What's Next?

Strategic Views on Foreign Direct Investment

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Edited by Samuel Passow
and Magnus Runnbeck

Contents

4. **Foreword**
By Kai Hammerich

8. **Introduction to the Authors**

I. What Tomorrow Brings

12. **John H. Dunning**
The Evolving World Scenario

18. **Julian Birkinshaw**
Brains Matter

24. **Thomas Andersson**
Coping Skills

32. **John A. Cantwell**
Too Little or Too Much?

II. Rising to the Challenge

40. **John M. Stopford**
New Actors Take the Stage

46. **AnnaLee Saxenian**
The Age of the Agile

54. **Marielou Guerrero and Lorraine Ruffing**
Linking Up With the Giants

62. **Max von Zedtwitz**
China Goes Abroad

70. **Guy Ryder and John Evans**
A Working Relationship

III. Strictly Business

78. **Leif Östling**
Sharpening the Competitive Edge

82. **Nani Beccalli-Falco**
Company to Country Strategy

86. **Tom Fox**
Sense and Sensitivity

90. **Karl P. Sauvant**
Reservoirs of the Future

98. **Khalil Hamdani**
Going for the Crown

IV. In Tune with the Times

104. **Christian Ketels**
Finding the Right Match

116. **Roel Spee**
Making the Right Offer

124. **Ricardo Martinez**
Bringing Out the Best

128. **Jegathesan Jegasothy**
The Art and Science of Success

130. **Martin Jahn**
Showcase the Benefits

132. **Kai Hammerich**
Life in the Fast Lane

Charts

61. **Foreign Direct Investment Flows**

85. **Foreign Direct Investment Trends**

Foreword

By Kai Hammerich

What's Next? What lies ahead in the next three to five years of globalization, foreign direct investment (FDI) and investment promotion? These are questions that those of us who work in the FDI field ask ourselves constantly. In order to illuminate the subject, we invited some of the most eminent academics in the field, together with specialists from private business, non-government organizations, multilateral institutions and investment promotion agencies (IPAs), to give their considered opinions.

The result is a collection of *Strategic Views on Foreign Direct Investment*. The 20 articles present a range of personal views on the effects of FDI – a core element of the globalization debate – though the vast scope of the subject matter means that the areas covered are necessarily selective.

Few can dispute that globalization has positive and negative aspects. The same concept that can create opportunity and wealth can also incite uncertainty and fear. For many years, the debate centered on the disparities between the haves and have nots: how could developing countries harness the positive effects of globalization and FDI? Another dimension has since been added: how can developed countries avoid the "negative" effects of globalization and FDI?

Enabling developing countries to enjoy the benefits of globalization is a formidable challenge for national decision-makers and the international community. Likewise, maintaining competitiveness in developed countries facing competition from expanding emerging economies is a challenge too.

The next installment in the FDI story has all the ingredients and interwoven plots of a best-selling thriller. There is the current economic stagnation of a number of the European Union countries, the strong performance and dynamic expressions of individuality in Central and Eastern Europe, the uncertainty of economic expansion in the US, the emergence of new economic and regional centers of gravity like China and India, and the contiuned lagging behind of Africa and other regions to catch up with the rest of the world.

This country/region scenario will be the background for the next wave of FDI. We saw global investment volumes explode in the latter part of the 1990s, only for them to fall dramatically at the beginning of the new millennium. Whatever the explanations for this, the tide of FDI testified to an important shift in corporate strategies as the world turned into a home market for many corporations.

After the decline of the last few years, the next wave of FDI will involve new sectors, new players, and new methods. Much will happen – and much will change.

This collection of articles covers a diverse range of issues. Why do some countries seem to benefit more from FDI than others? What policy initiatives should be taken to maximize the positive effects of FDI? How do the new, evolving business strategies connect with efforts to increase the attractiveness of countries and regions? What are the future requirements for successful investment promotion? I will reflect on a few findings that appear in this book.

– *Governments and international organizations have an important role in getting the best from FDI.*

A definite shift in public opinion and the attitudes of politicians to foreign investors has taken place over the years. Not so long ago, FDI was viewed with suspicion, if not outright hostility. But as mounting evidence demonstrated that foreign-owned companies could be important contributors to innovation, growth and employment, virtually all countries and regions began competing for FDI.

Even though FDI in many cases has proven to be an important component of economic development, we can also see that its effects are not given. They may be positive, mixed or even negative. Foreign-owned companies are not inherently "good" or "bad", but will strive to extract the best from their operations and deliver a good profit to their shareholders. With this in mind, companies may choose to exploit their strategic assets in a market or use a market to source valuable assets and refine them elsewhere. The first alternative will most likely result in positive spillovers of technology and new business opportunities in the local environment, whereas the second alternative may drain skills and competencies from the region.

This more nuanced view of the potential effects of FDI has far-reaching implications. A positive outcome of FDI, whereby strategic assets are exploited and operations developed and expanded locally, will hinge on the presence of an attractive business climate or at least a few specific competencies and complementary strengths. The right set of institutions is, therefore, not only beneficial for attracting FDI in the first place but also necessary to obtain the desired investment effects. The ever-increasing options for the localization of business operations make it crucial for national policymakers to review conditions for the enterprise and investment environment, not least in Europe.

Multilateral institutions such as the Organization for Economic Cooperation and Development (OECD), the United Nations Conference on Trade and Development (UNCTAD), the United Nations Industrial Development Organization (UNIDO) and two divisions of the World Bank, the Foreign Investment Advisory Service (FIAS) and the Multilateral Investment Guarantee Agency (MIGA), have a major role to play in supporting a favorable business and investment climate in developing countries.

– *The FDI concept is becoming more multi-faceted.* It extends to components like venture capital (VC) and the intangible assets held by companies, highly skilled individuals and entrepreneurs. Capital flows from direct investment are important but do not tell the whole story. The idea is not to change the definition of FDI, but to pay more attention to the resource flows that underpin and complement it.

For example, VC is a form of quasi-FDI that has emerged to take a more prominent role in the global economy. Aside from capital injections, VC and private equity firms may provide their portfolio companies with new competent management, valuable networks, and distribution channels. Strategic alliances often do not involve large capital flows but can be expected to contribute to innovation and growth. They may also evolve into more stable, organizational relationships that generate considerable FDI flows.

We have also seen a tremendous increase in the movements of highly skilled individuals and entrepreneurs across national borders. Expatriate entrepreneurs may play a crucial role in developing high-tech clusters in their country of origin, in this way laying the foundation for future FDI flows.

In the near future, we can expect new FDI inroads in the service sector and, as a result, increased offshoring. Activities that in many countries today are handled by the public sector may be ripe for FDI in the medium-term. There is a huge need for investment in infrastructure worldwide, not least in environment-related projects. And there is interesting potential for bringing official development assistance and FDI closer together. Small and medium sized enterprises (SMEs), which often lose out in the globalization process, will have to be among the new players. This is only to name a few of tomorrow's promising arenas.

– *Staying competitive will require a constant flow of new ideas and much smart work.*
Government measures or IPA activities to attract FDI must be state-of-the-art. Like companies, governments and IPAs are strongly exposed to competition and must therefore remain watchful and permanently adapt to changing conditions.

From a company perspective, the nature of competitiveness is becoming more open to debate. When it comes to offshoring, for example, questions are being raised. Is offshoring the right solution for saving or developing a business? Could offshoring be a "tranquilizer" that puts companies to sleep and makes them overlook necessary work to improve their productivity and product portfolio? Is offshoring the easy way out? Another question that arises is the extent to which a value chain can be broken up without efficiency loss. Perhaps making investment decisions solely based on unit cost will not produce a sustainable return on investment.

– *The focus will shift to new emerging economies.*
Much attention is currently focused on China, and the development that is taking place there is indeed impressive. But the changes go far beyond China and embrace a number of rapidly emerging economies – Brazil, Russia, and India, to name a few.

These nations are competing not only for low-cost production but are rapidly moving up the value chain. Increased political friction can be expected in developed countries as core corporate functions such as research and development gain the option of locating their activities in emerging economies. When these economies seriously start to expand abroad, they will also become important overseas investors. This will happen sooner rather than later, and will radically change the countries' role in international economics and business.

– *Investment promotion is becoming more professional and business-oriented.*
Foreign investors, who are the clients of IPAs, have become much more targeted and precise in their demands. As a result, investment promotion has evolved into a business – a business in its own right. IPAs will focus less on general promotion and more on concrete business and investment opportunities. Emerging markets

will attract more interest from IPAs worldwide, eventually at the expense of mature markets in Europe and North America. Put simply, FDI promotion is moving to a more sophisticated level.

One organization that is instrumental in promoting this development is the World Association of Investment Promotion Agencies (WAIPA), invariably in close cooperation with UNCTAD, FIAS and MIGA, OECD and UNIDO. Bearing in mind the importance that most developing countries attach to FDI, WAIPA has an essential role to play in capacity building and policy advocacy.

What's Next? aims to prompt the reader to ask questions, not necessarily to provide the answers. It is our hope that the various viewpoints of the authors – representing developed and developing countries, large corporations and SMEs, labor unions, and universities – will stimulate the debate on globalization, FDI and investment promotion.

I wish to thank the authors for their contributions and for generously sharing their most valuable insights and experiences. I also thank the editorial and production team, Khalil Hamdani and Karl Sauvant, for their very significant advice and cooperation in the realization of this book, which is a joint venture between UNCTAD, WAIPA and Invest in Sweden Agency (ISA); the co-editors Samuel Passow and Magnus Runnbeck for their dedicated and professional work; and ISA's Annika Rembe and Intellecta Communication for bringing the content to life.

An executive summary of the book is published in Swedish.

I will conclude by drawing attention to the fact that ISA and WAIPA are both celebrating their 10th anniversaries in 2005. A small celebration like this certainly constitutes a good opportunity to take stock and, more important, to look ahead.

Stockholm, August 2005

Kai Hammerich
Director-General of Invest in Sweden Agency
President of World Association of Investment Promotion Agencies

Introduction to the Authors

This book is a collection of articles on foreign direct investment and how investment promotion can be designed to meet the demands of the future. The 22 authors from 13 countries, who have contributed to this book, are themselves passionate explorers of their subjects. They each have their own views on the effects of globalization – the core issue of the foreign direct investment debate – and in this period of political correctness they are refreshingly blunt with their opinions.

To help you navigate smoothly through this book, it is divided into four chapters – creating a spectrum of perspectives from the purely conceptual to the point of policy implementation. The first chapter, written entirely by academics, tries to put the abstract notion of globalization into the context of our daily lives and offers a framework of how to start analyzing issues. The second chapter, which combines academics and advocates from non-government organizations, begins the transition from theory to practice by looking at how specific sectors within the business community – corporations, small and medium sized enterprises and entrepreneurs – view the subject. The third chapter contains comments and strategy from executives of multinational corporations and multilateral organizations, while the fourth and final chapter completes the transition from theory to practice by contributions from practitioners of investment promotion, who actually make policy.

Chapter I – What Tomorrow Brings

We are living in an epic period of social and economic transition. A market economy which 60 years ago included only two dozen or so nations is now embraced by over 190 countries. In this chapter, **John H. Dunning**, Emeritus Professor of International Business at Reading University in England, discusses the delicate balance of the benefits and drawbacks that come with the globalization. **Julian Birkinshaw**, Professor of Strategic and International Management at the London School of Business, explores the growing importance of human capital for competitiveness, a theme picked up by **Thomas Andersson**, President of Jönköping University in Sweden and a Professor of International Economics and Industrial Organization at Jönköping International Business School, who then points out that dysfunctional incentive structures impede the growth of high value-added operations. **John A. Cantwell**, Professor of International Business at Rutgers University in New Jersey, US, explores how fragmented global production chains will stimulate the economic and technical catch-up in the developing world.

Chapter II – Rising to the Challenge

Technology and innovations in business models are eroding the boundaries of traditional markets. **John M. Stopford**, Emeritus Professor of Strategic and International Management at the London Business School, explores how more investments, from new sources of funding, will be chasing low-income consumers. **AnnaLee Saxenian**, Dean of the School of Information Management and Systems at the University of California at Berkeley, explains how markets which were once the sole preserves of large corporations are increasingly becoming the territory of entrepreneurial ventures. **Marielou Guerrero and Lorraine Ruffing** of the World Association of Small and Medium Enterprises present a case study of how SMEs can work effectively with multinational corporations. **Max von Zedtwitz**, Associate Professor of Technology and Innovation Management at Tsinghua University in Beijing, looks at China's new policy of investing abroad. **Guy Ryder and**

John Evans of the International Confederation of Free Trade Unions and the Trade Union Advisory Board offer a labor perspective of working with management on globalization issues.

Chapter III – Strictly Business

Business considerations are always determined by the bottom line, but the calculations needed to reach that figure is changing dramatically. **Leif Östling**, President and CEO of the Swedish multinational firm Scania, discusses how players trading on a global scale need to move their operations and assets to the front end of the value chain to remain competitive. **Nani Beccalli-Falco**, President and CEO of General Electric International, explains how growing energy demands, water scarcity and rampant urbanization will redraw the landscape of future markets. **Tom Fox** of the London-based International Institute for Environment and Development examines the reputational issues that will plague companies who fail to embrace corporate social responsibility of environmental and labor practices. **Karl Sauvant**, former Director of UNCTAD's Division on Investment, Technology and Enterprise Development, explores the future reservoirs of FDI possibilities while **Khalil Hamdani**, Deputy Director of UNCTAD's Division on Investment, Technology and Enterprise Development, offers an insightful statistical overview of the foreign direct investment scene.

Chapter IV – In Tune with the Times

Investment promotion agencies (IPAs) are the front line in the battle to improve their societies. **Christian Ketels**, of Harvard Business School's Institute for Strategic Competitiveness sets out a framework for IPAs to focus on promoting competitiveness and growth. **Roel Spee** of IBM Business Consulting Services-Plant Location International explains how IPAs can create "value propositions" to differentiate their locations for investors. **Ricardo Martinez**, Executive Director of the Industrial Development Commission of Mexicali, offers a case study of how Mexico upgraded its investment strategy. **Jegathesan Jegasothy**, former Deputy Director-General of the Malaysian Industrial Development Authority, looks at how developing nations can tackle corruption in investment programs. **Martin Jahn**, Vice Prime Minister for Economic Affairs of the Czech Republic, writes what his country must do to remain competitive within a newly expanded European Union. And finally, **Kai Hammerich**, Director-General of Invest in Sweden Agency, suggests that competitiveness is a combination of hard facts and personal commitment.

This book is written for all the various stake-holders in FDI and investment promotion, be it in government, business, media, academia, non-government organizations and their constituents, as well as students training to assume these roles of responsibility in the future. Above all, it hopes to stimulate those readers who want to be involved in the debate on how cross-border trade and investment will impact on our common future.

I. What Tomorrow Brings

John H. Dunning
Julian Birkinshaw
Thomas Andersson
John A. Cantwell

We are living in an epic period of social and economic transition. A market economy which 60 years ago included only two dozen or so nations is now embraced by over 190 countries. Is the theoretical basis of free enterprise on this scale still valid? In this chapter, John H. Dunning discusses the delicate balance of the benefits and drawbacks that come with the globalization. Julian Birkinshaw explores the growing importance of human capital for competitiveness, a theme picked up by Thomas Andersson who then points out that dysfunctional incentive structures are impeding the growth of high value-added operations. John A. Cantwell explores how fragmented global production chains will stimulate the economic and technical catch-up in the developing world.

The Evolving World Scenario

Every answer leads to a new question. What are the critical characteristics of our contemporary world economy? How does globalization interface with foreign direct investment? What are the essential elements of FDI policy which all governments – be they from developing or developed, or large or small countries – need to focus on in these early years of the 21st century.

By Professor John H. Dunning
Reading University, UK and
Rutgers University, US

We live in a world characterized by the geographical spread of market-based economic democracy, tempered to some degree by the intervention of national and supranational regimes to protect or enhance extra-market political or social objectives.

We live in a world in which there is increasing cross-border interconnectivity between human beings and organizations. While such interconnectivity offers huge potential for economic progress and social intercourse among the peoples of the world, it is frequently uneven in its content and outcome and tends to lead to a less hospitable human environment.

We live in a world of economic and political turbulence; where change, volatility and complexity are among its endemic features.

We live in a world in which continuous advances in all kinds of knowledge and falling communication costs are dramatically reconfiguring our economic landscape; and the fabric of our daily lives.

We live in a world replete with paradoxes and tensions. Globalization brings with it its own "yin" and "yang": where convergence and divergence, uniformity and diversity, competition and cooperation, centralization and decentralization, and individualizm and communitarianizm go hand in hand.

We live in a world in which the goals and content of human development are being reappraised. Compared with the past, more attention is now being paid to the social, cultural and ideological well-being of individuals and communities and also to the moral dimension of wealth-creating activities.

We live in a world in which the global competitive position of corporations and countries is increasingly dependent on their success in forming and learning from,

cross-border partnerships and strategic alliances and of being part of a global network of related activities.

We live in a world in which the content and quality of the incentive structures and belief systems of countries are increasingly influencing societal attitudes towards the purpose and content of economic development strategies and to the social responsibilities of both corporations and governments.

In short, we live in a world in which the human and physical global environment underpinning the wealth-creating activities of corporations and the policies of national governments, is fundamentally changing. And it is the corporations and governments which are most able to respond to and benefit from these changes and which are best equipped to minimize or counteract the disruptive effects of them that are the most likely to succeed in today's hugely competitive global village.

Interfacing Globalization, Development and FDI

What then is the relevance of these characteristics for globalization and for economic development? What role does FDI play in both fashioning and reacting to these characteristics?

The circles in *Chart 1 (page 17)* demonstrate how these three concepts interface with each other. The rectangle surrounding the circles identify the main decision-taking entities in contemporary economies. As I have already indicated, the majority of economic transactions in most countries are undertaken through markets, but the extent to which, and the ways in which, these markets are supported, influenced or controlled by the actions of extra-market actors vary considerably. In this article I will concentrate primarily on the role of two of the key actors – corporations (particularly MNEs) and national governments.

Globalization

The phenomenon of globalization is best thought of as the interconnectivity of people and organizations across the planet. Such connectivity may be shallow or deep, short or long-lasting. It may be geared towards promoting personal or organizational interests and to advancing economic, cultural or political goals. Its main outcome is an increasing and deepening interdependence between otherwise geographically segmented human and physical environments.

"Globalization, in and of itself, is a neutral concept. But it can be used to advance good or bad goals or to achieve good or bad effects."

E-commerce and the Internet are the quintessential indices of globalization. But there are many others, such as the extent and geography of cross-border travel, the media (especially TV coverage), technology and financial flows and people movement. At the same time, it is worth noting that few organizations, public or private, are fully global in their activities. Most large MNEs, for example, still confine the greater part of their value-added activities to two of the five continents of the globe.

Globalization, in and of itself, is a neutral concept. But it can be used to advance good or bad goals or to achieve good or bad effects. The "yin" of globalization is that it can raise incomes, transfer ideas and knowledge, open up new markets and promote more dialogue and understanding among different cultures. The "yang" of globalization is that it can lead to more volatility and uncertainty and more disruption in people's lives. In the maximization of the positive and the minimization of the negative consequences of globalization, extra-market decision takers

have a critical role to play. For example, the fact that globalization is not as inclusive or as equitable in its outcome as it might be, is often due less to the inadequacies of markets and more to differences in the institutional artefacts underpinning these markets, and of inappropriate policies pursued by national governments or supranational agencies.

One final point about globalization is the growing role of multi-stakeholders (notably NGOs, consumer activists, shareholders and labor unions), in influencing its content and consequences – and particularly so in respect of the international and intranational distribution of its key resources and capabilities and of its end products.

Economic Development

What next of the contemporary scholarly thinking about purposes and content of economic development? Key among the new or revised ideas are those about the composition, determinants and form of development. No longer are crude and single measures such as gross domestic products (GDP) per head acceptable: increasingly those which emphasize quality of life measures, such as safety and security, good health, reduced infant mortality and education, are being sought.

This reflects the increasing attention being paid by national governments both to the social needs and the cultural liberty of the individuals and communities for which they are responsible. In an age of global branding and the cross-border harmonization of many goods and services, it also suggests the need for more local ownership of critical assets, ideas and institutions; of more multi-stakeholder involvement in policy formation; and of more consensus related decision-taking.

All contemporary data point to substantial progress being made in upgrading living standards and reducing levels of extreme poverty in most developing countries. According to the World Bank, the share of the population of developing countries in abject poverty (defined as those living on less than US dollar a day) fell from one-third in the mid-1980s to one quarter in the early 2000s. There have also been noticeable improvements in the quality of life, e.g. health provision, life expectancy, adult literacy and human rights and in gender related development and the physical environment.

At the same time, there are other areas of the life style of people which are giving more cause for concern. Along with (though not necessarily the result of) rising living standards and increasing behavioral freedom, has come more terrorism, crime, corruption, drug trafficking and social disorder, with all the "disbenefits" and uncertainties associated with those.

Development then, first and foremost, needs to be viewed as a holistic and multidimensional concept. Its contents and implementation involve multistakeholder initiatives. Its determinants are multicausal; its effects are multifaceted.

Foreign Direct Investment

What now of FDI as an instrument for upgrading national competitiveness and promoting structural change?

The recent growth in FDI stocks has closely paralleled that of globalization. According to UNCTAD between 1990 and 2003, the combined world inbound and outbound FDI stocks increased 4.4 times (from US$3,708 billion to US$16,441 billion). Over the same period, outbound FDI stocks from 10 middle-income developing countries rose by 7.9 times and inbound FDI stocks by 3.0 times. FDI today is not only the most important com-

ponent of trans-border economic activity; it is also one of the most critical shapers of the international division of labor, of economic restructuring and of life styles.

It is now estimated that MNEs currently account for three quarters of all global innovating activity and spending on human resource development. Increasingly, they are decentralizing such higher-value activities to their foreign affiliates (and particularly so within higher and middle-income countries). In most instances, this is welcomed since the speed at which countries can move up their development ladders is increasingly resting on the quality of the human and physical assets and the enterprise and vision of their corporations and people.

However, the benefits which a particular country derives from the operations of the affiliates of foreign MNEs in its midst and from its activities of its own firms outside their national boundaries, is highly contingent on the quality and content of its social and institutional capital and of its belief systems and cultural preferences.

I now turn to consider what I believe should be the most critical ingredients of FDI policy in the early 21st century, in the light of global economic trends and new thinking.

I offer 11 propositions – each of which is best considered as part of a coordinated and interactive system of FDI policies – as bullet points and in no particular order of importance. In any case, such ordering is likely to be highly contextual and will vary according to the types of and motives for FDI and the particular situation of individual home or host countries.

1. In seeking to maximize the benefits of globalization and to promote the desired development, FDI policies are only as effective as are the general macroeconomic and micro-management policies of which they are part. I shall term this the holistic proposition.
2. Inbound FDI policy must take account of the likely costs and benefits of different motives for and kinds of MNE activity, as well as the effectiveness of measures to attract new investments. In the early 21st century, most attention to the impact of inbound FDI is focusing on its "spillover" effects e.g. on the competitiveness of indigenous firms and the promotion of the host countries' dynamic comparative advantage. This is the effects proposition.
3. Inward and outward FDI policy must be dynamic, flexible and appropriate to the stage of development of a country. It should be geared to ensuring that it helps upgrade the structural transformation of the country, in an efficient, socially acceptable and properly sequential way. This is the structural transformation proposition.
4. FDI policy needs to be aware of the changing locational needs of foreign investors and in particular, the growing importance of the scope and content of host country incentive structures, in so far as they foster indigenous entrepreneurship and assisting individuals and firms to adapt to global change. This is the institutions proposition.
5. As knowledge, embodied in human and physical assets, becomes a more important ingredient of a country's economic welfare and growth prospects, so FDI policy must especially address itself to the best means of accessing, creating and enhancing physical and human resource capabilities. This is the capability upgrading proposition.
6. By the provision of appropriate incentives, inbound FDI policy should recognize the growing needs of foreign direct investors to form partnerships and coalitions with and/or tap into, the assets of networks of indigenous firms. This is the partnership proposition.

7. FDI policy should take account of the increasing role of multi-stakeholder initiatives in democratic societies, such as, those of consumer groups, labor unions, and non-government organizations (NGOs) which are affecting the pattern, pace and ownership of economic activity. This is the stakeholder proposition.
8. Inward FDI policy must accept that globalization is often widening the locational options of MNEs. This being so, it is all the more important for it to identify and promote the unique and sustainable economic and social advantages of the host country, as well as taking account of the FDI (and other) policies of likely competitor countries. This is the leveraging proposition.
9. As countries move upwards along their development paths, the need for an integrated policy towards outward and inward FDI becomes more imperative. Each has its own specific (but related) role to play in enhancing the production of indigenous factor endowments to structural change. This is the integration proposition.
10. FDI policy should take note of the trend towards more subsidiarity in decisions taken by MNEs and especially a better appreciation by them of the availability and value of localized economic capabilities and of social and cultural preferences. This is the localization proposition.
11. While FDI policy – and particularly investment incentives – should be as transparent, general and consistent as possible, there may be merit in tailor-making the contents of particular aspects of this policy to target certain types of FDI or MNEs. This is the targeting proposition.

Chart 2 (page 17) combines these various drivers and determinants of FDI policy into one picture. As we have already suggested, the prioritization and importance of each is likely to vary according to the type of FDI and the strategies of individual MNEs, the cost of their implementation and the specific institutional and other characteristics of particular countries or regions, as they might affect attitudes and actions towards globalization and economic development.

"Inward and outward FDI policy must be dynamic, flexible and appropriate to the stage of development of a country."

Let me finally offer you three statements which, though seemingly obvious, I believe should guide any actions taken by national governments and international investing agencies seeking to gain the most from being part of the global economy:

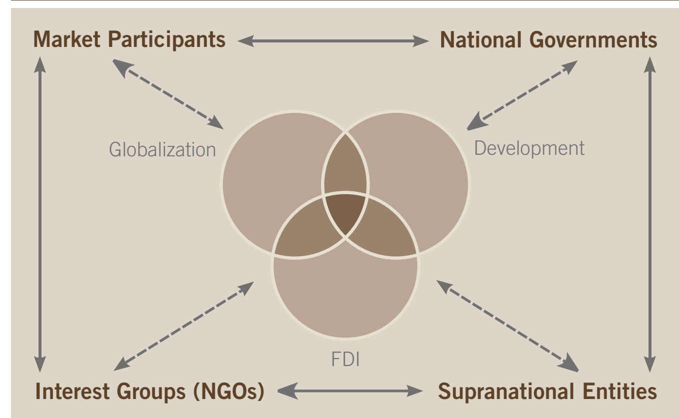
1. While both outward and inward FDI can help a country to benefit from globalization and foster economic development, it should not be regarded as a panacea for its economic ills. With a few exceptions, a country's long-term economic success and social welfare must rest on its ability to upgrade its indigenous resources and capabilities. In pursuance of this objective, I believe that it is essential that a country retains full ownership of its critical institutions, its cultural identity and its belief systems.
2. History and geography matter. Policy makers should seek to learn from their own past the successes and failures and from the experiences of other countries most similar to those of their own. However, they should not be bound by, or slaves to, those successes, failures and experiences. In the light of the perceived contribution of FDI to economic development and of

the axiological changes now occurring in the global human environment, they should (a) devise the macroeconomic and microeconomic strategies most suited to their own particular situations and needs, (b) ensure that they have the appropriate institutional mechanisms to implement these strategies.

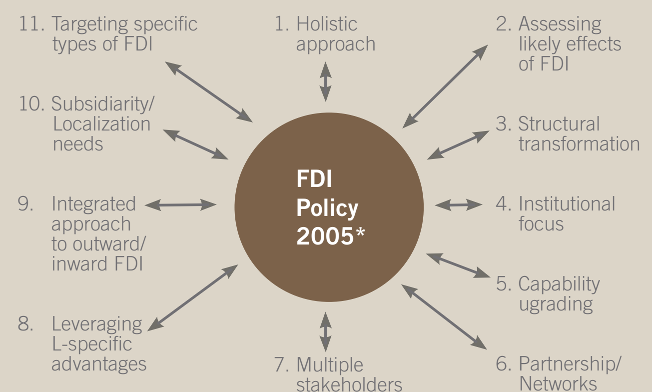
3. Policy makers should be cautious about making easy generalizations about the economic and social consequences of FDI. Not only will these effects vary according to the motive for, and kind of, inward and outward FDI undertaken, but also to the values, attitudes and actions of the societal stakeholders most affected by it and to the strategies and policies pursued by home and host governments most concerned.

__John H. Dunning__ is Emeritus Professor of International Business at the University of Reading, UK and Emeritus Professor of International Business at Rutgers University, New Jersey, USA. He has been researching into the economics of international direct investment and the multinational enterprise since the 1950s. Professor Dunning has authored, co-authored, or edited 42 books on this subject and on industrial and regional economics. His latest publications are a two volume compendium of his more influential contributions to international business over the past 30 years (Edward Elgar, 2002), an edited volume on Making Globalization Good (Oxford University Press, 2003) and a jointly authored monograph (with Rajneesh Narula) Multinationals and Industrial Competitiveness, (Edward Elgar, 2004). He is currently preparing (with Sarianna Lundan) a revised edition to his widely acclaimed textbook Multinational Enterprises and the Global Economy, first published in 1993; and on a new book on Institutions, Economic Development and International Business Activity. Professor Dunning is currently Senior Economic Adviser to the Director of the Division on Transnational Corporations and Investment of UNCTAD in Geneva, and past Chairman of a London based economic and management consultancy, Economists Advisory Group Ltd.

The Globalization/Development/FDI triad *Chart 1*



Proposed ingredients of FDI policy *Chart 2*



*Such policy will vary according to (a) type of FDI & strategy of individual MNEs, (b) country/region specific characteristics affecting attitudes towards globalization and economic development.

Brains Matter

Cross-border migration is one of the great fears of globalization. Yet increasingly, the economies of the developed nations are becoming dependent on well-trained, highly skilled overseas personnel, which is in short supply. This is forcing policy makers to deal with politically sensitive and emotive public issues such as who should have access to their universities and their social services.

By Professor Julian Birkinshaw
London Business School, UK

Old stereotypes die hard. We are accustomed to thinking of multinational corporations as manufacturing or extraction companies; and we expect them to make large capital investments and create large numbers of jobs when they invest overseas. While there is still some truth to these expectations, the reality today is more nuanced, and the challenges more complex. Most multinationals are either services companies or they have a large service component to their work. Foreign investments by such companies as Ericsson, Citibank, Novartis, SAP, and Unilever are typically in support activities (e.g. call centers), research and development, or corporate services, rather than in manufacturing. And today these and other companies compete not on the basis of their manufacturing assets or even their technologies, but on the collective capabilities of their people – their human capital.

To a lesser degree, the same shift can be seen in countries. Most developed countries rely far more on their service sector than their manufacturing sector for employment. And the challenge of building and maintaining a skilled and educated workforce is towards the top of the agenda for almost all national governments. The trouble is, human talent is increasingly becoming a global industry. Highly skilled workers have both the ability and the motivation to move to where the opportunities are greatest. Leading industry clusters, such as Silicon Valley or the City of London, are becoming magnets for the best and the brightest around the world.

This trend has massive implications for inward investment policy. Countries can no longer build their economic policy on an assumption that they will reap the benefits of their investments in human capital, because the people they educate may move abroad to work. Instead, policymakers need to think in terms of their country's ability to

attract and develop highly skilled workers, wherever in the world they come from. For example, it is estimated that approximately 40 percent of Indian Institute of Technology graduates seek employment abroad, and that Bulgaria lost around 65 percent of its graduates for jobs abroad in the last decade. These sorts of numbers underline just how easy it is for a country to lose its most well-educated people if it does not provide them with sufficient opportunities at home.

Competitiveness and Human Capital

The primary engine of economic growth today is knowledge. Wealth-creation was once built on privileged access to land, raw materials, and capital, but increasingly these assets are available in relatively unlimited supply. The scarce resource is now knowledge – the proprietary knowledge that allows firms to come up with new products and services. This knowledge exists in many forms – from patents to processes to higher-order capabilities – but in all cases it emanates from the skill and experience of individuals.

The growing importance of human capital for competitiveness is paralleled by an increased geographical mobility of individuals. It is relatively common now for skilled people to live in several different countries in the course of their working lives. A country can no longer invest in human capital and be sure that it will be able to harvest the fruits of this investment. Instead, it is quite possible for one country to make the investment in education for high potential individuals, and another country to benefit from that investment. For example, one estimate suggests that 40 percent of the foreign-born adult population in the US have tertiary-level education.

Human mobility works in two directions, and most countries are seeing increasing inflows and outflows of skilled people. Just as countries can benefit from outward and inward investment, there are benefits to encouraging bidirectional human capital flows. An outflow of people is valuable because it increases awareness of the country in the rest of the world, it creates personal connections overseas, and it provides the expertise to manage the outflows of foreign direct investment and exports. An inflow of people is valuable because it provides new competence and new ideas, it creates linkages between foreign and local people, and it facilitates the transfer of technology and capabilities from overseas.

The Global Market for Skills

The increasing importance of human capital and the increasing mobility of skilled individuals is creating an emerging global market for skills. Certain skills are so specialized or in such short supply that they are sourced on a global basis. Scientists, academics, and senior executives have been functioning in a global market for a long time. But now there are whole classes of jobs that are being sourced on a global basis. The most compelling example is the field of Information Technology (IT), which in the US has unfulfilled demand of up to 1,000,000 people.

This global movement of highly skilled workers represents an important shift in the broader debate around international migration. The large-scale migrations of people in the first half of the 20th century (especially to "new world" countries) have given rise to a more complex set of trends, including intra-regional job-seeking, family reunification, illegal immigration and asylum-seeking. But of most relevance here is the increasing number of temporary international migrations of highly skilled individuals. Such movements are being driven by the

changing policies of sovereign nations towards foreign workers, the increasing use by multinational corporations of international transfers as a way of managing their cross-border activities, and the emergence of a global market for tertiary education.

"The growing importance of human capital for competitiveness is paralleled by an increased geographical mobility of individuals. It is relatively common now for skilled people to live in several different countries in the course of their working lives."

For many years, the migration of highly skilled workers was characterized in terms of "brain drain" and "brain gain" as skilled workers from Europe headed to the US, and then as East European professionals moved to Western Europe. Today the discussion appears to be rather more nuanced. As the article by Professor AnnaLee Saxenian on page 46 describes, there is evidence of "brain circulation" when skilled individuals move between countries, or when they set up business networks back to their former homes.

What accounts for this shift towards the movement – and particularly the temporary movement – of highly skilled workers across national borders? There are three sets of important actors – multinational corporations, the tertiary education market, and host government policymakers.

Multinational Corporations

The entire *raison d'être* of the multinational corporation is that it "internalizes" transactions that cross national boundaries. This is true for physical products and technology, and it is also true for human capital. Thus, if a multinational wants to recruit a manager in a foreign country, it may lack necessary contacts to find the right person locally and instead decide to transfer an individual from within the company to work in that foreign country. Hence the term "internal labor market" is used because it essentially substitutes for the external labor market through which employment arrangements would usually be made.

But there are also a number of other reasons why multinationals will move individuals internally rather than using the external labor market to staff key positions. Executives develop deep internal knowledge of the workings of their company and strong personal networks, and these are vital attributes for effective management in multinational companies. Moreover, home country managers are often sent out to run foreign subsidiaries as a means of ensuring compliance with the demands of head office, on the basis that such individuals can be more readily trusted to understand and comply with HQ requests. There are also a lot of very short project-based assignments in multinationals that can be done more efficiently by temporarily moving individuals between countries.

There are some broad changes afoot in the way multinationals handle their international transfers. One trend is the increasing use of short visits of a couple of months or less, rather than extended moves of a year or more. A second trend is that individuals are getting more choice about whether, and when they are sent abroad. The traditional model, as exemplified by big oil companies like Shell, was that individuals more or less accepted that their careers would be mapped out for them. Today, most companies are giving individuals input into their own career plans, and letting them suggest what foreign locations – if any – they might be interested in going to.

A third trend is that the traditional focus on sending home country nationals to run the foreign subsidiaries is giving way to a more balanced model in which foreign nationals are also getting the opportunity to move, either back to the home country or to a third country. Increasingly, we are even seeing the top positions in multinationals filled by foreign executives, such as Dutchman Ben Verwaayen running British Telecom, Carlos Ghosn leading Renault Nissan, and American Howard Stringer becoming the first non-Japanese head of Sony.

The Tertiary Education Market

The tertiary education market traditionally operated on a purely national basis: funding came directly from the state, and students selected their university on a local or national level. However, this situation has changed significantly over the last 50 years, and the beginnings of a global market for tertiary education are emerging. This change is due to five interacting factors:

1. The traditional state funding model is not keeping up with the costs of and demand for tertiary education. Among the OECD countries, adult enrolment in tertiary education rose from 20 percent to 41 percent between 1975 and 2000. These increases in numbers, coupled with the increasing costs of capital equipment, buildings and faculty, are too much for the public sector to bear.
2. There is an emerging private sector in the tertiary education market. Private universities have been common in the US for many years, and they are increasingly seen in other parts of the world (both developed and developing). Many countries now encourage their universities to gain funding from a mix of public and private sources. Increasingly, students are also being asked to pay for their public schooling, through such initiatives as “top up fees” in the UK, and government-backed student loans in Canada.
3. The number of foreign students is growing quickly. This trend is most noticeable in post-graduate education, and among students from less developed countries such as India and China. According to one estimate, 25 percent of all US science and engineering graduate students come from abroad (i.e. around 50,000–100,000 people).
4. New tertiary education institutions are transcending traditional boundaries. Traditional universities are now being challenged by new models, such as virtual universities that offer on-line learning, franchise universities, and corporate universities. For example, according to one estimate 25 percent of the 80,000 foreign students at Australian universities are actually in offshore campuses in Malaysia and Singapore. Henley Management College in the UK has students studying for its MBA degree in over 100 countries via 25 global offices.
5. National laws are being harmonized to encourage greater movement of students. The biggest shift here is the 1999 “Bologna Declaration” between the member states of the European Union, who have agreed to reform their higher-education systems in a convergent way, and thus enable prospective students to study in the country of their choice.

Taken together, these trends are pushing inexorably towards a global market for tertiary education. The research-oriented parts of the system are already global in nature. Increasingly, the teaching elements are moving this way. Some schools have offshore campuses; others are creating international alliances (e.g. the Erasmus

exchange program in the European Union). It is only a matter of time before truly international universities emerge.

Host Government Policymakers

Finally, government policy is starting to get to grips with the increasingly global market for human capital. Most visibly, many developed countries have explicit programs for attracting highly skilled foreigners. Australia and Canada have for many years used a points-based system to select immigrants on the basis of their skills, and other countries are now copying this model. Five broad sets of initiatives can be identified:

1. Simplifying the work authorization process. Many countries are finding ways to expedite the process for gaining work permits. In the UK, a scheme has been set up which authorizes multinational employers to issue their own permits for workers currently employed abroad who wish to transfer to the UK. Singapore is not only offering a simplified and expedited work authorization process but also a simplified and expedited permanent residency and citizenship granting process. The United States has set up an on-line application process with an aim of processing 98 percent of applicants within three months.
2. Increasing entry quotas. Many countries which previously held entry number limitations are now raising these limits or eliminating them altogether. For example, in August 2000, the German Federal Institute for Employment passed legislation allowing up to 20,000 foreigners with a university degree and who are non-residents of the European Union to obtain work permits for a maximum of 5 years. In the Middle East, the government of Dubai has lifted all restrictions on the number of foreign nationals hired by an information technology company.
3. Spousal work visas. In some countries, governments have instituted measures to facilitate employment of spouses. In Canada, for example, spouses accompanying temporary foreign workers coming to Canada for jobs in certain high-skill occupations in key high-growth sectors of the economy will be permitted to work in their chosen field.
4. Worldwide promotion. In 2003, Ireland launched a six month worldwide promotion campaign in such diverse locations as India, Eastern Europe and South Africa to attract 200,000 workers from overseas to Ireland over the next five years. The German Federal Institute for Employment is providing a job placement market for IT experts on the Internet. Interested job seekers and companies can present themselves on this platform and make contact with one another directly.

"National governments need to take the increasing mobility of highly skilled workers very seriously, and they have to find ways of overcoming the knee-jerk reaction against allowing foreign-born individuals into well-paid jobs."

5. Tax breaks for expatriate workers. A common policy initiative in European countries is to provide tax incentives to foreign workers. For example, Denmark offers expatriates a 25 percent flat tax, rising to 31.75 percent if the employee is covered by Danish social security. In the Netherlands 35 percent of expatriate remuneration is tax free. In Sweden 25 percent is tax free, subject to criteria that establish the expatriate as highly skilled.

So What's Next for Policy?

National governments need to take the increasing mobility of highly skilled workers very seriously, and they have to find ways of overcoming the knee-jerk reaction against allowing foreign-born individuals into well-paid jobs. What policy initiatives are appropriate? On a broad level, it is possible to identify four themes that should be addressed in the years ahead to increase a country's attractiveness for human capital.

1. Liberalize tertiary education. Universities need the flexibility to bring in greater numbers of foreign students, by being allowed to charge them fees, and/or by being allowed to give them scholarships. This is already standard practice in post-graduate education in most countries; undergraduate education is next. Of course such changes always need to be balanced with protection for the needs and rights of domestic students, but at the moment most countries suffer from too few, rather than too many, foreign students.
2. Target highly skilled workers in areas of strength. Most developed countries have now recognized the need to open their borders to highly skilled workers, and have adapted their policies accordingly. But there is still enormous scope to actively target individuals in particular sectors of national importance and/or competence. Information Technology is one sector where there is a global shortage of talent, but other sectors, such as medicine, engineering and teaching all face shortages of talent in certain parts of the world.
3. Make it easier for Multinational Corporations to move their employees around. Multinationals move their people around for good reasons, and typically both the sending and receiving countries benefit. And more to the point, those countries that fail to accommodate the needs of multinationals risk losing them entirely.
4. Broadcast the competitiveness of the country. Most countries can put together a good story explaining why someone should work there for a few years, or why a multinational should invest there. But they often forget how little citizens of other countries know about them, and they often struggle under the burden of false stereotypes. There is clearly an important role to be played by inward investment agencies and other international agencies in improving the quality of information about prospects for foreign workers moving to the country for the first time.

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Coping Skills

Increasing foreign direct investment remains a major preoccupation in government policies towards globalization. Rather than the size of investment flows or the number of foreign affiliates, however, the key question is what role such investment plays in the economy. New evidence shows the impact of FDI to be sensitive to the specific conditions prevailing in each economy.

By Professor Thomas Andersson
Jönköping University, Sweden

Liberalization and regulatory reforms along with technical progress bring tremendous opportunities to gain from new combinations of international trade, investment, diffusion of technology, and labor migration. Some of the gains will be brought about through new patterns of specialization, as each country, community and organization dig deeper into mastering specific niches of skills development and commercialization, while interacting with others who specialize in their complementary abilities. At the same time, capturing such opportunities may take time, there are adjustment costs, and not all will succeed. There are certain to be winners as well as losers, and many potentially favorable scenarios are delayed or hindered from developing due to the resistance of vested interests whose privileges would be wiped out by the opening up of markets.

The scope and patterns of globalization are in a state of significant change. Manufacturing operations are no longer the main area but services have become predominant in FDI. Further, globalization is no longer limited to large-scale manufacturing operations, but small and medium-sized enterprises (SMEs) are becoming seriously engaged. SMEs tend to be more tied than large firms to local resources and capabilities, are affected by globalization in other ways, and encounter special risks. However, industrial performance is now less based on economies of scale at plant level but increasingly fuelled by networking capacity and flexibility. Finally, new countries, and competition for FDI, are on the rise. This includes notably Eastern and Central European countries, India, China and other economies in East Asia. Meanwhile, a number of developed countries, including a big part of Western Europe, encounter mounting structural challenges, and experience downward pressures on investment and employment.

The high-tech and skill-content of international pro-

duction patterns and trade has been on a steady rise over the last decades. These developments, popularly associated with the advance of the "knowledge-based society", naturally reflect a number of factors. The science and technology base of human societies keep expanding, which is accompanied by a range of socio-economic and political changes taking shape in most parts of the world. Perhaps most importantly at the present time, following a series of reductions in the cost of transports over the past century, the last decades have seen a swift decline in the costs of codifying and diffusing information in a general sense. This is also laying the basis for new kinds of commercial transactions in cyberspace.

Innovations in organizational modes and tools for dividing, linking and combining separate operations are changing the boundary lines between internal processing versus transactions performed at arm's length. Firms sharpen their capacity to outsource functions to be pursued by other units or firms, increasing their focus on core business and their ability to partner with complementary organizations. There is an ongoing decompartmentalization of the value chain, with each element located in principle wherever it is most effective. Traditional hierarchical structures are dismantled and replaced by operations that allow multiple inter-connected horizontal units to interact over vast geographical distances.

Further, firms need to access relevant knowledge wherever it is available, as well as engage in local learning processes. A move from "competence exploitation" to "competence creation", and from "assembly-type" towards "research intensive" or "strategic asset-seeking" investment, implies that greater weight is placed on upgrading the specific assets in each foreign affiliate. Affiliates' orientation is further seen to be shifting from "home-base exploiting" to "home-base augmenting" activity, and the geographical reach of affiliates has commonly increased. On the other hand, "tacit" knowledge remains vital for accessing, processing and using information, wherefore a geographical division of related activities may also reduce effectiveness. Proximity to other attractive activities and conditions in the form of existing firms or other unique assets, critically influences the industrial attractiveness of a particular region.

Regional Development

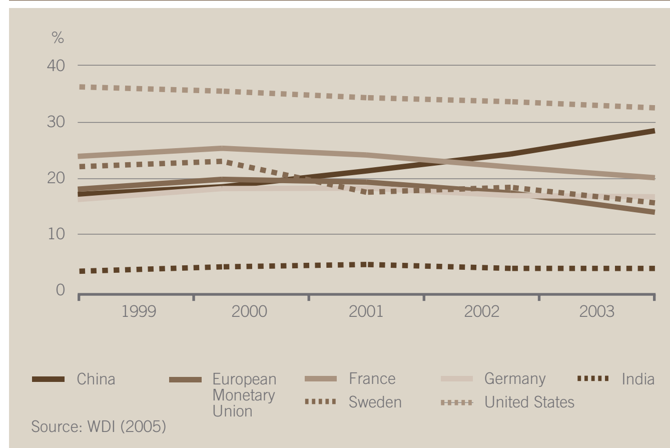
An important ongoing development, interwoven with the above, is the growing accessibility and reliability for investors of the markets of developing countries. This applies especially to Eastern and Central Europe, and to rising industrial strongholds in Asia, such as China and India. As seen from *Chart 1 (page 26)*, Chinese high-tech exports are growing fast. *Chart 2 (page 26),* shows that research and development (R&D) expenditure grows equally impressively, with an average annual increase of more than 15 percent over the last decade. Both developments are reflective of a shift in investment strategies on the part of transnational corporations (TNCs), which are moving to conduct more complex operations in China. Recent evidence indicates that FDI in China is now crowding out FDI in OECD countries, rather than other developing countries. Although less extensive thus far, such relocation of skill-intensive information communication technology (ICT) services to India is also occurring. In both these cases, inward FDI combines with the vigorous expansion of domestic firms.

For the European Union (EU), the composition of exports is tilting towards medium-tech products, and the gap in R&D relative the US continues to widen. Some

countries experience a weakening attractiveness for standardized production, e.g., in Central and Eastern Europe and also the southern member states, which raises pressures for further reforms in support of knowledge-intensive operations as a prerequisite for FDI. Mounting problems lead to increasing strains and defensive reactions. The so-called Lisbon Agenda, which the EU agreed upon in 2001 to turn Europe into the most competitive economy in the world within 10 years, appears increasingly unrealistic. Among other OECD countries, Japan has gone through more than a decade of stagnation, although there are now signs of revival. The United States, while recording high productivity growth, is plagued by a widening current account deficit, low private savings and weakening public finances.

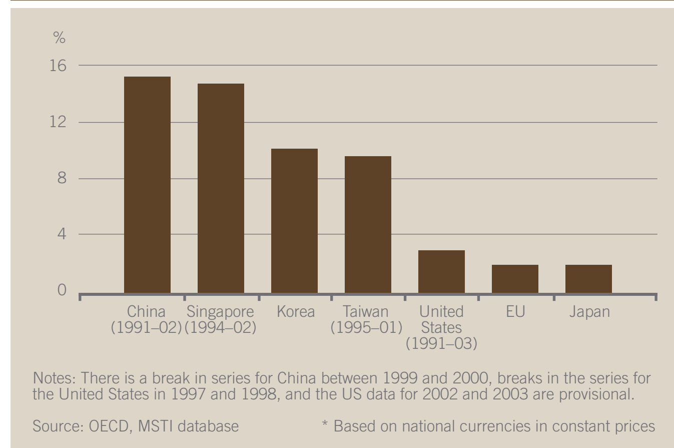
Taken together, these developments reflect changes under way in the international division of labor, primarily between Asia on the one hand – especially China and India – and the developed countries on the other. Changes in the organization and pattern of FDI are main instruments in this process. The "cost-driven" and "quality-driven" kinds of localization appear to be moving closer together. Developed countries, and particularly the EU, are faced with increasingly burdensome structural problems. Regions loosening competitiveness are obliged to adjust, new business must rise, and the small to medium enterprises (SME) sector needs to upgrade and grow in order to complement, or replace, internationalizing big business.

High-tech exports as a percentage of manufactured exports 1999–2003 *Chart 1*



Source: WDI (2005)

Growth of R&D expenditure, annual average growth rate 1991–2001* *Chart 2*



Notes: There is a break in series for China between 1999 and 2000, breaks in the series for the United States in 1997 and 1998, and the US data for 2002 and 2003 are provisional.

Source: OECD, MSTI database

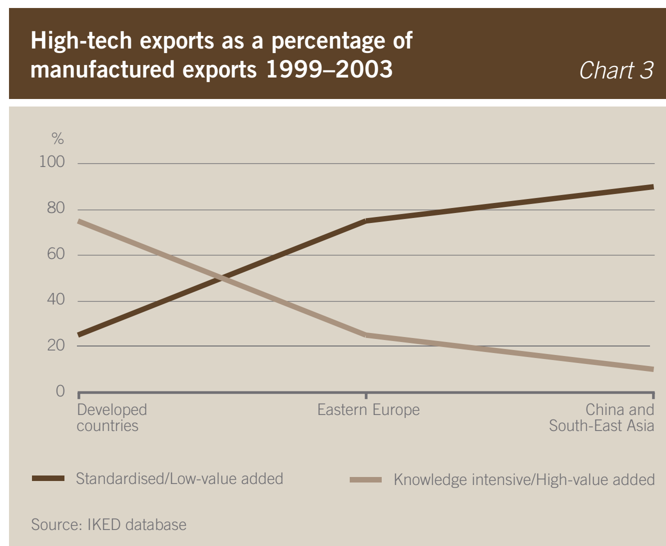
* Based on national currencies in constant prices

More Complex Impacts

Recent studies of TNCs based in, e.g., Germany and Austria in Central and Eastern Europe, point to a delocalization of jobs requiring skilled workers. SMEs based in Sweden, *Chart 3* illustrates that sophisticated operations to some degree are now established in those countries, as well as in the Far East. US-based TNCs have a much higher share of their foreign production in developing countries, and overwhelming evidence demonstrated over the years that relatively high-skilled jobs remained at home whilst less demanding ones were relocated abroad. The same has been concluded for outward Japanese FDI. Recent evidence is, however, less conclusive for these countries as well.

The flows and impacts of inward and outward FDI are related. The purpose of outward FDI may be to exploit the TNCs' own technology in a certain location. This is the form of FDI traditionally anticipated to be associated with positive productivity spillovers from the investing TNC to the host economy. Entry in a foreign market may however also be motivated by the option of technology sourcing, implying that technology is obtained in the host country and possibly transferred to the home base or to other parts of the TNC. The price for uptake will depend on institutions and market conditions. For instance, in an environment characterized by diversity in terms of alternative sources of seed and venture capital funding, as well as dynamic entrepreneurship, there is likely to be a greater flow of opportunities and higher prices for acquiring new technologies.

High-tech exports as a percentage of manufactured exports 1999–2003 *Chart 3*



Source: IKED database

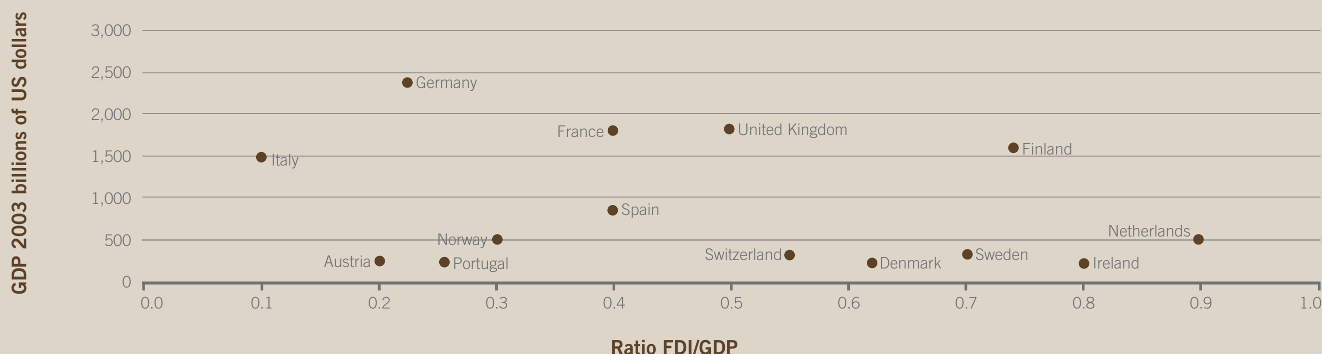
Several recent studies cast doubt on the prevalence of technological spillovers from inward FDI, or from R&D established by foreign-based TNCs in the EU. Several studies found evidence of reversed spillovers from outward FDI to home countries. US investment in the UK apparently shifted during the late 1980s and 1990s away from sectors in which US multinationals are technologically strong towards those in which the UK has significant technological expertise. TNCs have similarly been observed to establish "listening posts" around the world notably in high-tech activities. Several studies have concluded that technology sourcing has become an important determinant of foreign R&D. In UK manufacturing, the foreign sector has been found to derive substantial productivity gains from spillovers from UK-owned firms in relatively R&D-intensive sectors. The recent internationalization of R&D in Chinese companies is clearly driven by the benefits of technology sourcing in foreign markets. The technology gap would then be an important determinant of whether a country receives, or becomes sourced in technology.

Rather than depending on the mere localization trends as regards the size and direction of FDI, impacts are determined crucially by what restructuring and specialization are induced by internationalization. Does FDI induce a specialization towards higher or lower value-added in an economy? Today, it is widely recognized that an ability to develop and use skills, knowledge and information is decisive for value-added, and that capturing new opportunities in these respects requires an openness to various kinds of organizational and structural changes. In order to thrive, any location may have to continuously adjust the way in which it supports its specific assets, as a prerequisite to capturing new growth opportunities as they arise.

Country Factors

Responding to strengthening opportunities as well as sharpening international competition, FDI flows and TNC operations are becoming increasingly capable of adapting to the conditions prevailing in individual countries or regions. Some of the factors that determine the direction and impacts of FDI flows cannot be much influenced by policies. These may have to do with geographical distance, proximity to markets, or market size. Others may take a long time to adjust, such as the development level of a country and its institutions, or the skill level of its work force. At the same time, FDI and what effects it gives rise to will much depend on how an economy is able to adjust to changing circumstances.

Accumulated FDI flows relative to GDP, 1998 to 2003, in relation to GDP 2003 *Chart 4*



Source: UNCTAD; FDI database and Handbook of Statistics. Processed by IKED

To what extent does a factor such as country size exert any tangible impact on opportunities in such respects? American economist Paul Krugman argued that industries characterized by increasing returns to scale, which he assumed to be knowledge-intensive due to high fixed costs in R&D, would concentrate in countries with relatively large domestic markets. In contrast, constant-returns-to-scale industries, with standardized low value-added production, would locate in smaller and peripheral economies. Contributing to such patterns might be the capacity of a large domestic market to support variation in new enterprise and product development, depth in financial market institutions, greater scope of public R&D, or that the supply of skilled personnel may be less restrained in countries with a relatively large work force.

"A country should refrain from a 'picking-the-winner' policy, in terms of supporting individual firms or ventures. However, measures to attract foreign investment are warranted in many cases due to the presence of barriers and imperfections in information. At the same time, such a policy needs to concern itself with the impacts of the investment that is obtained, and strive for enhancing the public goods' element in the globalization process."

There is some empirical evidence supporting this kind of reasoning, as seen from the presence of a relatively high concentration of foreign R&D in large host countries. On the other hand, neither the distribution of FDI nor the economic record of European countries actually displays a positive relationship with country size. Ireland, the Netherlands, Denmark, Switzerland, and, in recent years, Finland and Sweden, have a strong record in inward FDI, R&D and growth. All established strong frameworks for education and research early on, achieved high stability and undertook structural reforms that helped feed the development of internationally competitive industries. In terms of economic results, they outperform the EU average. Larger continental European countries, notably Germany and Italy, attract less FDI in relative terms as well as meet with more severe economic problems. As indicated by *Chart 4*, within the EU there is a negative correlation between country size and FDI flows.

It appears that limited market size may indeed be compensated for by other factors, such as greater openness and readiness to accept entry by newcomers. Small country size implies pressure on political institutions to dismantle trade and investment barriers, and to pursue needed structural reforms. Unless such sentiments have their way, vested interests hamper an economy's ability to adjust. Today, parts of the EU are plagued by a risk-averse culture and policies reflecting a lack of appreciation for technological and commercial renewal, and for entrepreneurship. Given the presence of a strong existing scientific and industrial base, FDI may then occur under conditions that systematically favor FDI and foreign R&D motivated by sourcing technology. Technology sales will generate revenue, but production and employment may decline in domestic- and foreign-owned operations alike, as new economic activities are developed elsewhere.

How serious is today's competition from emerging industrial countries? Lower wages and production costs, less demanding taxes and more flexible labor markets, are nothing new. The big change under way has to do with the fact that such conditions combine with an enor-

mous increase in education and research, coupled with a strong drive for commercial success. In the meantime, the quality of these countries' bureaucracies is improving. Naturally they experience tensions due to, e.g., demands for higher wages and social security among workers. Serious frictions also reappear, or evolve in new ways, among sectors, social classes, or regions as these economies inevitably develop in an uneven fashion. Also, regulatory conditions and some institutions that are needed for creating well-functioning markets, such as intellectual property rights, or the protection of properties and opportunities of special groups, such as women, children or elderly, or members of different ethnical groups, continue to display major deficiencies. Despite such flaws, the precise nature and combination of which varies between individual societies, these countries are nevertheless already offering conditions that are becoming highly competitive as a basis for sophisticated economic activities. As they enjoy the opportunity to learn from failures in developed countries, they may manage to avoid creating new unfavorable conditions as they continue to develop.

What's Next?

In the future, for all countries to achieve or maintain a lead position in high value-added operations, it will be essential to improve dysfunctional incentive structures. In other words, each society needs to improve its ability to identify and rectify those conditions that are performing the weakest relative conditions elsewhere. Many countries need to take major steps to improve the basis for knowledge-accumulation throughout life, putting in place modes and means for creative learning that makes sense from early on and which then adjust and last to the very end of a career. In ageing societies, the mature and experienced should be enticed to continue to contribute for longer. Many of the established industrialized countries must dismantle currently prevailing disincentives to learning and upskilling,

"Swift responses are not well engineered by governments alone, but in many instances governments must assume responsibility for triggering joint efforts in working out solutions."

increase the mobility of workers, and strengthen mechanisms for upskilling among SMEs. In addition, it will be vital to ensure first-rate infrastructure for integrated transport and logistics solutions, as well as for communication and information technology. For policy makers, I offer the following ideas:

1. Regulatory conditions are becoming increasingly decisive, as is the way in which public-private partnership can be designed. Solutions must be allowed to flourish and be better coordinated in response to the real threats, as they arise, whether in the form of lacking trust, security and privacy in digital transactions, or in the form of new practices hampering competition and free market access. Swift responses are not well engineered by governments alone, but in many instances governments must assume responsibility for triggering joint efforts in working out solutions. Enabling faster implementation of relevant and effective policies in regard to evolving market needs will become increasingly decisive in the days to come.
2. A country should refrain from a "picking-the-winner" policy, in terms of supporting individual firms or ventures. However, measures to attract foreign investment are warranted in many cases due to the presence

of barriers and imperfections in information. At the same time, such a policy needs to concern itself with the impacts of the investment that is obtained, and strive for enhancing the public goods' element in the globalization process. This should include highlighting deficiencies hurting resource allocation among domestic and foreign firms alike, and often the balance between the two. Sharpening international competition and the evolving technological and organizational changes under way are making present distortions increasingly costly.

3. The developed countries must not fear globalization and shut the door to the restructuring it entails. The number of firms and jobs lost from restructuring is not the issue. The key question is what comes in their place, and whether potential opportunities for new products, firms and industries are in place. Today, however, there is a dearth of data on the interface between domestic factors and transnational investments and economic restructuring. The consequences are particularly unclear in some areas, as in the case of service industries and SMEs, which used to be less directly involved in globalization but are now strongly affected. There is thus a need of better data and of better understanding of factors that determine what outcomes are obtained under specific circumstances.
4. Transition economies and developing countries are faced with their set of challenges. These include managing acute needs without compromizing long-term capacity building. All countries need to remove red tape that commonly impede both FDI and the development of domestic enterprises. Each country will have to do the job of improving the efficiency of governance, to prioritize, and to bring together key stakeholders in decision-making processes so as to muster a greater strength to address its specific, most taxing deficiencies in a faster and more decisive manner.
5. All investment decisions are undertaken under conditions of uncertainty and imperfect information. Again, however, the impacts of globalization ultimately hinge on how local economies evolve and are able to specialize along promising avenues, including with respect to the upgrading of skills, restructuring, and the rise of new products, firms and jobs in place of those that dwindle or disappear.

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Too Little or Too Much?

The evolution of fragmented, competence-creating centers of excellence for global production is accelerating the rate in which developing countries will be able to exert influence on cross-border trade. The critical issue for policy makers in these countries is how to facilitate this "national specialization", encourage greater international coordination of production, while at the same time improve their ability to learn locally from what is being done in other parts of the world.

By John A. Cantwell
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There are three key recent and related trends in globalization that have begun to transform both the opportunities and challenges that foreign direct investment (FDI) presents, especially for the potential for economic and technological catch-up in developing countries.

First, vertical production chains have become increasingly fragmented – a trend that has been associated with a growth in the outsourcing of an ever widening range of functions. This has had a geographical aspect to it (and hence it is a critical component of current globalization), since the newly fragmented parts of production are also increasingly prone to be relocated.

As a result, the specialization of countries is now more and more driven by attracting functional lines of activity within global production chains or networks, rather than by attracting to just one location an extensive share of the vertical chain of activities associated with some given final product lines.

What is more, when fragmented parts of production networks are relocated to developing countries, it is not any longer just a matter of the relocation of simpler functions attracted by the availability of low cost labor, as sometimes imagined in popular discussions. The latest aspect of this first trend in globalization involves the increasing relocation of functions that require critical skills, such as the growth of international software provision and clinical trial facilities in India, or the emergence of international research and development (R&D) centers in China.

A key implication of the international dispersal of a wider range of elements of production networks is that countries catching up in the era emerging now can afford a higher degree of technological and industrial specialization in their fields of catch-up, and that they can more readily participate in at least some segments of more

technologically advanced fields of activity. In contrast, the catching-up of Japan and South Korea in the 20th century required the development of a diversified domestic industrial structure that facilitated growth across a broad front of industries at home. Those industries were connected through the indigenous *keiretsu* or *chaebol* networks. This suggests that there are some respects in which catching up has recently become more viable for countries that begin behind, and these might be set against other more commonly discussed respects in which catching up has become more difficult (such as the tighter enforcement of intellectual property regimes, and the greater restraints on imposing trade barriers on infant industry grounds and the like under the provisions of the World Trade Organization (WTO).

Knowledge-Based

Second, there is a trend towards an increase in outward FDI emanating from developing countries. While it is well known that there are a variety of motives for FDI (including those associated with the purposes of natural resource-seeking, market-seeking, or efficiency-seeking), there has been a steady rise since the 1980s in the significance of the role of knowledge-based asset-seeking FDI, and this motive is particularly evident in the emerging outward FDI from many developing countries. Especially in East Asia, and beginning from the earlier experience of Japan, policy makers have become aware of the role of the outward FDI of companies from their own countries of origin in the acquisition at home of foreign technologies and skills.

Years ago few would have contemplated the possibility of significant outward FDI from developing countries, and to the extent to which they considered outward investment at all development economists tended to frown upon it owing to the apparently resulting loss of scarce capital. What has changed today is the new contribution of international knowledge-based asset-seeking connections, and the scope for managing this activity from corporate centers within the developing countries. Look, for instance, at the recent outward FDI record of Chinese firms. The central role of knowledge-based and reputational asset-seeking seems undeniable in both Lenovo's acquisition of IBM's PC hardware business and in Nanjing Automotive's purchase of MG Rover.

"The bulk of empirical evidence has always shown that outward FDI too tends to be trade-creating and job-creating for the home country, since it supports exports from a wider range of companies from that country of origin."

In the context of investment promotion and FDI policy issues it is worth underlining this new context of outward FDI and economic development. So often – outside East Asia, at least – policy makers seem to think almost exclusively in terms of inward FDI into their own host countries. The reasoning that lies behind such thinking runs along the standard lines that investment is job-creating. So inward FDI is "good" from the host country perspective, as it means job creation in the locality of the investment, but if so outward FDI is at best suspicious from the perspective of the home country, since it is suggestive of moving jobs abroad.

Indeed, most of the popular discussions of outsourcing in the US and other established industrialized countries seem to be dominated by this kind of concern. However, the bulk of empirical evidence has always shown that

outward FDI too tends to be trade-creating and job-creating for the home country, since it supports exports from a wider range of companies from that country of origin. Even in terms of the specific firm undertaking the investment, the alternative to outward FDI may be an erosion of competitiveness that would in due course lead to greater job loss, while competitive regeneration creates new (albeit different) jobs.

What has changed for our understanding of outward FDI is that an essential part of today's competitiveness story is how the international networks of locally based transnational corporations (TNCs) are increasingly important also for technology, knowledge and asset acquisition at home, and so policy makers need to start viewing outward FDI through this new lens.

Third, comes a closely related micro trend at the firm level, which has provided the critical foundation for each of the other two recent trends in globalization. That is, there is now a tendency towards an increasing decentralization of nodes of control within the international corporate networks of TNCs. This trend towards administrative decentralization of elements of control in TNC operations is bound up with the consolidation of a movement towards a distributed model of competence creation within cross-border TNC networks.

Thus, the involvement of firms in catching up countries with the global production networks of TNCs from industrialized countries, and the appearance of asset-seeking outward investments by developing country TNCs, themselves both represent facets of the gradual emergence of the potential for a more decentralized structure of knowledge creation and exploration within the TNCs of today.

This third issue of the evolution and growth of competence-creating centers of excellence for global production networks that are locally embedded in their respective host economies but rely on international knowledge exchanges with other parts of their primary corporate group, now lies at the center of attention in studies of TNCs and innovation. The competence-creating parts of international corporate networks may include subcontractors or partner companies, as well as majority-owned subsidiaries, and there is now greater scope for some parts of these networks to be located in developing countries.

Thirty years ago, some economists expected that TNCs, with their combination of centralized organizational hierarchy and international spread, would tend to reproduce a hierarchical division of labor between geographical regions of the world that reflected the vertical division of labor within the firm. Since at that time most TNCs also originated from the US or Western Europe, on this view they would tend to centralize high-level decision-making occupations in a few key cities in which their headquarter offices were located in the established industrialized countries.

Corporate Decision Making

Inferring from the microcosm to the macrocosm, we can see a corresponding principle whereby the centralization of control within the TNC leads to centralization of control within the international economy. Thus, geographical specialization will reflect the hierarchy of TNC corporate decision making. With the increasing dominance of TNCs in the international economy, the concern that follows from this way of thinking is that the existing elements of inequality and dependency are reinforced and perpetuated and peripheral regions become locked in permanently.

However, the uneven development that we observe today, and the role of TNCs within it, emanates more

from the differentiation and marked variations in the extent of local initiatives as between individual subsidiaries, and a bottom-up evolution in the cross-border networks of TNCs, rather than from a purely top-down central administrative control in a uniform organizational TNC hierarchy. Also, it derives from a process of dynamic interaction between multiple actors, and not just from some prior geographical allocation of different types of activity by one single actor.

More especially today, the dispersion of knowledge and innovation implies a dispersion of control in the TNC network. In the current knowledge-based economy, in which knowledge has become the key asset, control comes increasingly from the possession of knowledge, and the ability to create new knowledge or access complementary knowledge. Control in TNCs is increasingly subject to elements of decentralization to specialized nodes of excellence because TNC headquarters often cannot fully understand the complexities of the knowledge-related activities of their subsidiaries.

As a result of TNCs becoming more like global networks with stronger elements of decentralized control, their increasing engagement in vigorous asset-seeking activities, and their dispersion of knowledge and innovation, it is now misleading to still think of the TNC as a singular allocator of world wealth, conducting a unilateral flow of investment, income and capabilities from center to periphery in each firm.

For Better and For Worse

TNCs can impact upon world development in complex and multi-faceted ways, both beneficial and detrimental. Higher-level technological centers arise not purely through the parent-led decisions of TNC headquarters, but as a consequence of the interaction of many actors, including at a location level local economic dynamics, the regional innovation system, local and national government policies, and at a firm level subsidiary-driven initiatives.

"Government can help attract foreign-owned research activity of a locally competence-creating kind by funding a suitably modern science and educational base."

The new conditions regulating locational quality imply a stronger role for the state (including its investment promotion efforts, broadly defined) in sustaining the competitive advantage of a country and increasing its share of value-added, through encouraging the most appropriate kinds of local technological specialization, depending upon the particular characteristics of local skills and institutions. Most notably, government can help attract foreign-owned research activity of a locally competence-creating kind by funding a suitably modern science and educational base.

In the current environment, there is one especially important determinant that has emerged of whether inward FDI and involvement in the global production networks of TNCs has either beneficial or detrimental effects on host country growth – and relatedly whether there is too much or too little globalization and FDI from the perspective of a host country. This issue concerns how local networks (between firms themselves, and between firms and other actors in a given location) interact with international networks in the process of economic growth and development.

A key feature of the international business literature has been to emphasize the trade offs between local respon-

siveness or local network embeddedness on the one hand, and international integration or cross-border network relationships on the other. Thus, to take advantage of the opportunities offered by international business connections, it becomes critical to understand how to obtain the right balance between local and international networks, so as to enhance their mutual creativity and to avoid them becoming mutually exclusive.

The workings of relationships between networks (and in other words between foreign-owned TNCs and local actors) are often quite complex, and involve both positive and negative factors, which is why a variety of possible outcomes can be observed. Consider, for instance, the interaction in a given location between foreign-owned TNCs and locally dominant indigenous firms in the same industry. On the positive side, the locally dominant firms will tend to be well placed insiders that enjoy good connections with local networks. They will therefore be better positioned to facilitate the transmission of local knowledge to foreign-owned TNCs, and thereby to others engaged in the international networks of such TNCs in distant sites.

However, on the negative side is what is sometimes termed the liability of foreignness effect. Foreign-owned TNCs may find themselves in the position of outsiders to local networks, which becomes more likely the greater is the institutional distance between the host country and the headquarters location of the TNC in question. If so, the subsidiaries of foreign-owned TNCs may be subject to a greater competition effect in local markets from better placed insider companies, and a gravitational pull of the best local resources towards those local firms. These counter-effects work against establishing a conducive relationship between local networks and the international networks of foreign-owned TNCs.

Instead, consider the nature of potential interaction of foreign-owned TNCs with local actors in a host region at the opposite extreme, in which there are no indigenous companies that are locally dominant in the area, but in which a wide diversity of indigenous firms are represented.

"To take advantage of the opportunities offered by international business connections, it becomes critical to understand how to obtain the right balance between local and international networks, so as to enhance their mutual creativity and to avoid them becoming mutually exclusive."

This kind of sub-national region would resemble much more the characteristics of a conventional cluster, which may consequently have the kinds of attractions as a potential location. The advantages to the competitiveness of incoming firms that locate in established clusters take the form of a pooled market for skilled workers with industry-specific competencies, and the availability of common suppliers. For reasons alluded to already, the more recent cluster literature has rather focused on the role of knowledge spillovers in attracting firms.

In this case of local inter-firm diversity and the absence of locally dominant players, on the negative side the plants of indigenous firms with which foreign-owned TNCs interact may not be closely embedded themselves within the local area, if the region in question is responsible for only a relatively small part of their own operations. Yet on the positive side foreign-owned TNCs can expect to find a wider variety of potential local sources of knowledge spillovers, and therefore to improve the likelihood

of establishing at least some useful linkages for themselves with local networks.

Also, where among the clustered variety of local companies there is a good representation of other existing foreign-owned subsidiaries, there may be in this context an advantage of multinationality effect to set against any liability of foreignness issues. In interacting with these local actors that are typically themselves as well connected with international networks as they are with local networks, foreign-owned firms may help one another to establish the potential for learning by outsiders the knowledge that is available locally.

So, how is the agenda of policy makers shifting as these considerations of the relationships between local and international networks, and the scope for knowledge spillovers become increasingly central to the determination of whether or not FDI positively influences local development? In this new framework, states are best advised to maintain a good local infrastructure and to encourage suitable local institution building, and to facilitate local inter-company networks for cross-licensing and other schemes for the mutual enhancement of technological development.

This type of connected local network strategy is increasingly likely to appeal to TNCs when they consider whether to extend capacity, and if so where. In this case, a local regional and industrial policy role remains for national governments, even in the context of globalization. For policy makers, the issue becomes one of how to facilitate the most appropriate pattern of national specialization, or in other words, how best to build upon established local strengths in innovative capability, and how to encourage a greater international coordination of productive activity in such a way as to improve the ability to learn locally from what is being done in other parts of the world. Needless to say, some developing countries (such as China and India) are currently better placed to capitalize upon this new agenda than are others.

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II. Rising to the Challenge

John M. Stopford
AnnaLee Saxenian
Marielou Guerrero and
Lorraine Ruffing
Max von Zedtwitz
Guy Ryder and
John Evans

Technology and innovations in business models are eroding the boundaries of traditional markets. In this chapter, John M. Stopford explores how more investments, from new sources of funding, will be chasing low-income consumers. AnnaLee Saxenian explains how markets which were once the sole preserves of large corporations are increasingly becoming the territory of entrepreneurial ventures. Marielou Guerrero and Lorraine Ruffing present a case study of how small and medium enterprises can work effectively with multinational corporations. Max von Zedtwitz looks at China's new policy of investing abroad. Finally, Guy Ryder and John Evans offer a labor perspective of working with management on globalization issues.

New Actors Take the Stage

As boundaries to traditional markets are being eroded by technology and innovation in business models, the next decade of foreign direct investment will see much younger firms entering as international players in more complex regional patterns of low cost production, more investments chasing low-income consumers and new sources of funding such as venture capital and private equity fund investments.

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There are the beginnings of a fundamental shift in the forms of foreign direct investment (FDI) and the geography of the sources and destination of the financial flows. We can expect to see a rapid growth of FDI emanating from emerging economies such as China, India, Brazil and Russia. We can also expect to see a rise in FDI spending by firms in smaller countries and by much younger firms entering the international market much sooner than before.

The motivations for investors from these relatively new locations to build positions in foreign markets seems set to remain roughly as they have long been for the "traditional" investor firms in high-income territories. Investors typically seek growth by gaining access to new markets, preferably high-growth markets. At the same time, they seek locations that can lower the total delivered cost of their worldwide systems, while maintaining adequate degrees of control and risk management. Other motivations, such as seeking sources of raw materials, remain unchanged.

New technologies, most particularly those related to the Internet, are acting to extend the ability of firms to reach further afield to tap into human resource systems. The Internet is also allowing firms to develop lower-cost methods of control, thus permitting ever more specialized investments to be developed at economic cost. A firm can now, more readily than before, locate labor-intensive operations in low-cost countries, while locating high-skill activities in those "clusters" that provide the best value for intelligent systems. The resulting complexity of integrating and coordinating such diversity can now be managed more competitively.

These developments are fuelling seven trends that can be summarized as:

1. Complex, often regional patterns of chasing low-cost sources of manufactured output.
2. More investments chasing the low-income consumer
3. Increasingly specialized investments, some of which will lead to their internationalization dynamics in the future.
4. More small firms are entering the international market and pushing upwards on the value chain as they innovate their business models.
5. A rapid rise in South-South investments, supplemented by more frequent South-North investments, often in very large deals.
6. More global strategic alliances becoming more closely linked through equity stakes.
7. Finally, venture capital and private equity fund investments need to be included as a new form of quasi FDI.

Some of these trends will induce a re-assessment of existing investments. There will be negative flows for some countries as plants are closed and moved elsewhere. The net impact of this, however, is unlikely to be sufficient to dent seriously the continuing growth of reinvested earnings, the primary and most likely continuing greatest source of financing of new investment.

Chasing Low Costs

Recent years have seen an enormous rise in FDI flows to China, and to a lesser extent, to India. These investments in both services and manufacturing are designed to capture shares of the local market and to create new export streams. Indeed, many US investments in China resemble the pattern of Japanese investments to South-East Asia in the 1970s and 1980s. Labor-intensive and low technology parts of the value chain were transferred to lower cost countries and the resultant output imported and assembled into finished products at home. Sometimes known as the pattern of "flying wild geese", this trend seems set to continue for a long time to come.

"Countries that are somewhere in the middle of the cost range are likely to suffer severe declines in their ability to attract inward FDI if they fail to offer other incentives for the investor."

The search for ever lower-cost sources of production has complex effects on existing "footprints" of production. One particular impact in some countries is a loss of FDI. For example, Mexico has lost export-oriented investment in textiles, but not to China. Instead, production has been shifting to neighbouring countries such as El Salvador, Honduras and Guatemala. These are countries that combine low costs of production with low costs of proximity to the main export market, the USA.

In industries where the costs of traded distance are lower, re-location of existing facilities will continue to be on a global basis. For example, Dell has recently invested in a major facility in Brazil as one of its source points for the global market. Should cost economics shift further towards China, then Dell would be under pressure to disinvest from Brazil. While acknowledging that local investments in human skills and processes act as a powerful drag against "footloose" behavior, there comes a time when the cost disparities are so severe that a failure to relocate to lower-cost sites can risk the competitiveness of the enterprise as a whole. Countries that are somewhere in the middle of the cost range are likely to suffer severe declines in their ability to attract inward FDI if they fail to offer other incentives for the investor.

Such developments are likely to become commoner in the future as multinationals adjust their regional patterns of output and trade. Within Europe, the same sorts of adjustments are becoming evident. In industries such as domestic appliances, a considerable amount of output is shifting to Eastern European countries. As the factories move eastwards, the steel industry must follow. Accordingly, major steel companies like Arcelor and Ispat have become active in buying facilities in Romania, Slovakia and the Ukraine and elsewhere in the region.

Chasing the Low-Income Consumer

Some multinationals are discovering new lucrative markets as they adapt their products and logistics to serve consumers earning US$2 a day or less. The start of what may turn into a massive revolution in thinking and action has been well described by CK Prahalad in his remarkable new book, "The Fortune at the Bottom of the Pyramid". Unilever is one of the pioneers, discovering in Vietnam, for example, that poor rural farmers without electricity or indoor plumbing wish to buy toiletries and detergents provided they are packed in tiny portions. Unilever also provides rural income by employing thousands of independent sales representatives that provide a capacity to reach consumers in the remotest part of the country.

These new consumers are part of the four billion people who have been ignored by the Western multinationals up to now. As Prahalad says, "the moment you create the opportunity for them to consume, you create the world's largest markets". The lure of the estimated incremental US$13 trillion a year market is likely to prove irresistible to many investors, but perhaps only slowly.

Most of the growth in the near term is likely to be for somewhat richer consumers: the dilemmas of solving the problems facing the few like Unilever that have already made progress are likely to deter less well endowed firms. Much more promising, as incomes continue to rise in emerging markets, is the potential for products appropriate for those consumers with incomes over US$500 per annum. The dilemmas and costs of adjustment are much less than those at the lowest income level. Motorola has launched a no-frills mobile phone for US$40 aimed at market segments in China, India and Turkey and in similar countries. There is an estimated two billion new purchasers of mobile phones in emerging markets in the next five years. Similar estimates exist for many other household gadgets as prices decline. Here is a vast potential market for organic growth within the existing multinationals, provided they can move fast enough to take leading positions. If they do not, then there will be plenty of new entrants willing to take on the new risks and create new flows of FDI.

Increasingly Specialized Investments

Much of the FDI from Europe and the USA used to be in the form of creating full-function businesses, in effect cloning the parent corporation in foreign territories. Then as the Japanese began investing abroad, many firms started specializing their FDI in terms of slicing up the functions along the value chain. Later on, new entrants that competed in only one of the incumbents' activities challenged whole industries. For example, major drug firms had for long based their strategies on integrating everything from research to sales. Starting in the 1980s, firms specializing in one activity – research, clinical trials, and manufacturing, selling – began to achieve significant inroads into the majors' business, sometimes in partner-

ship with their rivals. Some specialists like Quintiles provided a form of out-sourcing that later propelled them into the global arena as they followed their clients to all major sites of production. Similarly, in computing, Microsoft became more valuable than IBM, its initial and prime client.

Younger and Smaller Firms

The barriers to internationalization are going down precipitously, permitting many more new entrants. A major traditional barrier has been the cost of acquiring adequate knowledge of foreign markets and foreign competition. No longer is this a serious barrier to those prepared to invest time in using the available communication supports. In addition, policies of de-regulation and liberalization continue to open up new markets and ease the entry of newcomers.

This trend is set to continue and to grow. The reason is that the "boundaries" to traditional markets are being eroded both by technology and by innovation in the design and execution of business models. The diminishing power of the major pharmaceutical firms to control the integration of the total value chain has allowed many new specialized entrants into the market. Similarly, new entrants such as Pliva, from Croatia, Rambaxy from India and Teva from Israel have started in the low-cost generics end of the product portfolio and are moving further up the value chain as they gain international experience. Precisely the same developments are evident in other industries. Acer from Taiwan started as an own-label component maker and then developed as a branded producer of PCs challenging Dell and other leaders in emerging markets. Thermax has a similar history in small domestic boilers.

These examples of innovative new entrants defy explanations of FDI flows based on nations of the comparative advantage of the home nation. Croatia is not a strongly supportive environment for drug development. The new entrants demonstrate the power of experimentation and entrepreneurship. These are firms that have, in effect, thrown off the shackles of the competitive landscape of their homeland and reached for a far more ambitious scope of operations.

Furthermore, as the global message spreads in the entrepreneurial world, more firms are earning the label "born global". Rather than start locally, prove the strategic model and hope for later transfer internationally, some firms are conceived right from the start as a global entity.

"Rather than start locally, prove the strategic model and hope for later transfer internationally, some firms are conceived right from the start as a global entity."

Innovation in technology and strategy combined with more accessible global knowledge is fuelling a revolution in the dynamics of FDI flows. Timescales for development of position globally are collapsing in many industries. Think how rapidly eBay became global. Further, many of these born global new entrants are following the path beaten out by firms such as Microsoft, which uses its contracts with IBM effectively to piggyback on IBM's installed capacity across the world. The scale and scope of the market leaders makes the cost of going global far less for its preferred suppliers and contract partners.

This leads to a related, but speculative thought. Will the growth of the Internet act to decrease the flow of FDI? If more wealth-creating activity can be performed

on widely distributed screens, the need for investment in foreign markets may diminish. Moreover, it is not clear how the resulting trade will be reported. Consider the instance of an Indian software engineer in Bangalore working on a US-based computer system to repair software problems in the Argentinian facilities of a German multinational. How is that activity valued and recorded? Is there any trade involved? After all, only information has crossed a national border. How will the activity be taxed? By whom?

South-South and South-North FDI

The great majority of FDI has been from rich countries to less wealthy ones – a North-South pattern. This dominant pattern is now being broken, though traditional North-South flows will continue, as investors chase low costs and low-income consumers. The innovations permitting new entrants into crowded markets apply just as strongly to emerging markets as to rich ones. A growing army of Taiwanese entrepreneurial firms is now following the pioneering work of Acer to shed the image of Taiwan as solely a place of low-cost engineering and to develop a global brand.

South-South investments in manufacturing are growing rapidly as major firms in emerging markets gain in stature and confidence. Many firms in emerging markets are realizing they must develop global capability and position if they are to protect themselves from foreign takeover. China's growth and appetite for materials has led, not surprisingly, to expansion abroad to gain more secure access to raw materials.

There are, as yet, few examples of a firm from an emerging country aiming for global leadership in an established industry and succeeding. One example is Cemex from Mexico. Cemex is now leader in some segments of the cement business and is challenging Lafarge in France for overall leadership. Cemex illustrates the power of innovative business models in mature industries, in their case harnessing digital means to develop control processes. Cemex has expanded primarily in neighboring countries, including the USA and Canada, but has recently set its sights on Europe by acquiring the ReadyMix Company in the UK. Many more such stories will be told in the coming years.

Alliances for New Equity Deals

Some estimates have suggested that as much as one-third of all new cross-border entities created during the past decade or so have been in the form of strategic alliances. As such, these ventures have not entered the FDI calculations. There are signs however that some, perhaps many alliances are proving to be stepping stones to later equity swaps or outright purchase by one party.

"In many cases, private equity is used to replace publicly traded equity for a period when the target firm is re-organized."

Equity swaps have the ability to add discipline and control to the alliance in ways that contracts cannot always provide. Especially where there are great uncertainties in future trading conditions, contracts can fail to anticipate the necessary easements of the original contract terms or act to slow down adjustments.

Given the likely uncertainties and needs for radical adjustment in many industries, the substitution of equity for contract is likely to grow rapidly. This trend may also be supplemented as firms learn from an alliance and gain

confidence from their experience to acquire competitors of the alliance. For example, Arcelor, the major steel producer with headquarters in Luxembourg, has had a series of alliances in China with BaoSteel, the largest Chinese producer. Arcelor announced recently that it intends to buy several smaller Chinese steel producers to strengthen its position there.

Venture Capitalist and Private Equity

A final, much more speculative possibility for attracting FDI, is the growing role of venture capital (VC) and private equity funds. Recently branded by German politicians as "locusts", private equity managers have had a powerful influence in changing firms' strategies and capabilities. It is not at all clear whether the actions of internationally operating VC and private equity funds qualify in any technically finance sense as a form of even quasi-FDI. Yet, though they have very different characteristics, both have an ability to transfer resources other than simply money across borders. They can bring managerial expertise, market contacts, new technologies and the entrée to alliances of all sorts.

The amounts of money at stake are enormous. The boom for this relatively new industry was just before the dot.com bubble burst. VC funds are reported to be seeking US$46 billion of new capital in 2005, despite several years of low returns and a perception of rising risk. It is not clear how much of this money will flow across borders. Even larger sums are in play with the private equity groups, where deals of US$10 billion have been recorded. In many cases, private equity is used to replace publicly traded equity for a period when the target firm is re-organized. In Germany, these re-organizations have typically led to job losses at home and re-deployment of assets abroad, all in the search for lower costs. It is this sense of stripping out local resources that has led to the German political response. Whether the name is deserved is the stuff of current debate.

The facts though show that for both new ventures and for re-organizations, these funds have the effects often associated with the parent companies of the multinationals. They recognize opportunities that the capital market can miss and they have the power to insist on their terms of doing business to increase the efficiency and later real value of the assets. Their funds flow across borders cannot be equated with portfolio capital, because that has no direct managerial impact. For these reasons, they ought to be regarded as falling inside the net of the FDI phenomenon. Their impact is likely to grow.

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The Age of the Agile

Our international mobility, both physically and electronically, is giving a whole new meaning to the concept of a multinational company. What was once the sole preserve of large corporations is increasingly becoming the territory of entrepreneurial start-ups. Based on the Silicon Valley model, the whole world is now California dreaming.

By Professor AnnaLee Saxenian
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- *In 2005 the Intel Corporation announced a new US$200 million venture capital fund dedicated to investing in technology start-ups located in China. This was a large, but not unprecedented, commitment. Five years earlier Intel committed a US$100 million fund to India-based start-ups. The firm's venture capital arm, Intel Capital, has invested over US$4 billion in 1,000 entrepreneurial companies since 1991 and a growing proportion of these investments are outside of the United States. Today Intel Capital has investment managers in 25 countries and approximately 40 percent of its investments are overseas.*
- *Walden International Investment Group (WIIG), a venture capital fund founded by a Chinese-American engineer in San Francisco, began investing in technology start-ups in Taiwan in the mid-1980s. The firm achieved the status of a top-tier venture capital firm by financing some of the most successful semiconductor and computer-related ventures in Taiwan. With US$1.5 billion under investment, WIIG is now an active investor in communications, consumer/digital electronics, semiconductor and software/information technology (IT) services start-ups in China, Taiwan, India, Japan, Malaysia, Singapore and the Philippines.*
- *Acer Technology Ventures, the investment arm of Taiwan's Acer Computer, seeks to promote "cross-Pacific start-ups" through investments in companies based in the United States and Asia. Its US$260 million "IP Fund One" is devoted to early-stage start-ups in the Internet protocol (enabling technology and solutions based on Internet platform) and intellectual property (software, integrated circuit (IC) design, etc.) fields. Its limited partners include Acer affiliate companies (32 percent), Acer top management (six percent), and*

institutional investors and the firm has offices in Silicon Valley, Taipei, Shanghai and Singapore.

– *JumpStartUp Venture Fund was established in Bangalore India in 2000 by three veterans of the IT industry with experience in both India and Silicon Valley. The US$45 million fund, targeted at early-stage information technology start-ups, had funding from institutional investors in the US and India as well as successful Indian executives in the United States. In 2002 JumpStartUp moved its headquarters from Bangalore to Santa Clara, California, in order to shift its investment strategy from an India-focused fund toward "US-India cross-border investments." JumpStartUp envisions a role as co-investor with established venture capital firms in order to help portfolio companies set up engineering teams as well as design, deployment, and support functions in India.*

Discussions of foreign direct investment typically evoke images of stand-alone multinational corporations establishing large manufacturing and assembly branch plants or research and development labs in distant locations. However, investments in entrepreneurial technology ventures are an increasingly important component of foreign direct investment and promise to become a critical determinant of long-term developmental outcomes. Whether these investments are made by dedicated venture capital firms like WIIG or by the venture capital arms of established corporations like Intel and Acer, they have already contributed to the creation of dynamic clusters of technological innovation in locations ranging from Israel and Taiwan to India and China. These investments, while small by comparison to total FDI, have contributed to the creation of local business ecosystems that support entrepreneurial experimentation and capability building – and ultimately attract more substantial subsequent rounds of investment.

The globalization of venture capital provides a window into far-reaching changes in global labor markets. The falling cost of transportation and communications has facilitated dramatic increases mobility among highly skilled workers, while digital technologies have accelerated the formalization and exchange of vast amounts of information across long distances. International migration, historically a one-way process, has become a reversible choice, particularly for those with scarce technical skills, and it is now possible to collaborate in real time, even on complex tasks, with counterparts located at great distances. Scientists and engineers from developing countries – once forced to choose between settling abroad and returning home to far less attractive professional opportunities – are contributing to their home economies while maintaining professional and business ties in more technologically advanced economies.

From Brain Drain to Brain Circulation

The migration of talented youth from developing to advanced countries was viewed in the postwar decades as a "brain drain", that exacerbated international inequality by enriching already wealthy economies at the expense of their poor counterparts. In the words of a classic textbook on economic development: "The people who migrate legally from poorer to richer lands are the very ones that Third World countries can least afford to lose, the highly educated and skilled. Since the great majority of these migrants move on a permanent basis, this perverse "brain drain" not only represents a loss of valuable human resources but could also prove to be a serious constraint

on the future economic progress of Third World nations." Data on these trends are hard to find, but the UN has estimated a total of three hundred thousand highly skilled emigrants from all developing countries to the West during the 1960s; the 1990 US Census showed 2.5 million highly skilled immigrants, excluding students.

This "brain drain" from developing to advanced countries during the latter part of the twentieth century involved large-scale migration to the United States. California's Silicon Valley benefited disproportionately from this process. The region's technology producers grew very rapidly from the 1970s through the 1990s, absorbing technical skill voraciously, irrespective of national origin. Tens of thousands of talented immigrants from developing countries, who initially came to the US for graduate engineering education, accepted jobs in Silicon Valley rather than return to their home countries where professional opportunities were limited.

Ethnic Networks

By the end of the 1990s over half of Silicon Valley's 200,000 scientists and engineers were foreign-born, primarily from Asia, and only a small proportion planned to return to their home countries. These immigrants did, however, quickly create ethnic social and professional networks that have supported career advancement and entrepreneurial success in Silicon Valley's open labor markets. The successes of high profile start-ups like Sabeer Bathia's Hotmail, Jerry Yang's Yahoo and Min Zhu's Webex are only the most visible reflections of the extent to which Silicon Valley's immigrant engineers had mastered the region's entrepreneurial business system.

The same individuals who left poor countries like India and China for better professional and economic opportunities abroad are now increasingly reversing the "brain drain", transforming it into "brain circulation", as they return home to establish business relationships or start new companies while maintaining their social and professional ties to the United States. This process is typically led by foreign-educated engineers-turned-venture capitalists who invest in their home countries and transfer first-hand knowledge of new economy financial institutions and business models to peripheral regions. These individuals also often serve as advisers to domestic policymakers

"The same individuals who left poor countries like India and China for better professional and economic opportunities abroad are now increasingly reversing the brain drain, transforming it into 'brain circulation', as they return home to establish business relationships or start new companies."

who are anxious to promote technology growth. As these experienced engineers and managers return home, either temporarily or permanently, they bring the worldviews and identities that grow out of shared professional and educational experiences. These cross-regional technical communities have the potential to jump-start local entrepreneurship and they succeed over the long-term to the extent that they build alliances with technical professionals, businesses and policymakers in their home countries.

In the early 1980s foreign-born engineers transferred the Silicon Valley model of early-stage high-risk investing to Taiwan and Israel – locations that US venture capitalists typically had neither interest in nor the ability to serve. Native-born investors provided the cultural and linguistic

know-how needed to operate profitably in these markets. In addition to capital, they brought technical and operating experience, knowledge of new business models and networks of contacts in the United States. Israel and Taiwan today boast the largest venture capital industries outside of North America (US$4 billion is invested annually in Israel and US$1.3 billion in Taiwan.) Both have high rates of new firm formation, innovation, and growth. Israel is now known for software and Internet firms like Mirablis (an instant-messaging program developer) and Checkpoint (security software); Taiwan has become a center of leading edge personal computer (PC) and integrated circuit (IC) manufacturing with firms like Acer (PCs and components) and TSMC (semiconductor foundry).

Immigrants from India and China with experience in Silicon Valley are now starting to influence economic development in their home countries as well, by transferring technology and know-how when they return home to work or start businesses, as well as indirectly, by influencing the formation of policy and other aspects of the institutional environment. By 2004, venture capital and private equity firms were investing more than US$1 billion annually in enterprises located in China and a comparable amount in India. While this is a fraction of the venture capital invested annually in the United States or even the amount of FDI in these economies, it is contributing to the development of local ecosystems that support indigenous entrepreneurship and an alternative, increasingly competitive, trajectory to the development opportunities provided by both the established domestic firms and the multinational corporations in these nations.

Entrepreneurship in the Periphery

Transformations in the world economy have undermined the power of the core-periphery model – the assumption that new products and technologies emerge in industrialized nations that combine sophisticated skill and research capabilities with large, high-income markets and that mass manufacturing is shifted to less costly locations once the product is standardized and the process stabilized. Success in this view builds on success in advanced economies, while peripheral economies remain followers.

However, the increasing mobility of highly skilled workers and information on the one hand and the fragmentation of production in information and communication technology sectors on the other, provide unprecedented opportunities for formerly peripheral economies. Regions that missed the postwar economic boom, in particular, have provided fertile environments for a decentralized growth based on entrepreneurship and experimentation. The key actors in this process are neither policymakers nor multinational corporations in isolation, although both certainly play a role, but rather communities of technically skilled immigrants with work experience and connections to Silicon Valley and related technology centers.

US-educated and trained engineers are increasingly transferring up-to-date technology and market information and helping to jump-start local entrepreneurship, allowing their home economies to participate in the information technology revolution. Because of their experience and professional networks, these cross-regional entrepreneurs can quickly identify promising new market opportunities, raise capital, build management teams, and establish partnerships with other specialist producers – even those located far away. The ease of communication and information exchange within ethnic professional networks accelerates learning about new sources of skill, technology,

and capital as well as about potential collaborators. It also facilitates the timely responses that are essential in a highly competitive environment. This decentralized responsiveness is an advantage that few multinationals can claim.

This is not a one-way process. As recently as the 1970s, only large, established corporations had the resources and capabilities to grow internationally and they did so primarily by establishing marketing offices or manufacturing branch plants overseas. Today, the fragmentation of production and the falling costs of transportation and communication allow even small firms to build partnerships with foreign producers to tap overseas expertise, cost savings, and markets. Start-ups in Silicon Valley today are often global actors from their first day of operations; many raise capital, subcontract manufacturing or software development and market their products or services outside the United States.

"The scarce resource in this environment is the ability to locate foreign partners quickly and to manage complex business relationships and teamwork across cultural and linguistic barriers."

The scarce resource in this environment is the ability to locate foreign partners quickly and to manage complex business relationships and teamwork across cultural and linguistic barriers. This is particularly challenging in high-tech industries in which products, markets, and technologies are continually redefined – and where product cycles are often nine months or less. First-generation immigrants like the Chinese and Indian engineers in Silicon Valley who have the language, cultural and technical skill to function well in the United States as well as in their home markets have a commanding advantage here. They have created institutions and social structures that enable even the smallest producers to locate and maintain mutually beneficial markets.

Remote and Distant

Late-developing economies typically face two major disadvantages: they are remote from the sources of leading-edge technology and they are distant from developed markets and the interactions with users that are crucial for innovation. Firms in peripheral locations use a variety of mechanisms to overcome these disadvantages, from joint ventures and technology licensing to foreign investment and overseas acquisitions. However, a network of technologists with strong ties to global markets and the linguistic and cultural skills to work in their home country is arguably the most efficient and compelling way to overcome these limitations. Cross-regional entrepreneurs and their communities can facilitate the diffusion of technical and institutional know-how, provide access to potential customers and partners and help to overcome reputational as well as informational trade barriers for isolated economies.

The increasing sophistication of information and communication technologies and the liberalization of global markets have accelerated this process. It is now quick, simple, and inexpensive to communicate internationally and to transfer information between distant locations. Information systems that facilitate the formalization of knowledge are dramatically expanding the volume as well as the variety of possible forms of information exchange. However, information technology alone cannot ensure successful coordination or efficient transfers of technical and institutional knowledge. Long-distance collaborations

still depend heavily upon a shared social context and language that ensures mutual intelligibility between partners, particularly as speed and responsiveness are essential in today's technology competition. Efforts to jump-start entrepreneurship by mobilizing researchers, capital and a modern infrastructure cannot replicate the shared language and trust of a technical community that permits open information exchange, collaboration and learning (often by failure).

The new technology centers differ significantly from one another in their technological sophistication as well as the specializations of local producers. Cross-regional entrepreneurs rarely compete head-on with established US producers; instead they build on the skills and the technical and economic resources of their home countries. Israeli entrepreneurs, for example, have successfully applied the findings of the nation's advanced military research to innovations in the Internet security and telecommunications arenas. Indian entrepreneurs, by contrast, recognized the opportunity to mobilize the thousands of underemployed English-speaking Indian engineers to provide software development services for American corporations. Returning entrepreneurs are ideally positioned to identify appropriate market niches, mobilize domestic skill and knowledge, connect to international markets and work with domestic policymakers to identify and devise strategies to overcome obstacles to further growth.

Looking Ahead

The old pattern of one-way flows of technology and capital from the core to the periphery is being replaced by a far more complex and decentralized two-way flow of skill, capital and technology between differently specialized regional economies. Silicon Valley is now at the core of this rapidly diversifying network of economies because it is the largest and most sophisticated market as well as a leading source of new technologies. However, this too could change: the relationships between these emerging technology regions are multiplying and new markets are opening up that promise to further transform the world economy. The fast-growing market for wireless communication in Asia, for example, has created opportunities for firms in China and India to contribute to the direction of the technology and its applications – even if they do not define the leading edge of the technology. Over time, producers in developing regions can build independent capabilities and define entirely new specializations and markets.

"Cross-regional networks develop only when skilled immigrants are both willing and able to return to their home countries for business in large enough numbers to create close links to the technical community in the home country."

The new regional economies are not replicas of Silicon Valley – although institutions and professional service providers from that region are fast expanding into these new locations. These regions have co-evolved with Silicon Valley. Firms in these regions do not typically seek to compete directly with Silicon Valley producers; they focus instead on developing capabilities in areas that US producers are not pursuing and over time they are transforming activities once regarded as mundane and low-tech into more efficient and dynamic sectors. Taiwan was known in the 1980s for its cheap PC clones and components; today it is recognized for the flexibility and efficiency of its IC and electronic systems producers. China

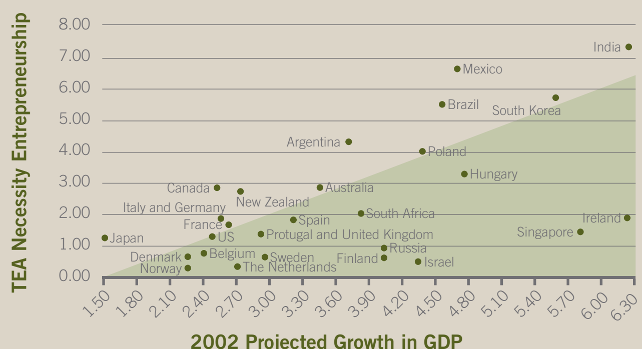
was known in the 1990s for me-too Internet ventures; today Chinese producers are poised to play a lead role in developing wireless technology. In the 1990s India was a provider of labor-intensive software coding and maintenance; today local companies are managing large-scale software services projects for leading global corporations. Israel was a low-cost location for research in the 1980s; since then local entrepreneurs have pioneered sophisticated Internet and security technologies.

A Model for Others?

This is not to suggest that all developing economies are positioned to reap the benefits of brain circulation and peripheral entrepreneurship. This opportunity is benefiting countries that have invested heavily in higher education, typically technical education and are politically and economically stable enough that immigrants will consider returning home. Some of the largest technically skilled immigrant groups in Silicon Valley have not built business or professional connections to their home countries for political reasons. Most of the region's Iranian and Vietnamese immigrants, for example, are political refugees and hence not inclined to return to countries that, in any case, lack the economic stability needed for technology investment or entrepreneurship. This criterion applies in varying degrees to many of the developing economies that have technically skilled communities in the United States and at home, including Russia, parts of Eastern Europe and Latin America. It is possible that urban areas like Saint Petersburg or Buenos Aires will become more attractive to returning entrepreneurs in the future as their economies develop and eventually provide greater professional opportunities for returnees. However, large parts of Africa and Latin America lack the skill base or political openness to become attractive environments for technology entrepreneurship.

In many Asian countries government support for large-scale, capital-intensive investments in the 1970s and 1980s, either by domestic corporations (South Korea) or by multinationals (Singapore), have created inhospitable environments for entrepreneurial experimentation. One indication of this is data on the sources of innovation. South Korea's *chaebol*, or large business groups, accounted for 81 percent of all US patents earned in South Korea in the 1990s compared to only 3.5 percent earned by business groups in Taiwan. Likewise in South Korea the top fifty assignees accounted for 85 percent of all US patents, with Samsung alone accounting for 30 percent, while Taiwan's top 50 assignees accounted for only 26 percent of all US patents. This decentralization of innovative capabilities

Entrepreneurship and Projected Growth in GDP



Source: 2001 Global Entrepreneurship Monitor

was reflected in a substantially higher rate of patenting in the late 1990s, with Taiwan earning 17.7 patents per US$ billion exports compared to 11.6 in South Korea.

Technological Laggards

Another group of developing economies has grown since the 1970s as recipients of manufacturing investments by United States, Japanese, and European technology corporations. These investments, which were targeted at low-wage locations including Singapore, Malaysia, Scotland, and Ireland, have contributed to the development of the supplier infrastructures and skill base needed to master high-volume manufacturing of electronic components. They have also contributed to substantial improvements in standards of living. However, the leading recipients of foreign direct investment remain technological laggards. The rate of patenting, normalized by either population or exports in Singapore, Malaysia, Hong Kong and Ireland since 1970 remains a small fraction of that observed in Taiwan and Israel. Seven of the top ten patent recipients in Singapore, for example, were foreign multinationals or organizations, accounting for 46 percent of all US patents between 1970 and 2000.

Recent policy changes, such as public support of venture capital, have not been sufficient to transform domestic institutions and capital and labor markets. In these nations, skilled workers prefer stable, corporate employment, and start-ups lack access to financial and technical resources as well as markets. The 2001 Global Entrepreneurship Monitor, for example, found that in spite of higher than average GDP growth, Singapore had "one of the lowest rates of entrepreneurial activity" of more than 29 countries *(see Chart, page 52)* it studied. Returning engineers to these nations have not made a significant impact on their home countries.

Cross-regional networks develop only when skilled immigrants are both willing and able to return to their home countries for business in large enough numbers to create close links to the technical community in the home country. The receptiveness of the home country depends upon factors such as political stability, economic openness, and level of economic development. It often builds on multinational investments in research and development that have contributed to a developing local skill base and infrastructure that supports entrepreneurship. The critical variable is the possession of political leaders willing to collaborate with returning entrepreneurs to develop a shared vision and remove institutional and political obstacles to entrepreneurship-led technology growth.

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Linking Up With the Giants

Small and medium size firms, the backbone of a domestic economy, often feel that they are losing out in the globalization of trade. They are often crowded out of access to finance, have to deal with foreign exchange instability and are lumbered with labor and environmental headaches. But as this case study in Malaysia shows, they can often work their way through these difficulties by working more closely with larger foreign firms.

By Marielou Guerrero and Dr. Lorraine Ruffing
World Association for Small and Medium Enterprises (WASME)

Current development strategies are very much directed to attaining the UN Millennium Development Goals. Professor Jeffrey Sachs of Columbia University in New York estimates that meeting the goals on a global scale would require US$150 billion in development assistance per year. However, a recent review of aid projects in the last half century found that with few exceptions there is a negative correlation between aid and growth in Africa.

World Bank officials caution that "Increased aid for Africa will only be invested efficiently if it is done from the bottom up, in partnership with the private sector, foundations and non-governmental organizations." And the UK Commission for Africa urges public and private sectors to work together to create a climate which unleashes the entrepreneurship of the peoples of Africa, generates employment and encourages individuals and firms, domestic and foreign to invest.

The European Commission's aid for trade fund, which is being increased to one billion euros a year, will only work if Africa has something to sell besides natural resources and raw materials. This requires the building of supply capacity in Africa. One of the most effective ways of doing this is by linking small and medium size business enterprises (SMEs) up with multinational corporations (MNCs), while governments and aid agencies are well advised to work with the private sector and civil society to promote best practices in business linkages.

While it is generally accepted that SMEs are the backbone of a domestic economy, contributing jobs and income and hence to poverty reduction (i.e., the first Millennium Goal), few governments in developing countries have framed policies to enhance their growth and survival. Furthermore, globalization, trade liberalization and foreign direct investment (FDI) have provided few oppor-

tunities for SMEs and, in fact, a growing number of SMEs find it more and more difficult to survive within their own borders.

Nevertheless, many developing countries still see FDI as an important engine for their development. This is despite the fact that FDI is very unevenly distributed among the top 30 host countries and its impact can be negative. In some instances, particularly in Africa, it has resulted in a crowding out of access to finance; abusive transfer pricing which minimizes taxes; foreign exchange instability; and labor and environmental problems.

Furthermore, although well designed and coordinated SME and FDI policies can ensure that FDI works for local enterprise development, this objective is not even on the radar screens of most policy-makers in developing countries. Without coherence between SME and FDI policies, there is less chance that FDI will result in the kind of business linkages that can open markets, facilitate access to finance and transfer technology to local enterprises. To date only a few governments have used FDI to improve the capacity of local enterprises through business linkage programs or supplier development programs (i.e., Ireland, Malaysia, Singapore, China and Taiwan, Province of China.

The good news, however, is that even where governments do little to promote business linkages between MNCs and SMEs, some enlightened MNCs have set up company linkage programs to mentor and coach SMEs because it is in their commercial interest to do so. They have made what is called a "step change" in how they manage their relations with their suppliers. And surprisingly, despite the seeming enmity between MNCs and non-governmental organizations (NGOs), the MNCs are sometimes joined by NGOs who provide SMEs with the management and technical skills they need to meet the high standards of their MNC partners.

Currently, there is as much interest in the linkage process as there is misunderstanding of it. Often the craze for public-private sector partnerships causes advocates to promote philanthropic activities instead of far-sighted supply chain management. Supply chain management that creates competitive SMEs can have a more profound effect on development than philanthropy. The aim of our case study in Penang, Malaysia is to identify the critical success factors for business linkages so that developing countries can reap more benefits from FDI and at the same time build a dynamic SME sector.

Factors Affecting Business Linkages

One might say that the topic of "business linkages" is as old as the issue of supply chain management. MNCs have been outsourcing operations for many years. Under what conditions are they willing to work with local suppliers vs. home-based suppliers?

MNCs are more likely to invest in local suppliers if:

1. Their investments are driven by the search for strategic capabilities and assets rather than for cheap natural resources, low-wages or protected local markets;
2. Their business models are based on networking and inter-firm cooperation;
3. Their corporate decision-making is decentralized and their local management is empowered to authorize independent sourcing and new product development.

When MNCs were asked what their most important criteria were for partnering with an SME, they first mentioned attitude. The chief executive officers (CEO) of an

SME must have the will to succeed and the will to transform. Furthermore, the SME must have its own strategy or vision for the future as well as good financial management.

The terms "partnerships or business linkages" are used to cover a wide variety of relationships. This article concentrates on backward linkages between large and small enterprises where the MNCs source parts, components, materials and services from SMEs and thus are more likely to have a profound development impact. Our case study: *Penang, Malaysia: Smart Public-Private Partnerships* was chosen with several criteria in mind:

1. It illustrates a backward linkage;
2. It is based on a profit-driven business strategy vs. a philanthropic motive;
3. It is long-term and has already demonstrated positive development impacts;
4. It is sustainable in the future;
5. It is replicable;
6. It shows a variety of approaches.

Background to the Case

Penang is one of the 13 states of the Federation of Malaysia and has a population of about 1.2 million. The Governments, both at the federal and state level, played a catalytic role in the economic transformation of Penang by adopting a pro-business stance. They fostered a conducive environment for the development of the manufacturing sector through vision, pragmatic policies and transparent incentives.

The linkage process, described in this section, transformed Penang from a sleepy agricultural economy and trading station to the Silicon Island of the East. In 2000 the manufacturing sector was the main engine of growth and accounted for 45 percent of the state's gross domestic product (GDP) as compared with 13 percent in 1970 while the contribution of the agricultural sector dropped from 20 percent to two percent. During the same period unemployment went from a high of 16 percent to a low of 4 percent. In the words of Chief Minister Dr. Koh Tsu Koon the economic transformation of Penang was based on the three "I's": institutions, infrastructure and incentives.

First "I": Institutions

The Penang Development Corporation (PDC), established in 1969, is the principal development agency for the State. The PDC pioneered the concept of Free Trade Zones (FTZ) to encourage foreign investment in export-oriented activities. It acts as a one-stop shop that interfaces between potential investors and the local authorities and local business community. It advises investors on how to get started in Penang, providing assistance in planning, siting the plant and submitting applications to various departments as well as finding suitable local partners.

PDC has created two free industrial zones and five industrial parks covering an area of 2,370 hectares. It helped global players, such as AMD, Dell, Fujitsu, Hewlett-Packard, Hitachi, Intel, Motorola, Fairchild and many others to locate subsidiaries in Penang and to create strong linkages with local SMEs in a wide range of industries, including electronics, engineering, metals, plastics, packaging, textiles and apparel.

Another key institution is the Penang Skills Development Center (PSDC). The existing labor pool, even with school leavers with an average of 11 years of formal education and with graduates from technical institutes, colleges and universities, did not have the skills that were demanded by industry. Their skills needed further fine-tuning through on-the-job training or through specialized

training in centers such as PSDC. This unique institution pools resources from the private sector, the government and academia. The 94 corporate members of PSDC contribute experts, training materials and equipment so that the Center can provide state-of-the-art training for a variety of engineering, technical and management skills. It also created the Global Supplier Development Program providing SMEs with training in core competencies and with MNCs to mentor them. During the mentoring period the MNCs transfer additional skills and technology. Once the agreed period is completed, the SME either enters the MNCs supply chain or is dropped.

Second "I": Infrastructure

The Penang government has put great emphasis on ensuring good transportation facilities and links, utilities and other physical infrastructure for the business sector. Penang International Airport, the second largest in Malaysia, has been upgraded with improved facilities and a new air cargo complex. In addition, the Penang port is a major regional hub with modern facilities for both international and coastal vessels, including a deep water wharf, a new container terminal and a bulk cargo terminal. Penang is at the intersection of the North-South and East-West highways and is served by the national railway line, thus ensuring quick access to Kuala Lumpur, Singapore and Thailand. It also has adequate electricity, water and high-bandwidth information technology (IT) infrastructure.

Third "I": Incentives

Various attractive tax incentives were provided for approved projects, in order to ensure that start-up and operating costs were competitive. Both local and foreign enterprises benefited from tax holidays, investment tax allowances, and reinvestment allowances. It is important to note that the incentives were for MNCs and SMEs alike. There were special incentives for increasing local content, for hi-tech industries, for industrial buildings, and for research and development (R&D) activities. There were a number of incentives for training and training facilities which are considered as investments. MNCs and SMEs were encouraged to invest in training by the double deduction allowance whereby they could deduct from their income double the cost of training. A one percent tax on wages helped to finance the Human Resource Development Fund which gives grants for skill development, training equipment and an apprenticeship program. SMEs also got special prices to acquire IT equipment and grants to invest in design.

Without the incentives it would have been difficult to convince top MNC management to invest the time and effort in coaching and mentoring partners rather than changing whenever they found better ones. On the other hand, SMEs needed the incentives since bank finance wasn't easily obtainable in order to maintain their cash flows so that they could meet TNC requirements. In particular pioneer status and investment tax allowances enabled SMEs to upgrade technology and invest in R&D.

Intel: Pioneer of the Smart Approach

Intel arrived in Penang in 1972 and was one of the original eight pioneers (Agilent, AMD, Osram, Bosch, Clarion, Hitachi, Fairchild, Intel) attracted to the FTZ by the PDC. It currently employs 8,000 workers. It has crafted a supplier development program called the "Smart Approach". The FTZ of Bayan Lepas is a hotbed of both competition and cooperation. A number of other MNCs have developed supplier programs that are strikingly similar to the

"Smart Approach". Intel's objective for supplier development was to demonstrate its commitment to grow Malaysian based suppliers by continuing its efforts to nurture existing and potential new suppliers. Intel has been chosen by the Financial Times as the best employer in Asia.

Intel looks for the following four qualities in potential suppliers:

1. Competitiveness: safety, quality, delivery, price
2. Capability: technical, materials, process
3. Stability: vision, finances
4. Resourcefulness: management, human resources, training.

MNCs such as Intel are in a strong position to choose their partners. They look for SMEs that can meet their corporate requirements as well as international standards on crucial production issues such as price, quality, delivery, health, labor and environmental standards. SMEs, on the other hand, are usually less than "partnership" ready, lacking information, experience, contacts and above all the human and financial resources to implement the managerial and technology changes needed to do business with the MNCs. It is unrealistic to think that in a world of giants, SMEs can become partnership ready without assistance.

Intel Takes a Three Pronged Approach to Creating SME Linkages

1. Develop supplier capabilities and competencies
2. Provide business opportunities for SMEs
3. Partner with government and community.

Intel uses the following five steps in its smart approach to selecting and nurturing its suppliers:

1. Intel identifies or sources suppliers who are willing and capable of meeting its requirements. Because Intel has "indigenized" its managerial work force it is easier for them to evaluate potential suppliers. In fact 98 percent of the CEOs of the foreign companies in Bayan Lepas are locals.
2. Intel matches its business needs with the capabilities of the potential suppliers and provides them with initial training. Intel collaborates with external skill centers to develop supplier capabilities. It uses the Penang Skills Development Center and participates in its Global Supplier Development Program and the National Institute of Occupational Safety and Health for contractor safety certification training. It also shares its internal training courses, innovation centers and engineers and consultants with suppliers. It assigns Intel staff to SMEs to share know-how and it upgrades technology starting with SME plant layout and design capability, progressing to flexible manufacturing and ISO certifications.
3. It gradually allocates tasks or contracts based on the SME's abilities and increases these contractual opportunities as the SME grows in its abilities.
4. It continually refines the SME's capabilities and promotes continuous improvement through coaching by setting up supplier briefings, contractor dialogues, business technical reviews and one-on-one sessions between Intel senior management and SME managers who evaluate and benchmark progress.
5. When the SME is mature and it is able to supply other parts of Intel's global supply chain, it becomes a global supplier. Intel insists that their SMEs have a diversified customer base and are not totally dependent on Intel. It propels local suppliers to the international scene by organizing road shows for selected suppliers, facilitat-

ing strategic alliances and fielding local suppliers for international projects. In this last stage of the smart approach the SME often is called upon to supply the solutions for Intel's technical problems, thus becoming a "total solution supplier". Part of the agility gained by the SMEs comes from the fact that Intel also shares its "technical roadmap" with its suppliers so that they can pre-position themselves and get ready for change.

The smart public-private partnerships between government, MNCs, SMEs, and their support institutions have yielded impressive results for the development of Penang and its SMEs. Together the partners have created a diversified, vibrant economy with growth rates of over eight percent and have achieved the first Millennium Goal – a decent standard of living. Their success shows that the most effective strategy for poverty reduction is job creation.

FDI now makes a solid contribution to the local economy in that a larger part of the FDI circulates locally due to the availability of competitive suppliers. For example, in 2000, 65 percent of Intel's suppliers were local firms.

At the end of this process, Intel's suppliers are able to meet stringent health, safety and environmental standards, are able to respond to multiple and sudden changes, are able to give 24/7 coverage, to compete from a total cost perspective and to support a global network and total solutions. As mentioned earlier a number of other MNCs in Bayan Lepas have replicated the smart approach. This has produced a core group of competitive SMEs that are able to dynamize the SME sector.

The smart approach has had a positive effect on enterprise creation, employment, and the fiscal stability of the State government. Between 1970 and 2002, industrial enterprises increased from 31 to 731; and jobs from 84,000 to 150,000.

Critical Success Factors

In distilling the "Penang experience" the following key elements or lessons learned emerge:

1. Long-term commitment by both government and MNCs
2. Targeted FDI strategy to attract MNCs with a positive corporate philosophy and willingness to delegate to local managers to develop linkages
3. Establishment of public-private sector dialogue
4. Formation of meso institutions, i.e. skill centers, such as PSDC
5. Use of appropriate economic incentives
6. Selective rather than indiscriminate support for SMEs.

Institution-building with local partners allows the initiative to be continued once a particular partnership ends and/or it can be replicated with other partners. Capacity-building among the SMEs through SME support programs can make SMEs "partnership ready" and able to enter the MNCs mentoring and coaching programs.

MNCs have to be r eady to invest in their SMEs to ensure that they can meet corporate and international product quality standards. The deeper and the longer the relationship, the more significant is the transfer of technology and the more expensive it is to end the relationship. Developing countries are often disappointed in that FDI in itself does not result in a transfer of technology. In this case, the linkage process was the medium through which the technology was transferred.

Governments have not been very successful in technology upgrading, due to a lack of finance and informa-

tion as well as the inability to adapt the technology to the enterprise's conditions. Transfer of technology is a private sector matter that involves proprietary information. Thus, there has to be trust and a long-term commitment between the TNC and the SME. In the case of Penang eventually there was even a reverse flow of technology from the SME to the MNC, since the relationship was both long-term and based on a competitive strategy that necessitated a sharing of knowledge.

"Cooperation must replace the current competition between the SME support agencies and the investment promotion agencies."

Probably, the most important success factor is that the linkage must make long-term business sense. One has to distinguish between short-term profitability and long-term competitiveness. If a linkage does give the MNC an immediate competitive-edge it can be undertaken without much intervention by government. However, there are instances such as Penang where economic incentives have been provided to induce the MNCs to do what they might not have been able to do in the short run due to top managements' preoccupation with quarterly earnings. In the long run once the process is embedded, most incentives can be diminished or eliminated. However, there are certain critical factors such as skills development where the burden cannot be left entirely to the private sector. Here either the government or a meso institution must step in and share the burden.

In terms of "what's next" there can be little hope of replicating best practices in business linkages if the current disconnect continues between policies and programs for attracting foreign direct investment and for strengthening SMEs. These two policy areas must be brought closer together through public-private sector dialogue. Cooperation must replace the current competition between the SME support agencies and the investment promotion agencies. In the future governments must be just as eager to build local capacity as they are to attract FDI.

Developing countries which continue to ignore the necessity to support local enterprises and help make them "partnership ready", will neither reap all the benefits from FDI nor will they increase their competitiveness in the global economy.

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Foreign Direct Investment Flows

Sectoral distribution of FDI stock in the world, developed and developing countries and Central and Eastern Europe, 1990, 2002

Inward FDI stock (%)

World

	1990*	2002*
Primary	9	6
Manufacturing	42	34
Services	49	60

Developed countries

	1990*	2002*
Primary	10	6
Manufacturing	41	32
Services	49	62

Developing countries

	1990*	2002*
Primary	7	7
Manufacturing	46	38
Services	47	55

Central and Eastern Europe

	2002*
Primary	3
Manufacturing	39
Services	58

Outward FDI stock (%)

World

	1990*	2002*
Primary	9	4
Manufacturing	44	29
Services	47	67

Developed countries

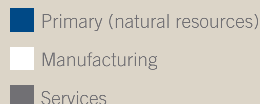
	1990*	2002*
Primary	9	4
Manufacturing	44	30
Services	47	66

Developing countries

	1990*	2002*
Primary	5	14
Manufacturing	33	85
Services	62	0.6

Central and Eastern Europe

	2002*
Primary	1.4
Manufacturing	26
Services	73



Note: In calculating the shares of the respective sectors, amounts recorded under "Private buying and selling of property" and "unspecified" are excluded from the totals.

*Or latest year available.

Source: UNCTAD, based on annex tables A.I.18 and A.I.19

China Goes Abroad

While much of the world's attention has been focused on foreign firms capturing a share of China's rapidly growing domestic market, the Chinese government has been quietly assisting around 150 of its own local firms to buy out well-known foreign companies in order to acquire their brand recognition and management expertise. In the process, China is also trying to transform itself from being a technology recipient to becoming a technology source.

By Professor Max von Zedtwitz
Tsinghua University, China

By 2004, on the back of growth rates of around 10 percent, China had developed into an economy the size of Italy's gross domestic product (GDP) of US$1.5 trillion. Since the economic reforms of the 1980s hundreds of millions of Chinese have come to benefit from greater wealth and income, averaging around US$1,500 per capita China-wide but about US$3,000 to US$4,000 in urban centers such as Shanghai and Beijing. The prospect of reaching the world's largest population has tempted foreign companies to invest in potentially the largest markets in the world, too, and many have established production bases in China to make use of the tremendous manufacturing capabilities there. For instance, more than 80 percent of all TV sets worldwide are said to be manufactured in Guangzhou, a province in the south of China. Perhaps even more importantly as a sign of China's long-term role in the global economy is the establishment of hundreds of research and development (R&D) centers (some estimate up to 700), mostly by foreign multinationals in the telecommunications, information technology (IT), and manufacturing industries. Thus, total foreign direct investment (FDI) into China has reached US$53 billion surpassing the US as the most attractive country in the year 2003.

But China's role as an indigenous source of economic and technological power has gone largely unnoticed, at least until recently. The first Chinese astronaut in October 2003 has shaken up our image of China as an underdeveloped country. Suddenly, China is one of three nations only to have sent people into space by their own means. China has also been economically "on the map" with Lenovo's US$1.75 billion acquisition of IBM's PC division in late 2004. This was followed by two high profile, though unsuccessful bids from Haier to buy out Maytag for US$1.28 billion followed by CNOOC, one of China's top oil firms,

offering US$18.5 billion for Unocal, based in California.

But Lenovo was not the first Chinese company to make significant overseas investments. Outbound foreign acquisitions began in the late 1990s and reached 20 to 30 deals a year. In 2000, Chinese companies acquired foreign corporate assets for US$344 million, US$507 million in 2001, US$2.8 billion in 2002, and US$1.6 billion in 2003. Prior to the Lenovo-IBM deal, D-Long's acquisition of Dornier, and TCL's Joint Venture with Thompson and purchase of Schneider had made headlines in Europe *(see Chart 1, page 67)*.

Multiple Motives

Chinese companies have multiple motives with their overseas investments. One of the most important ones is to go after foreign markets, for instance by establishing a brand presence. Haier has recently started to sell small refrigerators in the US under its own name. The former Legend Holdings changed its name to Lenovo in 2003 because it estimated that the meaning of the word "Legend" had too many connotations and legal implications abroad and would therefore be a hindrance for the firm's globalization. Keijian, a cell-phone maker, sponsors Everton, one of England's premier football teams. All these efforts help to facilitate a brand image outside China, often under an English-sounding name. "ZTE" is short for Zhongxing Telecom Equipment Company, and is thus more easily remembered by non-Chinese speaking people.

Chinese companies also tend not to have overseas distribution and service channels, as well as limited experience in advertising and promoting their products. An acquisition seems a quick way to rectify the situation, e.g. by retaining the network and moving more of the production to low-cost China. A step-by-step build-up of a local distribution network costs time and requires local savvy and skills. SVA, one of China's top-ten IT firms, has taken this route to establish themselves in the US market.

"Chinese companies carry a particularly strong liability: They have been cut off from international business until fairly recently, and their leadership has had little opportunity to develop international management skills."

Increasingly, Chinese companies also pursue in asset-seeking motives. Baosteel invested US$1.4 billion in a JV steel mill in Brazil, China National Bluestar was interested in a controlling stake in Ssangyong Motors, and SAIC was effectively gaining control of MG Rover's technology in their month-long diligence and deliberation process.

Not all Chinese acquisitions – as much as Chinese capital injections may be appreciated by local companies – are successful. Local government agencies have estimated that three out of four acquisitions fail, i.e., the venture continues to lose money and employees are ultimately out of their jobs anyway. D-Long wound up in bankruptcy not long after its Dornier acquisition, leaving the aircraft manufacturer searching for a strong partner again. While international acquisitions and joint ventures are difficult almost by definition, Chinese companies carry a particularly strong liability: They have been cut off from international business until fairly recently, and their leadership has had little opportunity to develop international management skills. These problems are acerbated by the fact that while their own home markets are under strong attack by foreign companies, their industries are undergoing a transition from state-owned towards more private or at least performance-oriented management. Many of

the new private companies are young, relatively inexperienced, and comparatively small. Even Lenovo was only four percent of IBM before their acquisition of the IBM PC business.

On average, about half of a Chinese company's supply network is within the city, and more than three quarters is from within China. Chinese companies are typically run by Chinese managers with no or little international experience. As most of their markets are still domestic, what promises to be successful at home usually has the upper hand in defining strategy and organization. But what may be successful in China may not prove useful abroad at all. For instance, Chinese companies have built empires through diversification in relatively unrelated businesses, where entry barriers were low and opportunities attractive. In many more mature Western markets, where quality of products and services is paramount, such an approach can not be implemented readily. As a result, many Chinese companies are paying hefty dues for learning how to compete abroad.

Policy Issues and Business Patterns

The examples of firms from Japan, Taiwan, South Korea and elsewhere show that it is perfectly possible to create international companies in fast-developing countries. Policies can be sometimes a support or a barrier in this process. The Chinese Government still approves foreign acquisitions on a case-by-case basis, since they involve foreign exchange transactions on the capital account. The State Administration of Foreign Exchange has blocked a few such acquisitions because they were assumed to illegally transfer foreign exchange holdings to offshore destinations. However, since 2003 the Chinese Government supports the internationalization efforts of companies under the "Zou Chu Qu" policy, in order to allow Chinese companies to acquire companies that have established distribution networks or to introduce acquired foreign technology to the domestic market. The Chinese Government has been preparing the top 100 to 150 companies to go overseas and expand, and seems to be willing to sacrifice some of them to learn how its companies can stand up to international competition. Dozens of smaller Chinese companies are observing carefully, waiting for their time.

"Chinese companies are paying hefty dues for learning how to compete abroad."

Chinese overseas investment goes back to 1979, when the Beijing Friendship Commercial Service Co. and a Japanese business established the very first joint venture in Tokyo. Since the promulgation of the new foreign investment policy, the Ministry of Commerce and the State Administration of Foreign Exchange have carried out reforms simplifying approval and examination procedures for applications to establish processing trade projects in other countries, allowing local governments to approve overseas projects of no more than US$3 million. In 2004 more than 10 countries listed China as their biggest investor, and Germany, Japan, Britain, Singapore and Sweden have established investment-attracting institutions in China.

Chinese companies invested US$3.62 billion in non-financial sectors overseas in 2004, an increase of 27 percent year-on-year. Up to the end of 2004, China's direct investment overseas reached US$37 billion. About half of Chinese investment went to Latin America and some 40 percent to the other parts of Asia, mainly in the fields of mining, agriculture and other natural resource development, commercial service, manufacturing and processing

industries, wholesale and retail sales. Chinese companies that were engaged in engineering projects overseas reported a business turnover of US$17.5 billion in 2004, up 26 percent year-on-year. Until 2004, China had dispatched 3.2 million individuals overseas under labor service contracts and earned US$30.8 billion.

The Ministry of Commerce launched an information platform through the Internet in July 2004 to help Chinese investors exchange information with their foreign counterparts. It provides information on companies interested in investing abroad, projects in other countries that need investment, and investment intermediary institutions. Companies investing in resource development projects can apply either for foreign exchange or low-interest RMB loans from the government. Projects designed to aid other countries can be incorporated into the state's foreign aid plan, and funds for the projects granted by the government are accordingly treated as foreign aid capital. When products made by China-funded companies abroad are those that China would normally import, they are included in the state privileged import plan.

"The Chinese Government has been preparing the top 100 to 150 companies to go overseas and expand, and seems to be willing to sacrifice some of them to learn how its companies can stand up to international competition."

These efforts in the strategic and policy realm are backed up by a strong investment in education at all levels. English is mandatory at the elementary level, and most young people speak English relatively well. Nearly 750,000 scientists and engineers graduate from Chinese universities every year, second only to the US. China has lifted its annual R&D spending to US$60 billion (third worldwide) or about 1.5 percent of GDP from almost zero within just a few years. Clearly, China is willing to make the investment in building a base of people trained to compete internationally.

However, much of the R&D spent seems to be directed towards technological learning and imitation, and little of this results in truly innovative products. Rather than building dominance in a particular industry through technological progress, Chinese companies tend to diversify into other sectors in order to exploit scale economies. As noted before, Chinese firms focus on activities with low barriers to entry. As cost pressures become more intense, they tend to shy away from risky R&D investments into higher end activities or developing proprietary skills, and rather choose to diversify into other low entry barrier markets. As a result, most of Chinese R&D is opportunistic and hardly cutting-edge.

Problems of Expanding R&D Overseas

So, what are some of the greatest barriers and problems of Chinese companies to expand R&D internationally? In part, they are reflected in typical internationalization problems of companies from developing countries, but some are more specific to China, and some are specific to R&D. Three principal challenges of Chinese companies to internationalize are:

1. Chinese companies have a size disadvantage: due to their inferior size, they cannot compete head-to-head with much larger multinationals.
2. Chinese companies continue to emphasize local business integration despite increasing international sales. For instance, supply chains are still highly local or regional, and there is little integration with global tech-

nology suppliers. As a consequence, Chinese companies are often barred from more value-added activities, and focus on low-cost competition, and hence unable to engage in product differentiation as a source of competitive advantage.

3. They also lack sufficient product innovation required to charge higher profit margins, rather than just cost reduction through efficiency innovation. While this produces advantages for manufacturing and customers, it also locks in Chinese companies in mostly domestic-oriented innovation.

Additionally, many Chinese companies demonstrate a number of disadvantages relating to lack of resources, lack of experience, and entry barriers in new markets:

- Lack of cash and resources: Although China is an expanding market, profit margins are low and hence only little can be reinvested in R&D. Investment in groundbreaking R&D (as opposed to technology adaptation and product localization) is more costly, and the first movers are likely to experience a loss of market share. Hence, less investment in indigenous R&D which is the lifeblood of global R&D networks.
- Lack of management expertise: Chinese companies have little experience in running or just participating in international companies, and hence few of them are qualified for international R&D management assignments. Overseas returnees have been invited to take a stronger lead, but essentially one of the most important phases of corporate internationalization would thus be carried out by outsiders.
- While the domestic market is still strong, there is little incentive to leave China and conquer less attractive markets elsewhere. Among those, developing countries require the least product adaptation but also offer fewer profits, while advanced countries as overseas markets are already highly contested by technology-intensive multinationals, leaving Chinese firms with some less attractive niche markets to begin with. Without size, it is difficult to demonstrate the long-term commitment necessary to conquer foreign markets.
- There is no efficiency advantage to go elsewhere for R&D as China is already offering a very favorable price-to-performance ratio for R&D and engineering work. Any local R&D work must be paid for with local revenues, which are generated as local start-up businesses and hence are often reinvested in business development rather than long-term product development.
- While younger university graduates speak English better, senior and middle R&D staff has no or little command of English, which is the international language of business and technology. It will take several years before more linguistically trained engineers will have entered the ranks and file to support R&D internationalization (incidentally, many of Haier's middle managers are quite young, i.e. in the late 20s).
- Chinese management also emphasizes personal networks ("guanxi") to take decisions and get things done. In international settings, where people are far away from centers of decision making and corporate networks, foreign R&D managers are disadvantaged to support their causes and risk permanent loss of social power if removed for too long. Recent initiatives, such as Dongfeng's "web-enabled R&D systems" are expected to alleviate this problem.

Some Chinese Companies are Fighting the Odds

Research that we conducted at the Center for Global

R&D Management at Tsinghua University revealed that only a handful of Chinese companies had established what could be considered as an international R&D organization, and a small number operated just one R&D unit overseas. The majority of Chinese firms even in high-tech industries had no international R&D presence.

We identified a total of 37 international R&D units of Chinese companies. Most of these R&D units are quite small in size, with a few exceptions such as Huawei's software lab in Bangalore (550 engineers in 2003 and expected to grow to more than 2000 by 2005). Haier, Huawei, and ZTE accounted for most of these R&D unites. Haier alone operated 10 small-scale research units abroad, focusing on technology monitoring and other non-indigenous research activities: with three industrial parks in the US, Jordan, and Pakistan, ten listening posts in Seoul, Sydney, Tokyo, Montreal, Los Angeles, the Silicon Valley, Amsterdam, Vienna, Taiwan and Hong Kong, and design centers in Lyon, Los Angeles, Tokyo, Amsterdam, and four other cities, this company is well on its course towards R&D internationalization. The latest addition to their R&D network is a design center in India, opened in late 2004.

Of the total 37 Chinese R&D units, 26 R&D units were located in advanced countries in the US (11) and Europe (11), and mostly serving as listening post or in product design roles. Japan accounted for two Chinese R&D units. Eleven of those 37 foreign R&D units (just under one third) are located in developing countries themselves. Some of these R&D units are extremely small (e.g., there are literally just a handful of engineers in Pakistan and Iran), but India has attracted quite substantial Chinese R&D investment.

R&D units in developed countries such as the US, Europe or Japan were typically mandated to search for technologies locally and transfer them back to the Chinese R&D headquarters, where they would be adapted for use in China or, increasingly, for deployment elsewhere in the world, most particularly through the R&D units in other developing countries. China thus has become – at least in some industries – a platform for technologies created in developed countries to be transformed for use in a developing country.

The Case of Huawei

As most of us are unfamiliar with Chinese companies such as Haier, Ningbo Bird, Galanz, Quirui Motors or others, let's look at one of its most international companies in more detail. Huawei is a Shenzhen-based telecommunications equipment provider with sales of US$5.58 billion in

2004, an increase of 45 percent year-on-year, of which US$2.28 billion were international sales. An icon of private enterprises in China, Huawei was founded in 1988 by Ren Zhengfei, and is nearly 100 percent held by Huawei Investment, a company in which employees participate through an Employee Stock Ownership Plan. Ren Zhengfei claims that his own stake is less than 2 percent.

In China, Huawei is comparatively strong in GSM (Global System for Mobile Communications), WCDMA (Wide-Band Code-Division Multiple Access), NGN (Next Generation Networks), and Optical Networks. Huawei has also become one of the few vendors in the world to provide end-to-end 3G solutions. Huawei UMTS has been commercially deployed in UAE, Hong Kong, Malaysia, Mauritius and the Netherlands. Huawei's strengths are greatest in selling to new entrants where its lower costs and shared platform design (to enable fixed-mobile convergence) are particularly attractive. Huawei's customers include China Telecom, China Mobile, China Netcom, China Unicom as well as BT, NEUF, AIS, Telefonica, Telfort, SingTel, Hutchison Global Crossing, PCCW HKT, SUNDAY, Etisalat (UAE), Telemar (Brazil), Rostelecom (Russia), etc.

In 2004 Huawei provided telecom products and solutions for over 300 operators worldwide and 22 of the world's top 50 operators are using Huawei's products and solutions. In order to support its global operations Huawei has set up 55 branch offices worldwide. To fund their expansion, Huawei is actively raising capital to carry out their international expansion plans. In December 2004, Huawei signed a financing agreement with the China Development Bank (CDB) under which CDB will support Huawei's international expansion with a massive credit facility of US$10 billion for both Huawei and its customers abroad in the next five years. Another strong possibility is an international initial public offering (IPO), an ambition that the company itself has so far down played for the time being. Given earlier controversies and the unpredictable climate of US-China relations, it remains to be seen whether the company can win over US regulatory agencies to list on US capital markets.

"As long as the Chinese Government backs up these endeavors with relatively easy to get bank loans, companies close to the state will have an advantage competing for the prey."

Huawei invested about 10 percent of annual revenues into R&D. Among Huawei's 24,000 employees are around 3,400 foreigners, and 48 percent are said to be engaged in R&D. In 2004, the company's worldwide patent applications grew by a third to 1,590. Overall, Huawei has received hundreds of patents, but just a handful came from the all-important US market. To crank up the pace of innovation, the company recognizes employees who came up with patentable ideas as "Huawei Innovators" – and gives them a medal and cash awards of as much as US$1,200.

Eight regional headquarters and a host of customer support and training centers have been established. In China, Huawei has four R&D center in Beijing, Shanghai, Shenzhen and Nanjing, as well as dedicated research institutes in Beijing and Shanghai. Several foreign research institutes were established in Dallas (USA), Silicon Valley (USA), Bangalore (India), Stockholm (Sweden) and Moscow (Russia). Each of those R&D centers has dedicated technology missions, concomitant with their chosen locations: for instance, Huawei R&D in Stockholm focused on base

station architecture and system design, radio technologies and RAN algorithm, having recruited a great number of telecom engineers from Ericsson and other local companies undergoing difficult times in the first years of the 2000s. Huawei was also the first Chinese company to set up an R&D center in Bangalore in 2000, earmarking over US$100 million for the Indian R&D site, which it expects to serve the Indian subcontinent, the Middle East, and Africa as strategic markets. At 550 engineers in 2003, it was expected to grow to a staff of 2000 by 2005. 85 percent of the R&D staff were Indian nationals, as the purpose was the tap into the rich Indian expertise in software design, 3G mobile communications, wireless infrastructure, network management, etc. Huawei also operated JVs with Siemens, 3C, Qualcomm and Microsoft to position itself favorably in the upcoming next-generation mobile communication technology.

Outlook

The Chinese Government has been very good at attracting FDI in general and R&D in particular. Most multinationals have or are in the process of setting up R&D in China. True to the phenomenon of the bandwagon effect, even some companies with unclear R&D benefits in China have decided to invest. The challenge is, as so often in China, to navigate the sometimes confusing and perplexing cliffs of contradicting realities.

In the future we will see more aggressive investments of Chinese companies into foreign markets and assets of foreign companies abroad. As long as the Chinese Government backs up these endeavors with relatively easy to get bank loans, companies close to the state will have an advantage competing for the prey. However, given the present absence of a discernible strategic advantage – such as superior management systems, technologies, and capabilities – Chinese companies will probably have to retain a high degree of localization of their activities overseas while continuing to work hard at carving out their own transferable competitive advantages at home.

We may still be a decade or two away from a more widespread presence of Chinese brands worldwide. But the first forerunners are developing now. It is unclear if Haier, Huawei, and Quirui are going to be the Sony, Toshiba and Toyota of China, but we can be fairly certain that some Chinese companies will make it. Given that China is 10 times the size of Japan, China's impact on the global economy and community will probably be larger than Japan's in the 1980s. The rest of the world should better get prepared now.

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A Working Relationship

Technology is increasingly allowing international outsourcing and offshoring in the service sector and putting pressure on white collar jobs previously thought immune to international relocation. Pressures on employment standards are for the first time having a more generalized effect across different categories of jobs. Moreover, foreign investment now drives or operates in conjunction with trade. Workers are confronted by the same firms, either directly as their employers, or indirectly through supply chains.

By Guy Ryder and John Evans
International Confederation of Free Trade Unions and the Trade Union Advisory Committee

Since the fall of the Berlin Wall and the emergence of China and India as major producers on world markets, the number of potential participants in the global trade and investment system has doubled from three to six billion people. The world labor force has more than doubled. The potential of such changes is very significant.

The acceleration of international offshoring and the relocation of industrial and service sector activities have heightened a sense of job insecurity amongst many groups of workers. Offshoring is only one factor amongst many in explaining the lack of job growth or job losses in some countries.

Lack of reliable data also makes serious analysis difficult. But the threat by employers of relocating activities to other countries, together with hype by many commentators in the business world about the scale of changes taking place, is creating a breakdown of confidence in the long-term relationship between companies and their employees.

The International Labor Organization (ILO) estimates that between one and five percent of service sector jobs in the US and Western Europe (2–10 million) could potentially be offshored to low-wage economies. The British Government estimates that up to five million service sector jobs in the US and Western Europe (2–3 percent) could be offshored by 2015. A much quoted report by Forrester Research estimated in November 2002 that 3.3 million US service sector jobs would move offshore by 2015. The sectoral impact could be much larger and a Deloitte Research survey of financial services firms predicts that 20 percent of the financial services cost base will be offshored by 2010.

The laissez-faire approach of some governments to the offshore outsourcing of jobs threatens to undermine

support for the multilateral trade and investment system. In response, a "whole of government" policy framework to the employment consequences of offshoring is needed, one that encompasses the international institutions. Governments must guarantee core workers' rights on a global basis.

Furthermore, governments must encourage dialogue and negotiations between trade unions and businesses, supported by targeted regional and industrial policies along with active labor market policies to help those communities whose jobs may be affected by change.

The Organization for Economic Cooperation and Development (OECD) Guidelines for Multinational Enterprises should be observed as a benchmark for good practice in managing change. Trade unions and forward-looking employers are negotiating these issues both at the national level and, through the sectoral Global Union Federations, at international level, including through the conclusion of global framework agreements.

The focus of such negotiations is on maintaining sustainable employment, avoiding compulsory lay-offs, and promoting internal firm-level redeployment and up-skilling, while at the same time ensuring that workers' rights are respected and developed everywhere and that companies recognise and negotiate with trade unions in their different locations. Governments have a role to support the outcome of such negotiations and to ensure that advance notice is given of change.

The hype about outsourcing has also led to a significantly worsening in the daily relations between trade unions and employers. The attitudes of employers towards unions generally - including attitudes to union recognition, policy on labor costs and employers' attitude to technological change and work organization – are increasingly dictated by international competitiveness and international trends. The threat of relocation to an offshore site is now the standard ploy in negotiations or in anti-union campaigns, and in some cases has become the reality.

A study by Cornell University in 2000 found that despite the economic expansion in the US of the late 1990s, workers were feeling more insecure. More than half the firms surveyed, when faced with union action, had threatened to close the plant and move to another country. In some sectors the figure rose to 68 percent. The fact that only five percent of firms actually moved away did not lessen the perceived risk of the threat, increasing the imbalance of relative power of unions and employers in the labor market.

The use of threats by firms to relocate internationally violates the two most important international instruments addressing the behavior of multinational enterprises: the OECD Guidelines for Multinational Enterprises and the ILO's Tripartite Declaration of Principles concerning Multinational Enterprises and Social Policy. The OECD's Guidelines state that "In the context of bona fide negotiations with representatives of employees on conditions of employment, or while employees are exercising a right to organise, [enterprises should] not threaten to transfer the whole or part of an operating unit from the country concerned."

The pressures on labor standards from these developments are greatest along the three North/South, East/West geographical "frontiers" where there are significant differentials in wage costs and relatively low transport costs such as, Mexico/US, Central/Eastern Europe, and China/East Asia. But the offshoring of service activities is facilitated further by the fact that information technology removes geographical proximity as an issue.

Harshest Examples

The issue of transfer of industrial locations is not just a North-South issue; it affects both industrialized and developing countries. Trade unions in Malaysia, the Philippines and Indonesia have raised a series of cases over the last two years of violations by foreign investors of the OECD Guidelines on Multinational Enterprises. The victimization and firing of union representatives and members, removal of recognition of unions and anti-union campaigns by some employers have been driven by the threat of relocation to China.

The harshest examples of competition to attract investment are often found in export processing zones (EPZ's) where semi-manufactured products or raw materials are processed into goods for export by foreign companies operating outside normal laws and regulations of the host country. They may operate very differently in different parts of the world, but EPZ's tend to have one overriding common characteristic: the right of workers to join trade unions is denied either by law or practice.

The most recent OECD report on trade and labor standards noted that the number of export processing zones worldwide had risen from some 500 in 1996 to about 850 in 2000, not counting China's special economic zones. EPZ's have become commonplace in many parts of Asia and Central America and now Africa as a development model – but they attract essentially footloose investment. Moreover the negative effects are in some cases aggravated by negative policy competition between governments to attract foreign investment.

The international trade union response has not been to call for national borders to be closed to flows of physical capital or goods. But trade unions cannot passively accept the working of economists' "relative price effect" in terms of labor, leading to a "race to the bottom" in employment standards. A multi-pronged "whole of government" approach is needed:

1. The enforcement of rules for global labor markets to ensure that specific and fundamental human rights are taken out of competition and that economic development sets in motion a "race to the top" regarding employment standards, whereby market opening can be mutually beneficial;
2. The establishment of enforceable intergovernmental regulation covering the accountability of corporations and their labor practices. An international framework governing the behavior of business should also facilitate the development of international industrial relations;
3. The adoption of far more active adjustment policies supported by targeted regional and industrial policies along with active labor market policies to help those communities whose jobs may be affected.

"Trade unions cannot passively accept the working of economists' 'relative price effect' in terms of labor, leading to a 'race to the bottom' in employment standards."

Guaranteeing Human Rights at Work

The expansion in offshoring and relocation of activity has drawn dramatic attention to the need to guarantee core workers' rights on a global basis. The agreement in the ILO in 1998 of the Declaration on "Fundamental Principles and Rights at Work" focusing on core workers' rights (i.e. freedom of association, rights to collective bargaining, freedom from forced labor or prison labor, freedom from

child labor exploitation and non-discrimination) has provided a floor for employment regulation in the global economy and a standard that should be applied throughout the international governance system. The primacy of these rights have been agreed by the vast majority of countries operating in the global economy – the 178 members of the ILO – and it cannot be argued that they infringe upon national sovereignty. The issue is whether or not they are enforced in practice.

Human Rights

Freedom of association, which in the context of work means the right of workers to form and join trade unions, is recognized as being both a political and civil right on one hand as well as an economic and social right on the other hand. It is an enabling right the exercise of which plays a vital role in the realization of other human rights. Without freedom of association it is hard to apply even basic labor protections or health and safety laws, or operate effective factory inspection.

Special note should be made about the rule of law and the role of government in the protection and realization of human rights. Markets, including labor markets, require rules if they are to function properly. In order to exercise their rights and have access to justice, workers need to have their status recognized. Foreign direct investment (FDI) has an important role in ensuring that work is performed within the legal and institutional framework and not on an informal basis.

The international labor movement has long-advocated "workers' rights clauses" in trade and investment agreements and in the constitution of the World Trade Organization (WTO). The purpose of a workers' rights clause is to ensure that fundamental workers' rights embodied in the ILO Declaration on Fundamental Principles and Rights at Work become an integral part of trade agreements. This would require close cooperation on implementation between the WTO and the ILO.

At the moment there is a lack of coherence between different parts of the international governance system. The same governments can profess support for these fundamental rights at the ILO while undermining them in their international trading practices that are governed through the WTO. Provisions for workers' rights in trade and investment agreements would provide a partial counterweight to these negative pressures on labor relations in the global economy and would influence the behavior of corporations.

"Without freedom of association it is hard to apply even basic labor protections or health and safety laws, or operate effective factory inspection."

Other intergovernmental institutions also have to treat the fundamental rights at work as criteria that they apply in their own activities. Both the G8 Labor Ministers' meetings and the ILO's World Commission on the Social Dimension of Globalization have made strong pleas for far more attention to be paid to the social dimension of globalization. Both have called for coherence to be established in the multilateral system to ensure respect for workers' rights by all international institutions, including through the lending and conditionality policies of the International Monetary Fund (IMF) and World Bank as well as at the WTO. The ILO Commission called for Policy Coherence Initiatives by the different institutions and the

establishment of a "Globalization Policy Forum" to establish coherence.

But action must go beyond strengthening dialogue and coherence to:

1. Continue to strengthen the ILO machinery for the ratification and supervision of conventions;
2. Extend use of workers' human rights machinery in bilateral and regional preferential trade arrangements. For example, the United States–Cambodia textile agreement, whereby workers' human rights in Cambodia's apparel exporting factories are monitored by ILO inspectors and their findings published, has helped both raise labor standards and increase trade. It shows what can be achieved by cooperation on labor standards;
3. Integrate obligations for the fundamental rights at work into all the World Bank's lending policies;
4. Extend labor standards clauses in hemispheric and regional trade agreements;
5. Establish a forum to work on coherence between the ILO and the WTO;
6. Incorporate consideration of sustainable development (including international labor standards) into WTO trade policy reviews;
7. Modernize Article 20 of the General Agreement of Tariff and Trade (GATT) to exclude from WTO disciplines goods made not just by prison labor – but in any situation where the fundamental rights at work are not respected.

None of these propositions are revolutionary in nature, yet they are all attainable and would make a difference. Over time, with productivity growth it would allow unions to ensure that workers have the incomes to buy back and consume the goods that they are producing.

Corporate Social Responsibility

The corporate social responsibility (CSR) concept, and the phenomenon of enterprises, organizations and interests that have emerged based on this concept, have had a major influence on policy debate concerning international rules for companies. A large part of the interest in CSR exhibited by some governments and by intergovernmental organizations is related to an attempt by governments to balance their own binding obligations with respect to property rights in trade and investment agreements on the one hand, with urging voluntary actions by companies to respect human rights on the other.

"This search for answers has led to the creation of a new industry of 'social auditors' who perform what is, essentially, private labor inspection."

One of the major components of CSR has been the promulgation of codes of conduct by companies intended to cover the labor practices of their suppliers and sub-contractors. The origin of these codes lay in the negative publicity generated by reports of dangerous and inhumane working conditions, starvation wages and use of child labor involved in labor-intensive manufacturing and the production of many agricultural products. Because these codes involved one company assuming some degree of responsibility for the behavior of other companies (its suppliers and sub-contractors) they raised questions that do not apply to activities that a company owns or otherwise directly controls.

The two most important questions concern first, how a company will know that its code is being observed by its suppliers and, second, what the company will do if it is discovered that its suppliers or subcontractors are not

respecting the code. These questions as well as the search for answers to these questions, continue to be controversial. Among other developments, this search for answers has led to the creation of a new industry of "social auditors" who perform what is, essentially, private labor inspection.

The emergence of supply chain codes of labor practice has had positive and negative aspects. Among the positive aspects are:

1. They represent the development of international policies by companies on labor practices. Before the emergence of these codes, multinational companies insisted that labor practices must be dealt with at the national or local level, where law and practice applied.
2. The supply chain codes were recognition of what trade unions had been saying all along. Employers were using sub-contracting to avoid the legal obligations of the employer while, through their economic power, they controlled the conditions of work. In those (usually rare) cases where workers, working for an enterprise somewhere down the supply chain, were able to bargain collectively, this meant that these workers did not have access to the real decision makers.
3. The organization of labor-intensive manufacturing into long production chains and the increasingly elaborate systems of sub-contractors were effectively removing a lot of work from any legal protection. The long supply chains made it possible to have work performed on an informal basis, often organized by intermediaries who themselves were not employers or even legitimate businesses. Trade unions have long maintained that companies are responsible for the labor practices of their suppliers and sub-contractors, as well as for the conditions under which work is performed in these supply chains. If nothing else, the supplier codes were an acknowledgement of this responsibility by many companies.

The main danger of the supplier codes is for them to be considered as a substitute for the proper role of government, as well as for trade unions and industrial relations. They may end up making things worse instead of better. However, this need not necessarily be the case. These codes can help to make sure that governments take up their responsibilities towards workers and create opportunities for workers to organize and bargain collectively. Code implementation should promote a culture of compliance with law among employers, be consistent with and complement the work of labor inspectorates and promote trade unions as the most effective means of workplace monitoring. In the end, the most important impacts of the supplier codes will be difficult to determine, because they will be indirect.

Guy Ryder *is the Secretary-General of the Brussels-based International Confederation of Free Trade Unions (ICFTU).*

John Evans *is the Secretary-General of the Paris-based Trade Union Advisory Committee (TUAC) to the OECD.*

III. Strictly Business

Leif Östling
Nani Beccalli-Falco
Tom Fox
Karl Sauvant
Khalil Hamdani

Business considerations are always determined by the bottom line, but the calculations needed to reach that figure is changing dramatically. In this chapter, ***Leif Östling*** *discusses how players trading on a global scale need to move their operations and assets to the front end of the value chain to remain competitive.* ***Nani Beccalli-Falco*** *explains how growing energy demands, water scarcity and rampant urbanization will redraw the landscape of future markets.* ***Tom Fox*** *explores the reputational issues that will plague companies who fail to embrace corporate social responsibility of environmental and labor practices.* ***Karl Sauvant*** *explores the future reservoirs of FDI possibilities. While* ***Khalil Hamdani*** *offers an insightful statistical overview of the foreign direct investment scene.*

Sharpening the Competitive Edge

Scania is the world's third largest manufacturer of heavy trucks and buses. Despite a small domestic market in its home country of Sweden, it has become a major player on the international stage by moving its operation and assets to the front end of the value chain.

By Leif Östling
President and CEO of Scania

Innovation and technical development in the transport and logistics industry has been key to European industry's success during the past 20 years. The Western European logistics industry is the best in the world. If this were not so, our economic system and prosperity would be unthinkable.

Industrial operations and production in our part of the world can only compete by being better organized, better managed and more efficiently utilized than our competitors from countries with much lower labor costs. For a Swedish company, with a small home market and a de facto transport handicap to export markets, this is even more true. European logistics costs are now approximately 10 percent of gross domestic products (GDP). (This is the same as for the US but six percent lower than Asia, excluding China.) With globalization and increased competition not only the manufacturing cost of products decide the price. The cost of getting components to factories and finished products to end customers, has become a vital part of the cost for most industrially manufactured products. How well we organize our logistics, and thus the cost of logistics, is an increasingly important factor for competitiveness.

Road transport is the backbone of our transport system. For distribution and short haul transport, there is no viable alternative. For long haul, in today's well organized Just-in-Time and Just-in-Sequence systems with low inventory levels, only the truck, with its flexibility and reliability, is competitive. Rail and sea are competitive in bulk transport for low value-added goods. Air is the logical choice for extremely high value-added goods.

As a result, the transport industry has undergone major development. For Scania, as a leading global manufacturer of heavy commercial vehicles, logistics is the core

business of our customers. Truck operators face new challenges, which emerge rapidly, as the logistics industry continues to sharpen its competitive edge.

Over the past 10 to 15 years, we have seen the emergence of a few, large, global players in the logistics industry. The European transport market is worth around € 180 billion. It is expected to continue to grow at an average five to six percent a year. Six companies now have a combined 10 percent market share and a major consolidation has begun. These companies specialize in supply chain management, information systems, logistics and transport management. They serve customers on a global or regional level, paying no or little notice to country borders. With their comparative muscle, the new global players ensure that the market for road transport is fiercely competitive.

We expect a further polarization in mature markets based on this business logic.

Big operators compete increasingly with know-how and geographic presence on a continental level. They provide complete logistics solutions, even including risk management. Size becomes a competitive advantage, both to maximize reach and to optimize flexibility. Owning fleets and employing drivers adds little to the competitive advantage due to increased fixed costs and tied up capital. Big operators are predicted to become bigger and fewer, while some will transform into logistics providers.

To make sure that a truck remains on the road from its take off point to its destination and that the driver gets all the support he needs to fulfil his job, that is the future challenge for Scania as a provider of hardware, trucks, and software, services.

Our strategy is very focused. We are only active in the segment of commercial vehicles for very heavy transport. We have a premium brand and in this segment the need for customer specification and tailored products allows us to command a premium price. Scania's modular product system, with a limited number of components and standardized interfaces, enables us to have the best of both worlds; the highest degree of customizing in our customer offer as well as economies of scale in research and development (R&D), production and the supply chain.

World demand for high quality, heavy trucks is linked inextricably to the growth of GDP, the development of road infrastructure and more sophisticated logistics systems. This makes Europe a growth market, as GDP increases. It means that the new European Union (EU) member states and the rest of Central and Eastern Europe as well as Russia also are growth markets. Many other markets, like Turkey and South Korea as well as South American countries like Brazil and Argentina are becoming increasingly exciting growth markets too.

Scania enters new markets with a long-term perspective and a firm commitment to our customers. We are already in China, building a service network and a small scale business, even though we recognize it will still take considerable time before the market for our type of products takes off. In China logistics costs are as high as 23 percent of GDP. Chinese industry can afford this as long as they have a competitive advantage in low labor costs. With an inadequate and uncompetitive logistics system, the need for high quality, heavy, western style trucks is limited. Today, the size of our market segment in China is not much bigger than the Finnish market for heavy trucks – around 2,500 trucks a year. But this is changing and is likely to change more rapidly than many observers expect.

Global competition will only increase and underpin

the demand for increased efficiency and innovations in logistics. To be able to take proper advantage of the understanding of our customer's needs, we have to get closer to them in every respect. Then we will grow with our customer base.

"We consider that outsourcing of production to countries with low labor costs is an easy way out for those who are too lazy to get stuck into the real work of innovation, sustainability and added value."

The tools we have at our disposal to achieve this are the same tools we have used in developing our R&D and production operations. A genuine learning organization with customer focus, working with standardized and quality assured methods. Cross functional teams, challenging the way we do things, taking responsibility for our own work, openly admitting mistakes in order to improve. At the same time, we can further improve and reap benefits from economies of scale. This attitude is a great generator of new ideas and this structured approach will unleash a clear entrepreneurial spirit also in the sales- and service- organization.

It is important to us to keep production and R&D together. We keep outsourcing of key components to a minimum. The exception is when it comes to very labor-intensive assembly, like our bus body assembly, where it is impossible to compete with a Western European labor cost structure.

We consider that outsourcing of production to countries with low labor costs is an easy way out for those who are too lazy to get stuck into the real work of innovation, sustainability and added value. Outsourcing creates a short lived competitive cost advantage at the price of the search for excellence in terms of quality, R&D, and production engineering. The average utilization of production facilities in Swedish industry is 35–40 percent. Scania aims to run at 80–85 percent.

Finally, Scania has started to invest in the part of the value chain that represents the customer interface. It is likely that 10 years from now, a majority of Scania's assets, as well as employees, will be in the front end of the value-chain – working in local sales and service operations, taking care of local, regional and global customers, with a global service offering based on common methods.

A Combination of Factors

Those who look for spectacular and dramatic breakthroughs will be disappointed. To grow and remain competitive in the engineering industry, is a long-term and slow, down to earth job. The cost of capital is more or less the same around the globe. The cost of labor remains local, but only represents part of the cost structure. The skill of the labor force as well as the infrastructure and the maturity of the industrial system also plays a vital role in the equation. So, in order to understand where future industry investments will take place, one has to look at all these factors in combination. The cost for labor has to be evaluated together with general factors like the competence of suppliers and the logistic support as well as specific factors like expected output in terms of quality, delivery reliability, factory utilization etc. All these factors will ultimately determine the local competitiveness.

Scania will continue to invest in order to eliminate bottlenecks in the existing global production system as well as in developing the sales and service network. The

focus, however, will always be on challenging how we do things in order to improve, step by step, the performance of our business. So what lessons can be drawn from this overview of Scania's development in general terms? Let me suggest a few in three different areas:

1. The future of the European engineering industry. Clearly, it is already facing competition from new giants, like China and India. Half of all the cameras in the world are "Made in China". One out of five refrigerators is manufactured in China. One out of four washing machines and one out of three TVs in the world is manufactured in China. Yet the European engineering industry is competitive and employs approximately the same amount of people it did 20 years ago if we include the industry dependent service sector. European engineering is still increasing its contribution to wealth-creation. Innovation and industrial competence must remain the focus to outweigh low labor costs. You either lead, follow or die.
2. The European transport market. It is vital that it succeeds in serving its customers. If it does so, it will improve the performance of European industry and contribute to financial growth and prosperity. At the same time, it must and will deal with the challenges of pollution and sustainability. But to believe that we can achieve our common objectives in terms of competitiveness and economic growth without a growing road transport sector is naïve. Europe cannot be a thriving continent if people are only employed in the service sector, telecommuting from home. It needs excellent physical infrastructure, including roads. This is a prerequisite for delivering sustainable full employment, economic growth and prosperity that in turn will finance other areas of concern, such as health, social security etc. The truck industry has a vital role to play in improving the competitiveness of the transport sector while providing the best solutions in terms of reduced energy consumption and exhaust emissions.
3. The need for political sensitivity. The single most important issue for Scania, and the future of European engineering industry, is our educational systems' ability to meet industrial demand for highly educated employees, researchers and leaders. High quality in education and research, with a close link to industrial activities, is the best way to make the young generation consider a future career in the engineering industry. At Scania, we regard the education system as our most important supplier. Academic research based on pragmatic industrial needs and cooperation with the academic world is the way to safeguard our future supply of competence and innovation. Industry also needs stability in terms of economic and other policies which allow it to prosper – but a focus on improving European competitiveness must not only look at industrial policy. It must put education at the heart of industrial policy and competitiveness.

***Leif Östling** is President and CEO of Scania, Sweden's 17th largest company and the world's third largest manufacturer of heavy trucks and buses. Östling joined the company in 1982 and has been its top executive since 1989. He holds an M.Sc in Engineering from Chalmers University in Gothenburg as well as an M.Sc in Business Administration from the Gothenburg School of Economics. Östling was awarded an honorary doctorate from the Royal Institute of Technology in Stockholm in 2003.*

Company to Country Strategy

A global competitive strategy needs to take into account many different factors. Few have as much experience in designing such plans as the iconic multinational General Electric, whose products range from household appliances to aircraft engines. The company's growth is driven by a policy of treating countries like customers.

By Nani Beccalli-Falco
President and CEO of GE International

The three main challenges of being the eighth largest company in the world – with revenues of US$152 billion, General Electric's (GE) output is greater than the gross domestic product of the world's 35th largest economy – are how to continue to grow at a pace that satisfies our investors, makes the most of the business opportunities for our company and maximizes our potential contribution to the global economy.

GE cannot stand still, nor can it simply invest for today's growth. We need to identify tomorrow's growth and meet our own target of being an eight percent organic growth company in an ever-changing world.

Future economic growth will be uneven. To succeed, companies must navigate major global trends that will have significant impact on valuation. These include:

1. An increasingly interdependent global economy racked by excess manufacturing capacity and the resulting price pressure. This is why unemployment remains stubborn and margin growth is tough to achieve. Winning companies will invest in innovation and build new revenue streams from their current capabilities.
2. A new economic order of global competitiveness and growth. Competition from places like China and India has evolved beyond low-cost manufacturing labor to include highly competitive engineering graduates who earn less than production workers in the developed world. Winning companies must think globally, but understand local consequences. Only competitive companies can serve investors, employees and stakeholders during this dramatic phase of globalization.
3. A move to consolidate distribution channels, which create value for consumers but make it difficult for manufacturers to maintain margins. Winning companies will have strong direct sales forces, low costs, and

value propositions that tie their own profitability to their customers'.
4. An opportunity to build growth platforms based on unstoppable demographics. Winning companies will sustain long-term growth by betting on high-growth markets to which they can bring unique technical and management capabilities.
5. A more volatile and uncertain world. The underlying insecurity created by 9/11 and the market bubbles will not end soon. Winning companies will win the confidence of customers, investors and employees by maintaining financial and cultural strength.

GE has made and sold products outside the US for 100 years, and one third of our leadership team is non-US. We succeed in growing globally because we recognize one central fact: Global growth requires more than simply shipping products. You must be equally committed to developing capabilities and relationships in the markets where you want to succeed. The breadth of GE has helped us accelerate our globalization. International revenues grew 18 percent and reached US$72 billion in 2004 and we expect those revenues to grow at about 15 percent on an average annual basis.

The most exciting global opportunities for GE are in the developing world, where our 2004 revenues were US$21 billion, a 37 percent increase. We believe that 60 percent of our growth will come from developing countries in the next decade versus 20 percent for the past 10 years. It is important for us to understand future customers, suppliers and competitors in these regions, where we believe that GE has a meaningful, competitive advantage.

Why do we anticipate the levels of demand that will support our continuing growth at these levels? Take a look at how the world is changing – a growing population, increasing pressure for economic growth and improved living conditions. At the same time you have a situation where millions of people don't have access to goods and services and basic infrastructure we take for granted, such as affordable energy.

This inequality is a problem today but will be a much greater problem tomorrow, as the gap between the "haves" and "have-nots" deepens. Governments around the world are trying to work out how to deal with that issue, as it can only get worse and is a potential source of huge social discontent and disruption.

The answer is to invest in the infrastructure that will support economic growth – right across the developing world. Multinational companies need to be strong partners in this endeavor working increasingly closely with governments as well as private customers, offering them a full range of infrastructure solutions. We have changed our approach to look at countries as customers and this is known as our "company to country" strategy.

"Multinational companies need to be strong partners in this endeavor, working increasingly closely with governments as well as private customers offering them a full range of infrastructure solutions."

We have plenty of opportunity. If you look at revenue as a share of nominal Gross Domestic Product (GDP) across the GE platform in the US, it's at 74 basis points. In the developed world, it's 43 basis points, and in a developing world, it's 25 basis points. So we see a lot of growth potential as we increase our penetration in both the developing world and the developed world outside of the United States.

Why do we want to make sure that as a company we are positioned in these big fast-growing emerging markets for FDI opportunities for energy, water and transportation infrastructure? Consider the following.

1. If we think about energy demand, we see shortages and insecurity of supply, price volatility and particularly high prices, all conspiring to change the way that game is played short-term and long-term. Oil consumption in the next 10 years is going to increase by a factor of 20. Natural gas consumption will increase seven times.
2. Water scarcity is another key global social and political issue, as demand grows more rapidly than our ability to replenish it. Within our lifetime, water will be a more valuable resource than, for example, oil. In 2000, eight percent of the world's population lived in areas where either water was scarce or there was stress in the supply. That number grows to over 40 percent by the year 2030.
3. Another trend which we think plays to our strengths is increasing urbanization as cities like Lagos and Dhaka become bigger than New York and Cairo and multiple cities in China become bigger than Paris. The growth in population in these countries is going to occur in the city because that is where the jobs are. This will put even more strain on the infrastructure and cause more investments to be made in infrastructure projects in these urban areas.

From a business perspective, all of this says there are going to be significant investments in infrastructure in the developing world. One estimate puts the total spend at US$3 trillion over the next 10 years. Even if that number were wrong by half and I don't believe it is, it will have a major impact on the world economy. The country that heads the list of such opportunity is China, I like to say it has one of the best "say do" ratios. What they say they are going to do, they do. Increasingly many more developing countries are adopting that attitude when it comes to investments.

Ecomagination

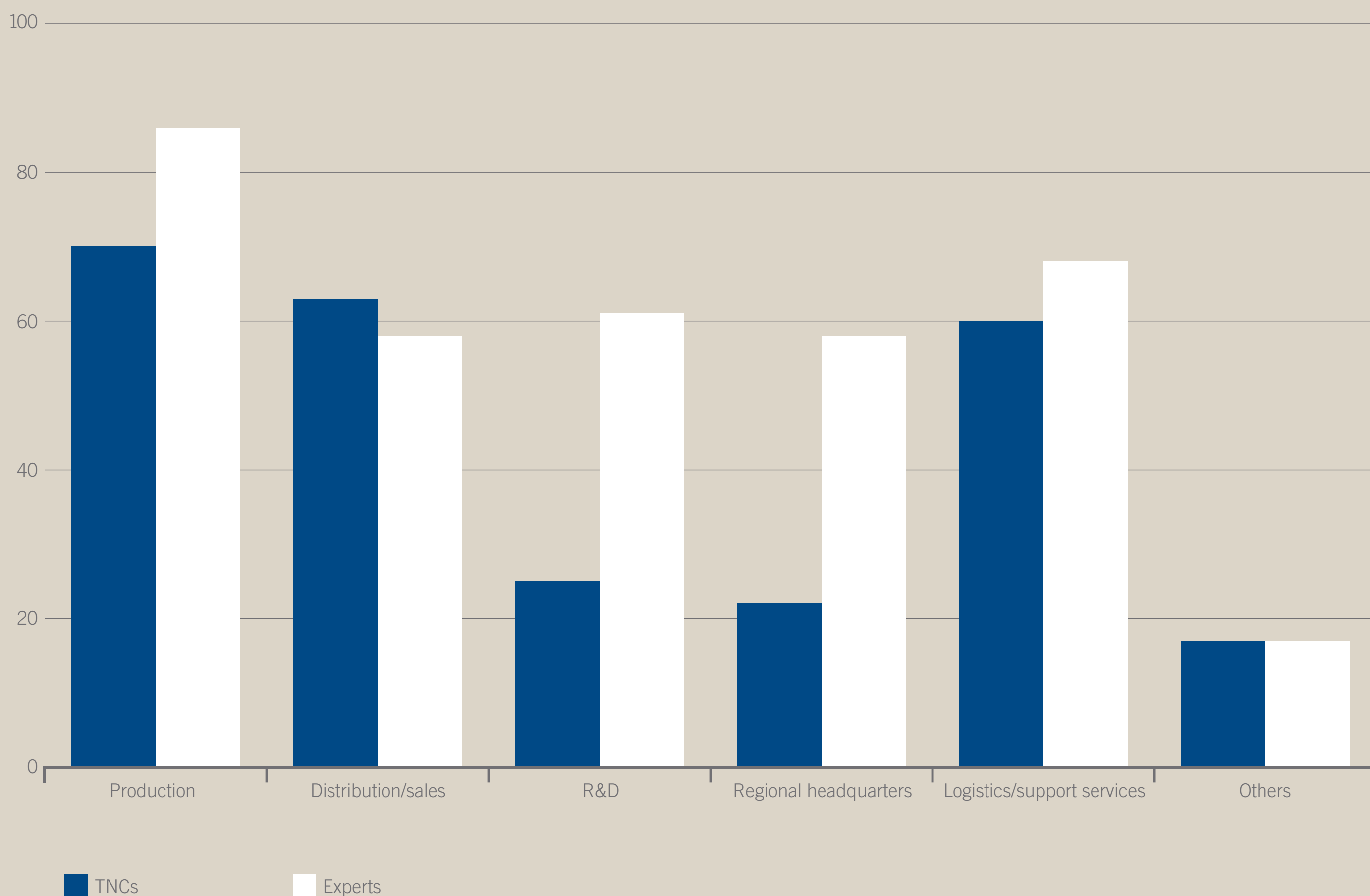
Research and development is the cornerstone of another GE growth initiative – Ecomagination – inspired by concerns around global warming and climate change.

We plan to establish partnerships with our customers to tackle their most pressing environmental challenges and develop the products and services they need. We will also use these technologies to improve our own energy efficiency and environmental performance. The research and development aspect of this initiative is represented by a commitment to double our investment in clean technology over the next five years. Today we invest about US$715 million – by 2010 we will invest about US$1.5 billion in technology. These are global products of interest to developing markets, for example coal gasification, recognizing that many of the world's developing economies rely on coal for energy but also want to reduce potentially harmful emissions.

Nani Beccalli-Falco is President and Chief Executive Officer of GE International.

Foreign Direct Investment Trends

Corporate functions expected to be relocated, 2004–2005, as reported by TNCs and location experts (Percent of respondents)



Source: UNCTAD, www.unctad.org/fdiprospects.

Sense and Sensitivity

Mainstream trade promotion agencies fail to embrace corporate social responsibility into their activities in a comprehensive way. While the benefits of doing so still remain unclear, there are examples – particularly in developing countries – where the benefits of having a social conscience is already paying dividends.

By Tom Fox
International Institute for Environment and Development

It is becoming increasingly clear that government has a key role to play within the corporate social responsibility (CSR) agenda. Central to this issue is the question of how public authorities at national, regional and subnational levels can provide an enabling environment for CSR. There is some evidence to suggest that trade and investment promotion is a key driver of pro-CSR initiatives by public sector agencies in developing countries, however, it is less clear whether any elements of CSR are being integrated into the strategies and activities of public sector trade and investment promotion agencies (IPA) themselves.

A significant development is the work of the World Bank's CSR Practice, which advises developing countries' governments on public policy roles and instruments they can most usefully deploy to encourage corporate social responsibility. It assumes that consumers are increasingly concerned about the social and environmental impacts of the products that they buy, and that companies are therefore increasingly interested in investing in and sourcing from countries with good labor and environmental practices. It follows that some countries might look to position themselves as locations for "responsible enterprise", for example through encouraging and supporting domestic companies to meet voluntary standards and codes of conduct.

A review of public sector roles in strengthening CSR found only anecdotal evidence to confirm a direct link between pro-CSR public policies and wider economic competitiveness, particularly in attracting foreign direct investment (FDI).

However, public sector bodies are recognizing the potential for the CSR agenda to open new market access opportunities for exports of sustainably produced goods

and services and to tackle potential exclusion from existing markets as CSR conditions are introduced. For example, literature from an environmental policy program in Egypt states, "Improving environmental standards should be considered as an integral means of maintaining our access to foreign markets in those sectors where we have a comparative advantage, and increasing our ability to compete in new ones".

Public sector responses also include capacity building for domestic producers to enable them to meet CSR standards. For example, the Thai Office on Labor Standards Development aims to address the lack of enforcement on labor issues and to promote compliance to voluntary labor standards. A support program entitled The Power of Labor Standards has been launched, which will provide presentations and free training programs to industry, subsidized consulting for factories, and a self-monitoring process.

Responsibility and Innovation

The link between CSR and national competitiveness is also the focus of ongoing work by AccountAbility and the Copenhagen Center. They ask whether corporate responsible practices can play a significant role in driving "responsible competitiveness", characterized by a positive relationship between national and regional competitiveness and a nation's sustainable development performance. It notes that, "the relationship between international competitiveness and corporate responsibility is not a simple one. However, our research suggests that corporate responsibility can, under certain conditions stimulate innovation, investment and trade, and so competitiveness".

Meanwhile, South Africa has pursued a policy of black empowerment as an integral part of its economic development strategy. Yet in doing so, it faces challenges that this might negatively impact on its international competitiveness and so ability to attract foreign direct investment. And Vietnam has sought to respond to international criticism about labor standards in its all-important, export-based, footwear sector. Yet it has simultaneously voiced concerns that in doing so it may price itself out of this market as manufacturing multinationals shift towards lower-cost parts of the region, notably China. Meanwhile, the South African wine industry's main export market is the UK, which means that it has been particularly impacted by the Ethical Trading Initiative, a UK-based partnership working around labor standards in global supply chains. This will give the South African wine industry an additional competitive edge if labor standards become a significant issue for wine exports beyond the UK.

The Organization of Economic Cooperation and Development (OECD) recently published a seminal paper, Foreign Direct Investment for Development, and, with the South East Europe Regional Roundtable for Investment Promotion, developed Best Practice Guidelines for Investment Promotion. The paper comments on FDI and environmental and social concerns, noting that there is little evidence that efforts to attract FDI may lead to a "race to the bottom". It suggests that home country authorities have a role to play in raising standards for CSR in host countries, by inducing MNEs to observe commonly agreed standards such as the OECD Convention on Combating Bribery of Foreign Public Officials, the Declaration on International Investment, and the Guidelines for Multinational Enterprises (MNE). In contrast, the Guidelines for Investment Promotion do not directly relate to social and environmental standards or other elements of CSR, beyond the second guideline to, "articulate and advocate

national policy on FDI among social partners and civil society as well as investors in order to create a better awareness and consensus on the aims of policy".

By taking steps against discrimination and abuse, authorities bolster employees' opportunities to upgrade their human capital, and strengthen their incentives for doing so. Also, a labor market where participants have access to a certain degree of security and social acceptance lends itself more readily to the flexibility that is key to the success of economic strategies based on human capital. It provides an environment in which MNEs based in OECD countries can more easily operate, applying their home country standards and contributing to human capital development. One strategy to further this goal is a wider adherence to the OECD Declaration on International Investment and Multinational Enterprises, which would further the acceptance of the principles laid down in the Guidelines for Multinational Enterprises.

Studies have found a positive relationship between FDI and workers' rights. Low labor standards can sometimes act as a deterrent to FDI, due to investors' concerns about their reputation elsewhere in the world and their fears of social unrest in the host country. Problems can, however, arise in specific contexts. For example, the non-trivial role that export processing zones (EPZs) play in many developing countries could raise concerns regarding the respect for basic social values.

Making It Work for You

According to the United Nations Conference on Trade and Development (UNCTADs) 2000 review of investment promotion, the core functions of IPAs vary according to the type of economy where they are situated. IPAs in OECD countries focus particularly on investor targeting, after-care programs, and consulting services. In contrast, a high proportion of IPAs in LDCs and other developing countries perform a much wider range of tasks, and investor targeting is therefore likely to be less focused and sophisticated. In total, 80 percent of IPAs included in the UNCTAD survey carry out some form of investor targeting, either by country, sector or type of investment. About two-thirds of IPAs (and 75 percent of developing country IPAs) reported that they had instigated special efforts to attract projects that would bring environment-friendly technology, and 59 percent had targeted labor-intensive investment.

"Low labor standards can sometimes act as a deterrent to FDI, due to investors' concerns about their reputation elsewhere in the world."

There are few examples of IPAs that have tried to develop an explicit CSR-related image. Although at a sub-national level, the Oregon Economic and Community Development Department has used strict environmental regulations to promote a "green" image, supported by a campaign from the mid-1980s, which targeted companies that could benefit most from the environmental conditions and incentives available.

However, it is likely that national IPAs will increasingly engage with the CSR agenda. Firstly, there are some signs that this is already happening, even where this is not obvious to casual visitors to IPA websites. For example, as well as working on corporate governance, the Uganda Investment Authority is "sensitizing companies on what is a good corporate citizen" and it takes environmental, labor and community responsibility into account in its Investor of the Year competition. The UNCTAD review

also notes that most IPAs' targeting is likely to become more sophisticated in the future – particularly to match the needs of investors with the development objectives of the host country. It also suggests that more countries are paying increased attention to optimizing the benefits of FDI, for example by promoting stronger links between foreign companies and domestic enterprises. Hence, there appears to be potential for exploring this and other possible links between CSR and investment promotion, and the benefits to countries of doing so.

Compared with the relatively scant evidence of IPAs acting on the potential link between CSR and FDI, there is clearer evidence that developing country agencies are starting to make concerted attempts to respond to CSR-related supply chain pressures, such as by trying to demonstrate the social and environmental integrity of their products through codes of conduct for their suppliers, who are often based in emerging markets. In order to maintain or win new contracts, producers need to respond by developing the capacity to implement and adhere to such codes. The government of Vietnam is planning to improve the advice and training available to Vietnamese factories seeking to institute CSR programs, "as they try to position Vietnam as a responsible location for sourcing". Other countries are carrying out similar support programs for producers, notably Thailand, where the Ministry of Labor has developed its own labor standard, TLS 8001, and is looking to provide consultation and certification for companies which want to enter the export sector, and India, where the Ministry of Textiles is providing support for small and medium-sized enterprises on various CSR standards.

"A labor market where participants have access to a certain degree of security and social acceptance lends itself more readily to the flexibility that is key to the success of economic strategies based on human capital."

Sector Advantages

There are other ways in which CSR relates to trade promotion. At a sectoral level, it is common for industry associations to promote pro-CSR activities, for example Cotton Australia's introduction of a Best Management Practice environmental program among its producers, in order to maintain a "clean, green" image. Colombia also runs a Green Markets Program, to support the production of "green" goods and services for national and international markets. Finally, an emerging area of interest is the inclusion of CSR in bilateral trade agreements. For example, the US-Vietnam Bilateral Textile Trade agreement includes an obligation on both parties to encourage the implementation of CSR codes of conduct.

Despite these examples, it is unusual for mainstream trade promotion agencies to build CSR into their activities in a comprehensive way. And even these examples tend to be in certain sectors – notably textiles and garments – rather than more widespread. There is a clear difference between the institutions used for investment promotion and trade promotion.

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Reservoirs of the Future

Monitoring new and emerging reservoirs of foreign direct investment and identifying ways and means to strengthen the development impact of such investments is not an easy task. It may require investment promotion agencies to strengthen their policy advocacy role within their own governments, with a view to helping improve the investment climate – not only for foreign, but also for domestic investors.

Karl P. Sauvant
Former Director of the United Nations Conference on Trade and Development's (UNCTAD) Division on Investment, Technology and Enterprise Development (DITE)

More and more firms have become transnational. For developed countries for which time-series data are available, the number of transnational corporations (TNCs) rose from 7,000 in 1968/69 to close to 40,000 in 2003; the total number of TNCs worldwide is today easily above 60,000. And firms that are already established abroad transnationalize further. Not surprisingly, therefore, world FDI flows have risen dramatically: from some US$40 billion at the beginning of the 1980s, to US$610 billion at the end of 2004; FDI outflows from developing countries today are already higher than world FDI flows were 25 years ago.

And there is no reason why FDI flows should not increase further, and substantially so. Worldwide, they account for 10 percent of gross domestic capital formation, but in some countries (UK, Singapore) they are quite high. The supply of FDI is not fixed – it is a function of three basic factors:

1. Progress in technology – which makes it increasingly easy for firms to operate international production networks. In this regard, computer-communication and transportation technologies have been particularly important in recent times.
2. The continued liberalization of FDI regimes and the strengthening of standards of protection of foreign investors through international investment agreements – which create the space into which firms can expand with security. This liberalization trend is pervasive: between 1991 and the end of 2003, nearly 1,900 changes of FDI frameworks took place in some 150 countries, 95 percent of which went in the direction of creating a more welcoming investment climate. These changes at the national level are complemented by international investment agreements. The number

of bilateral investment treaties alone had risen to nearly 2,500, by the end of 2004, and virtually all new free trade agreements are also free investment agreements.

3. Competition among firms – which drives them to take advantage of the opportunities offered by technology and liberalization in order to increase their international competitiveness by establishing a portfolio of locational assets, i.e. to undertake FDI.

To be sure, the expansion of the growth of FDI does not necessarily have to continue. For one, although the trend has been vigorously upward for the past 20 years or so, there were FDI recessions. There was a small one in the 1990s, and a big one – a virtual FDI bubble that was deflated – at the beginning of this decade, when FDI flows collapsed from US$1.4 trillion in 2000 to US$580 billion in 2003; only now are we coming out of this recession. These breaks in the trend were largely the result of an unfavorable overall economic performance, as economic growth is one of the principal determinants of FDI flows. Investment flows in the future will also be a function of economic growth, at least to a large extent *(see Chart 1, page 99)*.

But there are other risks, too. Chief among them is the attitude towards FDI. We need to remember that, only 30 years ago, many countries saw FDI as part of the problem, so to speak, as far as economic development was concerned and, therefore, restricted inflows. Since then, the pendulum has swung dramatically: FDI has become part of the solution to economic development. Some countries in fact appear to place too much store in FDI, forgetting that, as a rule, it is only a complement to domestic investment or perhaps also a catalyst.

We cannot exclude that attitudes change again. A backlash could be fuelled by disappointed expectations, disillusionment with certain aspects of globalization and/or a greater assertion of national identity. The question "Who is us" asked so famously by Professor Robert Reich 20 years ago is after all still with us today, in developed as well as in developing countries. As a result, the second basic factor mentioned above (the FDI liberalization trend) may come to a halt (or even be reversed) and be replaced by investment protectionism, with implications for the opportunities available for investors and hence also the competitive pressures on firms to take advantage of them.

For now, however, firms expect to invest more abroad, and all countries, without exception, seek to attract FDI, as an important ingredient of economic growth and development. And they do so with growing vigor: red carpets are replacing red tape everywhere.

The great majority of countries now have investment promotion agencies (IPAs), often also at the sub-national level. Many were established during the past decade or so, and more will be established in the future, substantially increasing the number of players seeking to attract investment. Indicative is the number of members of the World Association of Investment Promotion Agencies (WAIPA) which has risen in 10 years to 178 in August 2005, from 146 countries. And there are many more "out there" that are not members; China alone has some 200 at various administrative levels.

Hand in hand with the proliferation of IPAs, there has been a rise in investment incentives. Countries think that, through such incentives, they can compensate for locational weaknesses or otherwise tilt the balance of an investment decision in their favor – not withstanding that, in most cases, incentives are only icing on the cake

for investors. Still, as in the area of military disarmament, the containment or reduction of incentives is probably only possible if it is done on a regional or global basis. For the time being, however, such an investment incentive control regime is not in the cards. Some fear therefore a race to the sky for financial and fiscal incentives, and a race to the bottom for regulatory incentives.

Investment promotion is also becoming more sophisticated. The great majority of countries has moved from just liberalizing their investment regimes and opening up to such investment to a second generation of investment promotion in which they have established IPAs that actively promote their countries as investment locations. "Marketing a country" is the watch-word. Moreover, an increasing number of IPAs is complementing their first and second generation investment promotion strategies with embarking on a third generation strategy: targeting. By focussing on specific countries, industries, investors, companies or activities, IPAs expect to get more "bang for their buck", especially in light of their countries' comparative advantage and development goals, but also in light of the limited resources they typically have available. This targeting approach will become more prominent in the future – and calls for the identification of niche FDI markets.

The upshot of all of this is that more IPAs will be chasing every FDI dollar, making for fierce competition among countries. So where in this highly competitive world FDI market will the future FDI dollars come from? What are the FDI reservoirs of the future? Where should IPAs look for them?

First of all, of course, IPAs need to continue to look into all those areas to which they have traditionally paid attention, as these will remain investment reservoirs, e.g. developed countries, manufacturing, natural resources, and existing investors. Already established investors, in particular, remain key, as reinvested earnings account for a sizable share of FDI inflows. This makes after-care services especially important, as a satisfied foreign affiliate is a country's best investment ambassador. (Even poor IPAs can deliver such services without major expenses.)

"The FDI liberalization trend may come to a halt (or even be reversed) and be replaced by investment protectionism."

Beyond that, there are a number of areas that deserve more attention than they have typically received so far. In what follows, I identify two broad-based FDI opportunities and three niche FDI markets (some of which will become big over time). Looking beyond broad-based opportunities – where all are players – and focussing on niche markets may mean less competition from other IPAs, and it may involve some first-mover advantages. IPAs that have embarked on the third-generation investment promotion strategy, in particular, need to know where targeting opportunities exist.

Services – Where the Action Remains

In developed countries, the services sector accounts for over two-thirds of Gross Domestic Product (GDP), in developing countries over half. Moreover, most services are (not yet) tradable: they need to be produced when and where they are consumed. Hence, they can be brought to foreign markets only through FDI. At the same time, services firms have built up the firm-specific advantages that allow them to compete successfully abroad.

And they have started to do so, with a vengeance.

Over two-thirds of FDI flows are now in the services sector. As a result, the composition of the FDI stock has shifted dramatically: while only one-fifth of this stock was in services in the early 1970s, it is now three-fifths.

The action is likely to remain in services. While entry into manufacturing has largely been liberalized in most countries, the same cannot be said for many services. Liberalization, deregulation and privatization are bound to open up more services to FDI. The new opportunities will bring more players into the FDI market (including firms that have been privatized) and entice existing ones to transnationalize further. They still have some way to go if they want to catch-up with their manufacturing counterparts which, in terms of the share of foreign assets in total assets, are about twice as transnationalized than services firms.

Moreover, all manufacturing and natural resources firms also undertake substantial service activities, from marketing, to accounting to Research and Development (R&D); if conditions are right, a part of these activities are also candidates for FDI. Finally, third world TNCs typically begin to transnationalize by making trade-supporting investments. All these factors combine to suggest that services will remain the main source of FDI, perhaps becoming even more important.

How to capture this potential? First and foremost, by recognizing that industrial FDI, while certainly important, constitutes only a relatively small share of the total. While the need to shift focus may appear obvious, many IPAs still think of FDI mainly in manufacturing terms. In other words, IPAs need to focus more on services firms.

As services are typically more regulated than manufacturing, services investment policy reviews may be of help to determine a country's potential to attract services FDI and how this potential can be realized. Where key service industries (banking, insurance) are involved, however, countries need to keep in mind the need for prudential regulation. In the case of privatizations (especially of infrastructure projects), furthermore, the do's and dont's of privatization need to be observed, lest a public monopoly be replaced by a private (foreign) one.

Offshoring – Wave of the Future

If services are the driving force of the current wave of FDI, offshoring will power the next. In particular, computer-communication technology is making information-intensive services (and they are the bulk) tradable. In other words, it is no longer necessary to produce these services when and where they are consumed. Rather, they can be produced in one place and then consumed (later) in another place.

This tradability revolution opens entirely new opportunities for the production of services: the production process can be split up, and individual services or service components can be offshored – they can be produced where in the world the conditions are best for their production. What this means is that, as in manufacturing, an international division of labor is becoming possible, leading to a major shift, a new international division of labor, in the production of services worldwide. The reservoir for this is huge given that this possibility has only been created recently due to technological advances, that services account for the bulk of economic activity and that a good part of the activities of industrial firms consists of services.

Moreover, the regulatory framework for trade in offshored services is open, i.e. companies are free to trade their offshored services internationally. True, there has been some concern, especially in the US, about what off-

shoring means for the home country and especially its labor market; but so far these concerns have not taken hold. This may change, however, as offshoring gathers speed (and it is likely to be a much faster process than in the case of manufacturing); the magnitude of the phenomenon becomes apparent; if white-collar workers lobby against it and the adjustment process in home countries is too slow.

Given this new possibility, few firms can ignore it if and when their competitors can realize substantial competitive advantages through the offshoring of some of their services. (Many firms have in fact already taken the first step, by outsourcing certain services within their own countries; to do so internationally is the next step.) In fact, for those that offshore, all the advantages of an international division of labor come into play, not only lower wages (which may trigger the process), but also possibilities to access skills, create economies of scale, etc. So far, firms from the US and the UK have taken the lead, with the majority of the world's top 1,000 firms barely having joined in. But then we are only at the beginning of the tradability revolution, although competitive pressures are likely to ensure that the tipping point will be reached soon.

Naturally, services can be offshored to third parties (and a good part is done this way), i.e. it does not involve FDI. But a good part does – and FDI will become more important the more sophisticated the service activity involved is and the closer it is to the core competencies of the firms doing the offshoring. Thus, as the international production of services is being reorganized, IPAs can tap a huge potential – and not only IPAs from developing countries, but also from developed ones, and economies in transition. For, as in the geography of manufacturing FDI, various factors determine the location of offshored services investment, with the result that, at the moment, roughly half of the new offshored services projects are located in developed countries and half in developing ones. In principle, every country can get a piece of the action – provided the conditions are right.

How to get in into the action? The first thing is to be pro-active. Many firms do not yet understand the new world of offshoring. They need to be approached. Moreover, intermediaries are springing up to help them identify services that can profitably be offshored and, also, to advise them where to go; they need to be contacted or retained.

Of course, the challenge is to match a country's comparative advantage with the needs and strategies of investors. That may involve specific actions like offering certain skills, strengthening the telecommunication infrastructure and promulgating data-protection laws. Special attention needs to be given to after-care, including to get foreign affiliates to convince headquarters to consolidate their offshored services in your location. In brief, this is an opportunity that is up for grabs.

Emerging Market TNCs

Beyond the broad-based opportunities of services and offshoring (which, in any event, are interlinked), a number of niche FDI markets exist that deserve special attention, especially by IPAs that pursue third-generation targeting strategies.

Emerging market TNCs are very much in the news these days, especially because of a number of high profile takeovers (or attempts to do so) and greenfield investments by Chinese firms abroad. Certainly, outward FDI from emerging markets (all non-OECD countries) has risen

sharply, but developed countries remain by far the most important source of FDI. Still, the amounts involved are already considerable: in 2003, outflows were about US$50 billion and the outward stock stood at US$930 billion. Moreover, even though emerging markets are typically capital importers, over 120 of them reported FDI outflows in 2003. Firms in the BRICs (Brazil, Russia, India, China), in particular, are poised to join their counterparts from countries such as Chile, Mexico, Malaysia and Singapore to become significant players in the world FDI market.

"Over two-thirds of FDI flows are now in the services sector. As a result, the composition of the FDI stock has shifted dramatically: while only one-fifth of this stock was in services in the early 1970s, it is now three-fifths."

Outward FDI from emerging markets will grow significantly since their firms are subject to the same pressures of globalization as their developed country competitors. Hence, they too need to acquire their own portfolios of locational assets as an additional source of their competitiveness. They are increasingly helped in this by their governments: in spite of the policy dilemma in which most emerging markets find themselves by virtue of being capital importers and not exporters, an increasing number of governments is liberalizing their outward FDI regimes (and some of them are actively encouraging such investment), precisely not to handicap the international competitiveness of their firms.

What this means for IPAs is that, increasingly, they need to cast their eyes towards the most important of these emerging outward investors. (For example, a number of IPAs have established offices in China.) Some of these also have institutions responsible for outward FDI; it may be useful to cultivate relationships with them.

Clean Development Mechanism

The Kyoto Protocol entered into force in early 2005, making it mandatory for developed countries signatory to it to reduce their CO_2 emissions. The European Union has identified over 10,000 industrial installations that must limit their greenhouse gas emissions within the given timeframe; failure to do so will result in considerable fines. Japan has set up the Japan Carbon Financing Corporation to assist Japanese firms abroad in this respect.

As part of the Protocol's Joint Implementation Mechanism, the Clean Development Mechanism (CDM) gives financial credit to firms (and, by extension, their home countries) for reduced CO_2 emissions they bring about in emerging markets. Such credits can save 5 percent or more of the costs of an investment project – not an insignificant incentive. The CDM is particularly relevant in such industries as energy, mining and various processing industries. A few countries (especially Brazil, China, India) are already experimenting with CDM projects.

This niche market is brand-new. IPAs that wish to exploit it need to familiarize themselves with the CDM and especially the conditions under which a project qualifies for it. Countries also need the institutional set-up to handle such projects. After that, those firms in developed countries that need to reduce their CO_2 emissions need to be targeted, provided of course the host country can meet the needs of potential investors. The investment potential of the CDM is considerable.

SMEs

Most TNCs are actually small and medium-sized enter-

prises (SMEs). They account for the overwhelming number of firms in all countries. Yet, they account so far only for a small share of outward FDI. (In the case of Japan, this share is relatively high.) But they are subject to the same competitive pressures of globalization as their big counterparts; and they benefit also from the developments in technology and liberalization. Hence, they constitute an important reservoir for future FDI.

The problem is, of course, that, because they are so numerous, they are difficult to reach and to target. But it is not impossible. Different tools are required, such as credible investment guides. Also, IPAs may need to cooperate with industry associations in key home countries, especially in industries that are important for their development. Road shows focussing on such associations, as well as flagship SME investors, may also be of help here. And, more basic, IPAs must make it known that they are actively courting SMEs, not only the "big boys". Moreover, SMEs typically face special problems, including of a financial and regulatory kind. IPAs need to see how they can facilitate things in this respect, e.g. by offering co-financing.

Monitoring Emerging Opportunities

These are some broad-based and specific FDI opportunities of the future. There are others that need to be kept in mind. I simply list them, in no particular order, and without elaborating.

1. The boundary line between what the government does and what the private sector does is changing constantly. At the moment, the role of the private sector is expanding into such areas as education, health care, prison management, roads and waste management. While some of them may be sensitive for some countries, FDI can be found in most of them. IPAs need to monitor what governments are doing, and be ready to move once the opportunity arises.
2. The infrastructure needs of many countries are considerable, often representing a bottleneck for further economic growth. Yet, a number of firms are prepared to undertake FDI in this area. However, care needs to be taken so that, on the one hand, firms do not exploit monopolistic situations and, on the other, that the risks involved in such long-term investments are mitigated. As regards the latter, new mechanisms developed in the context of public-private partnerships may be of use.
3. Globalization puts pressure on many long-established clusters of tightly interlinked firms in developed countries. If some firms in such clusters lose competitiveness and close down or move out, the entire cluster is in jeopardy. Clusters hence may have to transnationalize or die. Perhaps one can identify clusters that are in jeopardy and see whether entire cluster can be attracted to a particular host country. Cooperation between the relevant IPAs of the host and home countries could be helpful here.
4. The proliferation of free-trade agreements creates new locational situations, and production facilities in one country may be consolidated into those in another. Corporate strategies play an important role here. As such agreements are being concluded, IPAs need to evaluate the opportunities to which they give rise.
5. As societies get richer and the leisure class expands, ecotourism and tourism to special theme parks become more popular. If a host country has the right conditions for tourism, TNCs could be interested to develop them.
6. Many donor countries are concerned about the effectiveness of their official development assistance (ODA). IPAs could explore possibilities to link ODA to major

projects in which foreign investors could play a role, leveraging ODA in this manner and making a given project more attractive. It may also be possible to leverage venture capital funds.

7. Another form of capital that can be leveraged is human capital – of particular importance as economies become more and more knowledge-based. If, for example, a country succeeds in attracting a world-renowned chemist to be affiliated with a local university, chances are that a knowledge cluster develops which, in turn, attracts foreign direct investors and venture funds to such high value-added activities as R&D.
8. There are many firms that have undertaken FDI, but not much of it. With some encouragement and cooperation, such low-intensity TNCs could perhaps be convinced to transnationalize further. The same applies to firms that are still entirely national, either because they have not ventured abroad or because they had been, until recently, public entities that operated only at home. And as more firms are "born global" or rapidly become TNCs, IPAs need to keep an eye on such newcomers. In this context, one should keep in mind that many of the benefits of FDI can also be obtained through various non-equity forms of transnationalization (although these may well lead, eventually, to investment relationships); IPAs may wish to encourage such non-equity arrangements as well.

Identifying investment reservoirs of the future requires a constant monitoring of trends and opportunities in the world FDI market and of corporate strategies. Going after investors pursued by everyone else is a necessity, especially if they account for the bulk of FDI. But increasingly IPAs have to be on the lookout for niche FDI markets that match the locational advantages of their economies and their own "unique value propositions".

What is more, IPAs need to do that without losing sight of the ultimate objective that FDI is meant to serve, namely to contribute to economic development and well-being of a host country's society. Keeping this development function of IPAs in mind will become increasingly important in the future, especially if the attitude towards FDI should again become more sceptical. Apart from seeking to attract FDI, IPAs will need to pay more attention to enhancing the positive developmental impact of such investment.

In the end, though, an African proverb may well capture best the competition that characterizes the world FDI market: "Every morning, when the lions wake up, they know they have to run faster than the slowest gazelle not to go hungry in the evening. And every morning, when the gazelles get up, they know they have to run faster than the fastest lion to survive." I guess the moral of this proverb is that it does not matter whether you are a lion or a gazelle – an IPA or a TNC: when you get up in the morning, you better run as fast as you can!

Dr. Karl P. Sauvant recently retired as the Director of UNCTAD's Division on Investment, Technology and Enterprise Development (DITE). He has been the team leader of the prestigious annual United Nations publication the World Investment Report since he created it in 1991. He is also the Editor-in-Chief of the journal Transnational Corporations. Apart from his work for the United Nations since 1973, he has published extensively on issues related to economic development, FDI and services. His name has been associated with some 150 United Nations publications on FDI over the past two decades. A native of Germany, Dr. Sauvant received his Ph.D. degree from the University of Pennsylvania, Philadelphia, USA.

Going for the Crown

Some compare FDI to a beauty contest. But the winners will not necessarily be those countries that attract the most in revenue or number of projects. They will be the countries that are able to derive the most benefits from an FDI policy that is embedded in an overall national development or industrial strategy. The figures tell the story.

By Khalil Hamdani
Deputy Director of the United Nations Conference on Trade and Development's (UNCTAD) Division on Investment, Technology and Enterprise Development (DITE)

Anyone searching the Internet for the foreign direct investment (FDI) web page at the start of 21st century would have found a posting of "under construction". The new millennium opened with three years of declining FDI flows worldwide. One out of four investment promotion agencies (IPAs) had to deal with foreign investors that cancelled or scaled back investment plans, or sold their assets. Four out of five agencies had to rethink their strategies, putting in place defensive programs (e.g., aftercare) or more aggressive promotion campaigns (e.g., targeting, incentives). Governments in all regions – a high of 82 countries in 2003 – implemented regulatory measures to attract investment.

The near term prospects for FDI are beginning to look good, and that's a relief because we have just lived through the largest FDI downturn in a decade *(see Chart 1, page 99)*. This was particularly disappointing as we had become accustomed to FDI growing at record levels since the mid-1980s, a global expansion in which most countries participated.

The good news is that global FDI finally began to rebound in 2004. Unlike earlier upturns, this time developing countries are playing the locomotive for global FDI demand. The global upturn is slight (two percent) and FDI into the group of developed economies continues to decline by 14 percent. But FDI inflows to developing economies rose significantly by 40 percent. Latin America and the Caribbean reversed four years of decline with a major upsurge, and Asia has more or less recovered its earlier record level. Greenfield FDI is another bright spot, rising for a third straight year.

The strong FDI performance of developing countries reflects the continuing spread of international production. Firms are expanding overseas operations to gain presence in emerging markets, and to rationalize production and lower

costs. This is particularly pronounced in manufacturing industries. The offshoring of services is also important.

The region of Eastern and Southern Europe, Russia and Central Asia, was another bright spot: the only group of economies to weather the global FDI downturn, recording increasing inflows in 2001–2004. However, this region accounts for only a small share world FDI demand (five percent).

Promising Prospects

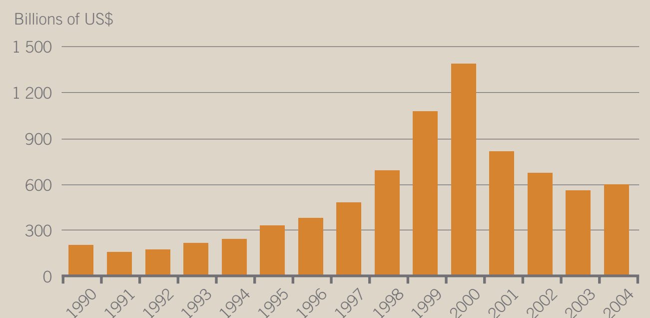
Developed countries account for the lion's share of FDI inflows (60 percent) and their performance as a group remains negative. But there were exceptions. The United States, the United Kingdom and Japan, and the new entrants to the European Union, all registered increased FDI inflows last year.

Overall, the near term prospects for FDI are promising. Hopefully, economic growth will not falter but rather become more widespread globally. If that happens, FDI demand should continue to be strong in developing countries and push up FDI levels in developed countries, particularly through the revival of mergers and acquisitions (M&As).

The majority of the experts, TNCs and IPAs surveyed predicted that FDI would continue to grow in both the short- and medium-term. More than half of the TNC and expert respondents, and four fifths of IPAs expected short-term (2005–2006) growth in FDI flows, while almost all other respondents expected levels to remain steady *(see Chart 2, page 100)*. Only a small fraction of respondents thought that FDI would decrease in the immediate future. The survey results represent a vote of confidence in the prospects for short-term FDI flows.

Opinions are more optimistic on FDI prospects forthe medium-term (2007–2008). *(See Chart 3, page 100)*. TNCs and IPAs are more confident than experts regarding FDI growth, with over two-thirds expecting a further increase in FDI flows in the medium-term. Asia is the most often mentioned region for increased FDI inflows. Asia, of course, includes China and India, two favorite FDI destinations, given their large internal markets and their competitiveness as a location for production. Other favored Asian countries are Thailand, Republic of Korea, Malaysia, Vietnam and Indonesia. The region is expected to attract FDI in production, distribution and sales, and logistics support services. Asia is also seen as a regional headquarters for companies, and a destination for R&D investment in the case of a few countries. Generally, prospects for FDI in services (tourism, construction, computer/information communication technology (ICT), business services) are more positive than for FDI in manufacturing, though

Global FDI inflows 1990–2004 *Chart 1*



Source: UNCTAD FDI/TNCs database

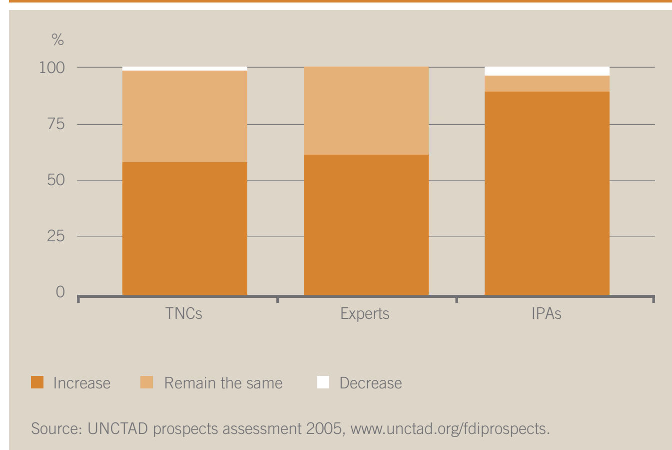
some industries are considered strong (electrical and electronics, automobile and machinery, chemicals).

Africa receives relatively little FDI but is cited for increased FDI inflows. The favorite country destinations are the large economies and those well endowed with natural resources (mining, quarrying and petroleum), namely South Africa, Egypt, Morocco, Nigeria and Algeria. Generally, FDI is attracted to such industries as tourism, hotels and restaurants, computer/ICT in services; and food and beverages, electrical and electronics in manufacturing. In the UNCTAD survey, 25 percent of the company respondents expect FDI in Africa to rise in 2005–2006.

Latin America and the Caribbean are also expected to benefit from increased FDI in 2005–2006, though market experts and companies are less optimistic than IPAs in this view. The main FDI destinations are the traditional favorites, namely, Brazil, Mexico, Argentina and Chile. FDI prospects in services (hotels, construction, tourism, computer/ICT,) and the primary sector (mining, petroleum) are seen as more attractive, than in manufacturing. Greenfield investment is seen to be the dominant mode of investment in the near term, which reflects a shying away from the privatization strategy pursued by many countries in the 1990s.

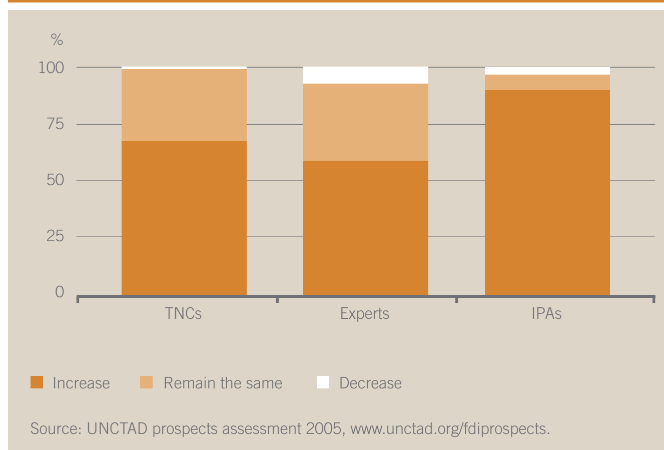
Southeast Europe and the Independent States of the former Soviet Union are expected to continue to attract FDI. The favored destinations are Russia, Kazakhstan and Romania. The main strengths of these countries are their competitive wages or their rich natural resource endowments. Finally, expectations are less optimistic with regards to FDI flows into developed countries compared to those of

Short term prospects for global FDI flow
TNC, expert and IPA responses (2005–2006) *Chart 2*



Source: UNCTAD prospects assessment 2005, www.unctad.org/fdiprospects.

Medium term prospects for global FDI flow
TNC, expert and IPA responses (2007–2008) *Chart 3*



Source: UNCTAD prospects assessment 2005, www.unctad.org/fdiprospects.

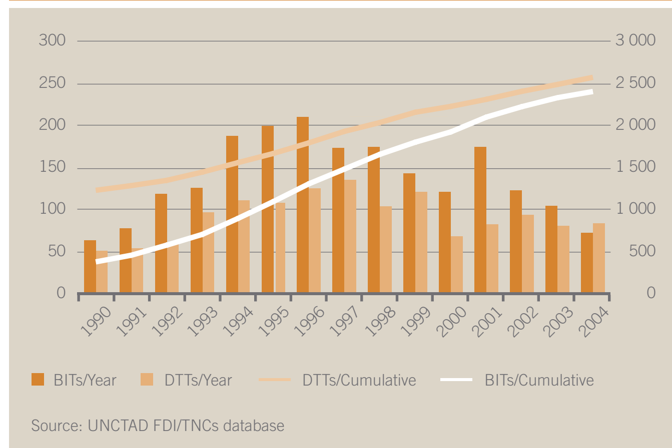
developing regions. Much of the scepticism can be explained by the ongoing uncertainty about economic growth prospects in major economies. While some developed countries are expected to perform well (particularly the new entrants to the European Union which enjoy free access to EU markets, low costs of skilled labor and low corporate tax rates), the overall expectations of FDI flows for the region as a whole remain cautiously optimistic.

Outlook for Investment

Whatever happens, it is clear that the outlook for investment promotion will be highly competitive. Countries will continue to strive to put in place an attractive investment environment, through more liberal national regulatory regimes and incentive structures, and through increased Bilateral Investment Treaties (BIT) and Double Taxation Treaties (DTT) *(see Chart 4)*. It is now common for countries to have liberal FDI entry and ownership requirements and streamlined admission procedures, and to offer standard guarantees and protection to foreign investors (in regard to national treatment, expropriation, dispute settlement, arbitration and the repatriation of funds). Investment agencies are shifting their focus away from authorization and regulation, to facilitation (one-stop operations, aftercare) and promotion – greater targeting and incentives (*see Chart 5*).

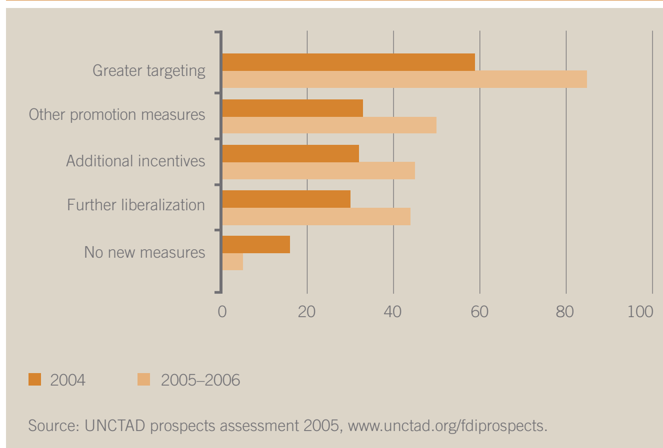
Khalil Hamdani is Deputy Director of the Division on Investment, Technology and Enterprise Development, United Nations Conference on Trade and Development (UNCTAD).

Number of BITs and DTTs concluded, 1990–2004 *Chart 4*



Source: UNCTAD FDI/TNCs database

Investment policy measures to attract FDI (Percentage of response by national IPAs) *Chart 5*



Source: UNCTAD prospects assessment 2005, www.unctad.org/fdiprospects.

IV. In Tune with the Times

Christian Ketels
Roel Spee
Ricardo Martinez
Jegathesan Jegasothy
Martin Jahn
Kai Hammerich

Investment promotion agencies (IPAs) are the front line in the battle to improve their societies. In this chapter, Christian Ketels sets out a framework for IPAs to focus on promoting competitiveness and growth. Roel Spee explains how IPAs can create "value propositions" to differentiate their locations for investors. Ricardo Martinez offers a case study of how Mexico upgraded its investment strategy. Jegathesan Jegasothy from Malaysia looks at how developing nations can tackle corruption in investment programs. Martin Jahn of the Czech Republic writes what his country must to do to remain competitive within a newly expanded European Union. And finally, Kai Hammerich suggests that competitiveness is a combination of hard facts and personal commitment.

Finding the Right Match

Modern investment promotion is about creating a match between companies and locations that help both reach a higher level of productivity, not just improve efficiency. Only then can investment promotion agencies create sustainable advantages in an increasingly competitive market that contributes directly to long-term prosperity – the ultimate measure of successful economic policy.

By Dr. Christian Ketels
Harvard Business School, US

While there is little disagreement that the context for foreign direct investment and FDI promotion is changing, there is still no widely accepted view on the factors that locations have to focus on in order to succeed in competition. A number of candidates have been proposed – like a focus on good governance, investments in education and research, entrepreneurship programs, the nurturing of a "creative class", or just plain low costs – but while all of them seem to explain some cases of success none of them has proven a powerful explanatory factor across all regions.

Michael Porter's competitiveness framework, first introduced in his "Competitive Advantage of Nations" (1990), is of a different character, proposing not one given solution independent of place and time but a process that allows each region to identify a strategy and action priorities most appropriate given its current competitive situation.

Competitiveness remains a term marred by much confusion, despite widespread acceptance of its importance. Porter defines the competitiveness of a location as the level of productivity that companies operating there can reach. This definition ties competitiveness directly to prosperity, the ultimate measure of economic performance and central goal of economic policy, because the productivity of an economy is the fundamental determinant of the level of prosperity it can sustain over time. Productivity depends on the value that products and services generated at a specific location provide for customers, not only the efficiency with which they can be produced. Over time, competitiveness relates to the ability of companies at a given location to increase their level of productivity through innovation.

The competitiveness of a location is driven by two broad sets of factors: Stable political, legal, and social institutions and sound macroeconomic policies are important to create

the potential for companies to operate productively. But wealth is actually created at the microeconomic level – in the ability of firms to create valuable goods and services using efficient methods. Only in this way can a nation support high wages and the attractive returns to capital necessary to support sustained investment *(see Chart 1)*.

The microeconomic foundations of productivity rest on two interrelated areas: (1) the sophistication with which companies compete at the location, and (2) the quality of the microeconomic business environment in which they operate. The productivity of a country is ultimately set by the productivity of its companies. An economy cannot be competitive unless companies operating there are competitive, whether they are domestic firms or subsidiaries of foreign companies. However, the sophistication and productivity of companies is inextricably intertwined with the quality of the national business environment. More productive company operating practices and strategies require more sophisticated business environments. FDI can be important especially when business environment conditions have improved much more quickly than companies have been able to upgrade their capabilities. The large inflows of FDI in some of the new EU member countries, especially the Baltic countries, reflect such an imbalance

Determinants of Competitiveness *Chart 1*

Source: Michael Porter

after fundamental policy reforms across many dimensions of the business environment.

The "Diamond" of Microeconomic Competitiveness

The business environment can be understood in terms of four interrelated areas: the quality of factor (input) conditions, the context for firm strategy and rivalry, the quality of local demand conditions, and the presence of the related and supporting industries. Because of their graphical representation *(see Chart 2, page 106)*, the four areas have collectively become referred to as the "diamond".

Most elements of the diamond are individually well known to be important for FDI. The diamond emphasizes, however, that these different elements are interdependent in their impact on company performance. In Russia, for example, the large pool of researchers (factor conditions) remains idle because the deficiencies in other parts of the business environment, especially the context for rivalry, are not conducive for Russian-based companies to compete on research-driven products. This imbalance creates opportunities for FDI to tap into these "islands of strengths" in the business environment that would otherwise degenerate over time; the investment by Samsung into a Moscow research center is only of many such examples.

The experience of one number of locations over the last few years has also highlighted that attractiveness for FDI is not a matter of being good on all elements of the business environment. It is much more affected by complementary strengths in a specific set of elements that are most critical given the location's specific positioning. Ireland, for example, was extremely successful in attracting FDI that leveraged the island's position as an efficient base to serve the European market. For this value proposition to investors to succeed, it was important to provide an efficient infra-

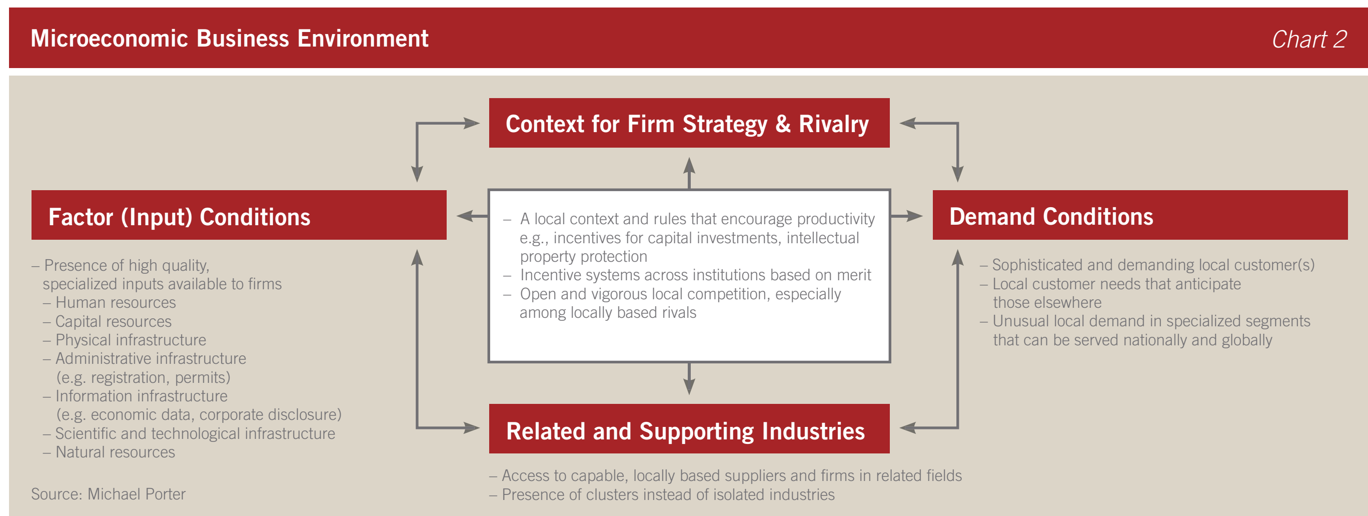
structure, a well-skilled labor force that could be easily integrated into mainly US multinational companies, and overall competitive costs of doing business. Other elements, such as world-class universities, were much less relevant.

The Role of Clusters

An improving business environment gives rise to the formation of clusters.

Porter defines "clusters" as "geographically proximate groups of interconnected companies, suppliers, service providers, and associated institutions in a particular field, linked by commonalities and complementarities". Clusters affect competitiveness in three broad ways: first, by increasing the productivity of constituent firms or industries. Firms with a cluster have more efficient access to specialized suppliers, employees, information, and training than isolated firms. The presence of a wide range of available inputs, machinery, skills, and knowledge promotes greater efficiency and flexibility than vertical integration or relationships with distant suppliers. Second, clusters increase the capacity for innovation and productivity growth. Opportunities for innovation are often identified more easily within clusters, and the assets, skills, and capital to pursue them are more readily available as well. Third, clusters stimulate and enable new business formation that supports innovation and expands the cluster. The local presence of experienced workers and access to all the needed inputs and specialized services, for example, reduces the barriers to entry.

The benefits of clusters apply to many parts of an economy, not only to knowledge intensive industries such as life sciences or information technology. A good example



is tourism: In the Cairns tourism cluster of Northwestern Australia, natural promotions such as proximity to the Great Barrier Reef and a tropical rainforest alone would provide little advantage for the location versus competing tourism destinations. It is the combination of high quality transportation services, accommodation, restaurants, travel guides, and the many supporting activities required to operate them that creates the high-level of value tourists are looking for. Even the best hotel and the most unique tourist promotion would loose greatly in value, if local services in, for example, transportation were weak *(see Chart 3, page 108)*.

Clusters differ widely in their profile, competitive strengths, and stage of development. One of the most important differences is the level at which cluster environments are in direct competition across locations. Porter's work in the United States, recently confirmed by work in Canada, Sweden, and the 10 new EU member countries, shows three different types of economic activities *(see Chart 4, page 110)*:

First, "traded" clusters includes industries that compete with their products and services across locations and are essentially free to locate wherever they find the best conditions for their activities. In these industries, companies compete not only on their internal capabilities but also on the quality of their locations' business environments. Empirically, these industries, from automotive to transportation and logistics, are identified by employment patterns that are clearly concentrated in a few locations. They account for between 30–40 percent of employment but have higher wages and much higher rates of technological innovation than the rest of the economy.

Second, "domestic" industries include industries that compete only in the local market and that are thus geographically tied to the location they want to serve. Companies in these industries compete on their different internal capabilities alone, as they are all exposed to the same local business environment in a given location. Employment follows the general patterns of population and is not specifically concentrated across locations. Domestic industries account for between 60–70 percent of employment but have lower wages and lower rates of technological innovation than the rest of the economy.

Third, "natural-resource driven" industries are geographically tied to the location of specific natural resources. These resources are often traded on global market but locational choice for companies is limited to the sites where such resources can be found. Companies compete on their internal capabilities as well as on the productivity of the business environment at the site they operate from; they tend to be price takes in global commodity markets. These industries tend to account for only about one percent of employment in advanced economies.

While government is important to competitiveness, government alone is less and less able to build a competitive economy. The private sector is an equally crucial actor in improving competitiveness and setting economic policy. And many other national and local institutions have a role in competitiveness and economic development as well.

FDI and Competitiveness

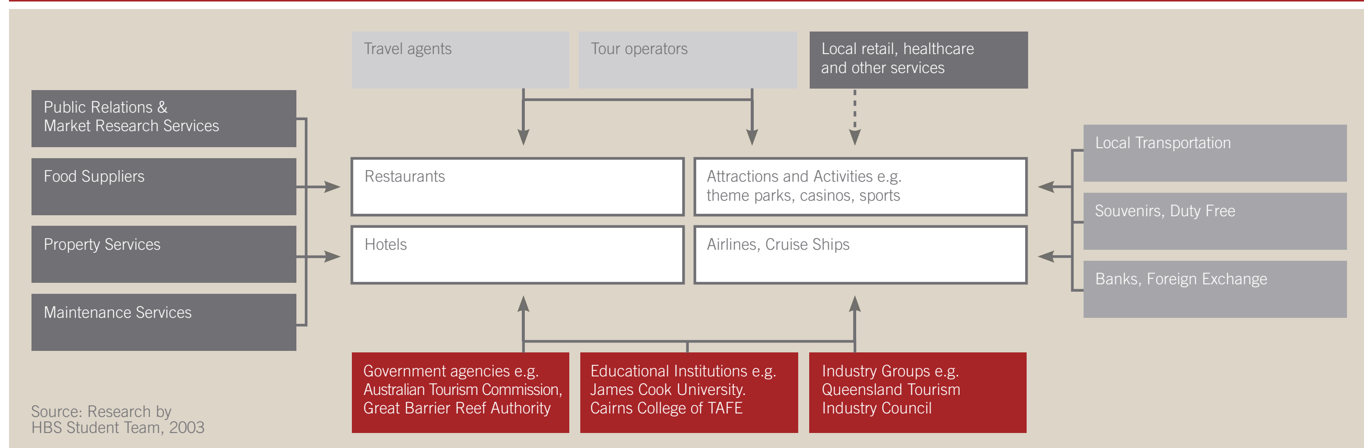
A location's competitiveness and its ability to successfully compete for FDI are linked in a number of ways:

1. Competitiveness is a key driver of a location's attractiveness for FDI. Business environment strengths motivate companies to locate economic activities in a specific location. Cost levels are important only relative a location's competitiveness; if cost (wage or asset

price) levels are below what could be expected given its competitiveness, i.e. the level of productivity companies can achieve, a location is especially attractive for foreign investors. This might explain the current interest of foreign investors, especially from the US, in countries like Germany. By implication, policies to improve the general competitiveness of a location tend to have a powerful impact on its attractiveness for FDI, even if FDI promotion is not the main objective. FDI promotion activities can not compensate for weaknesses in competitiveness or the absence of policies to upgrade competitiveness.

2. FDI inflows improve the competitiveness of a location. Almost all dimensions of the business environment benefit from companies moving economic activities to a new location. Capital investment, training programs for employees, new management personnel, and access to new technology strengthen factor conditions, new ways of competing and linkages to new markets improve the context for from strategy and rivalry, new activities deepen existing clusters, and the new demand for local inputs and services raises the sophistication of demand. FDI will also increase the linkages between a location and the world market. Such global linkages are increasingly a base requirement for locations to compete, not a distinguishing competitive advantage. But for many locations, especially in developing and transition economies, they remain a challenge that FDI can be important to overcome.

Cairns (Australia) Tourism Cluster *Chart 3*



Source: Research by HBS Student Team, 2003

3. It is important to realize that competitiveness and FDI differ in one important respect: Only competitiveness is, because of its direct link to prosperity, an "ultimate" goal of economic policy. FDI is one of the instruments to reach that goal but it is not a goal in itself. This distinction is critical when evaluating the economic benefit of FDI promotion policies. FDI promotion is only beneficial if it adds to the competitiveness of a location. Attracting a foreign company at significant costs, for example in terms of financial incentives or an explicit low-wage policy, without a sufficiently positive impact on competitiveness will do much less to increase prosperity and might even create net costs for an economy.

Implications for Investment Promotion Agencies

The competitiveness framework can be used to develop guiding principles for FDI promotion. We organize these guidelines *(see Chart 5, page 110)* around five topics:

1. Set the right goal

Many efforts to attract foreign direct investment are hampered by setting the wrong goals. While these goals often seem intuitively appropriate, they are not always tied to factors that have a direct relationship to the location's long-term prosperity. We suggest the following two guidelines:

– *Focus on FDI promotion to upgrade competitiveness as a precondition for higher prosperity, not job creation per se.*

Economic policy is ultimately motivated by the objective to create conditions that allow higher long-term prosperity for a given location. Increasing competitiveness is the central operational goal to achieve this objective. FDI can, as was discussed above, contribute to higher competitiveness and this is the appropriate goal that should be set for FDI promotion.

For political reasons, jobs created or investment commitments made are often chosen as the goal for FDI promotion instead of competitiveness. Unless policy does not address the underlying reasons of why those jobs were not being created before, however, there is no change in the sustainable level of prosperity that a location can reach. In the best case, the foreign investment filled a gap that anyway would have been filled at some point. In the worst case, the investment was based on short-term incentives to compensate for existing weaknesses in the competitiveness of the location and is unlikely to stay as the effects of these incentives wear out.

Investment promotion agencies should set themselves the goal of improving the competitiveness of their locations through FDI, not just attracting FDI per se. The assessment of their activities, too, should be based on their competitiveness impact, not the flows of FDI funds attracted.

– *Focus on attracting FDI to both traded and domestic clusters, not only the export-oriented sector.*

Creating the conditions for higher levels of productivity is the central goal across all segments of the economy. And cluster effects can make an important contribution to this goal across all types of clusters. FDI can strengthen any cluster – whether it is a plant to produce automotive supplies for export or the market entry of a foreign retail chain into the local market – and lead to improvements throughout that part of the economy.

The success of a number of economies with export-driven growth has led many to believe that export sectors are per se a more important part of the economy and that attracting investments into these sectors should take precedence. While it is true that export industries and the broader group of traded clusters make a more than pro-

portional contribution to prosperity, local clusters are important for prosperity and competitiveness as well. More efficient local industries can often make a more immediate difference to prosperity by providing the local population with more efficient access to goods and services. And local industries are often suppliers to traded clusters that suffer strongly if these industries are not efficient. Japan is an especially vivid example of an economy with very competitive traded clusters, very inefficient local clusters, and – maybe not surprisingly – a dismal track-record in attracting FDI. Attraction of market-driven FDI into local clusters is beneficial, especially if there is a stronger focus on improving productivity throughout the local clusters affected. For Sweden, for example, the entry of low-cost retail chains such as Lidl might have a stronger positive effect on Swedish prosperity than the recent investment of Pfizer in a pharmaceutical plant in the Stockholm region.

Investment promotion agencies should have a strategy that looks at the potential competitiveness impact of FDI projects in all clusters. FDI projects should be evaluated based on their prosperity and competitiveness impact, not on the broad sector of the economy which it affects per se.

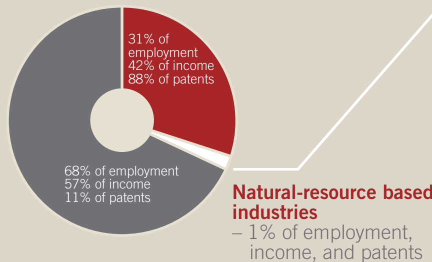
2. Target the right investors and investments

There is a broad understanding among investment promotion agencies that undifferentiated approaches to attract all companies to make an investment do not work. But what specific characteristics should inform the prioritization process when targeting potential investors? We suggest the following three guidelines:

The Composition of US Regional Economies *Chart 4*

Local industries
– Do not compete across regions
– Tied to location
– Dominated by services
– More critical for prosperity than for income

Traded cluster
– Compete across regions/countries
– Can locate anywhere
– Strong role of manufacturing
– Critical for income



Natural-resource based industries
– 1% of employment, income, and patents

Source: Michael E. Porter, Economic Performance of Regions, Regional Science (2004), Cluster Mapping Project, Institute for Strategy and Competitiveness, Harvard Business School

General Principles for Investment Attraction *Chart 5*

1. Set competitiveness upgrading as the key goal for investment attraction, not the amount of FDI generated or the number of jobs created.
2. Leverage the increasing role of clusters in the world economy for investment attraction activities.
3. Identify target investors by their fit with the location's cluster portfolio and overall positioning, not generic investor characteristics.
4. Design attraction activities and incentives to create mutual sustainable value for the location and the investor.
5. Mobilize partners – clusters, companies, and neighboring regions – that have the ability and interest to contribute to FDI attraction.

– *Target companies that fit into or close gaps in clusters in which the location has a position, not individual companies unrelated to clusters.*

The ideal candidate for an investment promotion effort combines to characteristics: it provides significant benefits for the location, ideally in terms of upgrading its overall competitiveness, and it derives significant benefits from being present in the location. Only this combination makes the investment a mutually beneficial and sustainable match. Companies that fit into or close gaps in clusters with a presence in the location are best suited to meet these conditions. A broader base of existing companies in the cluster creates a larger amount of possible spillovers from the FDI project. And a stronger existing cluster also provides a larger market and a more productive operational environment for any new investor. These benefits are larger if the investment closes a gap in the cluster and does not only grow existing capacity.

An alternative approach is to focus on the limited number of globally active companies that account for the vast majority of international FDI. This group can be easily identified and targeted. The problem with this approach is, however, that it puts all locations in direct competition against each other for the same investor. In this competition, all locations are forced to meet the same needs of the potential investors, instead of being able to target different investors with different needs based on the different business environment qualities of specific locations.

Investment promotion agencies should analyze the current profile of clusters present in their region, identify gaps, and work with companies from the cluster to define lists of potential investors to meet these gaps.

– *Be open to all types of companies that fit the above profile; don't give preferences to new or foreign investors.*

An important implication of the focus on investors that close existing cluster gaps is that it is becoming increasingly immaterial whether companies are foreign or domestic and whether or not they are already present in the location. What matters, is the contribution the company's activity can make to the location's competitiveness.

An alternative approach is to focus exclusively on new foreign companies when engaging in investment promotion. There is a tendency for such companies to be more beneficial for a location because their investment provides access to entirely new capabilities. But this relationship is not given automatically. More importantly, new foreign companies are finding it significantly harder to attract new or additional investments from domestic companies or foreign companies with an existing presence.

Investment promotion agencies should evaluate FDI projects by their impact on competitiveness alone. The fit of the investment with existing clusters should be used as an indicator of the competitiveness impact, not whether the investor is foreign and new to the location. It is likely that foreign companies will still end up being the most relevant targets for investment promotion efforts because they have most to contribute. But it opens the possibility for domestic investors also being actively considered, if not by the "foreign" investment promotion agency with specific competencies in working abroad in environments where little knowledge exists about the own location than by others with relevant competencies.

– *Target investments that have a high expected impact on competitiveness over their lifetime, not large greenfield investments per se.*

Once the appropriate companies are identified, it becomes important to prioritize among different types of activities that these companies could make their invest-

ment in. The right benchmark in evaluating such investments is their impact on competitiveness over time, not only the direct impact at the time of the initial investment committed. Companies often start with a limited presence at a new location that grows over time. Most FDI is not related to companies entirely new to the location, but to the upgrading of an existing presence. Loosing out on the small initial investment can thus put a much larger investment later on at risk.

An alternative approach is to focus all resources on attracting large greenfield investments from companies new to the location. Such investments have a highly visible impact on the local economy that makes it easy to justify investing in investment promotion efforts. The competition for such large and infrequent investments, however, tends to be fierce, improving the bargaining position of the investor versus potential host locations. Locations that already have attracted smaller investments from the investor before might be better placed in this competition.

Investment promotion agencies should work with potential investors to assess the potential long-term trajectory of the investment and define a development path together with the investor.

3. Design appropriate tools and incentives

Once the target investor is identified, the critical question becomes how to design an promotion scheme that is both effective in terms of getting the investment and of creating maximum benefit for the competitiveness and prosperity of the location We suggest the following three guidelines:

– *Create opportunities for firms to reach higher productivity and upgrade activities over time; don't just provide a one-time reduction of their input costs.*

Policies to attract FDI are motivated by the intention to increase the productivity companies can achieve at a location. The tools that such policies employ should thus focus on raising productivity of activities, not on lowering the costs of a given activity. It is, for example, more beneficial to provide tax credits for R&D investments and improve the innovative capacity of the location instead of lowering production costs by providing across-the-board tax exemptions. To foster productivity upgrading over time, FDI promotion tools should provide higher benefits for more advanced and more productivity activities, for example by providing tax breaks increasing with the level of potential spillovers instead of direct financial subsidies.

An alternative approach is to compete only on the cost level at which a given activity can be conducted at the location. Subsidies and other measures that directly lower input costs are often more tangible and easily assessed by the investor than improvements in the business environment that allow them to create higher-value products and services. For companies competing with differentiated business strategies, however, such higher-value is at the core of their sustainable market success.

Investment promotion agencies should focus on tools that enable and provide incentives for companies to create higher value and upgrade operations over time, not just operate at lower costs at the time of the initial investment.

– *Improve the quality of the location to benefit all companies, not just the investor.*

Policies to attract FDI are motivated by the intention to increase the prosperity of the location. The tools that such policies employ should thus improve the competitiveness of the location to make it more attractive for FDI, instead of providing only private benefits for investors. It is, for example, more beneficial for a location to open the market for electricity to competition or create incentives

for investments in generating capacity than providing subsidized electricity costs for an investor. In some situations, it can be the most efficient solution to pay the investor for the improvements, for example strengthening the available skill base by providing training grants or tax credits instead of setting up a new public university program. This will be attractive for the investor that can directly control the quality of the business environment upgrading and ensure that these improvements are in line with its specific needs.

An alternative approach is to select FDI promotion tools based only on their perceived attractiveness to the investor. Advantages available only to the new investors provide a direct benefit in terms of the value of the incentive but they provide also a competitive benefit in terms of providing the investor with more beneficial to compete than their rivals at the location. Such benefits, for example company-specific tariff exemptions instead of general tariff reductions, lead to market distortions that can be detrimental to competitiveness. They are also politically hard to sustain over time and thus less attractive to investors with a long-term perspective.

Investment promotion agencies should focus on tools that are either available to all companies or otherwise improve the business environment for all companies, instead of creating private benefits to specific companies. And they should leverage the specific skills of the investor to upgrade the business environment, even if the location covers the costs that occur.

– *Create benefits that accrue at the location over time, and cannot be removed shortly after the initial investment has been made.*

The ideal investment promotion tool creates benefits for the investor only as long as the investment remains at the location. There are two ways to link the structure of the incentives to the interests of the location: First, benefits should be tied to the location, for example by providing real estate instead of granting tax holidays. The developed real estate will remain at the location even when the investor moves away, while the financial benefit of the tax holiday can be easily removed. Second, benefits should accrue over time, ideally in the form of a flow of benefits available to the investor as long as she is present at the location. Improvements in the business environment or the right to use specific assets at the locations fit this profile much better than financial transfers.

An alternative approach is again based on the goal to best meet the perceived interests of the investor. It is certainly true that all strategies that make the benefit less fungible for the investor will reduce its value. However, for long-term investors – that will also tend to provide the highest value for the location – this difference will be much smaller than for others. And for them the signal that the location is determined to improve business environment conditions over time might even be more important as a signal than the short-term benefit of being able to freely use the benefit of the investment incentives.

Investment promotion agencies should use tools that are tied to the location and accrue over time to create incentives for the investor that are in line with the long-term incentives of the location.

4. Mobilize available partners

Investment promotion efforts and incentives are more effective, if they are provided together with partners that share the investment promotion agency's interest in the investment and can make a contribution to raise the value of locating to the investor. Too often these potential part-

ners are getting ignored or not sufficiently leveraged. We suggest mobilizing the following three partners:
– *Mobilize cluster participants at the location.*

The first group to mobilize in investment promotion efforts includes the companies already present in the location's clusters. They gain from the impact of new investors on the overall competitiveness of the location. They are credible ambassadors for the location because they can give directly relevant information about the specific strengths and weaknesses of the location from the perspective of companies, not just the public sector or other analysts. And they know best which companies should be targeted because they would provide the highest value to the location and would be most likely to be interested in making an investment. Existing cluster initiatives can often be the logical partner for investment promotion agencies to work with companies.

The challenge is to overcome the fear of local companies that new investors will be mainly competitors, either in the local market or for skilled employees. It will be easier to deal with these fears if the FDI promotion strategy is part of a broader effort to improve the competitiveness of the location and thus provide better conditions for all companies. Note that the more investment promotion tools are focused on providing business environment improvements available for all companies instead of private benefits to investors the easier it will be to engage local companies.
– *Mobilize other government agencies.*

A second group to engage in investment promotion efforts are the many other government agencies with an impact on business environment quality. Quite often, these agencies will be the main point of contacts for investors once the investment has been made. The more long-term perspective investors have, the more they will be interested in the quality of these agencies, not just the service and benefits provided by the investment promotion agency.

It still makes sense to have different agencies (or parts of agencies) focus on different parts of the competitiveness agenda. Investment promotion agencies can develop unique competencies in interacting with investors, while technology agencies can specialize on the work with different elements of a regional innovation system. What is important, however, is that the activities of these different agencies are well coordinated and informed by a shared understanding of the specific positioning the location is aiming for as a place to do business. Integrating investment promotion as one division in a broader agency in charge of competitiveness upgrading, a model that, for example, the Baltic countries have recently applied, can simplify such coordination.
– *Mobilize neighboring regions.*

Finally, it can be helpful to view neighboring regions not only as competitors for FDI but as partners in increasing the quality of the business environments across regions and in raising the awareness of foreign investors about the neighborhood.

This is a task within large countries that are home to a number of different locations. In Russia, for example, there is a national investment promotion agency that aims to strengthen the work of regional investment promotion agencies as well as promoting Russia overall as a place for investment. Individual regions are often just too small to be visible internationally.

Cooperation across regions is even more complicated in cross-national neighborhoods such as the Baltic Sea Region. The more different these regions are, the more attractive is an offer to foreign investors that gives them

access to local business environments with different but complimentary assets and capabilities.

5. The emerging agenda for investment promotion agencies

Based on these principles for investment promotion, it is possible to outline more specifically the emerging agenda for a modern investment promotion agency. We see five key roles for such agencies:

a. Market a location as a place to do business. Together with other agencies that focus on marketing the region to tourists and other groups Investment Attraction Agencies need to focus on creating and communicating the positioning of their region to the global business community, focusing on potential target investors.

b. Identify appropriate target investors. This is a core task of the investment promotion agency that it will have specialized skills relative to other government agencies active in business development and competitiveness upgrading. The criteria applied to identify these target investors will be based on the current cluster profile of the location as well as the positioning that the location aims to develop.

c. Work as a bridge between potential investors and key business and political leaders in the region. Investment promotion agencies are not necessarily a key actor shaping the future profile of strengths and weakness of a business environment. They are, however, critical in organizing the contacts between potential investors and the political and business leaders in the region that shape the long-term competitiveness trajectory of the location. These leaders can make a long-term commitment that can give investors a credible idea of how the location will change over time.

d. Design incentive packages to investors from the menu of tools generally available to companies in the location. To avoid creating distortive incentive schemes, investment promotion agencies should package incentives that are mainly provided by other government agencies (economic development agencies, technology agencies, others) and are thus available for all companies at the location. Investment promotion agencies might also develop specific tools and incentive schemes that are most relevant for investors but even these tools should in principle be available to all companies.

e. Participate in efforts to design strategic plans for developing a region's competitiveness. A clear overall economic strategy that outlines the unique value the location intends to provide as a place to do business is critical for successful investment promotion. Investment promotion agencies need to be integrally involved in efforts to develop such a strategy and can often contribute a lot of specific insights due to their contacts with investors.

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Making the Right Offer

The dynamics of supply and demand apply to all free markets, but not equally. They can be manipulated; especially if investment promotion agencies can create a "value proposition" based on a limited set of unique selling points of a location that give potential investors an indication of the costs of doing business compared with the quality of the business environment.

By Roel Spee
Director, IBM-Plant Location International

To understand what activities Investment Promotion Agencies (IPAs) will be required to focus on over the next decade, and how they will need to organize to do so, it is important to assess the dynamics that will impact the functioning of an IPA. In such assessment, one can make a distinction between the demand side dynamics that are external to an IPA and those supply side forces that relate to internal (organizational) aspects.

Demand-driven dynamics are influenced by investors who are requesting the services from IPAs, whereas supply-driven dynamics relate to the location options that investors have and to the organizations who market these locations to prospective investors. Demand-driven dynamics are mostly external, whereas supply-driven dynamics typically are internal.

The most important external dynamics that will impact the role of an IPA relate to the investors. After all, they are the most important customers of an IPA and any service oriented organization should monitor upcoming changes in behavior of its targeted customer audience to define its future strategy. FDI promotion is a typical demand-driven service, where the demand side (the investors) determines the way and intensity in which the supply side (IPAs and related parties who try to market their locations to the investors) operates.

Another set of external dynamics relates to the competitive environment. Changes in the quantity and quality of competing locations and IPAs will have great impact on the performance of IPAs in the near future.

Finally, there are also internal dynamics which relate to the internal operating environment of an IPA. Particularly, governmental views on how important FDI is for a regional economy and how efficiency improvements can be achieved may.

Key Elements to Consider for Future IPAs to be Successful

1. Stronger responsiveness to dynamics in the FDI market

In the past few years we have seen major new developments in the global FDI environment. Besides a global economic recovery after a couple of tough years leading to a new increase in FDI worldwide, there have been some major changes in the direction of FDI. The most striking observation is that the far majority of FDI growth is taking place in Asia, most particularly in India and China. This trend can not only be explained by the low cost base (mainly driven by labor costs) that these countries offer, but also by the huge pool of human resources available and the enormous market potential that these countries offer across a variety of industries. It is the combination of these three elements that continues to make these countries generally attractive locations for FDI for a longer period of time.

In addition, other emerging markets (such as for example Vietnam) are coming up as new destinations for FDI as companies recognize the potential that these markets offer for their businesses. A growing number of business locations around the world is becoming an acceptable option for companies seeking markets for expansion, lower cost locations or new pools of human talent to tap into. Increasing global mobility, infrastructural improvements and reduced instability (politically and financially) have strongly reduced hesitation among companies for considering such locations. And while a growing number of companies is successfully making the step to these emerging markets, other ones feel more confident that investment into these markets is no longer an unrealistic adventure.

Another important change is that these emerging markets are quickly developing into new outward investors. Already a large number of Indian and Chinese companies are setting up operations in other parts of the world, for three main reasons: (1) to serve their customers in their home markets, (2) for market driven investment, mainly into North America and Western Europe, and (3) find even lower cost operating bases such as in Africa.

The speed in which these market changes take place is striking, and there is no reason to believe why this should change in the near future. For IPAs this means that the competitive environment is in constant change and one should constantly monitor its competitive position in this market. We will deal with this aspect hereafter.

Another consequence is that target markets change quickly as well. A professional and market oriented IPA therefore ensures that it pro-actively monitors the upcoming changes to be able to timely respond to upcoming new opportunities and shrinking markets elsewhere. Flexible organization models are needed in which particularly overseas representations can be adjusted quickly according to important market changes.

2. Developing unique value propositions

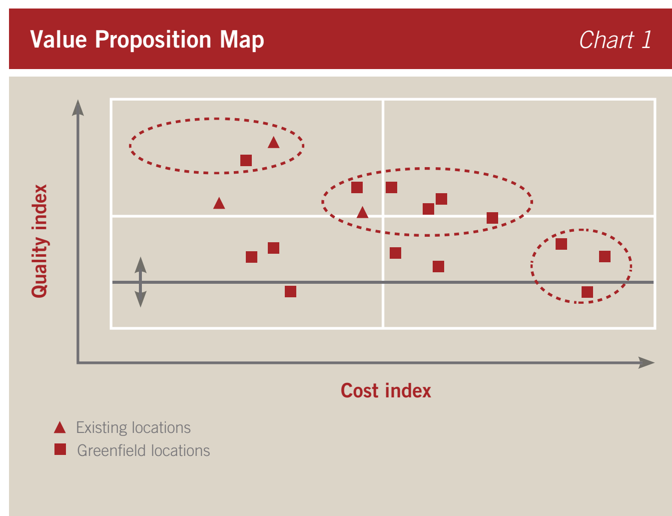
As more and more emerging markets around the globe are becoming acceptable business locations, and – even more important – a growing number of companies recognizes the potential of these upcoming locations, competition for the traditional recipient locations of FDI increases quickly. A growing number of traditional industries and activities, but even higher value-added activities (such as R&D) is expanding or relocating to emerging markets, and – again – there is no reason to believe why this should stop shortly. On the contrary, a further acceleration of this trend is more likely.

This increased competition makes it important for IPAs, particularly those in the most developed countries,

which are typically the relatively higher-cost environments, to reconsider their investment attraction potential. A very precise definition of the value proposition for specific targeted activities is required to convince potential investors that it is still worth being considered as an attractive location for their projects. This value proposition should be based on a very limited set of unique selling points of the location and an indication of how the costs for doing business compare with the quality of the business environment.

An important challenge for IPAs in building this value proposition will be to convince investors of the right trade off between the (high) quality of the business environment for the targeted activities and the costs or financial return on the investment in that location *(see Chart 1)*.

Value Proposition Map *Chart 1*



3. Stronger focus on "Investor Development" than on "New Investment Attraction"

The increased global competition will make "the-pool-to-fish-in" smaller for many IPAs. Despite the development of stronger value propositions, the number of contestable new (greenfield) investment projects that any individual IPA may compete for is likely to reduce as the number of location options for companies increases. This challenge will force IPAs to strongly review their target markets, and will also make a growing number of IPAs aware of a unique target group of companies for which the region has a strong competitive advantage. This is the base of companies that are already established in the region, and thus have experience with operating in the region.

To date there still is only a limited number of IPAs around the world who truly have developed a dedicated professional service that aims to identify investment potential among those companies that have an important base in the region already and to assist those companies with securing that investment for the region. This service, which is referred to as Investor Development aims to enhance economic development in the region on the basis of the existing investor base, by means of local expansions, adding new functions, attracting suppliers, research partners, etc. Experiences in various regions around the world show that up to 80 percent of new investment in a region is somehow related to existing investors.

Such Investor Development service can be considered as a next generation version of the After Care service as it was developed by various IPAs one or two decades ago. After Care was mostly focused on solving problems of companies after they had invested in the region, and trying to avoid downsizing or closures of these companies,

whereas Investor Development services aim to use the well-being of a key company in the region as a catalyst for economic development. An Investor Development program may include services such as supplier identification, workforce development, infrastructure development, etc. Such program is based on strong ongoing relationships between the IPA and a selected number of key companies in the region, both at the local operation and at HQ operations of the company.

Since this service targets companies that are established already in the region and as such aims at companies that are well known to the IPA, it is a very resource efficient marketing approach. It will therefore not be an exclusive service offered by mature IPAs but increasingly be implemented by relative young and resource constrained IPAs in both developed and developing countries.

This increasing Investor Development role also requires IPAs at various geographic levels to work more closely together. The main IPA in the country or state will typically be the coordinator of the Investor Development services, with local agencies working with the companies in their areas on their daily service requirements and the national agency focusing on strategic issues. Overseas IPA offices, embassies or other governmental bodies may assist in developing the strategic relationship with key investors.

In addition, IPAs will need to interact with service providers (both governmental and private organizations) on key elements for the investors such as utility companies, and environmental agencies, or governmental bodies who deal with fiscal matters or financial incentives.

4. Cluster development as a new task

The stronger need for unique value propositions and focus on the existing company base as described above includes a stronger focus on internal strengths. The most active IPAs will define their regional cluster strengths and develop location value propositions around the strongest clusters. A new dimension will be to not just promote an existing cluster to new investors, but to further expand and develop the cluster by means of governmental initiatives related to education, workforce development, technology and research initiatives, etc. The IPA will increasingly fulfil a role of identifying cluster development potential on the basis of investor needs, and provide recommendations to the relevant governmental departments to develop and implement the required initiatives.

Similar as with the Investor Development services, this cluster development service requires IPAs to work closely together with other partners in the cluster network. In particular, intense cooperation with universities will be required to fully leverage the knowledge potential in the region. Additionally, other educational institutes, research organizations, branch organizations, key companies, and such may be key elements in a cluster development initiative.

5. Increased role in policy advocacy

The growing advisory role of the IPA not only relates to cluster development but is a general task that IPAs should undertake to transfer any intelligence on required improvements in the business environment to the responsible government department and provide recommendations how such improvements can best be realized in order to retain existing and attract new investors. The IPA is best placed to absorb such signals in the market and channel them to other departments. Still many IPAs today have not recognized this unique “policy advocacy” opportunity.

IPAs should not only maintain a re-active attitude in

this regard, and just detect such signals from the market on an ad hoc basis, as they are given by existing or prospective investors. A more pro-active approach should be followed by seeking opinions from the investors for example through regular investor satisfaction surveys, selected interviews, etc. Such initiatives perfectly match with a more active Investor Development service as previously described.

To achieve best value from a policy advocacy role, it is important that IPAs get strong governmental support and are fully recognized as a key intermediate between government and new or existing investors. Without such strong recognition, IPAs advice on required improvements in the regional business environment is likely to have little impact.

6. Develop industry experts as opposed to generalists

The stronger focus (both external and within the region) on specific target sectors and activities for which unique value propositions exist as well as the growing attention for Investor Development and Cluster Development activities, requires IPAs to develop stronger knowledge on selected sectors and even individual companies. It will become important that industry expertise is available within the organization in order to optimally serve investors. Since they "speak the same language" as their customers these industry experts will be able to respond to the specific needs and problems that investors have. Generalists who will only be able to provide "general" information on the region will not add any further value to the investor, and as such will hardly be effective in serving their customers in a professional manner.

7. Matchmaking function to focus on higher value-added

As a consequence of their objective to develop and market unique value propositions, many IPAs will be forced to focus their efforts very much on high value-added sectors and activities, where new technologies are being researched and implemented. Current examples are biotechnology and nanotechnology. The companies that are being targeted as part of such strategy, often are not primarily looking for a location where a new entity will be established, but are merely searching for partners in research and development. Such partners can be companies, universities, research institutes, etc.

"To achieve best value from a policy advocacy role, it is important that IPAs get strong governmental support and are fully recognized as a key intermediate between government and new or existing investors."

The services required by these companies are different from the traditional "greenfield investor". They have less need for location information and site selection assistance, but are seeking assistance in partner identification and validation. IPAs that have the ambition of targeting these knowledge-based activities, will need to develop a matchmaking service to help companies in this process. This in turn requires strong industry and technology knowledge and a detailed understanding of the opportunities that local companies offer to meet the requirements of new investors.

This matchmaking function goes beyond the traditional service of introducing investors to potential suppliers. The required expertise also goes a step further than the industry knowledge that is needed in an Investor Development service of Cluster Development. The matchmaking service is almost a broker service. Rather than

developing such expertise in-house within the IPA it is more likely that the relevant IPAs work with (a network of) local experts that may assist in such processes. These experts may be found in universities, branch organizations, expert consultancies, etc.

8. Higher value support, less information provision
In their process of evaluating locations as possible candidates for new investment projects, companies have increasingly access to a wealth of information on most locations around the world via the internet. In addition, the new generation of investment decision makers more easily uses the internet as the main source of information for screening locations. The internet therefore will become increasingly important as an information source for investors and professional, informative and user friendly websites will be a necessary promotion tool for IPAs.

This development also means that IPAs are likely to be less contacted in an initial stage where an investor is orientating him/herself on the best options. At the point that companies involve external parties (either IPAs or advisors) to assist in the location analysis, there is less need therefore for pure provision of general information on the investment and operating conditions in the locations shortlisted. At that stage companies will require a high value service that responds to their project and industry specific requirements. This again emphasizes the growing need for industry expertise within IPAs.

Investors are clearly also becoming more demanding in their requests for assistance. Besides industry knowledge, professional and reliable responses, a consulting attitude, honesty about weaknesses (no location is expected to be perfect!), will be a more effective marketing approach than an aggressive sales pitch.

9. Awareness creation remains important
At the same time, the fact that investors are less likely to seek the high-level information they need for initial location screening via external parties (such as IPAs) involves that IPAs have less influence in this process of shortlisting. It becomes more important therefore to ensure that a targeted group of potential investors has a (positive) awareness of the location and will be considering the location as a result of that awareness.

Pro-active image building campaigns are consequently even more important to be considered as a candidate location, certainly now that a growing number of locations become acceptable options for new investment.

10. More IPAs compete for similar investment with growing professionalism
As discussed earlier, investors have an increasing number of acceptable location options to choose from, which leads to an increase in competition for FDI among IPAs. An additional development on the supply side (markets offering the locations to investors) further enhances this competition. A growing number of countries, regions and communities enters the competitive arena by creating investment promotion organizations who actively target companies to invest in their locations. Not only the quantity of IPAs increases also the quality and pro-activeness of many IPAs is likely to increase.

Traditionally strong IPAs, as established in mature FDI markets in many of the developed countries will see their natural competitive advantage from a service point of view decrease. This in turn emphasizes the need to redefine the location's value proposition, introduce higher value-adding services (investor development, cluster development) and become more industry experts to stay ahead of the game.

11. Pressure from government to become more efficient
Another development on the supply side is the increasing internal pressure on IPAs to operate more cost effectively and combine forces with related services. Particularly IPAs that are strongly influenced by the political composition of the government (which is the case in many countries both in the developing world and in developed countries) are increasingly forced to join forces with trade promotion services. The rationale behind this development is that both services deal with international expansion of companies, and synergies are expected from combining resources, particularly in overseas operations.

However, this integration neglects the fact that trade promotion and investment promotion are two distinct activities. Both have a different product to promote. Investment promotion tries to market geographic locations as attractive business environments, whereas trade and export promotion aims to improve business opportunities abroad for domestic industries. Both services require different skill sets and marketing approaches.

Combining the two functions is likely to create a risk of pulling staff into split functions and as such decreasing their focus. Despite the fact that there will be synergies and cost efficiencies achieved by sharing offices, support staff, marketing materials, etc. the risk of loosing focus in this increasingly competitive business is too high to make this a preferred move.

12. Breakthrough of private sector in economic development
As the pressure on government-controlled IPAs to operate more cost-efficient increases, the search for additional funding will increase. Typically, this leads to approaching private sector organizations for supporting IPAs, both financially and operationally. This development will be stimulated by the growing need for IPAs to develop more industry expertise, which can best be found in the industries themselves.

"This will both involve introducing stronger industry knowledge in the IPA organization and in the network that is being used for marketing efforts. "

Additionally, multinational companies who have established a strategic presence in a large number of locations around the world will increasingly seek active participation in stimulating economic development in these locations. Such involvement is inspired by greater economic health in those key locations, translated into major benefits for the company in the form of ability to recruit and retain workers, quality of local infrastructure to support the company's needs, higher property values, etc. Companies that are a major economic driver in many of the regions where they have invested have the opportunity to help shape the future economy in those regions.

Other (semi-) private sector organizations have a more direct and short-term interest in healthy economic development and new investment in a region as this will generate additional business and create value to those organizations. Good examples are utility companies who are already very actively involved in investment promotion in various regions (particularly North America), but also real estate firms, recruitment agencies, etc. have an interest in new investment and are likely to have a more active role in investment promotion in the future.

It is important for IPAs to seek private sector involvement from those organizations who are not just interested

in short term business, but who are likely to stay in the region for the long run. Less "mobile" or "footloose" operations recognize the stronger benefits of a sustained healthy business environment. Capital intensive industries typically have a much stronger investment stake in the region and a longer term vision. This translates into more involvement and commitment to regional economic development partnerships to protect that investment.

Final Observations

In summary, IPAs will need to become more focused on their specific unique strengths (value propositions) in which they can distinguish their locations from others. For many IPAs, particularly in mature FDI markets in developed countries, this means that a stronger focus on marketing existing cluster strengths will be developed, and investor development services will become more important, focusing on investors who already have a (strategic) base in the region.

This will both involve introducing stronger industry knowledge in the IPA organization and in the network that is being used for marketing efforts, as well as involving the private sector. The latter is not only meant to provide additional funding but should become an equal partner in defining the regional economic development strategy and implementing that strategy in order to retain and attract new investment into the region.

This transformation is not only required in developing countries, where traditionally the IPAs are strongly controlled by government, but also in some of the most developed countries in the world, where several IPAs are still very much depending on national or regional governments, and where each change in the composition or leadership in government has a direct impact on organization and staff of the IPA and the network of partners around it. With all the changes that can be expected in the FDI environment in the near future (more competition, more focus, stronger need for high value services, etc.), such IPAs will be struggling very hard to successfully compete for FDI and are likely to undergo even more pressure from their governments as results decrease and those governments apparently do not see the need for the IPA to change into a more business minded organization.

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Bringing Out the Best

The Northwestern part of Mexico is located along the border with the US states of California and Arizona. There has been a long tradition of free trade and commerce since the foundation of the main cities in this US – Mexico border region like Tijuana and San Diego and Mexicali and Calexico. Today, goods and services as well as investment and human capital flows have risen to become the busiest border crossings in North America.

By Ricardo Martinez
Executive Director of the Industrial Development Commission of Mexicali

In 1964 the Mexican federal government expanded their plans to attract foreign investors and stimulate Mexico's internal market with the creation of the Maquiladora Program. This dramatic policy change allowed manufacturing operations to be 100 percent foreign owned and for businesses to temporarily import raw materials and equipment to be processed in Mexico taking advantage of labor cost, geographical location and then re-export the final product to the US. It is a model which has been copied hundreds of times in export processing zones around the world.

Was the policy successful? Yes, but up to a certain point. Currently there are more than 2,800 foreign corporations operating under a Maquiladora program in Mexico, with more that 1.175 million employees. The Mexicali and Tijuana region represent 40 percent of this economy worth US$82 billion in exports.

However, there have been some inefficiencies in this economic model, such as a lack of technology transfer, failure to develop a local suppliers base and a lack of research and development (R&D) incentive policies. After 20 years of development, and as skilled workers in Mexico became more and more expensive, these foreign companies started to relocate to more competitive regions (inexpensive labor cost) such as Central America and Asia.

Mexicali is a location where the Maquiladora model has undergone profound transformation and can serve as a case study for many developing nations, who too, are experiencing a shortfall in expectations that can happen with foreign direct investment (FDI), and need to shift gears to a higher level of economic output.

Founded 100 years ago, the economy of Mexicali was based on the production of crops such as cotton, wheat and forage used as cattle feedstock. With a current population

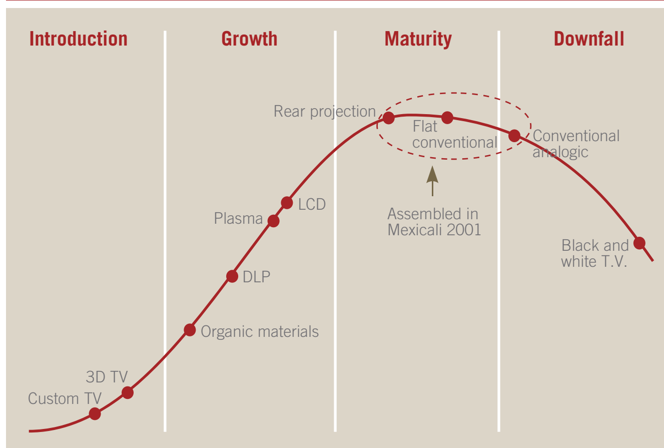
of 900,000, the city of Mexicali is changing the way we see economic development, from labor-intensive industries to more sophisticated and capital intensive ones such as aerospace, automotive, semiconductors and medical devices.

Mexicali, the capital city of the State of Baja California (stretching 63 km along the US border) and the entire Northwestern part of Mexico was developed during the 1990s as the largest television manufacturing center in the world and receives almost 80 percent of total Asian FDI into Mexico. Almost 30 million TV units are produced per year with all major brands operating as original equipment manufacturers (OEMs). After 10 years of successful operations and a 14 percent growth rate, the TV and computer monitor industry faced the inevitable: new technologies starting their entry in the market. Most of the OEMs operating in Mexicali and in the region where leaders and developers of such new technologies: Plasma, liquid crystal display, nano mirrors, among others. However, new projects where looking at different locations and close to 15,000 direct and 20,000 indirect jobs were at risk of being lost.

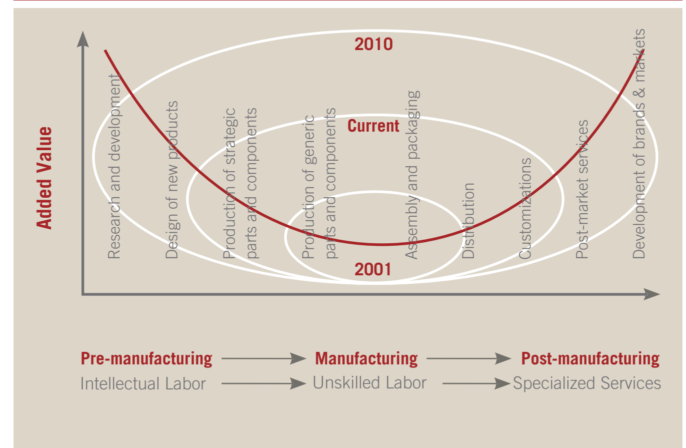
Four years ago, a concerted government response, at both the state and city level, backed with the support of the private sector resulted in devising a retention and expansion program whose purpose was to keep the commitment of present investors by upgrading our capabilities and migrate obsolete technologies operations (black and white TV included) into new technologies and new product production lines *(see Chart 1)*.

As a first effort, a new policy for economic develop-

Technology Life Stages, TV Manufacturing in Mexicali 2001 *Chart 1*



Production Value Chain *Chart 2*



ment was created aimed at long-term development based on specific industries, which already existed in Mexicali at an assembly and packaging stage, taking labor cost as the main competitive advantage.

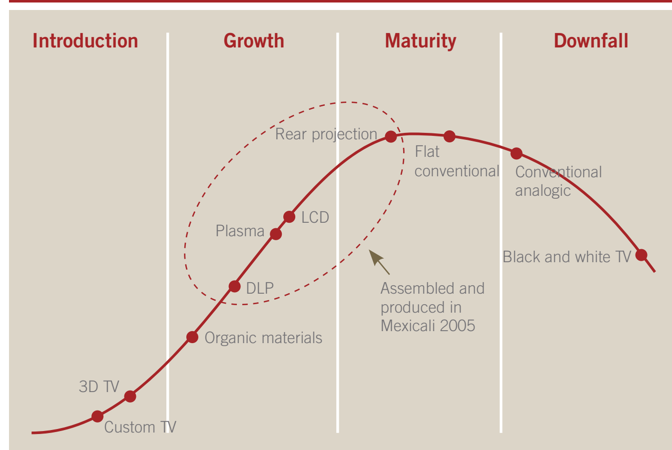
The goals set for 2005–2010 were to increase production value-added in Mexicali moving from simple assembly and packaging processes into manufacturing stages: generic to strategic components manufacturing, and into post-manufacturing stages such as distribution, logistics and services. A final goal was to promote R&D activities and market final users' services.

According to the production value curve *(see Chart 2, page 125)*, the starting point was the year 2001 in which added value or labor contribution to production was located at the bottom of the curve. At this point such contribution was based on unskilled activities. Moving along the curve both to the left and the right, labor added value increases as activities require specific skills to up to a complete switch from labor-intensive activities into intellectual and creative work. Such evolution will allow companies located in Mexicali to plan with a long-term vision having the support of local and state government to move from one stage to another.

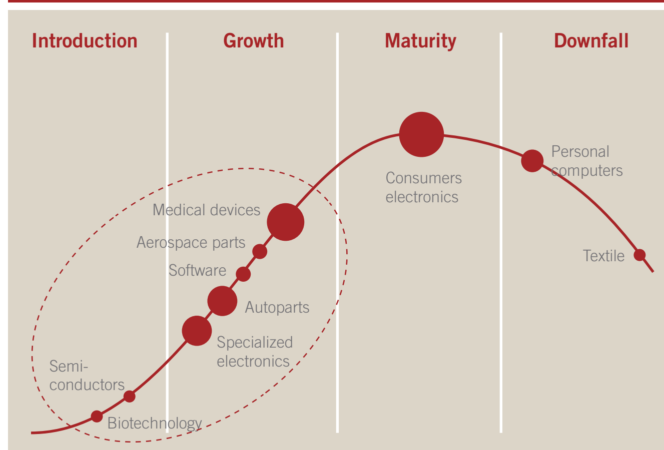
In short, the strategy to retain and expand the TV manufacturing industry in Mexicali and to move from the simple assembly of obsolete technologies into R&D and manufacturing of strategic components and parts, as well as logistics and distribution services for new products and technologies, has six main components:

1. Personal attention to OEMs operating in Mexicali

Technology Life Stages, TV Manufacturing in Mexicali 2005 *Chart 3*



Technology Life Stages *Chart 4*



2. New technical programs for digital technology
3. Supplier's development programs
4. Negotiations with federal government for new import duties
5. Infrastructure development
6. Attraction of key suppliers and new OEMs

As a first step, state and city authorities met with presidents and chief executive officers of companies in their own countries mainly Japan, Korea and the USA, to hear their needs, their interests and the feasibility of attracting new projects. Complaints, doubts and concern about specific issues was the initial response. No one mentioned new projects, new production lines or future plans for their operations in Mexicali.

After 12 months of a direct follow up on specific issues requested by OEMs to be resolved, a second visit to corporate offices in Asia headed by the State Governor, and a businessmen delegation succeeded attracting new projects to Mexicali and Baja California.

New assembly lines for new technologies started arriving within the next six months and after a year all OEMs where developing new products and expanding. Since then investment promotion agencies in the region have set up customer service centers to develop specific programs for each industry, visiting corporations in their own countries and working together with all government agencies to facilitate and take care of the companies already operating in Mexicali. Today, expansion and retention has been adopted as a key strategy for investment attraction by all IPAs in the region *(see Chart 3, page 126)*.

Over the last four years, extensive research to determine each industry's added value or production stage was developed taking into account OEM's as key role players and considering their product's technology life cycles and markets evolution. The final goal was to offer the private sector useful tools and resources to make long-term plans. Since then, specific industries such as aerospace, automotive, TV manufacturing, medical devices and semiconductors have been main targets.

However, as a result of a second step in the value-added time line, moving from assembly and packaging stages into strategic components manufacturing, offered new opportunities as local manufacturing capabilities were developed to support such activities. As a result, a total different strategy to attract new businesses took effect as comparative advantages between value-added stages had different motivations to locate in Mexicali *(see Chart 4, page 126)*.

Moving from assembly into manufacturing stages requires specific capabilities as an industrial base. Most processes are capital intensive with high-skills activities. Therefore, any new environment for such processes must develop human resources, infrastructure and most important of all, a reason to invest and develop in such activities. Since 2004 Mexicali has been working at this stage, promoting and developing local capabilities based on industrial evolution from assembly to manufacturing.

Cooperation with OEMs operating in the city has been a key element since they become a local market for new companies looking to be developed as "local suppliers". Local access to specific capabilities allow OEMs to consider the integration of more complex processes and products.

Ricardo Martinez is Executive Director of the Industrial Development Commission of Mexicali. He is also a member of the UNCTAD Commission on Investment, Technology and Related Financial Issues.

The Art and Science of Success

Politics has often been described as the art of the possible, while policy formation is seen a political science. How can these disciplines be combined to produce effective investment promotion?

By Jegathesan Jegasothy
Former Deputy Director-General of the Malaysian Industrial Development Authority

One of the greatest challenges that will face leaders of governments in developing nations and their investment promotion agencies (IPAs) is to realize and understand that investment promotion is not just a public relations activity, but a process that involves a total national effort.

In order to succeed in the race to attract FDI, policy-makers must focus on three vital policy aspects:

1. Political will & integrity: The capacity to attract FDI begins with establishing the rule of law. The rules and regulations a government approves will either make a nation an attractive base for FDI inflows or will relegate it to the backwaters. In many developing countries, the word "profits" is still perceived as a "bad word", giving the impression of the "exploiting foreign investor". Government leaders and parliamentarians must understand that the basis of the private sector is to make profits. And only when the private sector makes profits will nations have prosperity.
2. Civil service efficiency & integrity: Civil servants must understand and appreciate that they are civil "servants" and not civil "masters". That the reason of their very existence is to serve the public and not just the minister who is presently in office.
3. Private sector dynamism and integrity: Companies in developing nations must begin to look at their own internal systems of production to achieve the highest productivity at the lowest cost, if they wish to compete within their own national boundaries, let alone hope to succeed in export markets within a globalized world. Domestic companies must surrender the "dole mentality", where they constantly expect government to "feed them" with projects, favorable treatment based on "know who" and not "know how", and special treatment based on nationality.

In as much as the private sector expects the government to achieve the highest levels of "good governance," they too must, as early as possible, embrace the practice of transparent corporate governance.

Developing nations in Africa and Latin America can learn from the best practices of the successful Asian "tiger economies" such as instituting integrated approval systems within every department in government, for maximum efficiency and a seamless operational flow – from initial expression of interest, until the factory begins operation and starts creating jobs. A key element of this successful strategy is having a "clients charter", where the "client investor" is preeminent and is served with courtesy and efficiency. Not just at the national level, but all along the approval chain, right down to state, municipality and city/town council levels.

Malaysia has successfully introduced the clients charter concept within its government system and this knowledge has been subsequently transferred initially to Uganda and then to Ethiopia and Zambia.

"Every unwarranted bureaucratic delay not only reduces the competitive advantage of nations but leaves room for corruption."

Developing nations that wish to succeed beyond mediocrity must recognize that every unnecessary and complicated form, every unnecessary procedure, every unwarranted bureaucratic delay not only reduces the competitive advantage of nations but leaves room for corruption. One effective way to reduce delay and opportunity for corruption (for indeed corruption thrives only within a climate of opportunity), is to embrace "e-governance".

There are now software tools available that will help government leaders to track the movement of a project within the entire government approval system. This will make the process totally transparent and allow ministers and heads of ministries/departments see where a project is along the "administrative pipeline" at any one time and also as to whether delay is taking place for any specific project.

What is the Future of Investment Promotion?

In many nations investment promotion is considered an art – often defined by glossy brochures with "motherhood type" general statements and the ability of a minister or investment promotion officer to do a good public relations type "selling job". Too many government ministers are happy to announce that they have approved several hundred projects over the last few years. However, rarely is anyone aware of just how many have been implemented or whether they are creating jobs and wealth on the ground. Numbers are a useless exercise unless the projects are speedily implemented and begin contributing to the national welfare. In future investment promotion must become both an art and a science. The science of creating the right investment environment, and the art of projecting specific targets.

Jegathesan Jegasothy *is a senior advisor to UNCTAD and other multilateral organizations and is the former Deputy Director-General of the Malaysian Industrial Development Authority (MIDA). He is also CEO of JJ International Consultants.*

Showcase the Benefits

The Czech Republic has been one of the most successful countries in attracting foreign direct investment and in using it to restructure the national economy and boost economic growth. The challenge is how to sustain the inflow of FDI in the increasingly competitive world and how to use FDI to finish modernizing of the economy.

By Martin Jahn
Vice Prime Minister for Economic Affairs, The Czech Republic

It is clear from the changes in the global economy in recent years, that economic development is happening at a much faster pace then we expected. In the early 1990s, the Czech Republic and other economically successful countries of Central and Eastern Europe have more of less emulated the policies of countries such as the United Kingdom and Ireland to attract foreign direct investment and change the structure of their economies.

With a bit of exaggeration we can say, however, that what took Ireland, Scotland and Wales 20 to 30 years, the Czech Republic and other successful countries in Central Europe (such as Hungary) achieved in half the time. We have had the advantage to learn from others. On the other hand, while Ireland had less than a dozen competitors in the early 1990s, the Czech Republic is now competing with significantly more countries.

The breakdown of communism in the former Soviet bloc and subsequent social and economic transition recreated more than 20 independent countries all of which (with few exceptions) now compete for the attention of potential investors. Further afield, China, Vietnam and other countries in Southeastern Asia are also looking for foreign investment to create jobs and boost local economies and can offer huge underdeveloped domestic markets. Democratic and pro-market reforms have opened other potential locations for foreign investment, for example South Africa, Chile, Libya and others. Combined with cheaper communications and travel, these developments have offered potential investors a much greater choice of countries to invest in. The Czech Republic and similar countries have to face this challenge and adjust their policies to remain competitive.

1. It is clear that trying to keep unit labor costs low is not the way forward. Indeed, the whole transforma-

tion is about increasing the well-being of our citizens. We should not try to compete with countries like China on unit labor costs but to compete on quality of labor and its productivity.

2. The Czech Republic has a great tradition of technical education which we must develop further. Across Europe, the number of young people interested in technical education is falling. We must do our best to reverse this trend by increasing our support to technical schools, colleges and universities. The change of the educational system should also make the study of technical subject more flexible and more interesting. This skills development initiative should not be limited to just encouraging young people to study. We must encourage continuous education, too. Our workforce must embrace new technologies and new working practices. One such step has already been taken in the Czech Republic. From the beginning of this year, the Investors in People scheme is being introduced in the country. Developed in Great Britain, the scheme encourages employers, both large and small, to invest into continuous skills development of their employees. This should be but the first of many similar initiatives.
3. The Czech Republic also pays considerable attention to foreign language learning, where English and German predominate. At least one world language is studied by 76 percent of university students, while 20 percent study two languages and four percent study three or more languages.
4. We must target the business and investment climate. Much has been written about excessive regulation which has a negative impact on businesses in European countries. It is high time now to discuss how we can address these issues without undermining the foundations of the European social model. Some countries have already embarked on reforms and changed their tax systems, social security systems and healthcare systems. We must study outcomes of these reforms, explore all other options and press ahead with reforms.

"It is clear that trying to keep unit labor costs low is not the way forward. Indeed, the whole transformation is about increasing the well-being of our citizens."

Foreign direct investment has contributed greatly to the economic transformation of the Czech Republic. Foreign-owned companies now employ significant part of the Czech labor, produce a significant part of the Czech GDP and generate a significant part of Czech export. It has helped us modernize the Czech economy and re-connected the Czech Republic to the global economy from which it had been cut off for 40 years. We must continue to use the potential foreign investors offer us – their know-how, their technologies, their contacts. We can offer them an environment conductive to their business needs and to their future growth. I believe that this small country in the center of Europe has huge potential and will not be afraid to use it.

Martin Jahn *is the Vice Prime Minister for Economic Affairs for the Czech Republic. He is responsible for the coordination of economic policy, research & development and human resource development policies. From 1999-2004 he was Chief Executive Officer of Czech-Invest, the country's investment promotion agency.*

Life in the Fast Lane

An increasingly competitive world economy is making new demands on the role of all investment promotion agencies, especially their ability to interact efficiently with both the public and private sectors. The force of ideas is dependent on our ability to influence events. Sweden, with its small domestic market, yet highly educated population, has often been seen by other countries as an incubator for innovation, especially in public policy matters. As Invest in Sweden Agency celebrates its 10th anniversary, it serves as an example of how an organization can capitalize on its experience.

By Kai Hammerich
Director-General of Invest in Sweden Agency

Investment promotion has become a business – a business in its own right. Competition to attract foreign direct investment (FDI) is fierce and it's definitely a buyer's market. A foreign investor's main concern, bluntly put, is in knowing "what's in it for me?" or if you want to be more elegant: "How can my company profit from this venture?" Answering these questions professionally requires an investment promotion agency (IPA) willing to act increasingly as a business-oriented organization.

Before Invest in Sweden Agency (ISA) was founded in 1995, the government commissioned me to examine how an organization for investment promotion should be structured. In my report ("Invest in Sweden Agency: Proposed Activities and Organization," June 1995) I wrote that "since ISA's target group is made up of foreign companies and the aim is to enable them to make profitable investments, ISA's activities and organization must reflect business expertise and experience of international operations."

Ten years have now passed, and ISA's strategic orientation has gradually evolved from information and marketing to marketing and sales. In a nutshell, its operations have become more business-oriented.

But before exploring how we should cope with the global competition for foreign investment and the forthcoming challenges facing Sweden and ISA, let us take one step back and look briefly at how things were 10 to 15 or so years ago.

Making Sweden More Competitive

In the late 1980s and early 1990s, Sweden's multinational enterprises (MNEs) invested heavily abroad. This was the good news. The bad news was that much less was invested in Sweden. The country, at that time, was simply not very attractive to FDI.

Thus, the government in the late 1980s and the first half of the 1990s embarked upon a number of regulatory reforms with the aim of opening up Sweden and making it more competitive. Among these were abolition of all restrictions on FDI; foreign currency and tax reforms; liberalization of important sectors; and an application for European Union (EU) membership. Sweden duly joined the EU in 1995, and in the latter half of the decade the government consolidated the public finances and achieved macroeconomic stability.

These decisions, combined with the rapid pace of globalization from the late 1990s and the pent-up demand among foreign investors, which at that time applied to Sweden, have resulted in the country becoming an important location for FDI.

Chart 1 shows the changes and Sweden's rapid internationalization from an FDI perspective during theperiod 1995–2004 compared to the preceding 10 years. It also shows the overall number of mergers and acquisitions in this period of time. In Sweden, as in other developed countries, M&A comprises the bulk of FDI. In this chart, the M&A figures cover the years 1987–1994.

Chart 2 shows stocks of FDI, number of foreign-owned companies (FOCs), and number and percentage of employees in FOCs. The substantial flows of both inward and outward FDI in the last 10 years (flows which are in balance) indicate that Sweden and industry in Sweden participate very actively in the ongoing restructuring of international business. However, analysis of other statistics and data indicates that parliament and the government need to embark on a fresh round of regulatory reforms, just as they did in the 1990s, if Sweden is to maintain a competitive edge.

Chart 1	1985–1994 Total	Average/ year	1995–2004 Total	Average/ year
Inflow to Sweden (US$ bn)	24.1	2.4	161.3	16.1
Outflow from Sweden (US$ bn)	58.6	5.9	165.4	16.5
Foreign M&A in Sweden (deals)	429	53.6	1,271	127.1
Swedish M&A abroad (deals)	581	72.6	1,691	169.1

Chart 2	1994	2004
FDI stock, inward investment (US$ bn)	22.6	145.3
FDI stock, outward investment (US$ bn)	60.3	186.3
FDI stock, inward and relative to GDP (%)	11	42
FDI stock, outward and relative to GDP (%)	29	54
No. of FOCs	3,047	9,864
No. of employees of FOCs	214,014	544,579
Employees of FOCs as percentage of private sector	10	23

Sources: UNCTAD, Central Bank of Sweden and National Institute of Economic Research

Background to the ISA

The decision to found ISA stemmed from a desire to increase the flow of FDI to Sweden. The government's reasoning was as follows: FDI is growing in volume and importance; FDI is a critical vehicle for economic growth; competition for attracting FDI is increasing; a number of other countries have responded to competition for FDI by establishing IPAs, some of which have been very successful; now it is time for Sweden to create its own IPA.

ISA's late start, compared with that of many other

agencies, had some advantages. For instance, it was possible to start from scratch and construct a modern organization.

ISA's mandate was, and is, straightforward: to participate in increasing the flow of FDI to Sweden or, to be more specific, to increase the type of FDI that can strengthen competitiveness and hence improve economic growth. ISA is also charged with the task of providing the government with an annual report on the strengths and weaknesses in the climate for foreign investment in Sweden. This report analyzes the Swedish investment climate and FDI trends from an international and competition perspective.

In this context, it should be mentioned that the Swedish constitution gives government agencies substantial operating autonomy. The government appoints the board of directors and the director-general, sets the annual budget appropriation and issues general guidelines for the year ahead. It is the responsibility of ISA's board and management to draw up the organization's objectives, priorities, planned activities, and work structures. ISA reports to the Ministry for Foreign Affairs via the Minister of Industry and Trade.

ISA is organized as a marketing and sales agency with two main functions: business development and support, and international marketing and sales. This organization was introduced in January 2005 in response to increased international competition and to strengthen ISA's sales competencies. ISA's head office is in Stockholm and the agency has four offices abroad – in London, New York, Shanghai and Tokyo. ISA also has part-time representation in eight countries in Europe and Asia and cooperates with some 30 embassies and consulates general. ISA's representative offices are run by businesses in the country concerned (for instance banks and consultancy firms) which have a commercial interest in investments moving to Sweden. ISA's budget for 2005 totals SEK 105 million (US$ 14 million) and encompasses 70 employees and 20 consultants.

Since 1995, ISA and its regional partners have been involved in a large number of investments and establishments in Sweden from around the world. In 2004, ISA participated in 165 cases, compared to 132 the year before. Examples included new investments, expansions, venture capital funding, joint ventures and strategic alliances. The majority of cases took the form of new establishments. Our clients are in many cases SMEs with limited experience of operating abroad. Larger companies with experience of investing abroad generally have their own expertise. And when it comes to M&A, corporate finance firms and investment banks are the natural players.

Future Outlook

ISA's board of directors consists of nine members, six from private industry and three from the public sector. Approximately 80 percent of ISA employees have a background in private industry – a necessary factor for maintaining the organization's business expertise. However, I would not be averse to seeing more board members and employees of foreign nationality. The ISA personnel in our offices abroad are mainly nationals of the country in question, while the management group in Stockholm is entirely Swedish – as is the board. By introducing foreign nationals we would strengthen the experience of international operations within ISA.

ISA's activities and operations are necessarily highly focused and concentrated to a limited number of strategic sectors and markets. The sectors are those in which Swe-

den possesses excellence, such as pharmaceuticals, biotech, information and communication technologies (ICT), automotive, and specific areas related to natural resources and services. Target countries are chosen because they are important as overseas investors or expanding emerging markets. Existing trade flows and scientific exchange between Sweden and another country are also criteria when choosing a priority market.

In the years to come, we can foresee changes in our choices of sectors to be marketed abroad. It is also probable that new countries will be chosen as priority markets. There is always a balance to be preserved between adapting to changing conditions and being agile, and maintaining operational continuity and nurturing your business relations, since FDI is a long-term process.

Naturally, it is necessary to inform potential investors about areas in which Sweden has something to offer, be it technologies and competencies, markets, business costs, etc. But this is no longer sufficient. The potential investor, who is our client and customer, frequently wants to be informed about concrete business and investment opportunities, and about possibilities for operational agreements and strategic alliances. Investors from Asia are especially keen to receive this kind of service. This demands specific information not only about sectors in general but also about various niches, segments and product areas. In the next few years we have to continue to develop and market business offers that exist in Sweden and to strengthen ISA's role as a facilitator and matchmaker.

ISA cooperates extensively with Sweden's regional IPAs. Contacts are usually project-oriented and focus on case management. A project signifies that ISA and its regional partners have decided to market proactively a specific sector abroad – a sector of interest to both the country and the region in question. ISA and the regional IPA join forces in terms of management, competencies and financial resources. This approach has proven to be highly rewarding for all parties.

"While Sweden has done quite well in recent years, the favorable conditions that exist mean we could do better. We can see how countries that compete with Sweden revise their regulations and take concrete initiatives."

However, the concept of FDI is becoming increasingly complex, extending not only to traditional investments but also to human capital, venture capital, strategic alliances, and so on. ISA should therefore aim to enlarge the membership of the projects by trying to integrate other players from the public and private sectors.

Developing business offers and enlarging project memberships demands not only a flexible organization within ISA but also flexible mindsets in Sweden's public sector. ISA and three other agencies have formed an informal group which meets about three times a year. The other agencies' main responsibilities cover innovation systems, trade promotion, and national and regional economic development. All are involved, in one way or another, in internationalization. These meetings are mostly devoted to comparing notes, which is highly useful but insufficient. If we are to tackle global competition and its effects on Sweden more efficiently, we need to work together in a more operative way. Other public sector players are also becoming involved, indirectly, in FDI. These include universities, research institutes and foundations.

Cooperation with private industry and multipliers – consulting companies, law firms, investment banks and

other such organizations – can also be extended. The fact that ISA has become more business-oriented does not signify that we are keeping more for ourselves. On the contrary, when specialized expertise is needed we cooperate closely with commercial parties.

ISA devotes quite an effort to evaluate its results, which take the form of establishments to which ISA and our regional partners have contributed to a greater or lesser extent. The ISA follow-up system consists of six elements: a database, in which we follow all cases from start to finish; a receipt or questionnaire, which is filled in by the investor when the decision to establish operations is taken and includes information about the investment and ISA's contribution; an audit committee, which evaluates the investment after hearing the case manager present the case and receiving the written information from the investor; a points system, whereby the committee rates each investment in accordance with its size and importance; a score card, which allows us to evaluate the performance of operations over time; and an annual follow-up, through which ISA monitors the progress of the investment for a period of three years.

This system has enabled ISA to measure results and given rise to a concept equivalent to return on invested capital. We know exactly the amount of money spent on a specific project or market and the results delivered. The system also serves as an instrument for allocating resources and defining goals for each project and market over the next 12 months. As a result, the follow-up system has become a key management mechanism for ISA operations.

The follow-up system is being continually developed. A further step might be to change the composition of ISA's audit committee. Today, it has three members: one from the board of directors, one from the economic council, and the director-general. An alternative would be to have external members only.

A solid follow-up system is helpful for several reasons. Internally, the existence of a set of comparatively objective measurement criteria signifies that staff knows when they have done a good job. Externally, almost all agencies rely on taxpayers' money. It is our obligation to show how we use that funding and what results we obtain. In this business, it is no exaggeration to say that what cannot be measured does not exist. The ultimate aim of the follow-up system is to improve ISA's performance. It is worth noting in this context that the government conducts its own evaluations using independent consultants. To date, three such evaluations of ISA have been performed.

Policy Advocates

Sweden belongs to a group of countries that possesses very favorable conditions for success in international competition. Sweden is international, technology-oriented and adaptable – strong assets in an economy that is global, technology-driven and fast paced. In recent years, Sweden and the other Scandinavian and Baltic countries have performed well, at least compared to most of the other EU-15 (members of the union before May 2004) countries. However, comparisons solely with those countries do not give the full picture.

The EU has achieved – and continues to achieve – many things. But this cannot obscure the fact that member states' competitiveness is gradually declining. The union has lacked political leadership and economic performance for many years, and the Lisbon Agenda looks increasingly like a dream, if not a joke. The gap to the United States has widened rather than narrowed. Instead of EU states becoming more competitive, other countries

are making the progress to which we aspire. In several European countries there is much talk about how to protect yourself against the competition coming from “new” regions such as Central and Eastern Europe and East and Southeast Asia. Globalization is too often seen as a threat and not as a challenge and opportunity.

While Sweden has done quite well in recent years, the favorable conditions that exist mean we could do better. We can see how countries that compete with Sweden revise their regulations and take concrete initiatives and ambitious investments in various types of expertise. In its 2004 report on the national investment climate, ISA examined nine competitor nations. One of the conclusions was that Sweden needs to implement a number of reforms if it is to remain competitive.

“In its 2004 report on the national investment climate, ISA examined nine competitor nations. One of the conclusions was that Sweden needs to implement a number of reforms if it is to remain competitive.”

The government’s annual directives and appropriation document for 2005 states that ISA “is to carry out a comprehensive assessment of current conditions and trends regarding the investment climate in Sweden and the circumstances and measures that impact upon it.” This implies that ISA over the years has proposed and will continue to propose measures in areas such as economic policy and taxes, immigration and the labor market, education and R&D, as well as in investment promotion. ISA proposals focus on FDI-related issues. Some have fallen on fertile ground over the years; others remain dormant.

Without entering too far into specifics, I would highlight a few issues which I consider to be important for Sweden’s competitiveness. ISA intends to continue advancing these in the next few years.

The Quality of Critical Mass

Sweden has a number of world class clusters in ICT, life sciences, the automotive industry and several others. These clusters (which we may also call competency blocks or centers of excellence) have mainly been built up by Swedish players. Many of the largest Swedish corporations now locate an increasingly large share of their investments outside Sweden. In a global economy, they require a global presence. In addition, some production is moved out of Sweden to countries with lower costs.

This trend indicates the increasing importance of balancing outgoing Swedish investments with incoming foreign investments. If we do not succeed in this task, our clusters will be seriously impaired. This is because successful cluster development requires preservation of a certain critical mass: a volume of investments that creates dynamic development. Yet supporting competitive clusters is not only a question of critical mass but also of quality. Not even the largest nations can be self-sufficient in skills and expertise. Successful teams are created by combining the competencies of employees from different nations.

All this means that if Sweden is to continue to host leading clusters, it must also host Swedish and foreign interests alike. We must continue to attract foreign companies. We must also provide for increased immigration of qualified personnel. Among other things, this involves cluster initiatives and a review of existing rules and regulations by the national authorities in charge of immigration, the labor market, and integration. In brief, if indus-

try in Sweden is to prosper in the future, the country must be populated by many more foreign players than it is today.

Cluster Initiatives and Strategic Sectors

In the late 1990s and the start of the new millennium, we at ISA experienced some difficulties when marketing strategic sectors. We were not precise enough. The foreign investor wanted concrete information about segments and niches within a certain sector, including business potential, the existence of programs, and other specifics. In order to be able to present the investor with a package of investment opportunities, ISA initiated three cluster initiatives: Socware (system-on-chip ware) in microelectronics, Intelligent Vehicle Safety Systems (IVSS) in the automotive sector and Swedish Brain Power (SBP) in neuroscience as part of life sciences. I will use SBP as an example, since it can illustrate what is needed to attract FDI in high-tech sectors and how developed countries can strike strategic alliances and thus strengthen their competitiveness.

> ***"If industry in Sweden is to prosper in the future, the country must be populated by many more foreign players than it is today."***

After extensive consultation with the life science community and two feasibility studies (one mapping existing competencies and resources in Sweden and the other benchmarking these from an international, competitive perspective), it was decided that neuroscience is a sector in which Sweden has comparative advantages.

The background is that brain science – one of the broadest and most complex fields of research – offers tremendous commercial opportunities. Disorders of the brain and central nervous system result in more hospitalizations than any other disease group. The cost of treatments for diseases such as Parkinson's, Alzheimer's and dementia is a substantial burden for society and is set to rise as a result of the developed world's aging population. If it was possible to advance the diagnosis of these diseases by, say, a few years it would save society billions and billions of dollars. Not to mention what it would mean to the individual.

Five leading research foundations in Sweden and ISA formed a group to launch a SBP program aimed at bringing out the best in Swedish research into brain diseases. SEK 100 million (US$14 million) was raised by the foundations as an initial sum to launch the program. This "new" money was added to the existing resources of the various parties involved. A call was organized and six consortia in Sweden competed for the commission to operate the SBP program. Four panels with international expertise were formed to examine the consortia proposals. A consortium led by the Karolinska Institutet won the bid.

A physical and virtual center of neuroscience discovery is now being set up. Seventy-three research groups participate in SBP and the program will bring together an unprecedented range of researchers, practitioners and business people. The project is unique in uniting experts in "hard" scientific disciplines with experts in "soft" social science disciplines. The aim is to tackle neurodegenerative illnesses and the researchers are drawn from a wide variety of fields, ranging from brain imaging to genetics.

I have often been asked why an agency like ISA took such an initiative? First, nobody else had done so. Second, our experience at ISA is that attracting FDI depends on being able to present a concrete and attractive con-

cept. We are now preparing to take the SBP program outside Sweden by inviting participation from foreign research institutes, pharmaceutical and biotech companies and individuals. We strongly believe we have an interesting scientific, clinical and commercial package to offer.

Third, I also strongly believe that if we in the developed world are to confront competition from regions such as East and Southeast Asia – competition that is increasingly focused on R&D and high added-value operations – we must refine our methodologies and actions. Systems integration, cross-fertilization and greater concentration are all methods that can help us stay innovative and competitive. An interdisciplinary approach will enable us to advance upward through the value chain. For example, the IVSS program combines advanced know-how in mechanics, ICT, electronics, telecom, telematics, and vehicle and road safety.

What lessons can be drawn from the Swedish Brain Power initiative? One is that it takes great time and effort to implement a program like this. The initial work began in 2000 but the program was not officially launched until a press conference in January 2005. In my view, a lead time of five years was too long. Time to market is a crucial factor in meeting modern competition – and this applies to investment promotion as any other business. Admittedly, the program was far-reaching, involved many players from the scientific, commercial and political communities and was the first of its kind in Sweden. It takes time to gain acceptance for new, strategic initiatives.

During the process, opinions were voiced that a government agency should abstain from pursuing "industrial policy" or "picking the winners." I reject this because combining common strengths in key areas is not about industrial policy or cherry-picking winners but about harvesting existing resources in a smart way to gain competitive advantage. Combining resources as we did is precisely what is needed to foster innovative research and products for commercialization. Indeed, it would be desirable for the government to act more decisively to create the conditions for many more SBP-like initiatives and thereby underpin our most strategic sectors.

Another lesson to be drawn concerns the implications for FDI. At present, we cannot assess how successful the initiative will be but can merely say we have done our homework in Sweden and created a platform from which to act. We must now translate words into actions and see how competitive the program will be in attracting researchers and scientists, ideas and technologies, and companies and capital from abroad.

Extended Concept of FDI

The Swedish Brain Power program illustrates how the FDI concept is becoming more complex and extensive. Given that FDI is becoming increasingly driven by skills and technology, ISA has proposed and will continue to propose to the government measures aimed at creating better conditions for attracting internationally mobile and capable individuals and better fund structures attractive to fund investors, thus securing stronger skills and venture capital inflow.

Another aspect of an extended investment concept is the growing importance of strategic alliances, joint ventures and cooperation agreements. With competition so intense, technology development so costly and time to market so crucial, the ability to establish alliances, ventures or agreements of this sort has become an important competitive factor for companies as well as for countries and regions. Those parties that join forces to take advan-

tage of complementarities in technologies or markets will gain in competitiveness.

Strategic alliances are also important from a more direct FDI standpoint. A traditional foreign investment is often preceded by a cooperation agreement. In the case of SBP, it is our hope that initial cooperation agreements will lead to regular FDIs.

Strategic Markets

Notwithstanding, the shortcomings of EU-15 from a competitiveness and FDI perspective, it is in Sweden's interest to play the European card fully and loyally, and to contribute to consolidation of the EU internal market. However, this should not prevent us from reviewing some of our priorities. When it comes to ISA, I wonder whether we should not reassess some of our priorities when selecting our main markets.

We know that in five to ten years a number of emerging economies – Brazil, China, India, Malaysia, Mexico, the Middle East and Persian Gulf states, Turkey, Russia, South Africa, South Korea and others – will play an increasingly important role in international economics and business. For the moment they are focusing on attracting investments from abroad but are gradually also becoming overseas investors, realizing that the business of FDI is a two-way street. Like China, they have the ambition to "go abroad" and "go global." In this process of internationalization they are also searching for strategic alliances.

The question is, therefore, in which type of markets ISA can maximize its value for money. In other words, in which markets can ISA's limited resources make the difference: in developed nations or in developing countries?

Let us assume, even if it is not always the case, that developed countries possess fairly good knowledge about industrial Sweden and that market forces will take care of investment flows. But this assumption cannot be made for developing countries. One might therefore conclude that ISA should review its country priorities. I estimate that

Partnering for Progress What's Next for WAIPA

Invest in Sweden (ISA) is an investment promotion agency (IPA) among many others around the world. The nature and scope of an IPA depends naturally on the agency's mandate and financial resources, along with political and administrative traditions pertaining to the independence of government agencies. Another key determining factor is the country's state of economic and industrial development, which in turn determines the attractiveness of the country or the region.

No two IPAs are alike, even though much common ground exists between them. In the business of investment promotion we have much to learn from each other – a process that is channeled through the World Association of Investment Promotion Agencies (WAIPA).

WAIPA, which was founded in 1995 and is based in Geneva, currently has 178 member agencies from 146 countries (a majority of them developing nations). WAIPA cooperates closely with international organizations that are generally involved with FDI and have a particular focus on economic growth in developing countries. These are the United Nations Conference on Trade and Development (UNCTAD), Foreign International Advisory Services (FIAS) and the Multilateral Investment Guarantee Agency (MIGA) of the World Bank, the Organization for Economic Cooperation and Development (OECD), and the United Nations Industrial Development Organization (UNIDO).

In its first decade, WAIPA has focused chiefly on capacity building and training, net-

some 80 percent of ISA's resources are currently devoted to operations in developed countries and the rest to operations in China, Taiwan, South Korea and the Gulf states.

As a matter of fact, this review has to some extent already started. As soon as China joined the World Trade Organization (WTO) and the government launched its policy to "go abroad," ISA opened an office in Shanghai and started operations there in 2002/2003. The results have been very promising. ISA has also resently recived approval from the Swedish government for additional financial resources to establish a presence in India.

One experience from our activities in China is that larger companies have a strong appetite for cooperation. They recognize that they lack international business experience, that they are not acquainted with Europe's markets, and that it will take time before they have reached a stage of purely innovative performance. This highlights the great potential for long-term business – a true win-win situation. And this is the opportunity that we should seize, with China and with other emerging economies.

"I also think it is inappropriate to criticize the Chinese because they are ambitious, hard-working and strong investors in skills building. If anything concerns me, it is the risk of Europe failing to get its act together and slipping into protectionist measures as a result."

I am not daunted by Chinese competition. And I also think it is inappropriate to criticize the Chinese because they are ambitious, hard-working and strong investors in skills building. If anything concerns me, it is the risk of Europe failing to get its act together and slipping into protectionist measures as a result. I am naturally aware of the cost and other advantages enjoyed by developing countries in Asia. But even against an economy that does

working and knowledge sharing (study tours and meetings), the production of studies and publications, and other technical assistance activities. WAIPA is a demand-driven organization whose activities reflect the wishes and needs of its member agencies.

According to a World Bank report – *Does a country need a promotion agency to attract foreign business?* – greater investment promotion is associated with higher cross-country FDI flows. Consequently, WAIPA should develop its activities further in the context of the importance that IPAs attach to FDI as a vehicle for economic growth and the growing significance of many emerging economies. It should, for example, not only continue to be a forum for learning and best practice but also act as a catalyst to promote cooperation between individual IPAs in developed and developing countries. For instance, cooperation between ISA/regional IPAs in Sweden and the national/regional IPAs in South Africa would aim at competence building and attracting investments from South Africa to Sweden, and from Sweden to South Africa.

I would also like to see WAIPA assume another task, namely further promotion of cooperation between IPAs within a geographical region. One example might be the Baltic Sea region. Foreign investors are not constrained by national borders. When their investments are market-driven they analyze the prospects and size of the region in which they intend to invest. I am convinced that by joining forces Estonia, Denmark, Finland, Latvia, Lithuania, Norway and Sweden could make the Baltic Sea region a more attractive region for FDI.

Kai Hammerich, President of WAIPA

not possess such advantages, such as the US, Europe's performance is at present falling behind.

Ultimately, it might be more appropriate for us to strike a balance between allocating, say, 50 percent of ISA's resources to developed countries and 50 percent to developing countries. Such a balance would probably result in our activities in developed countries becoming more reactive, for instance servicing investors when they contact ISA. By contrast, activities in developing countries would have to be more proactive. Redefining our priorities in this way should be seen as a long-term investment in future FDI flows and strategic partnerships.

In this context, it is worth looking at the Baltic Sea region. At the present time we are marketing our seven small countries separately. What a waste of effort and money – particularly since our clients pay little heed to our national borders. They are interested in market size and the existence of advanced technologies and competencies. I am convinced that if we could act together it would be in the interest of each individual country and thus of the Baltic Sea region as a whole.

So What's Next?

How can a country like Sweden and an agency like ISA confront the global competition for attracting FDI?

For the country, the general answer is obvious: to continue and to accelerate investments in "hard" and "soft" infrastructure so that we remain competitive in our specialty of operations with high added value. But Sweden is also in much need of a number of regulatory reforms, as was the case in the 1990s. Tax reform, liberalization of key sectors (services, education and health care) and greater flexibility in immigration and labor market policy are all needed if Sweden is to continue to take its market share of internationalization, just as it did in 1995–2004 compared to the previous ten-year period.

More FDI-oriented measures would be to encourage many more cluster initiatives. The government should further stimulate the pooling of resources in strategic sectors where basic skills are already in place. By focusing on areas in which we have competitive strengths we can create platforms to catalyze a greater inflow of companies, individuals, ideas and technologies.

Since globalization and FDI is not a zero-sum game, I would welcome more decisive government initiatives in a number of strategic markets. For Sweden, the Baltic Sea region is a strategic market. It would be wonderful, and very rewarding from a FDI perspective, if the seven governments in the Baltic Sea region could regard themselves as being part of one and the same business corporation. What we could offer to our business clients abroad! The business and investment opportunities in the Baltic Sea region are multitudinous. In technologies and competencies the seven countries have much in common and, at the same time, complement each other strongly.

Another partnership that would make much sense would be with a number of emerging markets. They are in the midst of going international. Such partnerships could be far-reaching in as much as they could cover trade and investment, scientific and industrial cooperation, and human and venture capital.

What, then, should ISA as an agency do to strengthen its competitiveness? Increase the presence of foreign nationals within ISA; develop the business offers presented to potential investors; strengthen salesmanship within the agency; mobilize more partners from the private and public sector in FDI-related projects; and determinedly

pursue the policy advocacy role the government has given the agency. These are some of the actions and measures I would like to see implemented in the next few years.

Now and then I am asked by colleagues from other agencies if it is not tricky to be a government agency and at the same time make recommendations to the government on what to do, which implicitly involves criticizing it for what it is not doing. I have not seen any difficulty with this. In Sweden we are quite used to having an open debate in which representatives of the public sector also participate. But if you are to assume this policy advocacy and watchdog role, as ISA does, you have to be attentive in two respects: to adhere to your FDI mandate and to stay out of party politics.

"Sweden belongs to a group of countries that possess highly favorable conditions for success in international competition. If we do not succeed in taking advantage of globalization, then we have nobody to blame but ourselves."

Good ideas are not sufficient to achieve results in a policy advocacy role. You must be tenacious and follow up your proposals. For example, ISA initiated a proposal regarding special tax conditions for foreign experts. It took three to four years of persistent action before that proposal was accepted and implemented.

In emerging markets it is my hope that ISA will be able to launch a FDI-focused partnership, perhaps under the aegis of WAIPA, with South Africa or another country or countries. Were such a partnership to prove successful, I am sure it would encourage many others between IPAs in developed and developing countries.

I mentioned earlier that Sweden belongs to a group of countries that possess highly favorable conditions for success in international competition, and I mean this sincerely. If we do not succeed in taking advantage of globalization, then we have nobody to blame but ourselves.

I will conclude with a quote taken from the last paragraph of the report I submitted to the government in 1995 after it commissioned me to examine how an organization for investment promotion should be structured:

"Finally, it should be emphasized that a crucial precondition for Sweden's success in attracting foreign capital is that all those who are involved in investment-promoting activities at national, regional and local level should act with *personal commitment*. 'Hard' conditions, backed by personal attitudes, are what determine the climate of investment in a country, i.e. its competitiveness as a country for investment."

Kai Hammerich graduated in Law and Social Science (Sweden and France), and became a correspondent for European affairs in Brussels, before joining the Press and Information department at the Council of Europe, Strasbourg, as Deputy Director (1977–1980). From 1980 on, he started working with the automotive and aerospace corporation Saab-Scania AB, of which he became Executive Vice President in 1987. Since 1995, he is President and Director-General of Invest in Sweden Agency (ISA) and, since 2004, President of the World Association of Investment Promotion Agencies (WAIPA). He is also Chairman of the Board of the Swedish Agency for Economic and Regional Growth (Nutek) and of Almi Business Partner AB (parent company of 21 regional business agencies).

WAIPA has 178 members coming from 146 countries:
Afghanistan, Albania, Algeria, Angola, Anguilla, Antigua and Barbuda, Armenia, Aruba, Australia, Austria, Azerbaijan, Bahrain, Bangladesh, Barbados, Belarus, Belgium, Belize, Benin, Bolivia, Bosnia-Herzegovina, Botswana, Brazil, British West Indies, Bulgaria, Cameroon, Cape Verde, Chile, China, Colombia, Congo (Democratic Republic or the), Costa Rica, Côte d'Ivoire, Croatia, Cuba, Curacao (Netherlands Antilles), Cyprus, Czech Republic, Djibouti, Dominica, Dominican Republic, Ecuador, Egypt, El Salvador, Estonia, Ethiopia, Fiji, Finland, France, French Polynesia, Gabon, Gambia, Georgia, Germany, Ghana, Greece, Guatemala, Guinea, Guyana, Haiti, Honduras, Hungary, Iceland, India, Indonesia, Iraq, Iran (Islamic Republic of), Ireland, Israel, Italy, Jamaica, Japan, Jordan, Kazakhstan, Kenya, Kiribati, Korea (Republic of), Kosovo (Serbia and Montenegro), Kuwait, Kyrgyzstan, Latvia, Lebanon, Lesotho, Libya, Lithuania, Macedonia, Malawi, Malaysia, Maldives, Mali, Malta, Mauritania, Mauritius, Mexico, Moldova (Republic of), Mongolia, Morocco, Namibia, Nepal, Netherlands, New Zealand, Nicaragua, Niger, Nigeria, Oman, Pakistan, Palestinian National Authority, Papua New Guinea, Paraguay, Peru, Philippines, Poland, Portugal, Romania, Russian Federation, Rwanda, Saint Lucia, Saint Vincent and the Grenadines, Samoa, Saudi Arabia, Senegal, Seychelles, Sierra Leone, Slovakia, Slovenia, Solomon Islands, South Africa, Spain, Sri Lanka, Sudan, Swaziland, Sweden, Tajikistan, Tanzania (United Republic of), Thailand, Trinidad and Tobago, Tunisia, Turkey, Uganda, Ukraine, United Arab Emirates, United Kingdom, Uzbekistan, Vanuatu, Venezuela, Yemen (Republic of), Zambia and Zimbabwe.

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