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The effect of the GSP scheme on European Union's horticultural imports from SADC member countries: A Triple-Difference Approach

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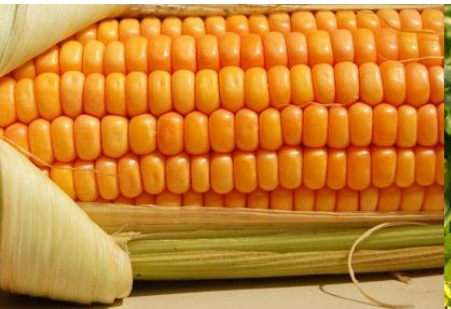
Presented by:
Moses and Yolanda




Presentation outline

- Objective of the study
- EU-GSP scheme
- EU's horticultural imports from SADC (Fruits)
- Method of analysis
- Results
- Conclusion

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Study objective(s)

- **Overall**: To empirically assess the benefits of the EU-GSP scheme towards agricultural products from the SADC

- **Specifically;**
  - To assess the effect of the scheme on the intensive and extensive margins of EU's fruit imports from SADC member countries

EU-GSP scheme

- The EU-GSP Scheme
  - non-reciprocal preferential trading arrangement helps the developing countries to export to EU
- Evolution of GPS scheme
  - 1970's
  - 1980's
  - 1990's
  - 21st Century

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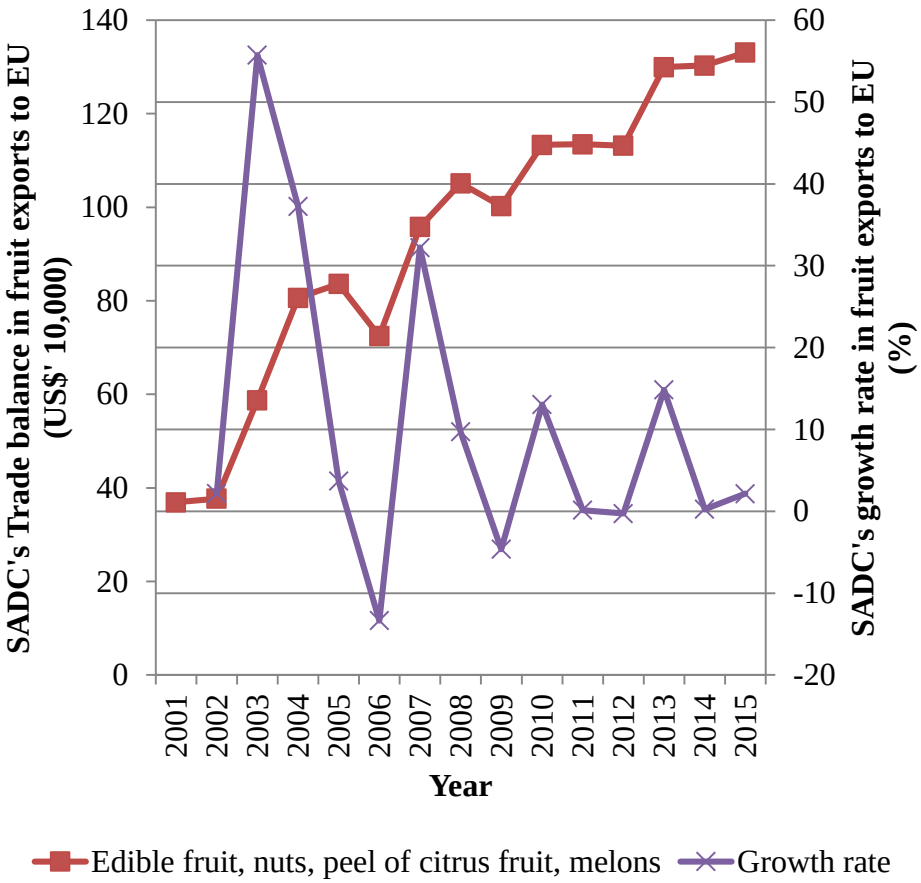
EU's horticultural imports from SADC (Fruits)



- Why fruits/EU???
  - F&Vs are the most important and highly protected sub-sector in the EU in production & trade terms.
  - Largest importer of F&Vs in world (Cardamone, 2011)
- SADC is a net exporter of fruits to the EU
- However, there is a declining growth rate in fruit exports to the EU over time

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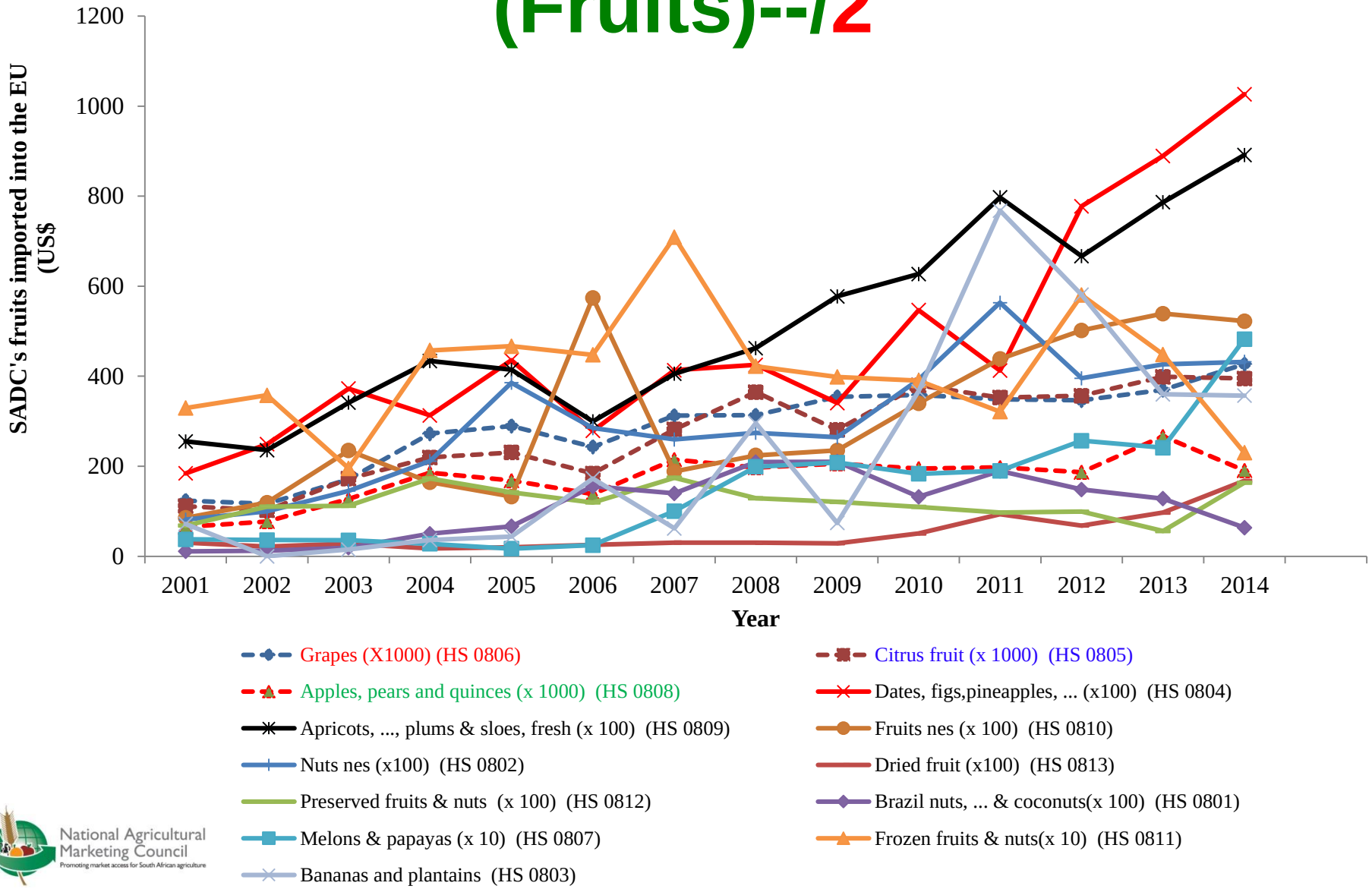
EU's horticultural imports from SADC (Fruits)--/2



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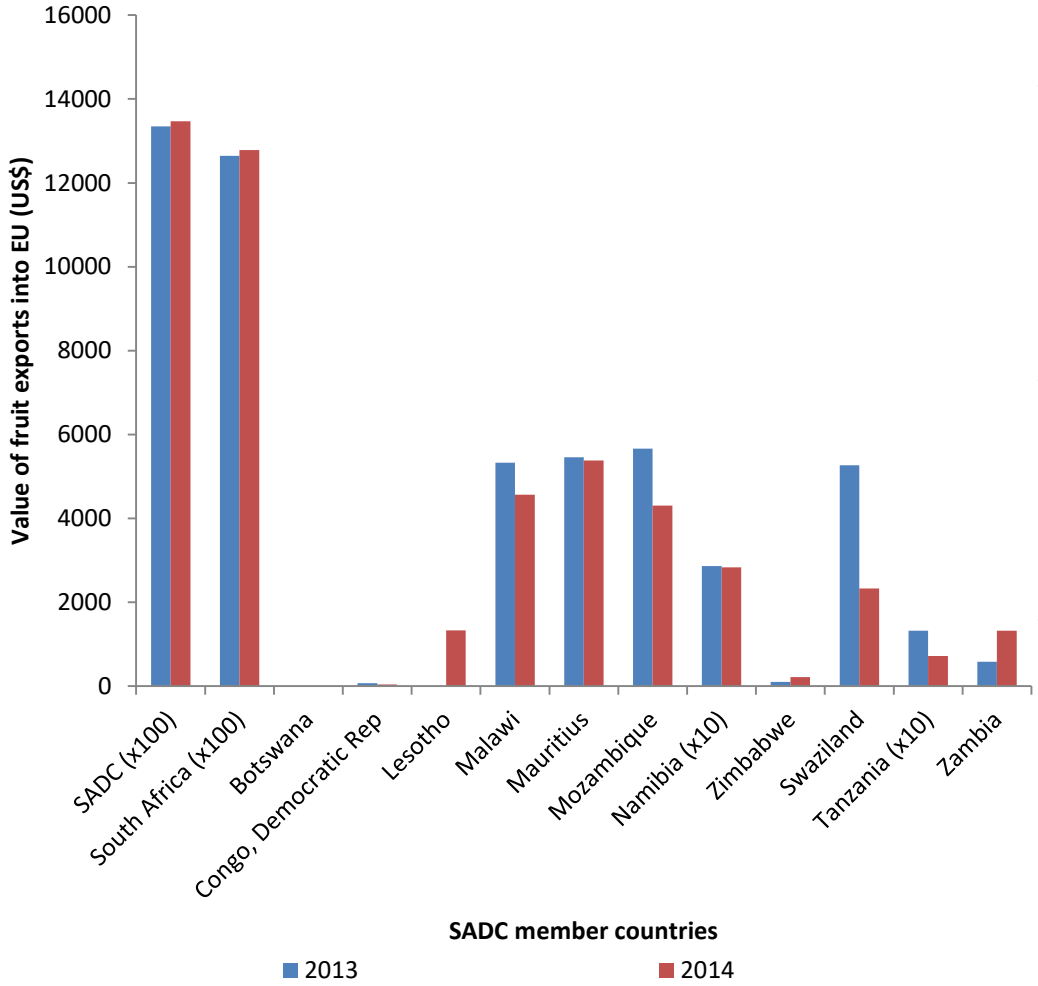
SADC member states' contributions to EU bound fruit exports--/4



- SA accounts for the largest share of fruit exports to EU.
- Some states occasionally export
- Apples,…, grapes, Citrus & preserved fruits are SADC's core fruit exports to EU

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Methodology

- **Triple-Difference (TP)** estimator proposed by Frazer & Van Biesebroeck (2010) – used

- Addresses the "endogeneity critique" linked with the standard **Difference-in-Differences (DD)** technique

- **TP**= [(G2 – G1) - (NG2 – NG1)] - [(G2 – G1) - (NG2 – NG1)]

[…] Denotes DD1 for GSP beneficiary country

[…] Denotes DD2 for Non-GSP beneficiary country

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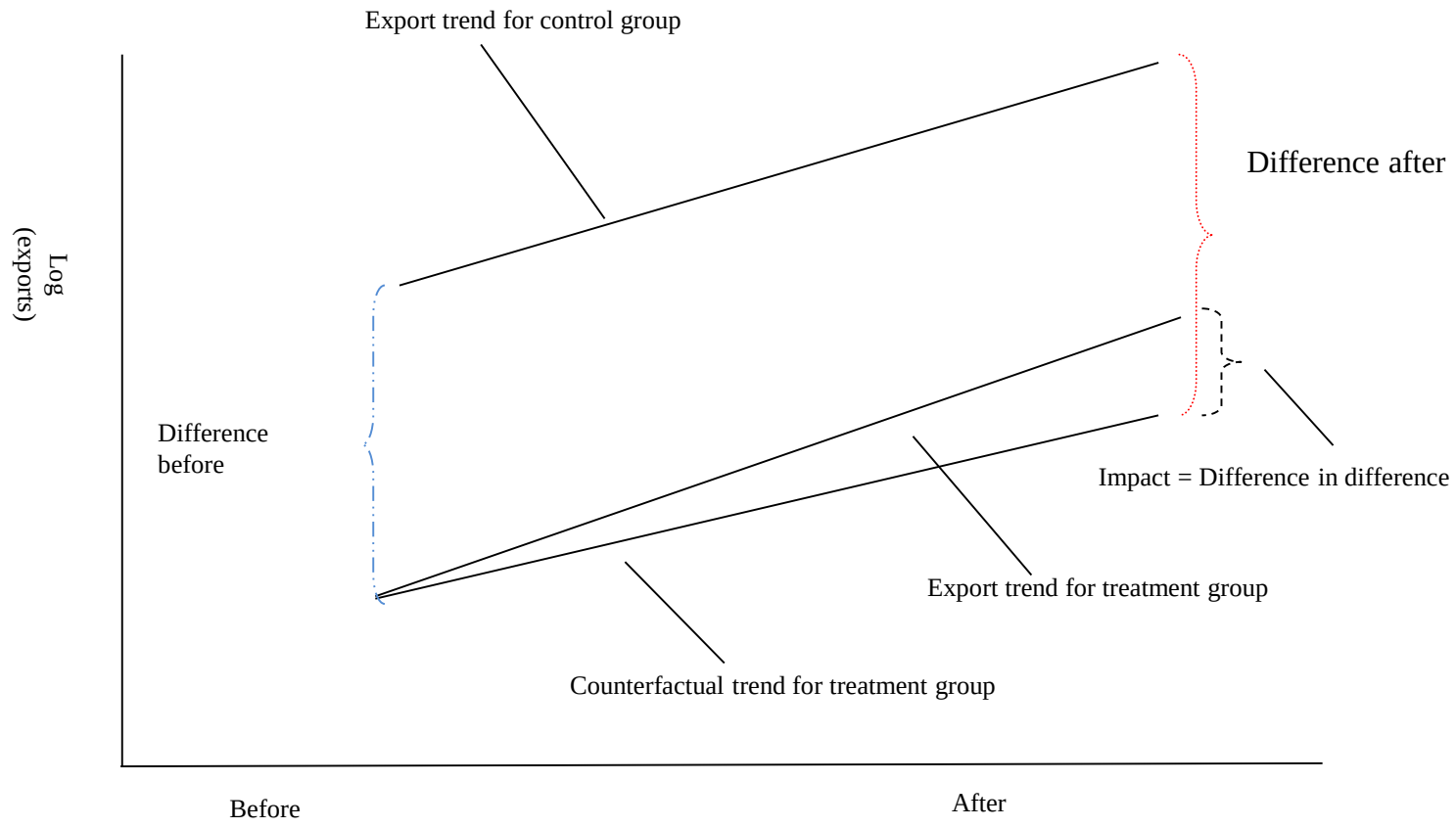
Graphically



Source: Adapted from Thelle *et al*. (2015)

Results---/1

- Baseline (Intensive margin)

Dependent Var	ln(X+1)			
Estimator	Triple-Difference (TP)		Difference-in-Difference (DD)	
	Tariff difference (T_{mfn} -T_T) PM1	Tariff ratio (1-T_T/T_{mfn}) PM2	Tariff difference (T_{mfn} -T_T) PM1	Tariff ratio (1-T_T/T_{mfn}) PM2
Effect of EU-GSP scheme	- 0.006 (0.009)	0.122** (0.054)	-0.001 (0.009)	0.150** (0.074)
Fixed effects	Yes	Yes	Yes	Yes
R-squared	0.128	0.129	0.090	0.090
No. of observations	6872	6872	6872	6872

Note: Standard errors (in brackets).
***, **, * indicates significance at the 1, 5, and 10 percent level respectively

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Results--/2

- Consistency checks (Intensive margin)

Dependent Var	ln(X+1)			
Estimator	Triple-Difference (TP)		Difference-in-Difference (DD)	
	Tariff difference (T_{mfn} -T_T) PM1	Tariff ratio (1-T_T/T_{mfn}) PM2	Tariff difference (T_{mfn} -T_T) PM1	Tariff ratio (1-T_T/T_{mfn}) PM2
Panel (a) – LDCs				
Effect of EU-GSP scheme	0.025*** (0.005)	0.381*** (0.033)	0.026*** (0.005)	0.528*** (0.044)
R-squared	0.056	0.084	0.040	0.071
No. of observations	3454	3454	3454	3454
Panel (b) – Non LDCs				
Effect of EU-GSP scheme	-0.018 (0.018)	-0.094 (0.094)	-0.004 (0.018)	-0.170 (0.136)
R-squared	0.216	0.216	0.155	0.155
No. of observations	3418	3418	3418	3454

Results--/3

- Baseline (Extensive margin)

Dependent Var	Dummy = 1 for positive exports, = 0 if otherwise			
Estimator	Triple-Difference (TP)		Difference-in-Difference (DD)	
	Tariff difference (T_{mfn} -T_T) PM1	Tariff ratio (1-T_T/T_{mfn}) PM2	Tariff difference (T_{mfn} -T_T) PM1	Tariff ratio (1-T_T/T_{mfn}) PM2
Effect of EU-GSP scheme	0.002 (0.001)	0.044*** (0.008)	0.002* (0.001)	0.060*** (0.011)
Fixed effects	Yes	Yes	Yes	Yes
R-squared	0.142	0.146	0.108	0.112
No. of observations	6872	6872	6872	6872

Note: Standard errors (in brackets).
***, **, * indicates significance at the 1, 5, and 10 percent level respectively

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Results--/4

- Consistency checks (Extensive margin)

Dependent Var	Dummy = 1 for positive exports, = 0 if otherwise			
Estimator	Triple-Difference (TP)		Difference-in-Difference (DD)	
	Tariff difference (T_{mfn} -T_{τ}) PM1	Tariff ratio (1-T_{τ}/T_{mfn}) PM2	Tariff difference (T_{mfn} -T_{τ}) PM1	Tariff ratio (1-T_{τ}/T_{mfn}) PM2
Panel (a) – LDCs				
Effect of EU-GSP scheme	0.008*** (0.001)	0.091*** (0.008)	0.008*** (0.001)	0.120*** (0.011)
R-squared	0.071	0.101	0.058	0.094
No. of observations	3454	3454	3454	3454
Panel (b) – Non LDCs				
Effect of EU-GSP scheme	-0.004* (0.002)	0.004 (0.013)	-0.002 (0.002)	-0.001 (0.018)
R-squared	0.234	0.233	0.182	0.182
No. of observations	3418	3418	3418	3418

Conclusion & implications

- Generally, GSP scheme boosted SADC's fruit imports fruits to the EU but LDCs benefit more than non LDCs (both extensively and intensively).

- GSP scheme marginally enhanced importation of new eligible fruits into EU from non-LDCs.

- **Implications:**
  - LDCs should fully explore the preferential treatment granted through the GSP scheme

  - Non-LDCs should look into making use of less restrictive preferential trade arrangements e.g. TDCA for SA

END