Bilateral liberalisation in the Automotive sector Egypt –EU

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16th Annual Short Course in Global Trade Analysis

Outline

- Background & shocks
- Methodology
- Simulation Results
- Concluding remarks

Background & Shocks

- Egypt is a net importer of automotives & applies an import tariff (aprox 20%) on automotive imports from all sources, with the exemption of USA (6%)
- USA the biggest exporter of automotives into Egypt while EU is the second

 We tested the impact of liberalising bilateral trade of automotives between Egypt & EU (we set tariffs to zero) on Egypt, EU and the USA

Methodology

- GTAP database version 6
- Standard GE closure
- Variable shocked: tms (import tariff)

```
Shock tms("cartrn", "Egypt", "EU") = -0.0000
Shock tms("cartrn", "EU", "Egypt") = -16.5803
```

- Analyse results
 - GDP & welfare
 - trade flows & domestic production

Simulation results & insights

Egypt-EU liberalisation

million 2001 \$

| | GDP in 2001 | GDP | EV Welfare | Allocative Efficiency | Terms of Trade | Investment Savings |
|-------|-------------|------|---------------|--------------------------|-------------------|-----------------------|
| Egypt | 81,519 | 3.46 | -0.2 | 3.46 | -7.65 | 3.99 |
| EU | 8,281,309 | -2 | 57.87 | -1.81 | 58.40 | 1.29 |
| USA | 10,098,768 | -27 | -72.42 | -27.13 | -30.32 | -14.96 |

TOT contributes mostly to welfare change:

$$tot(r) = psw(r) - pdw(r)$$



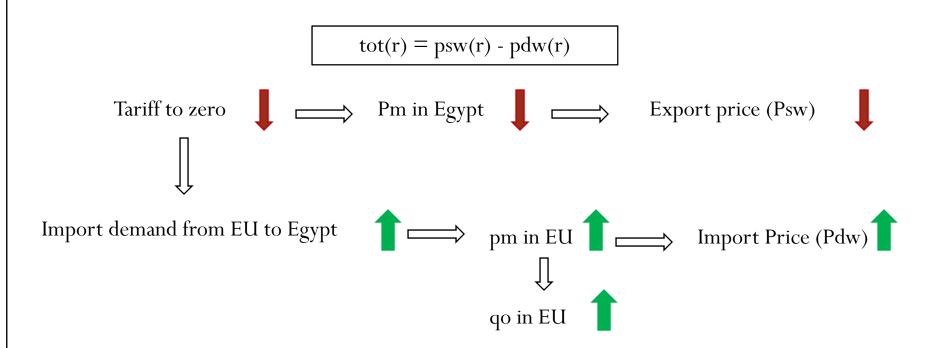
Export price (fob)

Import cif price

1. Why has the TOT of Egypt deteriorated?

Impacts on domestic production and market prices

| | | | | <u> </u> | | |
|---------------------|----|-------|----------|----------|--|--|
| | E | Egypt | | USA | | |
| | | | % change | | | |
| Domestic production | qo | -1.48 | 0.07 | -0.05 | | |
| Market prices | pm | -0.86 | 0.04 | 0 | | |



2. Little changed on the export side in Egypt

Egypt's Automotive exports

| • | | | | | |
|---------------|--------|------|--------|--------|--|
| | Pre | | Post | Change | |
| | mio \$ | | mio \$ | mio \$ | |
| 1 CENTAM | | 0 | 0. | 0.0 | |
| 2 China | | 0.3 | 0. | 3 0.0 | |
| 3 Egypt | | 0 | 0. | 0.0 | |
| 4 EU | | 27.2 | 28. | 5 1.3 | |
| 5 India | | 0 | 0. | 0.0 | |
| 6 Japan | | 0.4 | 0. | 4 0.0 | |
| 7 LDC | | 4.8 | 5. | 0 0.2 | |
| 8 MERCOSUR | | 0.1 | 0. | 1 0.0 | |
| 9 MEXICO | | 0.1 | 0. | 1 0.0 | |
| 10 ROW | | 5.2 | 5. | 5 0.3 | |
| 11 USA | | 1.4 | 1. | 5 0.1 | |
| 12 XME | | 3.3 | 3. | 5 0.2 | |
| Total | | 43 | 45. | 0 2.0 | |

Source: GTAP 6 database, variable VXWD

- There was no initial EU import tariff on automotive imports from Egypt
- Egypt's export flows of automotives are extremely low
- They increased slightly, mainly towards EU

3. Trade diversion follows Egypt-EU liberalisation

A small expansion effect, but a large substitution effect

Egypt's Automotive imports

| | Pre | | Pc | Change | |
|------------|--------|---------|--------|---------|--------|
| | mio \$ | % share | mio \$ | % share | mio \$ |
| 1 CENTAM | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 2 China | 47.7 | 2.8 | 32.5 | 1.9 | -15.2 |
| 3 Egypt | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 4 EU | 387.0 | 22.6 | 844.7 | 48.3 | 457.7 |
| 5 India | 20.5 | 1.2 | 14.0 | 0.8 | -6.5 |
| 6 Japan | 119.0 | 6.9 | 81.1 | 4.6 | -37.9 |
| 7 LDC | 1.3 | 0.1 | 0.9 | 0.0 | -0.4 |
| 8 MERCOSUR | 9.9 | 0.6 | 6.7 | 0.4 | -3.2 |
| 9 MEXICO | 0.2 | 0.0 | 0.2 | 0.0 | -0.1 |
| 10 ROW | 239.7 | 14.0 | 163.3 | 9.3 | -76.4 |
| 11 USA | 880.7 | 51.4 | 600.1 | 34.3 | -280.6 |
| 12 XME | 8.6 | 0.5 | 5.9 | 0.3 | -2.7 |
| Total | 1714.7 | 100.0 | 1749.3 | 100.0 | 34.6 |

Source: GTAP 6 database, variable VXWD

4. Why such a large substitution effect?

Impacts on Egypt's import demand and prices

| | | EU | USA | Aggregate | |
|-------------------------------------|---------|--------|----------|-----------|-----|
| | | % (| % change | | |
| power of import tariff | tms | -1.19 | 0 | | |
| demand of imports | qxs | 118 | -31.86 | 2.2 | qim |
| domestic price for good i from r to | o s pms | -16.58 | -0.003 | -6.12 | pim |

- The increase in the aggregate demand of imports in Egypt is mostly explained by the demand of automotives from EU
- \bullet There is a substitution effect of imports away from other sources because domestic price of automotives from EU decreased by 16%

谢 谢!

Grazie!