

Impact of China's WTO accession on rural-urban income inequality and poverty

**Kym Anderson, CIES, Adelaide University,
Jikun Huang, Chinese Academy of Sciences,
and
Elena Ianchovichina, World Bank**

Outline

 Key questions

 Methodology

 Protection changes

 Effects on agric, rural-urban inequality,
poverty, and hence food security

 Complementary policy changes to consider

Key questions

 How will the policy reforms from 2002, following WTO accession, affect:

- prices of farm relative to non-farm products; of factors?
- the average level of real income in rural areas:
 - absolutely, and relative to urban incomes?
- the distribution of income within rural areas:
 - farm vs non-farm households? across provinces?
- the incidence of rural poverty
 - absolutely, and relative to urban poverty?
- self sufficiency in food, feed and fibre:
 - nationally? regionally?
- national food security?

Income and employment, by region, 1998

	Per capita income (Y)	% of pop. that's rural	% of labor force in agr.
Eastern provinces	9,690	71	45
Central provinces	5,280	75	55
Western provinces	4,090	81	64

Key facts about rural China

 Share of population living below US\$1/day in 1999:

- 1% in urban areas
- 25% in rural areas

 75-85% of the poor live in rural areas

 Share of farm household income from non-agricultural sources:

- 17% in 1980, 26% in 1990, 47% in 1999

Methodology

-  Clarify agricultural policy instruments and extent of distortions in 1995, 2001, and 2007 (without vs with WTO accession)
-  Fine-tune GTAP's base in 2001 and accession scenarios from 2002 to get new national results on effects of implementing remaining reforms required for accession
-  Draw on GTAP model results on effects on food self-sufficiency, to infer impact on poverty incidence and on food security

Methodology (continued)

 In future we may link the GTAP model results with provincial production data and perhaps CCAP's CAPSIM database and model of China's food economy to get a more-detailed picture of effects within rural China

Protection changes

-  Scheduled tariffs have fallen slower since the mid-1980s for agriculture than for manufacturing,
-  and may in the next four years too (see next slide)

Statutory tariffs (simple average, %)

	All primary products	Manufactures
1992	36	45
1996	25	23
2001	22	16
2005	13(17 for agr.)	9.5

Tariff rate quota details: 7 crops

	% of ag. GDP	In-quota tariff (%)	Cut in out- of-quota tariff	Quota growth (% p.a.)
Rice	8	1	74/65	19
Wheat	4	1	71/65	7
Maize	3	1	71/65	13
Cotton	2	1	54/40	5
Oilseed	0.1	3	3	15
Sugar	0.0	15	90/50	8

Large tariff cuts on other items,
but for some it's just reducing 'water'

	Pre-accession	Post-accession
Beef	45	12-25
Other meats	20-23	12-15
Dairy products	50	10-12
Fruits	30-40	10-15
Soybeans	114	3
Wine	65	14
Tobacco	34	10

Protection changes (continued)

-  However, whether the producer price of farm relative to *all* non-farm products rises or falls is uncertain, because:
- duty exemptions already assist exporters of manuf.
 - textiles and clothing export restraints will be removed
 - services trade and investment liberalization may lower production costs for non-farm tradables more or less than for farm products
 - the demand for nontradables will rise because of income gains from trade and investment expansion (but input costs may fall, which would have an offsetting effect on the price of nontradables)

 Hence the need for quantitative analysis

Price changes within agriculture

- Price declines for maize, soybean, oilseeds
 - hurts import-competing producers but helps livestock & fish producers and food processors
- Sugar price decline: a pain for sugar producers but boosts food processing, hence increases demand for other farm products
- Again, quantitative analysis is needed to sort out net effects

Modifications of standard labour market assumptions are needed

☞ Unskilled farm labour earns less than unskilled non-farm labour, because of:

- ‘*hukou*’,
- migrant’s loss of rights to farm land, and
- they are less productive than unskilled non-farm workers when they migrate

☞ Hence we assume a low elasticity of transformation, and a persistent urban-rural wage gap

With those GTAP model changes, we find:

- Relative price of farm products falls
- But so too does relative price of textiles and clothing, because:
 - a lower demand for farm workers reduces wage costs
 - lower tariffs on and hence costs of inputs
- Unskilled farm wages fall 1.5% and unskilled non-farm wages rise only 0.4%, so average change is a fall of 0.1%
- Farm land real returns fall 6.3%
- Skilled wages remain virtually unchanged in real terms
- Non-farm capital returns rise 0.5% in real terms

Rural non-farm incomes for wage earners thus rise, while farm incomes fall

- With the rise in non-farm unskilled wages and the fall in consumer food and clothing prices
- And the fall in farm unskilled wages and in farm land earnings
- Which suggests widening income inequality within rural areas and increased on-farm poverty, particularly in hinterland provinces not well connected to the eastern provinces and hence with fewer rural non-farm job prospects

Food self sufficiency to fall slightly

- ☞ But China's TRQs and SPS measures will limit import growth
- ☞ Production subsidies of up to 8.5% allowed, and additional targeted decoupled subsidies could be WTO-consistent
- ☞ Biotech (GMOs) and/or other R&D investments would shift down the marginal cost curve and so be offsetting

Feed and fibre self sufficiency to fall too

 ... and moreover the more successfully China can:

- prise open SPS-protected livestock markets abroad (and hence import more feeds), and
- prevent safeguards being used to limit textile and clothing exports during 2005-08 (and hence import more fibres)

 *But total food and agric imports would be only \$4 billion greater (1% of export earnings)*

Regional self-sufficiencies in farm products to diverge

 ... because of increased opportunities to specialize and export

- The governors' grain responsibility system is likely to only dampen, rather than prevent, that trend

Food security need not increase

-  ... because the incidence of both rural non-farm and urban poverty will fall (except perhaps in remote areas)
-  and because food (if not feed and fibre) self-sufficiency will not fall much
-  But it may require the poorest of farm families whose incomes fall to receive some assistance (eg above-market infra-marginal procurement prices)

Some qualifications

 We assume NRPs for grains, cotton and sugar do not fall as low as in-quota tariff levels

- If they did rewards to farmers would fall slightly more and rewards to nonfarm households would rise slightly more
 - and food and ag self sufficiency would be 6% less
 - but only an extra 1 million farm workers would leave agriculture (7 instead of 6 million)

Some qualifications (continued)

-  If the assumed negative NRPs for rice, meats, fruits and vegetables were raised to zero, net exports of these goods would rise
-  If all off-farm migrants went to rural jobs so the 1/3rd farm-nonfarm wage gap assumption could be dropped, 35 million instead of just 6 or 7 million unskilled farm workers would migrate
 - and net imports of farm products would \$10 billion instead of \$4 or \$5 billion

Complementary domestic policies

 If some farm households were to be made worse off, policies that could offset that loss and simultaneously contribute to economic growth, equity and poverty alleviation are:

- more investment in:
 - rural infrastructure, especially in hinterland
 - agricultural research, and
 - basic education and health in rural areas
- fewer barriers to off-farm labour mobility

Complementary domestic policies (continued)

-  Less government involvement in grain marketing would help both consumers and producers
 - eg abolish quota procurement at below market prices
-  De-emphasising Governors' grain responsibility system (provincial self-sufficiency) would allow more exploitation of comparative advantage
-  The government could also seek more market access abroad for China's farm exports, under the next round of WTO multilateral trade negotiations