

# Pinot Noir Vineyards

*Are they worth the effort-  
What's the effort worth?*

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**Pinot Massif**  
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# Current Recording & Analysis; *self-report?*

## -Chatham House Rules-

### Productivity

- Yield:
  - Kg/vine
  - Tonnes/ha
- Planted Area
- Functional vines/ha
- Missing Vines
- Variation in vigour or wire-fill
- Other?

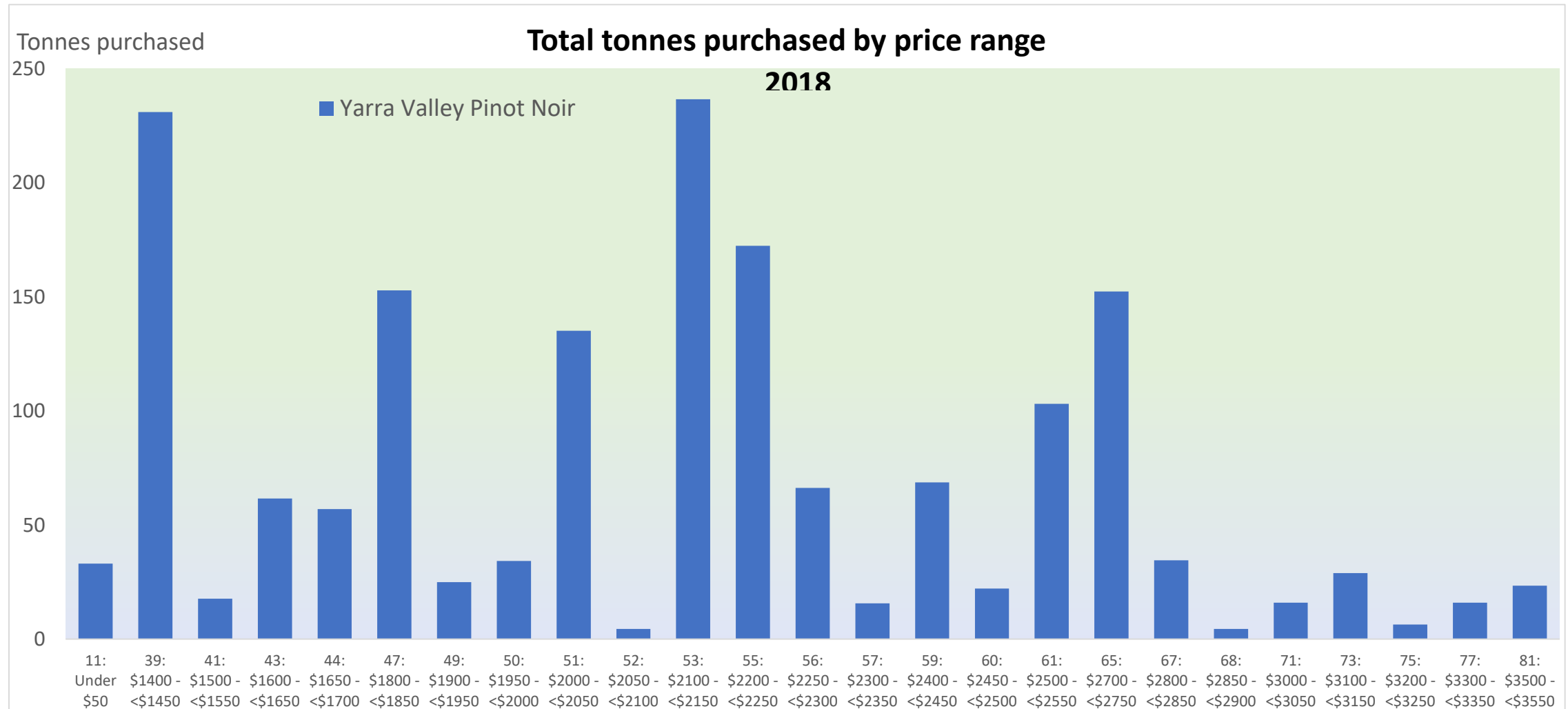
### Profitability

- *Returns:*
  - \$/t
  - \$/l or \$/kl
  - Aggregated into wine costing
- *Costs:*
  - Annual direct costs
  - Annual plus overhead costs, own labour, utilities, depreciation, etc.
  - Annual + overheads + finance costs
  - Cash/Capital/Financing/Opportunity Costs

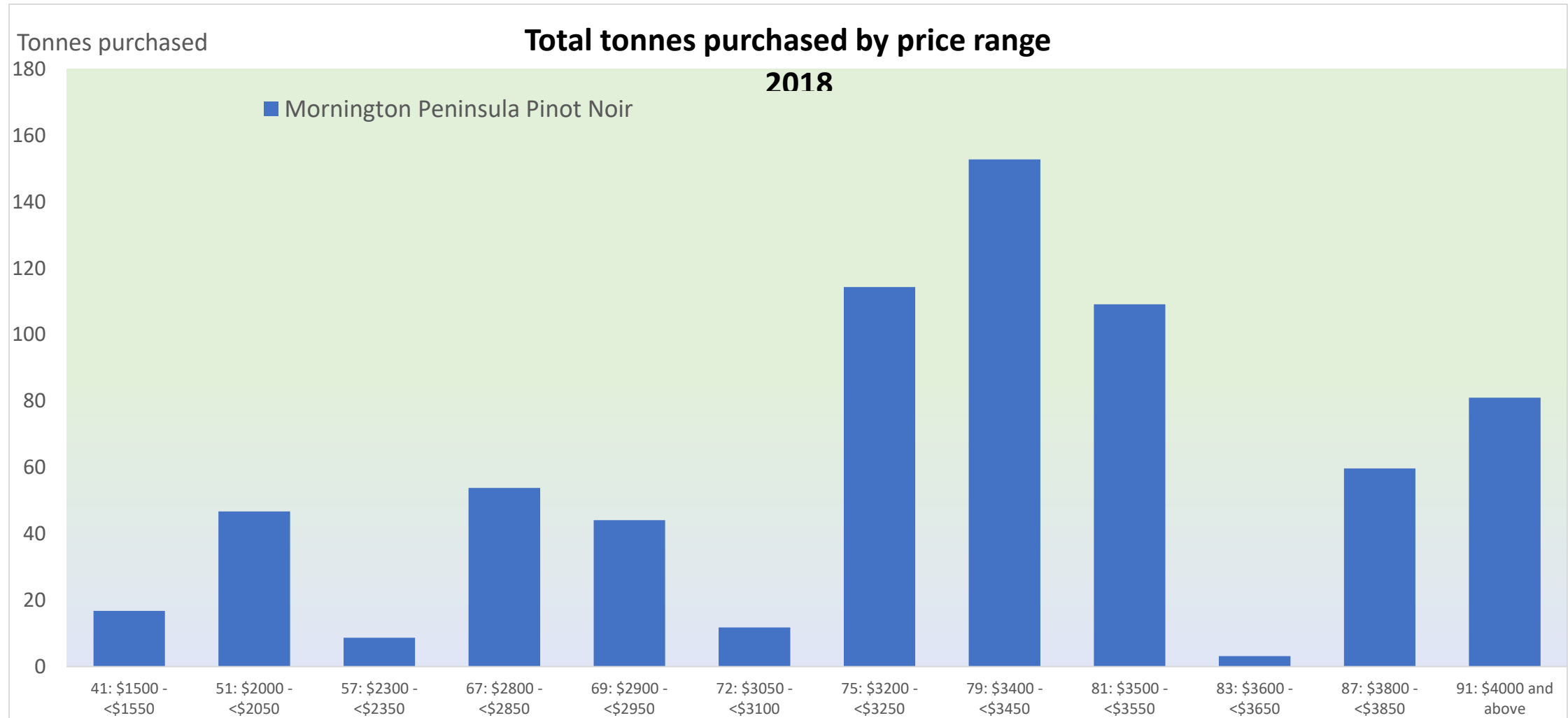
# Outline: Optimising Productivity & Profitability with Pinot Noir

- Australian Regional Benchmark “Profitability”?
- Capturing & Analysing Individual Performance Data
  - Annual Costs/Returns
    - Labour
    - Materials
    - Equipment
    - R&M
  - Longer-Term Costs and ROI
    - Depreciation
    - Capital Costs etc.
  - Opportunity Costs; alternative use/ways to deploy funds?
- Analysis into Management
- Optimising Operations

# What's a "fair price"; market price or sustainable return? Yarra Valley

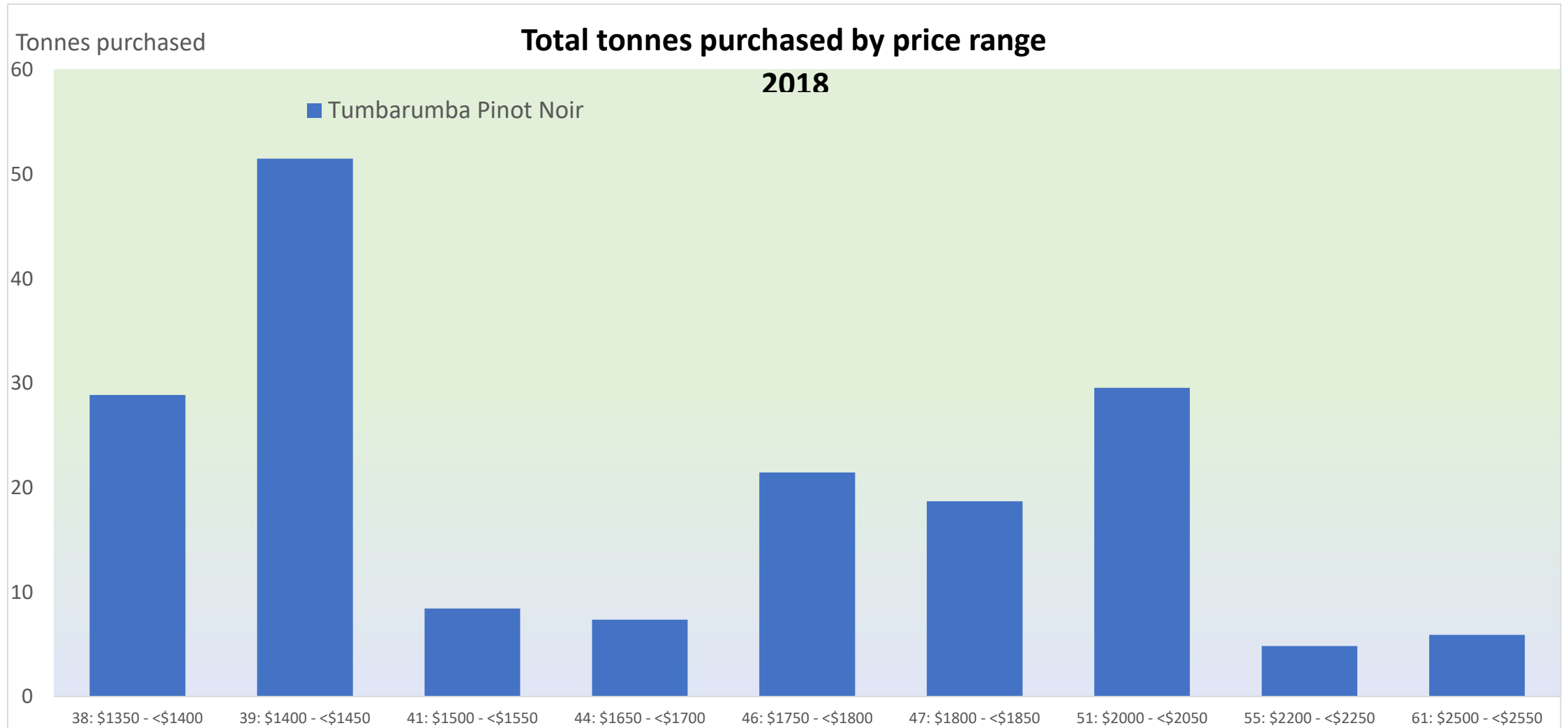


# What's a “fair price”; market price or sustainable return? Mornington Peninsula

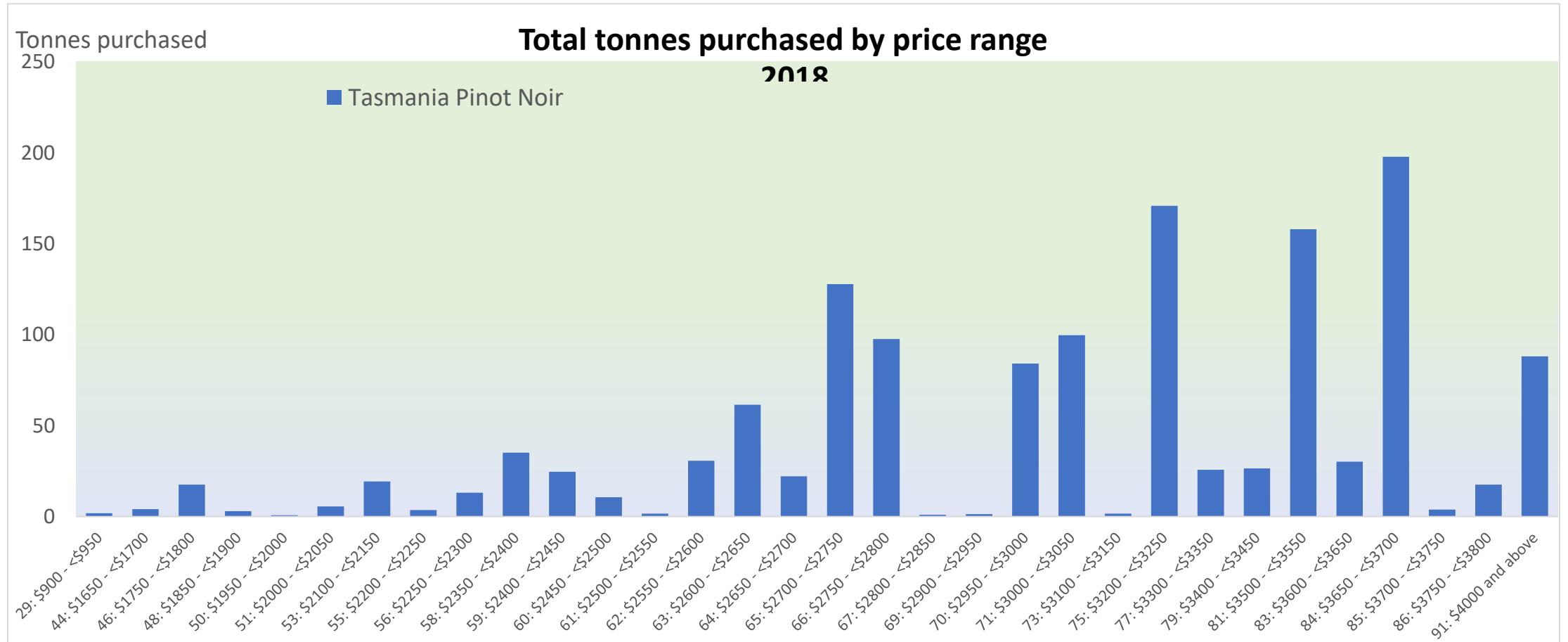




# What's a “fair price”; market price or sustainable return? Tumbarumba

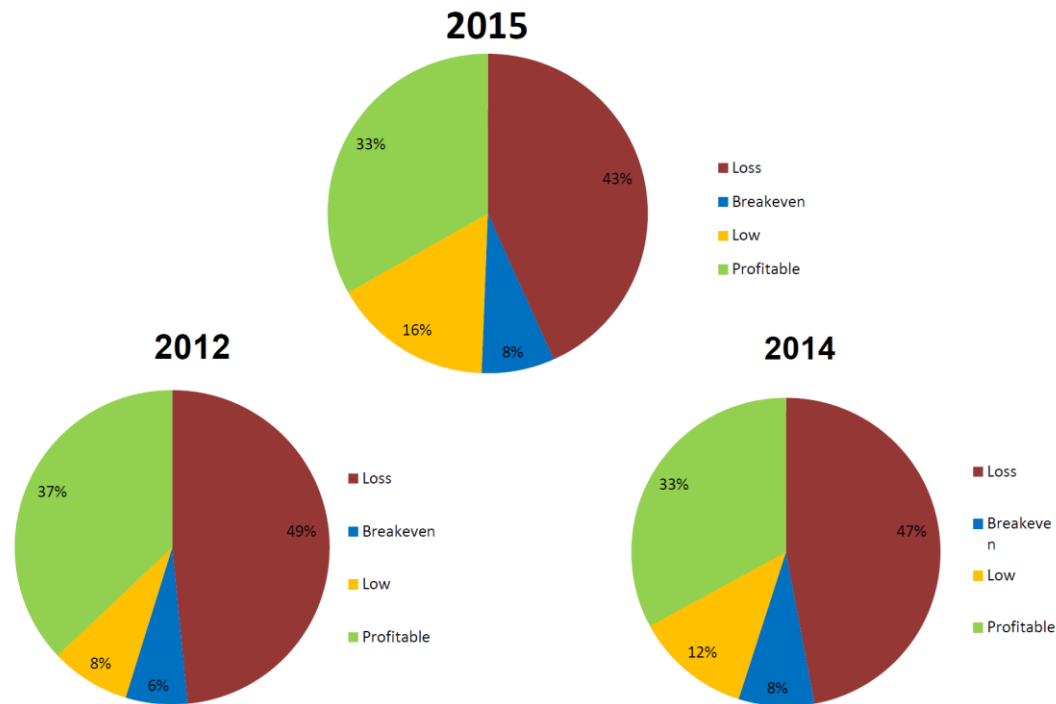


# What's a "fair price"; market price or sustainable return? Tasmania



# Profitability? On What Basis???

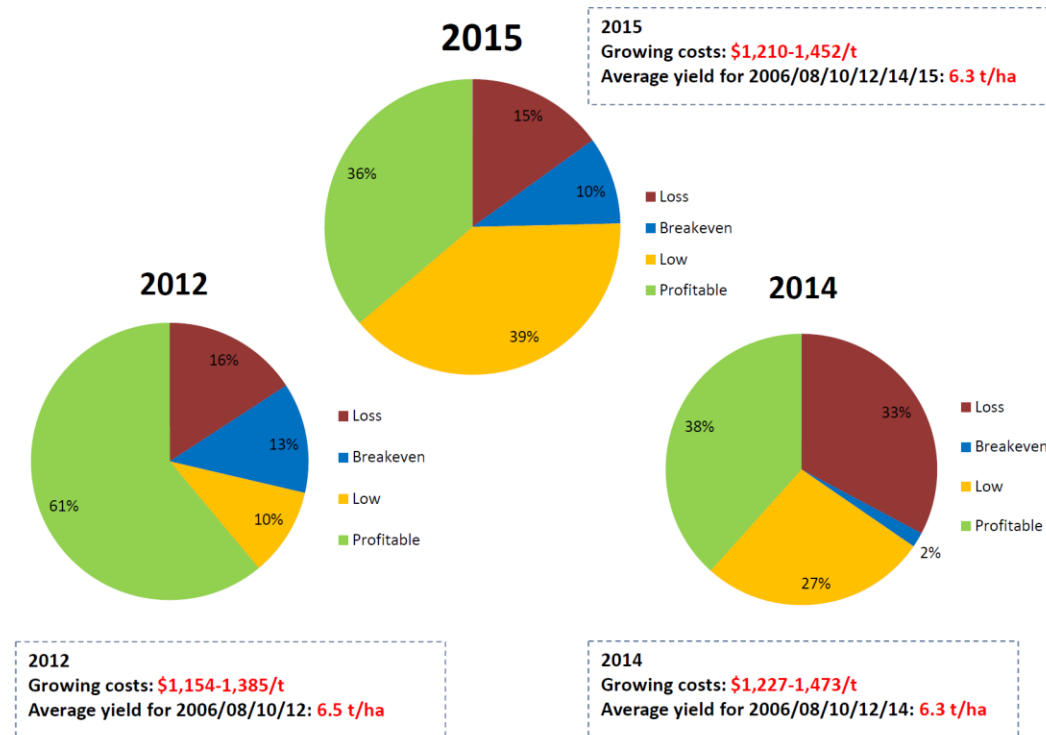
## Cool Climate Production Profitability





# Yarra Valley

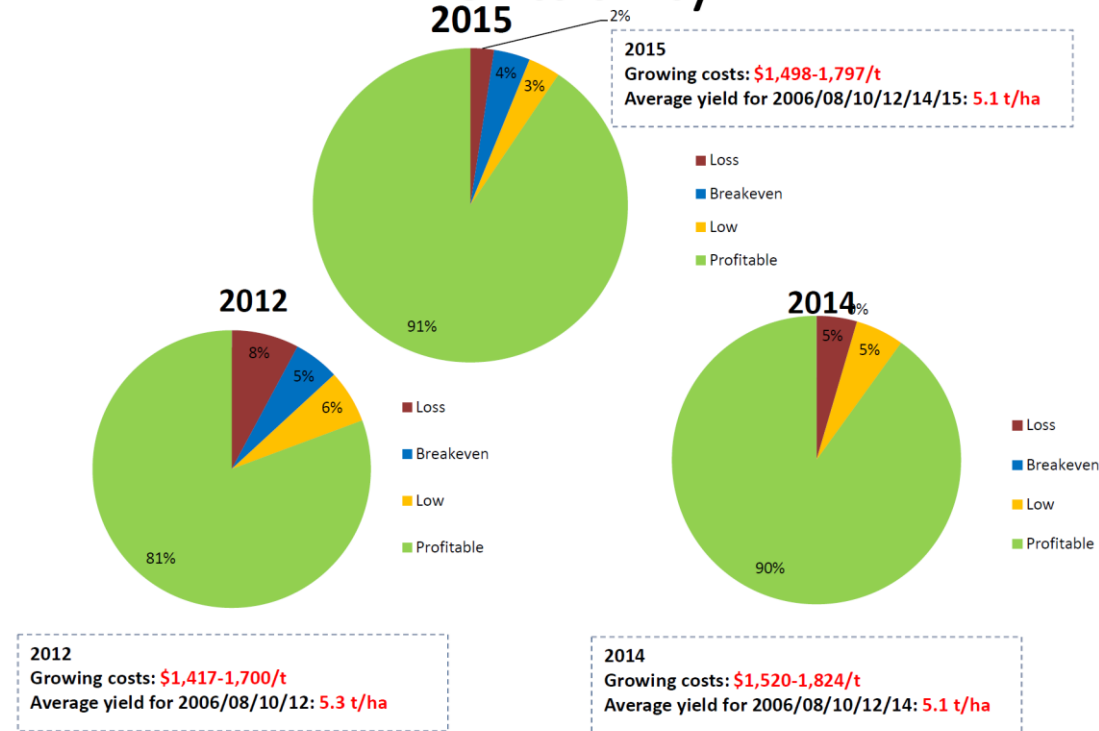
## Yarra Valley Production Profitability



# Mornington Peninsula

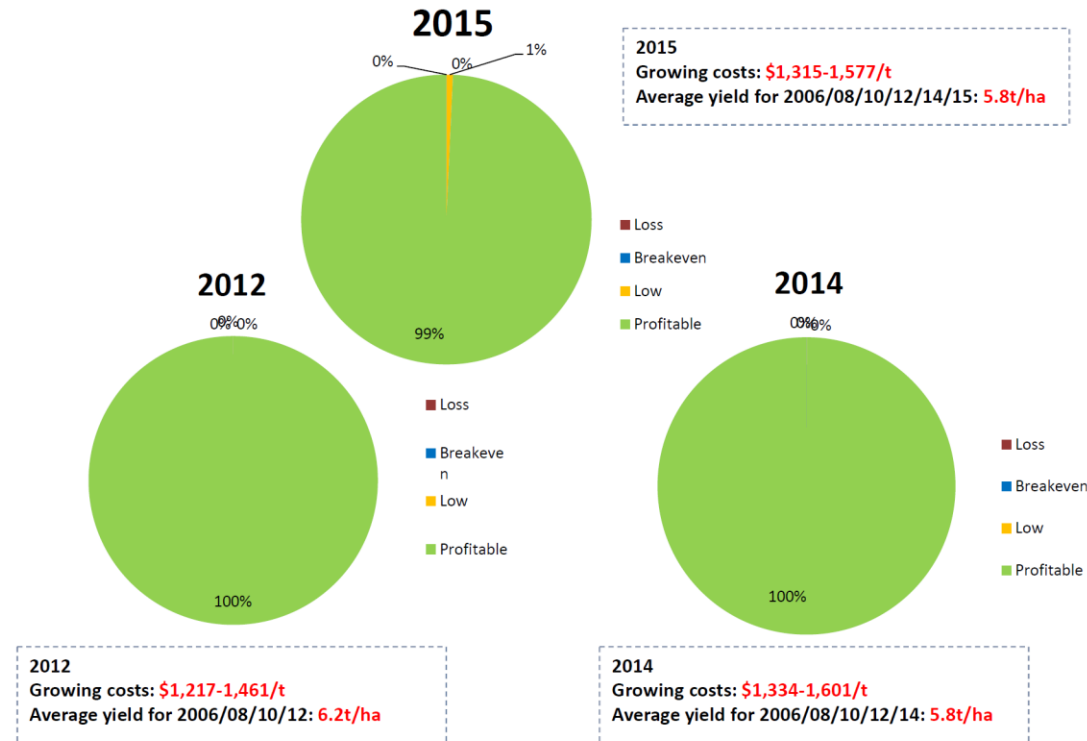
## Mornington Peninsula Production

### Profitability



# Tasmania

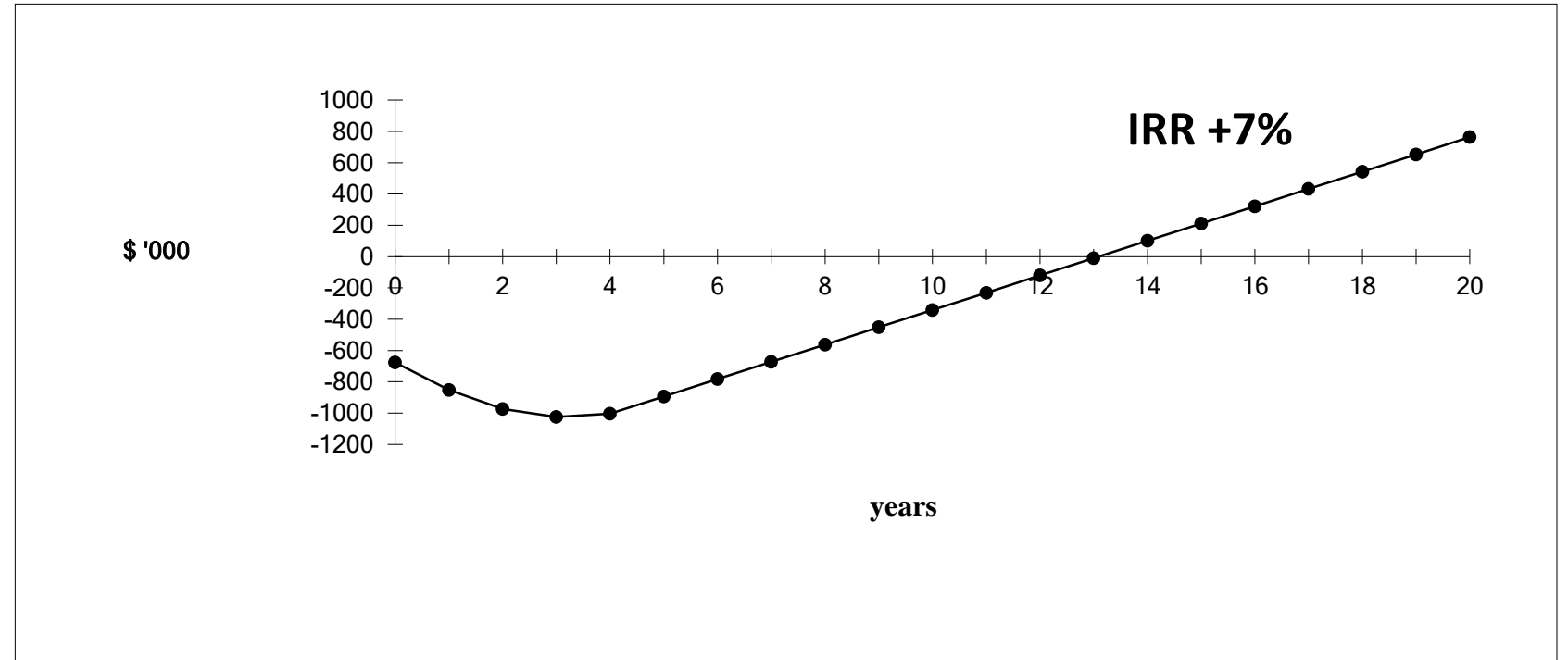
## Tasmania Production Profitability



# Yield x Price

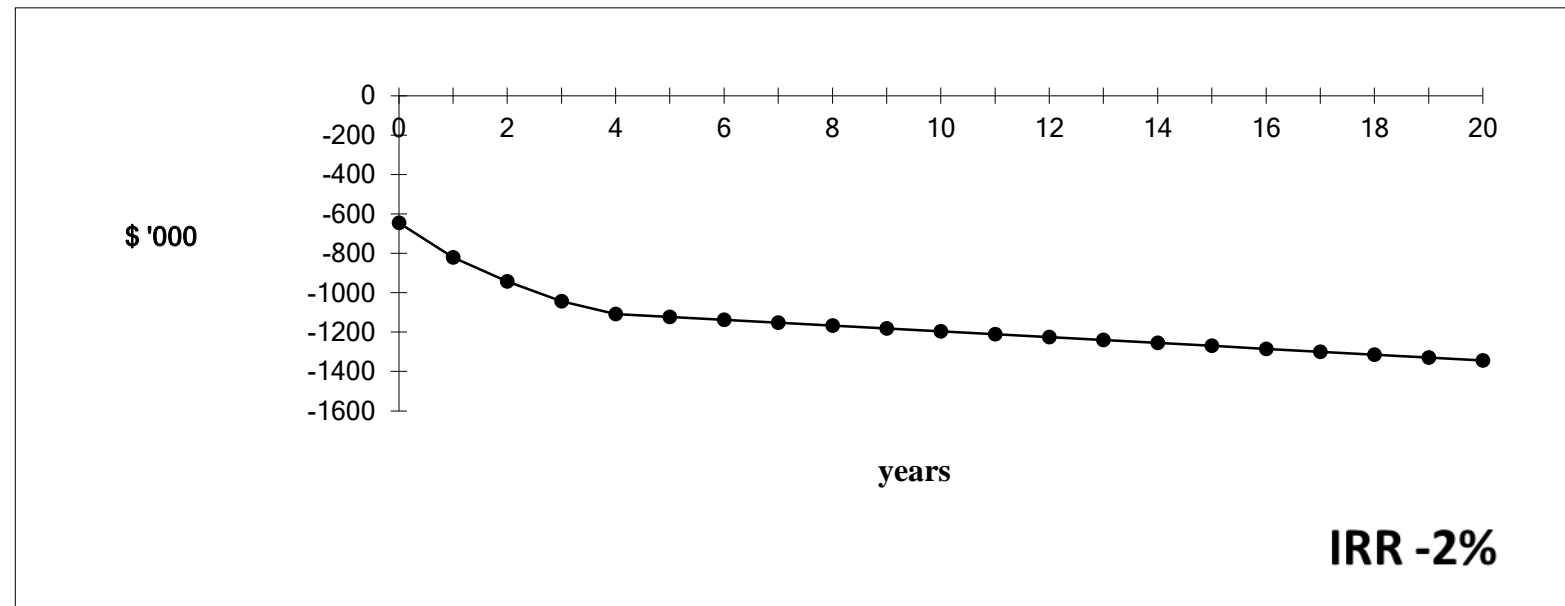
Yield Category	Yield t/ha				Price
	yr 2	yr3	yr 4	yr 5+	\$/t
Low	0.00	0.00	2.00	5.00	1850
Average	0.00	1.00	3.00	7.00	2000
High	0.00	2.00	5.00	9.00	2500

# Pinot Noir Cumulative Cash Flow; High Yield/High Value



Yields (L, A, H)	H
Grape Prices (L, A, H)	H
Hand Harvesting (Y/N)	Y

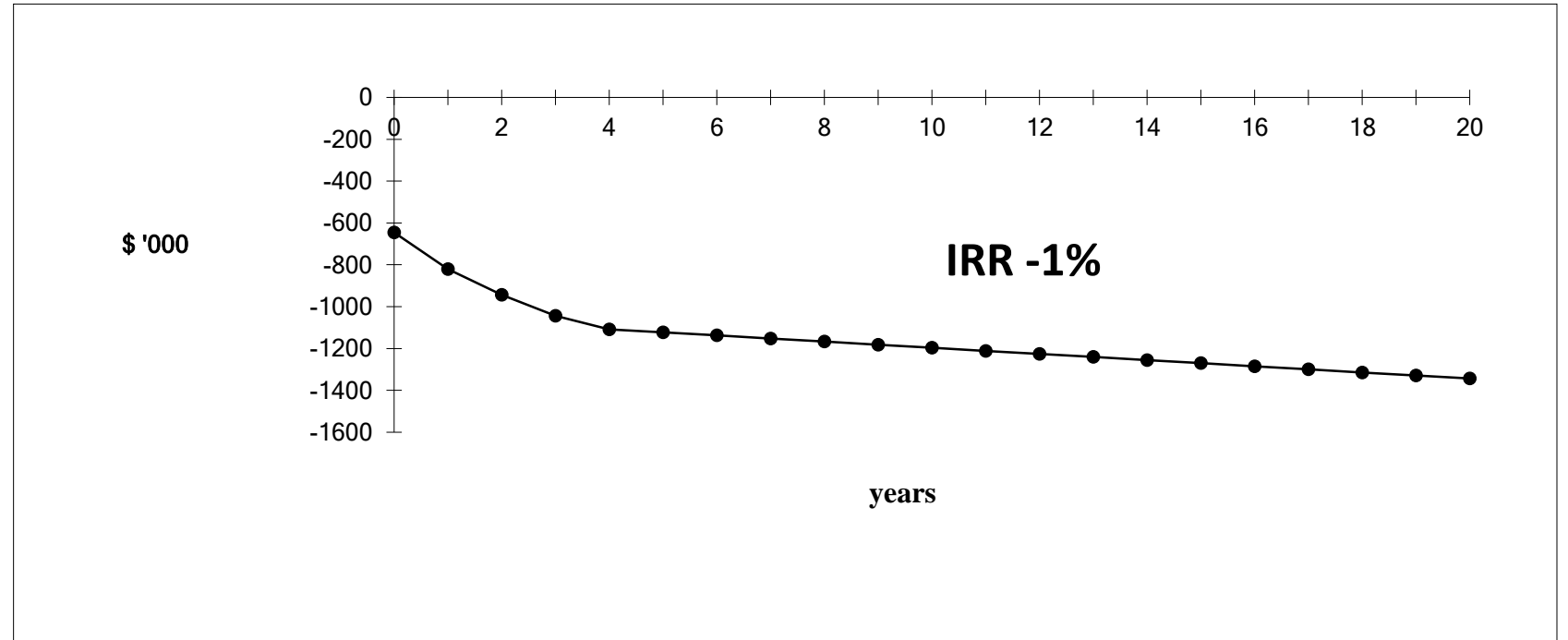
# Pinot Noir Cumulative Cash Flow; Low Yield/High Value



Yields (L, A, H)	L
Grape Prices (L, A, H)	H
Hand Harvesting (Y/N)	Y

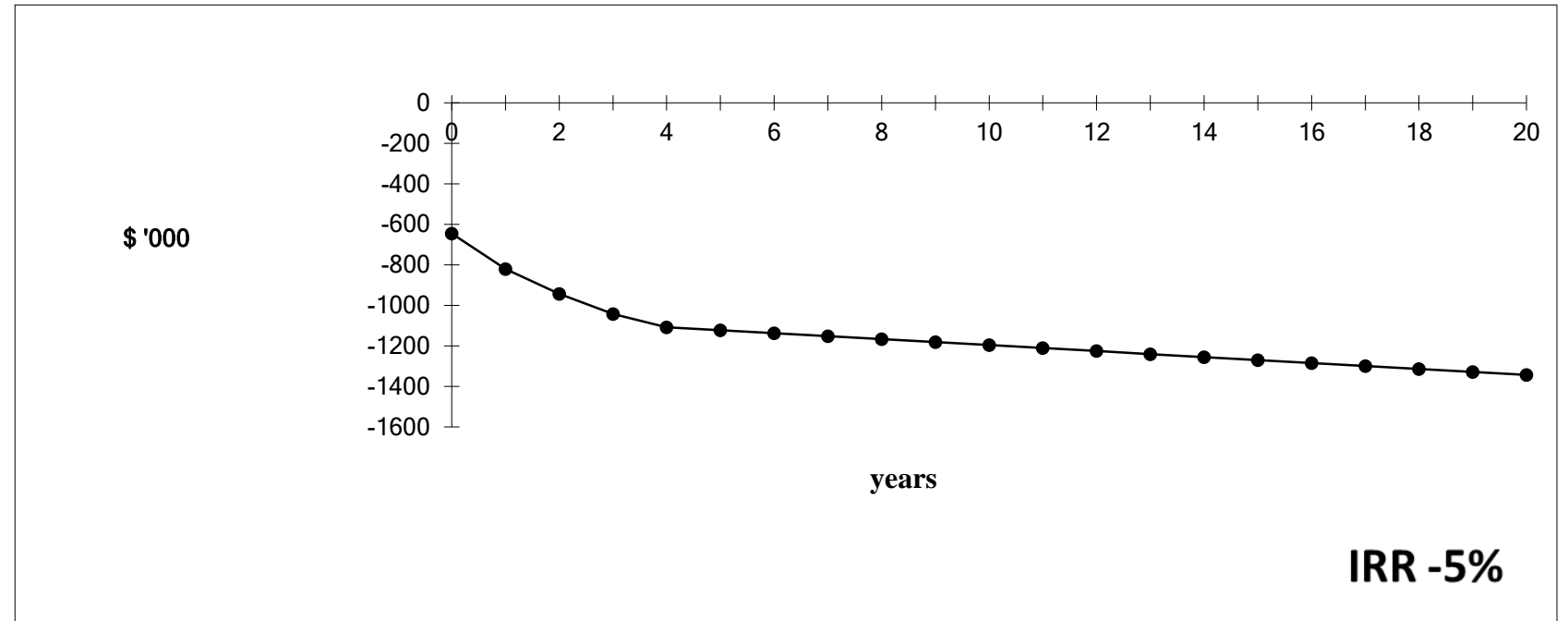


# Pinot Noir Cumulative Cash Flow; Average Yield/Average Value



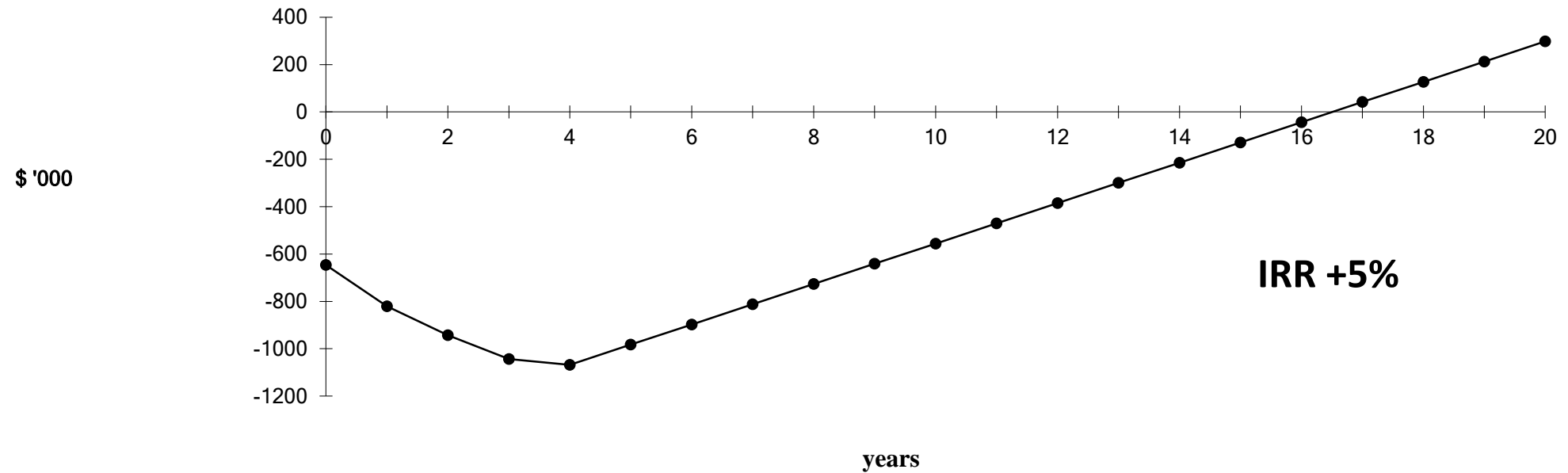
Yields (L, A, H)	A
Grape Prices (L, A, H)	A
Hand Harvesting (Y/N)	Y

# Pinot Noir Cumulative Cash Flow; Low Yield/Average Value



Yields (L, A, H)	L
Grape Prices (L, A, H)	A
Hand Harvesting (Y/N)	Y

# Pinot Noir Cumulative Cash Flow; Low Yield 5t/ha/ Value \$4000/t



# Cost Allocation; *for example*

Area	10			
Tonnes	50			
		Expenditure \$	\$/ha	\$/t
Permanent labour		60,000	6000	1200
Casual labour		20,000	2000	1200
Contractors		5,000	500	100
Consultant		3,000	300	60
Fungicides & Insect.		7,000	700	140
Herbicides		1,000	100	20
Fertilizer		2,000	200	40
Irrigation Water		10,000	1000	200
Irrigation Operation		5,000	500	100
Harvesting		25,000	2500	500
Fuel, oil & grease		7,000	700	140
Plant R & M		8,000	800	160
Power		5,000	500	100
Overheads		5,000	500	100
Depreciation		20,000	2000	400
Finance Costs		15,000	1500	300
TOTAL		198,000	19800	4760

# Analysis into Management

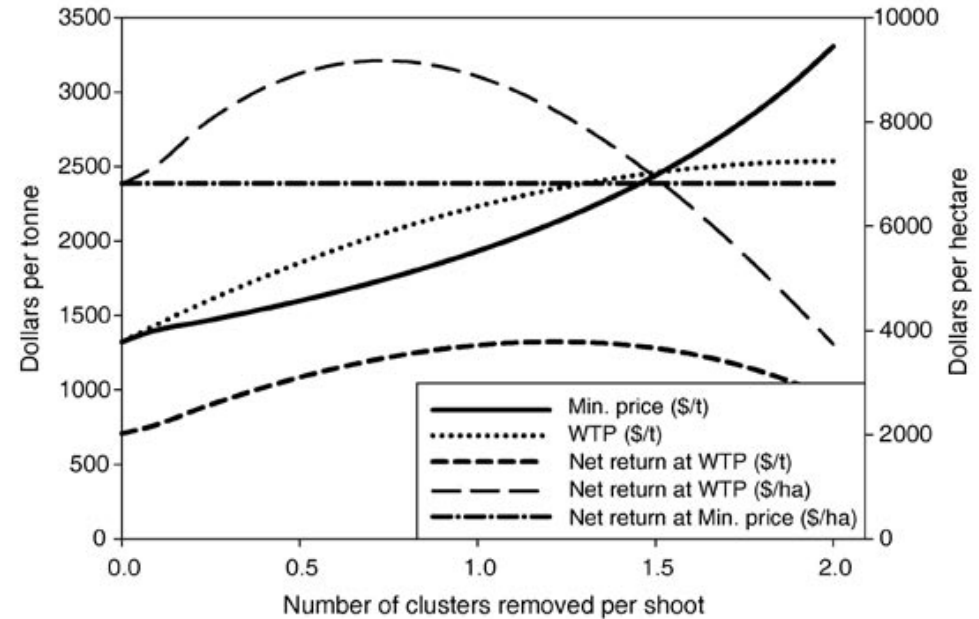
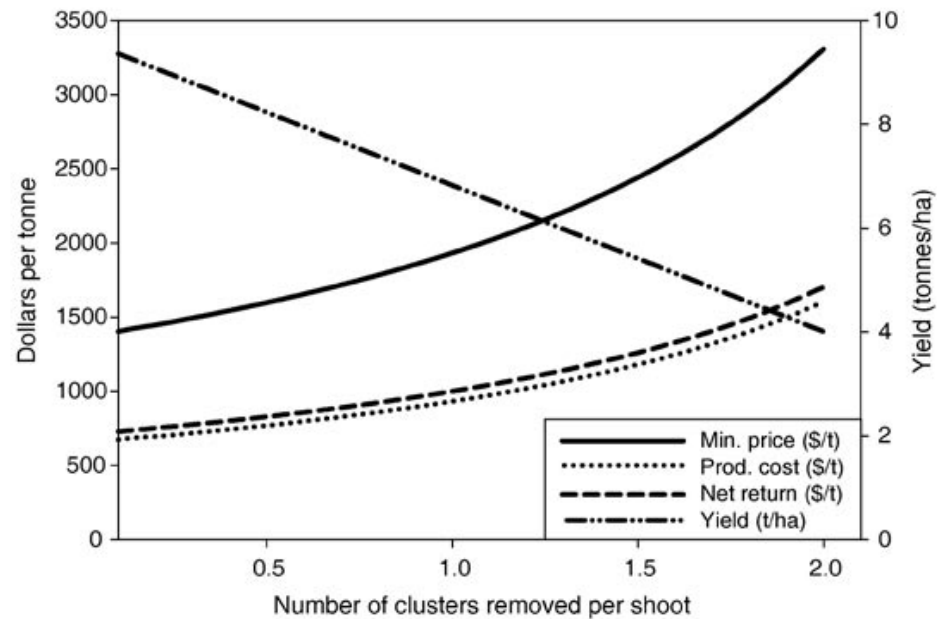
- Identify key data sets; financial + technical + operational
- Record & Organise
- Analyse & Review; especially against make, market intent, outcomes
- Interpret & Apply
- Monitor & Revisit
- Plan & Adapt

# Optimising Management Inputs; *several foci & pathways*

- Productivity, consistency, predictability, maturity, batch uniformity----
- Risk mitigation
- Style-quality-make requirement
- Parcel diversity; end use-own label, trade sale etc.
- Spend where it's worth spending
- Work program, labour and mechanisation deployment;
  - Efficiency
  - Effectiveness
  - Availability of;
    - Skilled labour
    - Appropriate mechanisation
- Specific Cultural Operations; shoot thinning, bunch thinning etc
- **Outsourcing; contract to management specifications?**



# Modelling Bunch Thinning Cost-Impact



**A Model to Establish Economically Sustainable Cluster-Thinning Practices  
Am. J. Enol. Vitic. 61:1 (2010)**

# Tonnage Price

	Yield t/ha			
Grape Price \$/t	5	6	8	10
1250	6250	7500	10000	12500
1500	7500	9000	12000	15000
1850	9250	11100	14800	18500
2000	10000	12000	16000	20000
2500	12500	15000	20000	25000
3000	15000	18000	24000	30000
3500	17500	21000	28000	35000
4000	20000	24000	32000	40000
5000	25000	30000	40000	50000

# Net Return @ Production Cost \$20000/ha

	Yield t/ha			
Grape Price \$/t	5	6	8	10
1250	-13750	-12500	-10000	-7500
1500	-12500	-11000	-8000	-5000
1850	-10750	-8900	-5200	-1500
2000	-10000	-8000	-4000	0
2500	-7500	-5000	0	5000
3000	-5000	-2000	4000	10000
3500	-2500	1000	8000	15000
4000	0	4000	12000	20000
5000	5000	10000	20000	30000

# Discussion Points: Sustainable Business and Suppliers

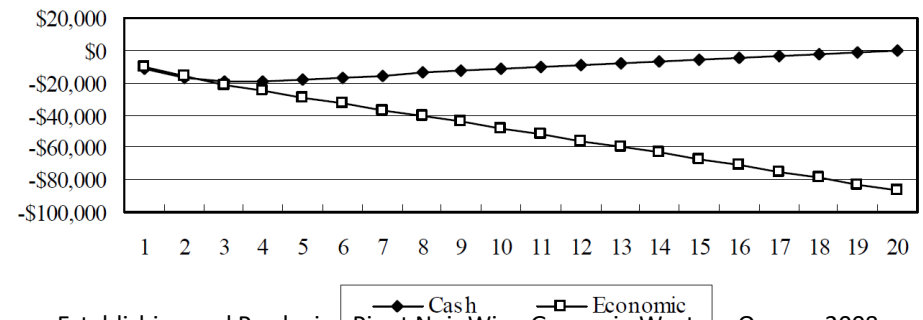
- Benchmarking; potential for “tuning” the business
- Planning;
  - Workplan redesign;
    - Seasonal program balance labour (quality, availability)
    - Adapting to end-use value and production risk; endless incremental inputs?
    - Mechanisation; where/when/how?
  - Mechanisation;
    - Capital purchases
    - Lease
    - Contractors
    - Group services?
  - Vineyard development, redevelopment incl. “right scale” *or*
  - Alternative procurement options; operational agreement & pricing---
- Relative priorities; efficiency, effectiveness, productivity, control---?

# Further Reading

- 2015 Winegrape Purchases: Price Dispersion Report;  
<https://www.wineaustralia.com/market-insights/national-vintage-report>
- The cost of making wine: A Tuscan case study based on a full cost approach; Wine Economics and Policy, Volume 6, Issue 2, December 2017, Pages 88-97  
<https://www.sciencedirect.com/science/article/pii/S2212977417300182>
- SAMPLE COSTS TO PRODUCE WINEGRAPES: Chardonnay and Pinot Noir;  
[https://coststudyfiles.ucdavis.edu/uploads/cs\\_public/33/41/3341f086-690a-4d70-a113-c864e26614de/2016winegrapesonomafinaldraft111816.pdf](https://coststudyfiles.ucdavis.edu/uploads/cs_public/33/41/3341f086-690a-4d70-a113-c864e26614de/2016winegrapesonomafinaldraft111816.pdf)
- Establishing and Producing Pinot Noir Wine Grapes in Western Oregon;  
<http://arec.oregonstate.edu/oaeb/files/pdf/EM8969-E.pdf>
- Oregon Pinot Noir Vintner Tries Transparent Pricing;  
<https://www.winespectator.com/webfeature/show/id/Oregon-Vintner-Tries-Transparent-Pricing>



Figure 3. Comparing cash and economic net returns per acre to establish a Pinot noir vineyard in western Oregon over 20 years.



Establishing and Producing Pinot Noir Wine Grapes in Western Oregon 2008