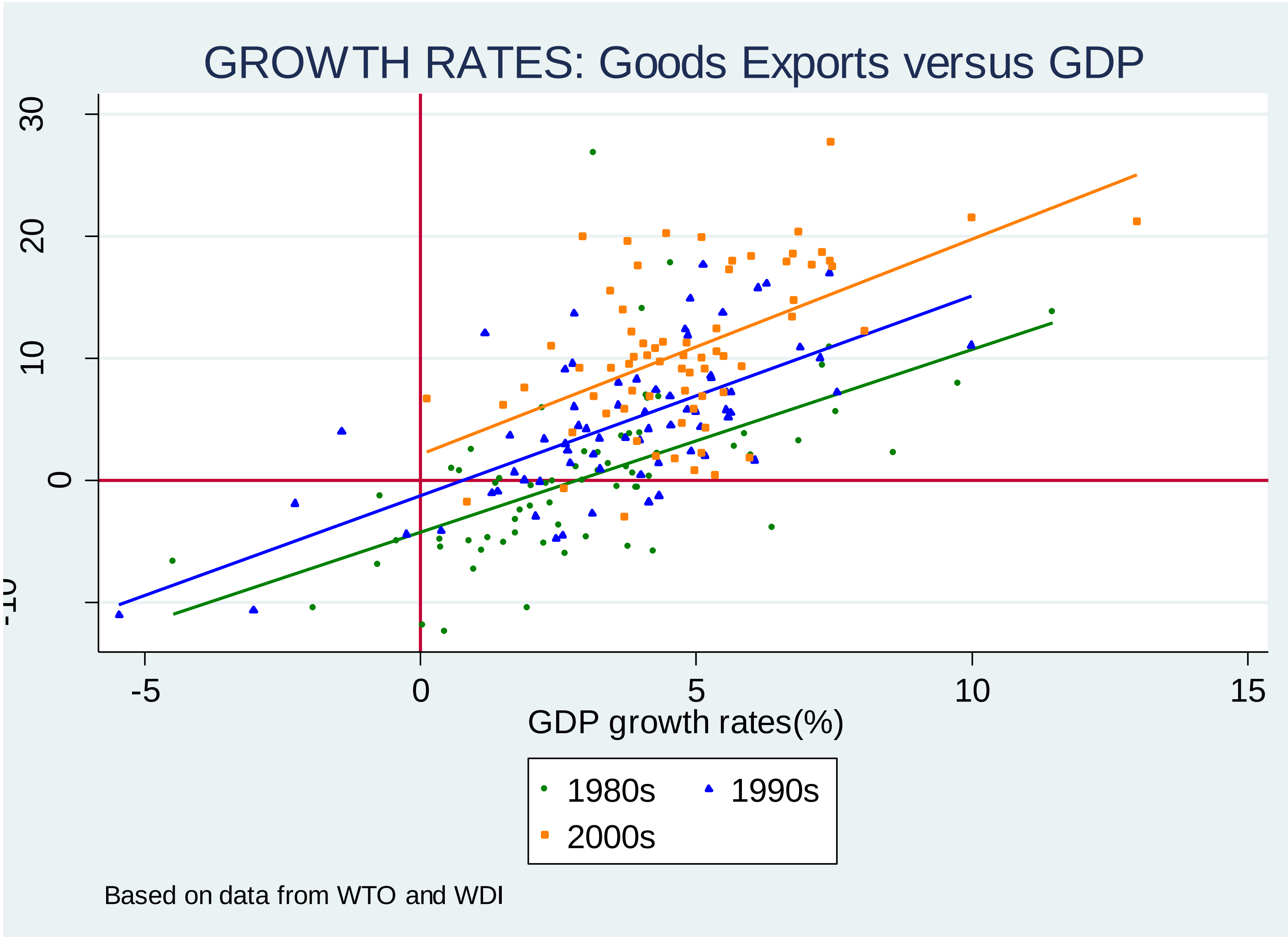
Trade and International Integration: A Developing Program of Research

World Bank Development Economics
Research Group

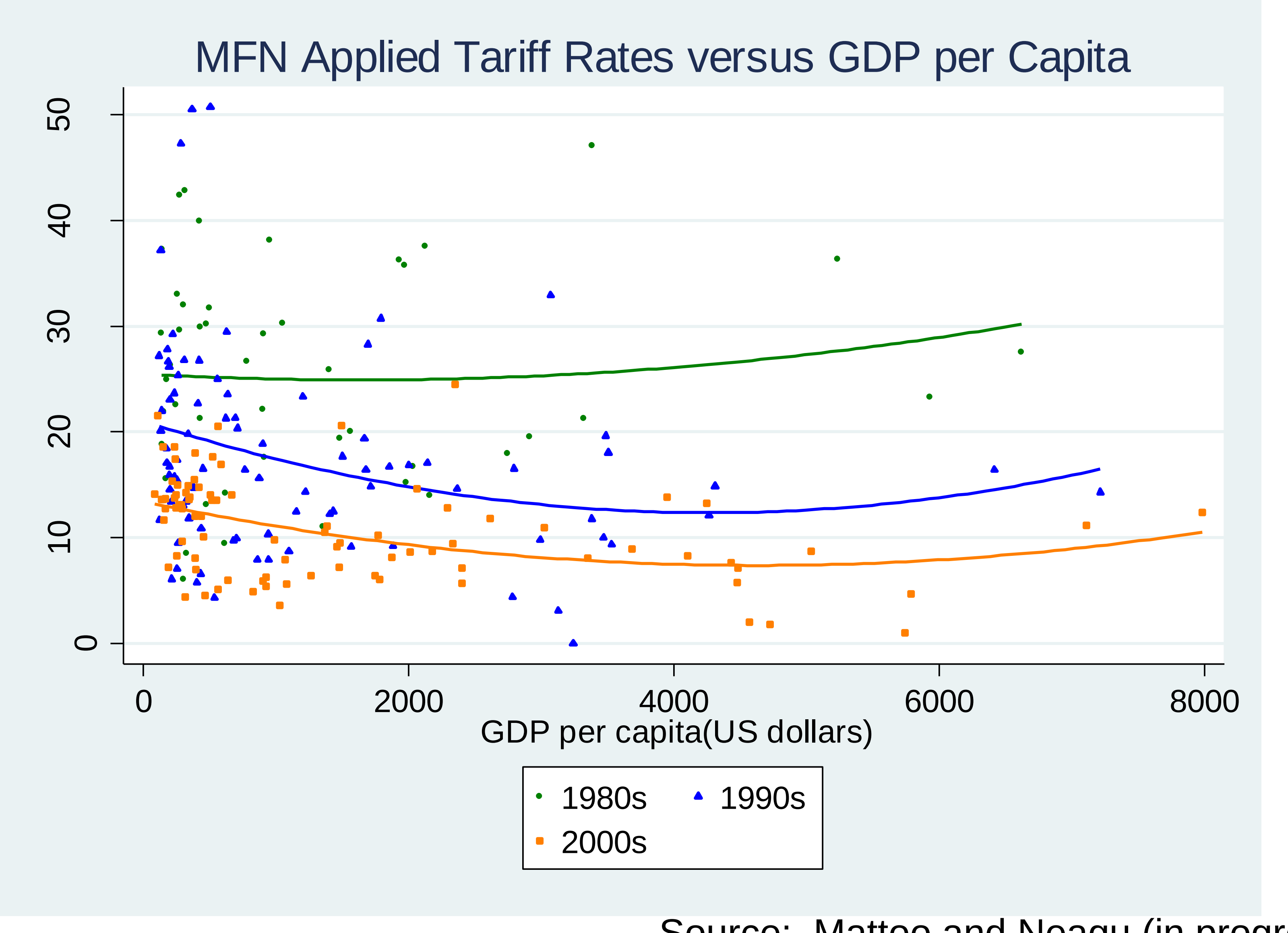
Washington, November 2011

I. The changing pattern of international integration



Source: Mattoo and Neagu (in progress)

II. Changing patterns of trade policy



Source: Mattoo and Neagu (in progress

Three issues

I. Implications of the changing patterns of international integration for development

II. Designing policy in a changing world

III. Identifying priorities for international cooperation

Countries don’t export, firms do!
Hence: a new export transactions database

<u>North America</u>

In negotiation:
USA

<u>Latin America and the Caribbean</u>

Data available:
Chile
Colombia
Costa Rica
Dominican Republic
Ecuador
Mexico
Peru

In negotiation:
Brazil
El Salvador
Guatemala

<u>Europe and Central Asia</u>

Data available:
Albania
Bulgaria
Turkey

In negotiation:
Kazakhstan
Kyrgyz Republic
Tajikistan
Russia

<u>Middle East and Northern Africa</u>

In negotiation:
Egypt

Negotiation also to be started in Jordan and Lebanon

<u>Africa</u>

Data available:
Kenya
Malawi
Mali
Mauritius
Senegal
Tanzania

Negotiation to be started in 10 more countries.

<u>South Asia</u>

In negotiation:
India
Pakistan
Sri Lanka

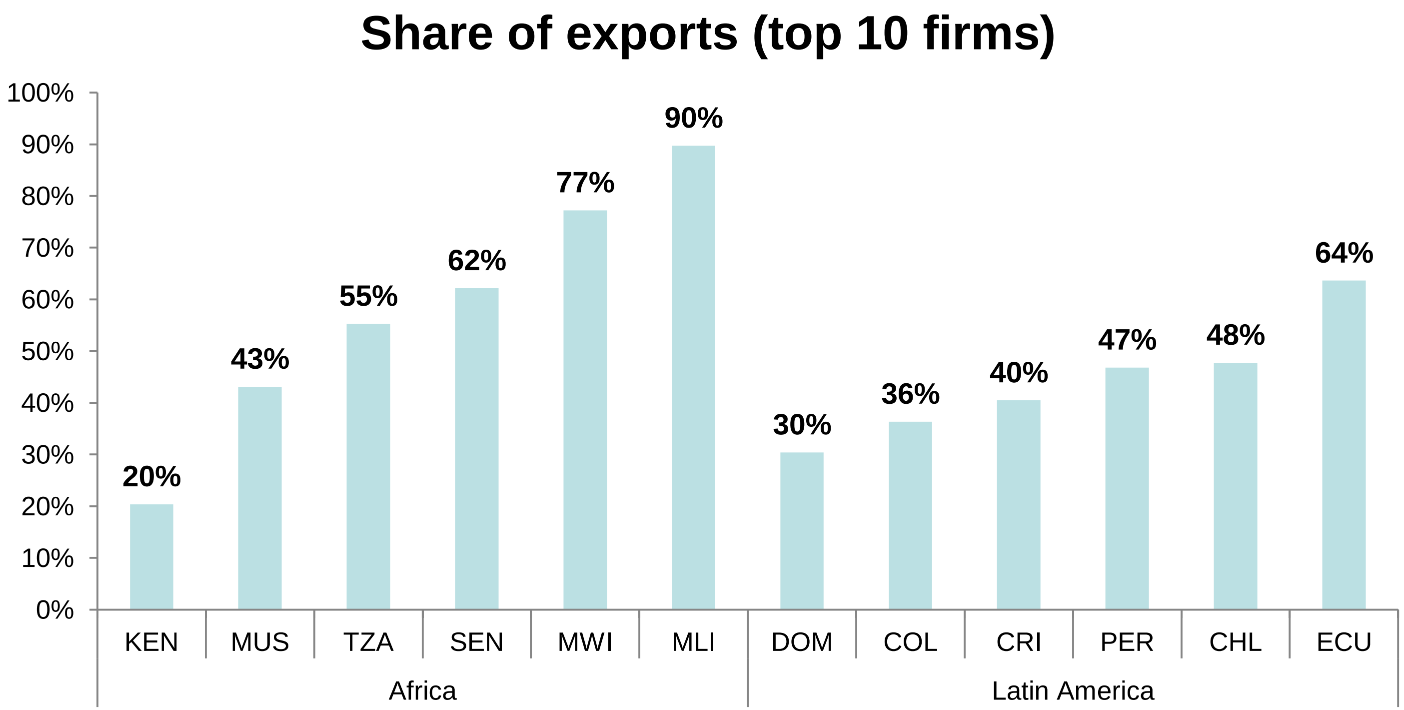
<u>East Asia</u>

Data available:
Cambodia
Laos

In negotiation:
China
Indonesia
Malaysia
Philippines
Thailand

Data already available for 18 countries in negotiation in over 25 more countries

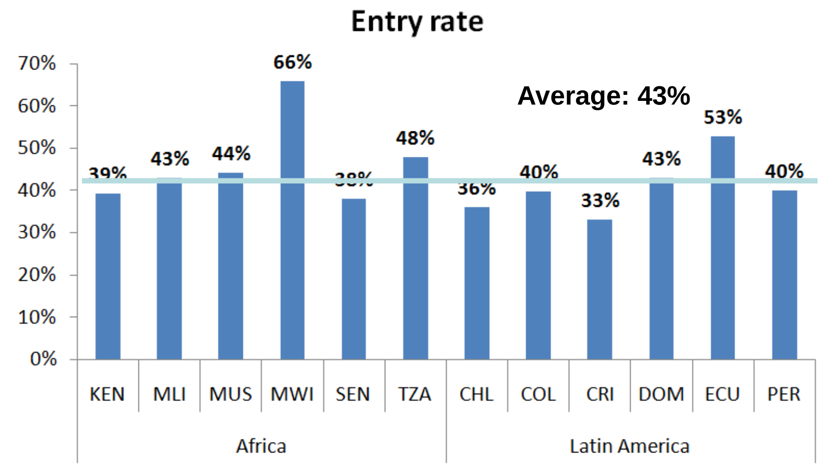
Across countries, a few firms account for the bulk of exports

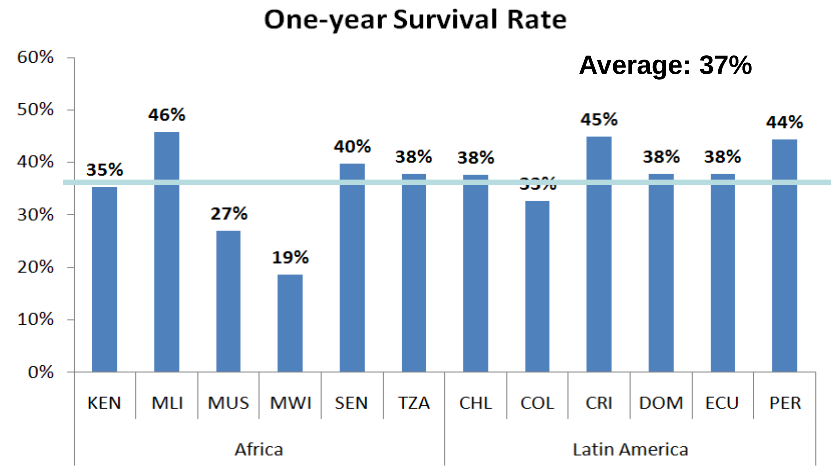


If there is a case for support, where should it be directed: to national (natural?) champions or SMEs?

Freund and Pierola (forthcoming)

Many firms enter but few survive





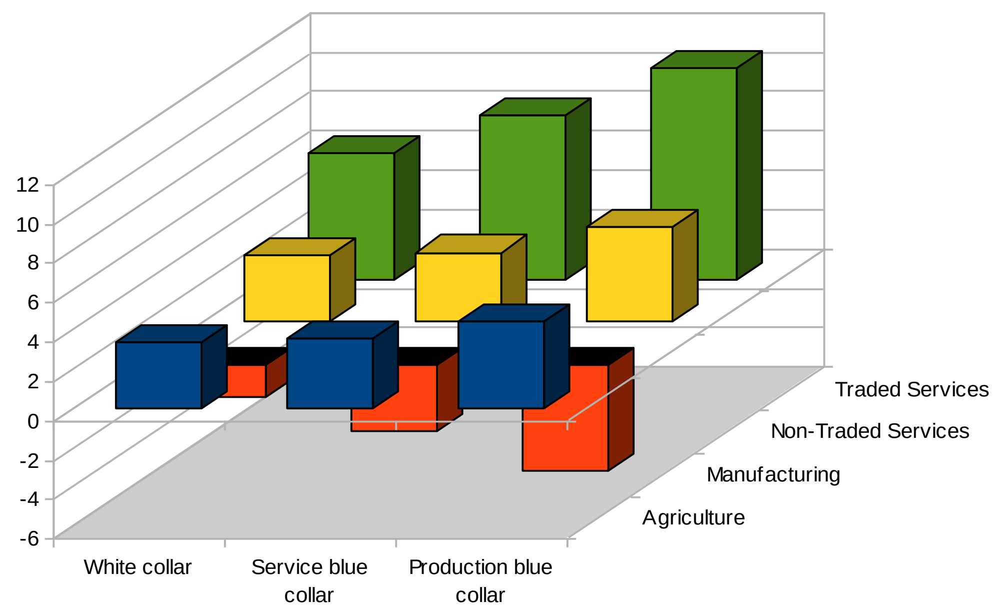
If there is a case for support, should we assist entry or survival?

Freund and Pierola (forthcoming)

Countries don't suffer, people do!
Hence: a focus on the impact of trade and trade reform on the individual

Counterfactual simulation of wage changes with trade liberalization

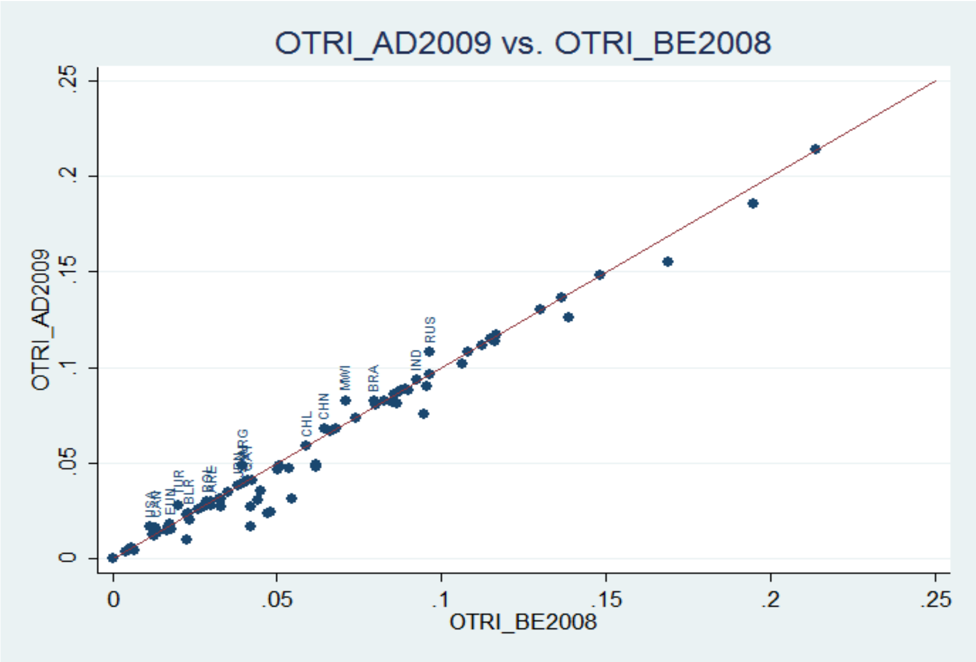
- Sectoral and occupational mobility of workers need to be estimated to forecast distributional effects of trade liberalization.
- Labor surveys of developing countries can be used to estimate these effects.
- Household surveys covering 28 countries and 12.million people used to estimate impacts of changes in food trade policies and food prices



Source: Artuc and McLaren (in progress).

II. Designing policy in a changing world

IIa. Better Measurement of Protectionism Shows that …

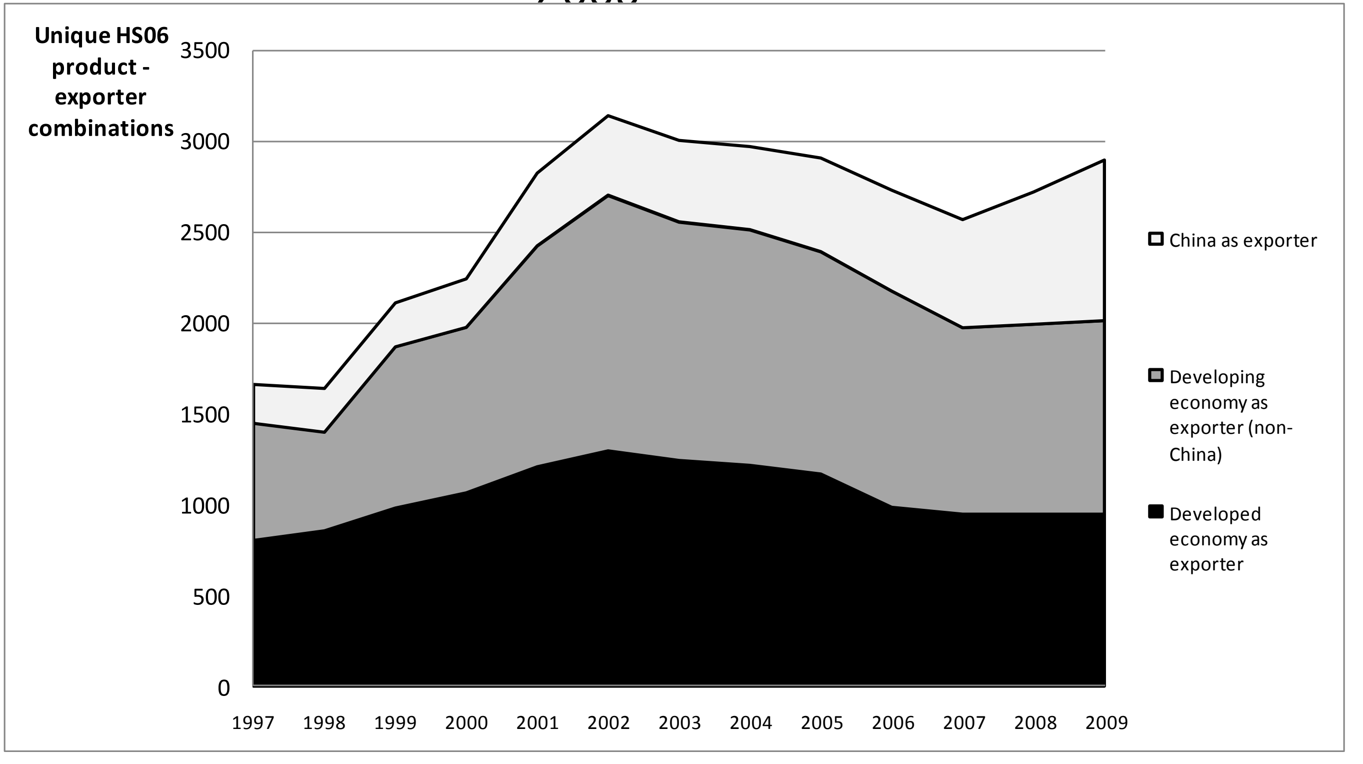


Source: Kee, Neagu and Nicita (2010)

- more countries liberalized during crisis period, and trade policy can only account for less than 2% in the collapse in world trade
- Critical to obtain information on non-tariff measures and technical barriers to trade

Most anti-dumping duties imposed by developing countries against other developing countries, especially China

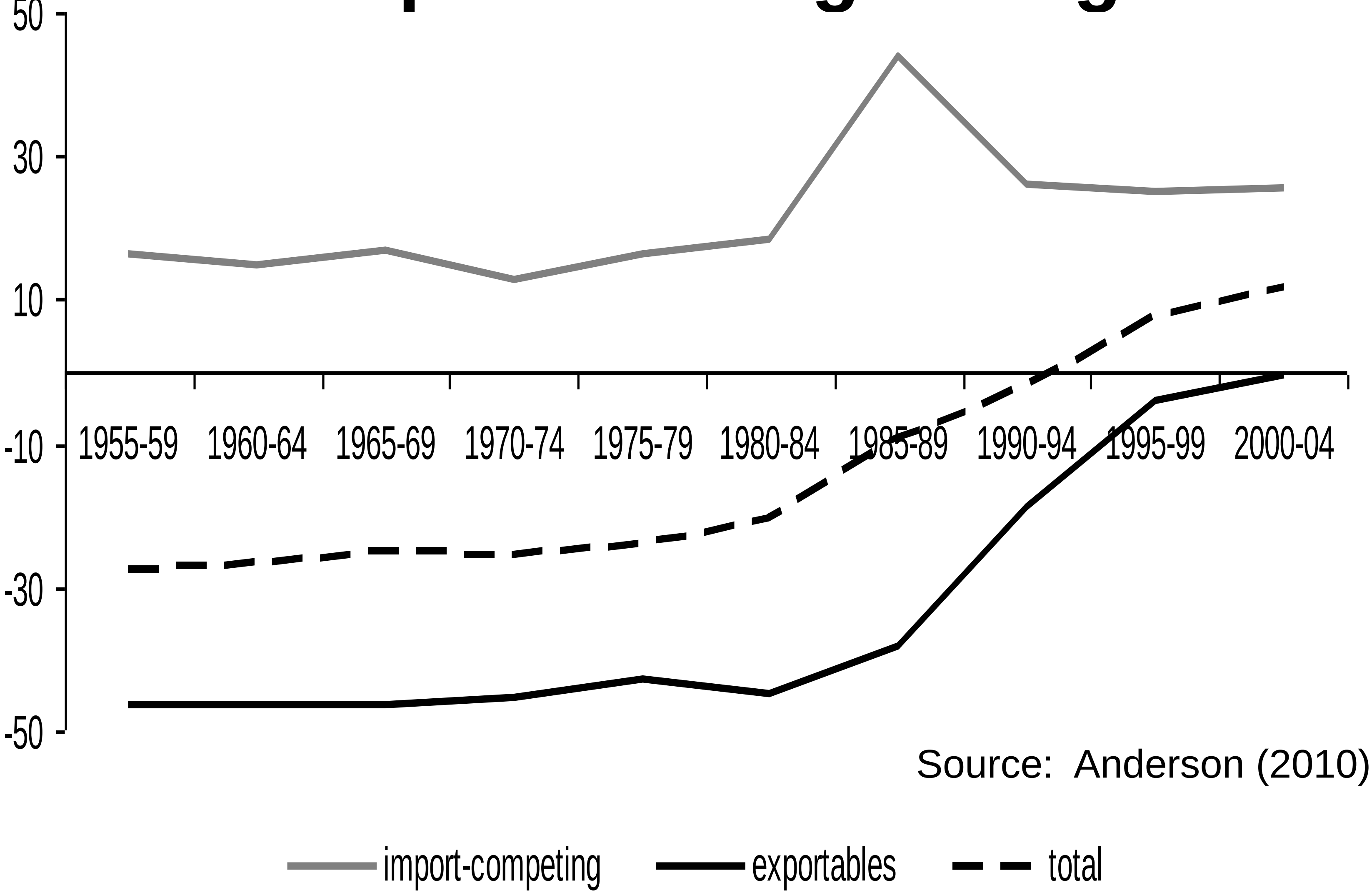
Combined G20 Use of Selected Temporary Trade Barriers <u>by Import Source</u>, 1997-2009



Source: Bown (2010), data compiled from DECTI's Temporary Trade Barriers Database

Critical to make transparent, and hence discipline, growing South-South protection

Agricultural export taxation almost gone, but import-competing protection growing



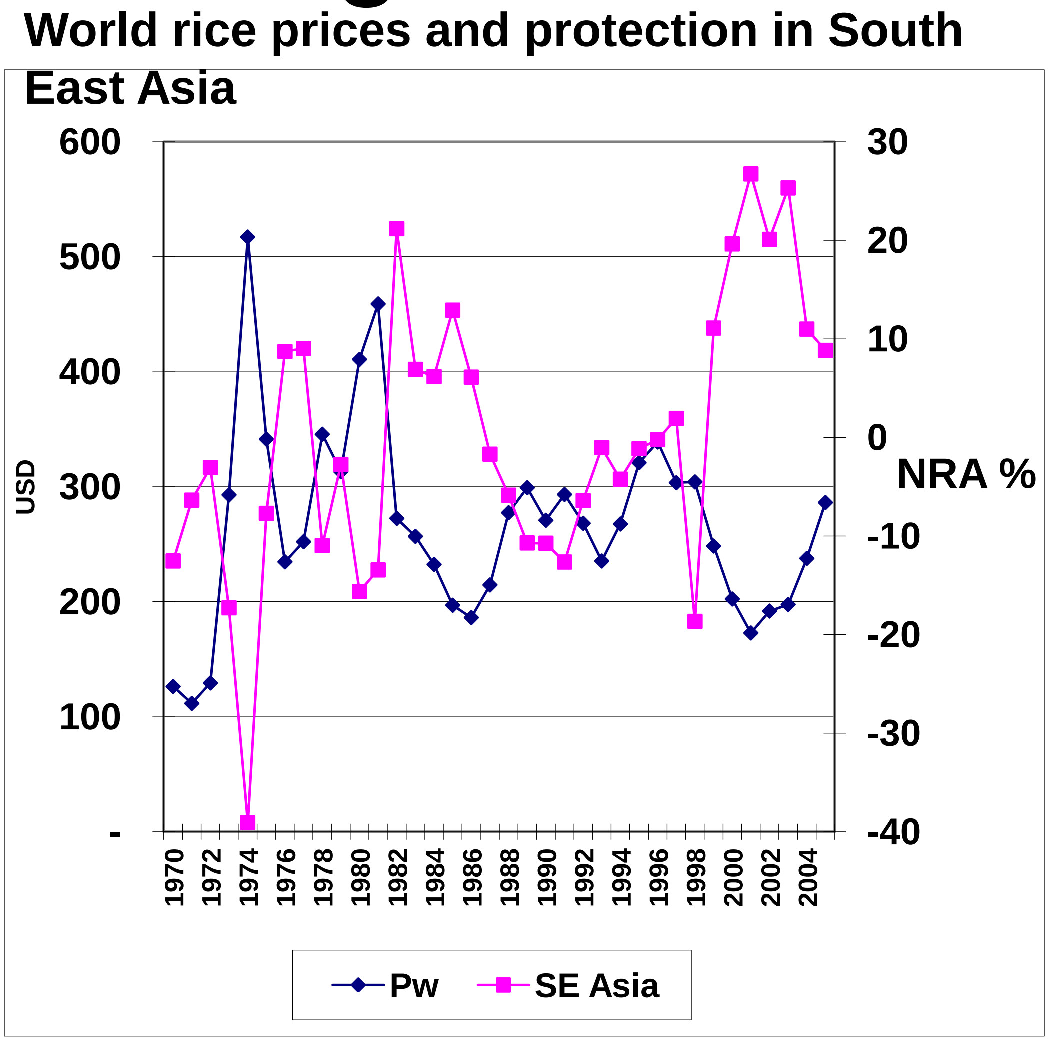
Price insulating-protection is still pervasive in agriculture

- Individual countries try to insulate themselves from changes in world prices of staple foods

- Individually rational, but creates a serious collective action problem

- 45 percent of the 2008 surge in rice prices was due to export restrictions & import tariff reductions

- Poor people vulnerable to high food prices: 100 million people thrown into poverty in 2005-8



Source: Martin and Anderson (2010)

Emphasis of trade policy and World Bank assistance to trade is changing

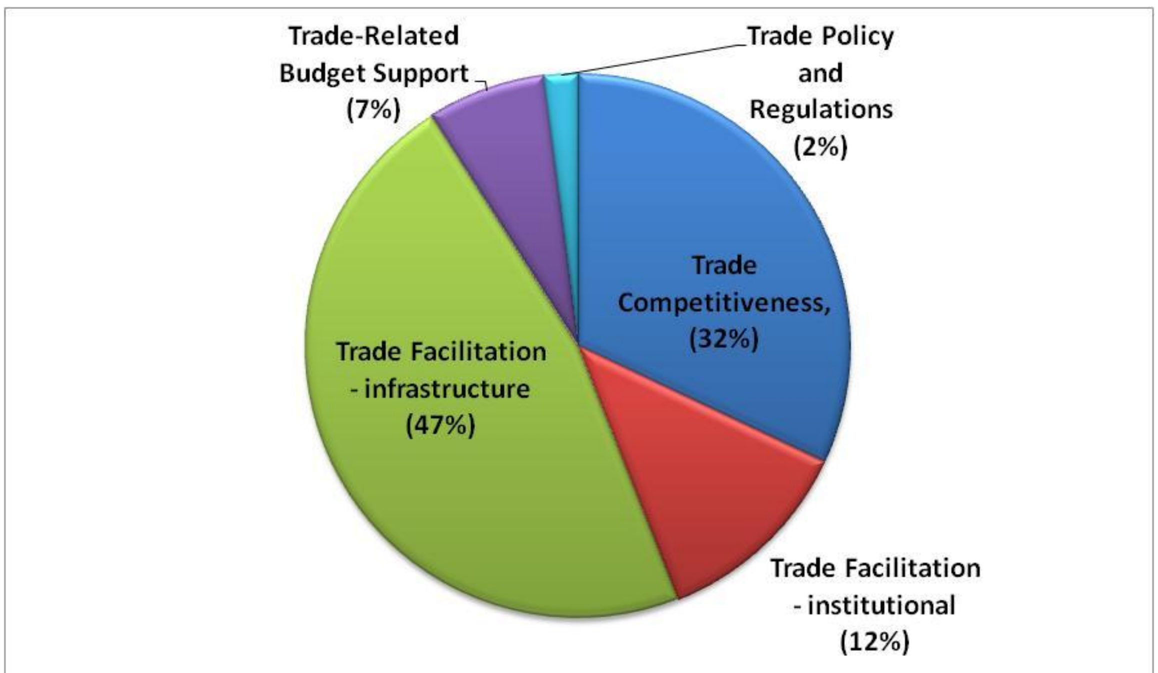
- **Trade Competitiveness**: pro-active industrial policies for productive capacity building and export promotion

  To equip agricultural, manufacturing, and services producers to export

- **Trade Facilitation and Logistics**: customs reforms and infrastructure improvements

  To reduce trade transactions costs and delays

World Bank Group Trade Portfolio (WB/IFC commitments FY2008)



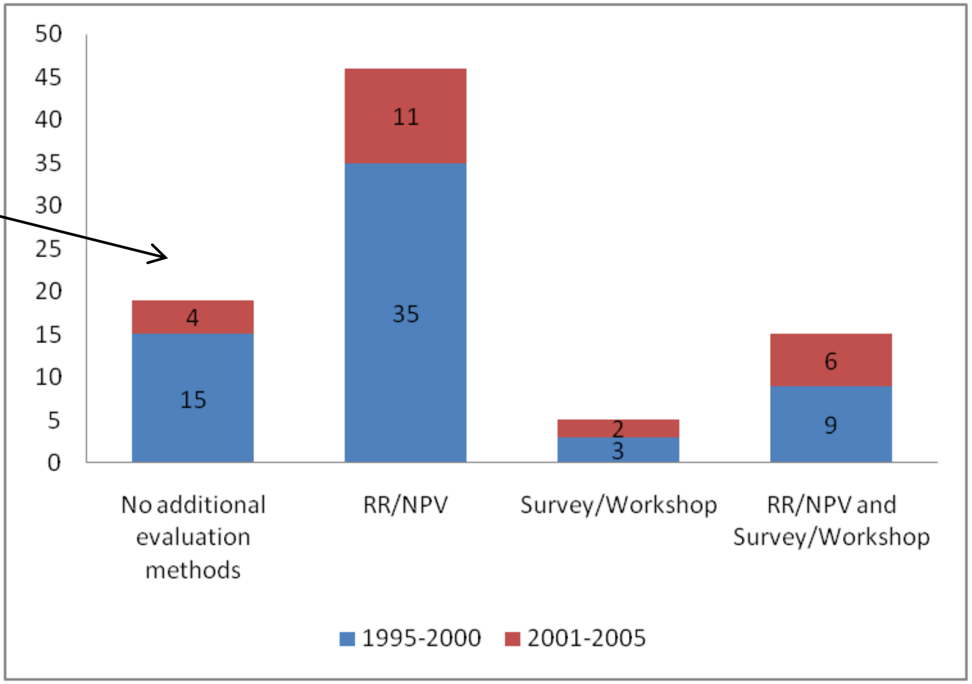
A widely-felt need for more credible evaluation methodologies

What can we learn from past evaluations of World Bank trade-related projects?

Of the 85 World Bank trade-related projects initiated between 1995 and 2005, only 3/4 were evaluated; most by non-rigorous methods; and less than 5 had a meaningful impact evaluation involving a control group

Subjective
"While the impact on the firms assisted had not yet been determined, a visit to two beneficiaries by a supervision mission confirmed that there had been an impressive impact on the firms' quality of products and skills."

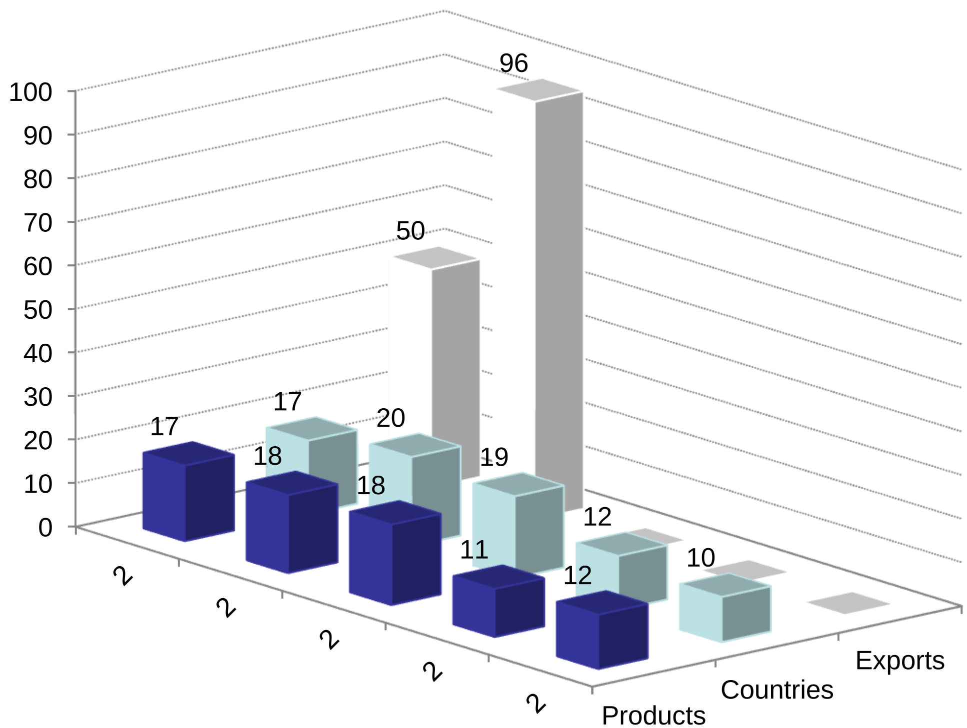
Simple before-after comparison
"The achievement of the overall goal of the project was measured in terms of increases in exports' share of GDP and greater diversification, compared with the initial year of the project."



COLLABORATIVE IMPACT EVALUATION: CAN EXPORT PROMOTION ASSISTANCE LEAD TO OVER-DIVERSIFICATION?

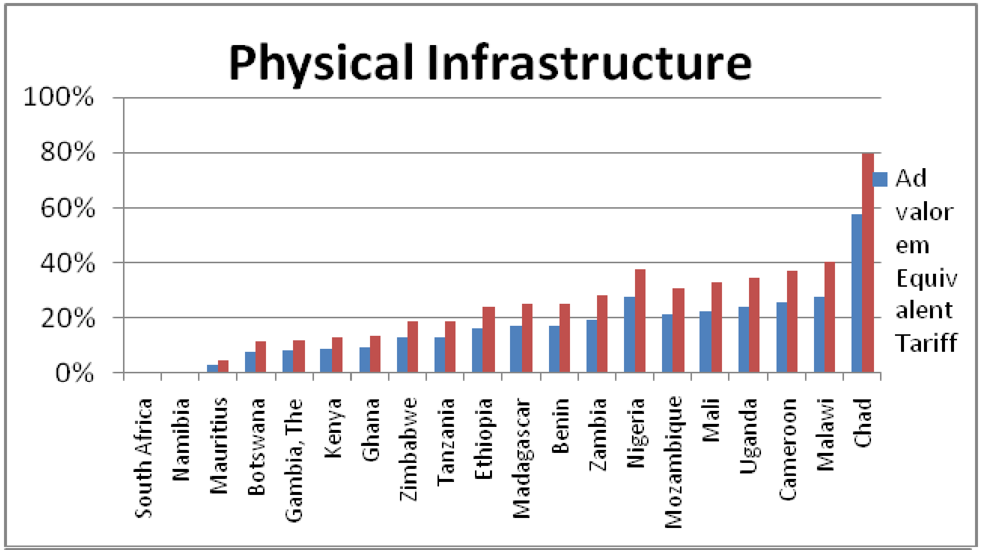
- Preliminary results suggest that Tunisian firms receiving FAMEX assistance are encouraged to introduce new products and sell to new markets with a consequent short-run boost to exports
- But the boost to exports may not be sustainable

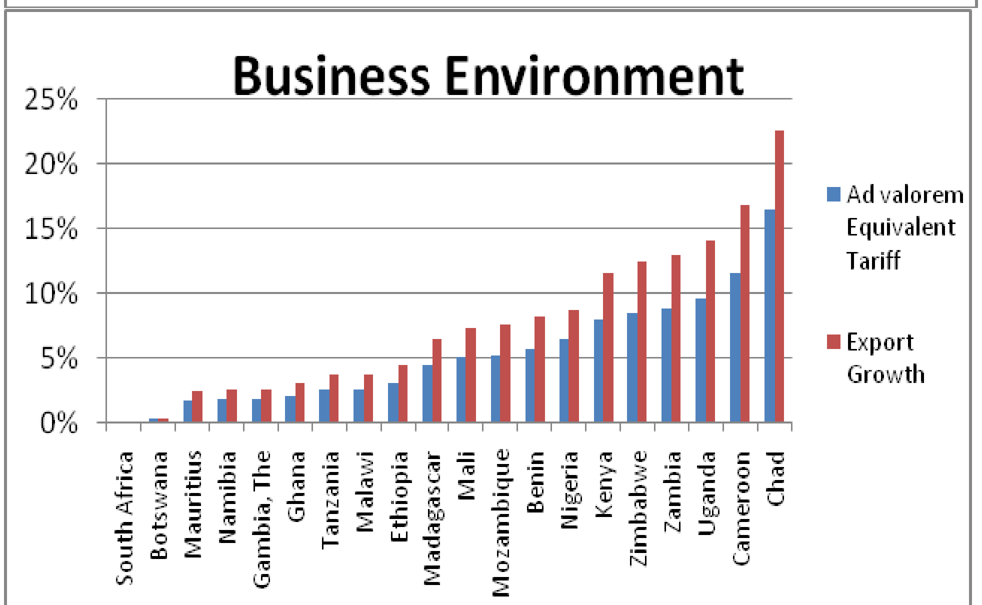
The consequences of export assistance provided under FAMEX 2005



Source: Gourdon, Cadot, Fernandes and Mattoo (2010)

IIc. Improved infrastructure and business environment would reduce trade costs and boost exports



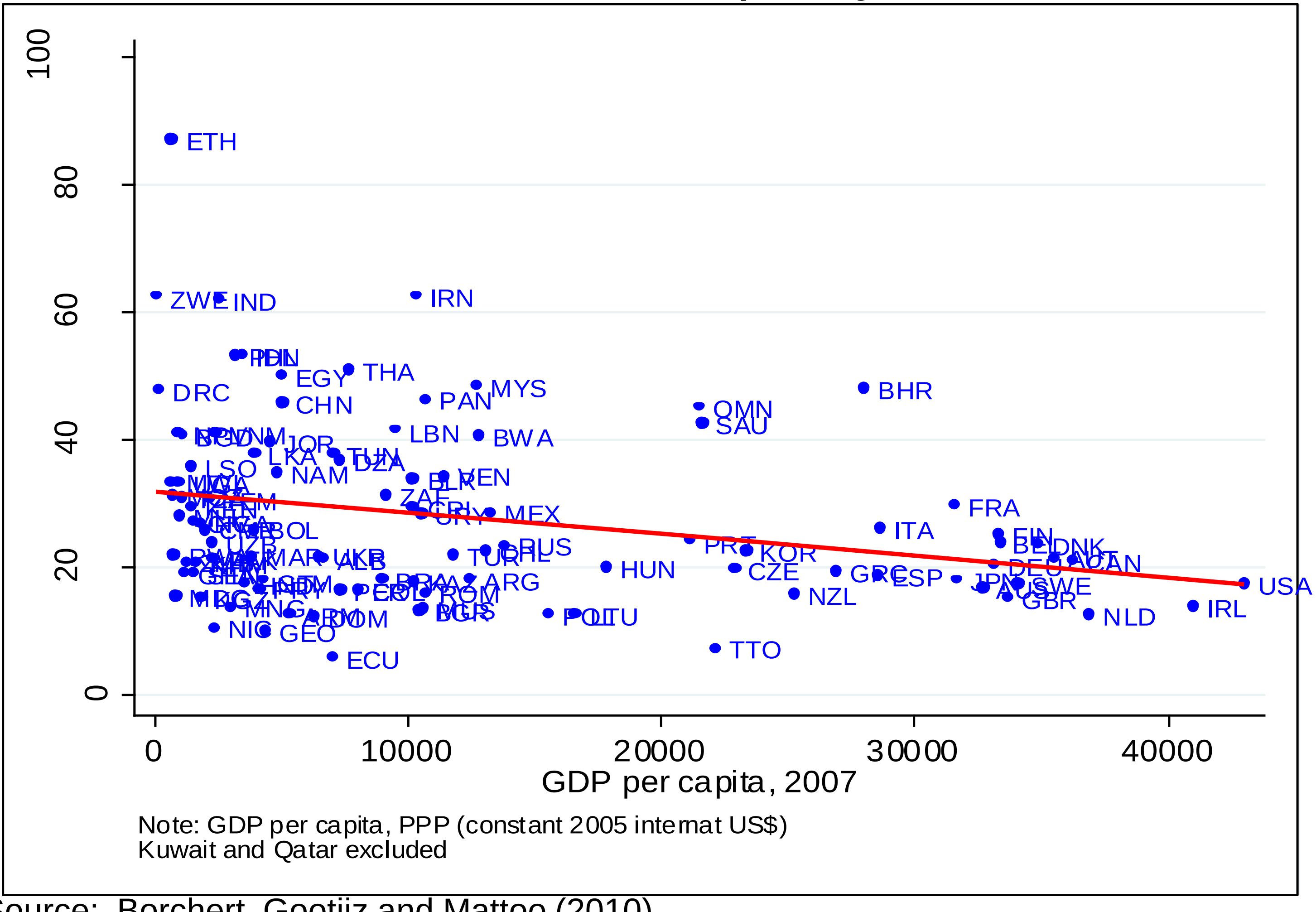


New research would help prioritize interventions: e.g. roads or ports or customs?

Source: Portugal Perez and Wilson (2010)

Services trade policy: New DECRG database shows substantial but uneven unilateral liberalization

Restrictiveness of services trade policy in 102 countries



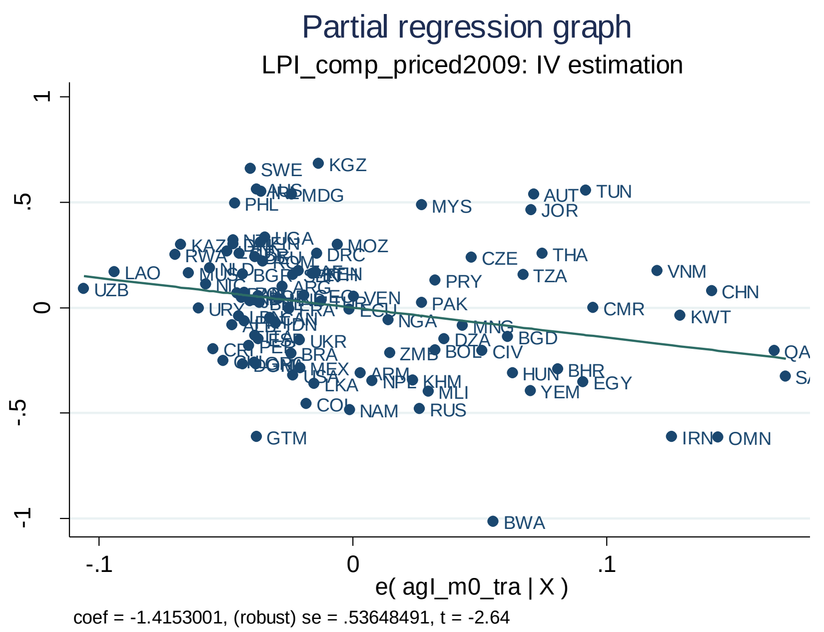
Source: Borchert, Gootiiz and Mattoo (2010)

New work would use better data on more sectors, and more rigorous methods of quantification

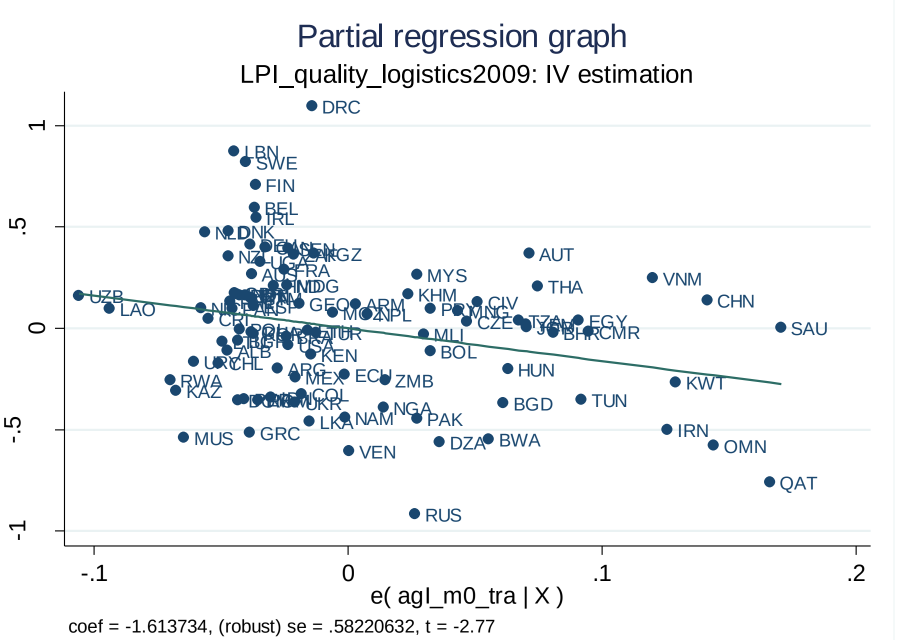
Services reform as trade facilitation

More restrictive transport policies are associated with more expensive and poorer quality logistics services

Availability of competitively priced logistics services



Quality of logistics services



Source: Borchert, Gootiiz, Grover and Mattoo (2010)

New work would find better indicators of performance and more rigorous links between policy and performance

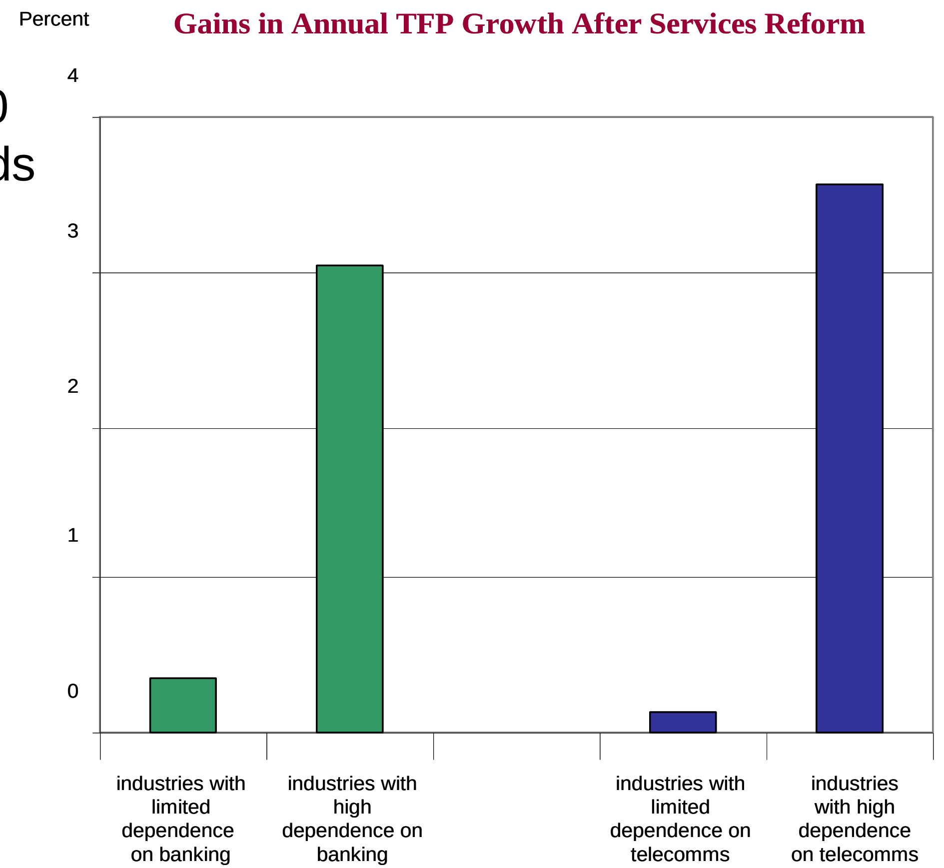
Services reform as industrial policy

India's services reform has boosted not only productivity and exports in services, but also the performance of downstream manufacturing industries

New study based on panel data for 4,000 Indian firms for the 1990-2005 period finds that

banking, telecommunications and **transport** reforms all have significant positive effects on the productivity of manufacturing firms

New work would help policy-makers understand the implications of alternative sequencing of reforms in goods and services.



Source: Arnold, Javorcik, Lipscomb and Mattoo (2010).

III. Identifying priorities for international cooperation

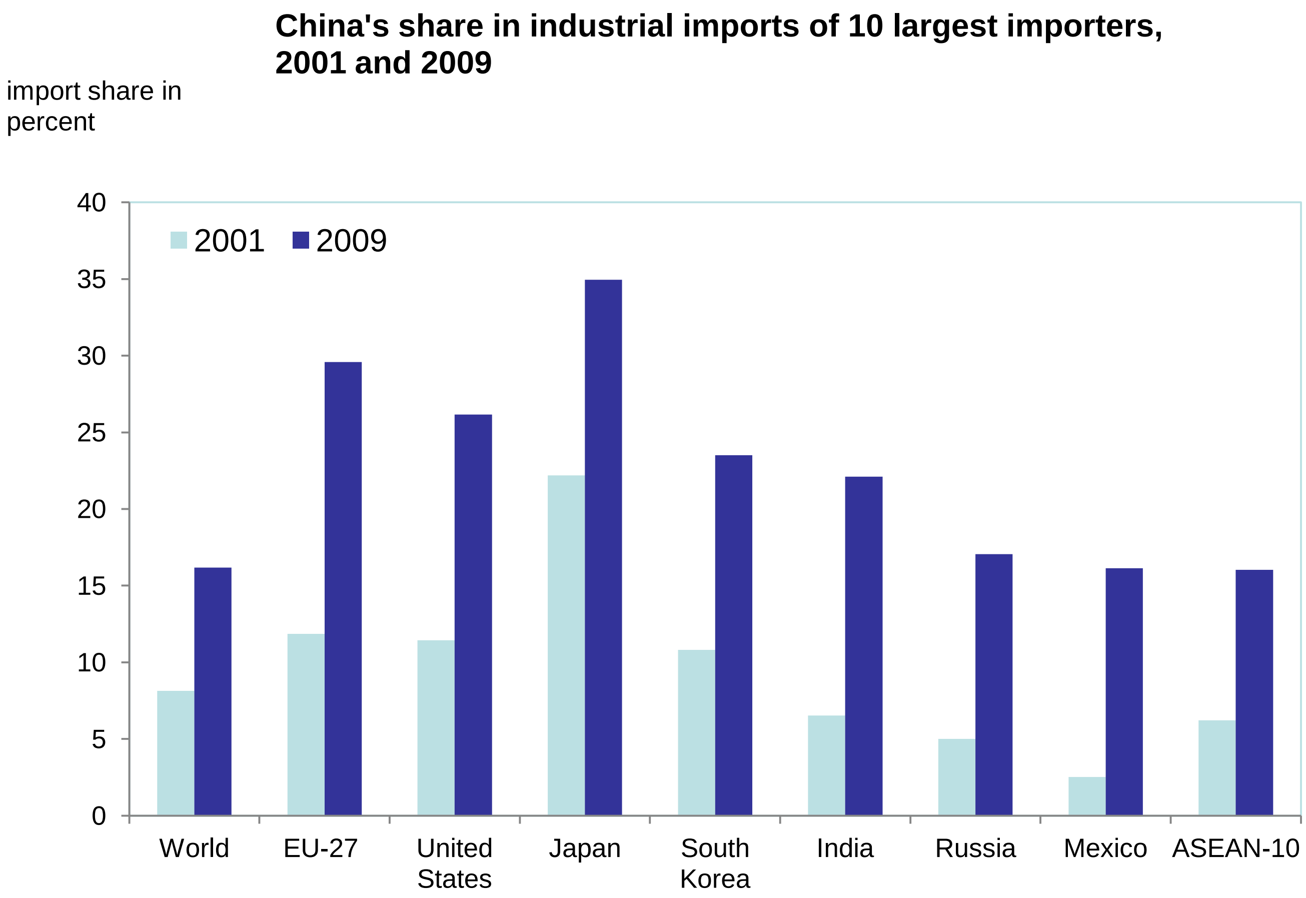
The Doha Agenda: Assessing the Benefits and Constraints

- Already significant unilateral liberalization in goods, services, and even agriculture
- How much additional liberalization does Doha offer and how much security of access?
- How valuable are the bindings in an interdependent world?

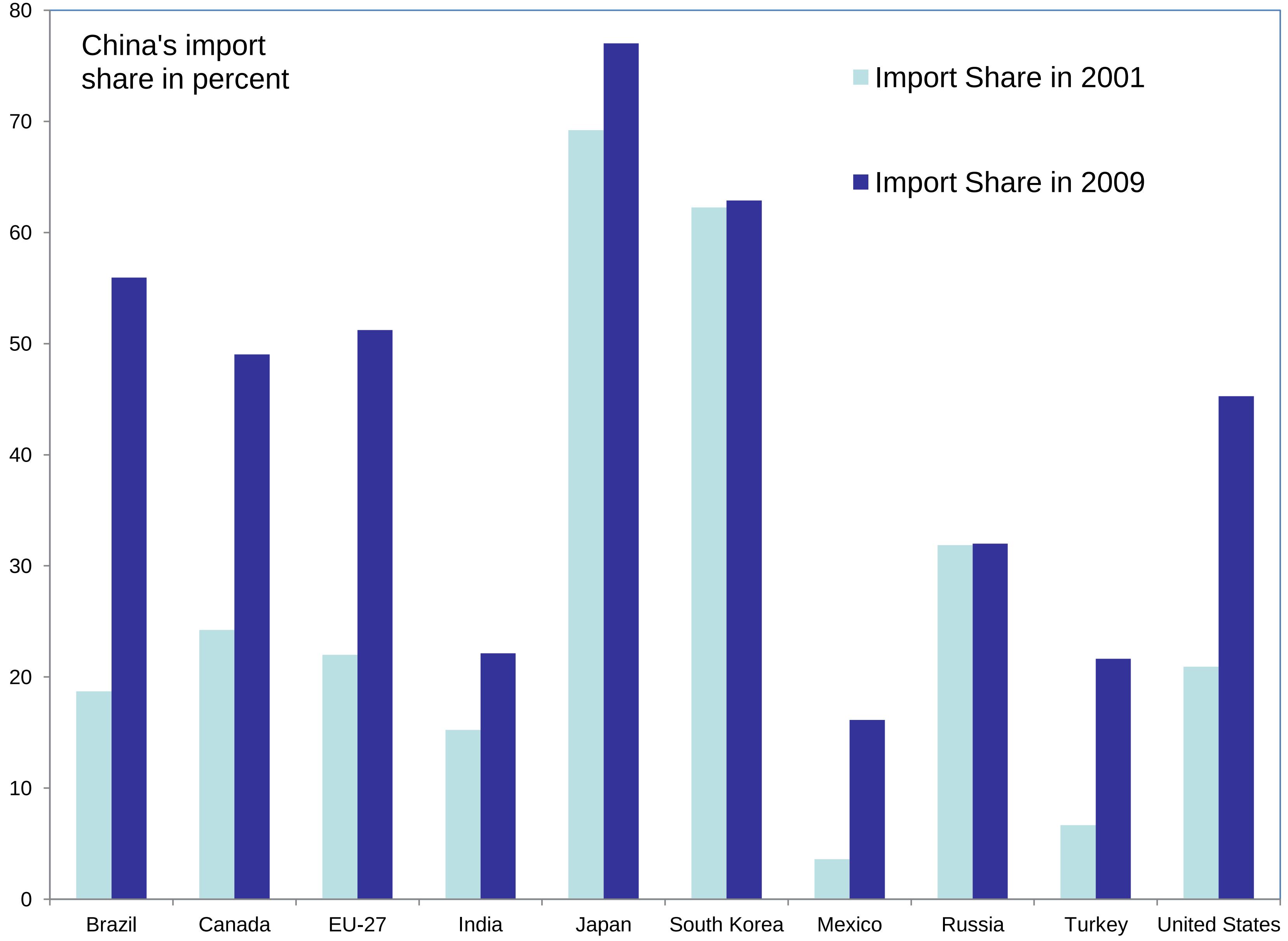
Doha Agenda: Merchandise

- Ambitious tariff-cutting formulas would in principle cut protection deeply
    - Agricultural tariffs cut in half. Non-agric by a third
- But the effect is sharply reduced by exceptions
    - When these are carefully accounted for average agricultural tariffs still reduced by nearly 18 percent
- Agricultural export subsidies abolished. Domestic support constrained
- Overall welfare gains could be as large as \$160 billion

China’s import penetration in industrial goods

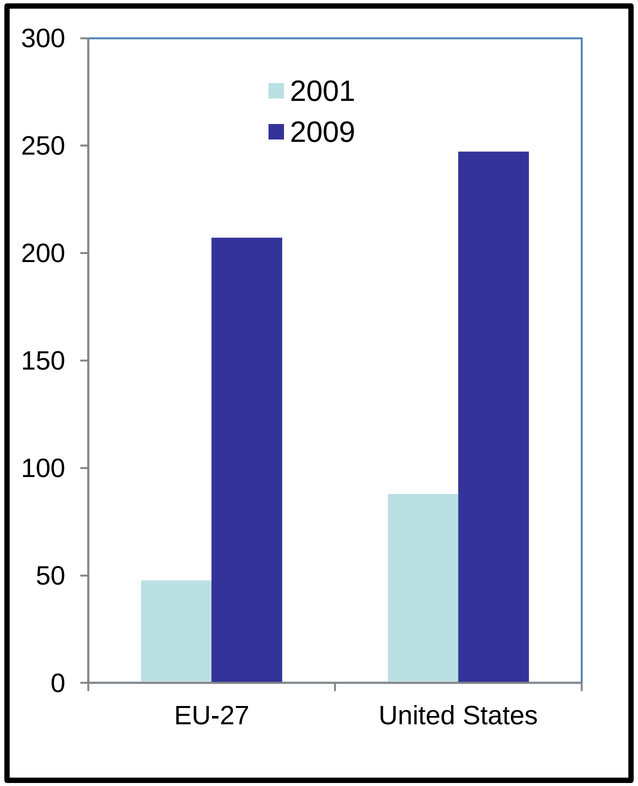


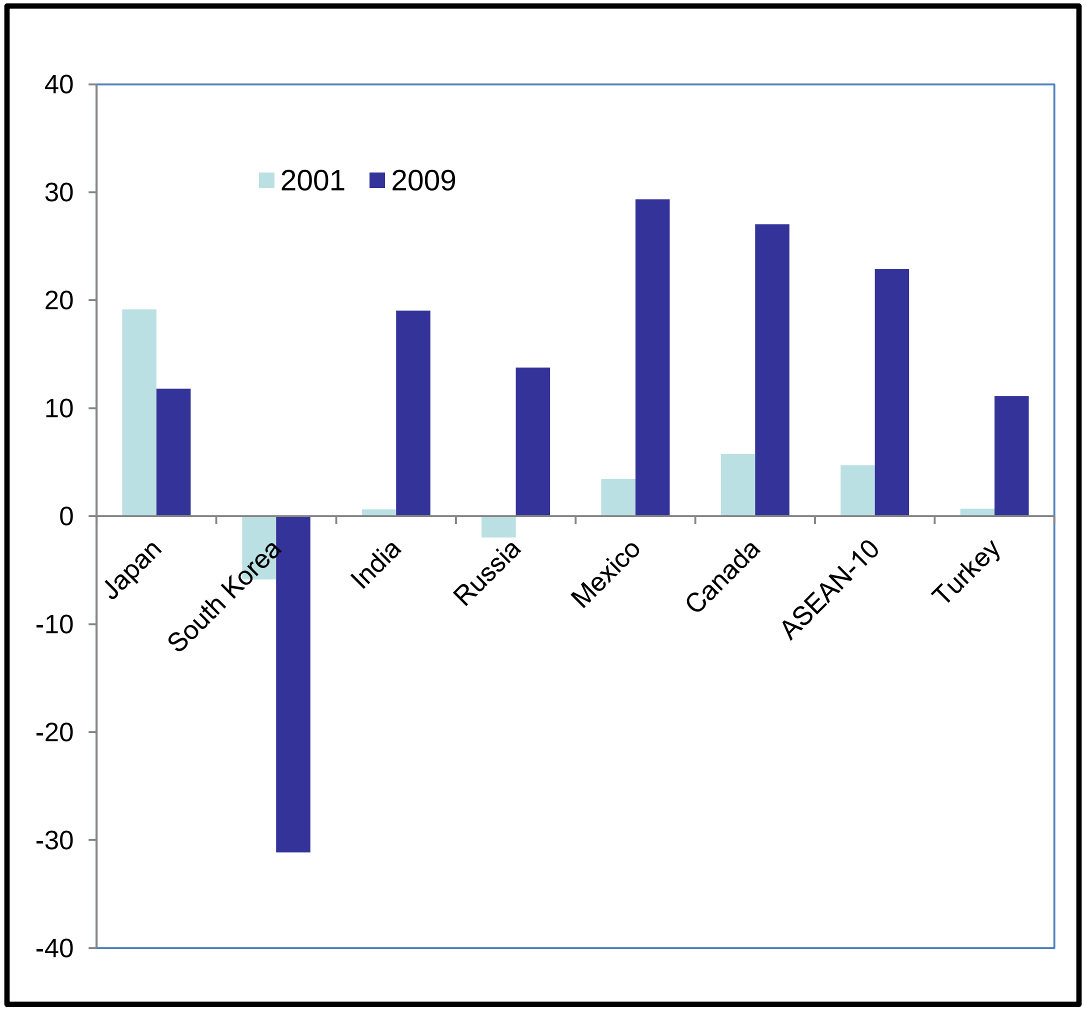
China’s Import Penetration in Most Protected Sectors



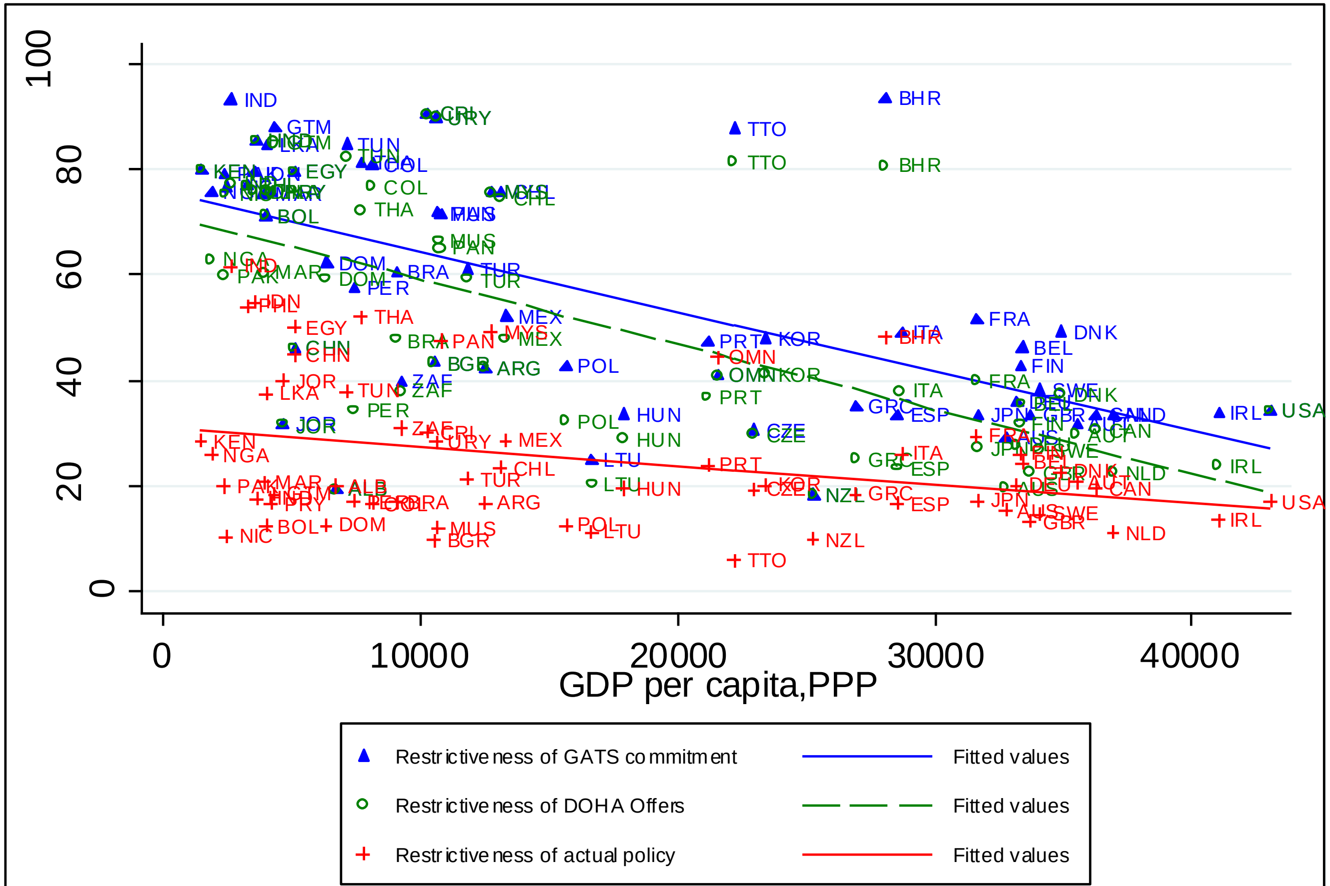
China's Trade Balance in Manufacturing

(billions of US dollars)





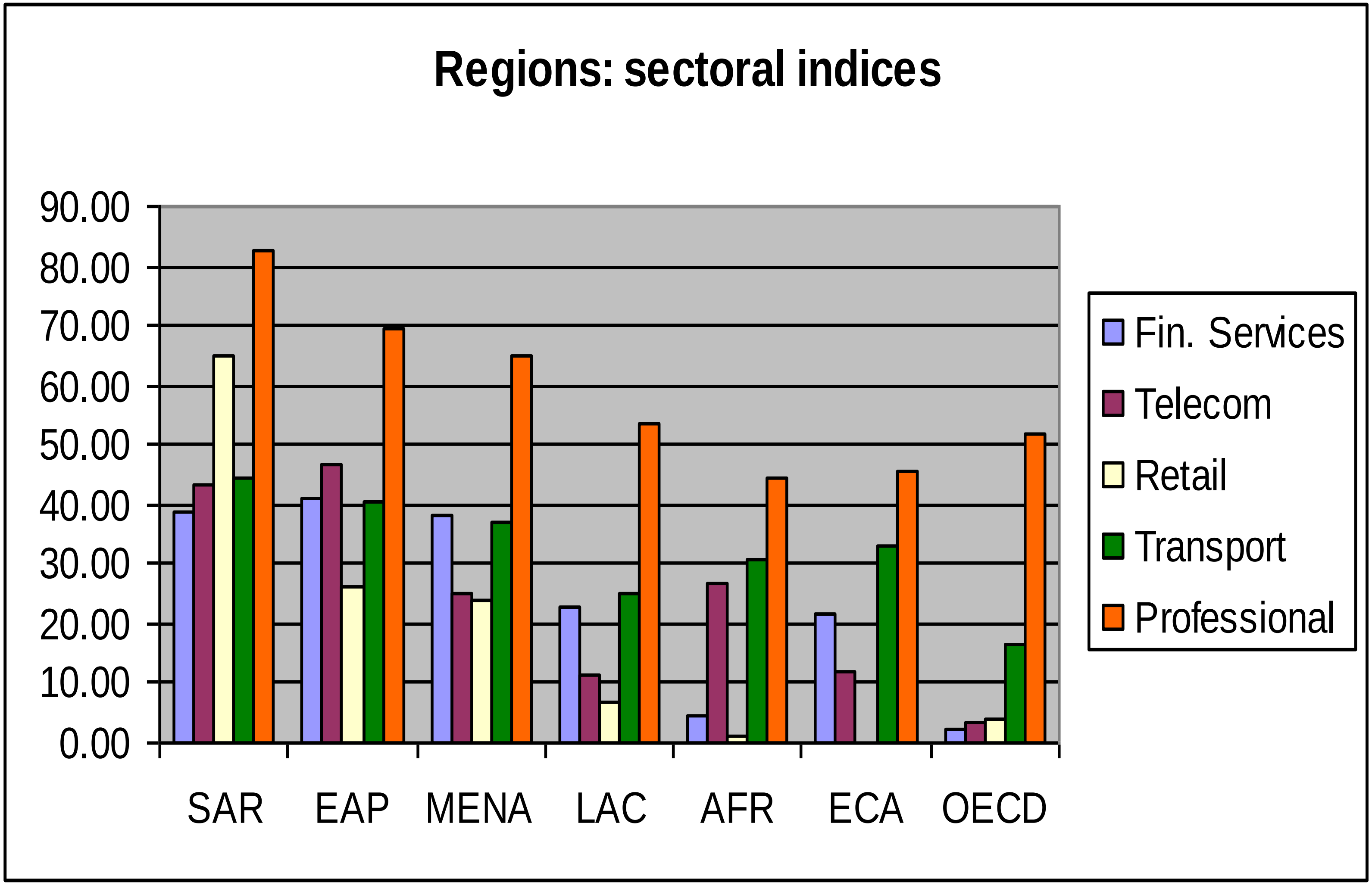
The Services Dimension: Uruguay Round Commitments, Doha Offers and Actual Policy



STRI for 61 countries, excluding Qatar and 31 countries that did not submit offers

Source: Borchert,Gootiiz, Mattoo 2010

Restrictiveness of services policy: by sector and region



Multilateral Cooperation in a Changing World Economy

- Security a growing concern
  - Agriculture and food security
  - Oil and energy security
  - Globalization/exchange rates and worker security
  - Financial globalization and financial security
  - Climate change and environmental security

- Multilateral cooperation will be preferable in many cases to unilateral actions but how is it best designed?

Summing up

Open data & research are having an impact

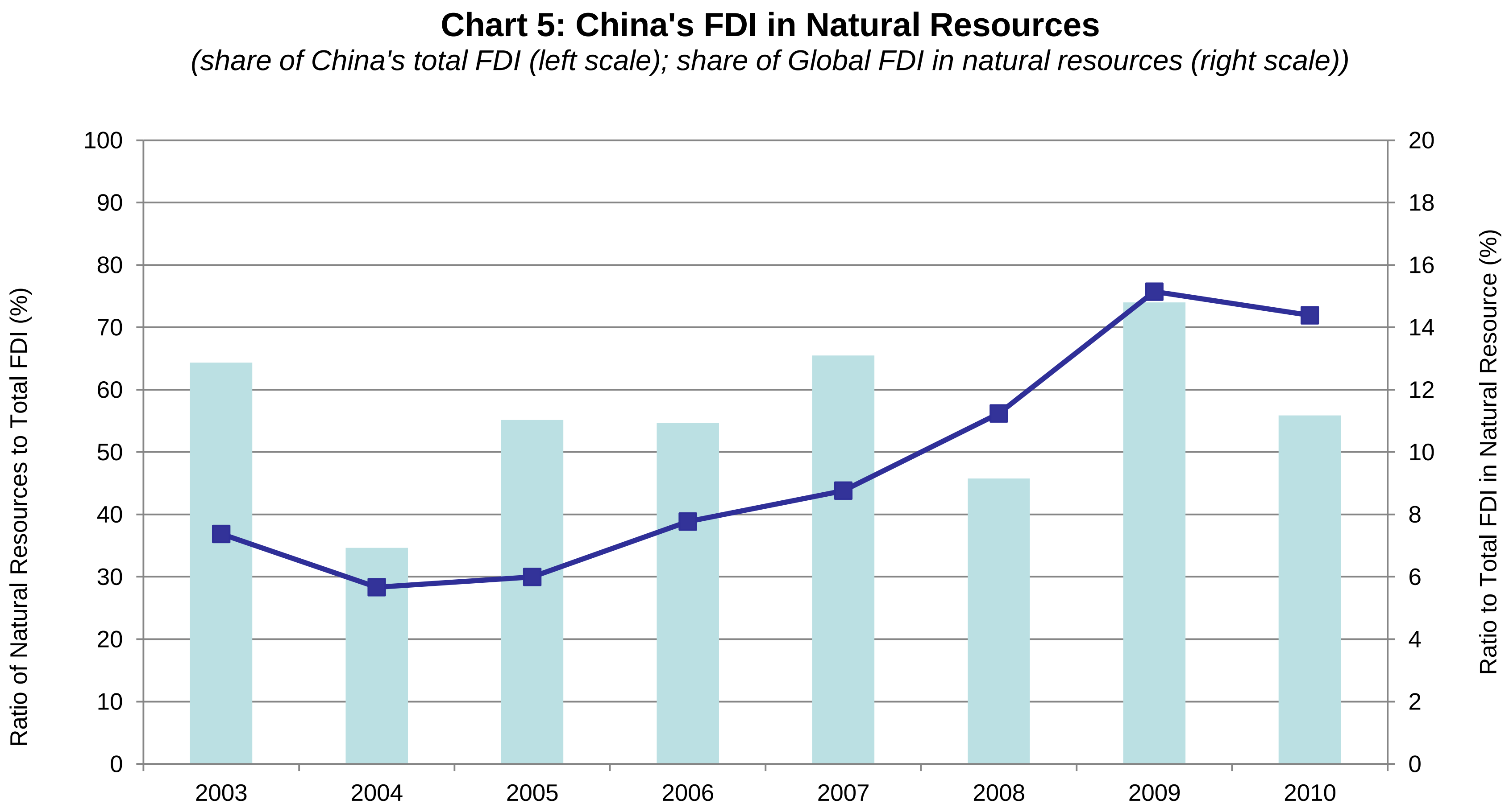
- Trade & trade policy responses to the financial crisis
- Impacts of food trade policies on poverty & food security
- Appraisal of trade facilitation & export promotion
- Assessment of services policies and reforms
- Evaluation of multilateral & regional trade agreements

New research would build on this platform to inform policy reform and international cooperation

China's Major Imports of Natural Resource Products, 2009

HS-4	Product Description	Imports ($ mill.)	Imports as % of Natural Resource	Imports as % of World Imports	Major Suppliers (and their shares)					
2601	Iron ores and concentrates, incl roast	50,140	69.3	64.9	Australia	Brazil	India	40.1	25.7	15.2
2603	Copper ores and concentrates.	8,479	11.7	27.9	Chile	Peru	Australia	24.2	16.1	12.7
2608	Zinc ores and concentrates.	1,883	2.6	36.8	Peru	Australia	EU27	28.7	27.2	9.9
2602	Manganese ores and concentrates	1,773	2.5	52.3	Australia	South Africa	Gabon	36.6	22.4	12.2
2607	Lead ores and concentrates.	1,737	2.4	44.1	Peru	USA	EU27	30.4	16.8	12.1
2610	Chromium ores and concentrates.	1,311	1.8	75.3	Australia	Brazil	India	40.1	25.7	15.2
2604	Nickel ores and concentrates.	1,057	1.5	54.2	Indonesia	Philippines	Australia	30.4	26.2	22.4
2515	Marble, travertine, ecaussine	861	1.2	55.0	Turkey	EU27	Egypt	39.2	29.1	15.0
2613	Molybdenum ores and concentrates.	766	1.1	24.4	Chile	USA	EU27	45.8	20.4	7.1
2503	Sulphur of all kinds, other than sublime	705	1.0	37.8	Canada	Saudi Arabia	USA	18.0	17.9	10.7
	Natural resources, excl agric goods	72,332	100.0	41.1						
0-97	All goods	1,005,555		8.3						

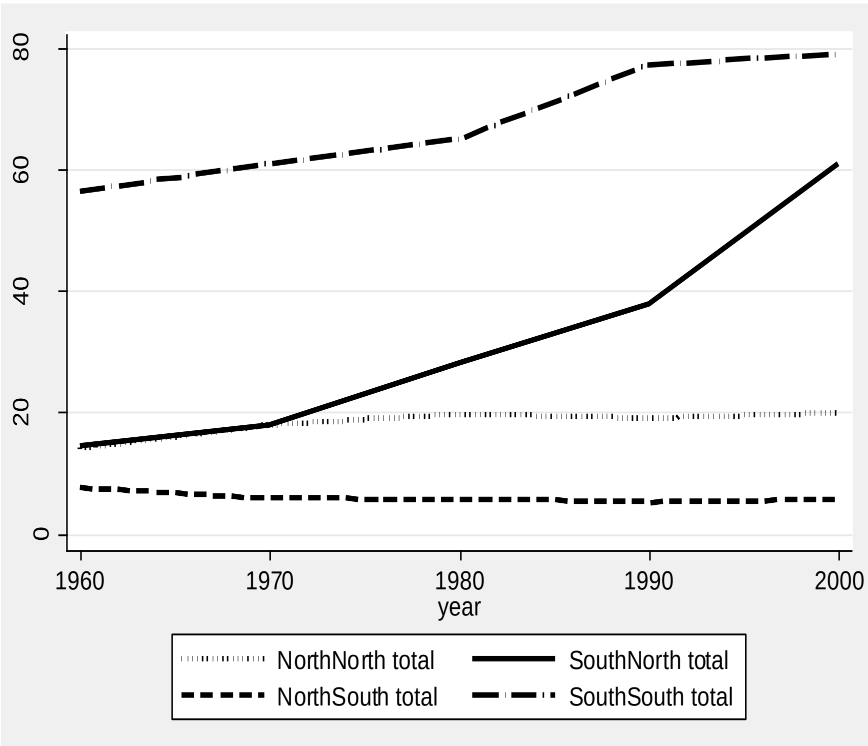
China's FDI in Natural Resources

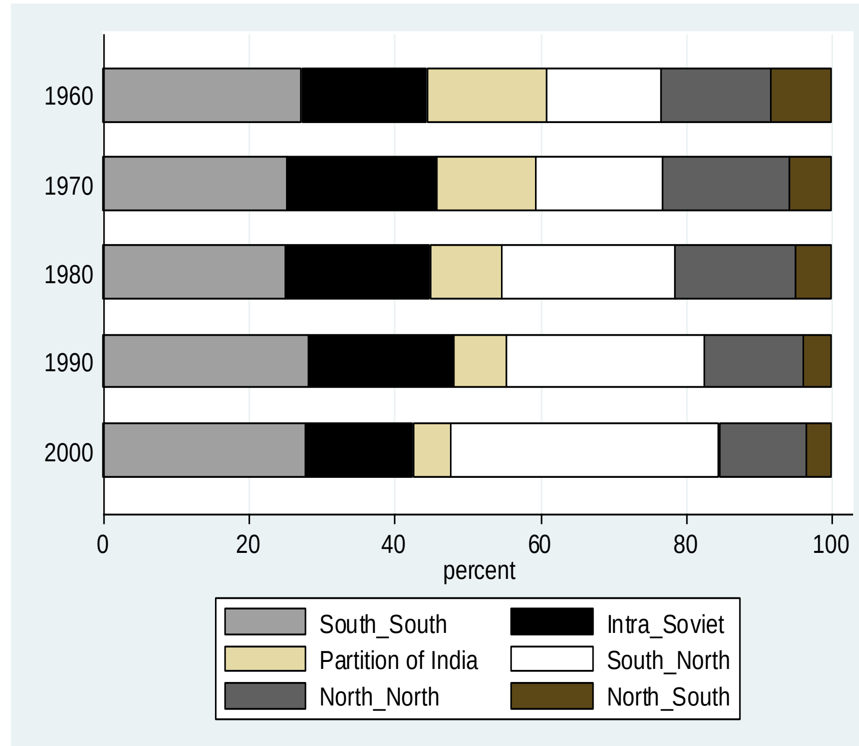


- Skilled Migration Databases
  - This was constructed through collaboration with academics and OECD. Bilateral data are disaggregated by gender and three education levels for 1990 and 2000
  - It includes raw data for 195 origin and 85 destination countries (30 OECD + 55 developing countries)
  - Using these original datasources, we estimated the extent and determinants of bilateral skilled migrant stocks for the whole world (including gender disaggregation) and then predicted the migration patterns for the rest of the world

- Future Data Projects
  - These two projects led to the current collaborative project with OECD and the UN Population Division to work jointly to update existing databases on migration patterns using the next round (2010) of censuses which will be released soon
  - Specific attention being paid to
    - Gender splits
    - Skilled migration patterns
    - Location of Education
    - Circular migration
    - South-South migration
    - Identifying development impact

Evolution of Migrant Stocks Between the 'North' and the 'South', 1960-2000, absolute numbers and changes in percentage contribution

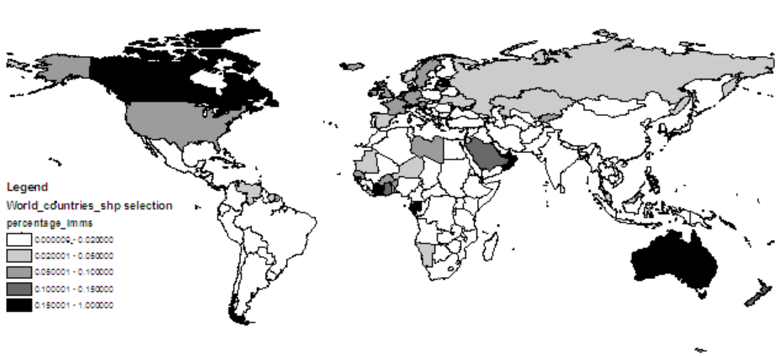




Source: Ozden, Parsons, Schiff, Walmsley (2011)

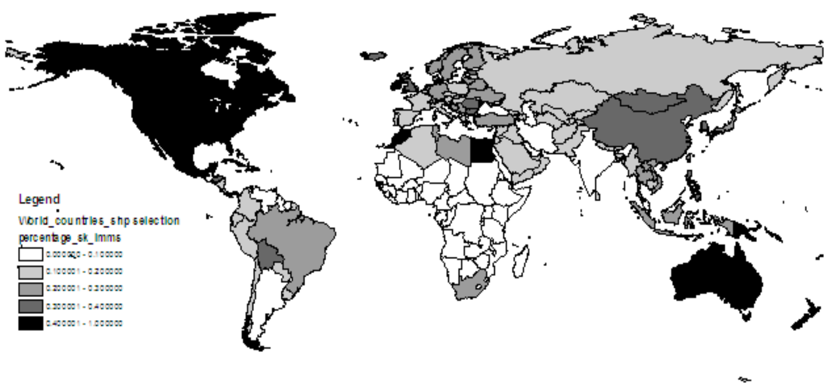
Geographical distribution of migration intensity and positive selection in 2000

2a. Immigration stock as percentage of the population

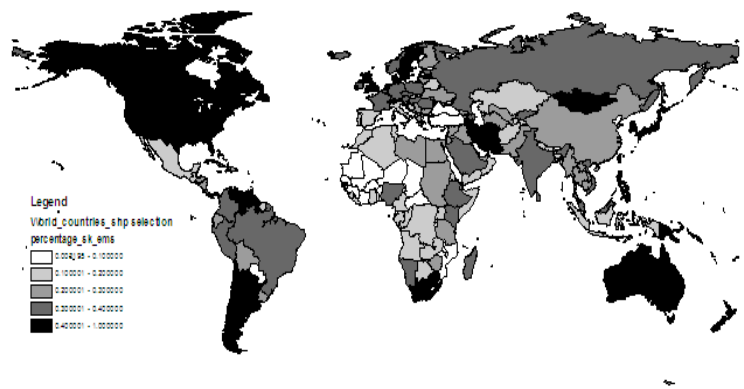


2b. Emigration stock as percentage of the population

2c. High-skilled immigration as percentage of total immigration



2d. High-skilled emigration as percentage of total emigration



Source: Docquier, Marfouk, Ozden, Parsons (2011)

- Looking Ahead – Analytical Work Program
  - *Wage impact of immigration and emigration in the OECD countries*
    - The 1990-2000 immigrant flows to the OECD has not hurt the wages of non-migrant natives. On the contrary, the negative effect has been due to emigration of the highly skilled, especially from the EU countries to toehr OECD destinations
  - *Wage impact of immigration in developing source countries*
    - In a large number of developing countries , migration has become an integral part of the labor market experience. The effects depend on the nature of the migration – whether it is mostly unskilled migration to a neighboring country (Mexico), temporary migration to a Persian Gulf country (Sri Lanka) or highly-skilled migration to the West (Caribbean). It turns out the effect on wages of the non-migrants in the home countries are significant in many origin countries.
  - *Globalization and Its components*
    - How do trade, FDI and migration flows effect each other. The existing literature, in general, finds that migration and trade or migration and FDI are complements and that the impact of migration is quantitatively important. However, because migration statistics are so scarce, many important and interesting aspects of the trade-migration-FDI nexus have been overlooked. In particular, it is still unclear how prominent these links are in developing countries or how they have evolved over time.
  - *Determinants of international migration*
    - Gravity models in the trade literature showed us the importance of bilateral linkages – geographic, political , cultural – in determining global trade patterns. We first apply these models – both analytically and empirically – to issues of labor mobility. Second, we explore if trade and labor flows can be explored jointly in this context.
  - *Demographic Profiles and Economic Integration*
    - This project investigates the impact of the divergence in the demographic profiles of developing and developed countries on migration patterns from the former to the latter. In the next stage, we link these with other aspects of globalization – trade integration and capital flows.

Research agenda is closely aligned with the Bank's new trade strategy

In turn, the four priority themes in the trade strategy are informed by DEC research

- ***Trade Competitiveness***: DEC's empirical research, including a new customs transactions database, is supporting the Bank's operational work and helping policymakers understand export constraints at the firm, industry, and country level.
- ***Trade Facilitation***: DEC's research has led to the establishment of the Bank's Trade Facilitation Facility and had a direct impact on operations and policy, including through support of operational projects such as Tunisia's Export Development Project II and the Mexico DPL on Competitiveness.
- ***Market Access***: DECs Overall Trade Restrictiveness Index (OTRI) has become a widely-used measure of trade restrictiveness in the Bank and outside. New research on services policies is helping identify impediments to international integration and priorities for reform.
- ***Promoting Greater Inclusion***: DECs research, especially on labor and agricultural markets, is helping operations assess and address the distributional consequences of trade reform. For example, household surveys covering 28 countries and 12.million people were used to estimate impacts of changes in food trade policies and food prices