

Doha-Experiment#5



KISS = Keep it SSimple

Experiment Questions

Implementing two economically meaningful closures gives us the same story for our studies ?

Experiment # 4 Changing Model Closure

- exogenous
- pop
- psaveslack pfactwld
- profitslack incomeslack endwslack
- cgdslack tradslack
- ams atm atf ats atd
- aosec aoreg avasec avareg
- afcom afsec afreg afecom afesec afereg
- aoall afall afeall
- au dppriv dpgov dpsave
- to tp tm tms tx txs
- qo(ENDW_COMM,REG) ;

Rest Endogenous ;

!Fix Trade Balances; (TR

swap dtbalr("Egypt") = dpsave("Egypt");

swap dtbalr("LDC") = dpsave("LDC");

swap dtbalr("CENTAM") = dpsave("CENTAM");

swap dtbalr("Mexico") = dpsave("Mexico");

swap dtbalr("MERCOSUR") = dpsave("MERCOSUR");

!Fix the Real Wage and Allow for UnEmployment;

swap qo("Unsklab", "Egypt") = pfactreal("Unsklab", "Egypt");

Swap qo("Unsklab", "LDC") = pfactreal("Unsklab", "LDC");

Swap qo("Unsklab", "India") = pfactreal("Unsklab", "India");

Swap qo("Unsklab", "CENTAM") = pfactreal("Unsklab", "CENTAM");

Swap qo("Unsklab", "China") = pfactreal("Unsklab", "China");

Swap qo("Unsklab", "Mexico") = pfactreal("Unsklab", "Mexico");

Swap qo("Unsklab", "MERCOSUR") = pfactreal("Unsklab", "MERCOSUR");

Swap qo("Unsklab", "ROW") = pfactreal("Unsklab", "ROW");

- **ASSUMPTIONS ABOUT UNEMPLOYMENT IN ALL COUNTRIES EXCEPT THE DEVELOPED COUNTRIES of US, EU and Japan.**

The experiment will focus on the comparison of results from both closures

- exogenous
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- aosec aoreg avasec avareg
- afcom afsec afreg afecom afesec afereg
- aoall afall afeall
- au dppriv dpgov dpsave
- to tp tm tms tx txs
- qo(ENDW_COMM,REG) ;

Rest Endogenous ;

!Fix Trade Balances;

- swap dtbalr("Egypt") = dpsave("Egypt");

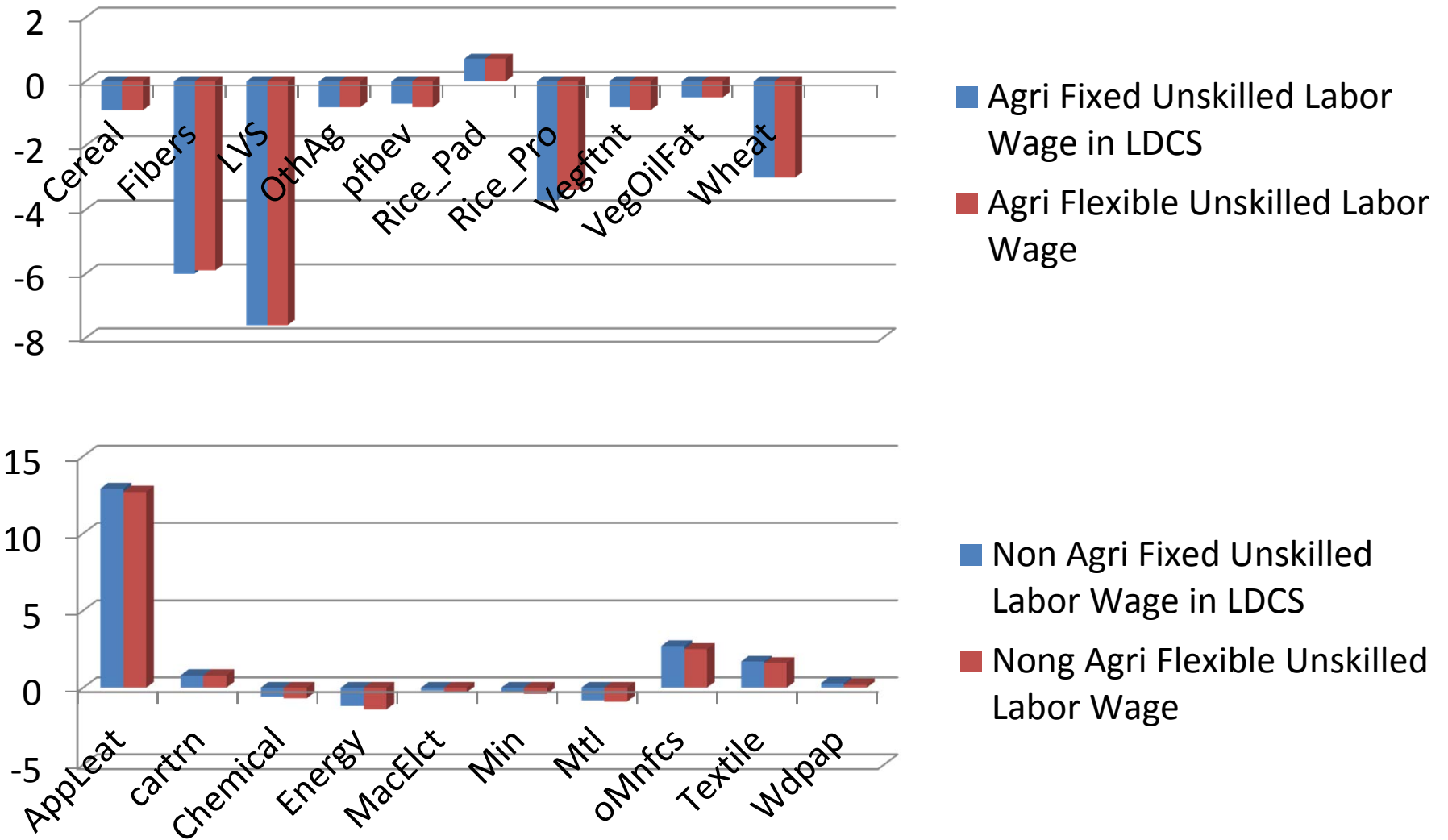
- swap dtbalr("LDC") = dpsave("LDC");

- swap dtbalr("CENTAM") = dpsave("CENTAM");

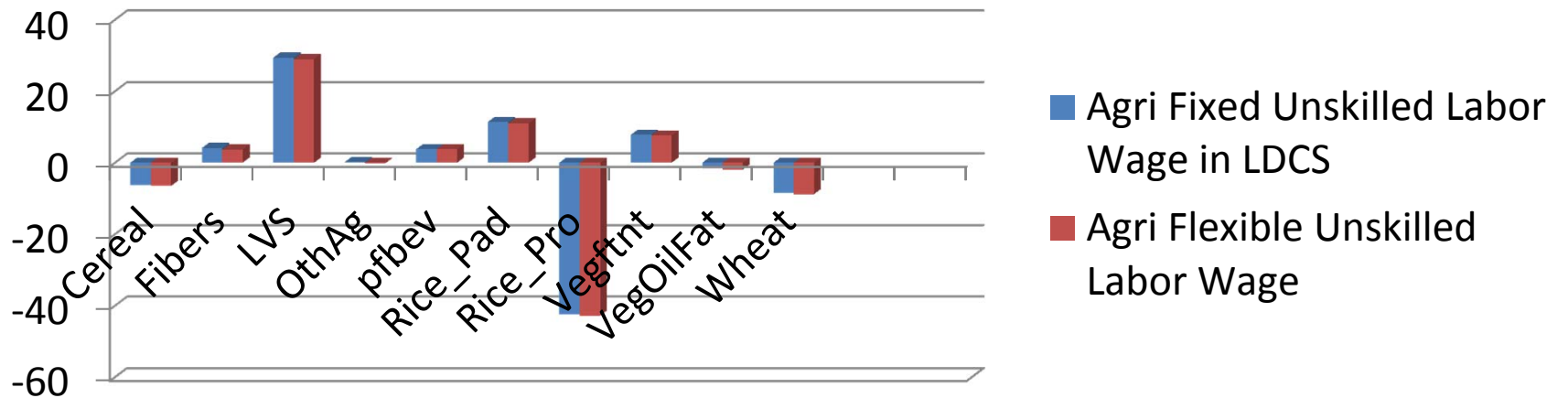
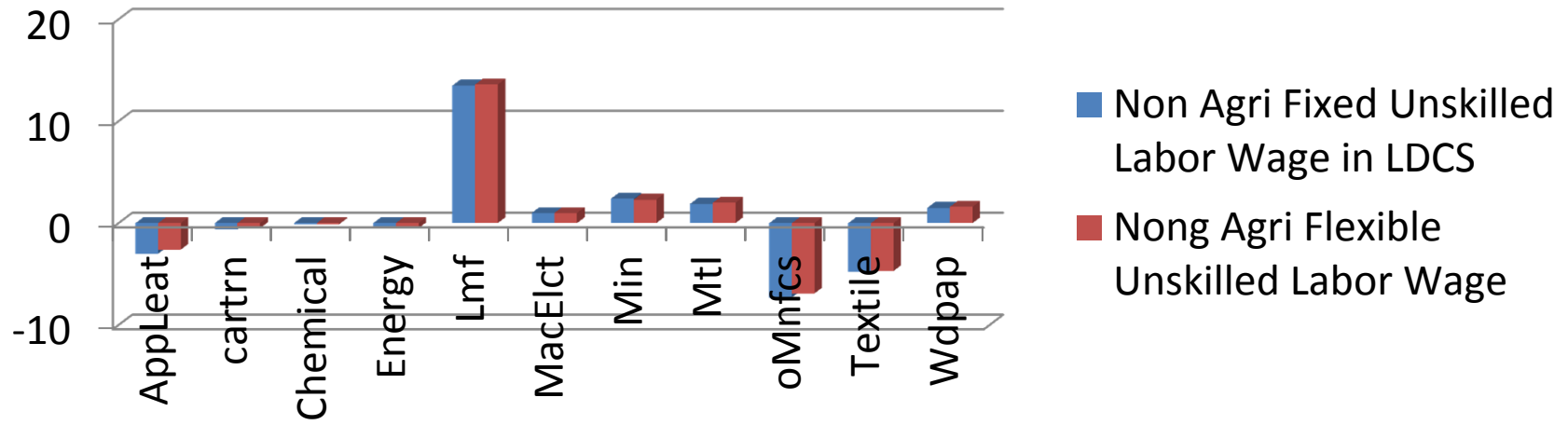
- swap dtbalr("Mexico") = dpsave("Mexico");

- swap dtbalr("MERCOSUR") = dpsave("MERCOSUR");

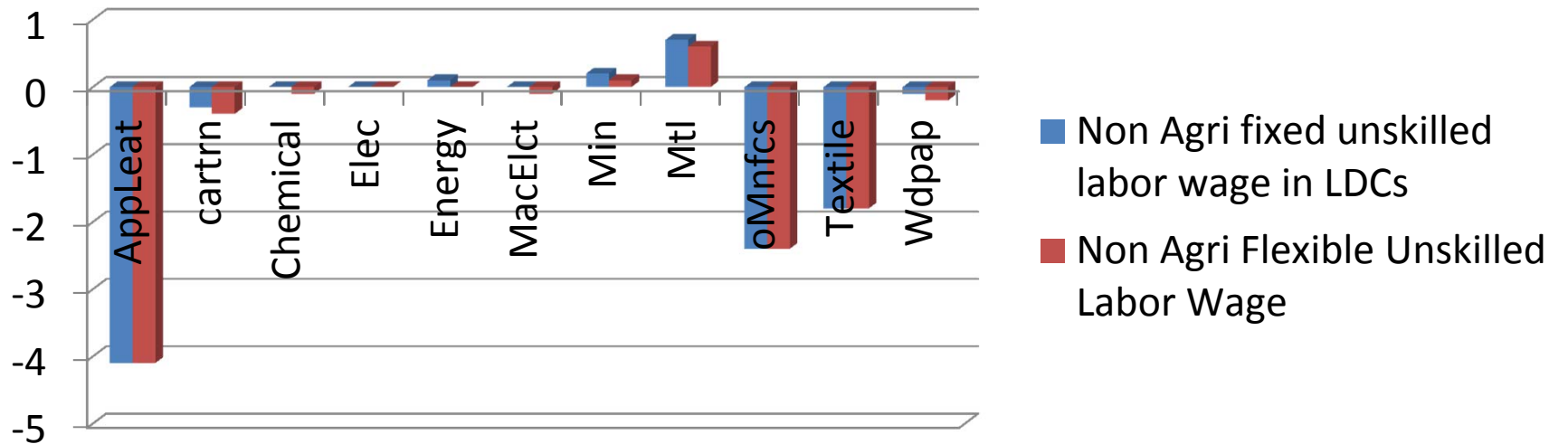
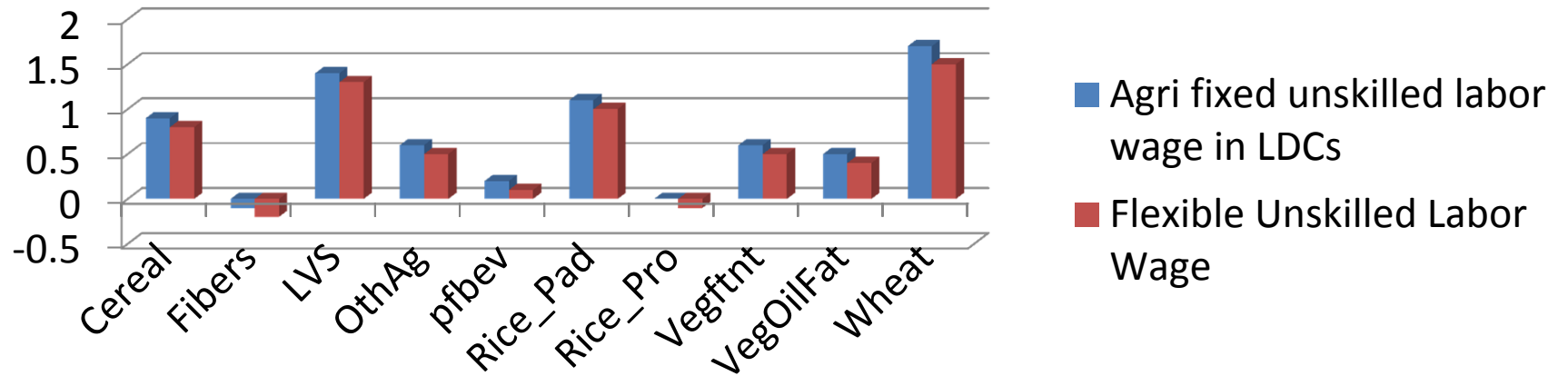
% Change in Egypt's Imports due to Doha Round



% Change in Egypt's Exports due to Doha Round



% Change in Egypt's Output due to Doha Round




Percentage Changes in Egypt's Domestic Production, Exports and Imports with Alternative GE Closures

	Fixed Unskilled Labor wage	Flexible Unskilled Labor wage
Domestic Production	-0.263	-2.467
Exports	13.44	11.516
Imports	-10.574	-12.679

Static Welfare Effects Egypt with Alternative GE Closures (millions of 2001 dollars)

	Fixed Uskl	Flex	Diff
Total	11	-72	83
Allocative Efficiency	70	66	4
Endowment ("Unskld", "Egypt")	74	0	74
Term of Trade	-101	-106	5
Investment Saving	-33	-33	0



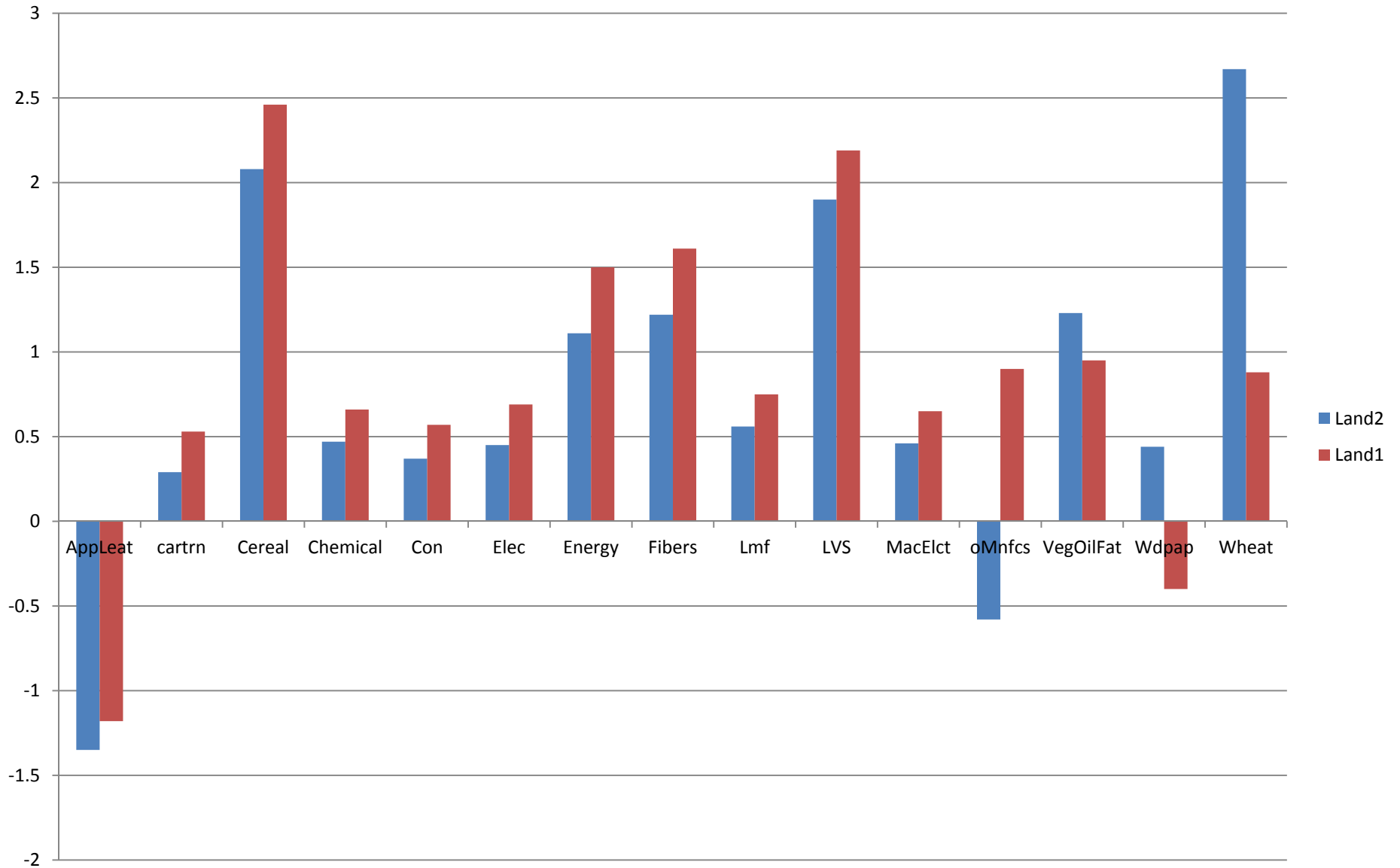
Egypt: From fixed to flexible wage (unskilled labor)

- Our Focus: Most of the loss comes from endowment efficiency loss:
 - For almost all sectors the increase in outputs under Doha are slightly lower under flexible wage than under fixed wage
 - the drop in nominal wage (of unsk) is smaller under flexible wage (-0.4%) than under fixed wage (-0.6%) (i.e. unsk. labor is more expensive)
 - The other average input prices have dropped , hence one explanation of the decrease in endowment eff. welfare.

Egypt: From fixed to flexible wage (unskilled labor)

- Focus: which sector of the economy benefit (or loses) from the changes?
- Livestock and wheat sectors are where most of the (intriguing) actions occur:

Eg. %change in and prices



- Livestock and Wheat (both are highly labor intensive):
- For wheat:
 - The increase in demand for unsk labor is smaller under flexible wage (normal because nominal wage has risen) ;
 - The increase in demand for land is also smaller (as price of land in the wheat sector has risen more)
 - → **hence the contraction** in wheat output.
- For livestock:
 - The increase in demand for unsk labor is smaller under flexible wage (normal because nominal wage has risen) ;
 - But Lvst is using less land too (although the price of land in lvst sector has not risen much) ? Why no substitution because the is

Bottom line:

When unsk labor supply is limited, the livestock and wheat sectors are the most affected: they use less labor and (also generally less land because lower substitution effects). This contracts output and the returns to factor (loss in endowment effect of \$ 74 millions for the regional hh)

- Equation ENDWDEMAND
- # demands for endowment commodities (HT 34)
- (all,i,ENDW_COMM)(all,j,PROD_COMM)(all,r,REG)

$qfe(i,j,r)$

$$= -afe(i,j,r) + qva(j,r)$$

$$- ESUBVA(j) * [pfe(i,j,r) - afe(i,j,r) - pva(j,r)];$$

