

# Franchising in Dairy Farming

John Droppert & Bill Malcolm

Melbourne School of Land and Environment

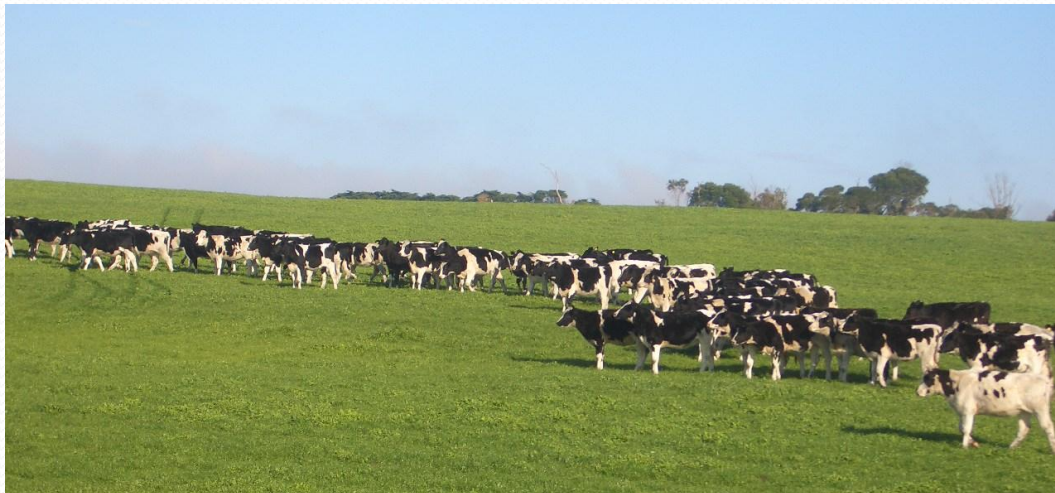
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# Project objective:

- To conduct an **economic** investigation of the **nature** and **competitiveness** of franchising as a management structure for dairy farm investments.
- In other words, to investigate:
  - What would a franchised dairy business look like?
  - How might it perform relative to alternatives?
- With performance considered in economic terms, i.e.
  - Wealth creation
  - Liquidity

# Research questions

- Overall question:
  - Is franchising a competitive dairy farm management structure on the basis of risk-adjusted investor wealth creation and business liquidity, relative to alternatives of leasing, corporate management and share-farming?



# Research questions

- Subsidiary questions:
  - Which of the key aspects of the dairy production system should a franchisor control, and which should be left to the franchisee?
  - What effect does franchisor control over each of these aspects have on wealth creation, risk and liquidity of the farming business, relative to independent control by the franchisee?

# Why franchising?

- An effective means for corporations to retain skilled, motivated managers
  - Franchisees operate their own businesses
- Aligns interests of the manager with those of the company – addresses agency issues
- Franchisees benefit relative to ‘going it alone’
- Both parties benefit through leveraging comparative advantage and economies of scale
  - Doing what they do best
  - At the most efficient level of output



# Methods

- Case study method
  - In-depth analysis of few rather than broad overview of many
  - Two farms: South-West Victoria and Gippsland
    - Currently operated under a corporate model
- Two phases:
  - 1. What aspects should the franchisor manage?
  - 2. How does franchising perform against alternatives?

# Methods

- Milk pooling and marketing considered the minimum level of franchisor involvement
- Other aspects chosen:
  - Purchasing supplementary feed
  - Managing pasture production
  - Herd breeding inputs
- Why these?
  - Potential for benefits
  - Importance in the system



## Higher-involvement franchises – e.g. FSP

- Farm **leased** from owner by operator
- Farm owner aggregates and markets **milk** on behalf of operators
- Farm owner combines two or more of the services listed below

### FS

- Farm **leased** from owner by operator
- Farm owner aggregates and markets **milk** on behalf of operators
- Farm owner sources **supplementary feed** on behalf of operators

### FP

- Farm **leased** from owner by operator
- Farm owner aggregates and markets **milk** on behalf of operators
- Farm owner manages **pasture production** on behalf of operators

### FH

- Farm **leased** from owner by operator
- Farm owner aggregates and markets **milk** on behalf of operators
- Farm owner manages **herd genetics** on behalf of operators

### BF

- Farm **leased** from owner by operator
- Farm owner aggregates and markets **milk** on behalf of operators

### Cash lease

- Farm **leased** from owner by operator

Level of farm owner (franchisor) involvement in the farm business

Franchise structures

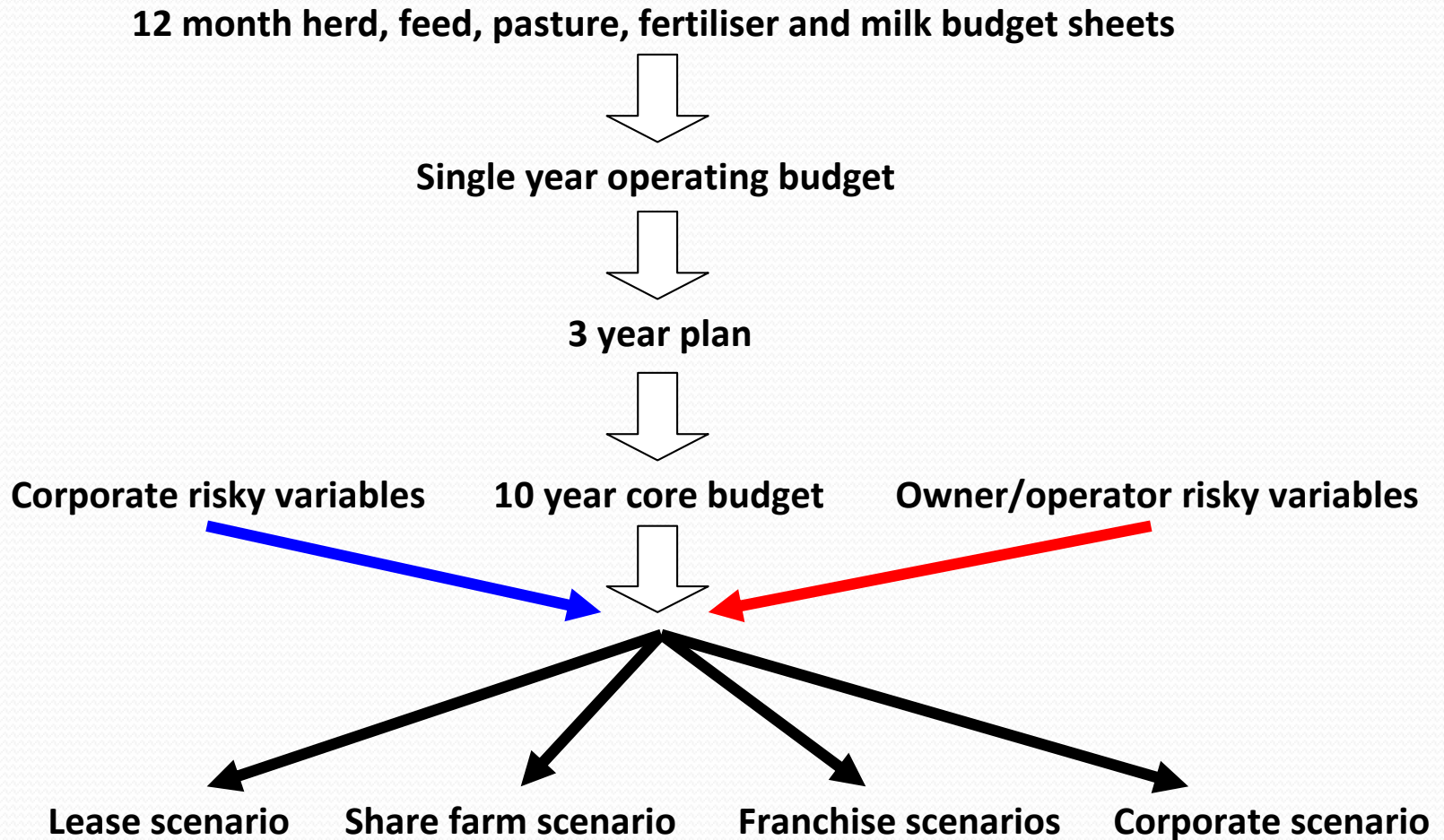
- Franchise scenarios:
  - Foundation is a cash lease
  - Franchise services added to the agreement

# Methods

- Data:
  - **DPI**
  - **Corporate operator**
  - **Consultants**
  - **ABARE**
  - **Dairy Australia**
  
- Process:
  - Monte Carlo simulation using a stochastic budgeting model and @Risk



# The model



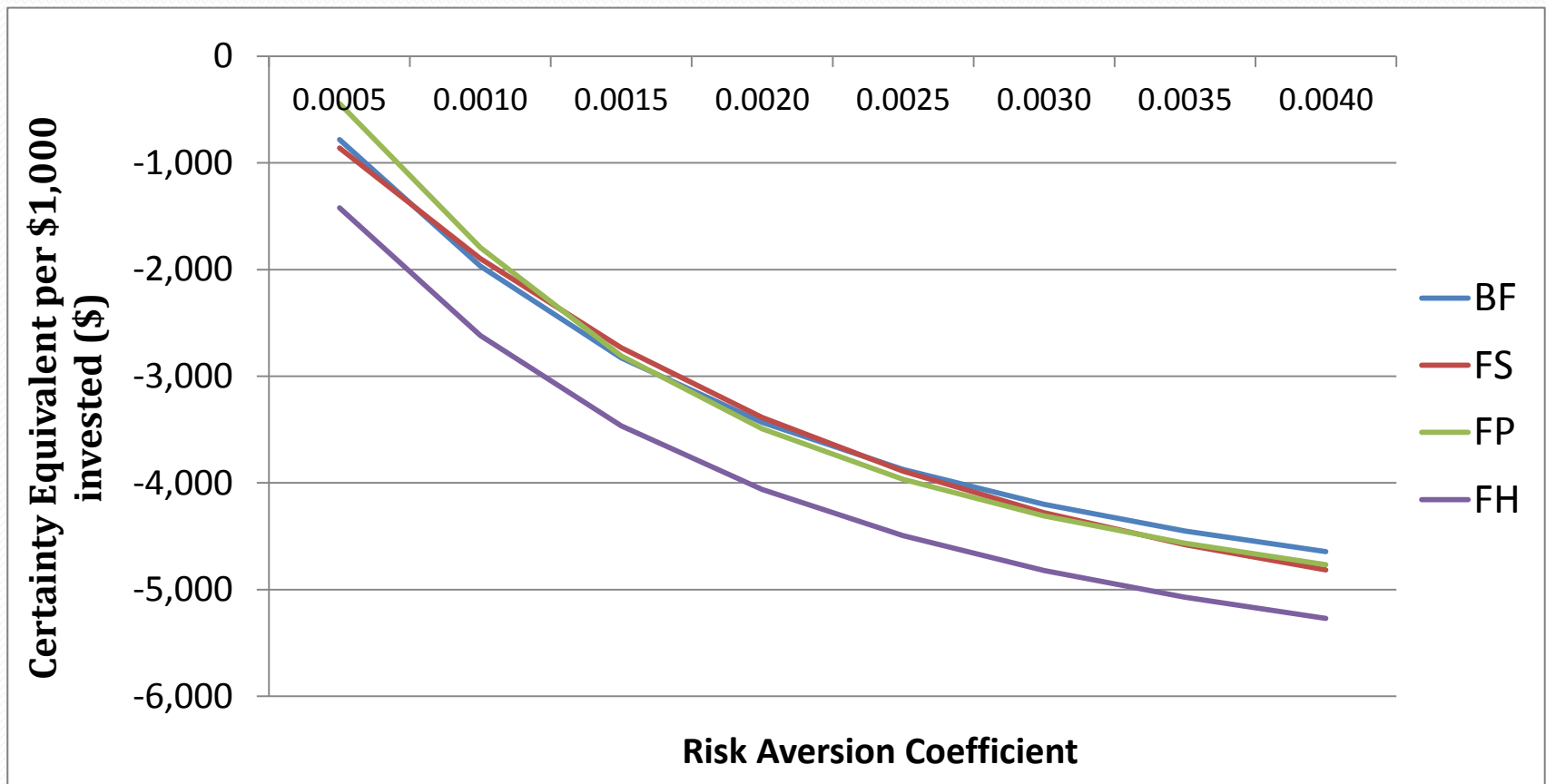
# Methods

- Measuring outcomes
  - Wealth creation
    - Net Present Value
    - Stochastic Dominance – CDF and SERF
  - Liquidity
    - Probability of net cash flow deficit



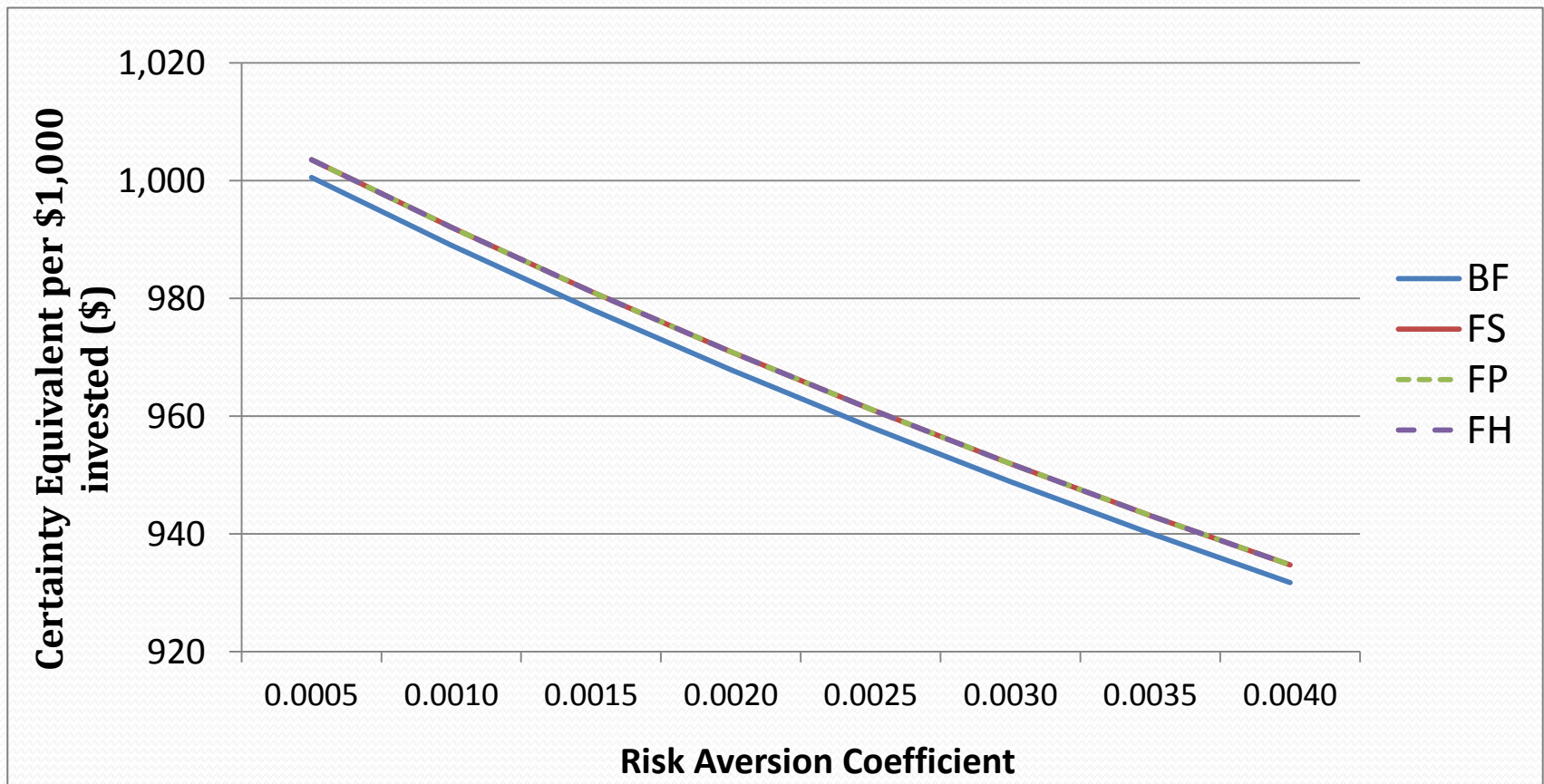
# Results – Comparison of franchises

- South-West Victoria
  - Stochastic Efficiency with Respect to a Function: Farm operator



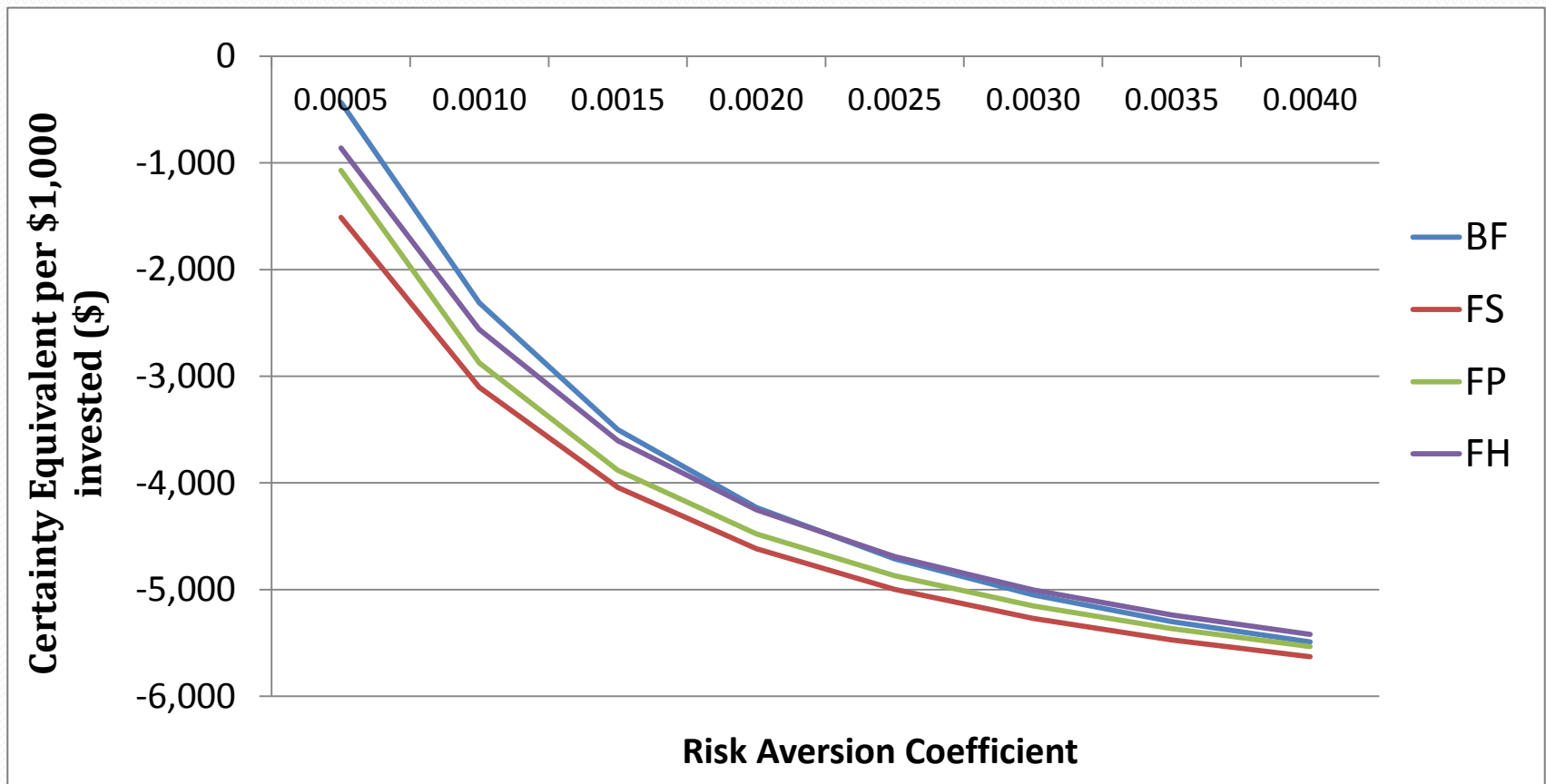
# Results – Comparison of franchises

- South-West Victoria
  - Stochastic Efficiency with Respect to a Function: Farm owner



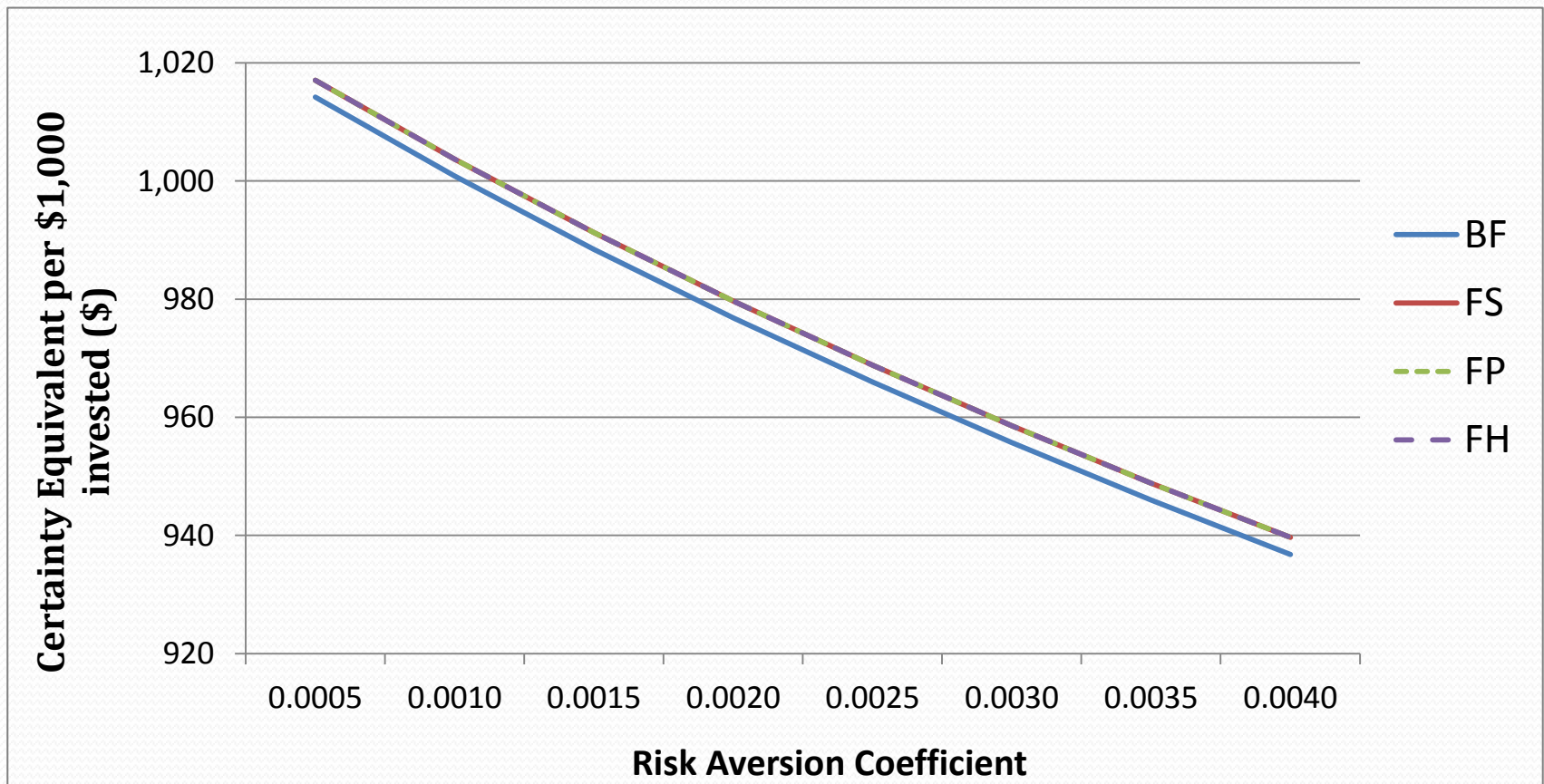
# Results – Comparison of franchises

- Gippsland
  - Stochastic Efficiency with Respect to a Function: Farm operator



# Results – Comparison of franchises

- Gippsland
  - Stochastic Efficiency with Respect to a Function: Farm owner



# Results – Comparison of franchises

- Liquidity: Probability of net cash flow deficit
- Farm operator:

|                              | BF            | FS     | FP            | FH     |
|------------------------------|---------------|--------|---------------|--------|
| Pr (NCF Deficit) – SW Vic    | 51.81%        | 59.08% | <b>47.32%</b> | 58.18% |
| Pr (NCF Deficit) – Gippsland | <b>41.98%</b> | 54.19% | 47.74%        | 48.74% |

- Farm owner: Zero

# Results – Comparison of franchises

- Wealth creation:
  - South-West Victoria – BF, FS, FP
  - Gippsland – BF, FH
- Liquidity:
  - South-West Victoria – FP
  - Gippsland – BF
- These form the efficient set for each farm respectively
- Farm operator outcomes largely determined the efficient set



# Results – Comparison with alternatives

- Notation:

| Name      | Description   |
|-----------|---|
| BF        | Base franchise agreement where franchisor markets milk only   |
| FS        | Franchise agreement where franchisor markets milk and sources supplementary feed                              |
| FP        | Franchise agreement where franchisor markets milk and manages pasture production                              |
| FH        | Franchise agreement where franchisor markets milk and manages herd genetics                                   |
| Lease     | A standard 5.5% cash lease  |
| SF        | A standard 50:50 share-farm arrangement   |
| Corporate | Management of the farm directly by the farm owner using hired labour and managers                             |
| FSP       | Franchise agreement where franchisor markets milk, sources supplementary feed, and manages pasture production |

- A new franchise alternative for the South-West Victorian farm: FSP

# Results – Comparison with alternatives

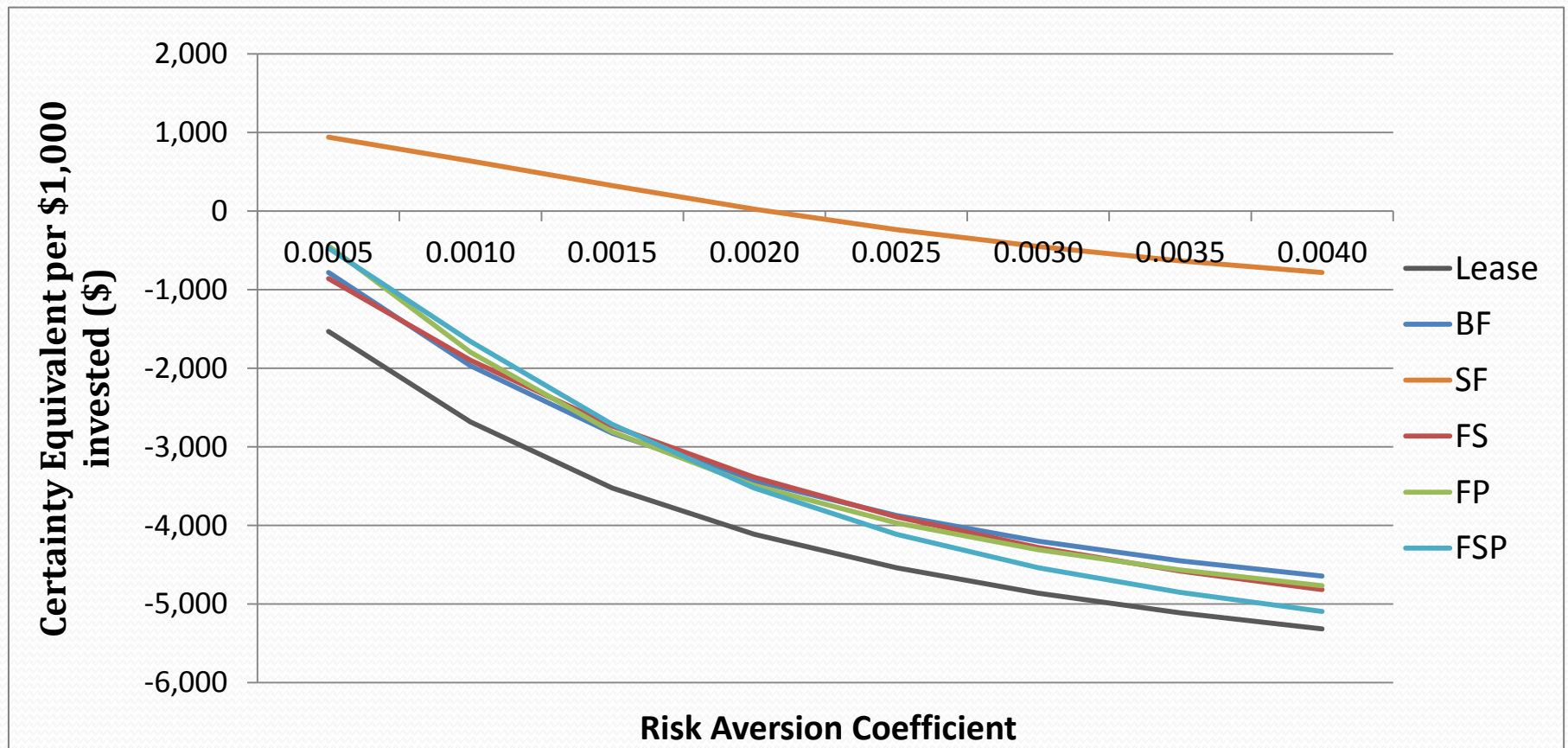
- South-West Victoria
  - NPV at 10%

|                         | Lease     | SF             | Corporate | BF        | FS        | FP        | FSP            |
|-------------------------|-----------|----------------|-----------|-----------|-----------|-----------|----------------|
| <b>Farm operator</b>    |           |                |           |           |           |           |                |
| Mean NPV at 10%(\$)     | (903,487) | <b>153,938</b> |           | (365,820) | (536,396) | (131,716) | (282,829)      |
| Standard deviation (\$) | 1,506,916 | <b>733,100</b> |           | 1,490,274 | 1,432,657 | 1,448,627 | 1,380,010      |
| <b>Farm owner</b>       |           |                |           |           |           |           |                |
| Mean NPV at 10%(\$)     | 43,184    | (569,525)      | (531,934) | 56,690    | 70,196    | 70,196    | <b>83,702</b>  |
| Standard deviation (\$) | 998,389   | 1,195,110      | 1,157,696 | 998,389   | 998,389   | 998,389   | <b>998,389</b> |

- Share-farming highest return, lowest risk for operator
- Franchising highest return, equal lowest risk for owner
  - FSP structure (highest involvement)

# Results – Comparison with alternatives

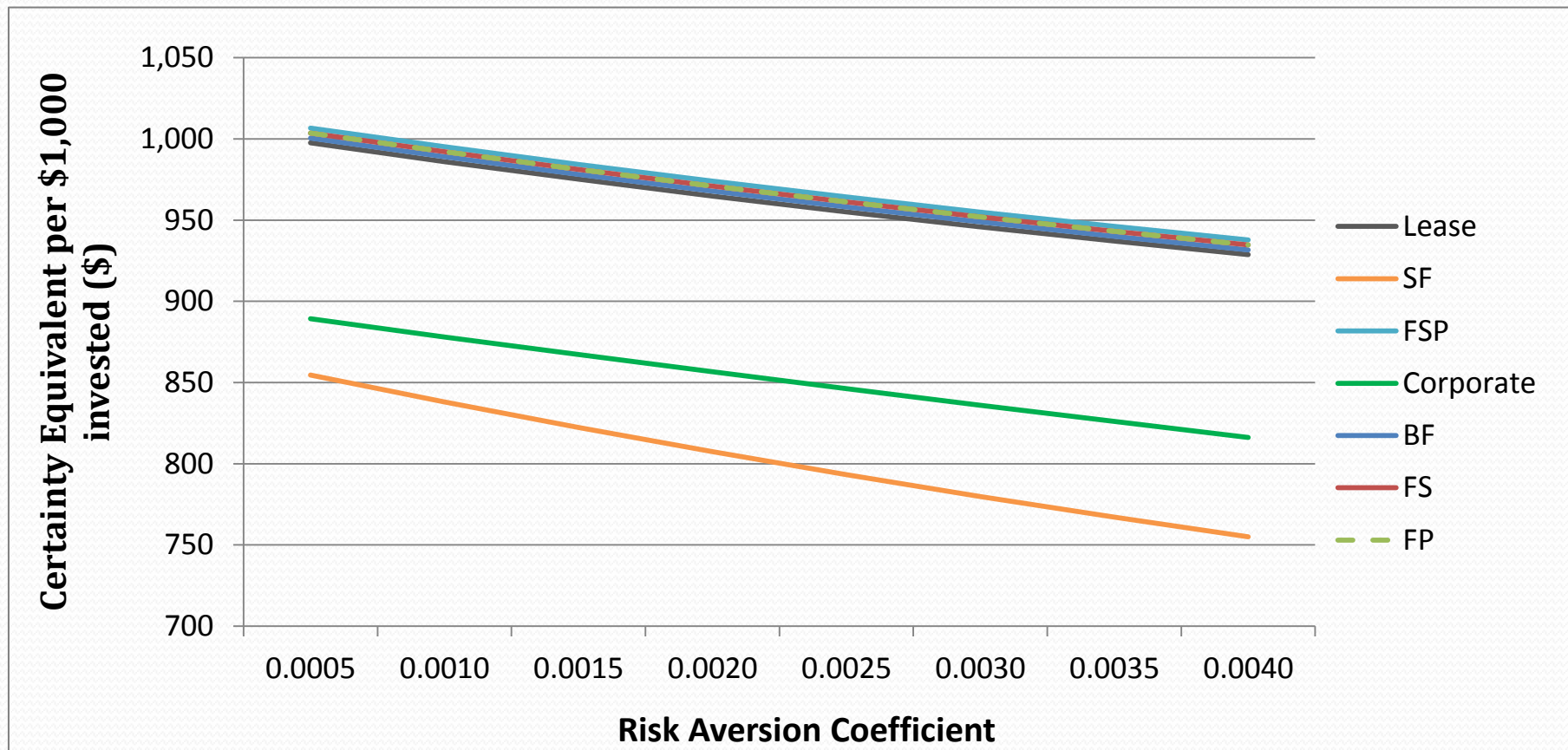
- South-West Victoria
  - Stochastic Efficiency with Respect to a Function: Farm operator



# Results – Comparison with alternatives

- South-West Victoria

- Stochastic Efficiency with Respect to a Function: Farm owner



# Results – Comparison with alternatives

- Liquidity: Probability of net cash flow deficit
  - South-West Victoria:

|                                      | Lease  | SF            | Corporate | BF     | FS     | FP     | FSP    |
|--------------------------------------|--------|---------------|-----------|--------|--------|--------|--------|
| Pr (NCF Deficit) – farm operator (%) | 64.86% | <b>32.45%</b> | N/A       | 51.81% | 59.08% | 47.32% | 52.81% |
| Pr (NCF Deficit) – farm owner (%)    | 0.00%  | 4.12%         | 8.37%     | 0.00%  | 0.00%  | 0.00%  | 0.00%  |

# Results – Comparison with alternatives

- Wealth creation:
  - South-West Victoria
    - Farm operator: Share-farm
    - Farm owner: FSP – the highest involvement franchise
  - Gippsland (not presented)
    - Farm operator: Share-farm
    - Farm owner: FH – the highest involvement franchise



# Results – Comparison with alternatives

- Liquidity:
  - South-West Victoria
    - Farm operator: Share-farm
    - Farm owner: Any franchise or lease
  - Gippsland (not presented)
    - Farm operator: – Share-farm
    - Farm owner: Any franchise or lease



# Overall

- Franchising best alternative for the farm owner/franchisor
- A share-farming alternative would be preferable for the farm operator/franchisee
- But:
  - Aggregate NPV at 10% – South-West Victoria

|                              | Lease     | SF        | Corporate | BF        | FS        | FP              | FSP       |
|------------------------------|-----------|-----------|-----------|-----------|-----------|-----------------|-----------|
| Operator mean NPV at 10%(\$) | (903,487) | 153,938   |           | (365,820) | (536,396) | (131,716)       | (282,829) |
| Mean NPV at 10%(\$)          | 43,184    | (569,525) | (531,934) | 56,690    | 70,196    | 70,196          | 83,702    |
| <b>Total</b>                 | (860,303) | (415,587) | (531,934) | (309,130) | (466,200) | <b>(65,120)</b> | (199,127) |

- Franchise models generate the maximum value overall
  - Offer the greatest potential for mutual benefit

# Conclusions

- The franchising concept has much to offer the dairy industry
- The optimal franchise model differs between regions
- The franchise models proposed were not optimal from the farm operator's perspective
- The franchise models were, however optimal from the farm owner's perspective
- Aggregate NPV for the franchise models was highest, suggesting that franchising has potential
  - But better structures have to be developed to share the benefits more evenly

# Opportunities for further research

- Other franchise models
  - This study only scratched the surface
  - Potential to maximise both parties' outcomes
- Application to other dairy systems
  - Higher stocking rates
  - Non-pasture based systems
- Qualitative research
  - The incentive effects of franchise fees
  - Attitudes of prospective counterparties
- Firm-specific research
  - Franchisor performance matters!



# Thank you

