FOREIGN DIRECT INVESTMENT
AND INCOME INEQUALITY
IN LATIN AMERICA

FINAL REPORT
TO SSR -DFID

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funds for this study as part of that objective but the views and opinions expressed are those of the
author(s) alone.
1. Background and objectives

There is a heated debate on the effects of Foreign Direct Investment on development. Proponents argue that FDI is good for development, and hence the rapid expansion of FDI in Latin America in the past decade and a half is manna from heaven. In some cases, it is indeed difficult to imagine whether the same development level could have been achieved without FDI. Critics, however, contend that FDI leads to more poverty, income inequality, isolation and a neglect of local capabilities. Recent difficulties with privatisation in Latin America, which involved FDI, appear to tell us that not all share in the benefits.

There are differing views on the contribution that Foreign Direct Investment (FDI) can make to reducing poverty and inequality in developing countries, depending on the effects on employment, skill-specific productivity and wage bargaining. FDI can respond to the relative abundance of unskilled labour in developing countries, creating unskilled jobs, thereby reducing both poverty and inequality; or FDI can be skill intensive, exacerbating inequality (and may or may not reduce poverty). FDI can also affect skill-specific productivity, thereby reducing or raising the demand for either skilled or unskilled labour, or both. In addition, FDI may affect wage bargaining. Finally, FDI can add to the human capital stock through training and education. The ultimate impact of FDI has wide-ranging implications for policy, and for the debate on the impact of globalisation on the poor. There is theory to support these different views, and the discrimination has therefore to be empirical. In practice, one would expect to observe a combination of factors.

Latin American countries opened up to trade and FDI after the mid 80s. FDI into the region increased dramatically until the late 90s. Most research on FDI examined whether, and under what conditions, FDI increases economic growth. Little is known about who gains from FDI within countries. Inequality in Latin America has remained consistently high, progress in poverty reduction has been slow in the last decade and an understanding of how FDI affects poverty and inequality is required to formulate appropriate policy responses for individual Latin American countries.

The main objective of the research was to understand the relationship between inward FDI and income inequality in Latin American countries. Does FDI lead to a narrowing of income inequality as would be expected on the basis of traditional trade models, or not, and do the effects differ by country?

A second objective was to examine the role of policy affecting FDI in shaping the relationship between FDI and income inequality in Latin America. Do different FDI policies result in different effects of FDI on income inequality? Can and should FDI policy be used to target income inequality?

The research follows on and compares with the ESCOR funded study “Foreign Direct Investment and Poverty” which was undertaken by Dirk Willem te Velde and Oliver Morrissey in the year to March 2002. They examined the effects of inward FDI using similar techniques in the case of a number of East Asian countries.
2. Methods

2.1 Methodologies

The main paper used two types of methodologies. We derived a relative wage curve derived from a CES production function with skill-specific technical progress and with skilled and unskilled labour as factors of production. The effects of inward FDI can enter through the technical progress function. We estimated a relative wage curve for a panel of Latin America countries at the national level, using panel data techniques. To estimate the impact of inward FDI on unskilled labour separately, we derived wage functions for skilled and unskilled labour and estimated them jointly.

We followed a supply/demand framework to examine the possible effects of policy. We reviewed key policies affecting FDI (FDI promotion policies, taxes for training, providing good quality and appropriate education, etc.), and discussed these with officials in Bolivia, Chile and at ECLAC. Then, using the framework, we analysed what effect these policies may have had on the relationship between FDI and income inequality in the countries in the sample, whether key policies have differed across countries, and whether this helps to explain results found in the regression analysis.

For countries where annual time series were available we estimated error correction forms for a panel of countries, ‘tested down’ for a dynamic structure and look for long-run relationships between FDI and relative wages or between FDI and wages of skilled and unskilled workers. Where sufficient and continuous observations over time were available, this framework allowed us to distinguish between long-run and short-run effects of FDI and apply the Pooled Mean Group Estimator imposing only long-run parameters while leaving dynamics country-specific. The use of IV estimators did not lead to very different results. Using different data sets we were able to use 3 to 4 observations during the 90s for 10 Latin American countries.

We examined FDI policies in Bolivia more closely based on a seminar organised in La Paz involving collaborations with the Catholic University of La Paz. We also organised a one-day conference at ODI with contributions of five presentations by academics, ODI staff, an ILO official and an ECLAC official to examine the impact of FDI on poverty and income inequality around the world, as well as possible policies that could help to improve the impact of FDI. Because it was argued that linkage creation and supplier development could help to improve the developmental and distributional impact of FDI, we analysed ways to promote linkages between TNCs and local firms in more detail and presented this at an ODU lunchtime seminar.

2.2 Methods

The specific methodology used in each of the studies is presented and discussed in the papers. We used a number of international databases and used national statistics. We collected data on a panel of Latin American countries. We focus on a recent time period, mid/late 80s – late 90s. Annual FDI data came from UNCTAD and the US Bureau of Economic Analysis. We also used annual economy-wide employment and unemployment data by occupation from the ILO Yearbook of Labour Statistics from the late 80s onwards and divided the occupations into skilled and unskilled (skilled: legislators, senior officials, managers, professionals, technicians, associate
professionals, armed forces and clerks; unskilled: other). The availability of occupation-based wage data limited the number of countries we can include in this study: wage and employment measures were constructed for Bolivia, Chile, Colombia and Costa Rica. For these countries we did not need to resort to data for the industrial sector as we had annual time series for a number of countries from national resources from ECLAC. We also constructed wage data by occupation on a detailed cross-country survey on occupational wages by the ILO (October inquiry). We also examined education-based measures of employment and wages. Finally, we analysed the education and occupation based measures on the basis of ECLAC and IDB data and used these data in regressions for 10 countries. Data issues are considered in more detail in the papers.

3. Findings

3.1 Foreign Direct Investment and Income Inequality in Latin America

The paper positioned Foreign Direct Investment (FDI) in the debate on income inequality in Latin America. It argued that:

- Income inequality is persistently and relatively high in almost all Latin American countries. Labour income inequality plays an important role in total income inequality. It is therefore instructive to examine developments in labour income inequality, both by occupation and education. We review different data sources. All support the conclusion that in most countries the relative position of skilled workers has improved over much of the late 1980s and early 1990s. In many, but not all, countries this has manifested itself in an increase in relative wages. Most countries have also experienced an increase in the relative employment of skilled workers (which should have caused a drop in relative wages)

- Many researchers have examined the causes of income inequality in Latin America. Income inequality can be determined by at least three factors: the distribution of factors of production and the demand and supply for those factors. Labour or human capital, i.e., the distribution of education and the returns to skill, are the factors of production that are driving income inequality.

- While FDI may have been good for development (e.g. positive correlation between FDI and GDP, or productivity, or wages) this masks the fact that different countries with different policies and economic factors tend to derive different benefits and costs of FDI. In addition, not all types of workers necessarily gain from FDI to the same extent. The reasons for this include: FDI induces skill-specific technological change; it can be associated with skill-specific wage bargaining; it may locate in skill-intensive sectors; and it provides more training to skilled than unskilled workers. A review of micro and macro evidence shows that, at a minimum, FDI is likely to perpetuate inequalities. This is in contrast to what traditional trade and FDI theories would predict. Nevertheless, because there are so many opposing effects, empirical research is required.

- When measured as FDI stock as a share of GDP, almost all countries experienced substantial growth in FDI over the past decade and a half (with the exception of
the last two years). However, growth rates and sector distribution vary markedly by country. New preliminary empirical evidence shows that FDI did not have an inequality-reducing effect in Latin America. There are possible exceptions, such as Colombia, but even here FDI may still have played a relatively minor role in reducing inequality. On the contrary, there are indications that in countries such as Bolivia and Chile FDI may have increased wage inequality. While this does not imply that FDI was or was not good for development and poverty reduction in these countries, it does imply that most of the gains of FDI have benefited skilled and educated workers. FDI tends to raise wages of both types of labour, although for Bolivia the results suggested that FDI lowered wages of less-skilled workers more than wages of skilled workers.

- Government and business policies affect the link between FDI and income inequality. A government may use education, training, infrastructure, trade and investment promotion policies to improve the developmental impact of FDI. Similarly, businesses can use pay, training, industrial relations and supplier development. There are areas in which both a business and development case can be made for improving the social impact of FDI, and hence where co-ordination is required to realise win-win situations. These include: training, health, supplier development, infrastructure and transparency, security and reputation.

The main conclusion of the paper was that while FDI may have been good for development, more can be done to improve its impact on income distribution and the poor in Latin America, either through appropriate government policies in the area of education, training and infrastructure (i.e. a general development policy), or through working directly with TNCs through incentives or partnerships. Determining which policies are most appropriate and relevant depends on country characteristics as well as FDI characteristics, and hence will require further discussion and in-depth studies.

3.2 Promoting TNC-SME linkages

The main paper on FDI and income inequality in Latin America argues that linkage creation and supplier development could help to improve the developmental and distributional impact of FDI. This motivated a closer analysis of how to promote linkages between TNCs and local firms.

The paper analysed the pros and cons of the establishment of a global linkage fund (GLF). It argues the following. The objective of the GLF would be to improve the social dimension of Foreign Direct Investment (FDI) by providing opportunities to sustain people’s livelihoods in developing countries, especially of poor people.

The reasoning behind the GLF is that it is expected
- To raise (leverage) FDI in developing countries. Cheap linkage possibilities should pull FDI into developing countries by increasing the private and social rate of return of such investments.
- To make FDI work for host-country development, in particular for the poorest, by stimulating SME performance through benefiting from reciprocal externalities through linkages with TNC affiliates.
The suggested **methods and instruments** are as follows

- Donors will support financially the creation of a GLF to promote linkages between TNCs and SMEs. Current bilateral funds addressing business linkages include a £18 million fund by UK DFID and a Euro 40 million fund by Germany GTZ (around £25 million).
- There should be clear criteria governing when private firms can draw on the fund. This can include, that intervention in linkage creation should achieve development objectives, that it provides public goods that address market failures and that it be demand led.
- In practice it may be difficult to score top marks on all criteria. Some flexibility in achieving all criteria (subject to minima) could be balanced with sufficient private sector interest. A steering committee would represent interests of civil society, business and developing country government.
- Activities would include supplier development through certification, general training, infrastructure development, provision of information, etc. These activities, which feature public goods aspects, are conducive to linkage creation but they are relatively costly for, and discriminate against, smaller firms; hence the focus on SMEs. Activities can be done by businesses or through linkage support organisations.
- It would address well established TNCs as well as new TNCs who may have relatively poor information about local sourcing opportunities and by financing part of finding and developing local supplies could help to attract FDI. There could also be rules that ensure that poorer developing countries have more “right” to draw on the fund (this needs to be defined but rules should be more flexible than inefficient, fixed time periods).

The following elements would, it is argued, enhance **political feasibility**

- Some developing countries have continued to resist implementing the requirements of the TRIMs agreement. The WTO Doha mandate acknowledged this by urging the positive consideration of possible requests for extension of implementing TRIMs. The availability of a business linkage fund would offer developing countries gains to offset whatever costs countries might expect from abolishing TRIMs. This would address “special development needs” and as such may help WTO negotiations. One could go one step further by conditioning the use of a fund to abolishing TRIMs.
- The Doha mandate urged that negotiations on investment “reflect in a balanced manner the interests of home and host countries.” While there are requirements for host-country governments, there have been no requirements for home country governments or TNCs. A business linkage fund could be made available helping predictability of aid flows: firms can use the fund for project that meet certain criteria.
- At a general level, governments around the world have repeatedly endorsed the Millennium Development Goals. Promoting business linkages would aim to help achieving those goals.

3.3 **FDI and development; the case of Bolivia**

Foreign direct investment (FDI) has become a hotly debated issue in Bolivia. FDI has flowed into the country, but progress in attracting FDI has coincided with controversy on the impacts of certain FDI projects. The purpose of this paper is to go beyond
individual projects by discussing the effect of FDI on development in Bolivia. It discussed the impact of FDI and policies that may improve the developmental impact of FDI on the basis of findings at a seminar organised by IISEC and ODI in La Paz in October 2002.

This note first discussed the size and structure of FDI flows into Bolivia in the Latin American context. It then evaluated the effects of FDI on economic growth and income distribution. The contribution of FDI to economic growth was analysed in the context of the effects of FDI on economic growth. The effects on income inequality was analysed through the effects of FDI on wage inequality and non-wage inequality.

The paper found that

- Most FDI has gone to the hydrocarbon and services sectors
- The privatisation process (called capitalisation in Bolivia) was the main factor behind the boom of FDI in the second half of the 90s
- The effects of FDI on growth over 1970-2000 are disappointing and only positively significant when interacted with export intensity. FDI, particularly by capitalised firms, raises domestic investment
- While various policies could help to improve the developmental impact of FDI, business can also help as demonstrated by the foundation supported by one TNC.

In order to attract FDI more beneficial to development in Bolivia, it would be necessary for the government to formulate a set of economic policies with the objective of creating favourable conditions for investment and improving the impact of FDI. This framework would need to consider the importance of human capital, the physical and communications infrastructure and an adequate institutional framework. Spillovers are more likely to occur if local firms have access to credit, technical assistance, human resources and information. Policies could also aim to attract export oriented FDI, where firms can more easily imitate technological and managerial innovations and learn to penetrate export markets.

Public policy may seek to solve the general problem of under-investment in good quality and appropriate human capital in order to get the full benefit of existing FDI and in order to attract more and better FDI. This would also improve the distributional effects of FDI. In addition, policy could be concerned with the general business environment in Bolivia, with the purpose of supporting the adaptation of new technologies, creating distribution networks and facilitating easier access to foreign markets.

4. Dissemination

The various users (academia, NGOs, policy makers in developing countries, officials in aid agencies and international organisations such as ILO, UNCTAD and OECD Development Centre) have been and will be targeted by different dissemination mechanisms. We arranged a seminar, a conference and participated in discussion elsewhere, wrote a policy briefing paper and used web-based dissemination mechanisms. We have also targeted the research community through presentations at conferences and through plans to publish in journals and books (much as we have done with the previous project, see additional list of publications). Specifics follow.
4.1 Substantial publications (attached to this report) included


We plan to submit an article to an academic journal based on the empirical findings in the main paper.

We also plan to publish an ODI publication based on the papers given at the ODI conference on 28 February 2003.

4.2 Presentations at conferences and seminars

- We organised a seminar at IISEC, Catholic University of La Paz on 29 October 2002. A programme and list of participants is attached. Papers and presentation available from http://www.iisec.ucb.edu.bo/english/projects.htm#FDI (and was covered in national press)


- Presentation for 50 LSE students on FDI and development in Latin America.

- Presented during seminar at ECLAC Chile October 2002, and received useful feedback.

4.3 Other means of dissemination

- Discussions with private sector representatives, officials and vice ministers in Bolivia and Chile (incl. ECLAC)

- Discussions with private sector representatives in Geneva and London (Shell, Unilever, WCSSD, etc.)

- Briefing Paper will be sent to users in Bolivia.

- Included a draft summary which is likely to be used by ID21 Insights in June/July.

- Informed on findings of our work during other meetings such as the ILO meeting on Social Dimension of Globalisation on 19-20 September 2002 and ILO/DFID meeting on 8 April 2003.
- Distributed TNC-SME linkages paper at annual Investment Commission meeting at UNCTAD Geneva, January 2003
“Foreign Direct Investment, Income Inequality and Poverty: Experiences and Policy Implications”

One-day conference. (Funded by UK DFID).
28 February 2003
ODI, London

**Provisional Programme**

10.00-10.30 Opening remarks (Simon Maxwell, director Overseas Development Institute. London, and Dirk Willem te Velde, Research Fellow, Overseas Development Institute)

10.30-12.15 **FDI in Latin America:** chair Sheila Page

“The Impact of TNC Strategies on Development in Latin America and the Caribbean” by Michael Mortimore (Chief, Unit on Investment and Corporate Strategies, United Nations Economic Commission for Latin America and the Caribbean, Santiago de Chile)

“Foreign direct investment and income inequality in Latin America: Experiences and policy implications” by Dirk Willem te Velde (ODI)

Discussion

12.15-13.15 Lunch

13.15-15.00 **FDI in Sub-Saharan Africa:** chair tba

“Foreign direct investment in Southern Africa: determinants, form and implications for development” by Carolyn Jenkins (Centre for the Studies of African Economies, University of Oxford.)

“Creating Wealth through FDI in Landlocked COMESA Countries: The Case of Zambia and Uganda.” by Watipaso Mkandawire (Regional Investment Agency Unit, COMESA, Lusaka)

Discussion

15.00-15.30 Tea

15.30-16.15 **FDI, Income and Employment:** chair Prof Rhys Jenkins, University of East Anglia)


16.15-16.45 Lessons learned and Close
Conference

Friday, 28 February 2003, 10.00am – 17.00 pm

Foreign Direct Investment, Income Inequality and Poverty: Experiences and Policy Implications.

Participants

Amazu Asouzu
Katherine Astill
Francesca Beausang-Hunter
Bill Taiwo
Freddy Bob-Jones
Peter Brannen
Indrajit Coomeraswamy
Robert Cord
Corrina Csaky
Malcolm Cutless
Chris Daley
Andrew Dey
Max Everest-Philips
Amalia Fawcett
David Fawkes
Bob Fitch
Lisa Gee
Danny Graymore
Matt Griffith
Stephanie Griffith-Jones
Nicholas Hacker
Natalie Halliwell
Alan Harding
Joy Haukozi
Christopher Hay de Vaux
Mark Hemetsberger
Mervyn Hinds
Kings College London
CAFOD
Law Lecturer, LSE
Independent Researcher
DFID
ILO London
Commonwealth Secretariat
Country Risk Services
Edinburgh Resource Centre
FCC Development Services Ltd
Elephant Enterprises
Department of Trade and Industry
DFID
Oxford University
WSP International Management Consulting
Enterplan Ltd
Engineers Against Poverty
Christian Aid
CAFOD
DFID
Oxford University
Standard Bank, London
Oxford University
Joy K Haukozi Consultancy
University of London
Commonwealth Business Council Insight
Global Trade Centre
Anita Hodgson
Martin Hogg
John Humphrey
Mohamud Hussein
Mikiko Imai
Rhys Jenkins
Charles Josob
Candycy Kelshall
Mrs Kinuthia
Verner Kristiansen
Constanza Lafuente
Ana Larcher
Paulo Lopes Lourenco
Peter Malcolm
Adam Matthews
Kate Meadows
Gabriela Monteiro
Ryotaro Oda
Alicia Ong
Gabriel Oosthuizen
David Orenstein
Suzanne Parkin
Bharti Patel
Rev. Carrie Pemberton
B Persaud
Martin Poulsen
John Pratt
Lila Rabinovich
Jonathon Ridley
John Roberts
Matthew Robinson
Camilla Roman
Jose Romano-Lopez
Olivier Rubin
Anesh Sankar
Jill Shankleman
B Shodeke
Fiona Simon
Julia Smith
Helen Stanley
Michael Stewart
Helen Sullivan
Andrew Sumner
Barbara Thomas
Clare Thomas
Fleur Tonies
Ram Venuprasad
Bruce Wise
Helen Yanacopulos
Fadli Zon

South African Business Association
Pura
Institute for Development Studies
LSE
UEA
Namibian High Commission
Trinidad and Tobago High Commission
Kenya High Commission
Danish Embassy
Oxford University
Biologika
Portuguese Embassy
CBI
UK Bushmeat Campaign
Natural Resources Institute
SOAS
Japan International Cooperation Agency
LSE
Acacia Initiative for Southern Africa
Oxford University
DFID
Former director, Low Pay Unit
Centre for International Studies
State Street Bank and Trust Co.
Development Finance Consultant
Marketing and Enterprise Consultant
University of Oxford
Enterplan Ltd
ODI
HM Treasury
University of Oxford
London Business School
Queen Elizabeth House, Oxford
South African High Commission
BOS International (UK)
Commonwealth Business Council Insight
Commonwealth Business Council Insight
Shell International
UEL
D&B
JBIC
Oxford University
Commonwealth Secretariat
Triple Line Consulting
Open University
LSE
**Foreign Direct Investment and Development**  
A joint ODI – IISEC workshop

**Venue:** Universidad Católica Boliviana, La Paz, Auditorium Principal, Bloque F.  
**Date:** 29 October 2002, 2:30 - 8:00 pm.

**Objective:**  
The objective of the workshop is to examine the impact of Foreign Direct Investment (FDI) on Development in Bolivia, and to understand what type of policies might improve its impact.

**Programme:**

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<tr>
<th>Time</th>
<th>Topic</th>
<th>Expositor</th>
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<tr>
<td>3:00 - 3:20</td>
<td>Inscription of participants</td>
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<tr>
<td>3:20 - 3:30</td>
<td>Welcome</td>
<td>Director of IISEC</td>
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<tr>
<td>3:30 - 4:00</td>
<td>The FDI project at the Overseas Development Institute in London + discussion</td>
<td>Dirk Willem te Velde, Overseas Development Institute</td>
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<td>4:00 - 4:30</td>
<td>Bolivia's attractiveness for FDI + discussion</td>
<td>Osvaldo Nina, Universidad Católica Boliviana</td>
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<td>4:30 - 5:00</td>
<td>Coffee break</td>
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<td>5:00 - 5:30</td>
<td>Lack of FDI in Industry + discussion</td>
<td>Gonzalo Vidaurre, Cámara Nacional de Industria</td>
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<td>5:30 - 6:00</td>
<td>Policies to improve the distributional and developmental impact of FDI + discussion</td>
<td>Jaime Villalobos, Ex-Minister of Development</td>
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<tr>
<td>6:00 - 6:30</td>
<td>Conclusions + discussion</td>
<td>Dirk Willem te Velde, Overseas Development Institute</td>
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<tr>
<td>6:30 - 7:00</td>
<td>Wine and snacks</td>
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The project is funded by the UK Department for International Development.

Further details available from:  
IISEC (Lykke Andersen, e-mail: landersen@ucb.edu.bo) or  
ODI (Dr Dirk Willem te Velde, e-mail: dw.tevelde@odi.org.uk).