AAMP Briefing Packet 1.2.c. Import and Export Parity Prices

(i) Introduction to import and export parity prices
(ii) Mechanics of computing border prices
(iii) Computing border prices: three exercises
(iv) Can domestic prices ever exceed import parity?
(i) introduction to import and export parity prices

- Domestic price
- Import parity price
- Export parity price
Domestic price

D
S0

Price $/ton

Quantity
Drought: closed borders

D
S1
S0

Price
$/ton

Quantity

300
200
100

200
300
Drought: closed borders

Price
$/ton

300

200

100

Pm

Quantity

D

S1

S0

200

300
<table>
<thead>
<tr>
<th>Quantity</th>
<th>Price $/ton</th>
</tr>
</thead>
<tbody>
<tr>
<td>S0</td>
<td>100</td>
</tr>
<tr>
<td>Pm</td>
<td>200</td>
</tr>
<tr>
<td>S1</td>
<td>300</td>
</tr>
</tbody>
</table>
Bumper harvest

Price $/ton

Quantity

D S0 S2

200

Red arrow pointing to the right from S0 to S2.
Bumper harvest: closed border

<table>
<thead>
<tr>
<th>Quantity</th>
<th>Price $/ton</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>S0</td>
</tr>
<tr>
<td></td>
<td>200</td>
</tr>
<tr>
<td></td>
<td>300</td>
</tr>
<tr>
<td></td>
<td>100</td>
</tr>
<tr>
<td>D</td>
<td></td>
</tr>
</tbody>
</table>

Price $/ton

Quantity
Bumper harvest: closed border

Price $/ton

Quantity

D

S0

S2

Pe

100

200

300
Bumper harvest: open border

Price
$/ton

Quantity

D
S0
S2

300
200
100

Pe
Border prices contain price volatility
Discussion questions

• When will IPP influence domestic price?
• When will EPP influence domestic price?
South Africa, domestic and border prices for white maize, 1992-2006
Rice Prices and Quantity of Private Rice Imports in Bangladesh, 1993-2000

Source: Dorosh (2001).
Rice Prices and Quantity of Private Rice Imports in Bangladesh, 1993-2000

Source: Dorosh (2001).
Saudi Arabia, domestic and border prices for wheat, 1980-2008
(ii) mechanics of computing border prices

- *Domestic reference price* = price in Location 1
- *Import parity price, Location 2*
- *Export parity price, Location 3*
(ii) mechanics of computing border prices

- **Domestic reference price** = price in Location 1

- **Import parity price**, Location 2 = price at which purchases in Location 2 can be delivered to market in Location 1

- **Export parity price**, Location 3 = price at which commodity would have to be purchased in Location 1 in order to be sold at market price in Location 3
(ii) Mechanics of computing border prices

- IPP, Location 2 = price at which purchases in City 2 can be delivered to market in Location 1
  = price in Location 2
  + transport to Location 1
  + duties and fees
  + handling costs
(ii) Mechanics of computing border prices

- IPP, Location 2 = price at which purchases in Location 2 can be delivered to wholesale market in Location 1

\[
\begin{align*}
\text{IPP from L2 to L1} &= \text{price in L2} + \text{transport to L1} + \text{duties and fees} + \text{handling costs} \\
&= \$200 + \$100 + \$50 + \$34 \\
&= \$384
\end{align*}
\]
(ii) Mechanics of computing border prices

- IPP, Location 2 = price at which purchases in Location 2 can be delivered to wholesale market in Location 1

\[
\begin{align*}
&= \text{price in L2} \quad \$200 \\
&+ \text{transport to L1} \quad \$100 \\
&+ \text{duties and fees} \quad \$50 \\
&+ \text{handling costs} \quad \$34 \\
&= \text{IPP from L2 to L1} \quad \$384
\end{align*}
\]
(ii) Mechanics of computing border prices

- EPP, L3 = price at which purchases would have to be purchased in L1 in order to be sold at market price in L3
  
  \[ \text{EPP, L3} = \text{price in L3} - \text{transport to L1} - \text{duties and fees} - \text{handling costs} \]
  
  \[ = \text{EPP from L3 to L1} \]
(ii) Mechanics of computing border prices

• EPP, L3 = price at which purchases would have to be purchased in L1 in order to be sold at market price in L3

\[
\begin{align*}
&= \text{price in L3} \quad $275 \\
&- \text{transport to L1} \quad $60 \\
&- \text{duties and fees} \quad $0 \\
&- \text{handling costs} \quad $25 \\
&= \text{EPP from L3 to L1} \quad $
\end{align*}
\]
(ii) Mechanics of computing border prices

• EPP, L3 = price at which purchases would have to be purchased in L1 in order to be sold at market price in L3

  = price in L3 $275
  - transport to L1 $ 60
  - duties and fees $  0
  - handling costs $  25
  = EPP from L3 to L1 $ 190
(iii) Computing border prices: three exercises

• **Nairobi**: mechanics of computing IPP, EPP: domestic maize price, IPP Durban, EPP Durban (*kenya data.xls*)

• **Nairobi**: graph domestic maize price, IPP & EPP Durban, IPP & EPP Uganda (*east africa data.xls*)

• **Blantyre**: domestic maize price, IPP Nampula, EPP Nampula (*south east data.xls*)
(iv) Discussion Questions

• When, if ever, has import parity capped domestic price increases?
• Can domestic price ever exceed import parity?
• If so, when and why can this happen?
• If not, why?
Nairobi, domestic and border prices for white maize, 2000-2006

Price (US$/ton)

- Nairobi
- Import parity, Durban
- Export parity, Durban
- Import parity, Mbale Uganda
- Export parity, Mbale Uganda
Malawi, domestic and border prices for white maize, 2000-2006
Lusaka, domestic and border prices for white maize, 1994-2006

[Graph showing price fluctuations over time]
Ethiopia Wheat

![Graph showing the price of Ethiopia wheat over time. The graph includes lines for White wheat wholesale Addis, Import Parity Revised, and Import Sales Price.]