# Appendix B.-Summary Analysis Tables for Dairy Farms

**Table B-1 .—Comparison of Selected Commodity Policy, Tax and Technology Scenarios on Representative Dairy Farms in Minnesota[e]**

| Criteria | Initial situation | Alternative Scenanos: Base | I | II | III | Iv | v | VI | VII | VIII |
|---|---|---|---|---|---|---|---|---|---|---|
| 52 cow ***Minnesota dairy:*** | | | | | | | | | | |
| Probability of survival | NA | 70.0 | 68.0 | 68.0 | 38 | 34.0 | 70.0 | 92,0 | – | — |
| Present value of ending net worth ($1,000). ,, | 417.0 | 224.0 | 222.0 | 223,0 | 157,0 | 149.0 | 221.0 | 314,0 | – | — |
| Ending equity ratio (fraction) | 0.71 | 0.41 | 0.41 | 0,41 | 0.30 | 0.29 | 0.41 | 0,57 | – | — |
| Annual net farm income ($1 ,000). | NA | –27.0 | –27 | –27,0 | –35.0 | –36.0 | – 27.0 | –15.0 | – | — |
| ***125 cow Minnesota dairy:*** | | | | | | | | | | |
| Probability of survival | NA | 100,0 | 100.0 | 100.0 | 100,0 | 98,0 | 100,0 | 100,0 | 100.0 | 100.0 |
| Present value of ending net worth ($1!000). . . . , , , , , , , | 969.0 | 1,012.0 | 1,019.0 | 1,012,0 | 888.0 | 872.0 | 965.0 | 1,111,0 | 116.0 | 1,140.0 |
| Ending equity ratio (fraction) | 0.76 | 0.83 | 0.83 | 0.82 | 0.72 | 0.71 | 0.79 | 0.89 | 0.92 | 0.91 |
| Annual net farm income ($1 ,000). | NA | 0.0 | 0.0 | 0.0 | – 18,0 | – 19,0 | –9.0 | 15,0 | 21.0 | 44,0 |

**Table B-2.—Comparison of Selected Commodity Policy, Tax and Technology Scenarios on Representative Dairy Farms in the Southwest[e]**

| Criteria | Initial situation | Alternative Scenarios: Base | I | II | III | Iv | v | VI | VII | VIII |
|---|---|---|---|---|---|---|---|---|---|---|
| 359 ***cow Arizona daity:*** | | | | | | | | | | |
| Probability of survival | NA | 96.0 | 86.0 | 96.0 | ***96.0*** | 92.0 | 96.0 | 100,0 | — | — |
| Present value of ending net worth ($1,000) ,. | 744,0 | 1,404.0 | 1,018.0 | 1,399.0 | 1,334.0 | 1,098,0 | 1,325,0 | 1,7190 | — | — |
| Ending equity ratio (fraction) | 0.71 | 0,94 | 0.84 | 0.94 | 0.94 | 0.88 | 0.94 | 0.95 | — | — |
| Annual net farm income ($1 ,000). | NA | 28,0 | –32.0 | 27.0 | 13,0 | –22,0 | 31.0 | 93,0 | — | — |
| 550 cow ***California dairy:*** | | | | | | | | | | |
| Probability of survival | NA | 96.0 | 76,0 | 96.0 | ***84.0*** | 76,0 | ***96.0*** | 98,0 | — | — |
| Present value of ending net worth ($1,000). 1,261.0 | 1,824.0 | 1,107.0 | | 1,813.0 | 1,368,0 | 1,074,0 | 1,716.0 | 2,312,0 | — | — |
| Ending equity ratio (fraction) | 0,71 | 0.90 | 0.68 | 0.90 | 0.79 | 0.67 | 0.90 | 0,94 | — | — |
| Annual net farm income ($1 ,000) | NA | –29.0 | – 142.0 | –30.0 | – 101.0 | – 147,0 | –30.0 | 65.0 | — | — |
| 1,436 cow ***California dairy:*** | | | | | | | | | | |
| Probability of survival | NA | 96.0 | 92.0 | 96.0 | 940 | 92.0 | 96.0 | 100,0 | 100.0 | **100,0** |
| Present value of ending net worth ($1 ,000) | 2,538.0 | 6,507,0 | 4,968.0 | 6,496.0 | 5,448.0 | 4,774.0 | 6,278.0 | 9,553.0 | 8,750.0 | 11,084.0 |
| Ending equity ratio" (fraction)" : : | 0.69 | 0.92 | 0.89 | 0.92 | 0.89 | 0.88 | 0.92 | 0,95 | .96 | 0,94 |
| Annual net farm income ($1 ,000) | NA | 375.0 | 136.0 | 373.0 | 211.0 | 99,0 | 371.0 | 7980 | 614.0 | 1,154,0 |

[e]The Scenarios are

Base–Contlnuatlon of present policy
I–A 20 percent acreage reduction In 1986.1992–9 percent higher feed costs
II–No crop program
111–Fifty cent per cw1 lower milk price
IV–NO dairy price support program
V–Reduce Income tax benefit program
V1–Milk supply control program
V1l– Computer feeding technology
Vlll– Bovine growth hormone technology

**Table B-3.—Comparison of Selected Commodity Policy, Tax and Technology Scenarios on Representative Dairy Farms in Florida[a]**

| | | Alternative Scenarios | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Crltena | In[t[al sltuatlon | Base | I | II | III | Iv | v | VI | VII | VIII |
| **350** cow *Florida dairy:* | | | | | | | | | | |
| Probability of survival | NA | 980 | 700 | 960 | 82 | 680 | 920 | 1000 | | |
| Present value of ending net worth ($1 .000) | 757.0 | 1,0090 | 5780 | 1,0050 | 933.0 | 648.0 | 911 | 0 1,3270 | – | |
| Ending equity ratio (fraction) | 0.71 | 085 | 057 | 085 | 074 | 059 | 080 | 093 | | |
| Annual net farm Income ($1 ,000) | NA | –8 O | –71 o | –8 O | –17 o | –66 o | –3 o | 280 | | |
| 600 cow *Florida dairy:* | | | | | | | | | | |
| Probablllty of survival | NA | 100.0 | 88.0 | 1000 | 980 | 840 | 1000 | 1000 | – | — |
| Present value of ending net worth ($1 ,000) | 1,4650 | 2,1700 | 1,5470 | 2,1690 | 2,1300 | **1,6300** | **1,9960** | ***2,326.0*** | | |
| Ending equity ratio (fraction) | O 76 | 094 | 081 | 094 | 091 | 0.78 | 092 | 094 | | |
| Annual net farm income ($1 ,000) | NA | 330 | –62 O | 320 | 300 | –46 O | 330 | 630 | | — |
| 1,436 cow *Florida dairy:* | | | | | | | | | | |
| Probability of survival | NA | 1000 | 100.0 | 1000 | 1000 | 1000 | 1000 | 100,0 | 1000 | 1000 |
| Present value of ending net worth ($1 !000) | 3,3430 | 8,6910 | 7,338.0 | 8,670.0 | 7,9420 | 7,7660 | 8,396.0 | 9,9540 | 10,5760 | 12,3580 |
| Ending equity ratio (fraction) | O 76 | 095 | 0.95 | 0.95 | 095 | 095 | 095 | 095 | 095 | 095 |
| Annual net farm Income ($1 ,000) | NA | 5860 | 411,0 | 585.0 | 5040 | 4630 | 5820 | 7490 | 7820 | 1.2860 |

[a]The Scenarios are
Base—Continuation of present policy
I–A 20 percent acreage reduction in 1986-"99? 9 percent higher feed costs
II–No crop program
III—Fifty cent per cwt lower milk price
IV–NO dairy price support program
V–Reduce income tax benefit program
VI –Milk supply control program
VII— Computer feeding technology
VIII–Bovine growth hormone technology

**Table B-4.—Comparison of Selected Policy Scenarios on Representative Minnesota Dairy Farms That Have High Debt or Are New Entrants With High Debt**

| | Financial Stress Scenarios[a] | | | | New Entrant Scenarios[b] | | | |
|---|---|---|---|---|---|---|---|---|
| Criteria | Initial situation | Ix | x | xI | Initial situation | xii | X111 | XIv |
| 52 cow ***Minnesota dairy:*** | | | | | | | | |
| Probability of survival | NA | 0.0 | 0.0 | 0.0 | NA | 0.0 | 0.0 | 0.0 |
| Present value of ending net worth ($1 ,000) | 246.0 | 97.0 | 93.0 | 101.0 | 264.0 | 138.0 | 122.0 | 138.0 |
| Ending equity ratio (fraction) | 0.42 | 0.19 | 0.19 | 0.20 | 0.36 | 0.21 | 0.19 | 0.22 |
| Annual net farm income ($1 ,000) | NA | –57.0 | –46 | –57.0 | NA | –98.0 | – 105.0 | – 98.0 |
| 125 cow ***Minnesota dairy:*** | | | | | | | | |
| Probability of survival | NA | 0.0 | 0.0 | 0.0 | NA | 0.0 | 0.0 | 0.0 |
| Present value of ending net worth ($1 ,000) | 554.0 | 238.0 | 235.0 | 235.0 | 575.0 | 304,0 | 298.0 | 303.0 |
| Ending equity ratio (fraction) | 0.44 | 0.23 | 0.22 | 0.22 | 0.37 | 0.23 | 0.22 | 0.23 |
| Annual net farm income ($1 ,000) | NA | –92.0 | – 73.0 | –94.0 | NA | – 147,0 | –163.0 | –147.0 |

**Table B-5.—Comparison of Selected Policy Scenarios on Representative Florida and Arizona Dairy Farms That Have High Debt or Are New Entrants With High Debt**

| | Financial Stress Scenarios[a] | | | | New Entrant Scenarios[b] | | | |
|---|---|---|---|---|---|---|---|---|
| Criteria | Initial situation | Ix | x | xI | Initial situation | X11 | X111 | XIv |
| **350** *cow* ***Florida dairy:*** | | | | | | | | |
| Probability of survival | NA | **26.0** | **42.0** | 26.0 | NA | 22.0 | 12.0 | 2.0 |
| Present value of ending net worth ($1,000) | 466.0 | **334.0** | **391.0** | 337.0 | 527.0 | 345.0 | 165.0 | 180.0 |
| Ending equity ratio (fraction) | 0.44 | **0.35** | **0.40** | 0.35 | 0.41 | 0.32 | 0.15 | 0.17 |
| Annual net farm income ($1 ,000) | NA | – 101.0 | --78.00 | - 101.0 | NA | – 174.0 | –245.0 | –230.0 |
| 359 cow ***Arizona dairy:*** | | | | | | | | |
| Probability of survival$ | NA | 66.0 | 70.0 | 66.0 | NA | 60.0 | 38.0 | 24.0 |
| Present value of ending net worth ($1 ,000) | 471.0 | 760.0 | 840.0 | 763.0 | 528.0 | 717.0 | 372.0 | 262.0 |
| Ending equity ratio (fraction) | 0.45 | 0.64 | 0.68 | 0.63 | 0.42 | 0.58 | 0.33 | 0.27 |
| Annual net farm income ($1,000) | NA | –59.0 | –35.0 | –60.0 | NA | - 102.0 | - 182.0 | - 194.0 |

a~~, financial Scenarios are:

IX—Continuation of present dairy policy and assuming high debt.
X–Subsidize interest rate so effective rate on all loans is 8 percent
XI–Restructure debt.

bThe new entrant scenarios are.

XI I—Base Policy and new entrant.
XIII – New entrant and no price support for dairy products.
XIV—New entrant and a 9-percent increase in feed costs.