Stark, Oded

Working Paper
On the Economics of Refugee Flows

ZEF Discussion Papers on Development Policy, No. 84

Provided in Cooperation with:
Zentrum für Entwicklungsforschung / Center for Development Research (ZEF), University of Bonn

Suggested Citation: Stark, Oded (2004) : On the Economics of Refugee Flows, ZEF Discussion Papers on Development Policy, No. 84, University of Bonn, Center for Development Research (ZEF), Bonn

This Version is available at:
http://hdl.handle.net/10419/21840

Terms of use:
Documents in EconStor may be saved and copied for your personal and scholarly purposes.
You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.
If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.
Oded Stark

Number 84

On the Economics of Refugee Flows

ZEF – Discussion Papers on Development Policy
Bonn, February 2004
The CENTER FOR DEVELOPMENT RESEARCH (ZEF) was established in 1995 as an international, interdisciplinary research institute at the University of Bonn. Research and teaching at ZEF aims to contribute to resolving political, economic and ecological development problems. ZEF closely cooperates with national and international partners in research and development organizations. For information, see: http://www.zef.de.

ZEF – DISCUSSION PAPERS ON DEVELOPMENT POLICY are intended to stimulate discussion among researchers, practitioners and policy makers on current and emerging development issues. Each paper has been exposed to an internal discussion within the Center for Development Research (ZEF) and an external review. The papers mostly reflect work in progress.


ISSN: 1436-9931

Published by:
Zentrum für Entwicklungsforschung (ZEF)
Center for Development Research
Walter-Flex-Strasse 3
D – 53113 Bonn
Germany
Phone: +49-228-73-1861
Fax: +49-228-73-1869
E-Mail: zef@uni-bonn.de
http://www.zef.de

The author:
Oded Stark, University of Bonn; University of Vienna; and ESCE Economic and Social Research Center, Cologne and Eisenstadt.
(contact: ostark@uni-bonn.de)
Contents

Acknowledgements

Abstract  1
Kurzfassung  1

1 Introduction  2

2 Analysis  3

3 Complementary Reflections  6

References  7

Notes  8
Acknowledgements

Partial financial support from the Humboldt Foundation and the Sohmen Foundation is gratefully acknowledged.
Abstract

Although the phenomenon of refugee flows is not devoid of economic connotations, it has so far been investigated primarily by political scientists and sociologists. The analytical tools of economic inquiry have not yet been applied to this subject, although it stands to reason that such a study will contribute to our understanding of why refugee flows occur and will guide the policy response. This note illustrates how economic analysis can be brought to bear on three key aspects of refugee flows: fear, poverty, and group movement.

Kurzfassung

1 Introduction

The phenomenon of refugee flows has eluded economic analysis for a long time. Yet both the causes and the consequences of refugee flows lend themselves to economic analysis. This note takes a step in this direction.

The United Nations High Commissioner for Refugees (UNHCR) estimates that by the end of 2000 there were 11.7 million refugees in the world. Since its founding in 1951 (to assist about one million Europeans who were still homeless five years after the end of World War II) the agency reports that “the number of uprooted people climbed ... to eight million by the start of the 1980s and then to a peak of more than 27 million in 1995.” In many particular settings the numbers involved are very large. For example, from 1979 onwards, Afghanistan produced more than six million refugees, and in 1994 more than one million refugees crossed into Zaire in a mere few days (Wilkinson, 2000). It is inconceivable that a phenomenon that is neither trivial nor random is devoid of economic underpinnings or is not deserving of economic analysis.

Refugee flows differ from standard migration (henceforth migration) in two important respects: the flow of refugees is typically a group movement – a large number of people move simultaneously – as opposed to a sequenced movement of individuals; and refugee flows are overwhelmingly from distinctly poor economies.

Refugee flows typically arise from the capriciousness of nature and the ferocious hostility of fellow human beings. A deleterious event that impacts harshly on a few (say casualties in a civil strife) triggers a movement by many refugees. The key terms used to account for refugee flows are impoverishment and fear. In a way, this note sketches heuristic economic equivalents of these terms.

A breakdown of newly arrived refugees by country of origin in 2000 (UNHCR 2001, Table 7) reveals that five countries produced more than 50,000 refugees each, and nine countries produced more than 10,000 refugees each. All nine countries are very poor (eight are in Africa, one – Afghanistan – is in Asia). What is even more tantalizing is that the list of countries producing more than 10,000 refugees each in 2000 is not all that different from the corresponding list four years earlier: Burundi, Rwanda, The Democratic Republic of the Congo, Afghanistan, Sudan, and Somalia feature in both the 1996 list and in the 2000 list. (The calculations for 1996 are based on UNHCR 1997, Table 3). It is as if a substantial refugees flow at one point in time gives rise to a substantial subsequent flow.
2 Analysis

Typically, in poor economies where markets are not well developed production takes place in smaller units (villages) than in well-to-do economies. Production is also subject to strong interdependencies or externalities within the production units. The intersection of a small size of the economic unit within which output is generated and spillovers implies that a decline in the productive attribute of one individual affects adversely the productivity of all other individuals. This correlation raises the likelihood of refugee flows. To see how, for a given degree of externalities, an adverse shock affecting the human capital of one individual will have a small effect on other individuals’ productivity in a large economy but a profound effect on other individuals’ productivity in a small economy, consider an economy in which there are \( n \) workers and the single production input is labor. Worker \( i \)'s human capital (the sum total of his efficiency units of labor) is \( \theta_i \), and the per-worker concave production function is

\[
f(\theta_i) = \alpha \ln(\theta_i + 1) + \eta \ln(\bar{\theta} + 1) \quad \text{for } \theta_i > 0
\]

where \( \alpha > 0 \) and \( \eta > 0 \) are constants, and \( \eta \) represents the externalities accruing from the average level of human capital \( \bar{\theta} = \frac{\sum \theta_i}{n} \). Assuming (for now) that all the \( \theta_i \)'s have already been determined, the effect of a decline of the human capital of worker \( i \) (whose human capital is \( \theta_i \)) on the output of worker \( j \) is

\[
\frac{\partial f(\theta_i)}{\partial \theta_i} = \eta \frac{1}{\frac{n}{\sum \theta_i} + 1} = \frac{\eta}{n(\bar{\theta} + 1)} > 0;
\]

the effect of an adverse shock to \( i \)'s human capital on \( j \)'s productivity is negative and is larger the smaller is \( n \). Thus, in a large economy, the outcome of \( \Delta \theta_i < 0 \) is more likely to be an individualistic migration as it will possibly prompt only \( i \) to leave, whereas in a small economy the outcome is more likely to be a refugee flow as other workers, along with \( i \), will be prompted to leave.

An economy whose workers are vulnerable to the prospect of becoming refugees will be poorer than an economy not facing such a prospect. To see how this happens relax the assumption that the \( \theta_i \) are given. Let \( \theta_i = \theta \forall i \). Workers choose how much human capital to
form taking into consideration the (gross) returns to human capital, \( f(\theta) \), and the costs of forming human capital. Let these costs be \( c(\theta) = k\theta \), where \( 0 < k < \alpha \) is a constant. To find out first how much human capital is formed by a worker if there is no prospect that the worker will end up as a refugee, we write

\[
W(\theta) = \alpha \ln(\theta + 1) + \eta \ln(\bar{\theta} + 1) - k\theta \quad \text{for} \quad \theta > 0.
\]

Since

\[
\frac{\partial W(\theta)}{\partial \theta} = \frac{\alpha}{\theta + 1} - k,
\]

the worker’s chosen level of human capital is

\[
\theta^* = \left. \frac{\alpha}{k} - 1 > 0 \right|.
\]

Suppose, alternatively, that workers face the prospect, \( p \), of becoming refugees – for example because such an event pervaded a neighboring economy in the past and the workers consider their own economy vulnerable to the same exogenous forces. As a refugee, the private returns to a worker’s human capital – the reward to a worker’s skill and know-how – are lowered, say from \( \alpha \) to \( \beta \), where \( k < \beta < \alpha \) is a constant. Assuming that workers depart as a group, the production externalities will be retained. (This argument views externalities as a community asset rather than as a geographical attribute; the externalities are specific to a group, not to a locale.) A worker’s expected net earnings will therefore be

\[
\tilde{W}(\theta) = p[\beta \ln(\theta + 1) + \eta \ln(\bar{\theta} + 1)] + (1 - p)[\alpha \ln(\theta + 1) + \eta \ln(\bar{\theta} + 1)] - k\theta.
\]

Since

\[
\frac{\partial \tilde{W}(\theta)}{\partial \theta} = \frac{p(\beta - \alpha) + \alpha}{\theta + 1} - k,
\]

the worker’s chosen level of human capital is

\[
\tilde{\theta}^* = \left. \frac{p(\beta - \alpha) + \alpha}{k} - 1 > 0 \right|,
\]

assuming that \( 0 < \frac{k - \alpha}{\beta - \alpha} < p < 1 \). Since \( p > 0 \) and \( \beta < \alpha \), \( \tilde{\theta}^* < \theta^* \); the discouraging effect of the refugee eventuality lowers the level of human capital that workers choose to form.
It is further possible to show that not only does poverty raise the likelihood of a refugee flow, as argued in the beginning of this section, but also the prospect of a refugee status brings about poverty. Let the level of poverty (social welfare) be measured by net earnings per worker, that is, the output per worker less the cost of acquiring the human capital used to generate the output. If workers do not expect to end up as refugees, their net earnings are given by

\[ W(\theta) = \alpha \ln \frac{\alpha}{k} + \eta \ln \frac{\alpha}{k} - \alpha + k. \]

By substituting \( x = \frac{\alpha}{k} > 1 \) into the first and third terms of the right-hand side of \( W(\theta) \) we get

\[ W(\theta) = \eta \ln \frac{\alpha}{k} + k \ln x - (k - x). \]

\[ = \eta \ln \frac{\alpha}{k} + k[x \ln x - (x - 1)] > 0 \]

since for any \( x > 1, x \ln x > x - 1. \)

When the refugee probability looms, workers’ net earnings are

\[ W(\tilde{\theta}) = p(\beta + \eta) \ln \frac{p(\beta - \alpha) + \alpha}{k} + (1 - p)(\alpha + \eta) \ln \frac{p(\beta - \alpha) + \alpha}{k} - [p(\beta - \alpha) + \alpha] + k. \]

These net earnings are highest when \( p \) is at its lower bound. Therefore, if welfare evaluated at this bound is lower than \( W(\theta) \) then welfare evaluated at any other \( p \) will a fortiorily be lower than \( W(\theta) \). Since

\[ \lim_{p \rightarrow \frac{k - \alpha}{p - \alpha}} W(\tilde{\theta}) = 0, \]

it follows that \( W(\tilde{\theta}) < W(\theta) \); welfare is affected adversely by the prospect of ending up as a refugee even if no worker actually does become a refugee.
3 Complementary Reflections

There can, of course, be other reasons why a refugee flow in a given period invites, rather than dampens, a refugee flow in a subsequent period. Once a relief response consisting of support structures, facilities, and amenities (such as camps, schools, clinics, wells, and other infrastructure – sometimes referred to by UNHCR as QIPs – quick impact projects) that caters for the needs and welfare of refugees is in place, the refugee route becomes more inviting. It is a moral hazard of sorts. For example, the construction of camps and associated facilities in Iran and Pakistan for refugees who fled Afghanistan in the wake of the 1979 Soviet invasion may have contributed to the considerable follow-up refugee flows taking place in the wake of the dramatic rise of the Taliban in 1994-96. A response of this type is not without a historical precedent. There is interesting evidence that in Europe, from the Middle Ages until the seventeenth century, changes in the manner in which prisoners of war were treated (including the ease with which they were ransomed) affected the incidence - and apparently the incentive - of being taken prisoner (Frey and Buhofer, 1988). For example, two religious orders founded at the turn of the twelfth century were prominent until the French Revolution in the ransom and release of prisoners of war. These orders were reported to have arranged for the ransom and release of about one million prisoners. Such activities appear to have contributed positively to the likelihood of falling prisoner, just as the increased brutality of the Revolutionary and Napoleonic Wars and the lower likelihood of exchanges of prisoners led to a decline in the likelihood of falling prisoner. To some extent, a soldier may choose to seek refuge in a prison camp and a civilian may choose to seek relief in a refugee camp.

A complete analysis of the dynamics of refugee flows is beyond the scope of this note. But it is tempting to speculate on the nature of this dynamics, especially as it may involve interactions between refugee flows and migration. A significant explanatory variable of the destination choice of migrants is the presence and size of a stock of past migrants. The stock may well consist of refugees who were integrated economically in the receiving country. Thus, if B had been the destination of refugees from A at time $t$, this event could account for the migration from A to B of workers at points in time subsequent to $t$. To the extent that labor migration alleviates conditions that otherwise could evolve to induce a flow of refugees, labor migration could preempt a subsequent refugee movement. For example, considerable evidence suggests that labor migration is shadowed by remittance flows in a reverse direction, and that these remittances mitigate the impact of droughts, alleviate poverty, and facilitate technological change in agricultural production.\(^3\) Events may so unfold that return may become an appealing option for refugees. It will be helpful to analyze return flows, to explain why some refugees return while others do not, and to characterize the returnees.
References


Notes

1. Vivid accounts of the strong production interdependencies in villages in developing countries are provided by Myrdall (1968, especially chapter 26).

2. Showing that for any $x > 1$, $x \ln x > x - 1$ is equivalent to showing that for any $x > 1$, $\ln \left( e \left( \frac{x}{e} \right)^x \right) > 0$. Since when $x = 1$, $\ln \left( e \left( \frac{x}{e} \right)^x \right) = 0$, and since $\frac{\partial \ln \left( e \left( \frac{x}{e} \right)^x \right)}{\partial x} = 1 > 0$, it follows that for any $x > 1$, $\ln \left( e \left( \frac{x}{e} \right)^x \right)$ must be strictly positive.

3. The econometric implication of this argument is that in estimating the incidence of refugee flows for a sample of economies, previous migration (the economy’s prevailing “migration stock”) should appear as a right-hand side explanatory variable with the associated coefficient having a negative sign.
The following papers have been published so far:

<table>
<thead>
<tr>
<th>No.</th>
<th>Authors</th>
<th>Title</th>
<th>Zentrum für Entwicklungsforschung (ZEF), Bonn, Date, Pages</th>
</tr>
</thead>
<tbody>
<tr>
<td>9</td>
<td>Johannes Jütting</td>
<td>Strengthening Social Security Systems in Rural Areas of Developing Countries</td>
<td>June 1999, pp. 44.</td>
</tr>
</tbody>
</table>
| No. 12 | John Msuya | Nutrition Improvement Projects in Tanzania: Appropriate Choice of Institutions Matters  
Zentrum für Entwicklungsforschung (ZEF), Bonn,  
August 1999, pp. 36. |
| --- | --- | --- |
| No. 13 | Liu Junhai | Legal Reforms in China  
Zentrum für Entwicklungsforschung (ZEF), Bonn,  
August 1999, pp. 90. |
| No. 14 | Lukas Menkhoff | Bad Banking in Thailand? An Empirical Analysis of Macro Indicators  
Zentrum für Entwicklungsforschung (ZEF), Bonn,  
August 1999, pp. 38. |
| No. 15 | Kaushalesh Lal | Information Technology and Exports: A Case Study of Indian Garments Manufacturing Enterprises  
Zentrum für Entwicklungsforschung (ZEF), Bonn,  
| No. 16 | Detlef Virchow | Spending on Conservation of Plant Genetic Resources for Food and Agriculture: How much and how efficient?  
Zentrum für Entwicklungsforschung (ZEF), Bonn,  
September 1999, pp. 37. |
| No. 17 | Arnulf Heuermann | Die Bedeutung von Telekommunikationsdiensten für wirtschaftliches Wachstum  
Zentrum für Entwicklungsforschung (ZEF), Bonn,  
September 1999, pp. 33. |
| No. 18 | Ulrike Grote, Arnab Basu, Nancy Chau | The International Debate and Economic Consequences of Eco-Labeling  
Zentrum für Entwicklungsforschung (ZEF), Bonn,  
September 1999, pp. 37. |
| No. 19 | Manfred Zeller | Towards Enhancing the Role of Microfinance for Safety Nets of the Poor  
Zentrum für Entwicklungsforschung (ZEF), Bonn,  
| No. 20 | Ajay Mahal, Vivek Srivastava, Deepak Sanan | Decentralization and Public Sector Delivery of Health and Education Services: The Indian Experience  
Zentrum für Entwicklungsforschung (ZEF), Bonn,  
January 2000, pp. 77. |
Zentrum für Entwicklungsforschung (ZEF), Bonn,  
March 2000, pp. 29. |
| No. 22 | Susanna Wolf, Dominik Spoden | Allocation of EU Aid towards ACP-Countries  
Zentrum für Entwicklungsforschung (ZEF), Bonn,  
March 2000, pp. 59. |
<table>
<thead>
<tr>
<th>No.</th>
<th>Authors</th>
<th>Title</th>
<th>Zentrum für Entwicklungsforschung (ZEF), Bonn,</th>
<th>Date</th>
<th>Pages</th>
</tr>
</thead>
<tbody>
<tr>
<td>26</td>
<td>Doris Wiesmann, Joachim von Braun, Torsten Feldbrügge</td>
<td>An International Nutrition Index – Successes and Failures in Addressing Hunger and Malnutrition</td>
<td>ZEF, Bonn,</td>
<td>April 2000</td>
<td>56</td>
</tr>
<tr>
<td>27</td>
<td>Maximo Torero</td>
<td>The Access and Welfare Impacts of Telecommunications Technology in Peru</td>
<td>ZEF, Bonn,</td>
<td>June 2000</td>
<td>30</td>
</tr>
<tr>
<td>28</td>
<td>Thomas Hartmann-Wendels, Lukas Menkhoff</td>
<td>Could Tighter Prudential Regulation Have Saved Thailand’s Banks?</td>
<td>ZEF, Bonn,</td>
<td>July 2000</td>
<td>40</td>
</tr>
<tr>
<td>29</td>
<td>Mahendra Dev</td>
<td>Economic Liberalisation and Employment in South Asia</td>
<td>ZEF, Bonn,</td>
<td>August 2000</td>
<td>82</td>
</tr>
<tr>
<td>30</td>
<td>Noha El-Mikawy, Amr Hashem, Maye Kassem, Ali El-Sawi, Abdel Hafez El-Sawy, Mohamed Showman</td>
<td>Institutional Reform of Economic Legislation in Egypt</td>
<td>ZEF, Bonn,</td>
<td>August 2000</td>
<td>72</td>
</tr>
<tr>
<td>31</td>
<td>Kakoli Roy, Susanne Ziemek</td>
<td>On the Economics of Volunteering</td>
<td>ZEF, Bonn,</td>
<td>August 2000</td>
<td>47</td>
</tr>
<tr>
<td>32</td>
<td>Assefa Admassie</td>
<td>The Incidence of Child Labour in Africa with Empirical Evidence from Rural Ethiopia</td>
<td>ZEF, Bonn,</td>
<td>October 2000</td>
<td>61</td>
</tr>
<tr>
<td>33</td>
<td>Jagdish C. Katyal, Paul L.G. Vlek</td>
<td>Desertification - Concept, Causes and Amelioration</td>
<td>ZEF, Bonn,</td>
<td>October 2000</td>
<td>65</td>
</tr>
<tr>
<td>No.</td>
<td>Title</td>
<td>Authors</td>
<td>Abstract</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-----</td>
<td>----------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------</td>
<td>--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>34</td>
<td>On a Variation in the Economic Performance of Migrants by their Home Country’s Wage</td>
<td>Oded Stark</td>
<td>Zentrum für Entwicklungsforschung (ZEF), Bonn, October 2000, pp. 10.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>35</td>
<td>Growth, Poverty and Asset Allocation: The Role of the State</td>
<td>Ramón Lopéz</td>
<td>Zentrum für Entwicklungsforschung (ZEF), Bonn, March 2001, pp. 35.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>36</td>
<td>Environmental Pollution and Policies in China’s Township and Village Industrial Enterprises</td>
<td>Kazuki Taketoshi</td>
<td>Zentrum für Entwicklungsforschung (ZEF), Bonn, March 2001, pp. 37.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>40</td>
<td>Environmental Kuznets Curve, Biodiversity and Sustainability</td>
<td>Renate Schubert, Simon Dietz</td>
<td>Zentrum für Entwicklungsforschung (ZEF), Bonn, October 2001, pp. 30.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>41</td>
<td>Displacement due to Violence in Colombia: Determinants and Consequences at the Household Level</td>
<td>Stefanie Kirchhoff, Ana María Ibañez</td>
<td>Zentrum für Entwicklungsforschung (ZEF), Bonn, October 2001, pp. 45.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>44</td>
<td>Allocation of Children’s Time Endowment between Schooling and Work in Rural Ethiopia</td>
<td>Assefa Admassie</td>
<td>Zentrum für Entwicklungsforschung (ZEF), Bonn, February 2002, pp. 75.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No.</td>
<td>Authors</td>
<td>Title</td>
<td>Publisher</td>
<td>Year</td>
<td>Pages</td>
</tr>
<tr>
<td>-------</td>
<td>----------------------------------</td>
<td>----------------------------------------------------------------------</td>
<td>--------------------------------</td>
<td>------</td>
<td>-------</td>
</tr>
<tr>
<td>45</td>
<td>Andreas Wimmer, Conrad Schetter</td>
<td>Staatsbildung zuerst. Empfehlungen zum Wiederaufbau und zur Befriedigung Afghanistan. (German Version)</td>
<td>Zentrum für Entwicklungsforschung (ZEF), Bonn</td>
<td>2002</td>
<td>27</td>
</tr>
<tr>
<td>46</td>
<td>Torsten Feldbrügge, Joachim von Braun</td>
<td>Is the World Becoming A More Risky Place? - Trends in Disasters and Vulnerability to Them –</td>
<td>Zentrum für Entwicklungsforschung (ZEF), Bonn</td>
<td>2002</td>
<td>42</td>
</tr>
<tr>
<td>47</td>
<td>Joachim von Braun, Peter Wobst, Ulrike Grote</td>
<td>“Development Box” and Special and Differential Treatment for Food Security of Developing Countries: Potentials, Limitations and Implementation Issues</td>
<td>Zentrum für Entwicklungsforschung (ZEF), Bonn</td>
<td>2002</td>
<td>28</td>
</tr>
<tr>
<td>49</td>
<td>L. Adele Jinadu</td>
<td>Ethnic Conflict &amp; Federalism in Nigeria</td>
<td>Zentrum für Entwicklungsforschung (ZEF), Bonn</td>
<td>2002</td>
<td>45</td>
</tr>
<tr>
<td>50</td>
<td>Oded Stark, Yong Wang</td>
<td>Overlapping</td>
<td>Zentrum für Entwicklungsforschung (ZEF), Bonn</td>
<td>2002</td>
<td>17</td>
</tr>
<tr>
<td>51</td>
<td>Roukayatou Zimmermann, Matin Qaim</td>
<td>Projecting the Benefits of Golden Rice in the Philippines</td>
<td>Zentrum für Entwicklungsforschung (ZEF), Bonn</td>
<td>2002</td>
<td>33</td>
</tr>
<tr>
<td>52</td>
<td>Gautam Hazarika, Arjun S. Bedi</td>
<td>Schooling Costs and Child Labour in Rural Pakistan</td>
<td>Zentrum für Entwicklungsforschung (ZEF), Bonn</td>
<td>2002</td>
<td>34</td>
</tr>
<tr>
<td>53</td>
<td>Margit Bussmann, Indra de Soysa, John R. Oneal</td>
<td>The Effect of Foreign Investment on Economic Development and Income Inequality</td>
<td>Zentrum für Entwicklungsforschung (ZEF), Bonn</td>
<td>2002</td>
<td>35</td>
</tr>
<tr>
<td>54</td>
<td>Maximo Torero, Shyamal K. Chowdhury, Virgilio Galdo</td>
<td>Willingness to Pay for the Rural Telephone Service in Bangladesh and Peru</td>
<td>Zentrum für Entwicklungsforschung (ZEF), Bonn</td>
<td>2002</td>
<td>39</td>
</tr>
<tr>
<td>55</td>
<td>Hans-Dieter Evers, Thomas Menkhoff</td>
<td>Selling Expert Knowledge: The Role of Consultants in Singapore’s New Economy</td>
<td>Zentrum für Entwicklungsforschung (ZEF), Bonn</td>
<td>2002</td>
<td>29</td>
</tr>
</tbody>
</table>
| No. 56 | Qiuxia Zhu  
Stefanie Elbern | Economic Institutional Evolution and Further Needs for Adjustments: Township Village Enterprises in China  
Zentrum für Entwicklungsforschung (ZEF), Bonn, November 2002, pp. 41 |
| No. 57 | Ana Devic | Prospects of Multicultural Regionalism As a Democratic Barrier Against Ethnonationalism: The Case of Vojvodina, Serbia’s “Multiethnic Haven”  
Zentrum für Entwicklungsforschung (ZEF), Bonn, December 2002, pp. 29 |
| No. 58 | Heidi Wittmer  
Thomas Berger | Clean Development Mechanism: Neue Potenziale für regenerative Energien? Möglichkeiten und Grenzen einer verstärkten Nutzung von Bioenergieträgern in Entwicklungsländern  
Zentrum für Entwicklungsforschung (ZEF), Bonn, December 2002, pp. 81 |
| No. 59 | Oded Stark | Cooperation and Wealth  
Zentrum für Entwicklungsforschung (ZEF), Bonn, January 2003, pp. 13 |
| No. 60 | Rick Auty | Towards a Resource-Driven Model of Governance: Application to Lower-Income Transition Economies  
Zentrum für Entwicklungsforschung (ZEF), Bonn, February 2003, pp. 24 |
| No. 61 | Andreas Wimmer  
Indra de Soysa  
Christian Wagner | Political Science Tools for Assessing Feasibility and Sustainability of Reforms  
Zentrum für Entwicklungsforschung (ZEF), Bonn, February 2003, pp. 34 |
| No. 62 | Peter Wehrheim  
Doris Wiesmann | Food Security in Transition Countries: Conceptual Issues and Cross-Country Analyses  
Zentrum für Entwicklungsforschung (ZEF), Bonn, February 2003, pp. 45 |
| No. 63 | Rajeev Ahuja  
Johannes Jütting | Design of Incentives in Community Based Health Insurance Schemes  
Zentrum für Entwicklungsforschung (ZEF), Bonn, March 2003, pp. 27 |
| No. 64 | Sudip Mitra  
Reiner Wassmann  
Paul L.G. Vlek | Global Inventory of Wetlands and their Role in the Carbon Cycle  
Zentrum für Entwicklungsforschung (ZEF), Bonn, March 2003, pp. 44 |
| No. 65 | Simon Reich | Power, Institutions and Moral Entrepreneurs  
Zentrum für Entwicklungsforschung (ZEF), Bonn, March 2003, pp. 46 |
| No. 66 | Lukas Menkhoff  
Chodechai Suwanaporn | The Rationale of Bank Lending in Pre-Crisis Thailand  
Zentrum für Entwicklungsforschung (ZEF), Bonn, April 2003, pp. 37 |
<table>
<thead>
<tr>
<th>No.</th>
<th>Author(s)</th>
<th>Title</th>
<th>Institution</th>
<th>Date</th>
<th>Pages</th>
</tr>
</thead>
<tbody>
<tr>
<td>68</td>
<td>Arnab K. Basu, Nancy H. Chau, Ulrike Grote</td>
<td>On Export Rivalry and the Greening of Agriculture - The Role of Eco-labels</td>
<td>Zentrum für Entwicklungsforschung (ZEF), Bonn</td>
<td>April 2003</td>
<td>38</td>
</tr>
<tr>
<td>69</td>
<td>Gerd R. Rücker, Soojin Park, Henry Ssali, John Pender</td>
<td>Strategic Targeting of Development Policies to a Complex Region: A GIS-Based Stratification Applied to Uganda</td>
<td>Zentrum für Entwicklungsforschung (ZEF), Bonn</td>
<td>May 2003</td>
<td>41</td>
</tr>
<tr>
<td>70</td>
<td>Susanna Wolf</td>
<td>Private Sector Development and Competitiveness in Ghana</td>
<td>Zentrum für Entwicklungsforschung (ZEF), Bonn</td>
<td>May 2003</td>
<td>29</td>
</tr>
<tr>
<td>71</td>
<td>Oded Stark</td>
<td>Rethinking the Brain Drain</td>
<td>Zentrum für Entwicklungsforschung (ZEF), Bonn</td>
<td>June 2003</td>
<td>17</td>
</tr>
<tr>
<td>72</td>
<td>Andreas Wimmer</td>
<td>Democracy and Ethno-Religious Conflict in Iraq</td>
<td>Zentrum für Entwicklungsforschung (ZEF), Bonn</td>
<td>June 2003</td>
<td>17</td>
</tr>
<tr>
<td>73</td>
<td>Oded Stark</td>
<td>Tales of Migration without Wage Differentials: Individual, Family, and Community Contexts</td>
<td>Zentrum für Entwicklungsforschung (ZEF), Bonn</td>
<td>September 2003</td>
<td>15</td>
</tr>
<tr>
<td>74</td>
<td>Holger Seebens, Peter Wobst</td>
<td>The Impact of Increased School Enrollment on Economic Growth in Tanzania</td>
<td>Zentrum für Entwicklungsforschung (ZEF), Bonn</td>
<td>October 2003</td>
<td>25</td>
</tr>
<tr>
<td>75</td>
<td>Benedikt Korf</td>
<td>Ethnicized Entitlements? Property Rights and Civil War in Sri Lanka</td>
<td>Zentrum für Entwicklungsforschung (ZEF), Bonn</td>
<td>November 2003</td>
<td>26</td>
</tr>
<tr>
<td>76</td>
<td>Wolfgang Werner</td>
<td>Toasted Forests – Evergreen Rain Forests of Tropical Asia under Drought Stress</td>
<td>Zentrum für Entwicklungsforschung (ZEF), Bonn</td>
<td>December 2003</td>
<td>46</td>
</tr>
<tr>
<td>77</td>
<td>Appukuttannair Damodaran, Stefanie Engel</td>
<td>Joint Forest Management in India: Assessment of Performance and Evaluation of Impacts</td>
<td>Zentrum für Entwicklungsforschung (ZEF), Bonn</td>
<td>October 2003</td>
<td>44</td>
</tr>
</tbody>
</table>