

Characteristics of Swine Farm Sales Data under a De Facto Moratorium

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Objective

Categorize and allocate the premium (if any) for swine farm purchase since the 1997 de facto moratorium.

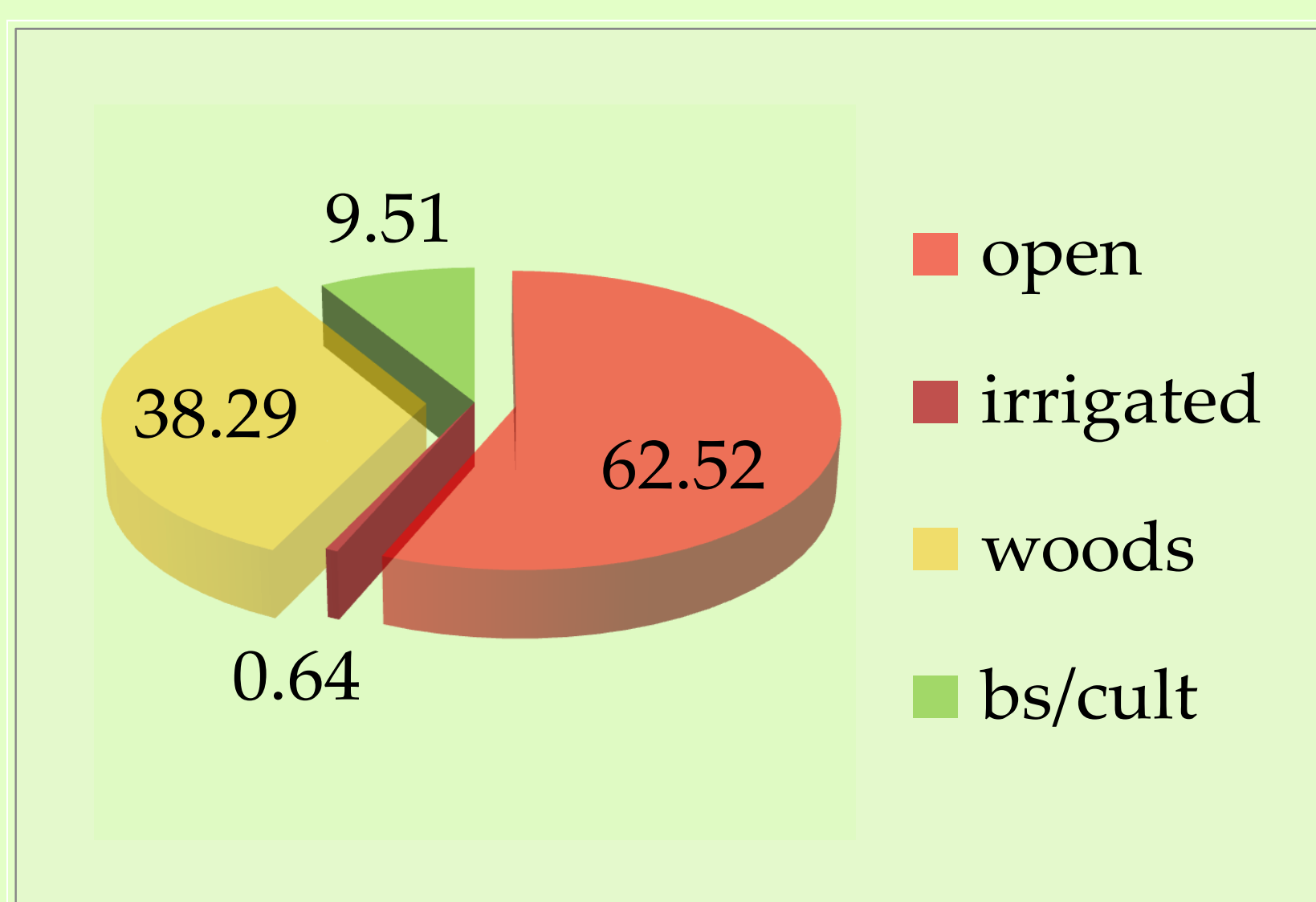
Background

- In September, 1997 the state government adopted a 'moratorium', under which new and expanded facilities could and can be built as long as they meet five stringent criteria for protection of the environment, public health, and nuisance minimization.
- The Steady State Life Weight (SSLW) rule assigns weight of 197 kg (433 pounds) per sow capacity at a farrow facility, 13.6 kg (30 pounds) per sow capacity at a nursery facility, and 61.4 kg (135 pounds) per sow capacity at a finishing facility.

Data

- Farm sales data of 130 farms from 6 NC counties (Cape Fear Farm Credit Association of North Carolina) for the period 1997-2010.
- Swine Farm Type Categories: 1. farrow to wean, 2. Natural Ventilated Nursery (NVN), 3. Tunnel Ventilated Nursery (TVN), 4. Full Slat Finishing (FS), and 5. Partial Slat Finishing (PS).
- Sale Analysis (sales price, sales date, types of units etc.)
- Land Mixed Analysis (use of acres, i.e. arable, forested)
- Income Analysis (actual & estimated income)
- Improvement Analysis (buildings & equipment evaluation, replacement cost etc.)

Figure 1: Average Farm Land Area (Acres)



Acknowledgements: Cape Fear Farm Credit Association, Fayetteville, NC, Mr. Wayne Strickland, Chief Appraiser, CFFCA and Mr. C. Dan Gurley, former Chief Appraiser for CFFCA, now owner of Pro Ag Appraisals and Mr. Martellis D. Avent.

Results

Figure 3: Full Slat Farm: Building & Equipment Adjusted Value Dollars per Hog Capacity, n=40

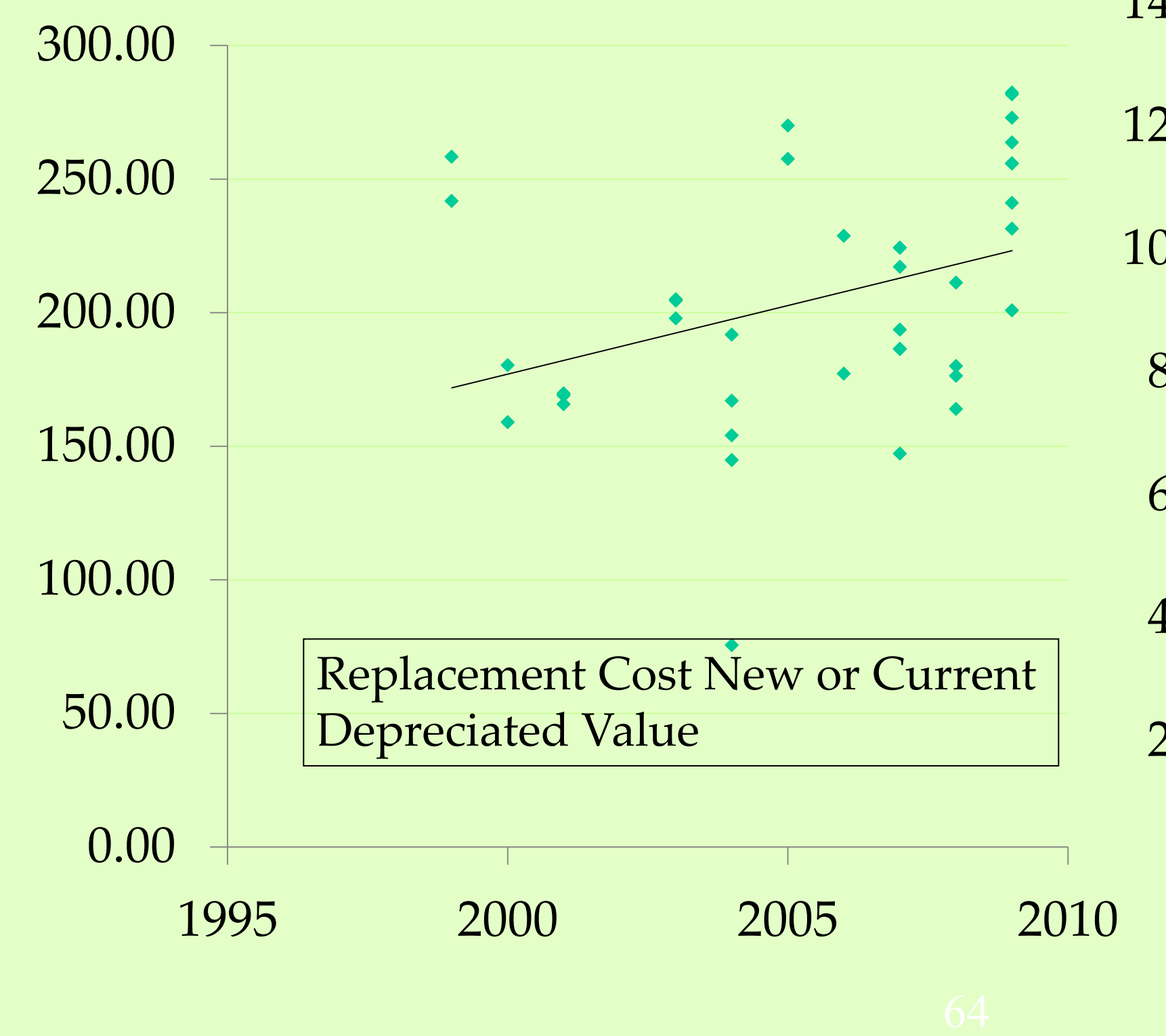


Figure 4: Farm Sales Price, Adjusted 1997-2010, n=130

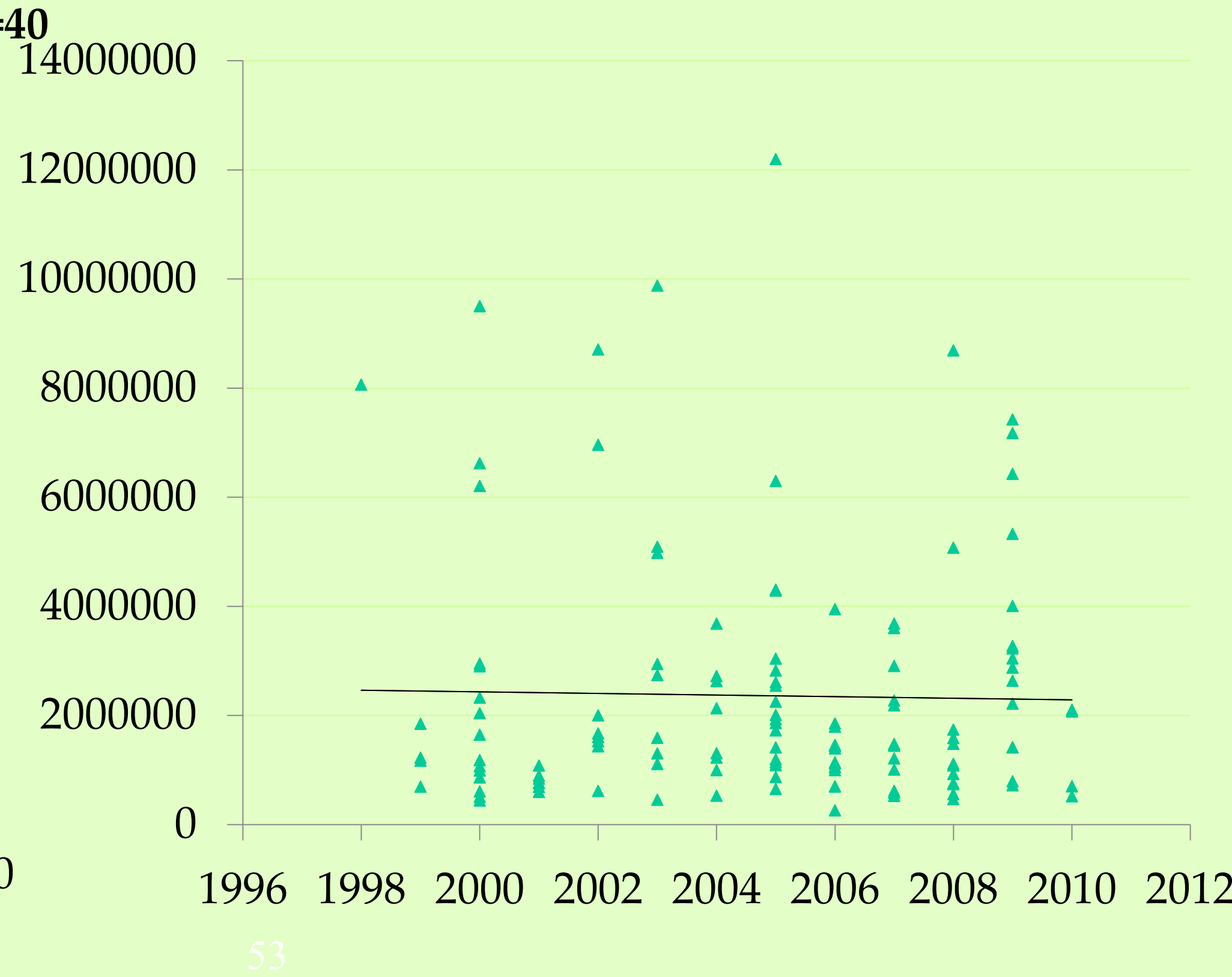


Figure 5: Tunnel Vent Nursery Farm: Buildings & Equipment PPI Adjusted value

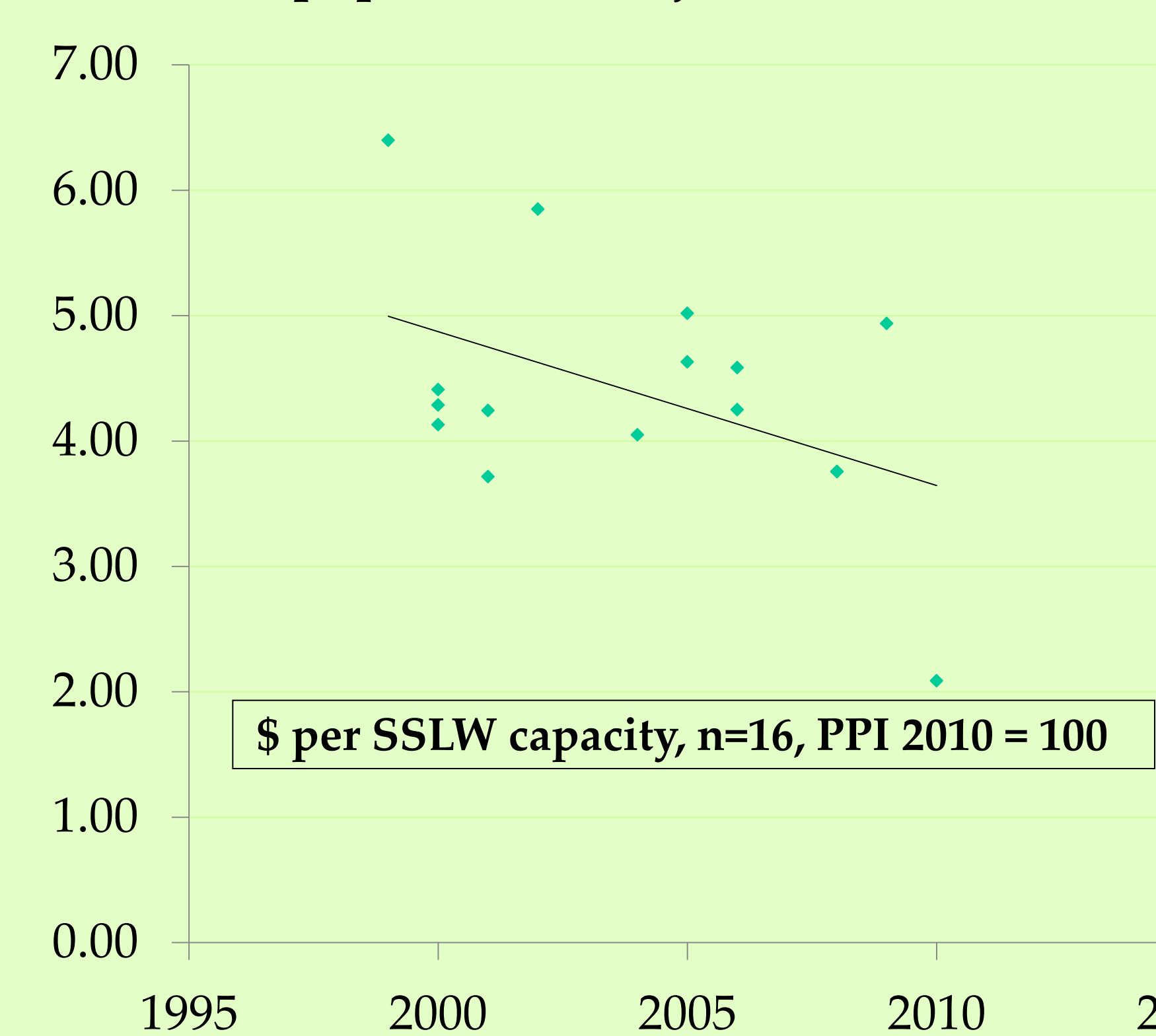


Figure 6: Tunnel Vent Nursery Farm: Building & Equipment Value

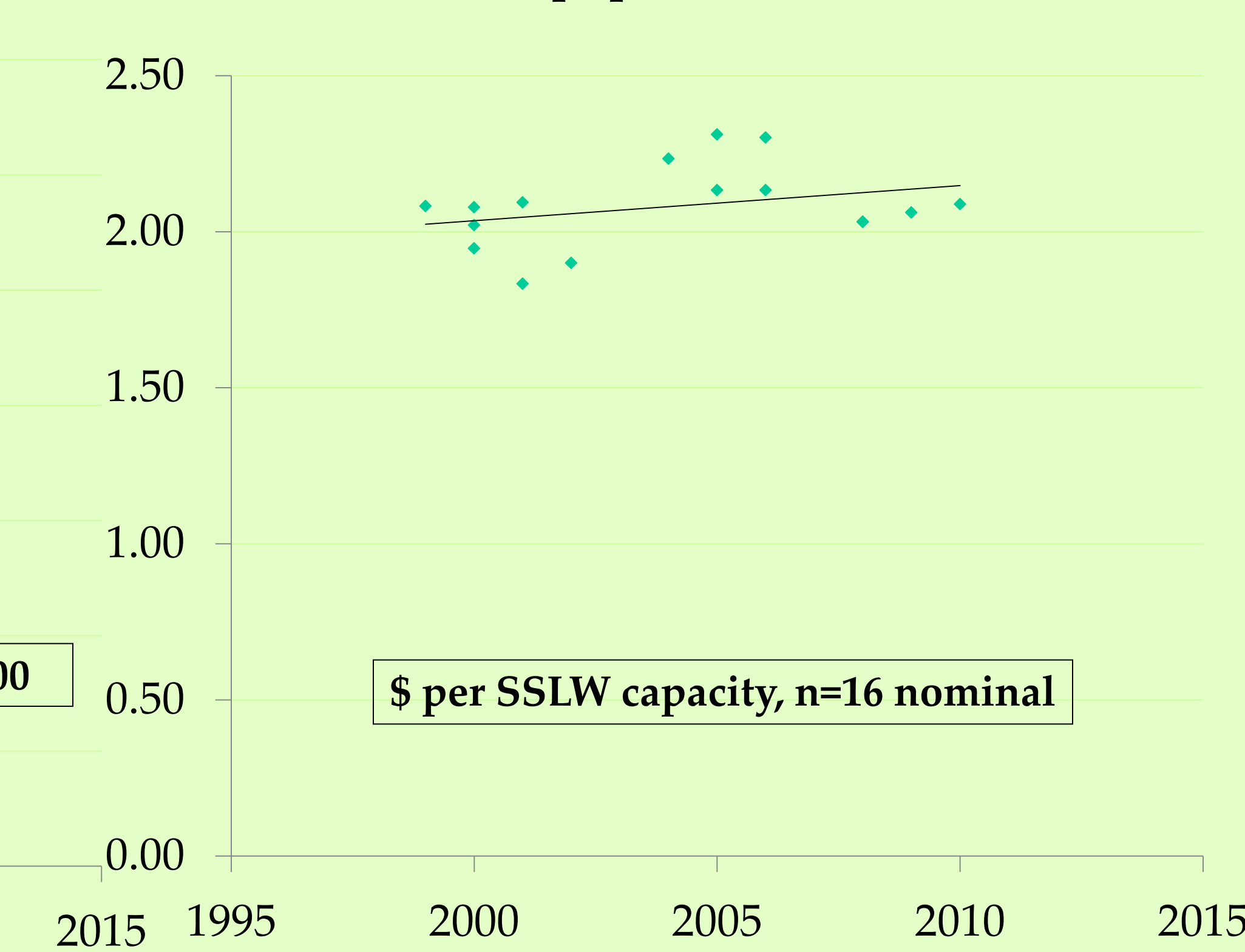
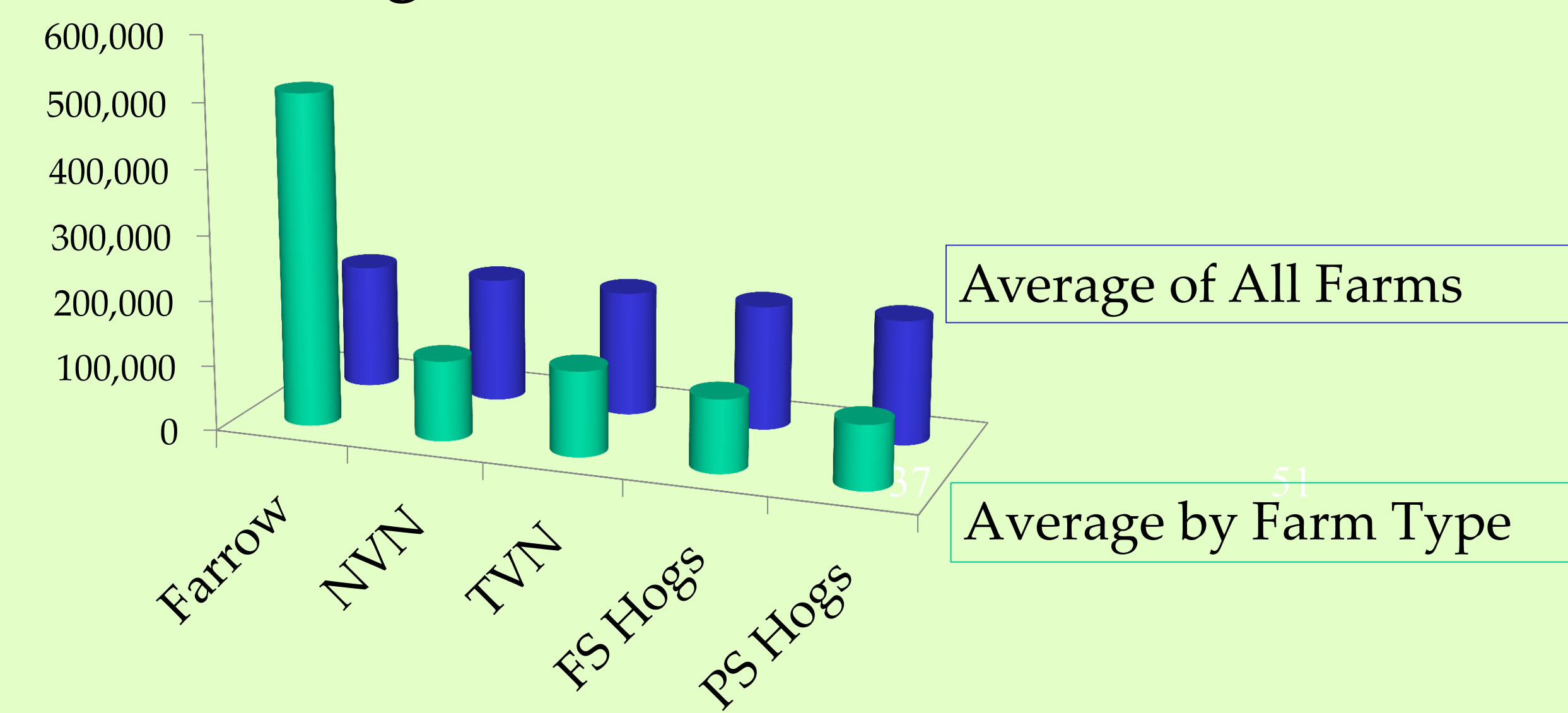


Figure 2: Total Contribution Premium



Results (cont')

Table 1: Average Sales Price for 1997-2010 PPI adjusted: 2010 = 100, US Dollars

	Per Farm	Per Unit	Per SSLW lb.
Total Farm Sale			
Farrow-Wean	4,974,653	1,940	4.62
Natural Vent Nursery	1,183,753	275	9.17
Tunnel Vent Nursery	1,547,152	268	8.92
Full Slat Finishing	2,259,669	395	2.92
Partial Slat Finishing	1,605,170	338	2.51
Buildings-Equipment			
Farrow-Wean	2,918,380	1,113	2.69
Natural Vent Nursery	554,912	128	4.26
Tunnel Vent Nursery	764,670	131	4.38
Full Slat Finishing	1,213,095	205	1.52
Partial Slat Finishing	738,872	146	1.08
Reported Premium			
Farrow-Wean	1,100,011	392	0.93
Natural Vent Nursery	268,512	57	1.89
Tunnel Vent Nursery	272,795	49	1.65
Full Slat Finishing	240,542	37	0.27
Partial Slat Finishing	207,255	39	0.29

Conclusions

- Total Farm Sales Prices increase over time in nominal terms for all farm types. They decline over time for TV Nursery, when converted to a SSLW pound basis.(Figure 5).
- PPI adjusted values allocated to buildings and equipment on a per unit basis decline over time except full slatted farms. This might indicate stronger demand for full slat or/and differing rates of physical depreciation (Figure 3)
- The premium averaged 18 to 27 % of buildings and equipment value for finishing floors, about 35% for farrowing facilities, and 38 to 46 % for nurseries.
- These different values suggest that the premium is based on something other than capital value of buildings and equipment alone (e.g., the land area parcelled with the facility and the income generating capacity of the facility).