Free Trade in the Americas FTAA

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FTAA the base case and domestic support in agriculture

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Free Trade in the Americas-FTAA

- **How confident can we be in CGE-based assessments of FTAs?** (Prof. Hertel, David Hummels, Maros Ivanic, and Roman Keeney)

  - ➢ **Motivation: CGE analysis is often criticized for its lack of econometric foundations.**

  - ➢ **Objective: to estimate the elasticity of substitution among imports from different countries (ESUBM). The estimated elasticity is then incorporated in the CGE.**

  - ➢ **Results/Findings:**
    1) **Estimates of ESUBM are all significant at the 95% level**
    2) **Results of the model**
        - 2.1) **Impacts on the welfare and various aspects of the economy of the countries in the FTAA block and the ROW**
        - 2.2) **The robustness of the results (SSA on ESUBM given the distribution of ESUBM and model's results)**

Free Trade in the Americas-FTAA

- **Results of the model**
  - ➢ **Imports increase in all regions with FTAA**
  - ➢ **Robust result to variation in the trade elasticities**
  - ➢ **Welfare gain in 10 regions (with more than 95% confidence).**
  - ➢ **Argentina and rest of South America experience welfare losses**
    - ❖ **More competition from other FTAA members**
  - ➢ **The welfare impact of the FTAA on Colombia is uncertain**
    - ❖ **due to offsetting efficiency and term of trade effects.**
  - ➢ **The impacts on employment in most regions are predicted with confidence.**
- **Small application with 12 regions and 8 sectors**
  - ➢ **Pre-FTAA tariffs**
    - ❑ **Most regions impose high import tariff on food and primary agriculture and low tariffs on machinery and equipment and other manufactures**
    - ❑ **On average Colombia imposes the highest import duty, particularly for food and primary agriculture**
    - ❑ **Most regions impose low import duty on machinery and equipment.**
    - ❑ **The US imposes low import tariff on Venezuela's, Chile's and other Andean Pact's food, so as FTAA take place these region stand to lose preference they used to enjoy**
    - ❑ **Brazil provides a strong protection for motor vehicles and parts.**

Free Trade in the Americas-FTAA

Small application

Region	Allocative efficiency	TOT	IS	Total
NAM	957.43	4,853.31	400.78	6,211.52
XCM	503.58	837.99	157.56	1,499.13
COL	**956.78**	**-622.69**	**-65.77**	**268.32**
PER	146.53	-92.75	-18.10	35.68
VEN	**-11.99**	**-53.79**	**59.14**	**-6.64**
XAP	39.79	7.29	-4.48	42.60
ARG	6.65	-45.86	-46.89	-86.11
BRA	**1,334.80**	**230.30**	**-45.13**	**1,519.97**
CHIL	**-58.40**	**77.80**	**-9.46**	**9.94**
URY	4.25	-8.40	-8.50	-12.65
XSM	12.55	-49.12	-45.82	-82.40
ROW	-1,747.02	-5,171.82	-377.86	-7,296.69

- It's argued that greater disciplines in domestic support (cuts, caps or elimination) will reduce world price distortions in main food staples (higher prices)

- The issue of agricultural domestic support is a global one, however, it appears as a central stumbling stone for progressing FTAA negotiations

- The US is reluctant o extend any commitment in the area of DS out of the WTO – Countries like Brazil won't go farther in trade negotiations as long as subsidies remain pervasive in US agriculture
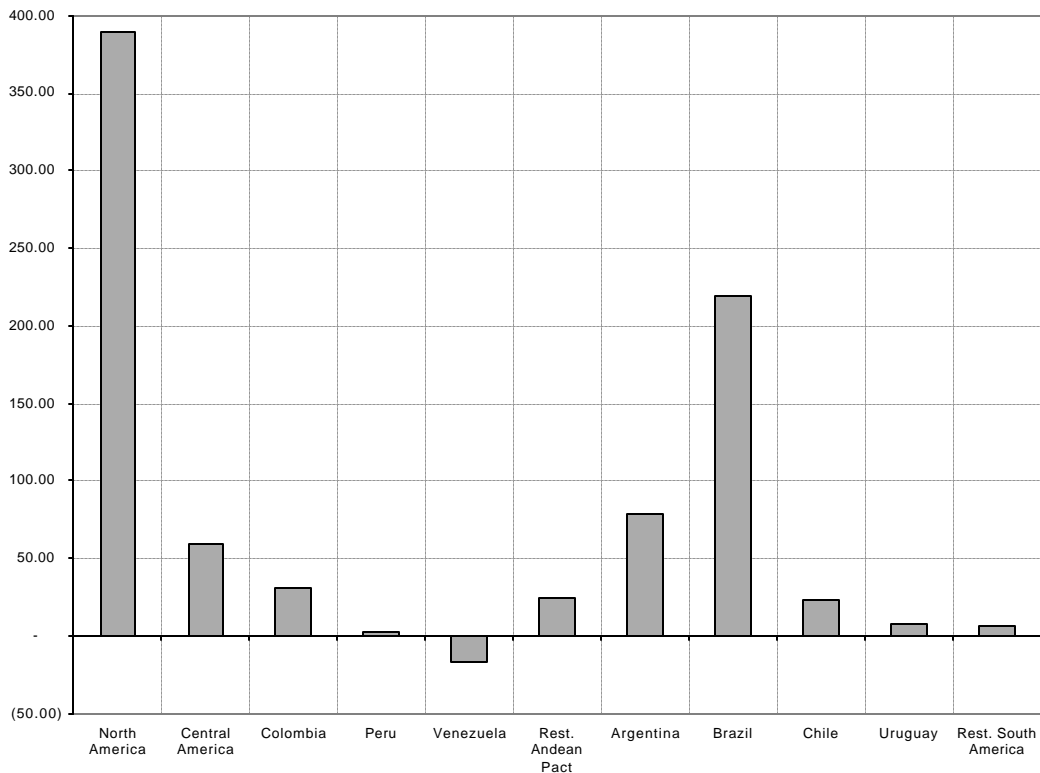
Objective:

- To find out which would be the welfare gains for eliminating Ag. Domestic Support in the FTAA context

FTAA – Ext. 1
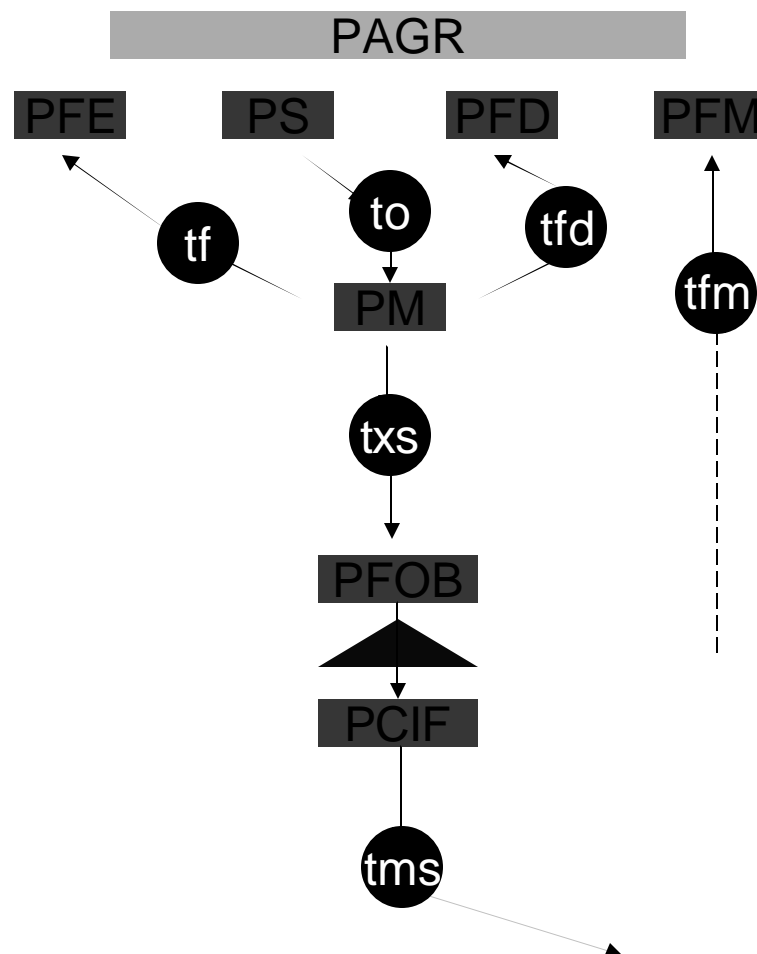
-Changes in FTAA welfare after eliminating Ag. Domestic Support (EV, m dollars)

Volume of merchandise imports, by region				Volume of merchandise exports, by region				Industry Output of PAGR in each region (qo)		
qiwreg	(Sim)	tms	DS	qxwreg	(Sim)	tms	DS	qo[PAGR*] (Sim)	Subtotal 1	Subtotal 2
NAM	2.79	2.85	-0.05	NAM	2.53	2.52	0.01	NAM	-1.94	-0.05	-1.89
XCM	13.25	13.29	-0.04	XCM	9.35	9.62	-0.27	XCM	-2.21	-2.96	0.75
COL	**17.41**	17.22	0.19	COL	22.43	22.48	-0.05	COL	-3.5	-4.13	0.63
PER	13.76	13.8	-0.04	PER	15.34	15.36	-0.02	PER	-0.63	-1.03	0.41
VEN	7.10	7.19	-0.09	VEN	2.73	2.7	0.02	VEN	-0.62	-0.94	0.32
XAP	8.08	7.89	0.19	XAP	6.86	6.97	-0.11	XAP	0.9	0.32	0.58
ARG	5.98	5.8	0.18	ARG	5.39	5.45	-0.06	ARG	1.19	0.96	0.23
BRA	10.22	9.99	0.23	BRA	9.03	9.13	-0.11	BRA	1.63	1.35	0.28
CHL	8.99	8.96	0.04	CHL	7.48	7.53	-0.05	CHL	0.11	-0.44	0.56
URY	2.55	2.5	0.04	URY	2.13	2.23	-0.1	URY	0.6	0.37	0.24
XSM	**6.38**	6.36	0.02	XSM	5.4	5.53	-0.13	XSM	0.39	-0.06	0.45
ROW	**(0.29)**	-0.26	-0.03	ROW	0.03	0.06	-0.03	ROW	0.25	-0.08	0.33

Changes in welfare sources after introducing Ag. Domestic support elimination ($ million)
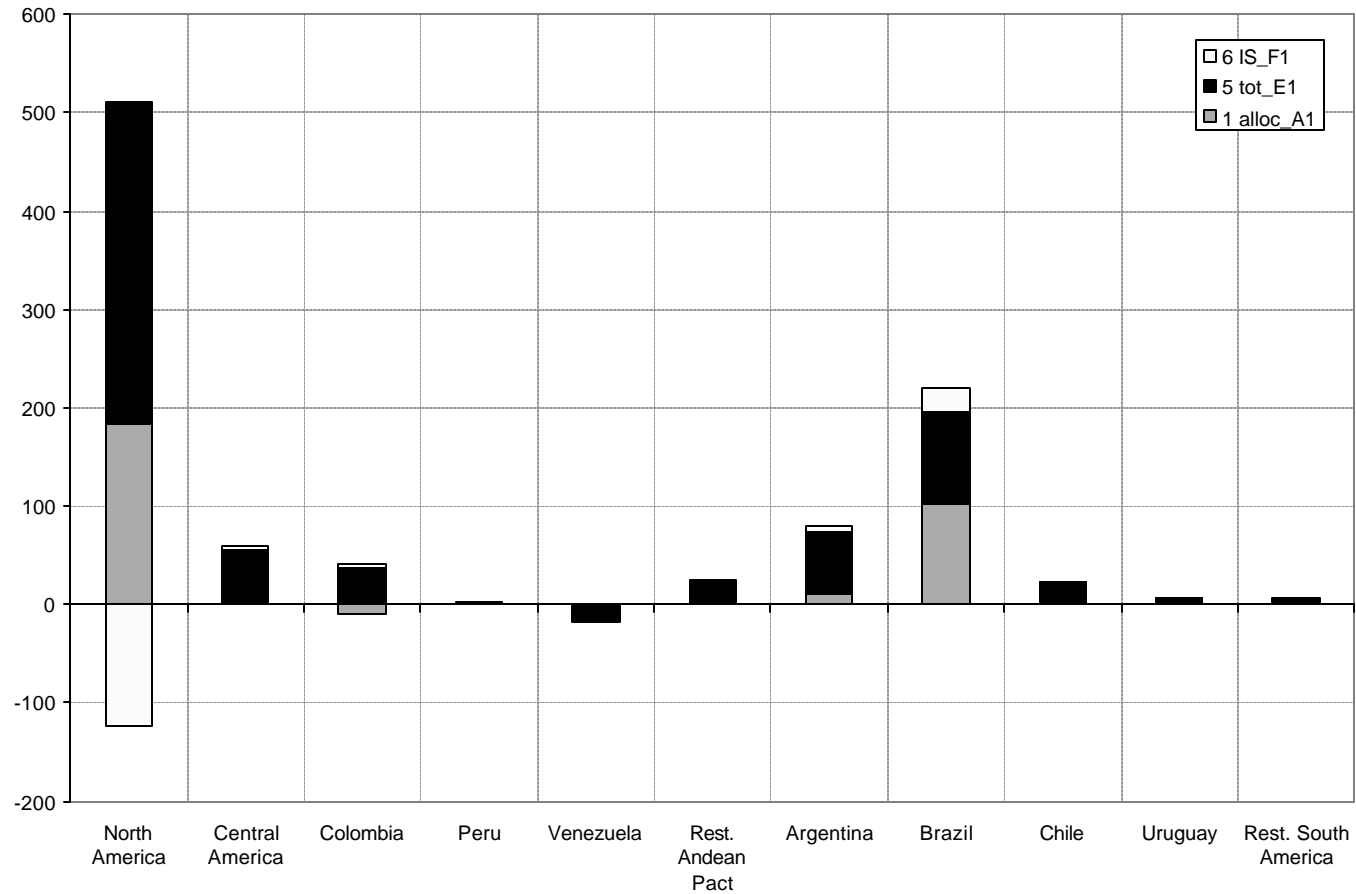
FTAA and export taxes

Amer Ahmed and Misa Okabe

FTAA – Export Tax Shock

- **<u>Motivation:</u> Does welfare change further with export tax removal?**

- **<u>Experiment:</u> initial experiment left export side distortions - taxes and subsidies; we want to remove taxes**

Tariff Removal   (Base sim)
+ Export tax removal   (Our sim!!)

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Examples of Export Taxes/Subsidies

- Export taxes increase the world market price of the commodity.
  - RTXS(TWL, URY, XAP) = 19.58

- Export subsidies decrease the world market price of the commodity.
  - RTXS (PAGR, BRA, NAM) = -16.63

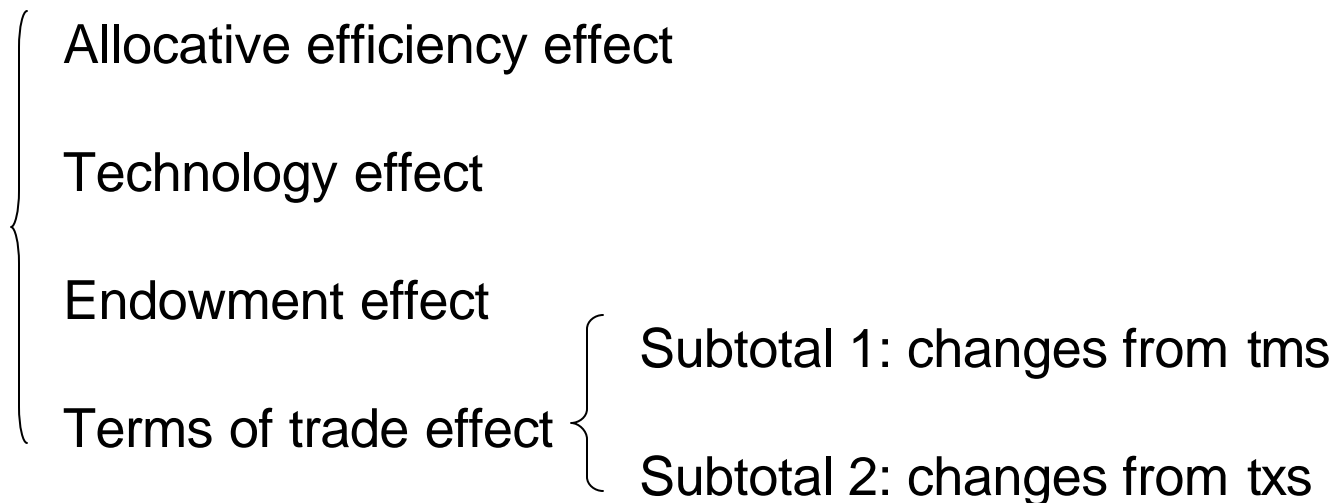- The shock sets all positive values to zero and leaves negative values in place.

Welfare Change at a Glance
$ million

	FTAA/import tariffs		FTAA/import tariffs and export taxes	
	TOT	Total	TOT	Total
1 NAM	4853.3	6211.5	5358.6	6886.9
2 XCM	837.99	1499.1	836.95	1629.3
3 COL	-622.7	268.32	-728.3	288.19
4 PER	-92.75	**35.68**	-80.69	**66.49**
5 VEN	-53.79	-6.64	-23.25	8.31
6 XAP	7.29	**42.6**	11.2	**63.67**
7 ARG	-45.86	-86.11	87.79	18.47
8 BRA	230.3	1520	-73.09	1977.2
9 CHL	77.8	9.94	112.91	46.42
10 URY	-8.4	**-12.65**	29.16	**27.24**
11 XSM	-49.12	**-82.4**	109.52	**128.55**
12 ROW	-5172	-7297	-5673	-8178

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Welfare decomposition -Terms of Trade Effect-

Allocative efficiency effect

Technology effect

Endowment effect

Terms of trade effect
- Subtotal 1: changes from tms
- Subtotal 2: changes from txs

	Subtotal 1	Subtotal 2	TOT, % change
Uruguay	-0.187	0.697	0.510
Brazil	0.677	-0.797	-0.120

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URY – Terms of Trade, % change

	FTAA	FTAA and export taxes
Tot = psw - pdw	-0.186	0.509
psw	-0.336	-0.51
(subtotal from tms shk)		-0.288
(subtotal from txs shock)		-0.228
pdw	-0.15	-1.014
(subtotal from tms shk)		-0.096
(subtotal from txs shock)		-0.918

- URY's pfob and pcif is seen to fall in the case of sectors with significant export subsidies.

- The fall in pfob and pcif drive the decline in psw and pdw respectively.

- Since pdw > psw, by a significant margin, there is a lower price and higher demand of URY's exports.

Conclusions

- All countries experienced positive welfare changes.

- Countries with significant export taxes experienced changes in welfare through positive changes terms of trade effects, e.g. Uruguay.

- Countries like Brazil, who had export subsidies, experienced negative changes in terms of trade effects of EV.

- Allocative efficiency effects can be looked into for further study.

FTAA with Unemployment

Alvaro Durand-Morat and Patrick Osakwe

FTAA with Unemployment

- **The objective is to account for unemployment of unskilled labor**
- **Why is this important?**
- **How can unemployment be incorporated?**
- **Endogenous approach**
  - **Efficiency wages**
  - **Implicit contracts**
  - **Labor turnover**
- **Exogenous approach**

FTAA with Unemployment

- ## Exogenous approach:
    - ### Fixed real wage with tax replacement

    Swap qo("unsklab","XCM") = pfactreal("unsklab","XCM")

    Swap tp("XCM") = Del_ttaxr("XCM")

- ## Rationale for fixing wages:
    - ### Government legislation
    - ### Union behavior

FTAA with Unemployment Welfare Effect ($ million)

	Full Employment Scenario	Unemployment Scenario
Total welfare	**1,499.1**	**2,291.2**
Allocative Effect	**503.6**	**639.5**
Endowment Effect	**0**	**629.7**
ToTrade Effect	**995.6**	**1,022.4**

FTAA with Unemployment Impact on GDP ($ million)

	Full Employment Scenario	**Unemployment Scenario**
GDP	**95,731**	**100,340**
Consumption	**80,640**	**85,011**
Investment	**25,311**	**25,608**
Government	**11,862**	**12,515**
Net Exports	**-22,082**	**-22,794**

FTAA with Unemployment Conclusions

- **Impact of FTAA varies depending on labor market assumptions.**

- **In the case of XCM, unemployment magnifies the welfare gains.**

- **Most of the adjustments occur in the service sector, which accounts for almost 50 percent of GDP.**
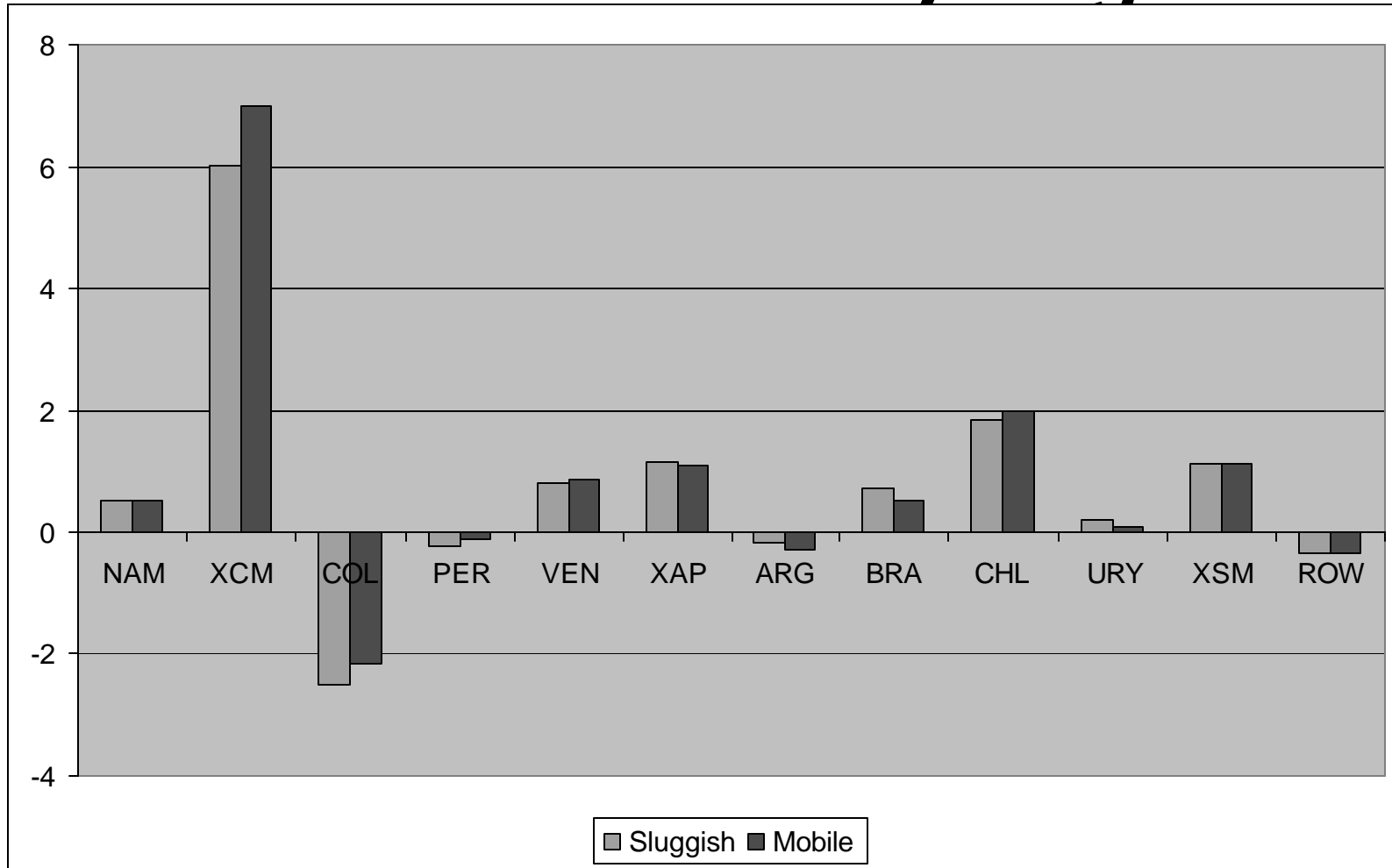
FTAA with unskilled labor sluggish

Nizwar Syafa'At and Atsuyuki Uebayash

Free Trade in the Americas-FTAA

- **<u>Motivation</u> – FTAA with unskilled labor sluggish**

- **<u>Micro Economic Effects</u> – Does the FTAA with sluggish labor affect wages?**

- **<u>Macro Economic Effects</u> – Does the FTAA with sluggish labor affect GDP and Welfare?**

- **How FTAA with sluggish unskilled labor was implemented**
  - **GTAP Parameters changed from;**
    - **SLUG(unskilled labor) = 0 and ETRAE(unskilled labor)=0**
  - **to**
    - **SLUG(unskilled labor) = 1, and**
    - **ETRAE(unskilled labor) = -1**

- **As a result sectoral wages, pmes(i,j,r), would be different by j**

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% Changes in average Wage of Unskilled Labor by Region

FTAA/sluggish unskilled labor:
Percent Changes in Wages of Unskilled Labor by Sector for Central America and Caribbean

PAGR	3.43
PRIM	2.34
FOOD	4.55
TWL	21.13
MAEQ	3.36
MVH	3.32
MNFC	2.66
SVCS	6.29
Average wage	6.01
FTAA/Mobile	*6.99*

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% Changes in Demand of Unskilled Labor by Sector for Central America and Caribbean
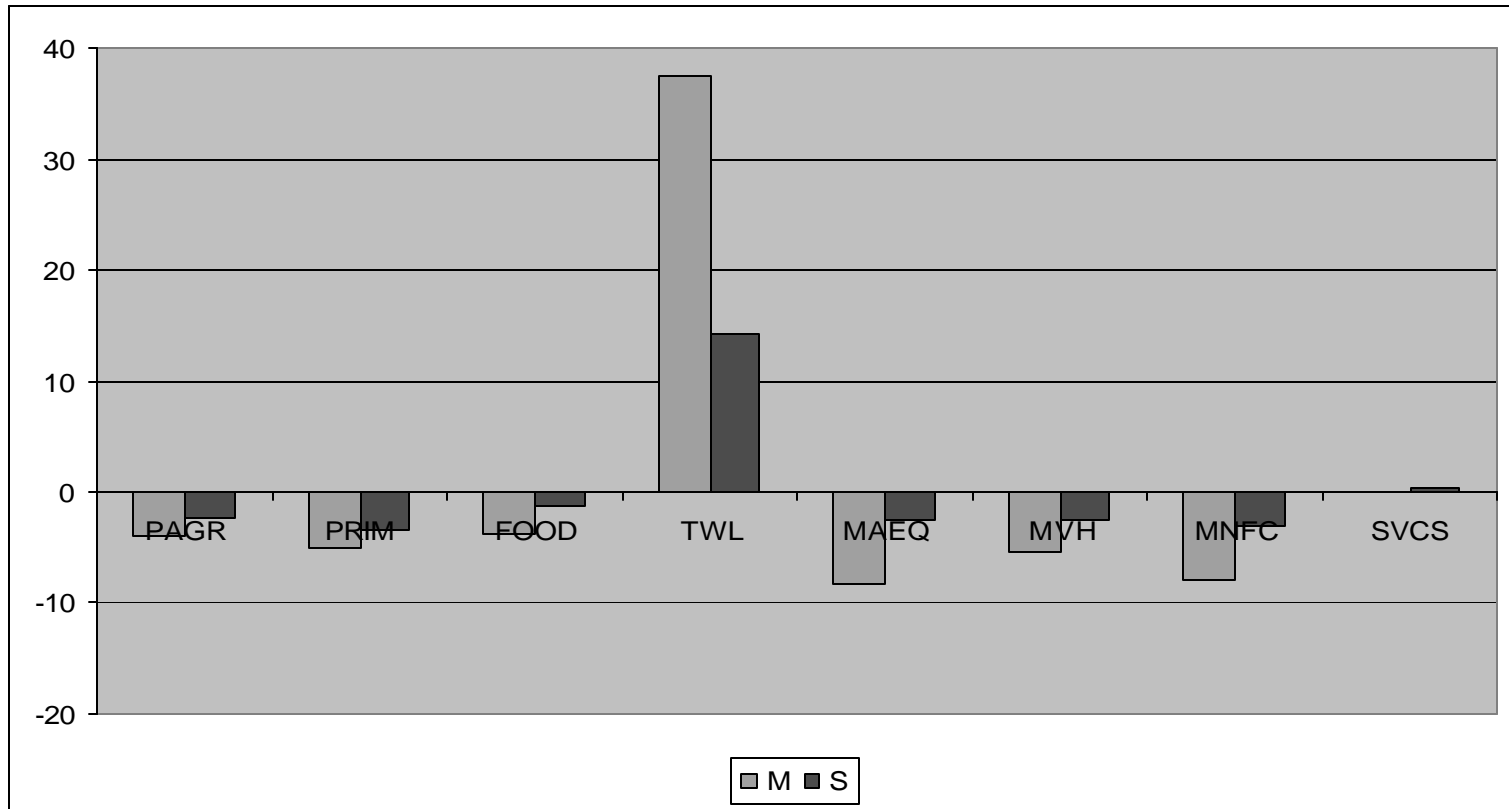
% Changes in Production
by Sector for Central America and
Caribbean
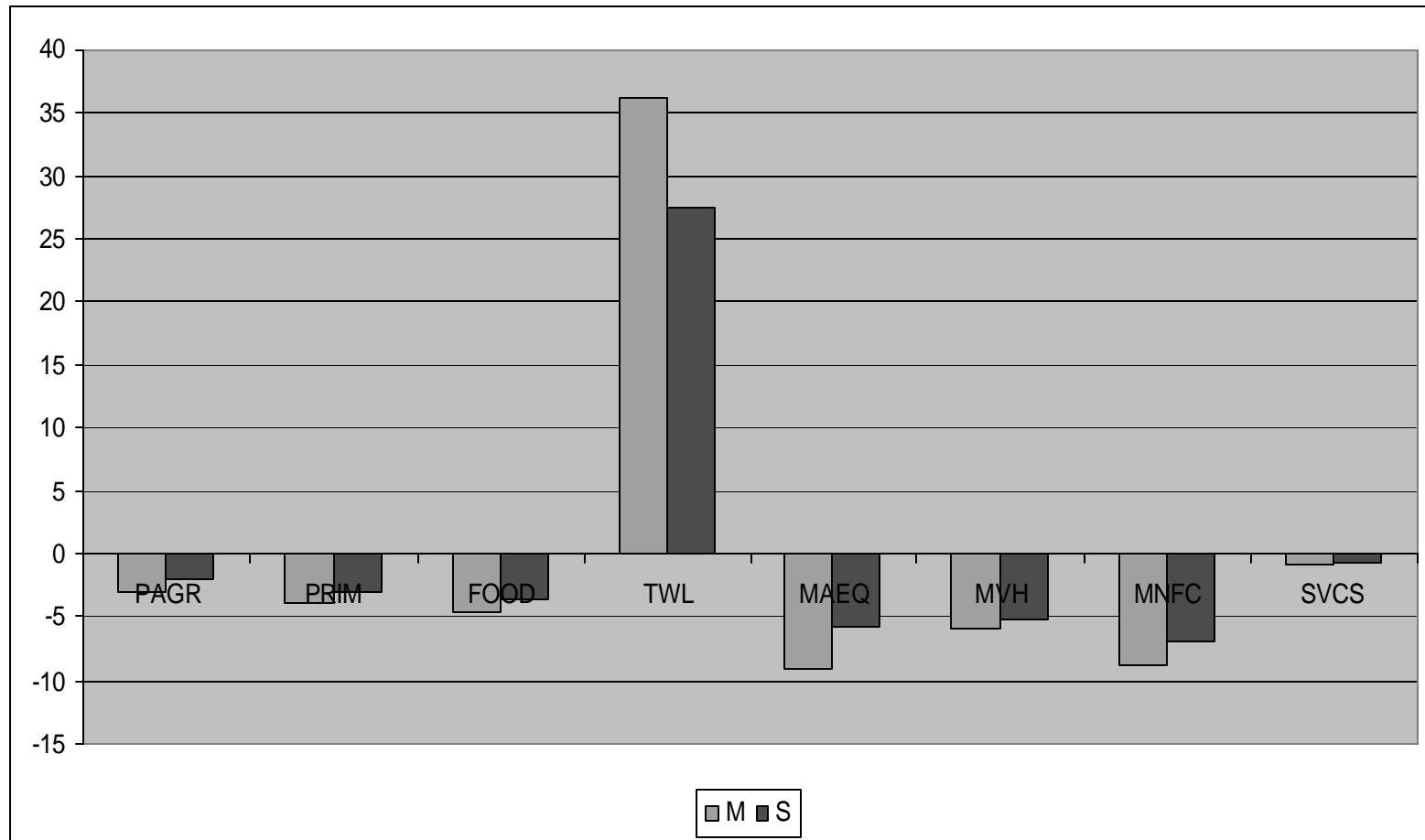
GDP by Region, $ billion

Regions	FTAA/mobile	FTAA/Sluggish
NAM	9,002	9,002
XCM	96	95
COL	95	95
PER	64	64
VEN	84	84
XAP	27	27
ARG	326	326
BRA	779	781
CHL	76	76
URY	18	19
XSM	10	10
ROW	18,368	18,367
TOTAL	28,945	28,945

Welfare impacts, $ million

Regions	FTAA/Mobile	FTAA/Sluggish
NAM	957	1,014
XCM	504	491
COL	957	946
PER	147	144
VEN	-12	-12
XAP	40	39
ARG	7	7
BRA	1,335	1,319
CHL	-58	-58
URY	4	6
XSM	13	12
ROW	-1,747	-1,742
TOTAL	2,145	2,166

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Changes in Import part of Welfare by Sector for North America ($ million)