UNITED NATIONS CONFERENCE ON TRADE AND DEVELOPMENT

WORLD INVESTMENT 2010 REPORT 2010

INVESTING IN A LOW-CARBON ECONOMY



New York and Geneva, 2010

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UNITED NATIONS PUBLICATION Sales No. E.10.II.D.2 ISBN 978-92-1-112806-2 Copyright © United Nations, 2010 All rights reserved Printed in Switzerland

PREFACE

The global financial and economic recovery remains fragile, threatened by emerging risks, constraints in public investment and other factors. For the recovery to remain on track, private investment is crucial for stimulating growth and employment. Foreign direct investment (FDI) has a major role to play.

The World Investment Report 2010 highlights a promising outlook: after a significant global FDI downturn in 2009, flows worldwide are expected to recover slightly this year, with a stronger recovery in 2011 and 2012. Overall, countries continue to liberalize and promote foreign investment, although there has also been an increase in new policy measures regulating foreign investment. Countries remain receptive towards FDI, seeing it as an important external source of development finance.

This year's Report focuses on climate change, and in particular the role of transnational corporations. As enterprises with formidable knowledge, cutting-edge technology, and global reach, TNCs are necessarily among the primary actors in the global effort to reduce greenhouse gas emissions and shift towards a low-carbon economy. The Report stresses that with the right policy initiatives, incentives and regulatory framework, TNCs can and must contribute significantly to both mitigation and adaptation. It also proposes a global partnership to galvanize low-carbon investment and advocates concrete initiatives such as a new technical assistance centre to support policy formulation and implementation in developing countries.

This twentieth anniversary edition of the World Investment Report continues the series' tradition of serving as a leading reference for policymakers, investment promotion agencies, business, academia, civil society and others. The series has been contributing to investment policy-making at the national and international levels. I commend it to all involved in our common quest to build a better world for all.

Ki Mow Ban BAN Ki-moon Secretary General of the United Nations

New York, June 2010

ACKNOWLEDGEMENTS

The World Investment Report 2010 (WIR10) was prepared by a task force under the direction and management of James Zhan. The core task force members include Quentin Dupriez, Masataka Fujita, Thomas van Giffen, Michael Hanni, Fabrice Hatem, Kalman Kalotay, Joachim Karl, Ralf Krüger, Guoyong Liang, Sarianna Lundan, Anthony Miller, Hafiz Mirza, Nicole Moussa, Malte Schneider, Astrit Sulstarova, Elisabeth Tuerk, Jörg Weber and Kee Hwee Wee. Kiyoshi Adachi, Amare Bekele, Hamed El Kady, Jan Knörich, Abraham Negash, Lizzie Medrano, Matthias Maier, Shin Ohinata, Sergey Ripinsky, Diana Rosert, Christoph Spennemann, Yunsung Tark and Dong Wu also contributed to the *Report*.

Research and statistical support was provided by Mohamed Chiraz Baly, Bradley Boicourt, Lizanne Martinez, Sara Tougard de Boismilon and the interns Wolfgang Alschner, Jan-Christoph Kuntze, Jia Lin, Katlego Moilwa, Celeste Simone Owens, and Peter-Jan Zijlema. Production and dissemination of the *WIR10* was supported by Tserenpuntsag Batbold, Séverine Excoffier, Natalia Meramo-Bachayani, Madasamyraja Rajalingam, Chantal Rakotondrainibe and Katia Vieu. It was edited by Caroline Lambert, copy edited by UNCTAD's editor, cover designed by Sophie Combette and desktop published by Teresita Ventura.

WIR10 benefited from the advice of Peter Buckley. Specific inputs were received from Anne Arquit-Niederberger, Tudor Constantinescu, Pietro Erber, Jonathan Gage, Jayme Buarque de Hollanda, Thomas Jost, Hyojin Kim, Padma Mallampally, Marcus Orellana, Steven Porter, Raymond Saner, Claudia Salgado and Han-koo Yeo.

WIR10 also benefited from comments and suggestions provided by participants at a brainstorming meeting in Geneva in November 2009 and a seminar on *WIR10* in May 2010. Comments and suggestions were received during various stages of preparation from Laura Altinger, Lucas Assunção, Anna Autio, Matthew Bateson, Nathalie Bernasconi, Richard Bolwijn, Anatole Boute, Thomas Brewer, Douglas Brooks, Jeremy Clegg, Paul Clements-Hunt, Rudolf Dolzer, Lorraine Eden, Michael Ewing-Chow, Heiner Flassbeck, Susan Franck, Kai Remco Fischer, Kevin Gallagher, Stephen Gelb, Charles Gore, Eric Haites, Wahid Ben Hamida, Michael Herrmann, Elke Hoekstra, Ulrich Hoffmann, Jeff Huang, Gábor Hunya, Anna Joubin-Bret, John Kline, Ans Kolk, Robert Lipsey, Yuebing Lu, Nannan Lundin, Michael Mortimore, Peter Muchlinski, Samson Muradzikwa, Lilach Nachum, Rajneesh Narula, Richard Newfarmer, Federico Ortino, Terutomo Ozawa, Sheila Page, Guido Palazzo, Nicolas Perrone, Jonatan Pinkse, Christos Pitelis, Rebecca Post, Eric Ramstetter, Matthias Rau-Göhring, Mohammad Reza Salamat, Thomas Scott, Josef Schmidhuber, Sophia Twarog, Peter Utting, Kenneth Vandevelde, Dirk te Velde, Obie Whichard, Henning Wuester, Peter Wooders, Stephen Young and Zbigniew Zimny.

Numerous officials of central banks, statistical offices, investment promotion and other government agencies, and officials of international organizations and non-governmental organizations also contributed to *WIR10*. The *Report* also benefited from collaboration with Erasmus University, Rotterdam and HEC Montréal, Canada.

The financial support of the Governments of Finland, Norway and Sweden is gratefully acknowledged.

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ABBREVIATIONS

ΑΑΤΤ	assigned amount unit
AAU	assigned amount unit business-as-usual
BAU BIT	
BOT	bilateral investment treaty
CCS	build-operate-transfer
	carbon capture and storage
CDM	Clean Development Mechanism
CER CIS	carbon-dioxide-equivalent emissions reduction
	Commonwealth of Independent States
CSO	civil society organization
CSR	corporate social responsibility
DTT	double taxation treaty
ESCO	energy services company
ESG	environmental, social and governance
ETS	emission trading scheme
FDI	foreign direct investment
FTA	free trade agreement
GFCF	gross fixed capital formation
GHG	greenhouse gas
ICSID	International Centre for Settlement of Investment Disputes
IEA	International Energy Agency
IIA	international investment agreement
IP	intellectual property
IPA	investment promotion agency
IPCC	Intergovernmental Panel on Climate Change
ISAR	International Standards of Accounting and Reporting
ISDS	investor-state dispute settlement
JI	Joint Implementation
LDC	least developed countries
LLDC	land-locked developing countries
MFN	most favoured nation
MST	minimum standard of treatment
NAMA	nationally appropriate mitigation action
NAPA	national adaptation programmes of action
NCRE	non-conventional renewable energy
NIE	newly industrializing economies
L-TAC	Low-Carbon Technical Assistance Centre
ODA	overseas development assistance
OPIC	Overseas Private Investment Corporation
PPP	public private partnership
SEZ	special economic zone
SIDS	small island developing states
SME	small and medium-sized enterprise
SOE	state-owned enterprise
SWF	sovereign wealth fund
TNC	transnational corporation
TRIPS	trade-related aspects of intellectual property rights
UNEP	United Nations Environment Programme
UNFCCC	United Nations Framework Convention on Climate Change
WIPS	World Investment Prospects Survey
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KEY MESSAGES

FDI Trends and Prospects

Global foreign direct investment (FDI) witnessed a modest, but uneven recovery in the first half of 2010. This sparks some cautious optimism for FDI prospects in the short run and for a full recovery further on. UNCTAD expects global inflows to reach more than \$1.2 trillion in 2010, rise further to \$1.3–1.5 trillion in 2011, and head towards \$1.6–2 trillion in 2012. However, these FDI prospects are fraught with risks and uncertainties, including the fragility of the global economic recovery.

Developing and transition economies attracted half of global FDI inflows, and invested one quarter of global FDI outflows. They are leading the FDI recovery and will remain favourable destinations for FDI.

Most regions are expected to see a rebound in FDI flows in 2010. The evolving nature and role of FDI varies among regions. Africa is witnessing the rise of new sources of FDI. Industrial upgrading through FDI in Asia is spreading to more industries and more countries. Latin American transnational corporations (TNCs) are going global. Foreign banks play a stabilizing role in South-East Europe, but their large scale presence also raises potential concerns. High levels of unemployment in developed countries triggered concerns about the impact of outward investment on employment at home.

Overcoming barriers for attracting FDI remains a key challenge for small, vulnerable and weak economies. Overseas development assistance (ODA) can act as a catalyst for boosting the role of FDI in least developed countries (LDCs). For landlocked developing countries (LLDCs) to succeed in attracting FDI they need to shift their strategy to focus on distance to markets rather than distance to ports. Focusing on key niche sectors is crucial if small islands developing States (SIDS) are to succeed in attracting FDI.

Investment Policy Developments

A dichotomy in investment policy trends is emerging. It is characterized by simultaneous moves to further investment liberalization and promotion on the one hand, and to increase investment regulation in pursuit of public policy objectives on the other.

Economic stimulus packages and State aid have impacted on foreign investment, with no significant investment protectionism observed so far.

The IIA universe is expanding rapidly, with over 5,900 treaties at present (on average four treaties signed per week in 2009). The IIA system is rapidly evolving as well, with countries actively reviewing and updating their IIA regimes, driven by the underlying need to ensure coherence and interaction with other policy domains (e.g. economic, social and environmental).

Global initiatives, such as investment in agriculture, global financial systems reform, and climate change mitigation are increasingly having a direct impact on investment policies.

Investing in a Low-Carbon Economy

TNCs are both major carbon emitters and low-carbon investors. They are therefore part of both the problem and the solution to climate change.

TNCs can contribute to global efforts for combating climate change by improving production processes in their operations at home and abroad, by supplying cleaner goods and services and by providing much-needed capital and cutting-edge technology.

UNCTAD estimates that in 2009 low-carbon FDI flows into three key low-carbon business areas (renewables, recycling and low-carbon technology manufacturing) alone amounted to \$90 billion. In its totality such investment is much larger, taking into account embedded low-carbon investments in other industries and TNC participation through non-equity forms. Already large, the potential for cross-border low-carbon investment is enormous as the world transitions to a low-carbon economy.

For developing countries, low-carbon foreign investment by TNCs can facilitate the expansion and upgrading of their productive capacities and export competitiveness, while helping their transition to a low-carbon economy. However, this investment also carries economic and social risks.

"Carbon leakage" has implications for both global emission reduction efforts and economic development. However, the extent of this phenomenon and its implications are hard to assess. Instead of addressing the issue at the border (as discussed in the current debate), it could be addressed at its source, working through corporate governance mechanisms, such as improved environmental reporting and monitoring.

Policy needs to maximize benefits and minimize risks related to low-carbon investment, based on individual countries' social, economic and regulatory conditions. To support global efforts to combat climate change, UNCTAD suggests a global partnership to synergize investment promotion and climate change mitigation and to galvanize low-carbon investment for sustainable growth and development. Elements of this partnership would be:

- *Establishing clean-investment promotion strategies.* This encompasses developing conducive host-country policy frameworks (including market-creation mechanisms) and implementing effective promotion programmes (with key functions being investor targeting, fostering linkages and investment aftercare). International financial institutions and home countries need to support low-carbon investment promotion strategies, in particular through outward investment promotion, investment guarantees and credit risk guarantees.
- *Enabling the dissemination of clean technology.* This involves putting in place an enabling framework to facilitate cross-border technology flows, fostering linkages between TNCs and local firms to maximize spillover effects, enhancing local firms' capacities to be part of global value chains, strengthening developing countries' absorptive capacity for clean technology, and encouraging partnership programmes for technology generation and dissemination between countries.

- Securing IIAs' contribution to climate change mitigation. This includes introducing climate-friendly provisions (e.g. low-carbon investment promotion elements, environmental exceptions) into future IIAs, and a multilateral understanding to ensure the coherence of existing IIAs with global and national policy developments related to climate change.
- *Harmonizing corporate GHG emissions disclosure*. This involves creating a single global standard for corporate greenhouse gas (GHG) emissions disclosure, improving the disclosure of foreign operations and activities within value chains, and mainstreaming best practices in emissions disclosure via existing corporate governance regulatory mechanisms (such as stock-listing requirements).
- Setting up an international low-carbon technical assistance centre (L-TAC). L-TAC could support developing countries, especially LDCs, in formulating and implementing national climate change mitigation strategies and action plans, as well as engage in capacity and institution building. The centre would help beneficiaries meet their development challenges and aspirations, including by benefiting from low-carbon foreign investment and associated technologies. Among others, L-TAC would leverage expertise via existing and novel channels, including multilateral agencies.

Investment for Development: Challenges Ahead

The evolving TNC universe, along with the emerging investment policy setting, poses three sets of key challenges for investment *for* development:

- to strike the right policy balance (liberalization vs. regulation; rights and obligations of the State and investors);
- to enhance the critical interfaces between investment and development, such as those between foreign investment and poverty, and national development objectives;
- to ensure coherence between national and international investment policies, and between investment policies and other public policies.

All this calls for a new investment-development paradigm and a sound international investment regime that effectively promotes sustainable development for all.

OVERVIEW

FDI TRENDS AND PROSPECTS

Global foreign direct investment (FDI) flows began to bottom out in the latter half of 2009. This was followed by a modest recovery in the first half of 2010, sparking some cautious optimism for FDI prospects in the short term. In the longer term, the recovery in FDI flows is set to gather momentum. Global inflows are expected to pick up to over \$1.2 trillion in 2010, rise further to \$1.3–1.5 trillion in 2011, and head towards \$1.6–2 trillion in 2012. However, these FDI prospects are fraught with risks and uncertainties, including the fragility of the global economic recovery.

The current FDI recovery is taking place in the wake of a drastic decline in FDI flows worldwide in 2009. After a 16 per cent decline in 2008, global FDI inflows fell a further 37 per cent to \$1,114 billion, while outflows fell some 43 per cent to \$1,101 billion.

There are some major changes in global FDI patterns that preceded the global crisis and that will most likely gain momentum in the short and medium term. Firstly, the relative weight of developing and transition economies as both destinations and sources of global FDI is expected to keep increasing. These economies, which absorbed almost half of FDI inflows in 2009, are leading the FDI recovery. Secondly, the recent further decline in manufacturing FDI, relative to that in the services and primary sectors, is unlikely to be reversed. Thirdly, in spite of its serious impact on FDI, the crisis has not halted the growing internationalization of production.

FDI: on the way to recovery

All the *components of FDI flows* – equity investment, intra-company loans and reinvested earnings - contracted in 2009. Depressed levels of cross-border merger and acquisition (M&A) transactions, as well as the lower profits of foreign affiliates, had a heavy effect on equity investments and reinvested earnings. Improved corporate profits have, however, supported a modest recovery in reinvested earnings since the second half of 2009. FDI showed renewed dynamism in the first quarter of 2010. Crossborder M&As - still low at \$250 billion in 2009 – rose by 36 per cent in the first five months of 2010 compared to the same period in the previous year.

The slump in *cross-border M&As* accounts for most of the FDI decline in 2009. Acquisitions abroad contracted by 34 per cent (65 per cent in value), as compared to a 15 per cent retrenchment in the number of greenfield FDI projects. M&As are usually more sensitive to financial conditions than greenfield projects. This is because turmoil in stock markets obscures the price signals upon which M&As rely, and because the investment cycles of M&As are usually shorter than those of greenfield investments. The global crisis curtailed the funding available for FDI, reducing the number of acquisitions. While depressed stock prices reduced the value of transactions, together with global restructuring they also created opportunities for the TNCs that were still able to access finance. Although FDI flows through both entry modes are showing signs of recovery in 2010, M&As are rebounding faster.

FDI declined across all three sectors – the primary, manufacturing and services sectors. Cyclical industries such as the automotive and chemical industries were not the only victims. FDI in industries that were initially resilient to the crisis - including pharmaceuticals and food processing - was also hit in 2009. Only a handful of industries attracted more FDI in 2009 than in 2008, namely electricity, gas and water distribution, as well as electronic equipment, construction and telecommunications. In all, FDI in the manufacturing sector was the worst affected, reflected in a decline of 77 per cent in cross-border M&As compared to 2008. The contraction in such transactions in the primary and services sectors was less severe - at 47 per cent and 57 per cent respectively. This continued to push up their relative weights in global cross-border M&As at the expense of manufacturing. Yet some industries in these sectors were severely affected too: notably, the value of cross-border M&A transactions in financial services collapsed by 87 per cent.

FDI by private equity funds decreased by 65 per cent in terms of value, while FDI from sovereign wealth funds (SWFs) rose by 15 per cent in 2009. These funds together accounted for over one tenth of global FDI flows, up from less than 7 per cent in 2000 but down from 22 per cent in the peak year of 2007. FDI by private equity funds was affected both by the drop in their fund-raising and by the collapse of the leveraged buyout market. The value of cross-border M&As by private equity funds went down to \$106 billion in 2009, or less than a quarter of its 2007 peak value. Nevertheless, smaller transactions exhibited resilience, and the number of acquisitions involving private equity funds actually increased. Private equity activity is showing signs of recovery in 2010, but proposed regulation in the European Union (EU) may restrict future transactions. Funding for SWFs also suffered in 2009, due to declines in commodity prices

and trade surpluses. Yet their FDI activity did not decline, reflecting the relatively high growth of the emerging economies that own these funds. New investments were redirected towards the primary sector and industries less vulnerable to financial developments as well as developing regions.

Further internationalization of firms

Despite its impact on FDI flows, the global crisis has not halted the growing internationalization of production. The reduction in sales and in the value-added of foreign affiliates of transnational corporations (TNCs) in 2008 and 2009 was more limited than the contraction of the world economy. As a result, foreign affiliates' share in global gross domestic product (GDP) reached an historic high of 11 per cent. TNCs' foreign employment increased slightly in 2009, to 80 million workers. The rise of developing and transition economies is apparent in international production patterns. These economies now host the majority of foreign affiliates' labour force. In addition, they accounted for 28 per cent of the 82,000 TNCs worldwide in 2008, two percentage points higher than in 2006. This compares to a share of less than 10 per cent in 1992, and reflects their growing importance as home countries as well.

Foreign affiliates' assets grew 7.5 per cent in 2009, thanks largely to the 15 per cent rise in inward FDI stock to \$18 trillion. The increase in FDI stock was due to a significant rebound of global stock markets as well as continued investment inflows of FDI, which remained positive but expanded at a much reduced pace than before.

Half of global FDI inflows now go to developing and transition economies

FDI inflows to developing and transition economies declined by 27 per cent to \$548 billion in 2009, following six years of uninterrupted growth. While their FDI contracted, this grouping appeared more resilient to the crisis than developed countries, as their decline was smaller than that for developed countries (44 per cent). Their share in global FDI inflows kept rising: for the first time ever, developing and transition economies are now absorbing half of global FDI inflows.

Following a five-year upward trend, FDI outflows from developing and transition economies contracted by 21 per cent in 2009. However, with the rise of TNCs from those economies, the FDI contraction was also more muted than in developed countries, where FDI outflows shrank by 48 per cent. FDI is also rebounding faster in the developing world. The share of their outward investment remains much smaller, but it is accelerating and reaching a quarter of global outflows.

Among the largest FDI recipients, China rose to second place after the United States in 2009. Half of the six top destinations for FDI flows are now developing or transition economies. Over two thirds of cross-border M&A transactions still involve developed countries, but the share of developing and transition economies as hosts to those transactions has risen from 26 per cent in 2007 to 31 per cent in 2009. In addition, this grouping attracted more than 50 per cent of greenfield projects in 2009. On the outward investment side, Hong Kong (China), China and the Russian Federation, in that order, are among the top 20 investors in the world.

Uneven performance in FDI across regions

As highlighted by some of the data presented above, the global picture of FDI flows belies a more varied regional reality. Most FDI in developing and transition economies has flowed to a small number of countries, mainly large emerging markets. Following almost a decade of uninterrupted growth, FDI flows to Africa fell to \$59 billion – a 19 per cent decline compared to 2008 – mainly due to contraction in global demand and falling commodity prices. Commodities producers in West and East Africa were affected. Flows to North Africa also declined despite its more diversified FDI and sustained privatization programmes. Contraction of investment in the services sector in Africa was less pronounced than in other sectors. Sustained by expanded activity, the telecommunications industry became the largest recipient of FDI inflows. Recovering commodity prices and continued interest from emerging Asian economies are expected to feed a slow upturn in FDI flows to Africa in 2010.

TNCs from developing and transition economies have increasingly been investing in Africa over the past few years. They accounted for 21 per cent of flows to the region over the 2005–2008 period, compared to 18 per cent in 1995–1999. Investors from China, Malaysia, India and the Gulf Cooperation Council (GCC) are among the most active - although Africa still makes up only a fraction of their FDI. Investors from Southern Africa and North Africa have also raised their profile in the region. These new sources of investment not only provide additional development opportunities, but are also expected to be more resilient than traditional ones, providing a potential buffer against crises.

Outward investment from Africa as a whole contracted by half, to \$5 billion. Outflows from Southern Africa, however, expanded to \$1.6 billion in 2009, boosted by South African investment, mainly in the rest of Africa. Nevertheless, North Africa remained the largest source of regional outflows, accounting for over 50 per cent of the total.

FDI flows to *South, East and South-East Asia* have experienced their largest decline since 2001, but they are the first to bottom

out from the current downturn. Inflows to the region dropped by 17 per cent in 2009, to \$233 billion, mainly reflecting a decline in cross-border M&As, which was particularly severe in services (-51 per cent). As investment from developed countries plummeted, intraregional FDI gained ground and now accounts for as much as half of the region's inward FDI stock. Total outflows from the region declined by 8 per cent to \$153 billion, with cross-border M&A purchases dropping by 44 per cent. Against these trends China's outward investment in the non-financial sector continued to expand, driven by a continued search for mineral resources and for the M&A opportunities created by global industrial restructuring.

FDI in South, East and South-East Asia has already started rebounding, and is likely to pick up speed as the region plays a leading role in the global economic recovery. In particular, inflows to China and India started picking up as early as mid-2009, and their sustained FDI outflows are expected to drive the region's outward investment back to growth in 2010. Recovery of FDI in and from the four newly industrializing economies (Hong Kong (China), Republic of Korea, Singapore and Taiwan Province of China), however, is likely to be slow and modest.

Growing intraregional investment in Asia has served as a vehicle for technology diffusion, "recycling" of comparative advantages and competitiveness enhancement. It has been instrumental in the sequential upgrading of industries across countries at various stages of development. Regional integration and China's take-off are now accelerating this process, creating development opportunities for a wider range of countries, including LDCs such as Cambodia, the Lao People's Democratic Republic and Myanmar. In addition, this process of sequential upgrading has expanded beyond industries such as electronics, and more high-tech products have been involved.

The tightening of international credit markets and the decline of international trade impacted FDI flows to West Asia, which contracted by 24 per cent to \$68 billion in 2009. Except in the case of Kuwait, Lebanon and Qatar, inward FDI declined across the region. The contraction hit Turkey and the United Arab Emirates the hardest. In Turkey, cross-border M&As plummeted, and exportoriented industries suffered from the impact of the global crisis. FDI outflows from the region, 87 per cent of which are generated from the countries of the GCC, declined by 39 per cent to \$23 billion. Rising outward investment from Saudi Arabia was not enough to compensate for the negative impact of the Dubai World crisis. Provided that this crisis abates and international credit markets stabilize. West Asian Governments' sustained commitment to ambitious infrastructure plans is expected to support a recovery in FDI inflows in 2010. Outward investment, on the other hand, will remain subdued in the short term. State-owned entities - the region's main investors - have refocused their attention on their domestic economies, and the Dubai World crisis will continue to weigh on the outward FDI of the United Arab Emirates.

The impact of the global economic and financial turmoil drove FDI to Latin America and the Caribbean down to \$117 billion - a 36 per cent decline from the 2008 level. Although Brazil, with a 42 per cent contraction in inward investment, was more affected than the region as a whole, it remained the largest FDI recipient. Cross-border M&As in the region collapsed, turning negative in 2009 due to sales of foreign affiliates to domestic companies, particularly in Brazil. FDI inflows are expected to recover in 2010 and to continue growing in the medium term, as Brazil and Mexico remain popular investment destinations, according to investor surveys.

Brazil's outward FDI swung to a negative \$10 billion, due to a surge in intra-company

loans from Brazilian affiliates abroad to their parent companies. This resulted in a 42 per cent decline in the region's outward investment. Nevertheless, cross-border M&A purchases by TNCs from the region, directed mainly at developed countries, rose by 52 per cent to \$3.7 billion. The continued emergence of the region's TNCs, which began in 2003, will drive outward FDI in the medium term. FDI outflows from Latin America and the Caribbean leaped from an average of \$15 billion a year in 1991-2000 to \$48 billion annually in 2003-2009. An increasing number of Latin American companies - mostly Brazilian and Mexican - have been expanding outside the region, primarily into developed economies.

Besides favourable economic conditions in the region since 2003, government policies also contributed to the consolidation of domestic firms at home and their further outward expansion. The region's main foreign investors today are often the largest and oldest business groups that prospered during the import substitution era. Moreover, privatization policies in countries such as Brazil and Mexico have resulted in the creation of national champions. More recently, government incentives in Brazil, including targeted credit lines, have supported companies' outward expansion. Limited access to domestic financing, coupled with the current tight international financial markets, could hinder further expansion, however. These TNCs will continue to benefit from their low debt-to-earnings ratio, limited exposure to the industries most affected by the crisis, and the relative resilience of the region's economy.

After an eight-year upward trend, FDI inflows to *South-East Europe and the Commonwealth of Independent States (CIS)* shrank to \$69.9 billion, a 43 per cent decline from 2008. FDI inflows to both subregions dropped in 2009, although flows to South-East Europe were less affected than those to the CIS. FDI flows to the Russian Federation almost halved, due to sluggish local demand, declining expected returns in projects related to natural resources, and the drying-up of round-tripping FDI. Nevertheless, the Russian Federation ranked sixth in the global ranking of top locations in 2009. Cross-border M&As collapsed due to sluggish acquisitions by firms from the EU, the largest investors in the region. Investments from developing countries, China in particular, were on the rise, though. The contraction of FDI outflows from the region (-16 per cent) was not as severe as the decline in inflows. In 2009, the Russian Federation – by far the largest source of outward FDI from the region – became a net outward investor. Stronger commodity prices, a new round of privatization, and economic recovery in large commodity-exporting countries (Kazakhstan, the Russian Federation and Ukraine) should support a modest recovery in FDI in the region in 2010.

FDI in South-East Europe's banking industry has been on the rise since the early years of the new millennium, fuelled by substantial restructuring and privatization. As a result, 90 per cent of banking assets were owned by foreign entities at the end of 2008. Foreign banks have played a positive role in the region during the global financial crisis. The recent sovereign debt crisis in Greece, however, is reviving concerns that the large presence of foreign banks could channel systemic risks to the region.

FDI flows to *developed countries* suffered the worst decline of all regions, contracting by 44 per cent to \$566 billion. However, this setback was not as pronounced as during the previous economic downturn of 2000–2003, even though the current economic and financial turmoil is far more severe. North America was the worst affected, while the 27 member countries of the EU weathered the blow better with Germany, for example, recording a 46 per cent increase, mainly due to an upswing in intra-company loans. On the other hand, FDI flows to the United Kingdom, another major host country in the region, shrank by 50 per cent compared to the previous year. Cross-border M&As dropped by two thirds in developed countries, with transactions in the manufacturing sector contracting by about 80 per cent.

A modest economic recovery stabilized inward investment in the first half of 2010 and is expected to push FDI inflows to developed countries to above their 2009 levels. Ongoing liberalization in areas such as electricity, further regional integration, and continued interest from TNCs based in developing and transition economies should all contribute to better FDI prospects for the developed countries in the medium term. Outward FDI, after falling 48 per cent in 2009, is also expected to recover in 2010 and pick up pace in the medium term, supported by the improving global economic prospects, in particular in the developing world. However, the perception of increased risk of sovereign debt default in certain European countries and its possible further spread in the eurozone could easily disrupt this upward trend.

The economic downturn has revived longstanding concerns in developed countries over the impact of the growing internationalization of production on home country employment. Rapid growth of outward FDI over the past decade has resulted in a growing share of developed-country TNCs' employment moving abroad. And yet, FDI can save or expand domestic employment if it results in exports for the home country or improved competitiveness for investing firms. Research has produced mixed evidence on the impact of outward FDI on domestic job reduction. Indeed, the impact depends on the type of investment, the location of affiliates and TNCs' employment strategies.

Small and vulnerable economies

The decline in FDI to weak, vulnerable and small country groupings – LDCs, LLDCs and SIDS – is of particular concern given its role in these countries' economies. The level of FDI compared to their gross fixed capital formation was equivalent to between 25 per cent and 40 per cent in 2009 across these groupings, which was much higher than in other parts of the world. While FDI is concentrated in natural resources in terms of value in these groups, FDI is diversified in manufacturing and services sectors as well judging by the number of such projects. Their share in global FDI inflows was only 4 per cent.

FDI flows to the 49 least developed countries (LDCs) declined by 14 per cent to \$28 billion. The impact of lower inward investment is particularly serious for this group of countries, as the high ratio of FDI to their gross fixed capital formation (24 per cent in 2009) suggests that it is a major contributor to capital formation. FDI inflows to LDCs still account for only 3 per cent of global FDI inflows and 6 per cent of flows to the developing world. FDI remains concentrated in a few countries that are rich in natural resources. Greenfield investments account for the bulk of FDI in LDCs, and over 60 per cent of such projects originated from developing and transition economies in 2009. Most FDI inflows to the group still originate from developed countries. FDI prospects over the medium term depend on the extent to which LDCs' structural weaknesses are overcome. These disadvantages could be partly mitigated if official development assistance (ODA) were to be used more effectively, with a view to boosting the productive capacity of the host country in order to leverage FDI for development.

The 31 *landlocked developing countries* (*LLDCs*) have not traditionally been seen

as attractive FDI destinations. Inherent geographical disadvantages compounded by structural weaknesses have hampered their economic performance. And yet economic reforms, investment liberalization and favourable global economic conditions had translated into a steady increase in FDI inflows during 2000-2008. The 17 per cent decline in FDI to \$22 billion in 2009 was less pronounced than in the rest of the world. Due to the lack of diversification of productive capacities, FDI to LLDCs remained concentrated in the primary sector of a few resource-rich countries (Kazakhstan alone received 58 per cent of the total in 2009). FDI to LLDCs, which originates primarily from developing economies, especially from Asia and Africa, is expected to pick up only slowly. In order to overcome their geographical challenges, LLDCs could focus on industries that have a higher knowledge and information content and that are less reliant on the use of inputs involving transportation costs. Regional integration involving non-landlocked countries could also make these economies more attractive investment destinations, by expanding the size of local markets.

The 29 small island developing States (SIDS) have also struggled to attract FDI. The small size of their domestic markets, limited natural and human resources, and high transaction costs such as those for transport, have discouraged FDI. However, in spite of its 35 per cent decline to \$5 billion in 2009, the ratio of FDI flows to gross fixed capital formation remained above 30 per cent, as domestic investment contracted even more. Half of the grouping's total FDI inflows were concentrated in the top three SIDS investment destinations (Jamaica, Trinidad and Tobago, and the Bahamas, in that order). Tax haven SIDS accounted for about one quarter of both FDI inflows and stocks in 2009, but stricter international regulations are gradually eroding inward FDI to those economies. Given their geographical limitations, SIDS are expected to continue to rely

on their potential in traditional niche services such as tourism. Knowledge-based industries also offer promising potential, provided that SIDS develop adequate information technology and telecommunications infrastructure and improve their human capital.

FDI prospects: a cautious optimism

UNCTAD estimates that global FDI flows will slightly recover to reach over \$1.2 trillion in 2010, before picking up further to \$1.3–1.5 trillion in 2011. Only in 2012 is FDI expected to regain its pre-crisis level, with a range estimated at \$1.6-2 trillion. The gradual improvement of macroeconomic conditions, corporate profits and stock market valuations observed in early 2010 is expected to continue, supporting renewed business confidence. After a contraction of 2 per cent in 2009, the global economy is projected to grow by 3 per cent in 2010. Both interest rates and commodity prices will most likely remain moderate until the end of the year, helping to keep production costs under control and supporting domestic investment. Corporate profits have been recovering since mid-2009 and are expected to pick up in 2010. Together with better stock market performance, this will support financing for FDI.

UNCTAD's *World Investment Prospects Survey 2010–2012* indicates renewed business optimism over the medium term. TNCs' intentions to pursue foreign expansion are stronger for 2011 and 2012. The recovery of FDI is likely to be led by cross-border M&As. Restructuring in a number of industries, as well as the privatization of companies rescued during the global turmoil, will further create cross-border M&A opportunities for TNCs. The survey also confirms that the share of the manufacturing sector in FDI will continue to decline relative to the primary and services sectors.

TNCs from developing economies are more optimistic than their counterparts from devel-

oped countries, and expect that their foreign investments will recover faster. This suggests a continued expansion of emerging TNCs as a source of FDI. In addition, global investors show an ever-growing interest in developing economies. Brazil, the Russian Federation, India and China (BRIC), in particular, are bright spots for FDI. Flows to developing and transition economies will not only be directed at the most labour-intensive parts of the value chain, but increasingly at more technology-intensive activities. The global financial and economic recovery remains fragile, threatened by emerging risks, constraints in public investment, uncertainty about financial regulatory reforms, the limited access to credit, the volatility of the stock and foreign exchange markets and other factors. For the recovery to remain on track, private investment is crucial for stimulating growth and employment. FDI has a major role to play.

At present, cautious optimism prevails regarding prospects for global FDI.

RECENT POLICY DEVELOPMENTS

Current investment policy trends can be generally characterized by further liberalization and facilitation of foreign investment. At the same time, efforts to regulate foreign investment to advance public policy objectives (e.g. protection of the environment, alleviation of poverty, and/or addressing national security concerns) have intensified. This dichotomy in policies and the political will to rebalance the respective rights and obligations of the State and investors are becoming apparent at both the domestic and international policy levels, with emphasis swinging towards the role of the State. The network of international investment agreements (IIAs) has expanded further, while attempts to ensure balance and coherence within the IIA regime are under way. Furthermore, investment policymaking is attempting to reflect the closer interaction between investment policies and other policies, including those relating to broader economic, social and environmental issues.

National policies: regulation gaining ground, as liberalization continues

National investment regimes continued to become more favourable towards foreign investment, while governments have increasingly re-emphasized regulation. Out of the 102 new national policy measures affecting foreign investment that were identified in 2009, the majority (71) were in the direction of further liberalization and promotion of foreign investment. This confirms that the global economic and financial turmoil has so far not resulted in heightened investment protectionism. Policies included, inter alia, the opening of previously closed sectors, the liberalization of land acquisition, the dismantling of monopolies, and the privatization of state-owned enterprises. Measures to promote and facilitate investments focused on fiscal and financial incentives to encourage FDI in particular industries or regions, including special economic zones; easing screening requirements; streamlining approval procedures; or accelerating project licensing. To improve the business climate, corporate tax rates were also lowered in a number of countries, particularly in developed countries and developing economies in Africa and Asia. Growing fiscal strains may eventually result in a reversal in the trend observed over the past decade, however.

In spite of the general trend toward liberalization, 31 of the new national policy measures were towards tighter regulations for FDI. Accounting for over 30 per cent of the total, this is the highest share of such measures observed since 1992, when UNCTAD started reporting these measures. These measures are driven in part by increased concern over the protection of strategic industries, national resources and national security. Recent crises, such as the turmoil in the financial markets and the impact of rising food prices, have also translated into a will to regulate specific industries. Lastly, emerging economies are giving more weight to environmental and social protection, while LDCs are filling gaps in their regulatory frameworks. As a result, new limitations on foreign participation were introduced in some industries, or procedures for the screening and approval of investments were tightened, sometimes on national security grounds. Greater state intervention in the economy was most obvious in expropriations - which occurred in a few Latin American countries - and an increase in state participation in companies as part of financial bailout measures.

The expected reversal of temporary nationalizations in sectors often considered as strategic could result in governments pushing to have privatized companies remain in domestic hands, or pressuring investors to keep production and jobs at home. As a result, the phasing out of rescue packages will need to be closely monitored, as risks of investment protectionism have not disappeared.

Thirteen G20 countries continue to carry outstanding assets and liabilities left as a legacy of emergency schemes. The total amount of public commitments – equity, loans and guarantees – on 20 May 2010 exceeded \$1 trillion. In the financial sector, several hundred firms continue to benefit from such public support, and in non-financial sectors, at least 20,000 individual firms continue to benefit from emergency support programmes.

The international investment regime: towards a more balanced approach

The international investment regime expanded in scale and scope, and a systemic evolution towards a regime that is more balanced in terms of the rights and obligations of States and investors is taking shape.

The international investment regime is evolving rapidly through both the conclusion of new treaties and an increasing number of arbitral awards. In 2009, 211 new IIAs were concluded (82 bilateral investment treaties (BITs), 109 double taxation treaties (DTTs) and 20 other IIAs) - on average about four new agreements per week. In all, the total number of agreements rose to 5,939 at the end of the year. The trend towards rapid treatymaking continued in 2010, with the first five months seeing the conclusion of 46 more IIAs (6 BITs, 33 DTTs and 7 other IIAs). A major recent development occurred in Europe, where the Lisbon Treaty transferred FDI competencies from member States to the EU. As for investor-state dispute settlements, at least 32 new cases were initiated in 2009 and 44 decisions rendered, bringing the total of known cases ever filed to 357, and those concluded to 164 by the end of the year. The overwhelming majority of these 357 cases were initiated by investors from developed countries, with developing and transition countries most often on the receiving end. Some arbitral awards resulted in inconsistencies and lack of coherence between arbitral decisions.

Regional integration – as well as the need to promote coherence and reflect broader policy considerations in IIAs – is driving systemic changes in the international investment regime, creating the opportunity for a more coherent, balanced, development-friendly and effective international investment regime. The IIA landscape appears to be consolidating through (a) an increase in broader plurilateral economic agreements that include investment provisions; (b) efforts to create regional (mainly South-South) investment areas; (c) the competence shift concerning foreign investment within the EU; (d) the abrogation of BITs to streamline the treaty landscape and eliminate contradictions with other legal instruments; and (e) efforts by numerous countries to reassess their international investment policies to better align them with development considerations by revising their model BITs, reviewing their respective treaty networks and their development implications, or denouncing their BITs.

In addition, many recent treaties, whether new, renegotiated or revised, suggest that governments, developed and developing countries alike, are increasingly seeking to formulate agreements more precisely, by clarifying the scope of treaties or the meaning of specific obligations, in order to preserve States' right to regulate. Environmental clauses, as well as clauses seeking to ensure appropriate corporate behaviour in areas such as social practices, are becoming increasingly common, too. Making IIAs work effectively for development remains a challenge, however.

Although international investment arbitration remains the main avenue for resolving investment disputes, systemic challenges are increasingly becoming apparent in the dispute settlement system. As a result, a number of countries have been refining the investor-state dispute settlement provisions in their IIAs, seeking to reduce their exposure to investor claims or increase the efficiency and legitimacy of the dispute settlement process. In addition, several sets of international arbitration rules - including those of the International Centre for Settlement of Investment Disputes (ICSID), the International Chamber of Commerce (ICC) and the United Nations Commission on International Trade Law (UNCITRAL) - have been or are being revised. At the same time, a few developing countries are turning away from international arbitration processes, denouncing the ICSID Convention or looking into alternative dispute resolution and prevention mechanisms.

Other investment-related initiatives

Besides investment treaties, recent policy initiatives to deal with global challenges also have implications for international investment.

Several efforts have been launched to establish international principles for responsible investment in agriculture. These include a joint initiative on promoting responsible agricultural investment, jointly spearheaded by UNCTAD, the Food and Agriculture Organization of the United Nations, the International Fund for Agricultural Development and the World Bank Group. Such principles, if embraced and implemented, could enhance the benefits of FDI in agriculture while mitigating its potential downsides, thereby contributing to strengthening food security and local development.

The members of the G20 committed themselves to refraining from protectionism in the area of trade and investment, and asked intergovernmental organizations, including UNCTAD, to monitor and publicly report on developments related to trade and investment protectionism.

Efforts are also under way, both at the national and the multilateral level, to reform the financial system and address the weaknesses that underpinned the global financial crisis. These will have significant implications for FDI flows. Attention needs to be given to coherence between the emerging international financial system and the international investment system, the interaction of which has been largely neglected. While the two systems have developed in parallel, both govern short- and long-term cross-border capital flows.

LEVERAGING FOREIGN INVESTMENT FOR A LOW-CARBON ECONOMY

TNCs are a part of both the problem and the solution

The global policy debate on tackling climate change is no longer about whether to take action. It is now about how much action to take and which actions need to be taken - and by whom. The global scale of the challenge in reducing greenhouse gas (GHG) emissions requires an equivalent and enormous financial and technological response. TNCs have an indispensable contribution to make in the shift towards a low-carbon economy, because they are significant emitters across their vast international operations, but also because they are in a prime position to generate and disseminate technology and to finance investments to mitigate GHG emissions. Inevitably, TNCs are a part of both the problem and the solution.

For 2010–2015, one estimate indicates that \$440 billion of recurring additional global investments per year are required to limit GHG emissions to the level needed for a 2 °C target to be met (as referred to in the Copenhagen Accord). By 2030, the estimates range even higher, up to \$1.2 trillion per year. All studies emphasize that the financial contribution of the private sector is essential for achieving progress in making economies worldwide more climate-friendly, particularly in view of the huge public fiscal deficits worldwide. To combat climate change, low-carbon policies aimed at TNCs and foreign investment therefore need to be incorporated into national economic and development strategies.

The need for effective mechanisms to mobilize the private sector

The current international climate change regime has not encouraged low-carbon

foreign investment and related technology flows (particularly into poor developing economies) as much as was hoped for, despite recent increases. Following the Copenhagen meeting in December 2009, future emission targets, the nature of the institutions, concrete policy mechanisms and sources of funding continue to be unclear. The main international policy effort so far remains the Kyoto Protocol, the prospects for which are unclear. The current climate change regime is thus failing to generate what the private sector most needs in order to reorient its business strategies: a clear, stable and predictable policy framework.

The Kyoto Protocol has been praised for creating mechanisms to reduce emissions, including the Clean Development Mechanism, which is also seen as a way to help developing countries achieve sustainable economic development. However, because the Protocol's mechanisms were designed for compliance with emission reduction targets at the national level, this left individual governments to decide how best to involve the private sector in the process, thereby leading to fragmented markets.

Today, it has become clear that "grand bargaining" is not enough, and that there is a dire need for rigorous mechanisms both at national and international levels to effectively mobilize the private sector's contributions in terms of cross-border capital flows and technology diffusions, especially to poor countries.

Low-carbon foreign investment: types and demand

Low-carbon foreign investment can be defined as the transfer of technologies, practices or products by TNCs to host countries, through equity (FDI) and non-equity TNC participation, such that their own and related operations and the use of their products and services generate significantly lower GHG emissions than would otherwise be the case. Low-carbon foreign investment also includes FDI undertaken to acquire or access low-carbon technologies, processes and products. There are two types of lowcarbon foreign investment:

- Introduction of *low-carbon processes* that reduce GHG emissions related to how products are made. This includes upgrading of TNC operations, and those of related firms along their global value chains.
- Creation of *low-carbon products and services* that lower GHG emissions in how they are used. Low-carbon products include, for instance, electric cars, "power-saving" electronics and integrated mass transport systems. Low-carbon services include rendering technology solutions by reengineering GHG-emitting processes in local companies.

Channelling low-carbon foreign investment into key sectors (i.e. "areas of emissions") with high mitigation potential is the most effective way of leveraging the contribution of TNCs to lower GHG emissions. Power, industry (including manufacturing as well as oil and gas), transport, buildings, waste management, forestry and agriculture are all major GHG emitters. An assessment of projected future emissions in these sectors, combined with their mitigation potential and cost, provides policymakers with a first indication of where their efforts should be concentrated.

The *power and industry* sectors are the cornerstones of any global effort to reduce emissions. In both sectors, TNCs have a strong presence and are in a prime position to diffuse cleaner technologies and processes. Industry also provides equipment

and services to help reduce emissions in other sectors. The transport, building and waste management sectors will each emit less than power and industry in 2030. For all three sectors, GHG emissions are to a large extent related to consumers and public use. In the transport sector, for instance, GHG emission reductions require more efficient vehicles and a change in consumer and corporate habits. In a similar vein, in the building sector, the use of improved appliances, lighting and insulation, as well as alternative power sources for heating and cooling, go a long way in reducing emissions. The waste management sector's emissions result largely from waste landfills and wastewater, with potential mitigation largely about landfill methane recovery. The two land-related sectors, agriculture and *forestry* have high abatement potential; in the case of forestry one greater than its emission – due to potential afforestation and reforestation. To all these sectors, TNCs can make important contributions.

Low-carbon foreign investment is significant and its potential is huge

Low-carbon FDI is estimated to have already reached a significant level, with flows of roughly \$90 billion in 2009 in three key industries alone: (a) alternative/renewable electricity generation; (b) recycling; and (c) manufacturing of environmental technology products (such as wind turbines, solar panels and biofuels). These industries form the core of initial new low-carbon business opportunities. Over time, low-carbon investment will permeate all industries, for example as TNCs introduce processes to reduce GHG emissions. Looking beyond FDI, low-carbon foreign investment is – and will be – more significant, as it also covers non-equity forms of TNC participation such as build-operatetransfer (BOT) arrangements.

An analysis of the three industries mentioned above reveals the following trends:

- There has been a rapid increase in lowcarbon FDI in recent years, though it declined in 2009 as a result of the financial crisis.
- Around 40 per cent of identifiable lowcarbon FDI projects by value during 2003–2009 were in developing countries, including in Algeria, Argentina, Brazil, China, India, Indonesia, Morocco, Mozambique, Peru, the Philippines, South Africa, Turkey, the United Republic of Tanzania and Viet Nam.
- Established TNCs are major investors, but new players are emerging, including from the South. TNCs from other industries are also expanding into the field.
- About 10 per cent of identifiable lowcarbon FDI projects in 2003–2009 were generated by TNCs from developing and transition economies. The majority of these investments were in other developing countries.

Drivers and determinants of lowcarbon foreign investment

Drivers (push factors) such as home-country policies, public opinion and shareholders' muscle are increasingly weighing on TNCs' decisions to invest in low-carbon activities abroad. Many of these drivers affect foreign investment in general, but a number are specific to climate change, for instance: (a) outward investment promotion measures in renewable energy for rural electrification; (b) policies that trigger the establishment of relevant technological capabilities, which are subsequently spread internationally; or (c) consumer pressure and shareholders' demands leading to increased disclosure of climate change risks and opportunities.

Locational determinants are host countryspecific factors that influence TNCs' decisions on where to set up operations (pull factors). Tailored policy frameworks and business facilitation are essential to attract low-carbon foreign investment. In addition to general determinants of foreign investment (e.g. market size and growth, access to raw materials, different comparative advantages or access to skilled labour), there are certain variations specific to climate change: market-creating or -defining policies can foster demand for new low-carbon products and services, particularly in the power, transport, building and industry sectors – and thereby draw in market-seeking foreign investment. Similarly, low-carbon technologies in particular countries can attract the attention of strategic asset-seeking foreign investors. As with any dynamic technologies, consolidation by M&A activity may occur in the low-carbon area; investors may also seek to participate in industry or technology clusters to gain knowledge from agglomeration and related effects.

Strategies for low-carbon foreign investment: pros, cons and policy options

Developing countries are confronted with two major challenges in responding to climate change and moving towards a lowcarbon economy: first, mobilization of the necessary finance and investment; and second, generation and dissemination of the relevant technology. Both are areas in which foreign investment can make valuable contributions.

Nevertheless, developing countries need to examine the pros and cons of low-carbon foreign investment when determining whether or to what extent they should be facilitating it. When adopted, such a strategy should help improve production processes and the emergence of new technologies and industries. This can offer advantages over and above the benefits usually associated with the FDI package, such as leapfrogging to new technologies, particularly for the efficient use of energy and other inputs, as well as first-mover advantages and attendant export opportunities in key industries. A number of possible disadvantages need to be weighed against these benefits. Among them are the crowding out of domestic companies, technological dependency, higher costs for essential goods and services, and related social consequences. These are challenges that LDCs and other structurally vulnerable countries, in particular, are illequipped to meet alone.

When promoting low-carbon foreign investment, policymakers need to consider the advantages and disadvantages, both in terms of economic growth on the one hand, and environmental, human health and sustainable development on the other, with a view to minimizing potential negative effects and maximizing the positive impacts. There is no "one size fits all" solution. Therefore, a policy mix in response to country-specific conditions is desirable. The following discussion is about policy options regarding investment promotion, technology dissemination, international investment agreements, corporate climate disclosure, international support and other relevant areas.

Based on these considerations UNCTAD advocates a global partnership to synergize investment promotion and climate change mitigation and to galvanize low-carbon investment for sustainable growth and development. This partnership should include, pursuing clean-investment promotion strategies; enabling the dissemination of clean technology; securing IIAs' contribution to climate change mitigation; harmonizing corporate GHG emissions disclosure; and establishing an international low-carbon technical assistance centre to leverage expertise, including from multilateral agencies.

Strategizing national clean investment promotion

Most countries have not factored in lowcarbon investment attraction into their current investment policy framework and promotion strategies, as shown by a recent UNCTAD survey of national investment promotion agencies (IPAs). One important step forward would therefore be to integrate the potential role of low-carbon foreign investment into developing countries' Nationally Appropriate Mitigation Actions (NAMA) programmes. In particular, it would mean putting in place policies to attract foreign investment which can contribute to the reduction of carbon intensity in traditional industries. It would also imply building upon emerging business opportunities for new types of low-carbon foreign investment, such as investment in renewables, and implementing proactive efforts to promote low-carbon investment.

Creating an enabling policy framework. This includes the provision of adequate investment promotion, protection and legal security. Other supporting policies include the provision of incentives and regional integration agreements to overcome constraints of market size for low-carbon foreign investment. The emergence of new areas of low-carbon foreign investment – e.g. the production of renewable energy and associated products and technologies, fuel-efficient or alternative-fuel modes of transport and new building materials – is likely to require specific policies to complement the "traditional" elements of the policy framework.

Foreign investment into new low-carbon industries may not be competitive in the start-up phase and may therefore need government support, such as feed-in tariffs for renewable energy or public procurement. In addition, such market-creation mechanisms are likely to require revisions to the regulatory framework, including the establishment of emission standards or reporting requirements. There is a need for capacity development in developing countries to enable them to deal with these complex tasks.

Promoting low-carbon foreign investment. The promotion of low-carbon foreign investment also has an important institutional component. Governments need to identify opportunities for such investment in their countries and formulate strategies to promote it. Investor targeting, image-building, aftercare and policy advocacy are all key functions that national IPAs could use to this end. The latter should focus on specific economic activities when they spot a promising opportunity for developing domestic low-carbon growth poles and/or export potentials, and design a promotion package in those areas. The establishment of clean technology parks can facilitate the entry of foreign investors. IPAs can offer matchmaking services by helping low-carbon foreign investors to build networks and connect with local entrepreneurs. IPAs can also advocate national policies to strengthen a country's attractiveness for low-carbon foreign investment.

Building an effective interface for low-carbon technology dissemination

As a vast pool of technology and know-how, TNCs can play a major role in diffusing lowcarbon technologies to developing countries. Nevertheless, technology dissemination is a complex process and many developing countries face difficulties in establishing effective policies. Among the key issues to be considered are the following:

Technology targeting. A number of factors might affect host governments' prioritization and targeting of foreign investment to boost prospects for technology dissemination. For instance, a government may identify targets for promotion efforts through an assessment of a country's natural resources and created assets. In specific segments of industries and value chains, where the absorptive capacities of domestic companies are high but low-carbon technology and know-how are lacking, governments can target specific foreign investors in order to acquire the necessary know-how. Such approaches have been taken by countries such as Malaysia, Morocco and the Republic of Korea.

Creating a conducive framework for crossborder flows of technology. The key elements of a favourable environment for cross-border flows of low-carbon technology include availability of the requisite skills, appropriate infrastructure (e.g. some countries are setting up low-carbon special economic zones), measures to define and create markets in low-carbon products, targeted incentives (e.g. to invest in the necessary R&D or technology adaption) and a strengthened legal system. How these issues play out varies between economies; for instance, some developing countries have the resources to bolster education and training in the necessary skills. Another issue for cross-border technology flows into host countries is intellectual property (IP) rights protection. Foreign investors in some sectors consider strong protection and enforcement a precondition for technology dissemination, but the actual effects differ from country to country. Concerns have been expressed by developing countries that an IP regime should not only support IP protection and enforcement, but also guarantee greater access to appropriate technologies.

Promoting transmission of technology through linkages. Domestic companies' acquisition of technology from TNCs depends on the type, scale and quality of the interface (for instance, joint ventures or affiliate-supplier linkages) between the two. One option to foster linkages is to promote the establishment of local technological and industrial clusters. With the participation of both domestic firms and foreign affiliates, these clusters can help enhance the exchange of knowledge and manpower and the establishment of joint ventures between local and international companies.

Boosting the absorptive capacities of domestic enterprises. Host developing countries should put in place strategies to develop domestic capacities to absorb and adapt technology and know-how. In this, government-driven research and development in "cutting-edge green" technologies can play an important role. There is scope for the establishment of regional technology synergy centres focusing on low-carbon technologies for developing countries as well as the industrial and other capacities needed to put this knowledge to work. Promoting technology dissemination may also require strengthening of the financial and entrepreneurial capacities of local firms. In this context, consideration should be given to the establishment of "green development banks".

Minimizing the negative effects of low-carbon foreign investment

Effective industrial and competition policies are key to tackling the negative effects of low-carbon foreign investment, such as crowding out and attendant dependency on foreign low-carbon technology suppliers. Industrial policies can help affected domestic companies to improve and upgrade; an effective competition policy framework can control the emergence of monopolies and prevent the abuse of dominant market positions.

Social policies can also help to cushion employment impacts and other social consequences. For instance, re-skilling measures can help workers to adjust to new professional requirements or can facilitate their transition to emerging industries. For all this, poor countries will require assistance from development partners in the framework of a renewed global partnership for sustainable development.

Synergizing international investment agreements and climate change policies

Attention needs to be given to the dualedged nature of IIAs. On the one hand, by committing internationally to a stable and predictable investment policy environment and providing investment protection, IIAs can contribute to increasing a country's attractiveness for low-carbon foreign investment. On the other hand, IIAs can possibly constrain the host country's regulatory powers with respect to measures aiming to facilitate a transition to a low-carbon economy. Relevant awards by international arbitration tribunals suggest that IIA provisions pertaining to fair and equitable treatment and minimum standards of treatment, expropriation, and umbrella clauses aimed at stabilizing the legal framework for foreign investors merit particular attention.

Numerous policy options exist to synergize the interaction between countries' climate change and international investment policies, with a view to fostering a climate-friendly interpretation of IIAs and harnessing the potential of IIAs to ensure climate changefriendly effects. This includes novel approaches in future IIAs, such as strengthening IIAs' promotion provisions with respect to low-carbon foreign investment, and redrafting and clarifying those IIA provisions that might lead to conflict with climate changerelated policy measures. Policymakers may also wish to consider complementary, broader approaches. A multilateral declaration, clarifying that IIA parties are not prevented from adopting climate change-related measures enacted in good faith, could help enhance coherence between the IIA and the climate change regimes.

Dealing with carbon leakage

The potential relocation of carbon-intensive production from highly regulated places to countries with less stringent or no regulation on emissions has raised concerns. There are fears that this "carbon leakage" – due to free riding – impedes global emission reduction efforts, and that such relocations of production may result in a loss of investment-related benefits (e.g. tax revenues and employment) in the home country.

A debate has begun on whether to introduce border adjustment measures (e.g. tariffs) to deal with the issue of carbon leakage. There are technical difficulties when it comes to assessing the carbon intensity of individual imported goods, and there are doubts as to whether different types of border adjustment policies would be consistent with World Trade Organization (WTO) rules. In addition, caution is warranted for countries to guard against possible protectionism affecting efficiency-seeking and export-oriented outward investment under the pretext of such carbon-related policy measures.

The extent of carbon leakage is difficult to quantify. Furthermore, due to different business-as-usual scenarios between countries, a new investment facility that is considered carbon-intensive in one country could be regarded as low-carbon in another. For poor countries in dire need of expanding their productive capacities, such foreign investment could potentially generate large development gains due to the tangible and intangible assets associated with foreign investment. In the long run, however, it is in the interest of *all* countries to move towards an energy- and input-efficient low-carbon economy.

Instead of addressing the issue of carbon leakage at the border, it could also be addressed at its source. This would involve working through corporate governance mechanisms, such as encouraging improved environmental reporting and monitoring. Most notably, applying consistent emission policies across borders – including in host countries with laxer regulation – might generate economic and reputational benefits for TNCs. Regarding the economic benefits, consistency throughout a company's integrated production system is not only in line with the logic of the value chain (thereby facilitating the implementation of corporate carbon policies), it can also help reduce production, monitoring and other costs. With respect to reputational benefits, such consistency in TNC action across jurisdictions would help brand the company as a "good corporate citizen". In this context, improved climate reporting, particularly when undertaken in a harmonized and verifiable manner, can help ensure that a company's reputation is based on solid ground. Further improving transparency in the marketplace facilitates consumers' choices.

Harmonizing corporate GHG emissions disclosure

A reliable internationally harmonized approach to measuring and reporting corporate climate change-related emissions is vital for the effective implementation and assessment of climate change policies (such as "cap and trade" schemes and carbon taxes), the internalization of climate risk into capital markets, and the monitoring of GHG emissions and clean technology diffusion throughout TNCs' value chains. Climate-related management and reporting are common among large TNCs, but the information being reported lacks comparability and usefulness, and information on emissions by foreign affiliates and by value chains is often missing. Meeting the long-standing need for a single global GHG reporting standard requires a coordinated global response.

Unifying the work of regulatory bodies, standard-setters and multi-stakeholder initiatives can strengthen and expedite efforts to create a single high-quality global standard for climate disclosure. The United Nations can facilitate this process by offering an established international forum: the Intergovernmental Working Group of Experts on International Standards of Accounting and Reporting (ISAR). Policymakers can demonstrate leadership on this issue by contributing to international efforts to harmonize climate disclosure, and by mainstreaming best practices in climate disclosure via existing corporate governance regulatory mechanisms (such as stock-listing requirements) and analyst tools (such as indexes).

Supporting developing countries

In their efforts to promote low-carbon foreign investment and harness TNCs' technological potential, developing countries need assistance. Home-country measures can support outward low-carbon foreign investment. For example, national investment guarantee agencies could "reward" low-carbon investors by granting them more favourable terms, for instance in the form of a reduced fee. Another means might be credit risk guarantees for investments into developing countries. It would also be helpful if developed countries would increase their financial and technological support for lowcarbon growth programmes in developing countries. The example of China and the EU, which have established a proactive and pragmatic climate change partnership with a strong focus on technology cooperation and the engagement of the business community, should be replicated.

International financial institutions (such as the World Bank Group and various regional development banks) are actively engaged in supporting the move towards a low-carbon economy in developing countries. Their engagement should be geared towards furthering partnership approaches between the public and private sectors to help developing countries combat climate change, including by leveraging private engagement in highrisk areas without directly subsidizing TNC activities.

Efforts should be made to further enhance international technical assistance for lowcarbon growth in developing countries through cross-border investment and technology flows. An international low-carbon technical assistance centre (L-TAC) could be established to support developing countries, especially LDCs, in formulating and implementing national climate change mitigation strategies and action plans, including NAMA programmes. The centre would do so by leveraging the requisite expertise via existing and novel channels, including multilateral agencies. Such a centre could also provide capacity- and institution-building in the promotion of low-carbon investment and technology dissemination.

INVESTMENT FOR DEVELOPMENT: CHALLENGES AHEAD

Over the last twenty years, TNCs and their international operations have evolved in scale and form, resulting in changes to their strategies and structure which are today shaping existing and emerging markets and industries. Among other things, the *integrated international production system* of TNCs of the past has been evolving towards an *integrated international network* in which TNCs increasingly coordinate activities between independent or loosely dependent entities, for instance through outsourcing and the use of original equipment manufacturers. At the same time, TNCs are much more involved in *non-equity forms of activity*, such as build-own-operate-transfer arrangements in infrastructure projects, than in the past. In addition, along with TNCs' exponential expansion worldwide has come the rise of *new players and investors*, including developingcountry TNCs, state-owned TNCs, SWFs and private equity funds. This new TNC universe has profound implications for the policies of both home and host countries and at both national and international levels. Partly for this reason, the pendulum has recently been swinging towards a more balanced approach to the rights and obligations between investors and the State, with distinctive changes in the nature of investment policymaking. Particularly in light of the current financial and economic crisis, there have been simultaneous moves to both liberalize investment regimes and promote foreign investment in response to intensified competition for FDI on the one hand, and to regulate FDI in pursuit of public policy objectives on the other. This has resulted in a dichotomy in policy *directions*, which contrasts with the clearer trends of the 1950s–1970s (which focused on state-led growth) and the 1980s-early 2000s (which focused on market-led growth). With thinking about the rights and obligations of the State and the investor in flux, striking the proper balance between liberalization and regulation becomes a challenging task. Ensuring coherence between international and domestic investment policies and investment and other policies (economic, social and environmental) is essential. A good example is the interaction between investment and industrial policies which require

a joined-up approach to foster linkages and spillovers (including the dissemination of technology) arising from TNC operations in host countries.

The challenge for policymakers is to fully comprehend the depth and complexity of the TNC universe and its new interface with the state and other development stakeholders. Meeting this challenge requires that the tripartite investment relationship in terms of rights and obligations between home and host countries and foreign investors be reconfigured, to better harness the contribution of TNCs for development. In particular, the policy framework has to enhance critical interfaces between investment and development, such as those between foreign investment and poverty, and national development objectives. Indeed, TNCs have a role to play; and, above all, the world needs a sound international investment regime that promotes sustainable development for all.

The new TNC universe, along with the emerging investment policy setting, calls for a new investment-development paradigm.

N. Vall

Supachai Panitchpakdi Secretary-General of the UNCTAD

Geneva, June 2010

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