



PINION ADVISORY

Making machinery decisions

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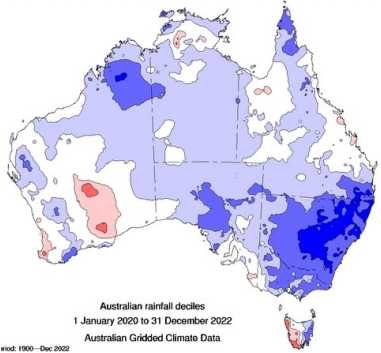
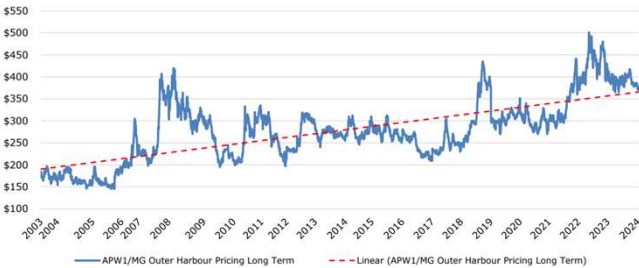
Key points

- Long term plans work
- Ensure machines are fit for purpose
- Monitor total investment
- Look for leverage and efficiency opportunities
- Run your own race

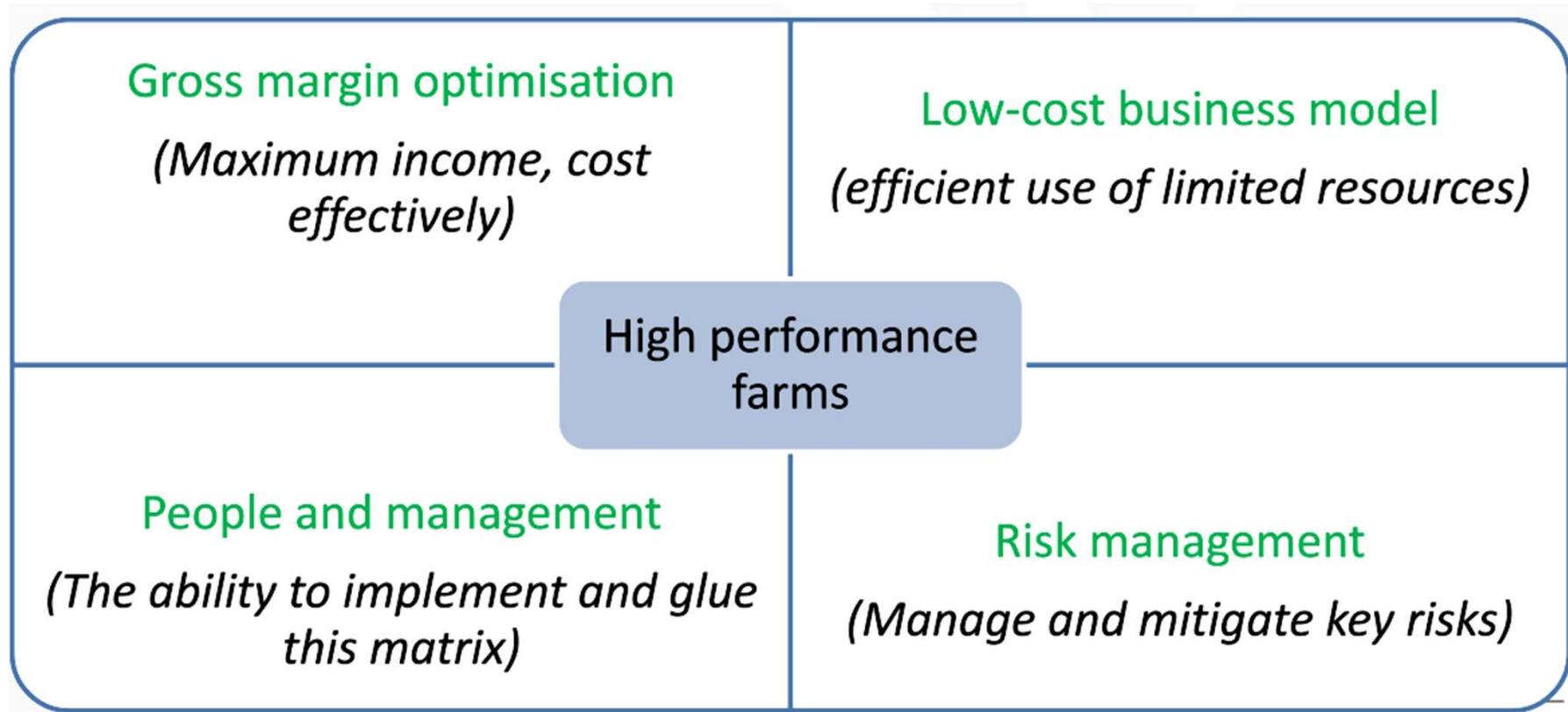
How did we get here??



Australian Government
Australian Taxation Office



Profit drivers

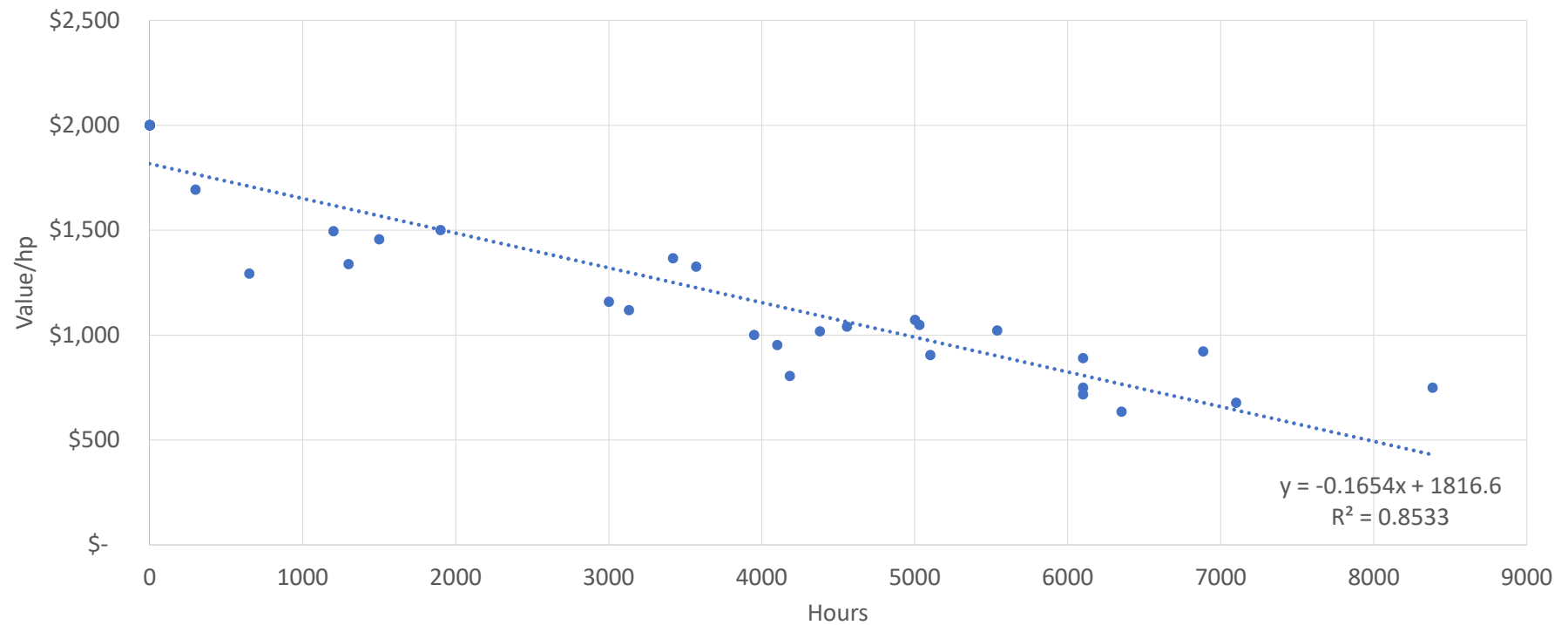


Drivers of machinery cost of ownership

- **Business model**
- **Total investment/depreciation**
- **Finance costs**
- **Area/leverage**
- Insurance
- Repairs and maintenance
- Fuel
- Labour

Depreciation

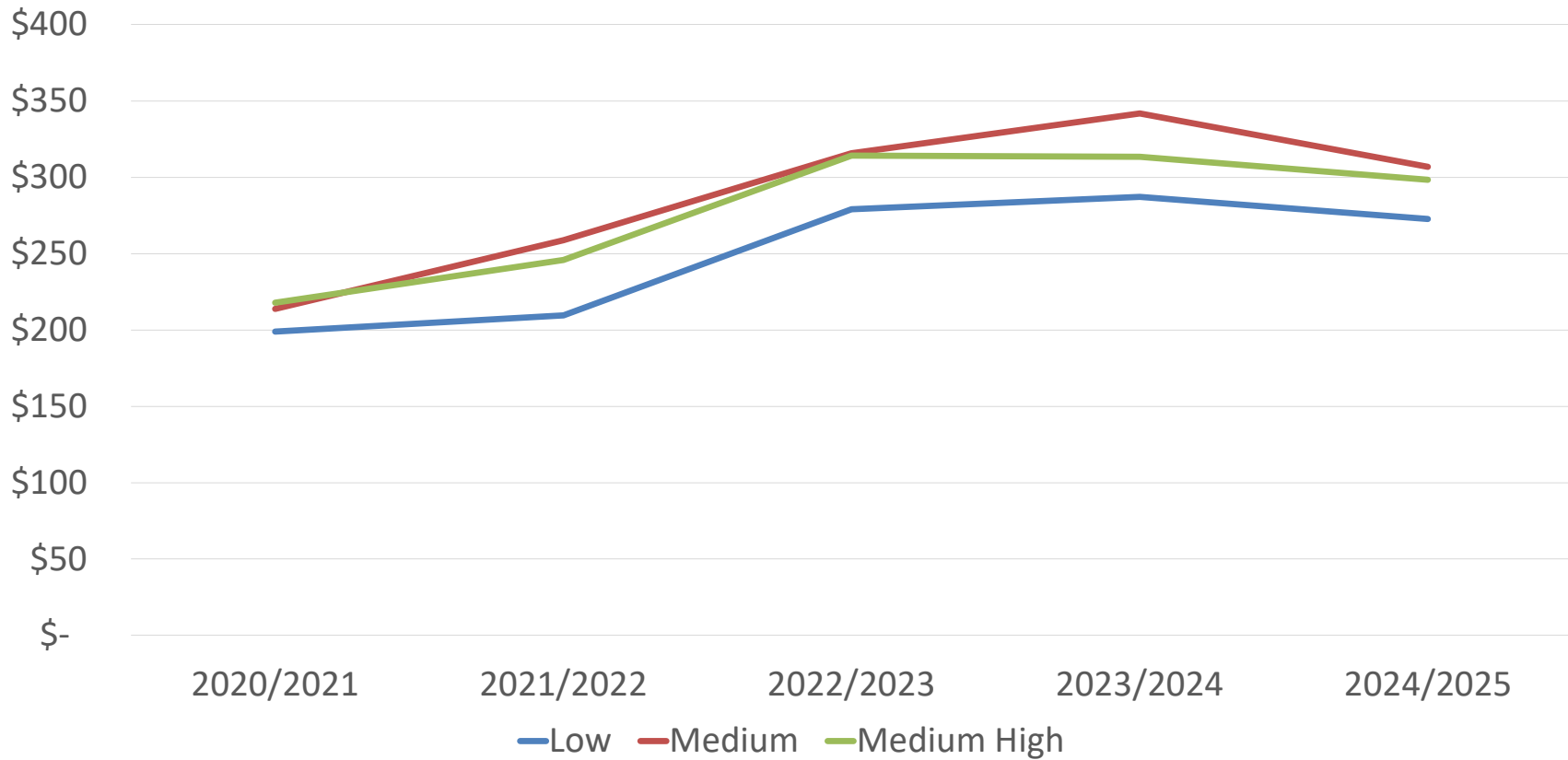
John Deere Tractors



Benchmarks over time

| | | Top 20% | Average |
|--|---------|---------|---------|
| Machinery investment ratio | 2009-13 | 0.66 | 0.94 |
| | 2017-19 | | 1.09 |
| | 2018-22 | 0.87 | 0.87 |
| Total Plant, Machinery and Labour costs as % of income | 2009-13 | 27.3% | 36.4% |
| | 2017-19 | | 37.9% |
| | 2018-22 | 25% | 31% |

Change in wheat breakeven point \$/t



Comparison with wheat pricing



Comparison with wheat pricing



Machinery investment ratio

= Total investment in plant & equipment ÷ total income

- Aim for below 1:1
- Stretch target of <0.8:1
- Highlights over/under capitalisation
- Doesn't account for contractors, R&M and labour

Total plant machinery and labour costs

= Total plant, machinery and labour costs ÷ total income

- Contracting costs
- Machinery R&M
- Fuel
- Freight
- Machinery hire
- Depreciation
- Finance costs
- Machinery lease
- Wages & on costs
- Value of owners time

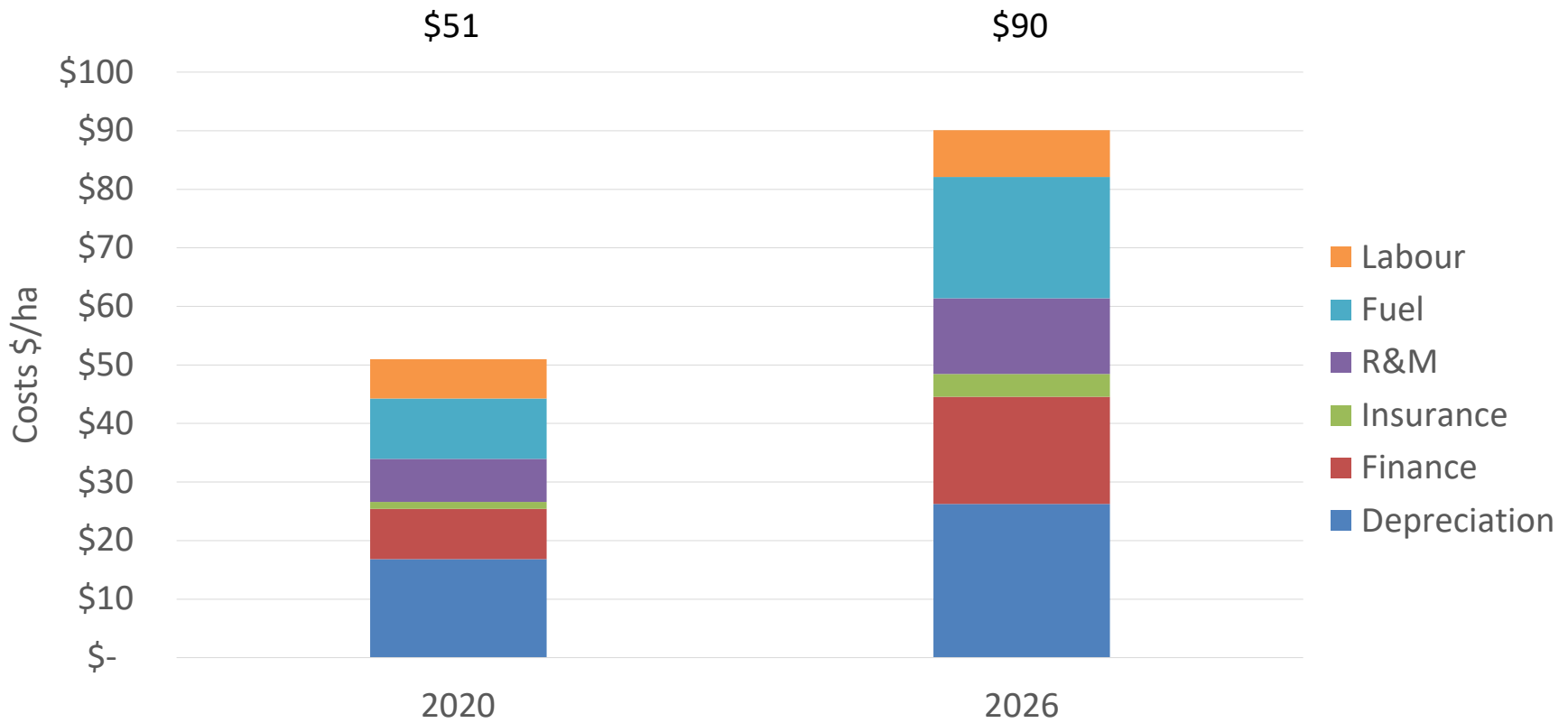
Total plant machinery and labour costs

- Aim for <30%
- Stretch target of 25%
- Cost of getting the job done
- Picks up the balance between machinery vs labour efficiency

Header cost of ownership survey

| | 2020 \$/ha | 2026 \$/ha | 2026 \$/t wheat | 2026 \$/hour |
|----------------|-----------------------|-----------------------|----------------------------|-------------------------|
| Min | \$20 | \$21 | \$6 | \$183 |
| Average | \$51 | \$90 | \$28 | \$615 |
| Max | \$108 | \$184 | \$66 | \$1299 |

How it's changed

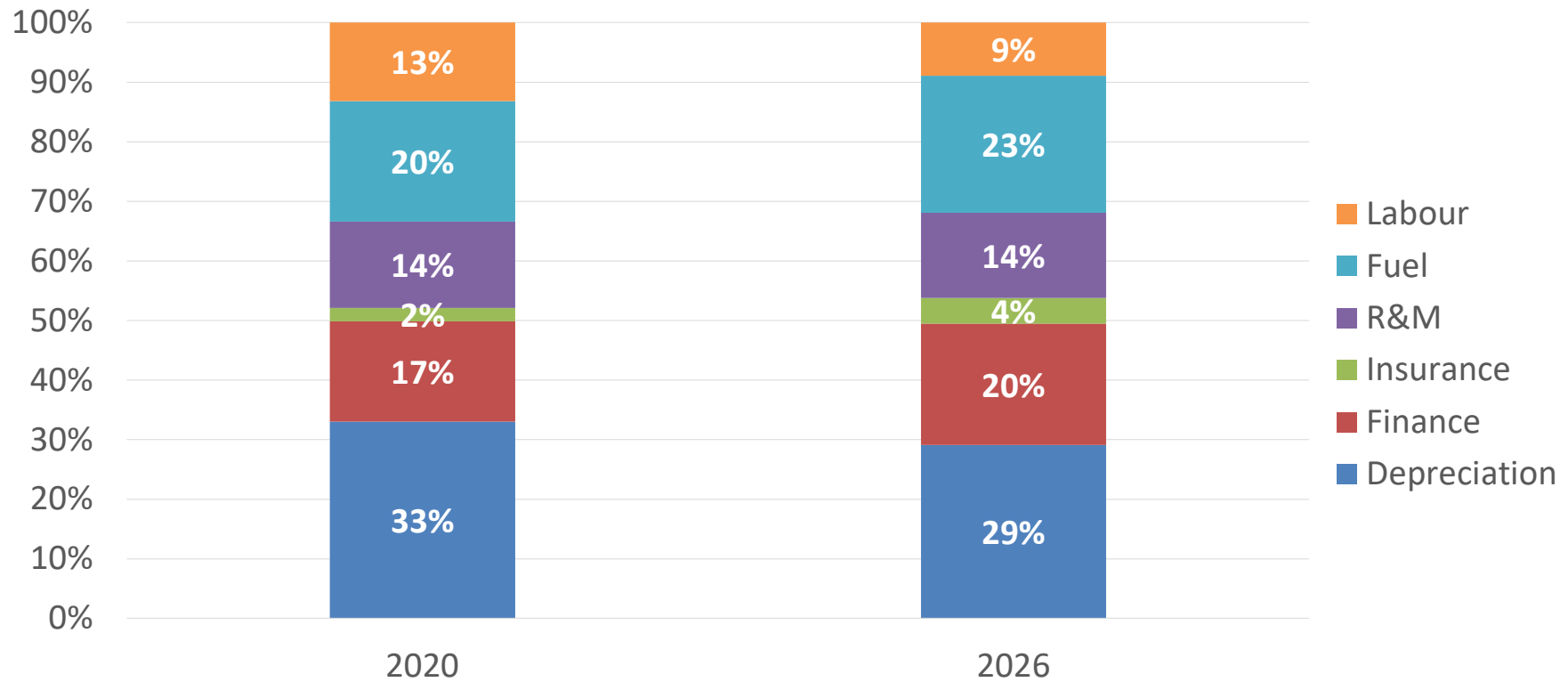


77% increase in total cost of ownership

Changes

- Depreciation up 56%
- Finance costs up 113%
- Insurance up 239%
- R&M up 75%
- Fuel up 101%
- Labour up 19%

Drivers of cost change



Insights

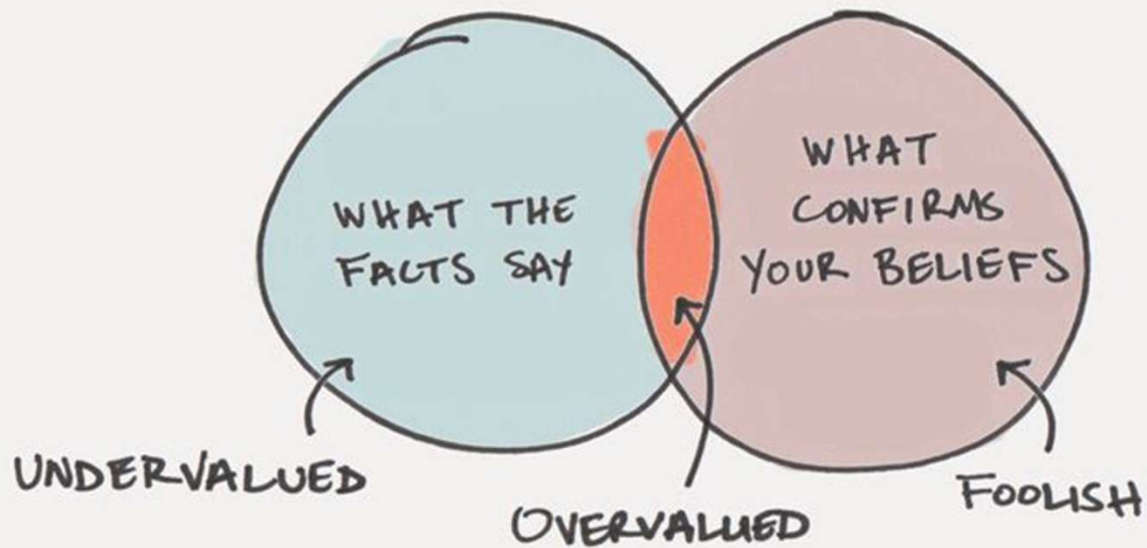
- Major costs are still capital related – depreciation, finance and insurance
- Try not to replace R&M with capital if it doesn't effect reliability/productivity

How do we plan for the future?

Challenges

- Balancing depreciation and R&M
- Internal people
- External people
- Other demands on cashflow

THE CONFIRMATION BIAS



JamesClear.com

Key considerations

- Do I have a replacement plan that is appropriate for my scale?
- Is the fleet fit for purpose?
- What are my biases in machinery purchases and are they warranted?
- Are there opportunities to leverage the fleet further through contracting? Or can we utilise contractors?
- Can we syndicate/hire any machinery?
- **What are the profit opportunities for labour and machinery?**

Replacement plan

| | Current use (hours) | Annual use (hours) | Change over policy (hours) | Estimated change over | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 |
|-------------------------|---------------------|--------------------|----------------------------|-----------------------|--------|---------|---------|---------|---------|---------|--------|--------|--------|------|
| Tractor 1 | 3000 | 500 | 6000 | 2029 | | | | | | 50,000 | 50,000 | 50,000 | 50,000 | |
| Tractor 2 | 5500 | 500 | 6000 | 2024 | 50,000 | 50,000 | 50,000 | 50,000 | | | | | | |
| Header | 900 | 300 | 1800 | 2026 | | | 100,000 | 100,000 | 100,000 | 100,000 | | | | |
| Sprayer | 1200 | 400 | 2000 | 2025 | | 100,000 | 100,000 | 100,000 | 100,000 | | | | | |
| Total annual repayments | | | | | 50,000 | 150,000 | 250,000 | 250,000 | 200,000 | 150,000 | 50,000 | 50,000 | 50,000 | |

Monitoring replacements

- Depreciation is around 10%
- Therefore, need to replace 10% of the value each year

$$10\% \times \$1,500,000 = \$150,000$$

Additional costs and cashflow need to be considered



Increasing efficiency and leverage

- Contracting
- Hire
- Syndicate

- Support equipment/infrastructure
- Paddock design
- Cropping plan



Key points

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THANK YOU,
ANY QUESTIONS?

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