The international mobility of talented individuals is a key part of globalization. In the quest to promote innovation and entrepreneurship, many governments have sought to attract skilled migrants from abroad, inciting both a global competition for talent and concerns about the displacement of domestic workers. This important new work investigates why skilled individuals migrate and how they shape innovation around the world. Using patent data from the World Intellectual Property Organization (WIPO), it charts patterns of high-skilled migration worldwide. In addition, contributions by leading migration scholars review the latest research insights, discuss new approaches to studying high-skilled migration, and present fresh evidence on the causes and consequences of greater talent mobility. This book will prove invaluable to policymakers seeking to understand how migration policy choices affect innovation outcomes as well as academic researchers interested in the migration-innovation nexus.

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Intellectual property (IP) is at the heart of modern economic life. In many countries, investment in intangible assets is growing faster than investment in tangible assets. Policy makers – whether in rich or poor economies – seek to promote an IP framework that is conducive to innovation and economic growth.

The series Intellectual Property, Innovation, and Economic Development intends to inform such policy initiatives through rigorous scholarship. Each book in the series examines a major aspect of the interface between IP, innovation, and economic development. Economic analysis is complemented by contributions from other academic disciplines to present the latest scholarship and consider its real-world implications. The series builds on studies by the World Intellectual Property Organization, reflecting the research interests of the international policymaking community.

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THE INTERNATIONAL MOBILITY OF TALENT AND INNOVATION

New Evidence and Policy Implications

Edited by

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CONTENTS

List of Figures, Tables, and Boxes  page vii
List of Contributors xi
Preface and Acknowledgments xv

1 Introduction: The International Mobility of Talent and Innovation – New Evidence and Policy Implications 1
CARSTEN FINK AND ERNEST MIGUELEZ

PART I  The International Mobility of Inventors: Data and Stylized Facts

2 International Mobility of Knowledge Workers and High-Skilled Migration 27
ÇAĞLAR ÖZDEN AND CHRISTOPHER PARSONS

3 Inventor Data for Research on Migration and Innovation: The Ethnic-Inv Pilot Database 73
 STEFANO BRESCHI, FRANCESCO LISSONI, AND GIANLUCA TARASCONI

4 Measuring the International Mobility of Inventors: A New Database 114
ERNEST MIGUELEZ AND CARSTEN FINK

5 Determinants of the International Mobility of Knowledge Workers 162
CARSTEN FINK, ERNEST MIGUELEZ, AND JULIO RAFFO
PART II Migration, Intellectual Property, Diasporas, Knowledge Flows, and Innovation

6 US High-Skilled Immigration, Innovation, and Entrepreneurship: Empirical Approaches and Evidence 193
WILLIAM R. KERR

7 Diaspora Networks, Knowledge Flows, and Brain Drain 222
AJAY K. AGRAWAL

8 Intellectual Property Protection and the Brain Drain 243
ALIREZA NAGHAVI

9 Brain Drain, Intellectual Property Rights, and Innovation in Africa 266
FRANÇOIS PAZISNEWENDE KABORÉ

Index 294
FIGURES, TABLES, AND BOXES

Figures

2.1 Cross-tabulation of log wages and log education level by occupation, United States 2000 page 32

2.2 Educational distribution within occupational categories, United States 2000 33

2.3 Wage distribution within occupational categories for those with and without a college degree, United States 2000 35

2.4 Stock of high-skilled migrants, defined by education and occupation, between OECD and non-OECD countries, 2000 39

2.5 Stock of high-skilled migrants: IT, engineering, and science occupations between OECD and non-OECD countries, 2000 45

2.6 High-skilled net emigration rates by territory, 2000 64

3.1 From inventor data to the Ethnic-Inv Database 88

3.2 Number of returnee inventors per year, 1985–2007, selected countries (balanced disambiguation algorithm) 105

4.1 Coverage of nationality and residence information in PCT patents 123

4.2 Share of immigrant inventors, 1985–2010 127

4.3 Share of immigrant inventors, 1990–2010 128


4.5 Net migration position, 2001–10 133

4.6 Brain-drain rates, 2001–10 134

4.7 Inventor immigration rates over time by field of technology: three-year moving averages 140

4.8 Inventor immigration rates, selected fields and countries, 2006–10 141

4A.1 Coverage of nationality and residence information, selected countries 154
LIST OF FIGURES, TABLES, AND BOXES

9.1 Tertiary education level of African emigrants versus those who stay in African countries 269
9.2 Top providers of African emigrants to OECD countries (as a percentage of the total sample) 270
9.3 Percentage of tertiary-educated emigrants from African countries (selected countries) 270
9.4 Skill composition of African immigrants in selected OECD countries (percentage of skilled African immigrants in receiving countries) 271
9.5 Percentage of tertiary-educated emigrants from African countries (selected countries) 270
9.6 Gender distribution among African migrants in OECD countries 272
9.7 Duration of stay of African migrants in OECD countries, 2005–6 273
9.8 Share of African skilled migrants with tertiary education staying for more than twenty years 273
9.9 Employment status of skilled African migrants in OECD countries, 2005–6 274
9.10 Percentage of African skilled migrants with high-skilled jobs, by selected countries of destination 274
9.11 Patenting in OAPI countries, 1966–2012 278
9.12 Industrial innovation in Ivory Coast, 2010–15 278
9.13 Manufactured innovations in the most brain-drain-affected countries, 2004–13 280
9.14 Scientific productivity of the most brain-drain-affected countries, 2004–13 (per million inhabitants) 280

Tables

2.1 Top Twenty High-Skilled-Occupation Immigrant Stocks, OECD, Non-OECD, 2000, and Top Twenty High-Skilled Emigration Stocks to OECD Countries, 2000 41
2.2 Top Twenty High-Skilled-Occupation Immigrant Corridors to OECD Countries, Including/Excluding the United States, 2000 43
2.3 Top Twenty High-Skilled-Occupation Immigrant Corridors to Non-OECD Countries, Including/Excluding Former Soviet Union, 2000 44
2.4 Top Twenty IT Professionals, Engineers, and Scientists to OECD Countries, Total and Largest Corridors, Including and Excluding the United States, 2000 46
<table>
<thead>
<tr>
<th>Figure/Table/Box</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.5</td>
<td>Immigrant Stocks to the Global North and South, 1990 and 2000 (millions)</td>
<td>51</td>
</tr>
<tr>
<td>2.6</td>
<td>Top Twenty High-Skilled Immigrant and Emigrant Stocks, 2000 (millions)</td>
<td>53</td>
</tr>
<tr>
<td>2.7</td>
<td>Largest High-Skilled Migration Corridors in 2000, Excluding the United States as a Destination (millions)</td>
<td>54</td>
</tr>
<tr>
<td>2.8</td>
<td>Largest Dual-Direction High-Skilled Migration Corridors (&gt;20,000), 2000</td>
<td>55</td>
</tr>
<tr>
<td>2.9</td>
<td>Emigration Patterns by Country Group, 1990 and 2000</td>
<td>57</td>
</tr>
<tr>
<td>2.10</td>
<td>High-Skilled Emigration Rates by Country Group, 1990 and 2000</td>
<td>60</td>
</tr>
<tr>
<td>2A.1</td>
<td>Number of Observations with Unidentifiable Origin, OECD and Non-OECD Countries, 2000</td>
<td>69</td>
</tr>
<tr>
<td>2A.2</td>
<td>Top Fifteen IT Professionals, Engineers, and Scientists to Non-OECD Countries, Total and Largest Corridors Including and Excluding the (Former) Soviet Union, 2000</td>
<td>70</td>
</tr>
<tr>
<td>3.1</td>
<td>Inventors in the Ethnic-INV Database by Country of Residence (Selected Countries Only)</td>
<td>90</td>
</tr>
<tr>
<td>3.2</td>
<td>Inventors of Foreign Origin as a Percent of Resident Inventors: Estimates from the Ethnic-INV Database and Comparison with Estimates from Other Data Sources</td>
<td>91</td>
</tr>
<tr>
<td>3.3</td>
<td>Inventors of Foreign Origin as Percent of Resident Inventors: Estimates from WIPO-PCT and Ethnic-INV (Selected Countries of Origin)</td>
<td>93</td>
</tr>
<tr>
<td>3.4</td>
<td>Inventors' Productivity: Summary Statistics</td>
<td>95</td>
</tr>
<tr>
<td>3.5</td>
<td>Foreign Origin and Outstanding Productivity: Logit Regression on Cohorts of Immigrants (Dependent Variable: Inventor’s Probability to Fall in the Top 5 Percent of the Distribution by Number of Patents; Odds Ratios Reported)</td>
<td>98</td>
</tr>
<tr>
<td>3.6</td>
<td>Foreign Origin and Outstanding Productivity: Logit Regression on Specific Countries of Origin of Immigrants: High-Recall Definition of Foreign Origin (Dependent Variable: Inventor’s Probability to Falling in Top 5 Percent of the Distribution by Number of Patents; Odds Ratios Reported)</td>
<td>100</td>
</tr>
<tr>
<td>3.7</td>
<td>Returnee Inventors, by Selected Countries of Origin and Disambiguation Algorithm</td>
<td>103</td>
</tr>
<tr>
<td>4.1</td>
<td>Total Records and Coverage of Nationality and Residence Information (Selected Countries)</td>
<td>124</td>
</tr>
<tr>
<td>4.2</td>
<td>Immigration Rates of Inventors and College Graduates</td>
<td>130</td>
</tr>
</tbody>
</table>
# List of Figures, Tables, and Boxes

4.3 Immigrants, Emigrants, and Emigration Rates, Time Window 2001–10 131
4.4 Largest Inventor Migration Corridors, 2001–10 136
4.6 Top Thirty European NUTS2 Regions by Immigration Stocks and Rates, 2001–10 143
4.7 Top Thirty US MSAs by Immigration Stocks and Rates, 2001–10 145
4.8 Inventor Immigration Rates for Top Ten Applicants, Selected Countries, 2006–10 146
4.9 Share of Immigrants in Highly Cited Patents, All Years 150
4.10 Share of International Copatents Including Conationals, 2001–10 152
4A.1 Patent IPC-Technology Mapping 156
5.1 Top Ten Receiving and Sending Countries of Migrant Inventors during Three Four-Year Time Windows 168
5.2 Top Ten Bilateral Inventor Migration Corridors during Two Four-Year Time Windows 169
5.3 Descriptive Statistics 172
5.4 Correlation Matrix 173
5.5 Determinants of Migration Flows, PPML Estimations, 91 × 15 Sending and Receiving Countries 175
5.6 Determinants of Migration Flows, PPML Estimations, 91 × 15 Sending and Receiving Countries: Amenities and Tax Revenues 178
5.7 Determinants of Migration Flows, PPML Estimations, 91 × 15 Sending and Receiving Countries: North-North versus South-North Migration 181
5.8 Determinants of Migration Flows, PPML Estimations, 91 × 15 Sending and Receiving Countries: North-North versus South-North Migration, without the United States, China, and India 183
5A.1 Determinants of Migration Flows, PPML Estimations, 91 × 15 Sending and Receiving Countries: Amenities and Tax Revenues, with Origin × Time Fixed Effects 186
9.1 List of African Diaspora Networks and Initiatives 283

## Boxes

4.1 Metrics used in this chapter 126
9.1 Two African diaspora networks in detail 285
9.2 Faces of African skilled migrants: a few inventors 288
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PREFACE AND ACKNOWLEDGMENTS

In 2007, Member States of the World Intellectual Property Organization (WIPO) adopted forty-five recommendations under the organization’s development agenda. Recommendation 39 highlighted the brain drain faced by many developing economies. In consequence, WIPO’s Economics and Statistics Division was eventually tasked with studying the linkages between skilled migration, innovation, and intellectual property (IP).

This was a difficult brief. Economists have long recognized that migration influences the level and composition of workers’ skills in the economy. The prominence of foreign-born scientists and engineers in fast-growing technology companies – especially in the United States – has also drawn significant attention. Clearly, these relationships raise important questions. How damaging is the brain drain for sending economies – both in the short and long run? Is skilled migration a straightforward win for receiving economies, or might it inhibit skills development and depress wages among domestic workers? Yet, generating systematic evidence on how skilled migration affects innovation and knowledge diffusion runs into numerous methodological and data-related limitations. Introducing IP as an additional element to consider makes the analytical challenge even greater.

However, after some exploration, it turned out that WIPO was sitting on a treasure trove of unexploited data on migrant inventors – namely, inventors listed in close to five million patent applications filed under WIPO’s Patent Cooperation Treaty System. This discovery turned what initially seemed like a daunting mandate into an exciting and rewarding research project.

Our investigations into the causes and consequences of inventor mobility coincided with heightened interest by policymakers seeking to attract educated workers as a way of easing domestic skills shortages and fostering innovation and entrepreneurship. Academic literature on the topic was also burgeoning, spurred in part by new migration databases.
becoming available to researchers. As part of its study mandate, WIPO organized a workshop in 2013 bringing together some of the most prominent academic scholars studying skilled migration and representatives from various international organizations that conduct research in this area. Drawing on state-of-the-art data, the workshop reviewed the main trends and patterns of skilled-worker mobility. It also explored how migration outcomes affect innovation in host countries and the diffusion of knowledge back to migrants’ home countries. In so doing, it tried to distill key lessons for policymaking.

As migration continues to be heavily debated in numerous policy circles and WIPO’s research foray in this area has resulted in a new perspective on how migration matters for innovation, we thought it would be useful to present the results of our research efforts and the papers presented at the 2013 workshop in book form for wider dissemination. We hope that both policymakers and researchers will find much food for thought among the contributions.

While our research has led us to believe that skilled-worker mobility can render national innovation systems more vibrant and help diffuse knowledge across economies, we also realize that such worker mobility may have adverse consequences and pose significant challenges. The development of migration and related policies can only benefit from empirical evidence that sheds light on the multifaceted and often long-term linkages between skilled-worker mobility, knowledge creation, and knowledge diffusion. We do not pretend to have settled the many intricate questions that have arisen with regard to these linkages – especially those relating to cause and effect. As always, any knowledge gain comes with the recognition that important knowledge gaps remain. Our introductory chapter discusses what we believe would be fruitful directions for future research.

We are most grateful to the volume’s contributors for their inspiring papers and for having devoted time to transform their initial workshop submissions into (largely) nontechnical book chapters. We would also like to thank the workshop commentators whose perspectives greatly enriched the workshop discussions – Michel Beine, Chiara Franzoni, Bronwyn Hall, Bela Hovy, Michael Kahn, Jinyoung Kim, Christiane Kuptsch, Igor Paunovic, Roberta Piermartini, Hillel Rapoport, and Theodora Xenogiani. Various WIPO colleagues offered advice and assistance in the development of the PCT-based inventor migration database and the investigations relying on it, including Kyle Bergquist, Matthew Bryan, Bruno Le Feuvre, Intan Hamdan-Livramento, Mosahid Khan,
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