

Global Location Trends

Annual Report



Foreword

Corporations today are faced with unprecedented pressures to adapt and reinvent themselves to survive and prosper in a new economic environment. This comes with profound implications for how they approach their physical infrastructures and global operations. An emphasis on gaining access to new and growing markets is being replaced in their current location strategies by consolidation and cost reduction. In their search for lower costs, companies have reduced their overall level of investment, but have also widened the scope of their search to encompass new and more cost efficient locations. For example, some African countries have seen their share of global investment grow, as they are increasingly seen as locations that offer attractive operating environments and costs.

More generally, the volatility of the last year has highlighted the importance of a region's resilience and adaptiveness. Cities and city-regions, which have increasingly positioned themselves as the focal point of economic activity must therefore think more broadly about how they can maintain a competitive position, secure job creation and prosperity in an environment characterized by change.

Within IBM, we see the need for locations, and particularly cities, to become "Smarter Cities." This concept captures the need for locations in general, and cities in particular to leverage new technology and new intelligence to optimize their natural, physical, human, and cultural resources to ensure sustainable prosperity for their citizens. Recent events in the world economy have shown that the imperative to become smarter is now greater than ever.

Frank Kern
Senior Vice President
Global Business Services

Introduction

IBM's Global Location Trends reports are based on analysis of data from IBM's proprietary Global Investment Locations Database (GILD). GILD continuously records investment project announcements around the world. With currently information on for over 80,000 investment projects recorded since 2003, GILD provides unrivalled insight into global trends in corporate location decision making.

The GILD database is maintained by IBM-Plant Location International (IBM-PLI), a specialized service within the Strategy & Change consulting practice in IBM Global Business Services. IBM-PLI is a global leader in providing advice to companies on their location strategies, covering all sectors and types of business functions. Moreover, drawing on the extensive expertise and knowledge of what shapes corporate investment decisions, IBM-PLI works with economic development organizations and investment promotion agencies in their efforts to improve and market their locations as attractive business environments for present and new investors.

A year of turbulence

Firms entered 2008 under a cloud of uncertainty about their prospects, with the financial system in severe difficulties and the global economy on the brink of recession. Indeed, the data now shows that some countries, notably the US, had already entered recession at the end of 2007. Accordingly, the latter half of 2007 saw an emerging paralysis of financial markets and limited access to credit for companies and consumers as banks aimed to de-leverage their balance sheets. This trend continued and intensified during 2008, with the global financial system and economy unraveling in dramatic fashion.

As we saw in last year's Global Location Trends report, the impact of the emerging financial crisis on foreign direct investment was already evident from its start during the last months of 2007, with a significant reduction in investment activity, notably in services. With the financial crisis developing into a fully fledged global economic recession during the course of 2008, global investment activity continued its downward trend with an overall reduction in jobs created from foreign investment projects from more than 1.1 million in 2007 to just over 800,000 in 2008. This is equivalent to a decline of more than 25%, the biggest drop in international investment since we started tracking investment announcements.

A change in motivation for investment

The deteriorating economic situation had significant implications for how companies approached their global operations. In previous years, a prime motivation for expanding internationally had been to gain access to growing or new markets. Accordingly, companies sought to locate their operations such that they could take advantage of opportunities in existing markets or emerging markets with growth potential -- either by locating or expanding operations directly in key markets or locating operations with a view to export to the main markets. This resulted in a widening of investment activity, as companies continued to expand their geographic scope and search for opportunities in new regions and countries around the world.

With consumer confidence falling and market prospects deteriorating rapidly, the prime concern for companies changed from one of market access to one of cost containment and reduction. Furthermore, the constraints on credit resulting from the financial crisis meant that companies found it increasingly difficult to finance their investment projects.

The concomitant changes in approach to international activities were characterized by an emphasis on consolidating existing operations, lowering capital expenditures on investment projects, and giving greater priority to opportunities for cost savings. This all manifested itself in not only lower investment levels but also a change in where investment projects were located and the type of investment that took place.

Investors consolidating and widening their geographic scope of investment

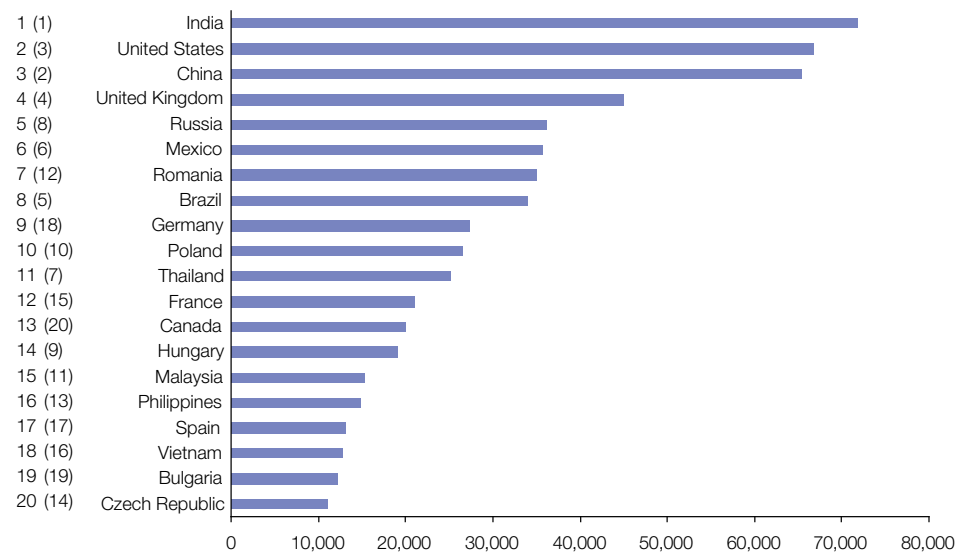
The change to a greater focus on consolidation and cost reduction rather than market entry had varying implications for where investors were looking to locate their activities. On the one hand it meant that many of the large and developed economies, such as the US, UK, Germany and France, increased their share of global investment, as companies consolidated activities in stable countries where they had existing mature operations, despite the rapidly deteriorating domestic economic conditions in these countries¹. Accordingly, the US advanced a position in its overall ranking, from 3rd to 2nd, ahead of China but after India; while France, Germany, and Canada improved their positions in the ranking.

¹ Of course, the economic difficulties facing these countries also resulted in a number of closures and reduced activities in these countries. However, our analysis is purely focused on trends in new greenfield and expansion projects.

Furthermore, companies looking to reduce costs continued to look for opportunities in new countries as recent 'hot spots' have become overheated and costly. This has resulted in a number of emerging economies increasing their share of investment at the expense of other previously low cost locations. For example, 2008 saw significant increases in the share of jobs created for countries such as Tunisia, Algeria, Egypt, Turkey and Romania, while central European countries such as the Czech Republic, Poland and Hungary saw significant declines in their share of investment and jobs created, as did some Asian countries, such as Malaysia, the Philippines, and Vietnam.

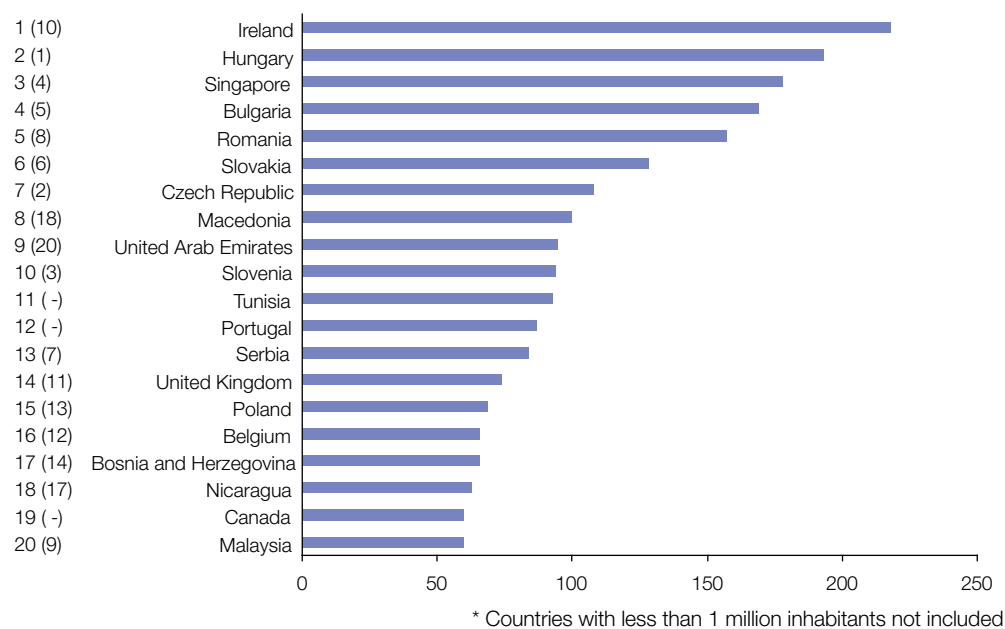
The trend towards greater geographic widening of investment activity is also reflected in a reduced concentration of job creation, with the top 20 destination countries accounting for approximately 73% of all jobs created in 2008 compared to 77% in 2007 and 78% in 2006.

Figure 1. Top ranking destination countries by estimated jobs- 2008 (07)



Other countries that have gained from the consolidation efforts are those that have a compelling proposition to investors for those business activities that can easily be consolidated. For example, despite a rapidly deteriorating domestic economy, Ireland experienced significant absolute and relative gains in inbound investment as a result of the country's strengths in services and R&D, which is reflected in the country being the top destination when taking account of population size.

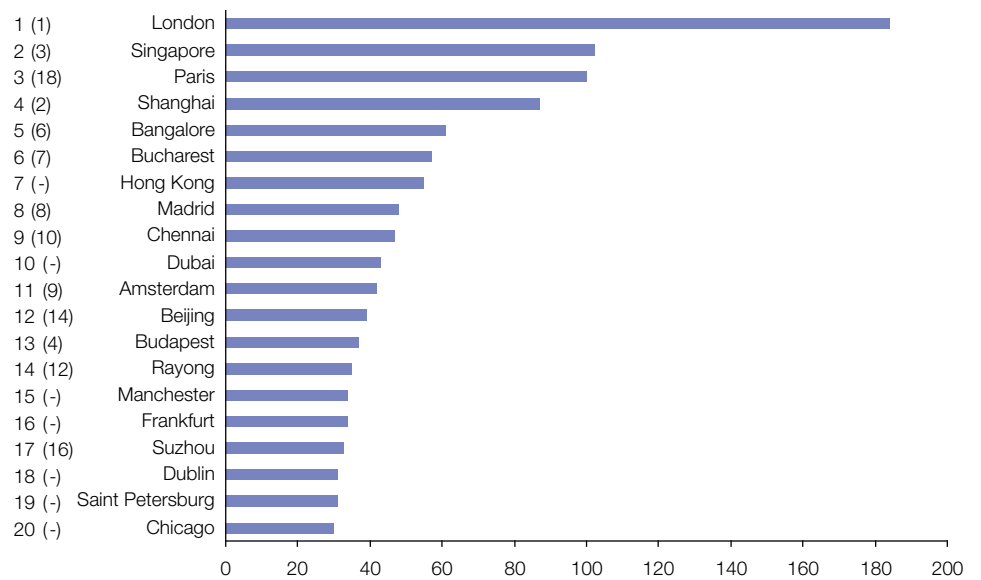
Figure 2. Top ranking destination countries* by estimated jobs - per 100,000 inhabitants - 2008 (07)



The combined trends of consolidation and widening of scope are further evident when analyzing the performance of cities around the world. Cities, themselves virtually complete economies in some instances, are increasingly becoming the focal points of global economic activity, and analysis of their performance offers a more granular picture of trends at the country level. Hence, measured by number of projects, London is the world's top destination for investment. As the economic centre of gravity of the UK it profits from the country's strong performance, but additionally it has established itself as a global key location for international services operations. London is followed by traditional strong performers Singapore and Paris. Cities such as Hong Kong, Dubai, Manchester, and Frankfurt saw

significant improvements in their relative performance, while some cities that have been known as major ‘hot spots’ in recent years, such as Budapest, experienced a relative decline in their ranking. It is noteworthy that the top 20 destination cities in the world include 8 Asian cities, 10 European and only 1 city from North America. The lack of US cities in the ranking is largely explained by the fact that the many projects going to the US are dispersed among a large number of different cities, with investors having many options for locating their activities in different places around the country.

Figure 3. Top ranking destination cities by number of investment projects* - 2008 (07)

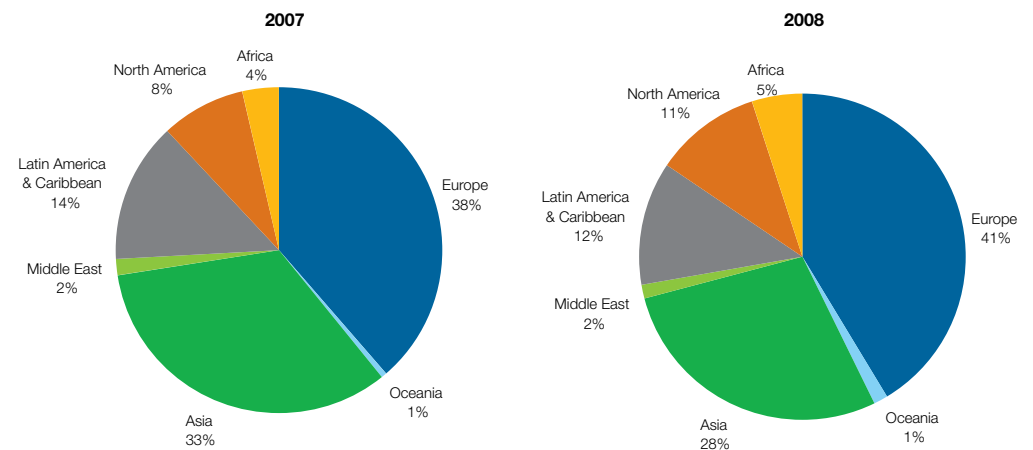


* Investment projects generating less than 10 new jobs are not included

Regional trends

The trend of mature economies, together with new cost competitive locations, increasing their share of investment is also evident when looking at the distribution of investment by geographic region. Hence, Europe and North America increased their shares of jobs created from foreign investment to 41% and 11% respectively in 2008, compared to 38% and 8% in 2007. Furthermore, it is of interest to note that Africa increased its share of jobs created from foreign investment from 4% to 5% while Asia saw a decline from 33% to 28% and Latin America reduced its share from 14% to 11%. For a few years in a row now, Africa is gradually increasing its global market share. Although the total number of jobs created is still relatively small, this increase confirms the growing acceptance of the continent by investors who are seeking new areas for attracting talent at competitive cost levels.

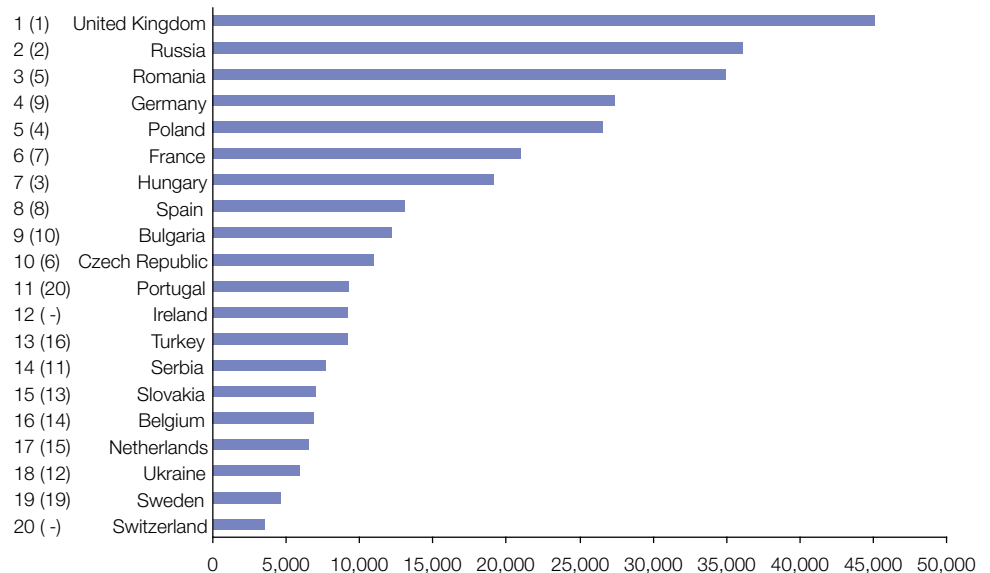
Figure 4. Distribution of estimated jobs by global region



Europe

While Europe as a whole experienced relative gains in its share of global investment, individual countries within the continent had very different experiences. The UK remains the top recipient of jobs from foreign investment. Its strong performance is further boosted by the move of many companies to stable business environments, and the country's strong cost competitiveness (in a western European context) being even further improved by the low pound sterling exchange rate. The UK is followed by Russia, where more companies are seeking entrance in the local market, and Romania, which mainly serves as the current low cost base for both manufacturing and services operations serving customers across Europe. Germany² and France have seen considerable relative gains, while the most notable improvement has been in Ireland's relative position. Hungary, the Czech Republic and Slovakia all saw significant relative declines as they lost out to more cost-attractive locations in South East Europe and North Africa.

Figure 5. Top ranking destination countries in Europe by estimated jobs - 2008 (07)

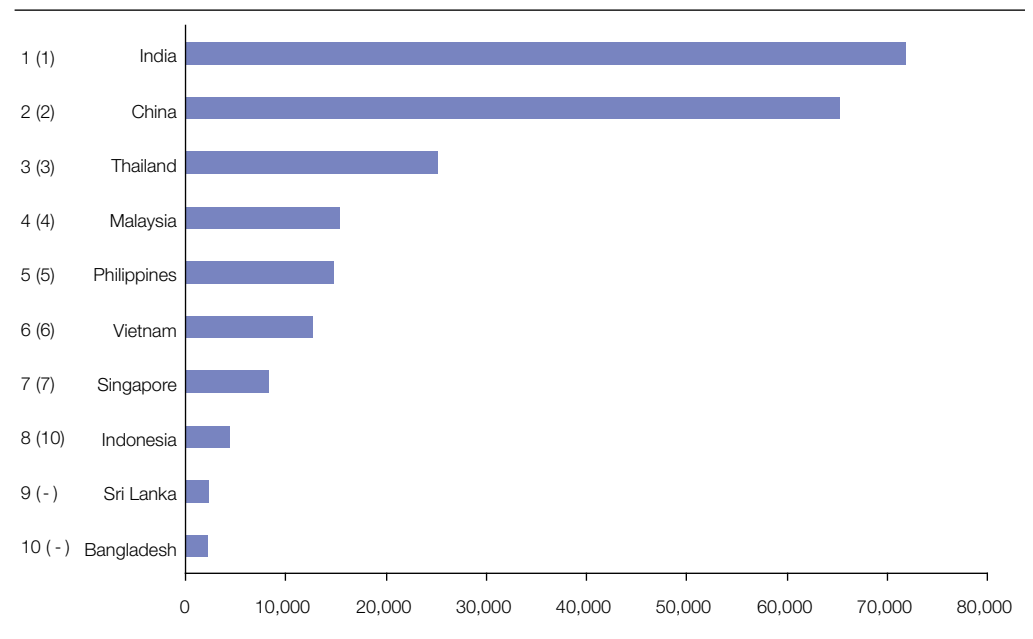


² The improvement in Germany's performance is in part explained by recently introduced improvements in regional and national governments' tracking of projects going to the country. Notwithstanding the better data, however, Germany did experience a considerable relative improvement in ranking and share of jobs created.

Asia

In Asia, the relative position of the top countries has remained fairly stable. However, while India and China continue to be the leading destination countries in Asia, it is of interest to note that countries such as Sri Lanka and Bangladesh are in the top 10, highlighting the willingness of investors to explore new locations as options for investment. Both of these countries managed to attract a couple of large projects in 2008, notably in textiles, which improved their ranking.

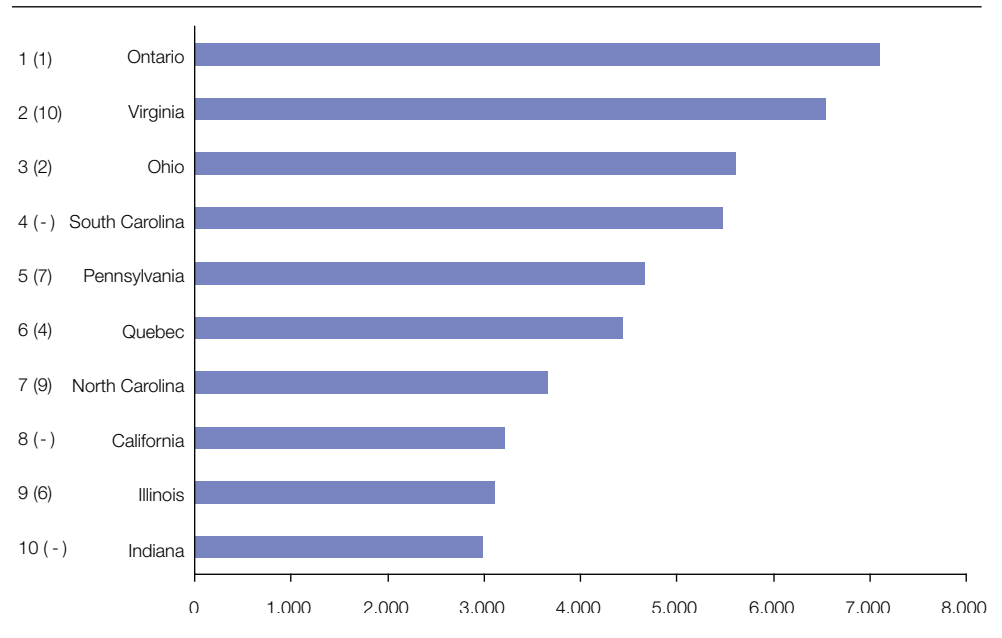
Figure 6. Top ranking destination countries in Asia by estimated jobs - 2008 (07)



North America

In North America, investors have many options, with a number of states and provinces contending for similar types of investment projects. This means that the relative performance of states may change frequently, depending on the destination of larger foreign projects. It is also important to note that the US is unique insofar as domestic investment is considerably more important for job creation than foreign investment. In 2008, Ontario maintained its top position in North America, with Virginia jumping from 10th to 2nd in the ranking. Other relatively strong performers were South Carolina, California, and Indiana.

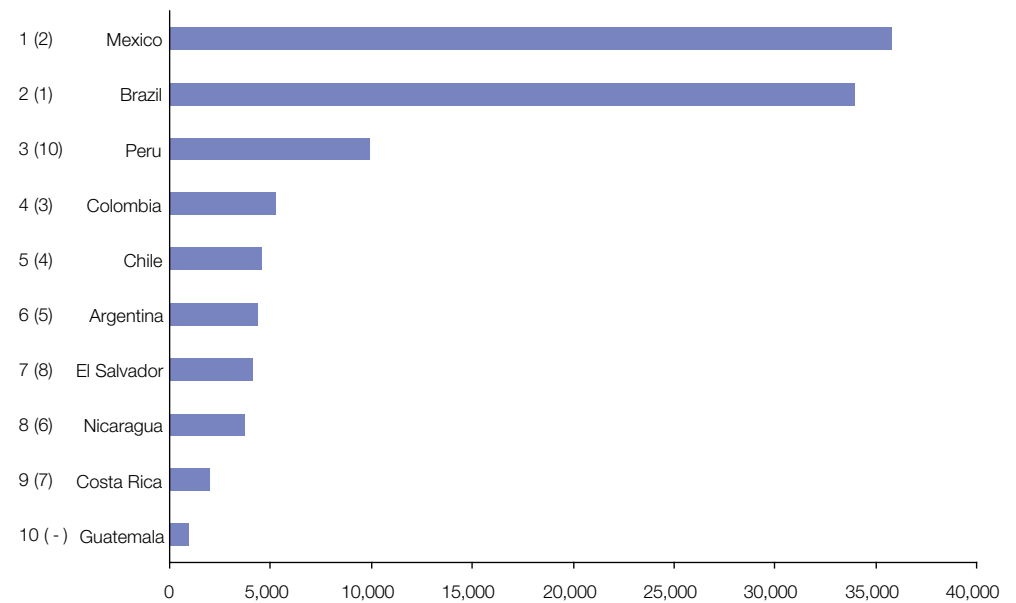
Figure 7. Top ranking destination states/provinces in North America by estimated jobs - 2008 (07)



Latin America

Overall, Latin America's share of jobs created from foreign investment declined from 14% to 12%. The two big economies of the region, Mexico and Brazil, remain the top destinations for investment. In addition, Peru is notable for its high regional ranking in 2008, which is mainly explained by significant investment in the energy, mining and metals sectors.

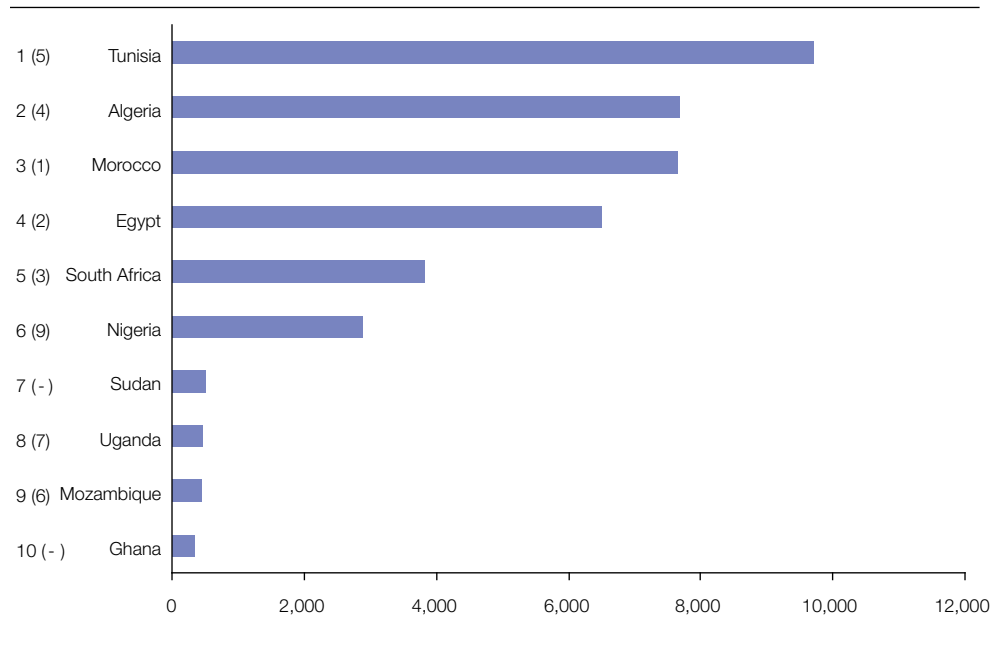
Figure 8. Top ranking destination countries in Latin America by estimated jobs - 2008 (07)



Africa

As previously noted, Africa experienced a relative improvement in its performance overall, with the continent receiving 5% of global jobs created in 2008, compared to 4% in 2007. North African countries are the main beneficiaries of investment to Africa, with Tunisia, Algeria, Morocco and Egypt constituting the top four destinations. These countries have particularly benefited from companies seeking lower cost alternatives to European locations. Recent evidence from our direct work with corporate investors suggests that this trend is likely to continue, with companies increasingly viewing some African countries as potential alternatives to locations in Eastern Europe and Asia (see textbox on next page). The focus here is more on northern Africa, rather than on Sub-Saharan countries.

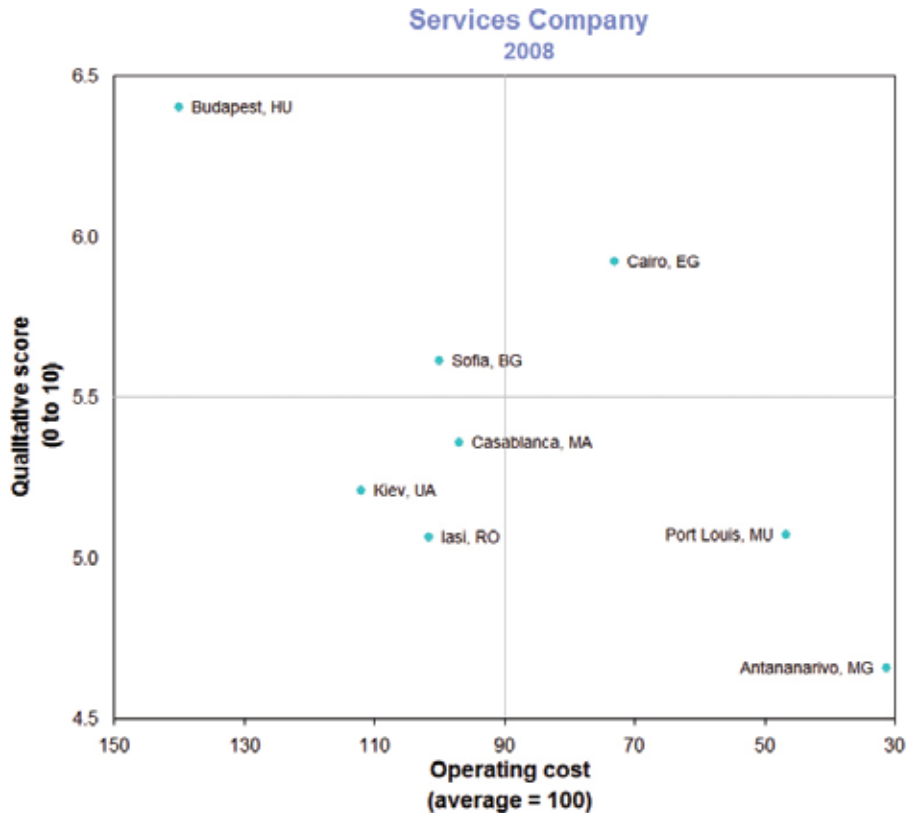
Figure 9. Top ranking destination countries in Africa by estimated jobs - 2008 (07)



New locations emerging as key contenders for investment

Companies are expanding their geographic scope of investment activity in search of new cost-efficient opportunities. This is, for example, manifesting itself in companies looking to locations in Africa and the Middle East as alternatives for serving the European market to traditional 'hot-spots' in Eastern Europe. This trend also reflects the improvement in the business environments that these locations have instituted in recent years. Accordingly, it is the combination of more favorable business environments and competitive costs that makes such locations increasingly attractive to investors. This is evident when analyzing locations in a cost-quality map – an analytical method developed by IBM-PLI – which provides a tailored assessment of the relative attractiveness of locations for particular business activities with respect to the quality of the business environment along the y-axis and operating costs along the x-axis. Locations further up the y-axis offer relatively more favorable business environments while locations further to the right offer a more attractive financial proposition. A location's position on the map indicates the cost-quality trade-off available to investors. As is evident from the case examples below, some African locations are now offering attractive cost-quality trade-offs for some investment projects compared to competitor locations in Eastern Europe.

Figure 10: Example Location Cost-Quality Trade-off



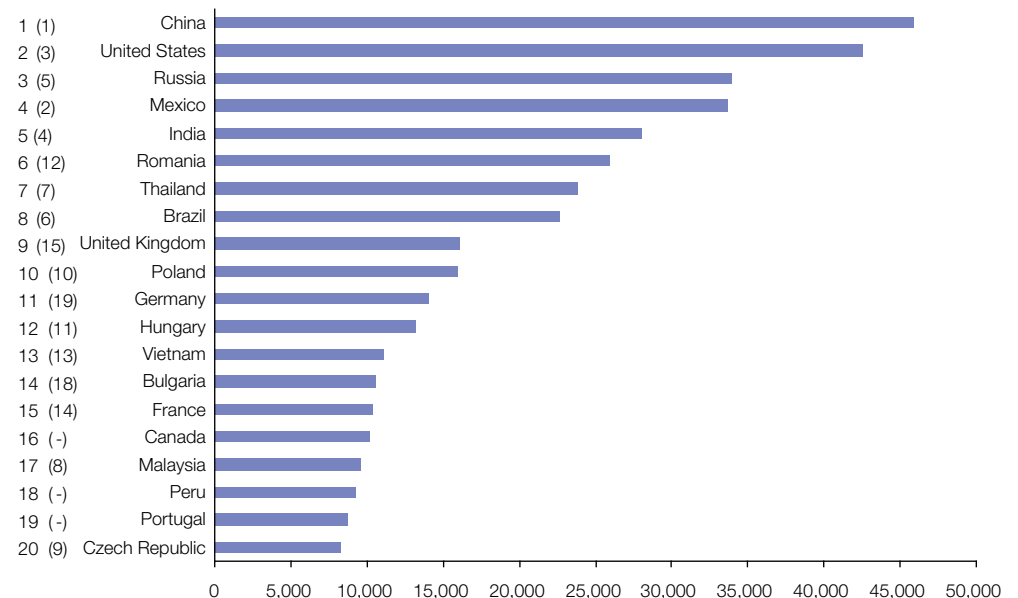
Decline spreading from services to production

The changing fortunes of countries and regions around the world are also partly explained by significant changes in the type of investment that occurred. During 2007, the immediate difficulties associated with the financial crisis resulted in a significant decline in investment for services activities, with the financial and business services sectors particularly badly hit. With credit constrained and economic activity slowing, 2008 saw the impact of the deteriorating economic environment spreading to other sectors of the economy, with production and R&D activities also seeing substantial declines in investment activity.

Production

The large decline in new production jobs, from more than 715,000 in 2007 to approximately 530,000 in 2008, affected many countries that have been traditional beneficiaries of such investment. Hence, while countries such as Germany, the UK, and Romania have seen gains in their relative positions, other traditional hotspots for production investment, such as the Czech Republic and Malaysia, have seen considerable declines in absolute and relative terms. China remains the top destination overall, with the US and Russia second and third.

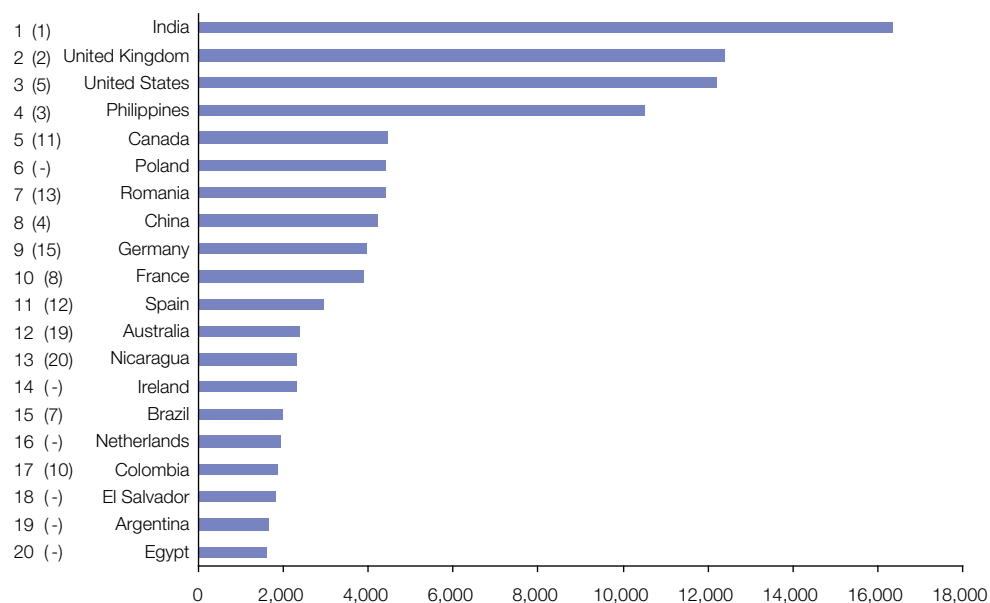
Figure 11. Top ranking destination countries by estimated jobs in production – 2008 (07)



Services

Investment in services activities declined in 2008, creating less than 120,000 jobs in 2008 compared to more than 175,000 in 2007. India continues to be the top destination, followed by the UK and the US. A number of countries have entered or re-entered the top 20, with Poland ranked 6th as a result of gains in shared services and Ireland 14th, gaining in higher end services projects. In addition, El Salvador, Argentina, and Egypt are now in the top 20, highlighting investors' willingness to explore opportunities in new countries for their services activities. In contrast, China and the Philippines experienced significant relative and absolute declines.

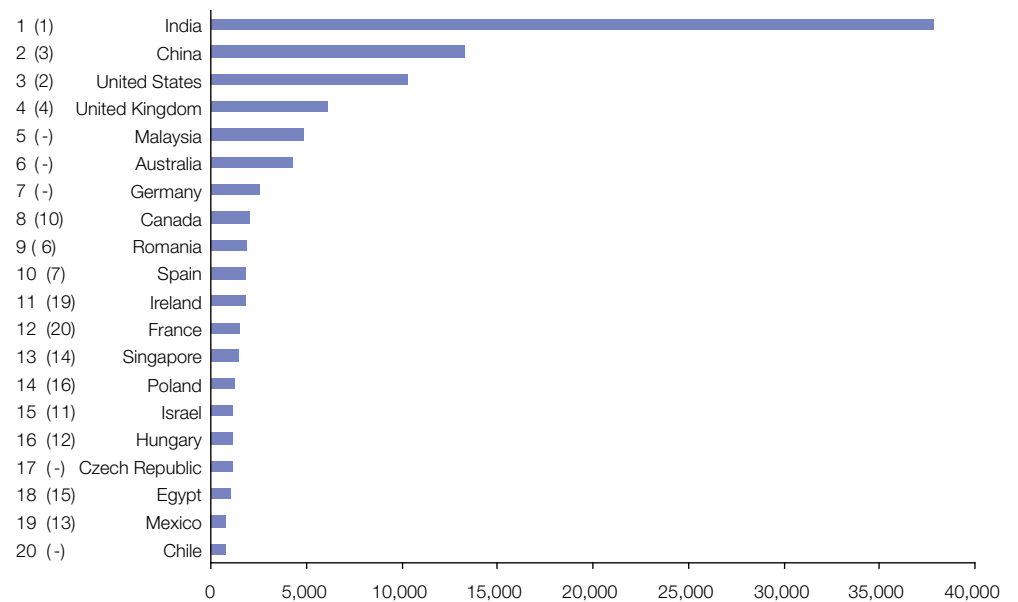
Figure 12. Top ranking destination countries by estimated jobs in services – 2008 (07)



R&D

Investment in stand-alone R&D projects experienced a dramatic decline -- of more than 35% compared to 2007 -- in jobs created from foreign investment during 2008. India continues to be the main recipient of R&D investment (albeit with a strong focus on software development), with China replacing the US in second position. It is also of interest to note that Malaysia, Australia, and Germany are all new entrants in 5th, 6th and 7th position respectively.

Figure 13. Top ranking destination countries by estimated jobs in R&D – 2008 (07)



Sector trends

The change in the impact of the deteriorating economic situation was also reflected in the performance of individual sectors, with investment activity in some sectors very badly affected, while others remained fairly stable or even experienced some gains.

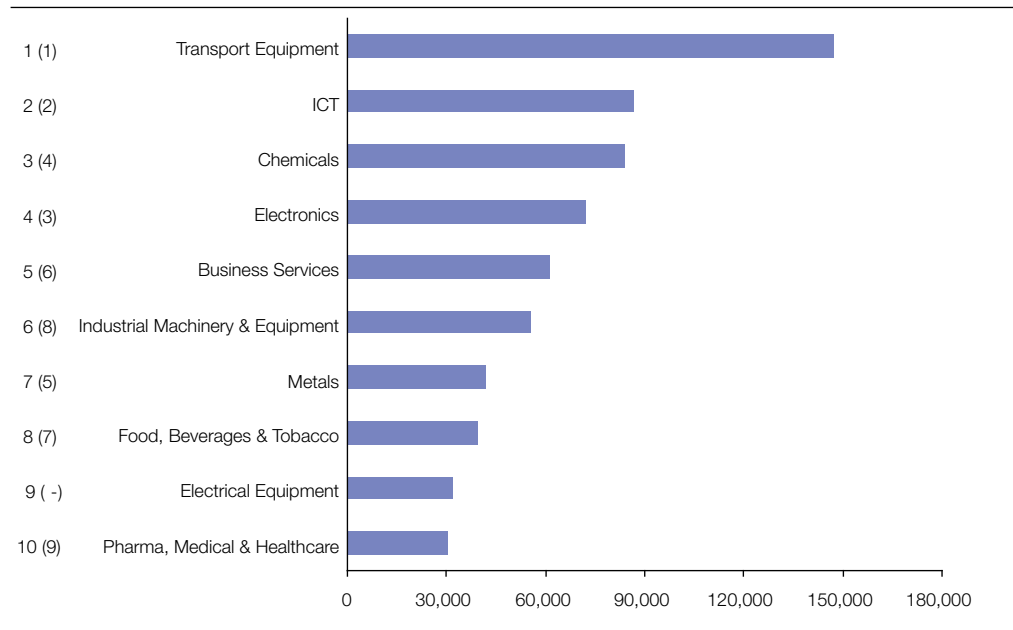
For example, the electronics sector created only approximately 70,000 jobs in 2008 compared to almost 200,000 in 2007, a decline of almost 65%. Similarly, the energy sector, which emerged as a new and fast growing sector for foreign investment in recent years as a result of buoyant renewable energy activity, saw a considerable decline and dropped out of the top 10.

In contrast, the business services sector experienced a slight increase in job creation from foreign investment compared to 2007, as the sector positioned itself as part of the solution for cost reduction activities in other sectors, with outsourcing of non-core service activities a feature in many corporate cost cutting initiatives.

Overall, transport equipment remained the top sector for job creation from foreign investment, albeit reduced to approximately 145,000 compared to almost 190,000 in 2007. The automotive sector saw a particularly severe decline as it experienced one of the toughest years for several decades, while the aerospace sector continued to experience significant investment activity.

Generally speaking, however, the sectoral ranking remained fairly stable, as most of the major sectors experienced considerable declines.

Figure 14. Top ranking sectors by estimated jobs - 2008 (07)

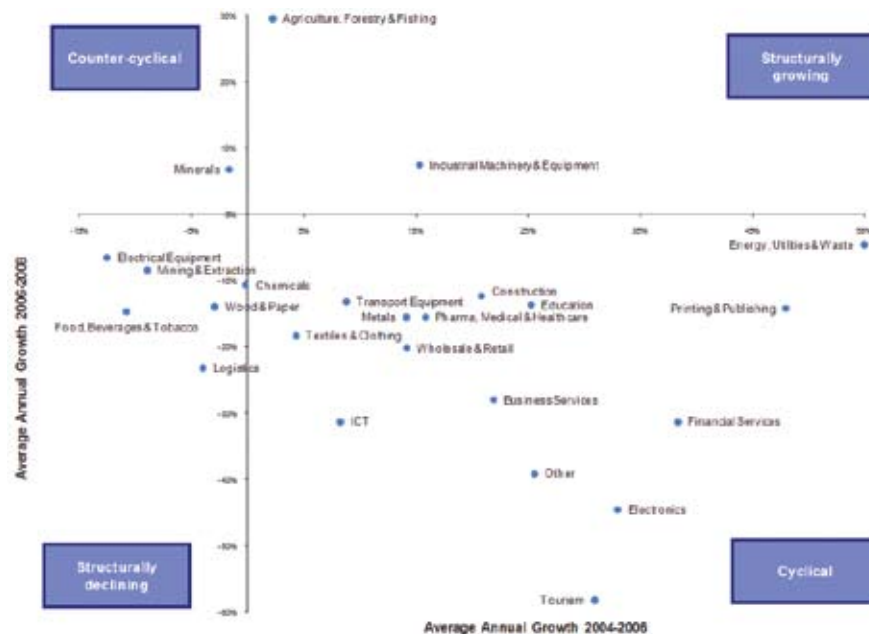


A temporary decline or a structural shift

In view of the findings above, it is useful to see whether the changes occurring in 2008 were mainly cyclical or the result of real structural changes in the world economy.

To wit, we determined which sectors were experiencing a structural shift as opposed to experiencing a cyclical change. Figure 15 below thus illustrates the performance of sectors during the period of global growth in jobs created from foreign investment from 2004-2006 on the x-axis, while the y-axis depicts the performance of countries during the period of global decline in foreign investment after the peak in 2006 until the end of 2008.

Figure 15. Crisis impact on sector investment



It is evident from the figure that the vast majority of the decline in job creation in the different sectors is cyclical rather than structural. Financial and business services are particularly cyclical, having grown considerably during the years of expansion and declining dramatically during the recession. Similarly, electronics has been subject to dramatic cyclical changes in investment activity.

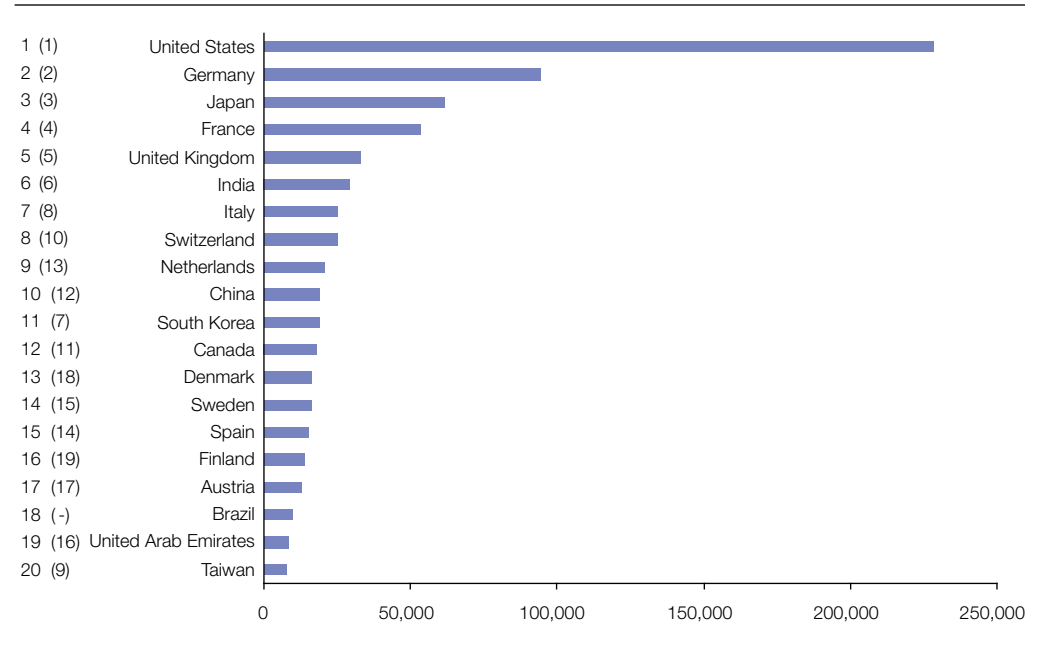
However, some sectors have experienced a decline in both periods, such as wood and paper, food and beverages, electrical equipment, and mining and extraction. These sectors are experiencing a structural decline in investment, which may have been accelerated during the recent global recession. In contrast, there are also sectors that are growing despite the economic downturn, notably industrial machinery and equipment. It is important to look closely at the fundamental structure of these sectors to judge the degree and speed of their responsiveness to changes in economic activity.

Growing role for emerging countries as sources of investment

While the global recession had its most immediate origins in the financial crisis, it also revealed more fundamental imbalances in the global economy. More specifically, large current account surpluses in emerging economies (e.g. China) based on export-led growth to high-spending countries running current account deficits (in particular the US and some European countries) was inextricably linked to the easy access to credit and low interest rates fuelling the growing debt in the US and parts of Europe. The economic crisis thus also reflects a need for re-balancing the global economy, with a growing role for emerging economies as key players on the world economic stage, not merely as locations for exporting to mature markets but increasingly as sources of investment and as consumer markets in their own right. In particular, while companies in the US and Western Europe are busy adjusting their operations to a financial and economic environment characterized by less leverage, cash rich companies from emerging countries are likely to become more prominent as sources of investment.

This trend is manifesting itself in growing investment from emerging countries, with, for example, India and China among the top 10 origin countries, with the latter moving from 12th to 10th. Brazil is now also in the top 20, highlighting the importance of emerging economies as sources of investment. Indeed, the rise of these countries as international investors may well be accelerated in the future as a result of the more permanent changes associated with the global economic crisis.

Figure 16. Top ranking origin countries by estimated jobs - 2008 (07)



Final thoughts and prospects for the future

2008 was a turbulent year for the world economy. A central feature of the corporate response to the crisis has been for companies to critically review and adapt their global footprints in attempts to reduce costs and consolidate operations. This has, on the one hand, involved reducing the number of sites that companies operate from and, on the other, exploring opportunities for reducing operating costs by moving operations to cost efficient locations. In this context, as one might expect, some countries have gained relatively, and in a few cases in absolute terms, while others have seen considerable declines.

Hence, some new countries have emerged as key contenders for investment, while traditional established locations have been the preferred locations for many consolidation efforts. In contrast, some of the recent hot spots, notably in Eastern Europe, have seen a considerable relative decline, as overheating and resultant loss of cost competitiveness has made them less attractive than new and emerging lower cost alternatives.

As the economic crisis continued and deepened through early 2009, these trends in location strategy have persisted, with investment stagnating or declining further as a result. Accordingly, the data for 2009 is likely to show a third year in a row with overall declining levels of investment activity.

However, looking forward, with the global economy turning the corner and beginning its path to recovery, foreign investment activity will follow. Indeed, as is evident from the analysis above, the vast majority of the decline in investment activity in the last two years has been cyclical rather than structural, suggesting that we will see growth in investment activity as the global economy begins to recover. In our corporate location advisory work we are seeing tentative evidence that companies are gradually becoming more willing to consider new investment projects, suggesting a forthcoming increase in investment activity, although when this will translate into concrete projects and announcements is less clear.

Furthermore, the analysis allows us to make some predictions about how a future recovery may affect foreign investment activity in different sectors. The sectors that have been oscillating dramatically in response to the cyclical changes in the economy, e.g. business services, electronics and ICT, may see a relatively rapid recovery in investment activity as the global economy begins to grow.

Sectors that have been less or even counter cyclical with respect to foreign investment, such as minerals, are less likely to see a major increase in investment activity as a result of a future recovery in global economic activity. Furthermore, sectors that are experiencing a structural decline in investment activity, such as wood and paper, are unlikely to benefit from the economic recovery.

In response to the current economic environment and future developments, countries, regions and cities that aim to position themselves for investment are facing a set of interrelated challenges.

First, they need to tailor their offers and value propositions to investors' immediate needs for cost reduction and consolidation, and ensure that their locations are seen as part of a solution rather than a problem. This means understanding how their location can help companies to optimize their global footprints as they aim to contain or reduce costs.

Second, locations must ensure that they are well positioned to take advantage of the opportunities arising from an eventual upturn in the global economy. Accordingly, it is necessary for locations to understand how they are positioned for investment in sectors that are likely to grow as a result of a forthcoming upturn, and take concerted action to improve their offer to investors in these sectors.

For the longer term, locations need to understand how they can take advantage of emerging sectors for foreign investment, and reduce their dependence on sectors in structural decline. More generally, the turbulence of the last couple of years has highlighted the importance of locations being adaptable and resilient in the face of a more disruptive global economic environment. Cities and regions must therefore think more widely about how they can maintain a competitive position and secure job creation and prosperity in a global economy that is increasingly characterized by change. Not only is the global economy as a whole experiencing greater volatility, but individual sectors are constantly subject to transformation, with new technologies, processes and business models creating new business needs and thus location drivers. In such an environment, as we stated at the outset, successful locations are those that can continuously develop, leverage and integrate their resources, infrastructure, technology and people into compelling value propositions for businesses. This entails effectively using information and analytics to assess and monitor what challenges a location is facing, spot structural and cyclical trends in investment activity, and identify relevant improvement needs. The understanding gained from such information and analytics can be used for developing, monitoring and adapting economic development strategies that enable locations to prosper in the global economy.

About GILD

GILD is a leading corporate investment tracking database, registering investment projects around the world. Our focus is on so-called 'mobile' projects, which means that for these investments a wider choice among different locations can be assumed. As such GILD allows representative and up-to-date location trend analysis on a global scale.

GILD is a dynamic database updated on a daily basis, with multiple media (newspapers, newsletters, websites, etc.) in the most important global languages screened for investment project announcements, which are then registered in GILD. Additional investment project data are received from many investment promotion agencies and other economic development organizations.

GILD monitors corporate investments at the project level. It records announcements and openings of new (greenfield) and expansion projects by companies. For each project announcement, details are registered on the investor, origin, location of investment, sector and cluster, activity and type of investment, as well as estimated jobs, capital invested, locations considered, and so on as available. Announcements of large labor intensive investment projects are validated directly with corporate sources, and corrected or excluded where appropriate to avoid overestimating projected job creations.

Investments through business mergers and acquisitions are not included in GILD since these investments are unrelated to attractiveness of individual locations, a key weakness in official FDI statistics. GILD aims at analyzing location decision trends, and as such it is the best possible information source for measuring countries' and regions' success in attracting new businesses.

Many organizations and FDI experts use capital investment as the main indicator for assessing the impact of new corporate investment on a location. For the purposes of our analysis, the emphasis is on the jobs created from the investment rather than capital invested. There are two primary reasons for this:

- Capital investment is a less reliable guide to the impact of the investment on the location, since much of the capital may be spent on purchasing equipment and material from elsewhere.
- For economic development purposes, job creation is a more important factor than capital investment.

About IBM Global Business Services

With business experts in more than 160 countries, IBM Global Business Services provides clients with deep business process and industry expertise across 17 industries, using innovation to identify, create and deliver value faster. We draw on the full breadth of IBM capabilities, standing behind our advice to help clients implement solutions designed to deliver business outcomes with far-reaching impact and sustainable results.

IBM Global Business Services offers one of the largest Strategy & Change practices in the world. Strategy & Change fuses business strategy with technology insight to help organizations develop and align their business vision across four strategic dimensions – business strategy, operations strategy, organization change strategy and technology strategy – to drive innovation and growth.

About Plant Location International

Plant Location International (PLI) is a global service of IBM Global Business Services' Strategy & Change practice, specialized in corporate location and economic development services. Operating as a fully globally integrated service - with a global center of excellence in Brussels, Belgium, supported by dedicated Global Delivery resources, and satellite teams in key markets – IBM-PLI provides expert services to corporate clients for analyzing international business locations for expanding or consolidating companies to select the optimal location (country/city). IBM-PLI also advises economic development organizations on improving their areas' competitiveness, strategic marketing, developing value propositions, and marketing tools, etc.

IBM-PLI is a leading innovator in location strategy and economic development tools and techniques, which are constantly being improved based on latest insight in corporate location decision making. Examples are:

- Cost-Quality location screening methodology, assessing the trade-off between cost and quality of communities as investment options for companies
- IBM-PLI's Location Benchmarking Tool, based on this methodology, allowing regions and cities to test their location's value proposition for targeted activities and successfully market their communities to investors
- The Global Investment Locations Database (GILD) which tracks location decisions for contestable investment projects around the world.

Further information

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