The WTO Agricultural Negotiations: Reform Options and Outcomes For New Zealand

Anna Strutt and Allan Rae
University of Waikato and Massey University

Support from the C Alma Baker Trust is gratefully acknowledged
Significance of Agricultural Reform to New Zealand

- NZ has historically had a comparative advantage in agricultural production
- Agriculture and food still generate a very large proportion of New Zealand’s exports
  - There has been a decline in the relative importance of agricultural raw materials
  - But the share of exports accounted for by food products has remained relatively stable over recent decades
Changing Commodity Export Shares, NZ

1964:
- Ag. Raw: 13
- Food: 52
- Manufactures: 43
- Other: 6

1999:
- Ag. Raw: 46
- Food: 4
- Manufactures: 33
- Other: 52

Legend:
- Ag. Raw
- Food
- Manufactures
- Other
• Globally agriculture is one of the most protected sectors
  – with protection of ruminant meats and dairy products particularly high

• International agricultural market distortions make it difficult for NZ to fully exploit its efficient agricultural production

• But despite this, NZ appears to performed quite strongly on world markets for some key agricultural products
Recent Performance of New Zealand’s Agricultural Exports

Cumulative Growth in Agricultural Exports, 1993-1998

Growth in NZ’s Exports (%)

Growth in World Exports (%)

Cmt

Oap

Fsh

Ocr

Mil

Odf

Om

For

Wol

Ctl

B_t
What Can be Gained from Trade Reform?

- NZ imposes relatively low average tariffs
- But NZ exporters face an average tariff rate of over 18.5%
- This is the highest average tariff rate imposed on exports from *any* country or region in the current GTAP database
- Therefore potential gains from reform are likely to be large
Average Tariffs Faced and Imposed by Region

![Bar chart showing average tariffs imposed and faced by region.](chart.png)

- **Regions**: aus nzl chin ono jpn sea sas can usa arg lam eu eft oeu xrw Total
- **Y-axis**: 0 to 25
- **Legend**:
  - Average tariffs imposed
  - Average tariffs faced

The chart compares the average tariffs imposed and faced across different regions.
An Extreme Simulation: Removal of all Distortions

- What would be the impact of the removal of all global import and export distortions?
  - i.e. complete liberalization across all markets
  - We use GTAP v5 to simulate removal or all tariffs, export distortions and output taxes/subsidies

- What are the potential impacts on New Zealand?
Changes in NZ’s Exports with Global Distortions Removed

Performance of New Zealand's Agricultural Exports with Trade Distortions Removed

Growth in New Zealand's Export Volume (%)

Growth in World Export Volume (%)
Modelling the Impacts of the New WTO Round

- Cuts to protection that will be agreed to in the new WTO Round are far from certain
- We model two different WTO trade reform scenarios:
  1. A 36% reduction in all tariffs
  2. A cocktail approach:
     - tariffs between zero and 5 percent reduce to zero
     - tariffs between 5 and 100 percent reduce by 36%
     - tariffs over 100 percent reduce by a Swiss formula
Changes in NZ’s Exports with Trade Reform

Growth in New Zealand’s Exports (%)

Growth in World Exports (%)

Tariff_36
Cocktail

ocr
ctl
v_f (both scenarios)
oap
cmt
ofd
mil
wol (both scenarios)

### Welfare effects of trade reform

<table>
<thead>
<tr>
<th>Country</th>
<th>Change in EV ($USm)</th>
<th>EV/GDP (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Cocktail</td>
<td>Tariff_36</td>
</tr>
<tr>
<td>aus</td>
<td>266</td>
<td>367</td>
</tr>
<tr>
<td>nzl</td>
<td>380</td>
<td>358</td>
</tr>
<tr>
<td>chn</td>
<td>4774</td>
<td>3161</td>
</tr>
<tr>
<td>ona</td>
<td>5157</td>
<td>4364</td>
</tr>
<tr>
<td>jpn</td>
<td>5958</td>
<td>7415</td>
</tr>
<tr>
<td>sea</td>
<td>4136</td>
<td>2064</td>
</tr>
<tr>
<td>sas</td>
<td>1862</td>
<td>1673</td>
</tr>
<tr>
<td>can</td>
<td>-277</td>
<td>512</td>
</tr>
<tr>
<td>usa</td>
<td>2439</td>
<td>135</td>
</tr>
<tr>
<td>arg</td>
<td>895</td>
<td>919</td>
</tr>
<tr>
<td>lam</td>
<td>969</td>
<td>2122</td>
</tr>
<tr>
<td>eu</td>
<td>-231</td>
<td>5060</td>
</tr>
<tr>
<td>eft</td>
<td>2642</td>
<td>1899</td>
</tr>
<tr>
<td>oeu</td>
<td>4836</td>
<td>2527</td>
</tr>
<tr>
<td>xrw</td>
<td>9049</td>
<td>6154</td>
</tr>
</tbody>
</table>
Preliminary Conclusions

- Results from both WTO trade liberalization scenarios suggest that:
  - Significant gains are possible from a multi-sector approach to reform that includes the heavily protected agricultural sectors
  - Projected gains for the dairy and meat product sectors in New Zealand are shown to be large since these sectors faced particularly high tariffs
  - Across all countries, such reform will lead to improved allocative efficiency and increases in real GDP
Limitations and Future Directions

- Results presented in this paper are very preliminary, limitations of the current work include:
  - Simulated reforms are very much open to debate
  - Inadequate modelling of TRQs
  - No attempt is made to model some other impacts that may be important e.g. environmental effects