

Growing Beyond

Looking beyond the obvious

Globalization and new opportunities
for growth

About this report

Looking beyond the obvious: globalization and new opportunities for growth draws on three sources of original research: the 2012 Globalization Survey, an online survey of 730 global business executives from around the world conducted for Ernst & Young by the Economist Intelligence Unit; in-depth interviews with senior executives and high-level experts conducted at the end of 2012; and data from Ernst & Young's 2012 Globalization Index, which was developed by the Economist Intelligence Unit for Ernst & Young to measure the 60 largest countries/territories by GDP according to their degree of globalization. Among the respondents to the 2012 Globalization Survey, 433 were from developed markets and 297 from rapid-growth markets; of the latter group, 139 were from Brazil, Russia, India and China and 158 from other rapid-growth markets. Among the companies surveyed, the reported annual revenues were as follows: 23%, US\$10 billion or more; 24%, US\$1 billion to US\$9.9 billion; 49%, US\$100 million to US\$999.9 million; and 4%, under US\$4 million.

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Introduction



Globalization continues to define our business landscape, increasing the levels of cross-border trade, capital and labor integration.

A constant challenge for business leaders is to anticipate and interpret how globalization is changing, while understanding the opportunities and risks it creates. Although there may be little they can do to change global demographic shifts or capital flows, business leaders can react effectively to the forces of globalization or, even better, anticipate them to their advantage.


This latest edition of our annual globalization report clearly shows that globalization is evolving against a highly volatile economic backdrop. Although globalization continues, its pace has slowed from pre-recession levels and its nature has changed. Capital flows between East and West have become more evenly balanced and technology is now the key driver of globalization, promoting innovation across nations and cultures, regardless of location. By contrast, the globalization of talent is at an early stage, with skilled people clustered in some locations but scarce in others, and businesses everywhere struggling to match talented professionals with available positions.

Prospering in this globally integrated environment requires constant refinement of even the most sophisticated global business strategies. The businesses that will ride the next wave of economic growth will be those that understand the significance of globalization and tailor their strategies based on that understanding. They will explore new markets and establish well-rounded global business portfolios.

At Ernst & Young we recognize globalization as one of the defining issues of our time. For many years, we have worked with the Economic Intelligence Unit to study globalization trends and support our clients in their attempts to understand these trends and the advantages and risks they present. Our report, which is informed by the views of close to 800 global business leaders, looks at the most important elements of globalization for business.

The changing face of globalization will have a profound impact on the business landscape. It is now time for business leaders to respond with the flexibility, speed and unconventional thinking necessary to prosper in our increasingly connected world.

James S. Turley
Chairman and CEO
Ernst & Young



Executive summary

The changing face of globalization will present new challenges for companies in the coming years. Our research for this report, based on Ernst & Young's 2012 Globalization Index and Survey, reveals a business landscape of uncertainty and ambiguity, set against a backdrop of slowing cross-border integration. In this uncertain world, companies will need to look for growth in new ways and from new places. The trends and issues they must consider include the following:

Globalization continues, but it's different this time around. Although globalization – the cross-border integration of business – will continue in the years ahead, its pace will slow, with the financial crisis and subsequent recessions providing a tipping point. Trade, technology, culture, labor and capital will integrate at different rates across the 60 countries measured in the Index.

Companies must make “big bets” on markets they may not have considered before. To stimulate the global economy, head off competitors and ride the next wave of opportunities, businesses will need to bet on markets or regions of the world that may not be obvious choices today. This may mean considering not only rapid-growth markets outside Brazil, Russia, India and China (BRIC) but also developed markets, as well as creating nuanced and customized strategies for different markets, sectors, areas, regions

and countries. Taking “big bets” on carefully chosen markets, categories or technologies – those that match a business's existing competencies – offers the best chance of securing a sustainable competitive advantage.

The BRICs are still reliable options – for now ... For many multinational companies, Brazil, Russia, India and China were the big bets of the past decade. And there's no question that these powerhouses will continue to be major players in the world economy. But as their growth slows over the next few years and their operating environments become more challenging, companies must look for additional engines of growth.

... But the momentum is shifting to other hot spots. Increasingly, non-BRIC rapid-growth markets (such as Mexico, Turkey, South Africa and Vietnam) are emerging as attractive locations for global business. Despite their risks, these markets are more globally integrated than the BRICs on a range of trade, investment, cultural and technological criteria, and in the past three years have improved markedly in terms of ease of doing business, infrastructure, government policies and labor productivity. In particular, several countries and regions in Africa are shaping up to be among the most dynamic parts of the world for investment.



“To compete in a volatile and dynamic business landscape, organizations must invest in continuous learning so they can respond to change quickly and effectively. Turning diffuse data into usable information has never been more important. Using information technology and social media well helps – it allows organizations to capture the information they need faster and use it more collaboratively.”

Mark Weinberger, Global Chairman and CEO-elect, Ernst & Young

Are developed markets worth betting on?

It may not seem like it, given the problems in the Eurozone, uncertainty over the US's tax and budget policies, and the slow growth prospects for most of the world's advanced economies. But there are pockets of exciting opportunities in some developed markets, which can leverage their technological advantage. The penetration of broadband, social, digital, mobile and other advanced technologies is much higher in mature economies, allowing them to have a large share in the export of goods and services and maintain their dominant position in certain markets. The US, which is already benefiting from a wave of re-shoring and a resurgence of domestic manufacturing, may see growth in some industries thanks to the tremendous technological advances in the development of unconventional oil and natural gas resources, such as shale gas and “tight” oil, which could significantly move the country towards the long-held goal of energy independence. The availability of domestic energy at an affordable price will have a profound effect on global companies' decisions about where to locate production.

Operational changes are essential to picking the right big bets and increasing their chances of a payoff. To choose the best opportunities from a wide variety of markets,

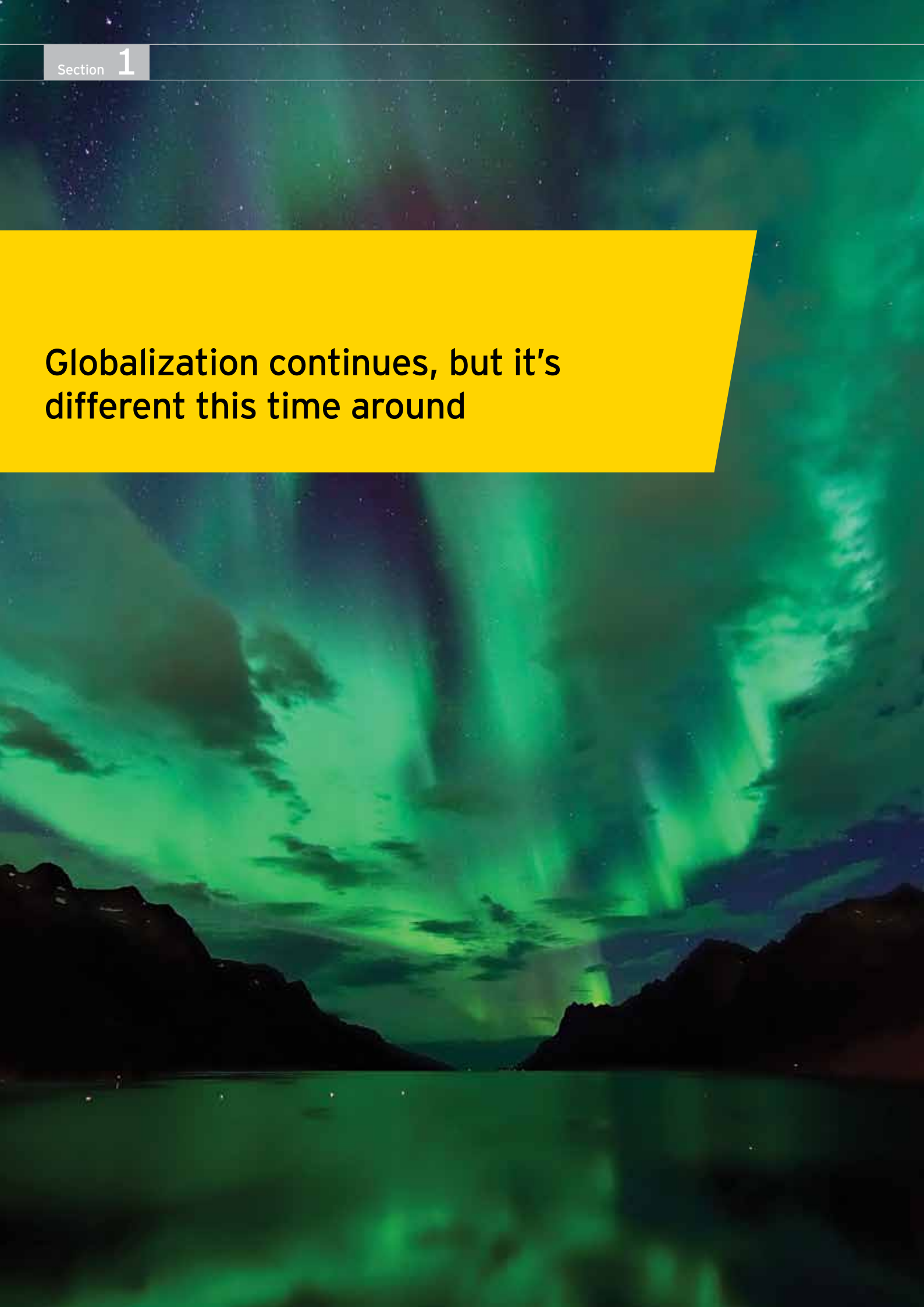
companies must adapt their operations to a new growth cycle – one that requires highly disciplined and rigorous strategic planning, execution and learning, all supported and enhanced by technology. A possible approach to this new growth cycle might include:

- **Strategic planning: allocate resources in a bold and focused way.** Deciding how to apportion scarce resources involves resolving many trade-offs and conflicts between slow-growth and rapid-growth markets, short-term and long-term returns, and volume-to-margin ratios. Once companies decide on the right balance of these elements, they must settle on a handful of key investments that offer the best promise of future growth. Making these bets clearly requires a high degree of confidence that an investment will work. Technology plays a big role here: business analytics, for example, can help companies build an investment case, evaluate risks, look at potential scenarios and simulate outcomes.
- **Execution: make your big bet investments as local and granular as possible.** Succeeding in the world's new markets means being immersed in them – tailoring offerings to meet the exacting needs of local customers, forming close relationships with local officials and communities,

manufacturing locally or establishing regional supply chains, and empowering local managers to make decisions so that they can act on opportunities swiftly. Again, technology can help by providing corporate parameters for decision-making.

- **Learning: transform your company into a “learning organization.”** It's no news to anyone that rapid change is the new normal in business today and that many outcomes will remain unpredictable. Yet companies can learn to manage change better. This is where the power of technology really comes into play. Applications such as business intelligence and analytics, mobility solutions, and social networking allow businesses access to a wealth of data that they can feed into future strategic planning and use to become lean and flexible organizations that are well positioned to thrive in the global economy of the future. An organization with a mindset of continuous learning will be best equipped to manage successfully in a turbulent and ever-shifting business landscape.

**Globalization continues, but it's
different this time around**

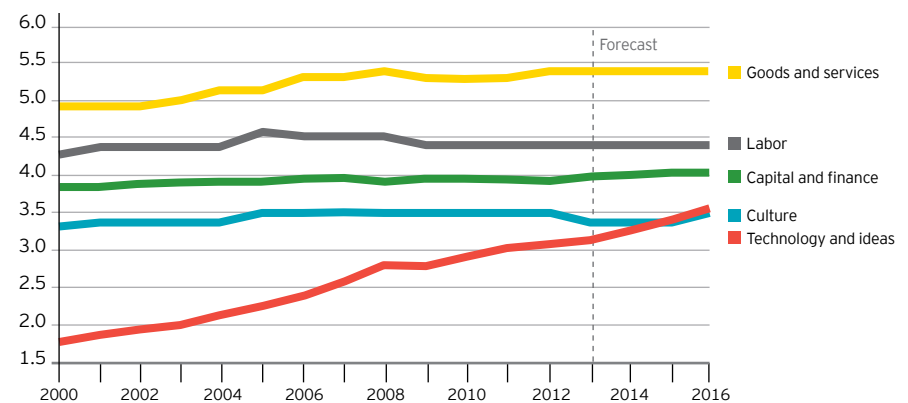


If your company plans its future strategies based on assumptions made even just a year or two ago, it will struggle to stay competitive. Businesses need to make some radical changes to their assumptions and strategies if they are to weather the next round of globalization.

What has changed? The overall rate of globalization is slowing and its character is different. Although trade in goods and services is returning to pre-financial-crisis levels and the flow of capital shows a stable increase, the game changer today is technology and the flow of ideas (see Figure 1). Technology is the foundation of today's increasingly digital and connected world and it is having a profound impact on every market (see Figure 2). By contrast, the globalization of talent is still at an early stage: businesses worldwide struggle to find workers with the right skills and experience, and pools of top talent cluster in some locations but are scarce in others.

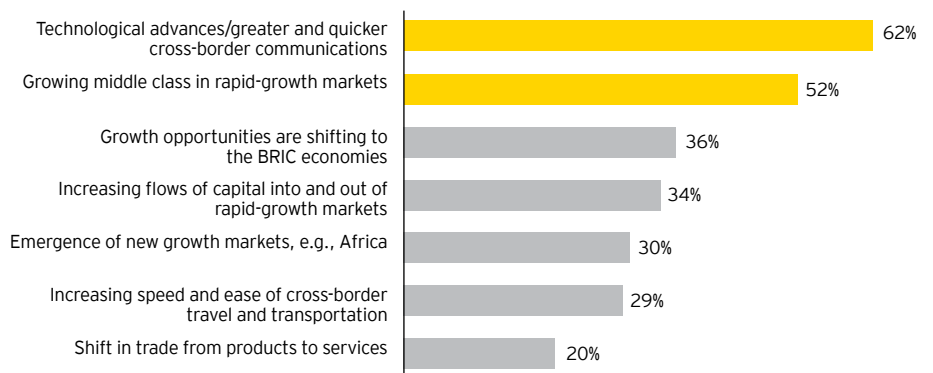
The Index also shows distinct geographic differences between markets as capital flows show a return to the US and core Eurozone countries. As trade integration stabilizes, we see a shift between import and export countries, with rapid-growth markets emerging as stronger consumer markets and developed markets regaining strength as producers and exporters of goods and services.

Figure 1: Globalization index components show varying integration rates



Source: Ernst & Young 2012 Globalization Index Note: Base = 60 largest countries/territories by GDP

Figure 2: Technological advances are the top driver of globalization



Source: Ernst & Young 2012 Globalization Survey Shown: percentage of all respondents (730)
Question: In your opinion, which of the following factors are accelerating the rate of globalization?

Companies must make “big bets” on markets they may not have considered before

In this world of changing globalization patterns, extensive technology integration and rapidly shifting demographics, organizations are faced with great complexity and uncertainty. It's not always clear where the next big opportunity lies, and it may be tempting for companies to play it safe and stick to proven investment destinations. But to ride the next wave of growth, businesses will need to bet on markets or regions of the

world that may not be obvious choices today. Our 2012 Globalization Survey, conducted alongside the Globalization Index research, shows that leading companies are adopting a multi-market approach. While the BRICs remain critical to their strategy, they're also looking closely at opportunities in non-BRIC emerging markets and developed markets. They're discovering that a standard strategy for a group of markets – e.g., an “emerging

markets” strategy – no longer works. Instead, what they will need are nuanced and customized strategies for different markets, areas, regions, sectors and countries.

Heathrow

Global decision-making takes off

Over the past decade, the profile of the passengers passing through UK airports, such as Heathrow, Stansted and Glasgow, has changed. Travelers from rapid-growth regions of the world, including Asia and the Middle East, were once rare visitors, but as economic weight shifts to the South and East, the number of passengers touching down from these regions has increased significantly.

It is not just the passenger profile that has changed for Heathrow Airport Holdings Limited, formerly BAA, which owns Heathrow Airport. Its capital structure has also moved in line with changes to the global economy, becoming more heavily weighted toward rapid-growth markets.

In October 2012, CIC International, a subsidiary of China Investment Corporation, China's main sovereign wealth fund, acquired a 10% holding in Heathrow Limited. This deal followed an investment by Qatar Holding – the direct investment arm of Qatar's sovereign wealth fund – that, assuming the deal is approved by European Union competition authorities, would make it the second-largest shareholder in the company with 20%.

“As growth has moved to the emerging markets, they have been accumulating trade surpluses year after year, and they have the cash to invest,” says Colin Matthews, CEO of Heathrow Limited. “At the same time, foreign pension funds have been attracted because the long-term returns available in the airport industry match their liabilities.”

These new investors add to a base that is already international. Ferrovial, the Spanish building company, owns more than one-third of Heathrow Limited's shares, following the company's £10.4 billion acquisition in 2006. Heathrow Limited also has significant investors from Canada, the US and Singapore.

“Heathrow Limited has a well-diversified investor base with a global geographical focus and a range of strategic and financial perspectives,” says Matthews. “Having a global investor base allows us to raise equity capital at a low cost, reducing our cost of capital. And our international investors' support has also allowed us to continue developing our airports.”

International investors also own Heathrow Limited's debt, with bonds issued in sterling, Swiss francs, euros, and Canadian and US dollars. “In the current context, companies like ours offer attractive returns to investors who otherwise might have lent money to governments,” says Matthews.

The Qatari and Chinese investments will mean that representatives from these investors will gain a seat on the airport's operating board. For Matthews, this heralds a new phase in the company's globalization, in which its decision-making will also become international. “It's going to be interesting having a group of investors sitting around the board table who are plugged into a very global set of views on investment and trade,” he says.

“We do not align ourselves with markets in the traditional way of thinking about emerging versus developed,” says Maher Al-Haffar, Senior Vice President of Communications, Investor Relations and Public Affairs at Mexico-based CEMEX, one of the world’s leading manufacturers of cement, concrete and related building materials.

“What we try to look at is the structure of the market. Sometimes you have emerging markets that do not have a high-growth trajectory, and you also have high-growth markets that are not particularly profitable. China, for example, has high growth but is much lower on the priority list than somewhere like Mexico or India because the structure of the market is different.”

With many investment possibilities available worldwide, companies will need to consider where they allocate their scarce resources. Not every opportunity needs to be seized. Taking “big bets” on carefully chosen markets, categories or technologies – those that match or complement a business’s existing competencies – offers the best chance of securing a sustainable competitive advantage.

The National Football League

Scoring with technology

The National Football League (NFL) has experienced numerous bumps on the road to globalization. Efforts to make American football a global sport began in the 1970s with occasional exhibition games played in various countries around the world. The following decade, the NFL established a European League, but closed it down in 2006, disappointed by its performance. “Ultimately, our European fans wanted to access the best product, and that was the NFL games that were played locally in the US,” says Chris Parsons, the NFL’s Vice President of International Business.

Since then, the NFL has sought to bring the real product to the fans directly in key markets, by playing regular NFL season games overseas. “We focused on a number of strategic geographies, like the UK, Mexico and Canada, where we felt we could create forward momentum,” says Parsons. “These are markets with good scale, a sizable business opportunity, and a competitive media market with strong demand for good sports content.”

At the same time, the NFL built up local organizations in these key markets to drive fan interest and engagement throughout the course of the season. “The aim was to create local events, bring on board sponsorship, and work with our licensing partners to create comprehensive marketing strategies that activate fan engagement,” says Parsons. “This has been key to succeeding in overseas markets.”

But perhaps the biggest enabler of all has been technology. In the past, the NFL relied on broadcasting as its primary route to market, but new channels, such as social media and online, have created powerful new ways through which the NFL can distribute its product to a growing international fan base. “Technology has allowed us to have much more localized messaging and communications,” says Parsons. “In addition to broadcasting games, we now have multiple digital products that allow our fans to access the NFL, such as subscription products to stream games and websites in local languages.”



“Taking advantage of new opportunities in an uncertain and volatile marketplace involves operating with the utmost efficiency. Organizations need to be rigorous, disciplined and highly focused in their choice of markets and investments.”

John Ferraro, Chief Operating Officer, Ernst & Young

“You can’t play in every market,” cautions Ian Hudson, President for Europe, Middle East and Africa at DuPont. “You look at GDP growth, population and the types of industries that these markets have and how that fits with your own competitive advantages. If you look at Nigeria with 180 million people and Indonesia with 180 million people, Indonesia is probably an easier choice than Nigeria, although maybe in the longer term Nigeria may have bigger potential. It’s those sorts of calls that we have to make – although in this case we have to be in both.”

Hudson adds that in the past few years, companies have been forced to become meticulous about where they place their resources. “In the pre-financial-crisis years, when everything was growing at 10% to 15%, you just put up an office anywhere and hoped that it would bring in business,” he says. “This led companies to place offices in small countries that would just never have had critical mass. You have got to have a laser-like focus on pinpointing pockets of growth, but it’s become much more difficult to define growth and ensure that it is profitable.”

What makes selecting the next growth opportunities even more difficult is that companies must make those bets now. They cannot wait for uncertainty to go away – the problems in the Eurozone, and possible fallout of the fiscal uncertainty in the US, for example, are likely to persist for several years. By waiting too long to invest in their big bets, businesses will allow competitors to build a presence and market share in those areas, making it more expensive to commit resources and more difficult to compete effectively when they finally decide to take the plunge. “If you are a technology company, you want to establish a leadership position in a market which is in an adoption phase,” says Alfonso di Ianni, Senior Vice President for the Eastern Central Europe, Middle East and Africa regions at Oracle. “We need to make sure that our technologies are taken first before the others.”

The BRICs are still reliable options – for now ...



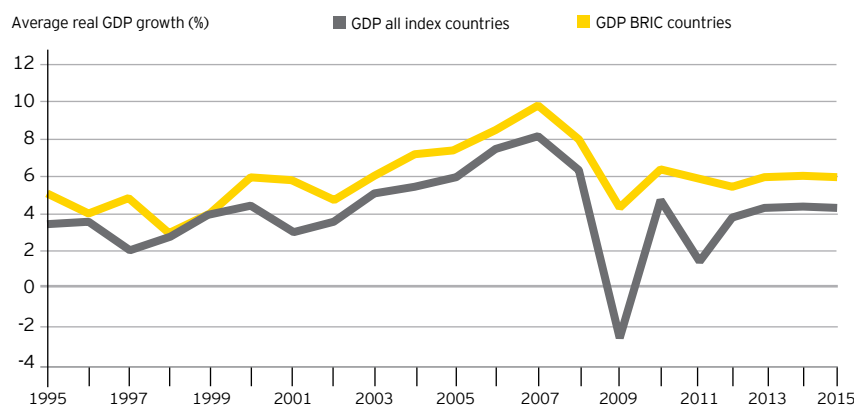
For many multinational companies, Brazil, Russia, India and China were the big bets of the past decade. And there's no question that these powerhouses will continue to be major players in the world economy. Not only will the BRICs' gross domestic product (GDP) grow faster than that of the other countries included in the Index (see Figure 3), but the BRICs will also integrate further with the global economy. Yet the challenges of operating in the BRICs are increasing, as their slowing real growth, rising inflation and labor costs, political instability, infrastructure shortfalls, and bureaucratic obstacles chip away at business confidence.

"Emerging markets have had a bit of a rough ride over the past 12 months, proving once again that on a cyclical basis they are vulnerable to disappointments in other parts of the world," says Stephen King, Chief Economist at HSBC. "China wobbled this year, but with more stimulus, its growth should come back on track. India has struggled with a lack of supply, reform and investment in the right areas. Brazil, always a very cyclical economy, slowed significantly through the course of this year, and its recovery will depend to some extent on growth in other parts of the world."

Gavyn Davies, a macroeconomist and former head of the global economics department at Goldman Sachs, notes that over the course of 2012, GDP projections for the BRICs have dropped substantially for the first time in many years. "The financial markets have been adjusting to slower growth in general, but slower growth particularly in the BRICs, where there have been downgrades of at least 1% to GDP in 2012," he says. Growing protectionism is yet another threat to the

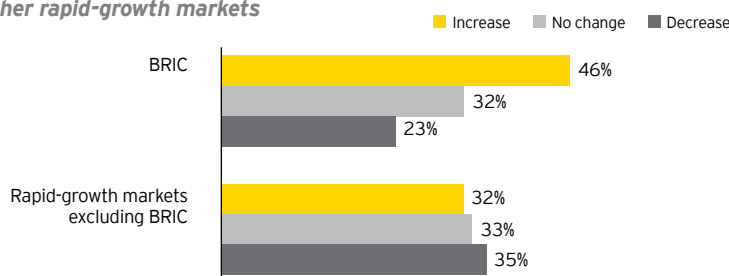
BRICs' attractiveness. Nearly half of the respondents to our 2012 Globalization Survey say they expect declining growth, along with increased global competition, to spark more protectionism among the BRICs (see Figure 4). In fact, companies based in the BRICs are themselves looking beyond their home markets for opportunities to sustain growth, as Ernst & Young's *Beyond Asia* series of reports reveals.¹

Figure 3: BRIC countries continue to grow at a faster pace than other markets



Source: International Monetary Fund, World Economic Outlook Database, October 2012 outlook, accessed December 2012

Figure 4: Protectionism is more likely to increase among the BRICs compared with other rapid-growth markets



Source: Ernst & Young 2012 Globalization Survey Shown: percentage of all respondents (730)
Question: How do you expect the level of protectionism in the following markets to change in the next 12 months?

Footnote

1. *Beyond Asia: strategies to support the quest for growth*, Ernst & Young, July 2012; *Beyond Asia highlights* (individual market reports) for Mainland China, Hong Kong (SAR), Indonesia, Malaysia, Singapore, South Korea, Taiwan, Thailand, Vietnam, Ernst & Young, July-August 2012; *Beyond Asia: developed-markets perspectives – meeting the challenge of changing global competition*, Ernst & Young, October 2012

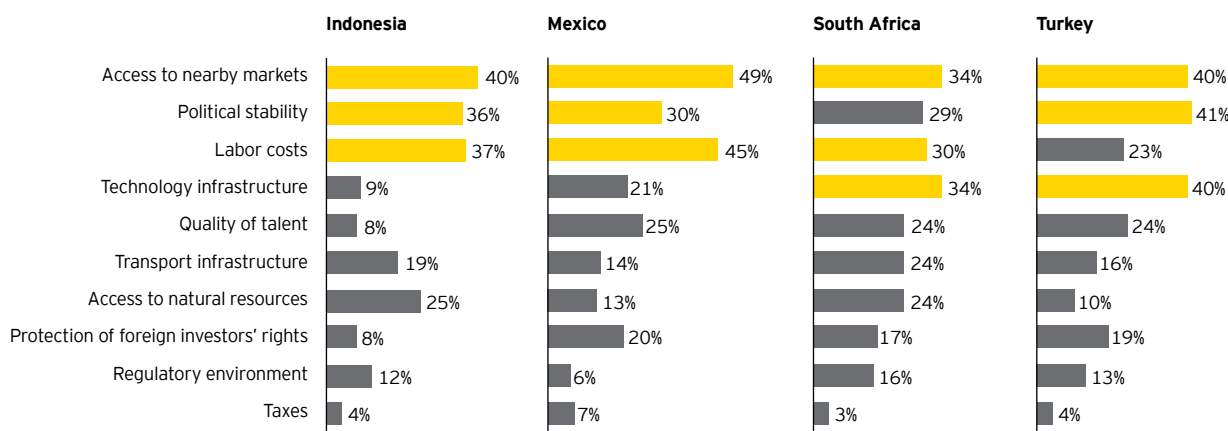
... But the momentum is shifting to other hot spots



Against this backdrop, it's critical for businesses to look for alternatives - and the search may well involve making unconventional choices. Increasingly, non-BRIC rapid-growth markets are emerging as hot spots for global business. These markets are more globally integrated than the BRICs on a range of trade, investment, cultural and technological criteria, and this is set to continue through 2016, as our Index data shows. Many of these markets also show consistently high economic growth close to that of the leading BRICs. For example, Turkey, Mexico and Indonesia closely shadow China and India in terms of GDP growth from 2000 through 2015. Other promising locations include Peru, Colombia, Venezuela, Malaysia and Vietnam, as well as several countries and regions in Africa that are shaping up to be among the most dynamic parts of the world for investment.

In our survey, the number of executives who view rapid-growth markets other than the BRICs as the most important source of new revenue nearly doubles from 26% today to 45% in three years. And they're following the money. Executives from all geographic regions expect to increase investment in these markets - 82% plan to do so, and 4 in 10 expect to increase it by more than 10%. Our respondents believe Indonesia, Mexico, South Africa and Turkey to be the most competitive locations because of their access to nearby markets, political stability, and transport and technology infrastructure (see Figure 5). In fact, our survey shows a significant shift in fundamentals: a vast majority of executives see improvement in non-BRIC rapid-growth markets in terms of ease of doing business, infrastructure, government policies and labor productivity.

Figure 5: Top three competitive drivers for non-BRIC rapid-growth markets



Source: Ernst & Young 2012 Globalization Survey Shown: percentage of all respondents (730)

Question: Which of the following non-BRIC rapid-growth markets will be the most promising for your company over the next three years? For your number one rated market, please indicate what makes it most competitive in its peer group. Please select up to three.

This can be seen as part of a broader cycle of economic development. As an increasing number of emerging markets around the world develop the capability to be manufacturing leaders, they leapfrog other countries – a cycle driven by the development and dispersion of new technologies. “As technology has become more accessible, and as their education base grew, certain countries suddenly found themselves in the position where they could build things that historically they would never have been able to,” says Colm Reilly, Head of the UKTI Investment

Services group. “And that is why you’re starting to see the growth of markets beyond the BRICs, like Mexico, Indonesia or some countries in Africa, where you’re starting to see a propensity for them to leapfrog because of technology. Mexico, for example, is now the No. 1 producer of flat-screen TVs. And as long as they keep educating their young people, which they are doing very successfully, then you would expect that to continue. These countries have available capacity in skills at a relatively low cost, which is not something that every country can claim at the moment.”

Businesses are also looking to non-BRIC rapid-growth markets primarily to grow their demand base, rather than to cut costs. This is an important shift in mindset. It reflects the relatively attractive economic fundamentals in these markets, such as favorable demographics and the potential for income growth, although higher inflation is altering the equation on production costs (see Figures 6 and 7).

Tata Power

Energizing the community

To succeed in rapid-growth markets, companies that invest in them must do more than just deliver a product or service tailored to the needs of the local population. They must also contribute to society in ways that often go well beyond the scope of making a profit. With many of these markets in urgent need of health care, education, infrastructure and other basic services, global companies would be well advised to work closely with local governments and communities to combine commercial interests with long-term social development.

Tata Power, India’s largest integrated power company, pays close attention to how it can help the communities in the rapid-growth markets where it operates. In recent years, the company has been expanding its geographical reach into four key regions: Africa, the Middle East and Turkey, South Asia, and the ASEAN region.

“When we are expanding into a new geography, there is one key concern at the top of our mind: not to act like a foreign company,” says Anil Sardana, CEO of Tata Power. “We try to behave like a local company by partnering with government and local players and by developing a genuine sustainability program. This encompasses corporate social responsibility, biodiversity and engaging with every stakeholder. And all of this goes hand-in-hand with a long-term commitment to the markets.”

Underlying this strategy is a deeply held belief that companies need to give back to society before they earn the right to expand. “You have to make sure you make a positive impact before you can expect society to share their land or resources,” says Sardana. “Otherwise, you don’t earn the entitlement to stay.”

A year ago, for example, Tata Power embarked on a 50/50 joint venture with Exxaro, a South African mining group, to develop a portfolio of renewable and non-renewable fossil-fuel based projects. As part of the investment, Tata committed to developing schools and supporting village programs, water projects and other community-related efforts. “Working closely with the local government helps develop long-term relationships based on trust,” says Sardana. “People have faith that we have not come to take advantage of them. There is a sense of equality and of being all in it together.”

This philosophy is at the heart of Tata – and is embedded in the company’s governance. Approximately two-thirds of the equity capital of Tata Sons, the parent company of Tata Power, is held by philanthropic trusts endowed by members of the Tata family. “The main goal of these trusts is to invest the dividends back into society,” emphasizes Sardana. “And they have been doing this every year for the past 100 years. It is literally in our DNA.”



“It will take strong and decisive leaders to stimulate global economic growth. And those leaders must come from diverse backgrounds and have international experience, as well as a global mindset. That is the key challenge for organizations today: developing a pipeline of the type of leaders we need for the future.”

Beth Brooke, Global Vice Chair, Public Policy, Ernst & Young

Sub-Saharan Africa, in particular, is a magnet for investors. The International Monetary Fund estimates that foreign direct investment (FDI) in the region has surged 50% since 2005. FDI projects abound in manufacturing, infrastructure and services. Seventy-three percent of respondents to Ernst & Young’s 2012 Africa attractiveness survey of more than 500 investors and business leaders

anticipate that Africa’s attractiveness will improve over the next three years.²

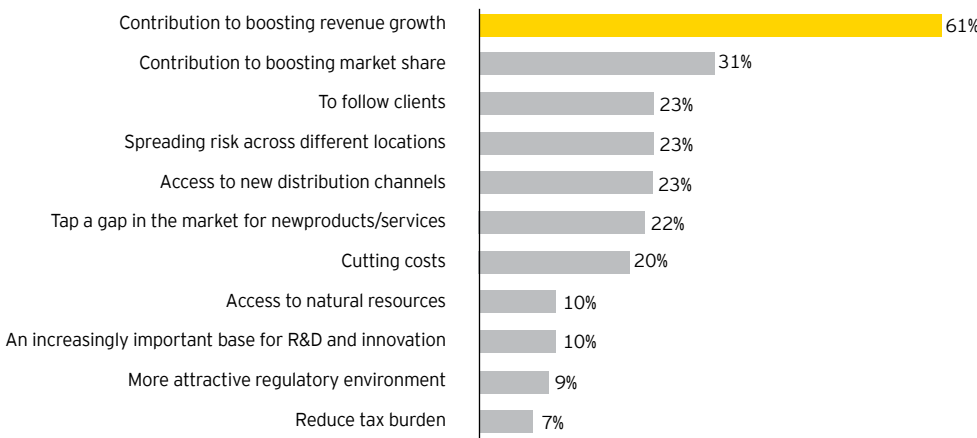
“There is a lot of pent-up demand across Africa, whether it’s for manufactured goods, white goods, consumer products or technology,” says Austin Okere, CEO of Computer Warehouse Group, based in Nigeria. “If you look at a region like Western

Europe, almost everybody has a fridge, almost everybody has a television set and they are covered by medical insurance of one sort or another. In Western Europe, it’s all about replacements, whereas in Africa it’s about first-time acquisition. This means that Africa has more headroom for growth.”

Footnote

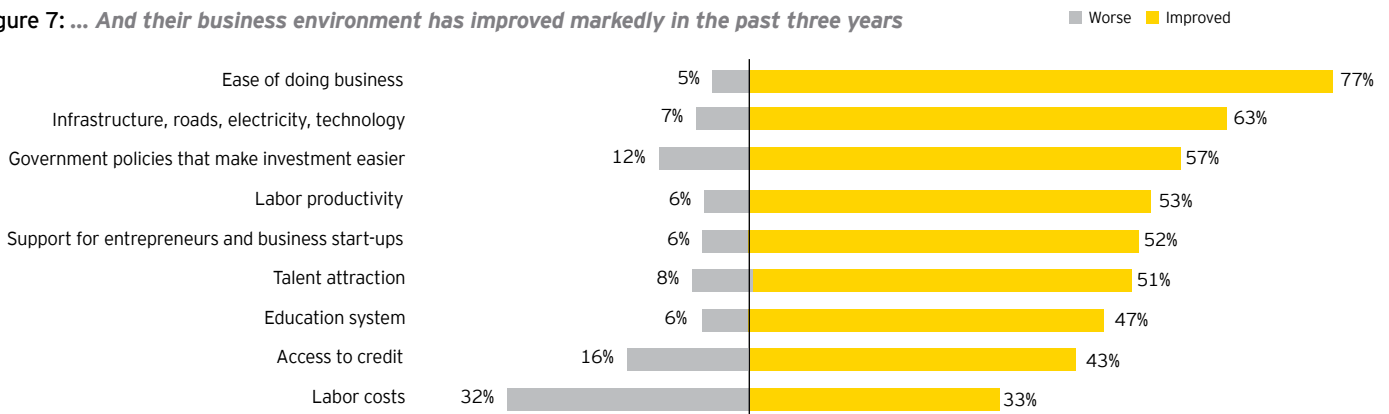
2. *Building bridges: Ernst & Young’s attractiveness survey 2012 – Africa*

Figure 6: *Non-BRIC rapid-growth markets offer a major end-demand opportunity ...*



Source: Ernst & Young 2012 Globalization Survey Shown: percentage of all respondents (730)
 Question: What are the main drivers for your company’s investment in these frontier markets over the next three years? Select up to three.

Figure 7: *... And their business environment has improved markedly in the past three years*



Source: Ernst & Young 2012 Globalization Survey Shown: percentage of all respondents (730)
 Question: How have the following aspects of the business environment in frontier markets changed in the past three years?

“In the next decade, growth will be very substantial in African countries. They are the potential BRIC economies of the future.”

Michael Lalor, Lead Partner, Africa Business Center, Ernst & Young South Africa

In the 2012 World Bank Doing Business rankings, eight African countries rank ahead of China, the highest-ranked BRIC country, 14 ahead of Russia, 16 ahead of Brazil and 17 ahead of India. In comparison with the Ernst & Young Emerging Markets Center’s portfolio of 25 rapid-growth markets,³ South Africa would rank sixth in terms of the relative ease of doing business, behind South Korea, Saudi Arabia, Thailand, Malaysia and the United Arab Emirates.

“Other countries are slowing, but Africa is an exception to the rule - it is the one bright spot in an otherwise depressing forecast,” says Michael Lalor, Lead Partner of the Africa Business Center at Ernst & Young South Africa. “In the next decade, growth will be very substantial in African countries. They are the potential BRIC economies of the future.”

Yet, Africa and other non-BRIC new markets clearly present their own particular challenges. Respondents to Ernst & Young’s 2012 Globalization Survey overwhelmingly cite several factors, including political corruption, as a great risk in these markets (see Figure 8). Indeed, global risk consultancy Control Risks has increased the political risk ratings in nearly a dozen African states over the past five years. In part, this increased risk can be ascribed to the huge inflows of money into sub-Saharan Africa and

governments’ desire to “acquire” a share of it through institution building, according to Michael Denison, Research Director at Control Risks and former Special Adviser to the UK Foreign Secretary. “Before, the regulatory environment was relatively open or even unregulated in certain sectors,” he says. “Now governments are beginning to build a framework of commercial law and regulations that will allow the state to recover more of the revenues that have been obtained. This then raises a whole range of second-order risks.”

Footnote

3. Argentina, Brazil, Chile, Colombia, Czech Republic, Egypt, Ghana, Greater China including Hong Kong (SAR), India, Indonesia, Kazakhstan, Korea, Malaysia, Mexico, Nigeria, Poland, Qatar, Russia, Saudi Arabia, South Africa, Thailand, Turkey, Ukraine, United Arab Emirates, Vietnam

Driving toward a granular approach



By Mike Hanley
Global Automotive Leader
Ernst & Young

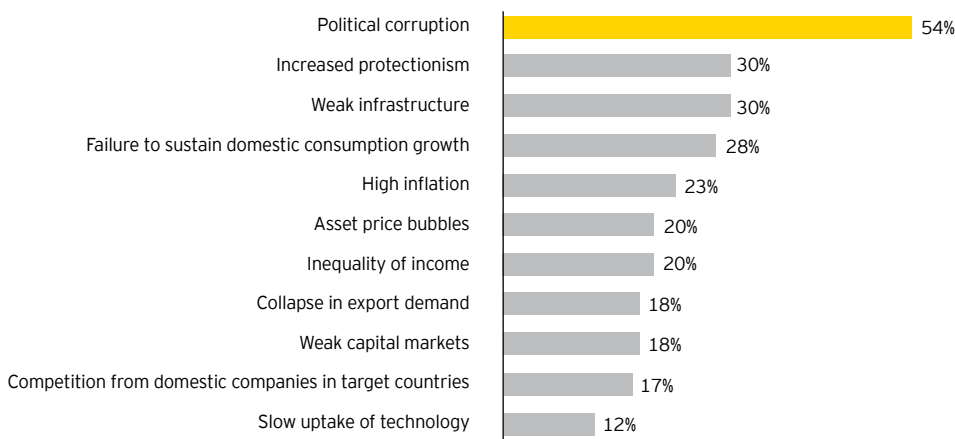
The automotive industry is embarking on a new wave of geographical expansion. For the past few years, car makers have faced significant challenges in developed markets and have targeted their investment at the BRIC economies, especially the huge consumer markets of India and China. These will remain critically important over the next decade, but automotive companies recognize that they cannot become too dependent on them. Growth across the BRICs is slowing and the market has become extremely competitive. The operating environments in these economies are also challenging.

As a result, what we see today is a much greater emphasis on non-BRIC rapid-growth markets. A key reason for this relates to demographic change and economic growth. Many of these countries are undergoing a very rapid rate of urbanization. In Africa, for example, we see the growth of mega-cities, such as

Lagos, Cairo and Kinshasa. This is creating an emerging and fast-growing middle class, with citizens who see car ownership, or sometimes car sharing, as an important component of their new lifestyle. Automotive companies are looking very closely at these markets and also playing an active role in helping cities think about urban mobility.

Automotive companies have learned that when investing in any large rapid-growth market, they need to take a granular approach. In China, for example, the needs of customers in the major cities of the Eastern Seaboard may be very different from those of the population in the interior. As a result, automotive companies often segment these markets, targeting luxury cars at the bigger coastal cities, and smaller, value models at the second-tier or third-tier cities.

Figure 8: Political corruption tops list of risks in non-BRIC rapid-growth markets



Source: Ernst & Young 2012 Globalization Survey Shown: percentage of all respondents (730)

Question: What are the key risks that could derail these frontier markets over the next three years? Select up to three options.

The impact of political risk also depends on the particular industry, its investment time horizon and its relationship with local governments. There is great political risk, for example, in investing large sums of money in a volatile regime where no one knows who the next head of state is going to be. "If you go to the resources sector, particularly mining and oil and gas, these are enormous issues," says Julian Birkinshaw, Professor of Strategy and Entrepreneurship at London Business School. "If you ask a BP or a Rio Tinto what are the things that keep their chief executive awake at night, it will essentially be around the political risk or challenges of doing business in Russia, Brazil or various parts of Africa."

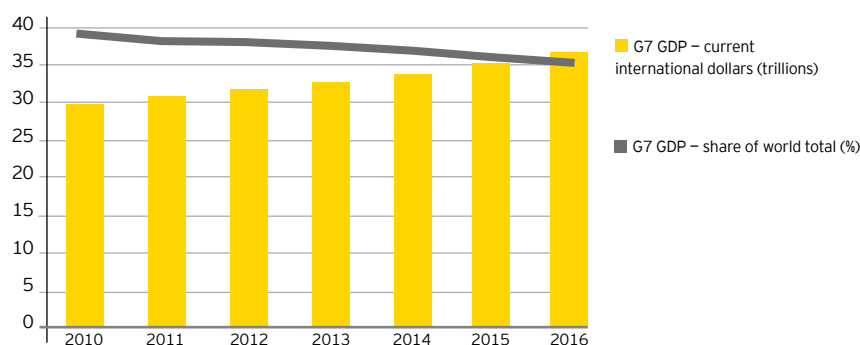
Companies that invest in rapid-growth markets often use partnerships and alliances, both as a means to obtain the license to operate and to build on-the-ground knowledge. Local partners have a deep understanding of customer needs and know how these are evolving. This can be extremely valuable so companies don't make the very expensive mistake of setting up a factory in a new market only to find that the models being built do not meet the needs of customers. Many automotive companies have learned valuable lessons from their experience of investing in the BRICs and will be able to apply this knowledge in the next wave of their investment.

**Are developed markets
worth betting on?**



So, while many of the non-BRIC rapid-growth economies are worth a big, mostly long-term bet, they're only part of the picture. To create a well-rounded portfolio, investors will need to diversify their bets to include several mature markets, which are making a comeback in certain areas and sectors. That may seem surprising in view of the current bleak economic outlook for the G7, but it's important to note that although rapid-growth markets are picking up output share, developed markets are still major drivers of world economic activity (see Figure 9).

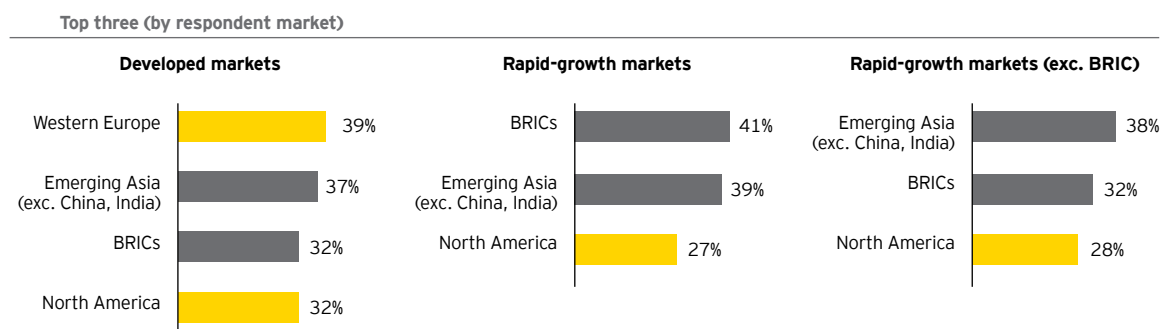
Figure 9: *Advanced economies remain important drivers of world economic activity*



Source: International Monetary Fund, World Economic Outlook Database, October 2012 outlook, accessed December 2012
 Note: The same scale is used for both series of data.

For the respondents to our 2012 Globalization Survey, North America and Western Europe remain critical to protecting the bottom line (see Figure 10). Although new investment in these regions is still slow to take off (and the potential impact of the fiscal uncertainty in the US could affect corporate investment), high energy costs and shorter product life cycles are driving global organizations to pursue near-sourcing (see Figure 11). In the next three years, the number of respondents who expect to outsource more operational functions to providers in mature markets will rise to 36% from 22%; the number that plan to near-source previously outsourced activities will more than double, from 14% to 35%.

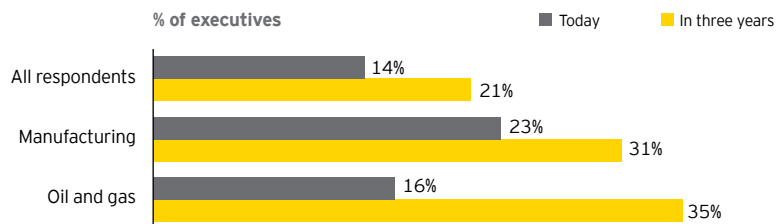
Figure 10: *Developed markets are highly important to companies' bottom lines in the next three years*



Source: Ernst & Young 2012 Globalization Survey. Shown: Percentage of respondents in developed markets (433); rapid-growth markets (297) and non-BRIC rapid-growth markets (158)
 Question: Which of the following markets is likely to be the most important for your company's bottom line in the next three years?

Mature markets offer several pockets of promise. Innovation and exchange of technology and ideas give these markets an edge over their rapid-growth counterparts, as our 2012 Globalization Index shows. Advanced economies that can leverage these capabilities are at an advantage. The diffusion of broadband, social, digital and mobile technologies is much higher in mature markets, enabling them to use it to their advantage and retain a high share in the export of goods and services, maintaining their dominant position in certain markets. Our Index data reveals a correlation between a strong integration score on technology and ideas and a superior share of world goods exports, suggesting that countries in this group are able to leverage their technological strengths to dominate export markets (see Figure 12). The UK, for example, is regaining its competitiveness, ranking eighth in the World Economic Forum's Global Competitiveness Report 2012-2013, after having fallen from seventh to 12th between 1997 and 2010. As the report highlights, the UK continues to have a sophisticated and innovative business environment.

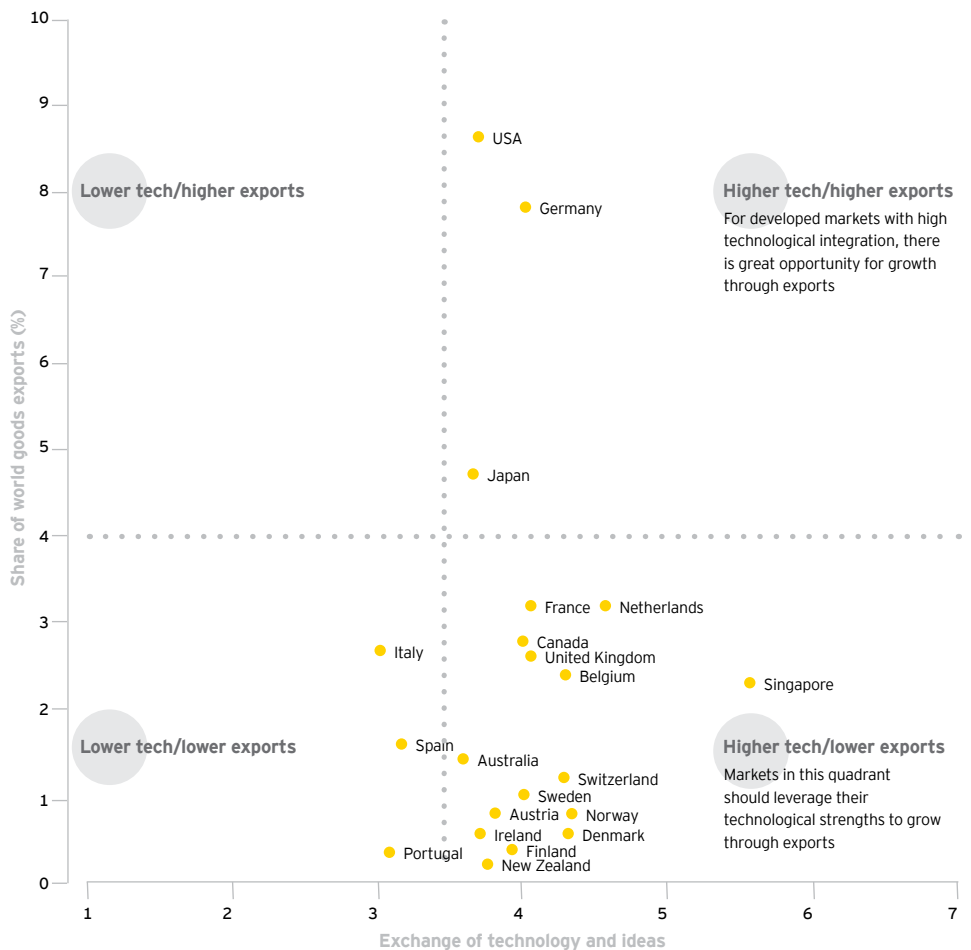
Figure 11: Companies plan to bring production capability back to developed markets



Source: Ernst & Young 2012 Globalization Survey Shown: percentage of all respondents (730)

Question: For each of the following, please indicate whether it is applicable to your company today and/or will be in three years' time. Percentage of executives selecting, "we are planning to bring production capability back to developed markets."

Figure 12: Top export markets take advantage of technology integration



Source: Ernst & Young 2012 Globalization Index



“The global economic environment is going to be challenging for some time to come, and issues such as the Eurozone crisis will not be resolved in the short term. Yet the world’s new markets, particularly those in Africa, offer enormous potential. With strong business and government leadership, these markets can grow significantly.”

Mark Otty, EMEA Area Managing Partner, Ernst & Young

With a strong revival of domestic manufacturing, the landmark discovery of new shale gas reserves (which is driving low energy costs for US producers), increasing high-tech and export-fueled growth, and narrowing labor cost differentials, the US may be a surprisingly attractive investment destination. The country perhaps best exemplifies the resurgence of domestic manufacturing, which could revive some industries and spark new ones. A 2011 study by the business consulting firm AlixPartners estimates that 10% to 30% of the manufactured goods that the US now imports from China could shift back to US production by 2020, adding between US\$20 billion and US\$55 billion to GDP on an annual basis.

Many US-based multinationals have already re-shored some manufacturing capacity. For example:

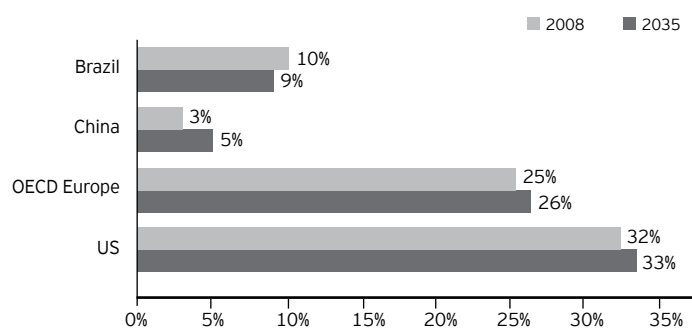
- ▶ NCR Corporation is moving all of its ATM production from China, India and Hungary back to a facility in Columbus, Georgia, to customize products and get them to clients faster.
- ▶ Carlisle Transportation, a division of Carlisle Companies, brought tire production formerly done in China back to two plants in the US. Carlisle’s Jackson, Tennessee, plant is becoming more efficient and it is now cheaper to produce tires in the US as certain Chinese subsidies have disappeared.
- ▶ Coleman announced in June 2011 that it was canceling plans to outsource some of its operations to China, instead choosing to build more factories in Kansas. The strategic purpose of the decision was to move its production base closer to the end market and reduce inventory pressures.

In 2012, GE re-shored its domestic appliance manufacturing business to the US from Mexico. “We brought back the manufacture of refrigeration units from Mexico to the US for one very simple reason,” says Nani Beccalli-Falco, President and CEO of GE International. “It takes eight hours to make a refrigerator in Mexico; it takes two hours to make a refrigerator in Louisville.”

Colm Reilly of UKTI identifies two key phenomena underlying the recent trend toward in-sourcing. “First, technology continues to drive change,” he says. “So companies find that if they take into consideration new manufacturing technologies and the total cost of logistics, including management time and the overhead of managing a location on the other side of the world, they’re able to manufacture at a lower cost than the outsourcers can in some cases. We can now, for example, manufacture certain products without the large capital expenditure needed to manufacture the same products a decade ago. The second reason is that the outsourcing of manufacturing has meant that companies have lost an inherent capability that they want to get back.”

Near-sourcing and in-sourcing are less common in Europe than in the US. There are some examples - Steiff, a German toy manufacturer, recently decided to move production back to Europe from China, citing high transportation costs and problems with quality – but in general, the practice is not widespread. Part of the reason may be that manufacturing never really left in the first place. For example, in Germany, the family-owned Mittelstand companies, which are small to midsize businesses that account for an estimated 50% of the country’s GDP, have retained a strong manufacturing capability and been more resistant to outsourcing than many large multinationals. European countries’ less flexible rules governing labor can also be an impediment to offshoring.

Figure 13: Leading gas users, especially the US, will benefit from low gas prices



Source: US Energy Information Administration, accessed December 2012

Redrawing the global energy map



By Dale Nijoka
Global Oil & Gas Leader
Ernst & Young

The next few years will see a complete transformation in the global oil and gas markets. The discovery, development and exploitation of the huge reserves/resources of shale gas in the US – estimated at between 500 and 1,000 trillion cubic feet – will reshape the energy map. The International Energy Agency (IEA) expects that by 2020, the US will claim Saudi Arabia’s current position as the world’s largest oil producer. The IEA forecasts that a decade after that, North America (i.e., the US, Canada and Mexico combined) will be a net oil exporter.

So what will this mean for the global economy and business? One clear implication is that natural gas prices in the US will be much lower than in Asia. Countries across Asia know that to grow their economy, they need to have a source of energy to run factories, plants and infrastructure. They are therefore doing all they can to make the necessary investments.

Cheap energy in the US will change the calculation that companies make when considering where to locate energy-intensive activities like manufacturing. There is a growing advantage for companies to locate these facilities in the US because of the low price of natural gas there, compared to the relatively high price in Asia. That is a major shift that will make US manufacturing more competitive than it has been for decades.

Within the next decade, we are likely to see a substantial number of coal-fired plants in the US retired and replaced by natural gas-fired plants. With its distinct price advantages, we also expect to see an increasing use of natural gas as a transportation fuel, displacing some gasoline and diesel fuel. Vehicle manufacturers are expanding the production of trucks and automobiles that are fuelled by natural gas, and the



“Rapid-growth markets can be highly rewarding, but in many cases they are a long-term proposition. To reap rewards in these markets, businesses must be prepared to make an extended commitment to them while also putting in place mechanisms to deal with short-term volatility and uncertainty along the way.”

Rajiv Memani, Country Managing Partner, Ernst & Young India

“If you look at vertical integration, Europe has been more effective at retaining manufacturing compared to the US, and part of this is that there is closer integration between the manufacturing and service functions,” says Javier Gimeno, Professor of Strategy at INSEAD. “In some German companies, labor has more of an influence on company strategy and, as a consequence, these companies do not just quickly cut headcount every time the profits are down. That means they are not losing capabilities as fast as some of the American companies do.”

But American businesses may reverse that trend in short order, thanks to the US’s biggest turnaround story in decades: the tremendous technological advances in the development of unconventional oil and natural gas resources, such as shale gas and “tight” oil. This windfall will not only reduce domestic energy costs but will shake up the energy picture globally,

putting the US on track to become more energy independent and increasing growth in a variety of related industries such as agriculture and petrochemicals. In particular, the US shale gas “revolution” means far cheaper feedstock costs for US manufacturers than in recent years and an advantage for US firms over markets – including China – that rely on more expensive fuels (see Figure 13). The availability of domestic energy at an affordable price will have a profound effect on global companies’ decisions about where to locate production.

refuelling infrastructure is gradually being built out. Natural gas’s penetration into the vehicle fleet is currently being driven by its use in heavy trucks, buses and local commercial fleets, but we expect the personal vehicle market to start to show strong growth over the next decade.

At some point, the US will also start to export natural gas to other parts of the world. It’s very difficult to rationalize not doing that when prices are so much higher in Asia and even Europe. There will be barriers, of course. Natural gas is still not a global commodity, like oil, because the infrastructure is not nearly as developed. That will take time, but the incentives are certainly there to make it happen. And while there have been some political issues raised with regard to US energy exports, we would expect those issues to be successfully resolved, given the expected net economic benefits.

Operational changes are essential to picking the right big bets and increasing their chances of a payoff



Companies have already learned many of the lessons of globalization, such as the need for flexibility, agility and localization. But as globalization enters its next phase, they must prepare to make decisions on markets and investments without always knowing all the possible outcomes. The case studies and examples of the companies featured in this report are by no means applicable to all multinationals or industries, but they offer creative approaches to dealing with the many unknowns that characterize global business. No matter their size or sector, to choose the best opportunities from a wide variety of markets, companies must adapt their operations to a new growth cycle – one that requires highly disciplined and rigorous strategic planning, execution and learning, all supported and enhanced by technology. The following are some recommendations for a possible approach to this new growth cycle:

Strategic planning: allocate resources in a bold and focused way. Deciding how to apportion scarce resources involves resolving many trade-offs and conflicts between slow-growth and rapid-growth markets, short-term and long-term returns, and volume-to-margin ratios. Once companies decide on the right balance of these elements, they must settle on a handful of key investments that offer the best promise of future growth. Because the risk is so concentrated, making these bets clearly requires a high degree of confidence that an investment will succeed.

This is a tough call to make, particularly in rapid-growth markets, which are not only volatile but also, in many cases, a long-term proposition. Businesses need to be willing to make an extended commitment to the market to reap rewards – and to live with early start-up losses and other short-term volatility along the way. “Foreign markets are a long-term game,” says Julian Birkinshaw of the London Business School. “So profits are likely to take a hit in the short term as companies learn how to make the investment work. Markets – famously short-term – are looking for the chief executive to tell them a story of how the company is going to succeed over the long term.”

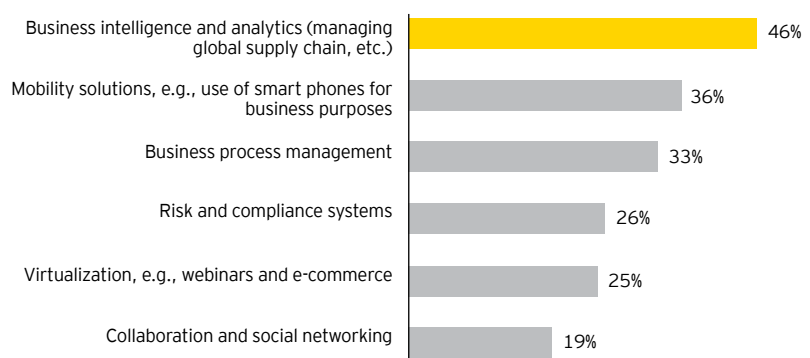
It’s also important to look at the big picture when allocating resources. Oracle’s Alfonso di Ianni advises taking a balanced regional approach to emerging economies, focusing not on company performance in any specific market but rather on a portfolio of countries and prioritizing accordingly. “Senior management wants to see consistent overall growth in Oracle’s designated emerging regions in the Eastern Central Europe, Middle East and Africa region,” he says. “The region may include developed countries that will emerge from recession and developing countries experiencing better growth. However, we apply a strategy of establishing common regional business support structures that lower barriers to entry, reduce risk and allow us to work our markets efficiently within a broad growth band. This means that even if a particular market does not grow at the expected rate, or if another experiences a spike, we are well placed to continue doing business successfully. Within the budget, I can define my priorities. I recommend that we have a portfolio of assets to balance the ups and downs.”

Of course, with market conditions changing so quickly, what at first seems like an optimal resource allocation strategy may soon become less than optimal. The challenge, therefore, is to maintain as much flexibility with resources as possible while keeping an eye on the bottom line. Companies need the flexibility not only to make strategic bets but also to change course or exit if an investment doesn't pan out. Technology plays a vital role in decision-making here: business analytics, for example, can help companies build an investment case, evaluate risks, look at potential scenarios and simulate outcomes. Nearly half of our 2012 Globalization Survey respondents say that business intelligence and analytics will have the greatest impact on their international expansion strategy (see Figure 14).

Execution: make your big bet investments as local and granular as possible. Succeeding in the world's new markets means becoming immersed in them – tailoring offerings to meet the exacting needs of local customers, forming close relationships with local officials and communities, manufacturing locally or establishing regional supply chains, and empowering local managers to make decisions so that they can act on opportunities swiftly. Again, technology can help by providing acceptable risk parameters for local decision-making.

In fact, the ability to “go local” seamlessly may very well be the key to making strategic bets yield positive results. One way to do this is to connect with local markets by contributing to their economic development, says Andrew Kakabadse, Professor of International Management Development at the Cranfield University School of Management. “A vast majority of smaller markets are fundamentally lacking in infrastructure, even in basics like police, education and health,” he says.

Figure 14: Business intelligence and analytics will have the most impact on global expansion strategies



Source: Ernst & Young 2012 Globalization Survey

Shown: percentage of all respondents (730)

Question: Which technological advances are likely to have the greatest impact on your company's strategy for international expansion?

“Companies need to think long-term in those markets and create an investment pattern that will maintain their presence but also indicate their commitment by investing in the infrastructure that is relevant to their business in those markets. That will create a sustainable investment platform, but that is a very long-term strategy.”

The drive to localize brings up a longstanding debate: how do companies find the right balance between localization and globalization, between the search for economies of scale and differentiation, between centralization and decentralization? The companies we interviewed offer a variety of responses, but the overall theme is the same: become granular, specific, customized. Of course, a granular approach increases complexity, particularly because most companies now recognize that marketing and customer relationships need to be handled at the local level. Therefore, businesses need to think about commonalities across markets and how to take successes from one and repeat them in another to derive economies of scale.



“Only those companies that stand out as innovators are likely to succeed in a slow-growth environment. To capitalize on pockets of growth, businesses need to be bold, entrepreneurial and willing to take risks on new products and services.”

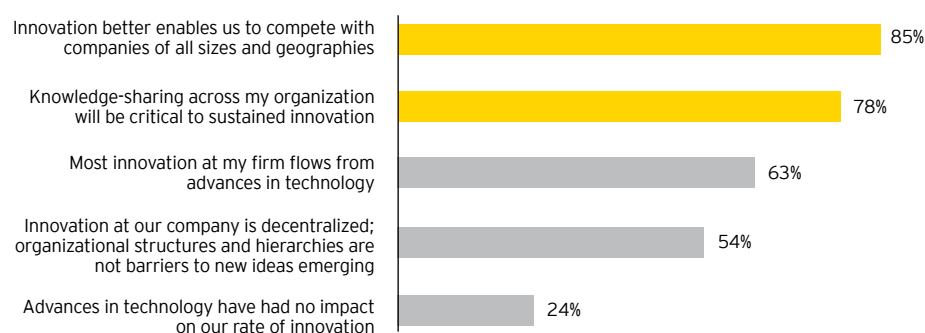
Maria Pinelli, Global Vice Chair, Strategic Growth Markets, Ernst & Young

“Our business of ready-mix concrete is extremely local,” says Maher Al-Haffar of CEMEX. “The radius of an effective market is somewhere between 50 and 75 miles and the shelf-life of the product is four hours maximum. But while our business is local, we recognize that there is enormous value to be gained by identifying best practices, globalizing them, standardizing them and allowing the local units to add value in terms of the innovation and improvement of these best practices.”

Finding commonalities might include creating platform technologies that can be developed centrally and then adapted locally to suit market needs. Hubs offer one way for companies to develop a core presence to centralize service delivery across a region and build a basis to expand at the local level. “Hubs are very important in large territories,” says Oracle’s Alfonso di Ianni. “In Central Asia, for example, we use Istanbul, Baku and a little bit of Almaty. In the hub, we try to hire people who potentially can then move on into the country that they serve remotely, because we know that those countries are critical and we may open an office there. So we have continuity in our own investment in terms of people.”

Successful companies often centralize core functions, such as financial control, and release operational control more and more to the local level. This sets up a structure that supports the core pillars of the business while setting clear expectations for the local outcomes required. “But beyond that, local managers do what they need to do, and that helps the innovation cycle as well,” notes UKTI’s Colm Reilly. Innovation, in fact, is another vital component of success in expanding globally, as our respondents point out: most agree that innovation - largely enabled by technology - will help them better compete with companies of all sizes and from all geographies (see Figure 15).

Figure 15: Companies believe innovation lowers geographical barriers

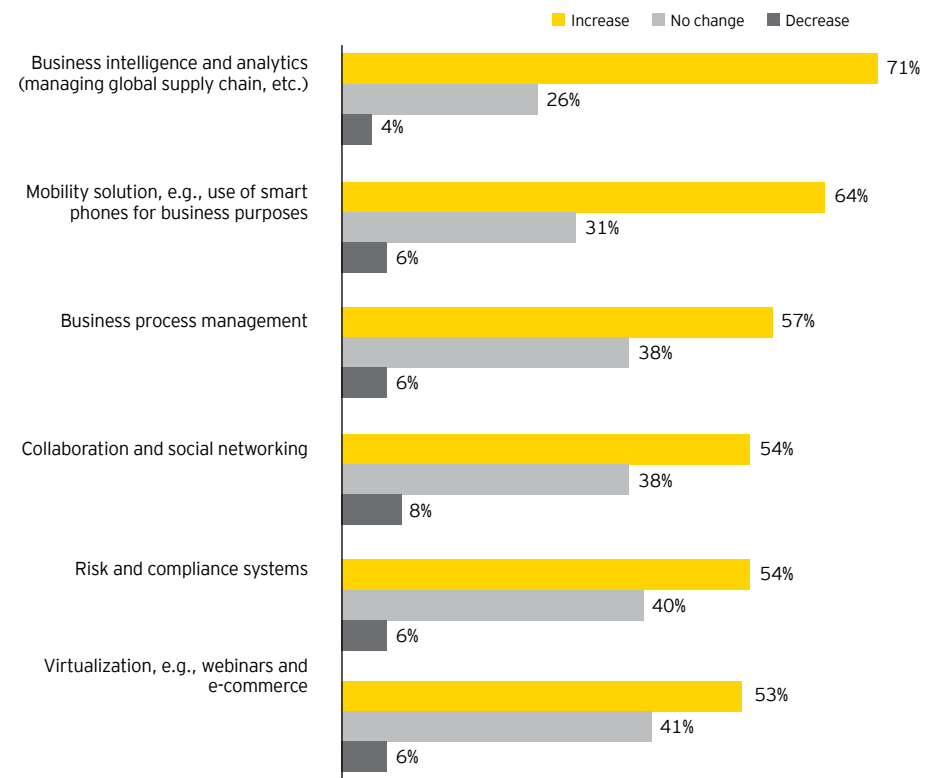


Source: Ernst & Young 2012 Globalization Survey
Percentage of all respondents (730) who responded “Strongly agree” and “Somewhat agree”

Question: Do you agree or disagree with the following statements on the role of innovation in your business?

Learning: transform your company into a "learning organization." It's no news to anyone that rapid change is the new normal in business today and that many outcomes will remain unpredictable. Yet companies can learn to manage change better. This is where the power of technology really comes into play. Applications such as business intelligence and analytics, mobility solutions, and social networking allow businesses access to a wealth of data, both global and local. They can feed that data into future strategic planning and use it regularly to become lean and flexible organizations that are well positioned to thrive in the global economy of the future. Over the next 12 months, a majority of our survey respondents expect to increase their investments in a variety of digital technologies that promote mobility, collaboration and knowledge sharing (see Figure 16).

Figure 16: Technology investments are set to increase markedly in the next 12 months



Source: Ernst & Young 2012 Globalization Survey Shown: percentage of all respondents (730)
 Question: How is your company's investment in technology across the following categories likely to change over the next 12 months?

Understanding the four transformational forces of technology



By Pat Hyek
 Global Technology
 Industry Leader
 Ernst & Young

Technology has long been one of the fundamental drivers of globalization, but in the years ahead, its role will become even more important. Underlying this trend are four transformational forces that are having a profound impact on how businesses operate and engage with their customers and how other communities/networks engage with each other.

The first of these disruptive forces – mobile – is creating an entirely different relationship between employers and their workforce, and gives companies the opportunity to interact with customers in new and powerful ways.

Social media, the second transformational force, also enables companies to build new relationships with customers. Businesses can understand how customers perceive their brands, products and services, and engage in two-way conversations that can help to pave the way for refinements or innovations.

Digital video and emerging technologies like social media create huge amounts of data, but much of it is still in a form that cannot be easily analyzed. Over the next few years, the third transformational trend – big data – will change this. By analyzing data from social media and many other sources, companies can better understand where they should invest their capital and resources and how they should customize their offering to suit customers.

Huge amounts of data require storage and large complex software applications to analyze it all. These are among the roles that one of the four transformational trends, the cloud will play. The cloud allows companies to access storage and many other powerful computing resources without the need to invest in infrastructure/application software, giving them the flexibility to scale up or down depending on their needs.

These four transformational forces are powerful enablers of

“You constantly have to look over the horizon, but the horizon is changing so quickly and what you thought was on the horizon today is suddenly so much closer or has moved somewhere else.”

Ian Hudson, President for Europe, Middle East and Africa, DuPont

The term “continuous learning” may be a cliché, but without it organizations cannot thrive in the new growth cycle, which requires them to learn quickly, apply that knowledge to their strategic plan, execute on the plan, and then begin the cycle again. Although it cannot predict the future, a learning organization can make effective use of real-time digital technology to react to changes more efficiently, bypassing traditional hierarchies to enable faster decision-making and implementation of key strategies.

A learning organization also will be best equipped to manage successfully in a VUCA world - a volatile, uncertain, complex and ambiguous world - a US military term often used in the private sector to describe the turbulent and ever-shifting business

landscape. Ian Hudson of DuPont best sums up the monumental challenge of navigating this terrain. “You constantly have to look over the horizon, but the horizon is changing so quickly and what you thought was on the horizon today is suddenly so much closer or has moved somewhere else,” he says. “Humans haven’t necessarily evolved quickly enough to keep pace with such rapid change.”

globalization. But they also have the potential to change the competitive landscape dramatically and at an unprecedented speed. We have already seen entire industries, such as retail or the media, being disrupted by new competitors leveraging technology. Over the next decade, we are certain to see more disruption as new, agile, technology-savvy firms displace the more traditional incumbents.

The scale of these opportunities and challenges emphasizes the importance for business leaders to understand these four transformational forces. Technology is a fundamental competitive force that should be at the heart of C-suite and boardroom discussions. If companies are not thinking about these transformational forces, then there is a good chance that their competitors are. The lesson of the past few decades is that disruption happens quickly. If companies do not keep pace with technology, they will put their business models at risk.

2012 Globalization Index



Globalization has become more nuanced since 2011 as different aspects of the Ernst & Young Globalization Index have become more important in driving global integration. The performance of the major Index components shows higher growth in the integration of goods and services, technology, and capital in the medium term. By contrast, labor and cultural integration are expected to show less progress toward further integration than in the five years before the financial crisis. The biggest increases in cross-border integration continue to be driven by technology, particularly global connectivity through broadband penetration and internet access, as well as increases in R&D trade.

While integration in mature markets appears to be slowing down, reflecting the already high penetration levels of technologies such as the internet and broadband, it is ramping up for rapid-growth markets. This suggests that the BRICs and other emerging economies can reap particularly big opportunities from further technological integration through 2016.

Updated Globalization Index methodology and variables for 2012

Ernst & Young's annual Globalization Index was developed in 2009 in conjunction with the Economist Intelligence Unit. The Index is based on a comprehensive understanding of the underlying drivers for globalization across five main pillars: openness to trade, capital flows, exchange of technology and ideas, labor movements, and cultural integration. With these key categories, the Index incorporates a broad range of sub-indicators for 60 countries and spans the years 1995 to 2016. www.ey.com/globalization

As globalization evolves, and new and better datasets become available, it is appropriate to review the index data and methodology to accurately reflect these developments. In 2012 we introduced revisions to the Globalization Index scoring system and included several new sub-indicators to better reflect the state of play in the global economy, technology and markets.

The new scoring system uses a dynamic normalization technique. In addition, the following variables are included in the 2012 Index: share of main trading partners in total trade, as a percentage of GDP (trade in goods and services); trade in information and communications technology (ICT) goods, as a percentage of GDP (technology); foreign direct investment (FDI) stocks, as a percentage of GDP (capital and finance); and total international fixed telephone traffic (culture). The last two of these variables are substitutions for FDI flows as a percentage of GDP (capital and finance) and international outgoing fixed telephone traffic (culture). The sub-indicator weights in the Index have been redistributed to reflect the changes in the variables.

The purpose of these changes is to better capture relative country performance and performance over time across the five main drivers of globalization. The changes are reflected in some larger-than-normal historical revisions to the 2011 rankings, but the updated Index methodology better captures the nuances in globalization in the world today, suggesting improved forecasting capability and insights into key business opportunities and challenges.

2012 Globalization Index

Overall	Country/territory	2012 score	Change in score since 2011	Change in score since 1995	Trade	Capital	Labor	Technology	Culture
1	Hong Kong (SAR)*	7.81	0.06	1.96	8.27	8.46	4.81	8.54	8.89
2	Singapore	6.31	-0.02	1.01	8.57	6.04	4.80	5.56	6.31
3	Ireland	5.63	0.08	1.20	6.32	6.04	5.90	3.68	6.35
4	Belgium	5.49	0.11	1.17	6.39	6.64	5.60	4.27	4.29
5	Switzerland	5.30	0.04	1.49	5.32	5.64	6.15	4.33	5.06
6	Netherlands	5.19	0.02	0.92	6.24	5.59	5.19	4.49	4.21
7	Sweden	4.96	0.01	0.97	6.27	5.29	4.82	4.07	4.12
8	Denmark	4.94	0.01	0.92	5.88	5.33	4.88	4.26	4.12
9	Hungary	4.75	0.07	1.02	6.63	4.15	5.03	3.82	3.92
10	United Kingdom	4.74	0.03	0.63	5.89	4.81	4.83	3.94	4.06
11	Germany	4.72	0.03	0.87	6.47	4.58	4.38	3.92	4.00
12	Slovakia	4.66	0.09	1.53	6.29	4.16	4.76	3.74	4.22
13	Finland	4.62	0.03	0.71	5.73	4.90	4.42	3.96	3.87
14	France	4.58	0.04	0.87	5.41	4.55	4.77	3.97	4.08
15	Canada	4.55	0.00	0.73	5.06	4.79	4.36	3.90	4.60
16	Israel	4.55	0.01	0.54	5.75	4.36	4.41	3.32	4.89
17	Taiwan	4.55	0.02	0.88	5.86	4.24	4.56	4.03	3.87
18	Czech Republic	4.53	0.07	0.91	6.15	4.42	4.45	3.75	3.63
19	Austria	4.51	0.03	0.73	5.89	4.95	4.14	3.84	3.41
20	Spain	4.45	0.00	0.84	5.65	4.37	5.02	3.26	3.85
21	New Zealand	4.44	0.05	0.68	5.49	4.48	4.24	3.81	4.05
22	Bulgaria	4.37	0.04	1.25	6.31	4.06	4.80	2.91	3.56
23	Norway	4.36	0.01	0.85	5.33	4.46	4.51	4.12	3.11
24	Australia	4.34	0.04	0.57	5.30	4.59	4.39	3.49	3.77
25	United States	4.33	0.02	0.66	5.32	4.57	4.16	3.62	3.79
26	Malaysia	4.28	0.07	0.38	6.21	4.18	3.60	3.89	3.13
27	Poland	4.23	0.06	1.27	5.60	4.01	4.53	3.17	3.68
28	Chile	4.22	0.04	0.60	5.61	5.07	4.19	2.61	3.38
29	Portugal	4.21	0.01	0.14	4.93	4.02	5.50	3.11	3.42
30	Italy	4.20	0.03	0.79	5.42	3.65	4.77	3.10	4.02

*Special Administrative Region of China

Overall	Country/territory	2012 score	Change in score since 2011	Change in score since 1995	Trade	Capital	Labor	Technology	Culture
31	Romania	4.10	0.05	1.27	5.42	3.73	5.20	2.58	3.52
32	Thailand	4.07	0.09	0.84	6.24	3.52	4.51	2.55	3.33
33	South Korea	4.02	0.03	1.18	5.82	3.66	3.47	4.13	2.62
34	Philippines	3.94	0.11	0.95	5.41	3.14	5.53	2.13	3.51
35	Greece	3.90	0.01	0.13	4.56	3.35	4.67	3.11	3.86
36	Vietnam	3.83	0.07	1.08	5.74	3.49	4.47	2.66	2.53
37	Mexico	3.76	0.05	0.89	4.73	3.89	3.99	2.52	3.63
38	Peru	3.62	0.01	0.49	5.25	3.48	3.87	1.95	3.44
39	Sri Lanka	3.62	0.06	0.18	4.14	3.51	5.57	1.65	3.32
40	Colombia	3.59	0.04	0.45	4.20	3.74	4.02	2.50	3.48
41	Saudi Arabia	3.58	0.03	0.30	5.68	3.23	4.24	2.32	2.12
42	Egypt	3.56	-0.01	0.37	4.80	3.55	4.83	1.90	2.58
43	Japan	3.54	0.03	0.72	5.15	3.72	2.94	3.59	1.87
44	China	3.53	0.02	0.88	5.30	3.41	3.44	2.66	2.53
45	Brazil	3.51	0.06	0.58	4.80	3.97	3.23	2.11	3.29
46	Turkey	3.46	0.02	0.26	5.36	3.42	3.29	2.29	2.69
47	Ukraine	3.31	0.06	1.00	5.09	2.37	4.05	2.20	2.75
48	Russia	3.24	0.05	0.53	5.22	2.64	3.61	2.55	1.83
49	Ecuador	3.23	0.03	0.42	4.83	2.09	4.61	1.96	2.61
50	Pakistan	3.21	0.01	0.22	3.69	3.57	5.54	1.43	1.76
51	Azerbaijan	3.19	0.05	0.04	3.63	2.35	4.97	2.40	2.63
52	South Africa	3.19	0.04	0.26	5.16	3.27	3.36	1.37	2.61
53	Argentina	3.17	0.03	-0.16	3.92	2.38	3.83	2.43	3.35
54	India	3.17	0.06	0.27	4.56	3.20	4.08	1.36	2.52
55	Nigeria	3.16	0.03	0.61	3.43	2.75	5.54	1.65	2.50
56	Kazakhstan	3.12	0.06	0.78	4.20	2.52	3.93	2.20	2.67
57	Indonesia	2.98	0.03	0.17	5.01	2.68	3.00	1.49	2.52
58	Venezuela	2.88	0.04	0.28	3.34	1.92	3.74	2.17	3.36
59	Algeria	2.63	0.00	0.02	3.81	2.53	3.37	1.48	1.79
60	Iran	2.16	0.05	-0.01	3.34	1.40	2.77	1.43	1.78

2012 Globalization Index – indicators, sources and weightings

Ernst & Young's 2012 Globalization Index was developed by the Economist Intelligence Unit for Ernst & Young to measure the 60 largest countries/territories by GDP according to their degree of globalization. The table below shows, for each of the headline categories, the individual indicators used and their source. The categories were then weighted.

Indicators	Weight	Source
Movement of goods and services (<i>Business leader weighting: 22%</i>)		
Total trade (exports and imports)	40.0%	National accounts
Trade openness (5=very high)	10.0%	Scored on 1-5 scale by EIU analysts
Tariff and non-tariff barriers (5=very low)	10.0%	Scored on 1-5 scale by EIU analysts
Ease of trading (cross-border) (5=very easy)	10.0%	Scored on 1-5 scale by EIU analysts
Current-account restrictions (5=very low)	10.0%	Scored on 1-5 scale by EIU analysts
Share of main trading partners in total trade (%)	20.0%	National accounts
Movement of capital and finance (<i>Business leader weighting: 21%</i>)		
FDI stocks (in and out, % GDP)	50.0%	IMF International Financial statistics
Portfolio capital flows (in and out, % GDP)	8.3%	IMF International Financial statistics
Government policy towards foreign investment (5=very encouraging)	8.3%	Scored on 1-5 scale by EIU analysts
Expropriation risk (5=non-existent)	8.3%	Scored on 1-5 scale by EIU analysts
Investment protection schemes (5=very good)	8.3%	Scored on 1-5 scale by EIU analysts
Domestic favoritism by government (5=no favoritism)	8.3%	Scored on 1-5 scale by EIU analysts
State control/ownership (5=no state interference)	8.3%	Scored on 1-5 scale by EIU analysts
Exchange of technology and ideas (<i>Business leader weighting: 21%</i>)		
Trade in ICT goods (exports and imports) as % of GDP	30.0%	UNCTAD
Trade in creative goods and services (exports and imports) as % of GDP	30.0%	UNCTAD
Broadband subscriptions (per 100 people)	20.0%	International Telecommunications Union
Internet subscribers (per 100 people)	20.0%	International Telecommunications Union
Movement of labor (<i>Business leader weighting: 19%</i>)		
Net migration rate (per 1,000 population)	40.0%	United Nations
Current transfers (in and out, as % GDP)	40.0%	IMF International Financial Statistics
Hiring of foreign nationals (5=very easy)	20.0%	Scored on 1 - 5 scale by EIU analysts
Cultural integration (<i>Business leader weighting: 17%</i>)		
Tourism (in and out, per 1,000 population)	33.3%	World Tourism Organization
International total fixed telephone traffic (minutes) per capita	33.3%	International Telecommunications Union
Openness of national culture to foreign influence (5=very open)	33.3%	Scored on 1-5 scale by EIU analysts

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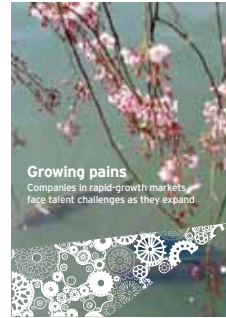
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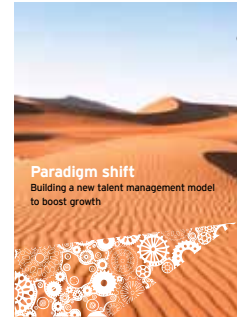
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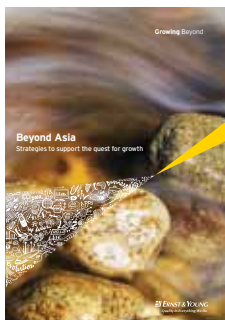
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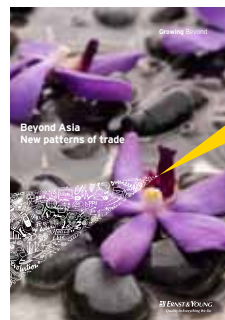
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- ▶ Accelerate your decision-making, freeing up time to focus on implementing your strategy

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