

AN ANALYSIS OF THE SECTOR-SPECIFIC EFFECT OF TRADE ON CHILD LABOUR

**Masterarbeit im Rahmen des MSc International
Political Economy (LSE) 2014**

1

FORSCHUNGSFRAGE

What is the association between exports and child labour in three different sectors (manufacturing, agriculture and services) and what are the underlying dynamics?

THEORETISCHE ÜBERLEGUNGEN UND ANNAHMEN (1)

- Substitutionseffekt und Einkommenseffekt (Neumayer, de Soysa 2005)
 - Substitutionseffekt: Kinderarbeit steigt da Handelsoffenheit die Erträge der Kinderarbeit erhöht
 - Einkommenseffekt: Kinderarbeit sinkt da Handel zu einer Erhöhung des Einkommens führt

THEORETISCHE ÜBERLEGUNGEN UND ANNAHMEN (2)

- Rolle von MNCs: Erhöhung des Arbeitnehmerschutzes (inkl. Schutz von Kindern) durch Codes of Conduct (Winstanley et al. 2002; Kolk, van Tulder 2002; Rodriguez-Garavito 2005; Graham, Woods 2007)
- Unterschiede in der Qualifikations- und Technologieintensität verschiedener Sektoren (Neumayer, de Soysa 2005; Maskus 1997)

METHODOLOGIE

- “nested analysis as a mixed-methods strategy” (Lieberman 2005: 435)
 - quantitative Analyse
 - qualitative Case Study Analyse
- vergleichende Case Study Analyse (Lieberman 2005) & “theory-developing case study” (George and Bennett 2005)

QUANTITATIVE ANALYSE – EMPIRISCHER RAHMEN

- Paneldaten- Methode: cross-country Analyse
- drei Sektoren: Produktion (man), Landwirtschaft (agr), Dienstleistung (ser)
- Random effects (RE) und Fixed effects (FE) Regressionen; FE werden bevorzugt
- Endogenität

QUANTITATIVE ANALYSE – MODELL (1)

Random effects:

- Manufacturing sector (1):

$$chlab_{ij} = \alpha + \beta_1 \frac{exports_{ij}}{GDP_i} + \beta_2 * man_i + \beta_3 * man_i * \frac{exports_{ij}}{GDP_i} + \beta_4 * employ_{ij} + \beta_5 * agr_i + \beta_6 * \log(GDP_{pc,i}) + \varepsilon_{ij}$$

- Agricultural sector (2):

$$chlab_{ij} = \alpha + \beta_1 \frac{exports_{ij}}{GDP_i} + \beta_2 * agr_i + \beta_3 * agr_i * \frac{exports_{ij}}{GDP_i} + \beta_4 * employ_{ij} + \beta_5 * man_i + \beta_6 * \log(GDP_{pc,i}) + \varepsilon_{ij}$$

- Service sector (3):

$$chlab_{ij} = \alpha + \beta_1 \frac{exports_{ij}}{GDP_i} + \beta_2 * ser_i + \beta_3 * ser_i * \frac{exports_{ij}}{GDP_i} + \beta_4 * employ_{ij} + \beta_5 * agr_i + \beta_6 * \log(GDP_{pc,i}) + \varepsilon_{ij}$$

QUANTITATIVE ANALYSE – MODELL (2)

Fixed effects:

- Manufacturing sector (4):

$$chlab_{ij} = \alpha + \beta_1 \frac{exports_{ij}}{GDP_i} + \beta_2 * man_i + \beta_3 * man_i \frac{exports_{ij}}{GDP_i} + \beta_4 * employ_{ij} + \beta_5 * agr_i + \eta_i + \varepsilon_{ij}$$

- Agricultural sector (5):

- $$chlab_{ij} = \alpha + \beta_1 \frac{exports_{ij}}{GDP_i} + \beta_2 * agr_i + \beta_3 * agr_i \frac{exports_{ij}}{GDP_i} + \beta_4 * employ_{ij} + \beta_5 * man_i + \eta_i + \varepsilon_{ij}$$

- Service sector (6):

- $$chlab_{ij} = \alpha + \beta_1 \frac{exports_{ij}}{GDP_i} + \beta_2 * ser_i + \beta_3 * ser_i \frac{exports_{ij}}{GDP_i} + \beta_4 * employ_{ij} + \beta_5 * agr_i + \eta_i + \varepsilon_{ij}$$

QUANTITATIVE ANALYSE – ERGEBNISSE (1)

	(1)	(2)	(3)	(4)	(5)	(6)
$\frac{Exports}{GDP}$	24.565 (8.673)***	-8.888 (8.695)	22.261 (8.525)***	32.709 (13.382)**	-20.388 (17.263)	25.436 (10.224)**
Man	-0.377 (2.439)	-2.272 (2.164)		-0.282 (3.193)	-2.648 (2.505)	
Agr	41.036 (3.601)***	36.182 (3.806)***	43.995 (3.173)***	39.883 (3.679)***	32.071 (4.898)***	43.588 (3.179)***
Ser			7.737 (3.585)**			9.393 (4.504)**
$Man^{*} \frac{exports}{GDP}$	-25.521 (8.822)***			-32.090 (16.364)*		
$Agr^{*} \frac{exports}{GDP}$		43.691 (17.304)**			68.912 (30.599)**	
$Ser^{*} \frac{exports}{GDP}$			-52.965 (32.058)*			-67.271 (42.269)

QUANTITATIVE ANALYSE – ERGEBNISSE (2)

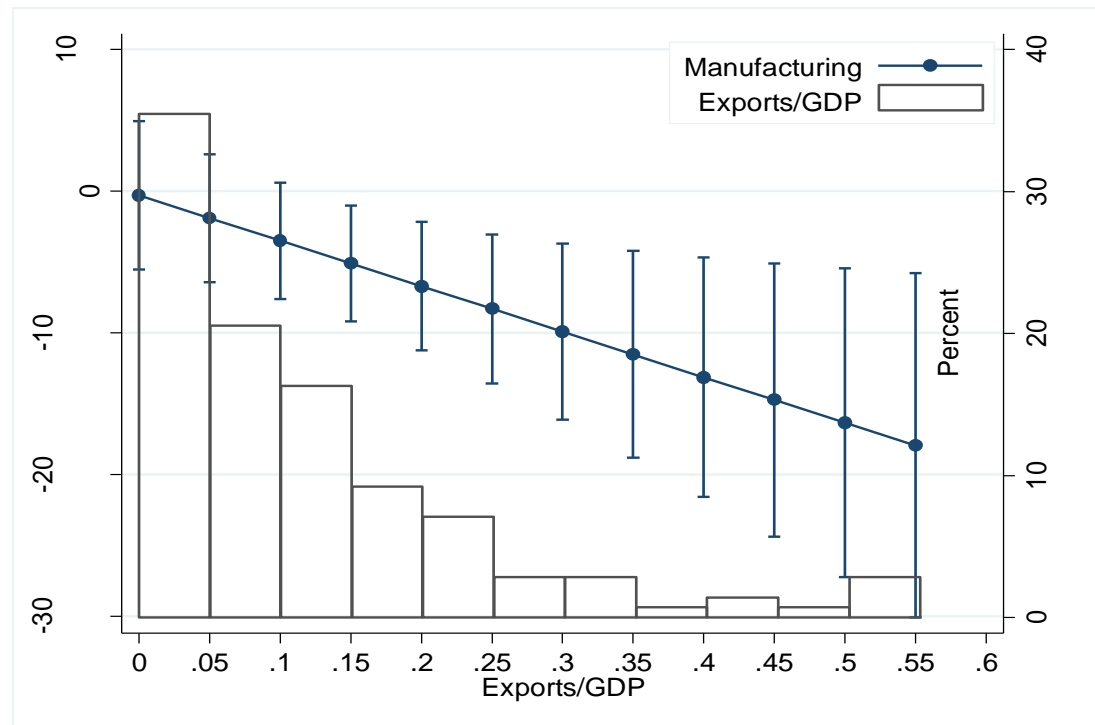
Employ	0.623 (0.076)***	0.639 (0.072)***	0.627 (0.072)***	0.624 (0.076)***	0.650 (0.073)***	0.634 (0.071)***
Log(GDP_{pc})	-0.789 (0.410)*	-0.719 (0.418)*	-0.853 (0.406)**			
Country FE	No	No	No	Yes	Yes	Yes
Observations	133	133	133	133	133	133
Number of countries				50	50	50
R²	0.9121	0.9177	0.9149	0.9126	0.9189	0.9151

Robust standard errors in parentheses.

* significant at 0.1 level, ** significant at 0.05 level, *** significant at 0.01 level

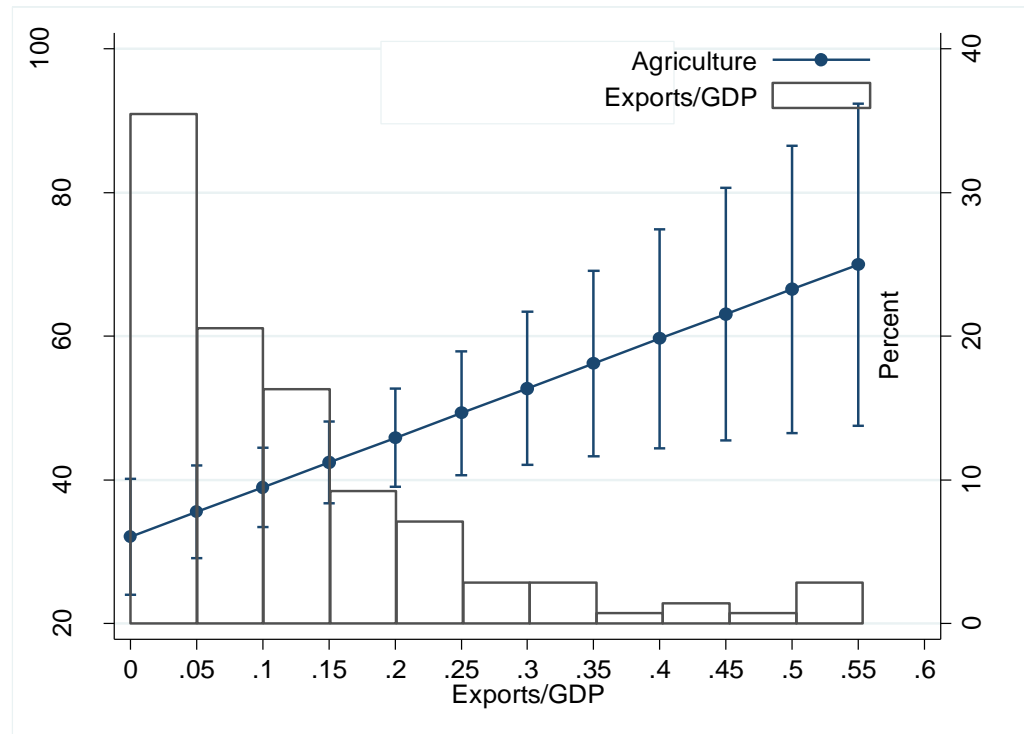
QUANTITATIVE ANALYSE – ERGEBNISSE IN DEN EINZELNEN SEKTOREN (1)

Produktions-Sektor



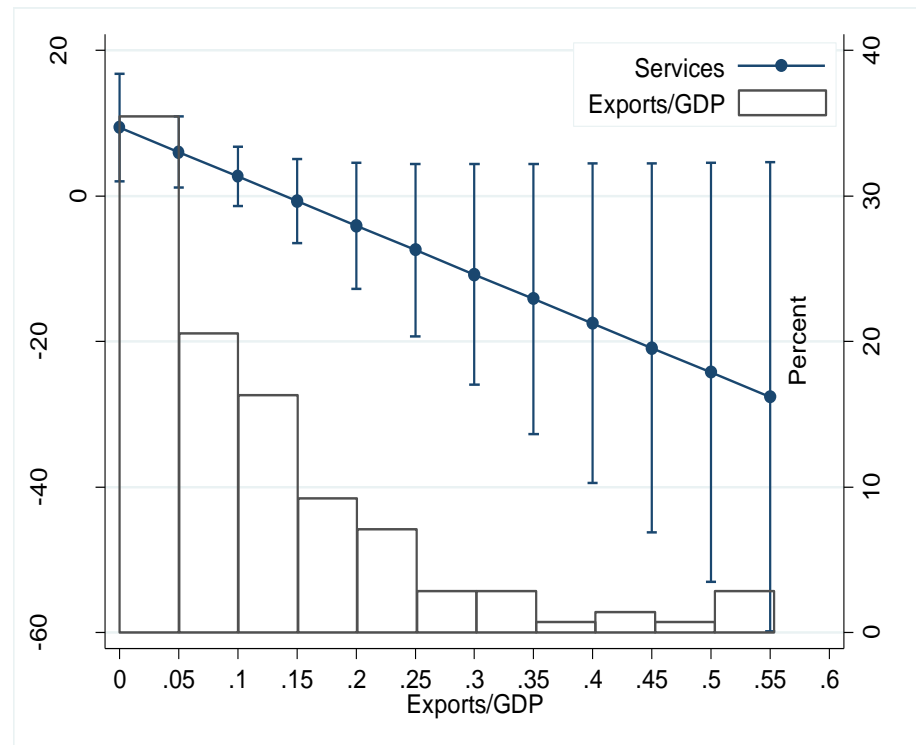
QUANTITATIVE ANALYSE – ERGEBNISSE IN DEN EINZELNEN SEKTOREN (2)

- Landwirtschafts-Sektor



QUANTITATIVE ANALYSE – ERGEBNISSE IN DEN EINZELNEN SEKTOREN (3)

- o Dienstleistungs-Sektor



QUANTITATIVE ANALYSE – DISKUSSION DER ERGEBNISSE (1)

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QUANTITATIVE ANALYSE – DISKUSSION DER ERGEBNISSE (2)

Employ	0.623 (0.076)***	0.639 (0.072)***	0.627 (0.072)***	0.624 (0.076)***	0.650 (0.073)***	0.634 (0.071)***
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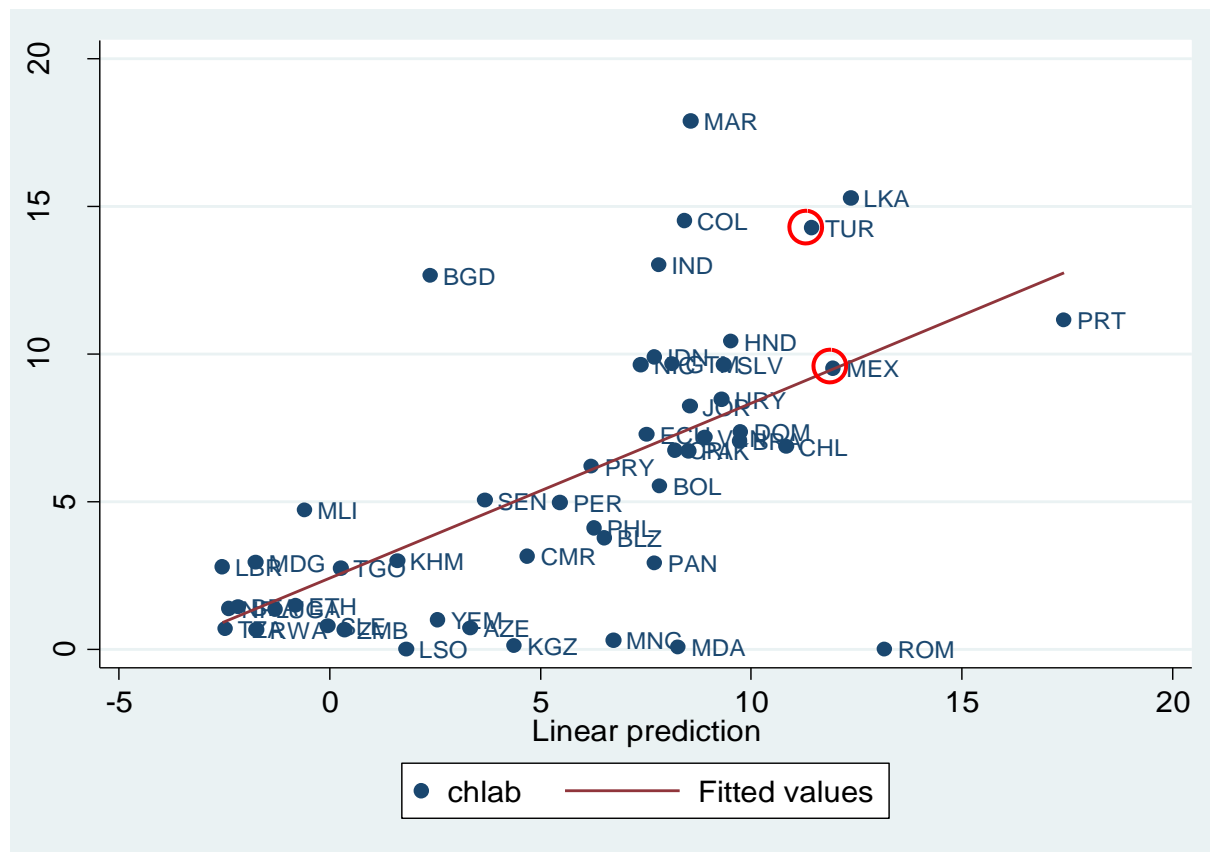
* significant at 0.1 level, ** significant at 0.05 level, *** significant at 0.01 level

QUALITATIVE ANALYSE – AUSWAHL DER CASE STUDIES (1)

- mit Hilfe von Regressions-Plots der abhängigen Variable
- “plotting actual dependent variable scores against regression-predicted scores” (Liebermann 2005: 444)
- Plots für den Produktions- und den Landwirtschafts-Sektor

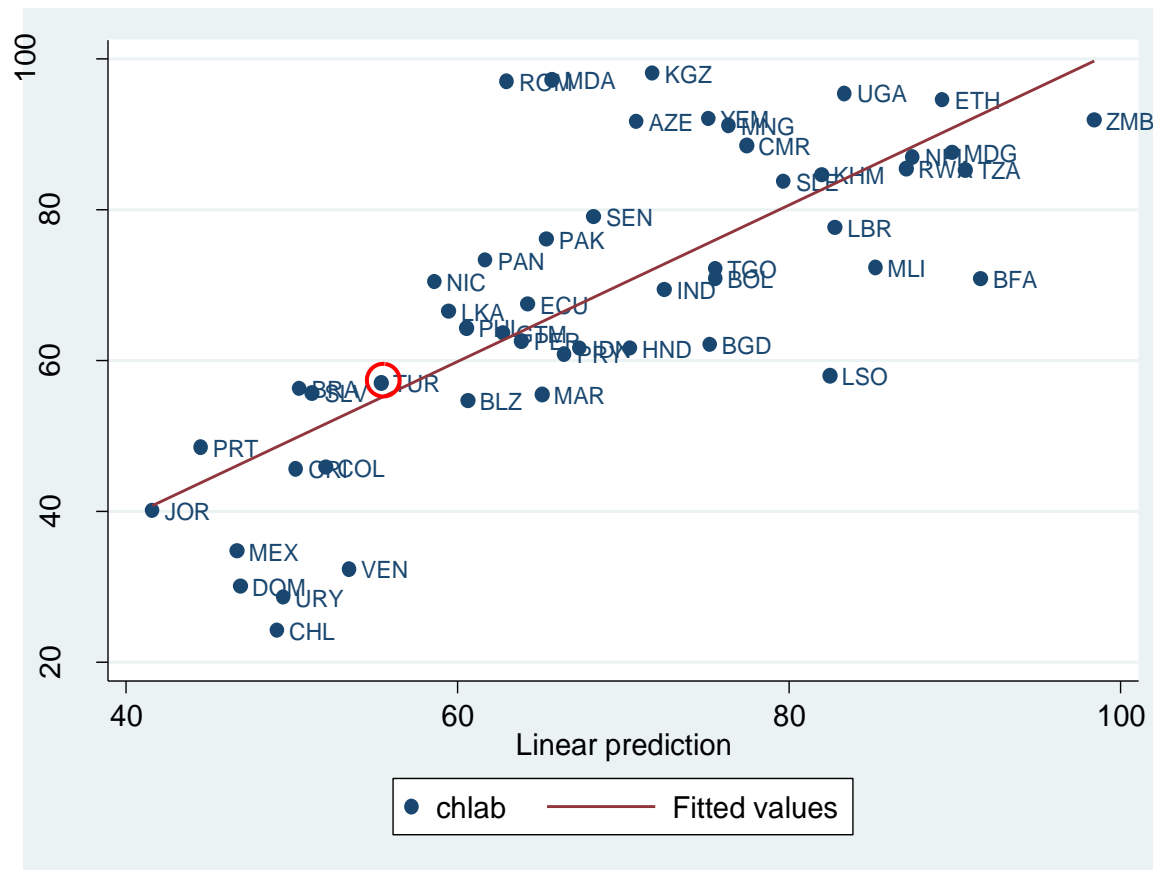
QUALITATIVE ANALYSE – AUSWAHL DER CASE STUDIES (1)

○ Produktions-Sektor



QUALITATIVE ANALYSE – AUSWAHL DER CASE STUDIES (2)

○ Landwirtschafts-Sektor



CASE STUDY 1- PRODUKTIONS-SEKTOR IN MEXIKO

- MNCs spielen in Mexiko eine bedeutende Rolle
 - besonders wichtig im Produktionssektor
 - Codes of Conduct am Beispiel Nike
- Qualifikations- und Technologieintensität des mexikanischen Produktions-Sektors
- Gründe: Bildung, Infrastruktur

CASE STUDY 2 – PRODUKTIONS-SEKTOR IN DER TÜRKEI

- geringe Bedeutung von MNCs, Qualifikations- und Technologieintensität hat wenig Bedeutung
 - hohe Präsenz von kleinen Unternehmen
 - Hindernisse im türkischen Geschäftsumfeld
- weitere Gründe für Position über der Linie:
 - gesetzliche Ausnahmen
 - keine staatlichen Programme für Produktions-Sektor

CASE STUDY 3 – LANDWIRTSCHAFTS-SEKTOR IN DER TÜRKEI

- keine Präsenz von MNCs
- viel Nachfrage nach ungelerten Arbeitskräften im türkischen Landwirtschafts-Sektor
- => Dynamiken des Produktions-Sektors treffen nicht auf Landwirtschafts-Sektor zu

CONCLUSIO

- Zusammenhang zwischen Handel und Kinderarbeit:
 - Produktions-Sektor: signifikant & negativ
 - Landwirtschafts-Sektor: signifikant & positiv
=> allerdings auch hier Einkommenseffekt
 - Service-Sektor: unsignifikant & negativ

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