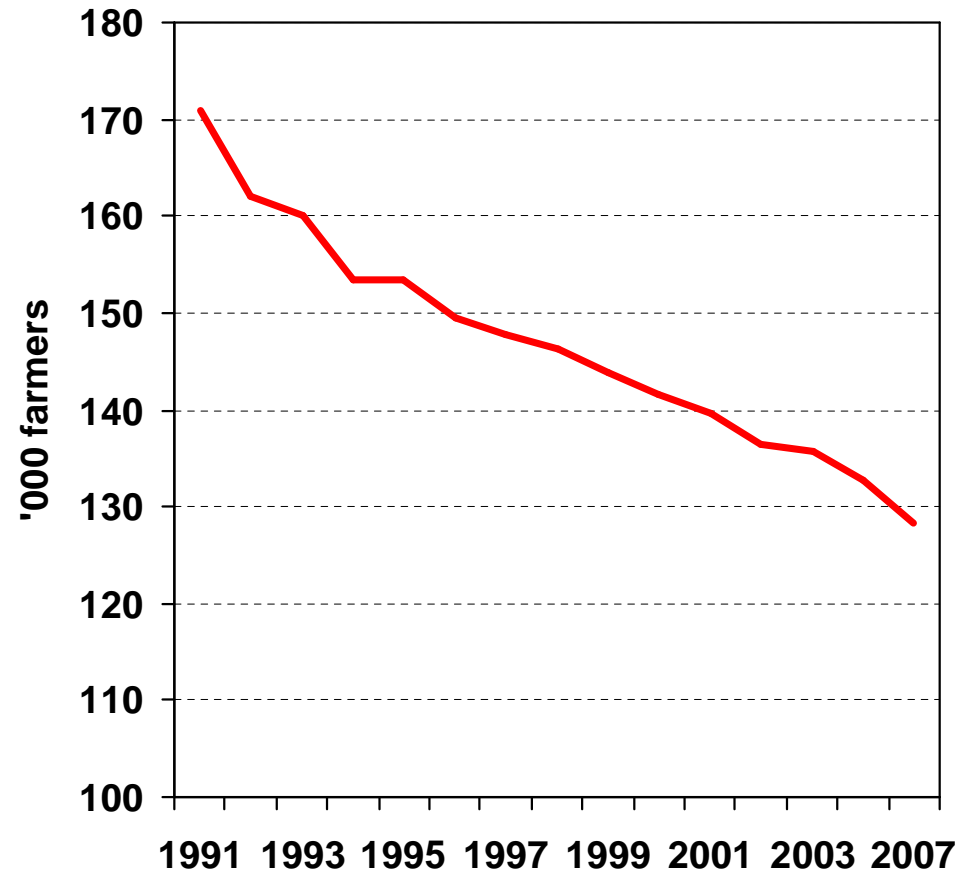


Changing farm structures and competitiveness

- Anania “economy of scale” competitiveness wedge
- Economies of scale could be exploited by some farmers as a means of augmenting competitiveness and increasing income per farm
 - Achievement economies dependent on farmers management ability
 - But is discouraged by policies that bid up the prices of agricultural land
- Barriers to increasing scale effectively also constitute Barriers to improving competitiveness
 - Does the current SFP system, REPS and LFA direct payment inhibit the restructuring of Irish agriculture?
 - Increases, other things equal, the price/rental rate of agricultural land making it more difficult to enter farming or expand existing enterprise

Irish farm numbers

- Irish farm numbers declining
- In 2007 there were 128,000
 - In 1960: 267,000
- Rate has slowed in 2000s
- Hypothesis:
 - part-time farming/off-farm employment slowing the rate of structural change
- Farmers make these choices because it is in their interest
- Consequences for competitiveness of the overall industry
- How will contracting off-farm labour markets affect the pace of structural adjustment within agriculture?





Irish agricultural land price & rental data

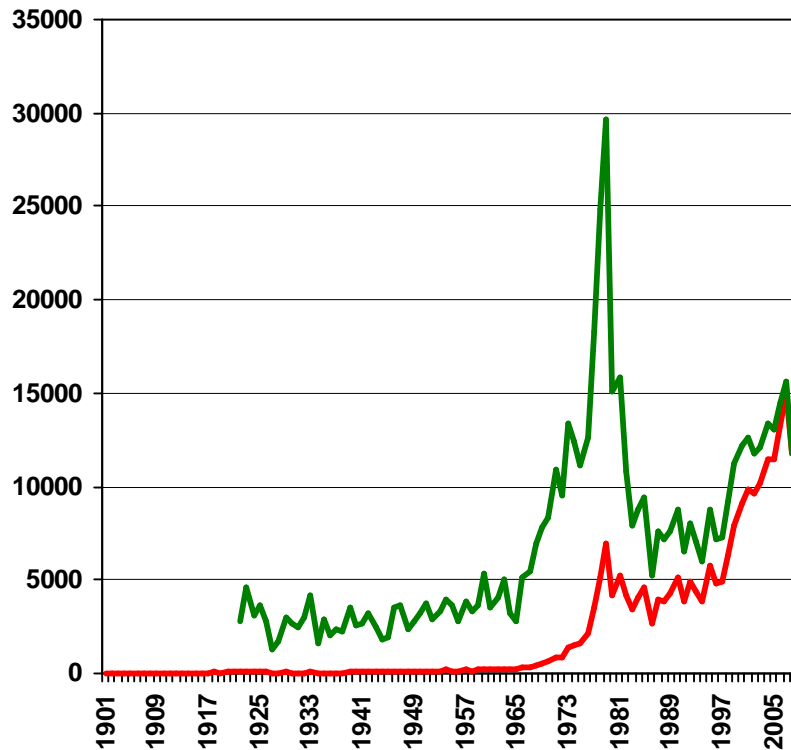
■ Agricultural land sales prices

- Eurostat (1979-2005)
- ESRI (Barrett and Trace) (1990-1997)
- CSO (1991:Q1-2005Q1)
- Nunan (1987) and Roche and McQuinn (1901-1996)
- Irish Farmers Journal (2007-2008)

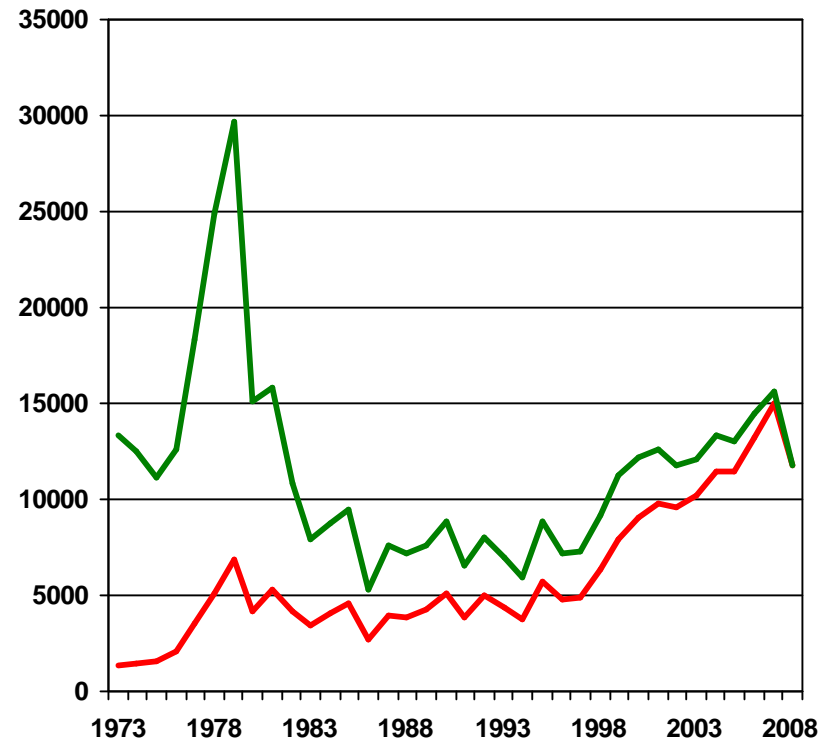
■ Agricultural land rental price data

- Nunan (1987) and Roche and McQuinn (1901-1996)
- Eurostat/NFS (1997-2008)

Agricultural land prices: Nominal versus Real (2008 prices)



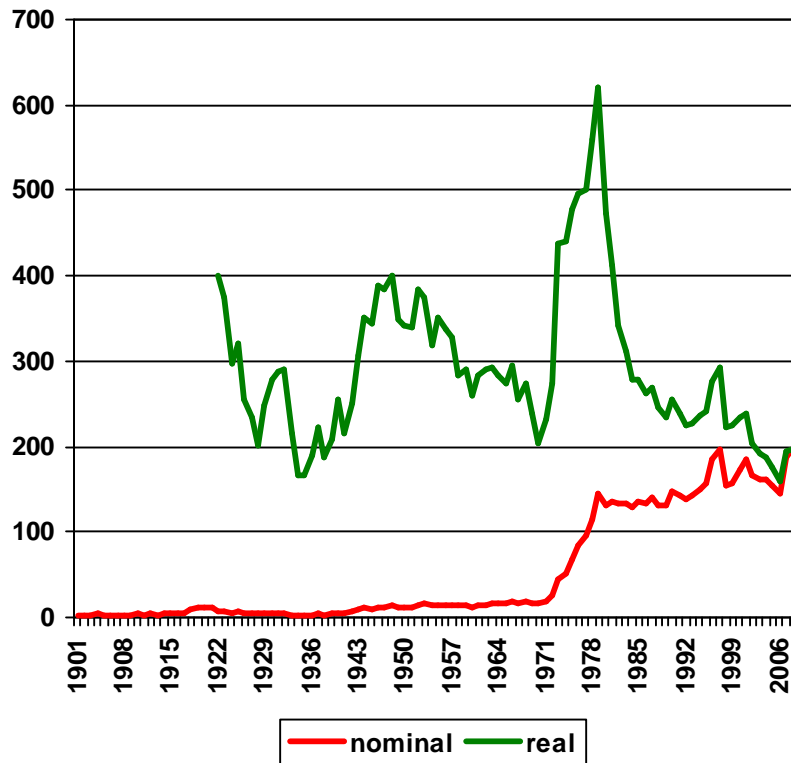
Agricultural land prices since 1901



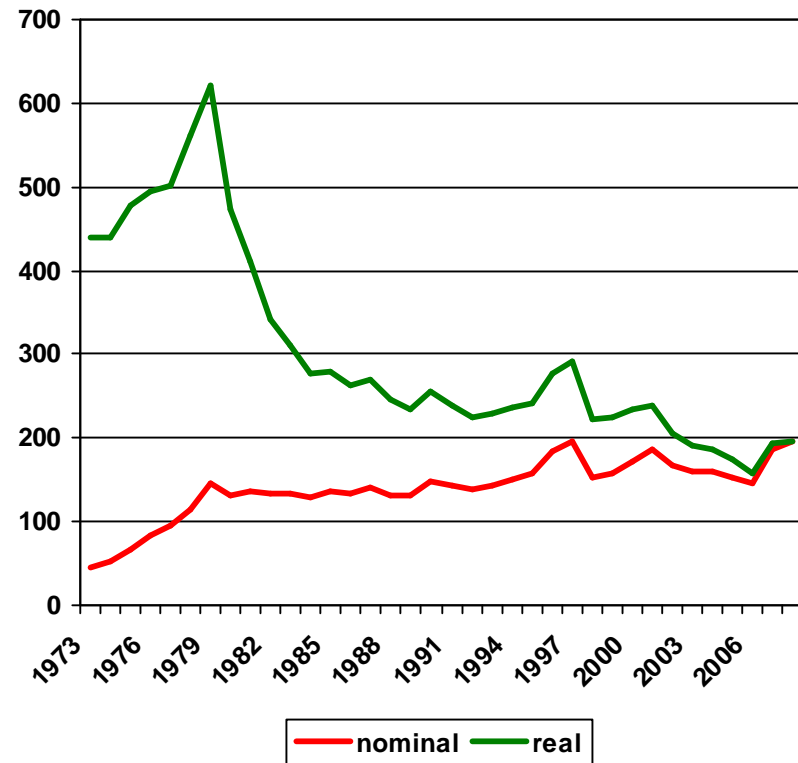
Agricultural land prices since 1973

Agricultural land rents

Nominal and Real (2008 prices)

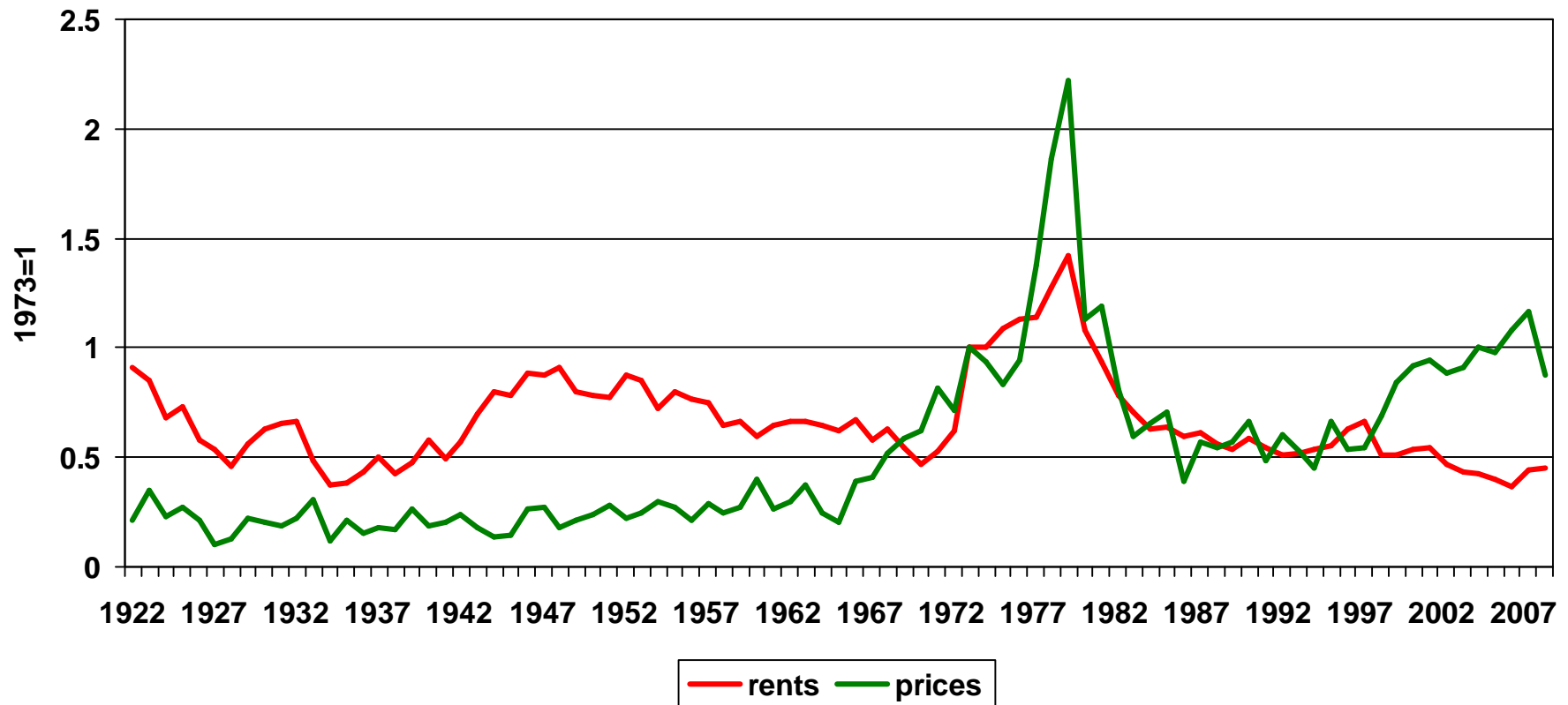


Agricultural land rents since 1901



Agricultural land rents since 1973

Real land rental and sales prices: Index (1973=1)





Research Agendas

- Need for data on sales
 - No data on sales from the CSO since 2005 (Q1)
- Given the importance of rental markets need to develop dataset on agricultural rental rates
- Need to examine the supply and demand side of the Irish land rental market
 - What factors affect the decision of farmers to rent-out land
 - What policy frameworks could improve the attractiveness of renting-out?
- To what extent do exploitable economies of scale exist in Irish farming?
 - To what extent are current policies coherent/incoherent?
- Analysis of the impact of the wider property bubble on agricultural land markets in Ireland
- Analysis of the impact of CAP reform on agricultural land values and rents