

Team Doha – Arab Winter



20th Annual Short Course in Global Trade

is - DO NOT QUOTE/CITE

Osman and Ricky

Model Setup

- ▶ Removed tariffs between Egypt and the other Middle East Countries (XME)
- ▶ Shock `tms(TRAD_COMM,"Egypt","XME") = target% 0` from file `tms.shk`;
- ▶ Shock `tms(TRAD_COMM,"XME","Egypt") = target% 0` from file `tms.shk`;
 - Results (e.g. changes in welfare) were not very large as these countries do not trade very much
- ▶ So this leads to.....

SHOTS FIRED!!!!



- ▶ An increase of tariffs in Egypt and XME on imports from the USA by 25%

Welfare Changes

	Allocative Efficiency	Terms of Trade	Total	% GDP
Egypt	229	142	87	-0.1%
EU	95	1,466	1,561	0.0%
USA	897	4,587	5,484	-0.1%
XME	2,216	636	1,580	-0.3%

- ▶ MENA, Egypt, and the US face decreases to welfare, while the EU comes out better off
- ▶ But do these policies result in welfare gains anywhere within the US?

Subsidies! Subsidies! Subsidies!

- ▶ The change in the allocative efficiency of the land commodity acted as a contribution to welfare (+112)
 - We found that this results from an 80% subsidy on wheat.
 - There was the decrease in wheat production of 4.34% has led to the US moving closer to equilibrium (i.e. a decrease in the deadweight loss triangle)
- ▶ Analogously, machinery and electronics have subsidies (in terms of export taxes), but exports increased, which resulted in a decrease in welfare for the US.

	Welfare Contribution	Volume Change	Tax Rates
Cereal	18	28	64
Wheat	129	164	81
Other	34		
Total	112	4	296

Preventing the EU collapse? Probably not.

- ▶ Welfare in the EU rises largely because of the terms of trade
 - Overall, exports from the EU rise in price, and imports into the EU become cheaper

Changes in Factor Prices			
	Pre-Sim	Post-Sim	%Ch
EU	1.00	1.0017	0.17%
USA	1.00	0.9969	-0.31%

- Although the change is small, the EU receives 11% of its imports from the US, hence the large impact in terms of trade

How to break GTAP



- ▶ Export taxes on energy from the US to MENA acted as a contribution to US welfare (the quantity exported decreased, but there was an export tax subsidy)
- ▶ In the process of finding this we (i.e. Pete) noticed that tax rates changed from the based data – for ONLY energy exports from the US to XME – even though there were no shocks to tax rates
- ▶ Cause? – Small exports in energy? (From \$229 mil to \$22 mil)

		Power of the Tariff Shock (%)						
	Base	10	20	21	22	23	24	25
Export Tax rate	-44.2315	-44.2315	-44.2315	-44.2314	-38.1405	-34.6146	-30.0043	24.1576
Variable Accuracy		7	7	7	7	6	6	6
Data Accuracy		7	6	6	6	6	6	6

▶ Solution?

- Change the solution method from stock Gragg 2-4-6 to include 2 sub-intervals with automatic accuracy at 90%

Conclusions: Did it work?

- ▶ When asked what is best in life:

*To crush your enemies, see them driven before you,
and to hear the lamentation of their women.*

– *Conan the Barbarian*

- Despite the welfare decrease, Egypt and XME still ended up with increases in GDP, whereas the US decreased!

	Change in GDP
Egypt	668
USA	30,867
XME	4,923

- ▶ The future? US to bring democracy to MENA?