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**Інвестиційна діяльність транснаціональних корпорацій в сфері інновацій / Investment Activities of Multinational Corporations in the Field of Innovation**

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Thesis is devoted to the study of analytical and theoretical application of the strategies implemented by transnational corporations in the global market. The comprehensive study shows how transnational corporations invent new strategies to influence the global market.

## АНОТАЦІЯ

Толорунлоджу Олуваджувонло Опейемі. Інвестиційна стратегія транснаціональної корпорації на світовому ринку інновацій. Рукопис.

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Дипломна робота присвячена дослідженню аналітичному і теоретичному застосуванню стратегій, реалізованих транснаціональними корпораціями на світовому ринку. Всебічне дослідження показує, як транснаціональні корпорації знаходять нові стратегії, щоб впливати на світовий ринок.

## RESUME

**Thesis contains** 123 pages, 24 figures, 8 tables and list of sources with titles.

**The aim of the thesis** is to analyze investment strategies implemented by transnational corporations in the global world through different innovative schemes and how they affect different economies in retrospect.

**The object of study** - innovation of Transnational Corporations

**The subject of research** is the investment strategies implemented by Transnational Corporation in the global world.

**The resulting conclusions and innovation:** It is proven that in order for corporations to expand, they need more innovative ideas to help push them forward. In order for transnational corporations to effectively be profitable, they have to consider the strength and weaknesses of each economy they plan to dominate.

## РЕЗЮМЕ

**Дипломна робота містить** 123 сторінок, 24 малюнків, 8 таблиць і список використаних джерел.

**Метою роботи** є аналіз інвестиційних стратегій, що реалізуються транснаціональними корпораціями в глобальному світі за допомогою різних інноваційних схем і визначення, як вони впливають на економіки різних в ретроспективі.

**Об'єкт дослідження** - інновації транснаціональних корпорацій.

**Предметом дослідження** є інвестиційні стратегії транснаціональних корпорацій в глобальному світі.

**Отримані висновки та інновації:** Доведено, що для експансії корпорації необхідно використовувати більш інноваційні ідеї, щоб допомогти підштовхнути їх вперед. Для прибуткової діяльності ТНК, їм необхідно використовувати всі переваги і недоліки економік.

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# INTRODUCTION

## **Actuality of the Research Topic**

International accomplishments are no longer preserved for the highly extreme/deep-pocketed organizations, nor is it an incredible scheme for already regressive marketing companies, thanks to the World Wide Web. In fact, an international presence has been made possible for any business with a creative innovative strategy and an understanding/insight into global markets. To give a descriptive ideology of what a great global innovative scheme looks like, a comprehensive study would be done into the global market of innovation of a particular brand of company, Coca-Cola. From adapting their social strategies to translate across multiple languages, to adjusting their inventions to appeal to the cravings of a diverse group of people, this brand is taking a positive step towards creating a solid presence across the world. Of course before that is done, we take a look into the world of the investment strategies implemented all across the globe and their effects on world economy, both on highly developed, developing and under-developed nations of the world. Transnational Corporation around the globe tend to implement different strategies in order to keep up with the growing economy of different nations with different systems of function.

The actuality of this research is based on the fact that different transnational corporation need to reinvent themselves in order to stay ahead of the market, that's why different organization seeks to have different strategies through innovation to stay the course. Without innovation, organizations influence in different parts of the globe diminish, thereby reducing their influence in difference nations.

**Object of the Research** is innovation of Transnational Corporations.

**Subject of the Research** is the investment strategies implemented by Transnational Corporation in the global world.

**Goal of the Research** is to show how Transnational Corporation affect the world system and the innovation strategies implemented to sustain such heights.

**Task of the Research:**

- Determining the essence and types of investment strategies
- Determining the essence of innovation and its types
- Discovering transnational corporation's effect in the global market
- To analyze the global market of innovation
- To analyze the investment strategies implemented by TNCs
- To draw out the strategies implemented by Coca-Cola company on the global market
- Determining the perspectives of development of global market of innovation
- Determining the base of improvement of investment strategies in Coca-Cola company

**Method of research** includes lot of research documents such as books, articles, publications, and all kinds of documents related to this topic.

**Novelty of the Research** constitutes transnational corporations bearing in mind that all economies aren't the same. In order for an organization to strategically have influence in different nations, it has to bear in to consideration the level at which the particular nation is at. For instance, their technological know-how, once a country's technological knowhow is limited, any organization that doesn't consider that factor would come to realize that they could not make any great impact in the nation. In order to be influential, they have to re-invent themselves to meet the level of that nation and gradually build them up.

**CHAPTER 1.**  
**THEORETHICAL APPROACH TO THE INVESTMENT**  
**STRATEGY OF TNC**

**1.1. Essence of Investment Strategies and its Types**

Investment is an economic resource which is applied with the objective to increase material wealth. It is the commitment of money to buy financial instruments to get returns in the forms of income and interest, as well as appreciation of the asset value. It involves the choice of an individual or a company to put the money in a commodity, bond, stock, currencies, futures or options, each of which has a certain amount of risk and gives an opportunity of generating returns over time. As it follows, financial instruments can take many forms ranging from significantly safe and low return government bonds to much riskier and high return international stocks. Therefore, investment can generally be referred to as a long-term overview through which it mostly differs from trading and speculating. The latter are usually short-term practices and contain significantly higher level of risk.

Investments can be grouped into the following types:

- Real investments
- Financial Investments
- Intellectual investments

Real investments are investments made into tangible and productive assets such as machinery, plants, lands, etc., rather than shares and bonds.

Financial Investments are investments into securities which provide opportunities for a higher payoff in the nearest future. It involves an asset that you put money into with the aim of generating an increase in the amount invested upon. Examples of financial investments include, mutual funds, fixed deposits, bonds, stocks, equities, real estate, gold/silver, etc.

Intellectual investments are investments based on the creation and improvement of knowledge. It's a term used to describe the intangible assets provided to an entity by its employees' efforts and also knowledge assets such as patents, trademarks, copyrights, and other results of human innovation and thought. Intellectual investment is considered as an asset, and can be defined as the collection of all informational resources a company has at its disposal that can be used to gain profits, gain new customers, create new products, or otherwise improve the business.

Investment strategy is regarded as an investor's plan to guide their investment decisions based on individual goals, ability to tolerate risks, and future needs for capital. An investor looking to invest systematically plans to allocate assets which are investable towards opportunities such as bonds, stocks, commodities, etc. these plans take into consideration like inflation, economic trends, and interest rates.

Investors looking to invest do not dive into every opportunity that comes their way, because not all available opportunities yield a fruitful result. There is therefore a need to strategically streamline those investment opportunities that come into play. Those strategies help to scrutinize non-profitable opportunities, reduce risks and as well allocate capitals effectively.

The system that organizations use to select their assets vary widely according to their individual managers. There are numerous amount of strategies imputed by different organizations for the profitability of the organizations by different organizational managers. "Both risk and return are connected to style. According to current practice portfolio theory, we can optimize a blend of styles for diversification, balancing reward and risk."

Here's is a look at different common investment strategies among organizational fund managers.

- Top-down investing/ Bottom-up investing
- Fundamental analysis/ Technical analysis
- Contrarian investing/ Dividend investing



### Top-down/ bottom-up investing

Top-down investing strategies involve choosing assets based on a big theme. For example, if a manager anticipates that the economy will grow sharply, he or she might buy stocks across the board. The manager might as well buy stocks in particular economic sectors, such as industrial and high technology, which tend to outperform when the economy is strong. Perhaps the manager expects the economy to slump, it may spur him or her to sell stocks or purchase shares in defensive industries such as health care and consumer staples.

Bottom-up managers choose stocks based on the strength of an individual company, regardless of what's happening in the economy as a whole or the sector in which that company lies.

“The great advantage of top-down is that you're looking at the forest rather than the trees” says Mick Heyman, an independent financial adviser in San Diego. That makes screening for stocks or other investments easier.

Of course, managers might be wrong on their big idea. Even if they're right, that doesn't guarantee they'll choose the right investments.

“A good example is gold,” says James Holtzman, a shareholder at Legend Financial Advisors in Pittsburgh.

A bottom-up manager benefits from thorough research on an individual company, but a market plunge often pulls even the strongest investments down.

### Fundamental or Technical Analysis

Fundamental analysis involves evaluating all the factors that affect an investment's performance. For a stock, it would mean looking at all of the company's financial information, and it may also entail meeting with company executives, employees, suppliers, customers, and competitors.

Technical analysis involves choosing assets based on prior trading patterns. You're looking at the trends of an investment's price. Most managers emphasize fundamental analysis, because they want to understand what will drive growth. Investors expect the stocks to rise if a company is growing profits, for example.

Heyman sees power in technical analysis, because he believes an asset's price at any single moment reflects all the information available about it.

The best managers use both fundamentals and technical, he says. "If a stock has good fundamentals, it should be stable to rising. If it's not rising, the market is telling you you're wrong or you should be focusing on something else."

### Contrarian Investing

Contrarian managers choose assets that are out of favor. They determine the market's consensus about a company or sector and then bet against it. The contrarian style is generally aligned with a value-investing strategy, which means buying assets that are undervalued by some statistical measure, says Wharton's Geczy.

"In the long run, value has beaten growth in assets around the world, though during certain periods that's not true," he says. "The contrarian style generally rewards investors, but you have to choose the right assets at the right time."

The risk, of course, is that the consensus is right, which results in wrong bets and losses for a contrarian manager.

### Dividend Investing

As the name suggests, dividend funds buy stocks with a strong record of earnings and dividends. Because of the stock market volatility of recent years, many investors like the idea of a fund that offers them a regular payout. "Even if the price goes down, at least you're getting some income," says Russ Kinnel, director of mutual fund research at Morningstar. "It's a nice way to supplement income if you're retired."

However, the recent popularity of dividend stocks causes some market pundits to wonder if they're currently overvalued. Also, beware of funds with extremely high yields. That could be a sign that companies are taking outsized risk and are headed for declines.

As at 2015, investor's guide analyzed 3 different investing strategies for more profitability ratio in stocks.

Keep US stocks as a core Holdings. Stocks are expensive. The average stock in the S&P 500 is trading at a price of 16 times this year's estimated earnings, about 30% higher than the long run average. A more consecutive valuation gauge developed by Yale finance professor Robert Shiller that compares prices with longer-term earnings shows that stocks are trading at more than 50% above their average.

“Given current high valuations, the returns for stocks are likely to be lower over the next 10 years,” says Vanguard senior economist Roger Aliaga-Díaz. He expects annual gains to average between 5% and 8%, compared with the historical average of 10%. Shiller's numbers suggest even lower returns over the next decade. That doesn't mean to give up on U.S. stocks. They remain the best shot at staying ahead of inflation, especially today, when what can be expected from a bond portfolio is, not much. “Stock returns may be lower,” says Aliaga-Díaz, “but bond returns will be much less, so the relative advantage of stocks will be the same.” And the U.S. economy, though far from peak performance, is the healthiest big player on the global field.

Now is a particularly important time to make sure your stock allocation is matched to your time horizon. “The worst outcome for older investors would be a bear market just as you move into retirement,” says William Bernstein, an adviser and author of *The Investor's Manifesto*. A traditional asset mix for someone in his fifties is the classic 60% stock/40% bond split, with a shift to 50%/50% by retirement. If your allocation was set for a 35-year-old and you're 52, update it before the market does. On the other hand, if you're in your twenties and thirties, you should be far less worried about today's prices. Hold 70% to 80% of your portfolio in equities. The power of compounding a dollar invested over 30 to 40 years is hard to overstate. And you'll ride through many market cycles during your career, which will give you chances to buy stocks when they're inexpensive.

Spread your money widely. With many overseas economies barely out of recession or dragged down by geopolitical crises, international equity markets have been trading at low valuations. And some market watchers are expecting a rebound

over the next few years. “Central banks in Europe, China, and Japan are making fiscal policy changes that are likely to boost global growth,” says Schwab’s Klein--top. Oil prices, which have fallen 40% in recent months, may boost some markets as consumers spend less on fuel and step up discretionary buying. Foreign stocks aren’t uniformly bargains. The slowdown in China’s economic growth threatens the economies of the countries that supply it with natural resources. Japan’s stimulus program to date has had mixed success, and the reason to expect stimulus in Europe is that policymakers are again worried about deflation.

Spread your money widely. The typical investor should hold 20% to 30% of his stock allocation in foreign equities, including 5% in emerging markets, says Bernstein. Many core overseas stock funds, such as those in your 401(k), invest mainly in developed markets, so you may need to opt for a separate emerging-markets offering—you can find excellent choices on our -MONEY 50 list of recommended mutual and exchange-traded funds. For an all-in-one fund, you could opt for Vanguard Total International Stock Index VGTSX 0.07%, which invests 20% of its assets in emerging markets.

Hold Bonds for safety, not for Income. Fixed-income investors have few options right now. Today’s rock-bottom interest rates are expected to move a bit higher, which may ding bond fund returns. (Bond rates and prices move in opposite directions.) Yet over the long run, intermediate-term rates are likely to remain below their historical average of 5%. If you want higher income, your only alternative is to venture into riskier investments.

If you don’t want to take risks outside your stock portfolio, then accept that the role of your bond funds is to provide safety, not spending money. “After years of relative calm, you can expect volatility to return to the stock market—and higher-quality bonds offer your best hedge against stock losses,” says Russ Koesterich, chief investment strategist at BlackRock. Stick with mutual funds and ETFs that hold either investment-grade, or the highest-rated junk bonds. Don’t rely solely on government issues. Corporate bonds will give you a little more yield. You may be tempted to hunker down in a short-term bond fund, which in theory

will hold up best if interest rates rise. But this is one corner of the market that hasn't returned to normal. Short-term bonds are sensitive to moves by the Federal Reserve to push up rates. The Fed has less ability to set long-term rates, and demand for long-term Treasuries is strong, which will keep downward pressure on the rates those bonds pay. So an intermediate-term bond fund that today yields about 2.25% is a reasonable compromise. Sometimes in investing, winning means not losing.

### The Impact of Investment Policy in a Changing Global Economy

Research proves that foreign direct investment can provide diverse opportunities to different countries, most especially base countries. This includes, better jobs, improvement in their productivity level, as well as transfer of knowledge. Investments into different global economy can also serve as a means for the transformation of local production and better efficiency between global channels, but the benefits are not automatic. Investment policies are required to increase the profitability ratio for foreign direct investment. One key challenge is, there are different economy of the world which differs from their economic, social and environmental impacts.

Investment policy formulation requires a framework complex enough to differentiate between the various kinds of foreign direct investments, as well as potential challenges and benefits for development. It must also be simple enough to enable governments organize and prioritize the multiple and complex variables affecting the profitability of investment benefits.

Investment patterns have changed increasingly over the past three decades. Major changes occurred in the patterns of foreign direct investment (FDI), the participants included, and the modalities used.

FDI in developing countries once planned to concentrate almost entirely on resources. However, many of those countries have now become hosts of FDI involving more diverse production of goods and services. Developing countries are also becoming the source of FDI into other developing as well as industrial countries.

Today more goods and services reach consumers through production by international affiliates of multinational organizations than through trade alone. Global value chains are increasingly changing the growth of developing economies. Global value chains are organized through increasingly complex networks of supplier relationships and various governance modes, from direct ownership of foreign affiliates to contractual relationships to lengthy dealings. This carry a lot of risks and cost of investment. Therefore, they impact the investment decisions of multinational companies as well as the distribution of economic gains from trade (UNCTAD 2013).The need for countries to have clear investment policies stems from the fact that FDI needs to be managed. History shows that despite the key role of FDI in development, if not properly managed, under certain circumstances, FDI may not be automatically conducive to better standards of living for a host country's population. Further, not all FDI is the same nor has it the same potential impact for development. For instance, FDI in extractive industries may generate very different environmental, social and political impact than FDI in high-tech manufacturing, business services or labor-intensive apparel assembly.

Evidence shows that FDI can provide significant economic and social benefits to host countries. For instance, it can help create higher skilled and better paid jobs, promote the transfer knowledge, raise productivity, and diversity and upgrade the value-added component of exports, all of which affects a country's ability to integrate with global value chains. However, such potential benefits are not automatic. Indeed, specific policy interventions responding to the respective country and investment contexts may be required.

Most of the literature analyzing FDI often tends to swing from an extremely case specific focus, analyzing FDI experiences in one particular country into a single sector during a given period, to the other sides.

Why do countries seek foreign direct investment? Countries tend to compete for FDI to attract the transfer of technology, strengthen managerial and organizational skills, increasing access to foreign markets, and diversifying exports within the boarder of objectives of promoting jobs and economic growth. Many

studies have also shown how FDI can enhance productivity, increase investment in research and development, and create better paid and more stable jobs in major countries.

The extent from the FDI are not automatic. Indeed, the extent to which countries regulate investment and devise other policies affecting spillovers can have a direct impact on the economic, environmental, and social effect of foreign direct investment. Thus, the importance of governments is to obtain the “right mix” of policies to properly manage different types of FDI. Historically, inadequate design and/or lack of implementation of appropriate policies may, on many occasions, have prevented developing countries not only from attracting, retaining and linking FDI within the domestic economy, but also from maximizing FDI benefits.

Despite the reoccurrence of mixed outcomes of FDI, the key ingredient is, for policy makers in many developing countries, the real question is how to connect both the foreign direct investments with the domestic investments. Even in those sectors in which there is no domestic investment, the question remains whether to obtain FDI or no investment at all. According to economic theory, the main reason to attract FDI lies primarily in its potential to deliver greater dynamic benefits to host economies. However, the low levels of domestic capital accumulation and technology in many developing countries practically mean that if FDI does not flow, the prospects for generating additional sources of economic growth remain limited. Moreover, in an increasingly interdependent international economy where prosperity depends on the technical knowledge embedded in goods and services and participation in global value chains, for practical purposes the relevant question is not whether FDI is good or not, but rather, what key policies are needed to maximize its positive effects for development.

Investment can take many forms. Foreign direct investment consists in making capital available from one country for carrying out economic activity in another country, with a view to exercising a form of control, such as the ability to influence business decisions. The most common form of foreign direct investment

is the creation of a company, like a plant to produce cars. Other forms of investment does not seek control, or any other assets including intellectual property (IP) rights.

The EU encourages the movement of capital as it is essential in generating economic growth, jobs, and reducing poverty. The EU is the largest source and destination of foreign direct investment in the world measured by the stocks flows.

FDI plays an important role in establishing businesses, creating jobs at home and abroad, as well as in setting up global supply chains. Investment and trade are inter-dependent and complementary. Half of the world trade takes place between affiliates and multinational enterprises that exchange intermediate goods and services. The investor is the key decision maker over where production of goods and services take place and their decisions have a direct impact on trade, jobs and capital movements.

In the EU, outward investment make a positive and significant contribution to the competitiveness of European enterprises, notably in the form of higher productivity. Investment into the EU brings many benefits such as creating jobs, optimizing resource allocation, transferring technology and skills, increasing competition and boosting trade. This explains what the EU countries make significant efforts to attract foreign investment.

There are two different aspects in the EU investment policy:

Increasing market access. The EU is negotiating investment rules in the context of free trade agreements with third countries and also in stand-alone investment agreements. Whereas the EU is currently negotiating stand-alone agreements with china, and Myanmar, investment chapters are being negotiated in the context of FTAs with India, Singapore, japan, the United States, Egypt, Tunisia, morocco, Jordan, Malaysia, Vietnam, and Thailand. Negotiation with Canada ended in 2014.

Supporting legal certainty and transparency. The European comprehensive investment policy will be introduced progressively. This means that almost 1200 bilateral investment agreements of member states that currently offer investment



protection to many European investors will be preserved until they are replaced by EU agreements.

## **1.2. Essence and Types of Innovation**

Innovation is a dynamic process that focus on the creation and implementation of new or improved products and services, processes, positions, etc. it's the process of translating an idea, or invention into goods and services that can create values or for which customers will pay. This is accomplished through more effective products, processes, services, technologies, or business models that are readily available to markets, governments and society. Successful innovations are those that results in improvements in efficiency, effectiveness, quality or social outcomes/impacts.

To be called an innovation, an idea must be replicable at an economical cost and must satisfy a specific need. Innovation involves deliberate application of information, imagination and initiative in deriving greater or different values from resources, and includes all processes by which new ideas are generated and converted into useful products. In business, innovation often results when ideas are applied by the company in order to further satisfy the needs and expectations of the customers.

This definition is drawn from specific attempts to pin down exactly what warrants being called an innovation, and to examine the process that successful innovations pass through from conception to scale-up. It is also important to recognize that novelty should not be seen as good in itself, rather innovations need to be judged on the basis of their contributions to improvements in efficiency, effectiveness, quality or social outcomes.

### **The Innovation Process**

The process of innovation is often compared to the process of evolution as it is fundamentally a dynamic process of improvement and adaptation which

strengthens organizations' ability to survive and thrive. Despite its complexity and unpredictability, a successful innovation process is usually seen as proactive rather than reactive, and can be said to include some or all of five key elements:

1. Recognition of a specific problem, challenge, or opportunity to be seized, in relation to the provision of humanitarian aid.
2. Invention of a creative solution, or novel idea, which helps address a problem or seize an opportunity.
3. Development of an innovation by creating practical, actionable plans and guidelines.
4. Implementation of an innovation to produce real examples of changed practice, testing the innovation to see how it compares to existing solutions.
5. Diffusion of successful innovations – taking them to scale and leading to wider adoption outside the original setting.

### Innovation Policy

Policy is, by definition, goal-oriented, constituting deliberate courses of action in pursuit of some stated aim. Policy goals range from being very broad, for example, improving workforce skills, to being more specific, for example, increasing the number of female graduates in engineering schools (more specific goals are often described as policy objectives). Policy goals emerge from the agenda-setting activities of policy arenas. They are shaped by those interests participating in such arenas, as well as by commonly-held ideas, beliefs and conceptual models. There is also a great deal of path-dependency in policy goals, since once pursued, they attract a range of actors who commit various types of resources to that end.

While the central actors in technological innovation are firms, other actors are also important, including governments. For example, through regulations, financing and procurement, governments directly affect the innovation activities of firms. In a less direct way, government funding of education, research and physical infrastructures provide essential resources for innovation processes in firms. The

contributions of government to innovation are therefore far reaching. These contributions can be directed towards achieving stated high level socioeconomic goals.

High level goals in innovation policy imply certain expectations of actors' behavior and their performance and outcomes. However, it is not common for actors, such as firms, banks, and researchers, to behave differently from what is expected of them. The gap between desired and actual behaviors provide the rationale for policy intervention. The traditional rationale for innovation policy intervention is market failure. Further rationales for intervention have become more mainstream over the last decade, including system failures, which refer to weaknesses in the links between the various elements of the innovation system, capability and resource failures, which refer chiefly to weakly developed organizational capabilities, but also to lack funding and political support, as well as directionality failures, which refers to lock-ins along undesirable development paths that are difficult to redirect towards achieving high level goals. At the same time, it might as well be that the government is not well equipped to address these failures, they might perform its existing expected roles, around regulations, poorly. These can be described as government failures and are an important consideration for policy intervention.

On the basis of high level goals, and the rationales for policy intervention, policy arenas articulate more specific policy objectives. Given the breadth of innovation policy, objectives can be extremely diverse in terms of factors they target and the outcomes they seek to produce. Objectives also differ in their level of responsiveness. Some can be of a high level, such as increasing the commercialization activities of universities, while others are more specific, such as setting-up technology transfer offices for this purpose. In fact, it can be useful for policy analysts and designers to outline a hierarchy of objectives innovation policy, with high level policy goals at the top followed by subsequent levels of more specific policy objectives.

Finally, the means of innovation policy refers to the policy instruments used. These are varied in innovation policy, reflecting the field's breadth. They can be classified in different ways, for instance, predominant mechanisms used; financial incentives, regulations, and information by their targets (firms, universities etc.) or by the objectives they are intended to address. It is not uncommon for countries to have a full set of innovation policy instruments, but the ways these are designed and implemented can vary greatly.

In the wake of the Great Recession, the UK is hardly alone in looking for sources of economic growth. Economists and many other commentators agree that technological innovation must be at the heart of long run growth. It is also widely understood that left to itself the market is unlikely to provide enough incentives for innovation. This 'market failure' is primarily because only a small proportion of the benefits of invention are captured by the firm or individual who spends money and time on research. Most of the benefits of invention 'spill over' to other firms who can copy the new idea without having to pay the upfront research costs. For example, it took a lot of effort to invent the automobile and the personal computer, but once they were invented, imitators crowded in. This means that there will be too little spent on research and development (R&D) from the point of view of society as a whole. Intellectual property rights, such as patents and copyright, were designed to protect inventors and increase their incentive to innovate. But in most cases patents can be designed around so they do not fully eliminate the market failure. So can there be a role for public policy in stimulating innovation? Is it driven by fundamental factors, such as culture and luck, which are beyond the ability of governments to influence except in the most minor ways? CEP research has challenged the fatalistic attitude that innovation is not amenable to government action. One direct way to influence innovation is through the tax system, in particular by offering a tax break for business spending on R&D. They started working on fiscal incentives for R&D in the mid-1990s after being shocked to discover that the share of UK national income spent on business R&D had declined

since the late 1970s. In just about every other developed country, it had been rising.

The United States introduced an R&D tax credit in 1981 under Ronald Reagan, but the UK Treasury had always resisted the idea, arguing that firms were unlikely to increase their R&D efforts significantly in response. Evaluations of the US system seemed to show, however, that after a few teething problems, American firms had responded to these tax incentives. Working with Bronwyn Hall of the University of California at Berkeley, our review of all the existing evidence showed that when researchers used good quality firm-level data and tracked companies over time, they found that tax credits stimulated significant American R&D spending (Hall and Van Reenen, 2000). Were UK firms likely to be so much more lethargic than their counterparts across the Atlantic? At that time, international evidence on the effectiveness of innovation tax policy was almost non-existent. No one had even collected systematic information on the tax benefits to R&D across countries over time, not the International Monetary Fund, the OECD, the World Bank or the United Nations. Together with Rachel Griffith (now deputy research director of the Institute for Fiscal Studies), they put together a team and embarked on a major effort to measure the impact of the tax system on the costs of R&D capital across all the major economies over 20 years. A downside of this was that we had to wade through many dusty tomes of rather tedious tax and accounting rules. Once we had accomplished that arduous task, they were able to show that there had been a major shift towards R&D tax credits and away from direct subsidies. One of the advantages of tax credits over the more traditional grants was that the government could simply set the rules and it did not have to get involved with ‘picking winners’. More importantly perhaps, they combined the tax data with information on national R&D and showed that tax credits had a large effect on increasing business R&D. Although a 10% reduction in the tax costs only increased private sector R&D spending by about 1% in the first year after an R&D tax credit was introduced, in the long run R&D volumes rose by a full 10% (Bloom et al, 2002). So far, so good, but what they care about is not R&D per se, as this is

just an input. We care about economic growth, which will increase wages and consumption. To tackle this problem, we had to develop a new model of ‘endogenous growth’ that took account of not just the obvious effect of R&D on innovation but also the less obvious ‘second face’ of R&D, which fosters diffusion of existing innovations. Having more scientists helps the UK catch up with leading-edge countries because they can read and understand new ideas, which can then be ‘absorbed’ more effectively in the UK economy. For a country like the UK, which is sadly often far from the technological frontier, this is very important. It means that just sitting back and letting other countries; the United States, Germany, Japan and increasingly China, do all the innovation is unlikely to be the right strategy. A strong R&D base helps a country to imitate as well as innovate. In a speech on the science budget last year, David Willetts, the universities and science minister, quoted CEP’s research in this area: ‘Some 95% of scientific research is conducted outside the UK. The researchers need to be able to apply it and, in advanced scientific fields, it is often necessary to conduct leading-edge research in order to understand, assimilate and exploit the leading-edge research of others. ‘It is this absorptive capacity which is crucial. Indeed, Griffiths, Redding and Van Reenen have shown that higher domestic business R&D spend also leads to greater productivity being generated at home from foreign R&D spend as well, and there are powerful feedback mechanisms on top of this – foreign companies cite the quality of the public research base as one of the main reasons for locating their own internationally mobile R&D here.’ In a series of studies with Princeton University’s Steve Redding (who was director of CEP’s globalization program from 2005 to 2010), we created an econometric model for the whole OECD, which showed how R&D stimulated productivity growth through both innovation and imitation (Griffith et al, 2004). The researchers combined this with our R&D tax information to simulate the effects of introducing an R&D tax credit in the UK.

Governments are increasingly making innovation a key issue on policy agendas today, recognizing its potential to promote economic growth and address social and environmental challenges. However, many countries face significant

innovation “gaps”, resulting from a variety of binding constraints. Tracing development paths that help overcome these constraints is an important task of innovation policy.

An innovation is the implementation of a new or significantly improved product (good or service), or process, a new marketing method, or a new organizational method in business practices, workplace organization or external relations. Innovation plays a key role in the economy and society by contributing to growth and jobs and helping address social and environmental challenges. Innovation is important for growth at all stages of development, specifically by creating and diffusing new technologies; different types of innovation play different roles at various developmental stages. Innovation may be characterized by several dimensions including the degree of novelty, the type of innovation (product and process innovation), the impacts of radical and incremental innovation and the source of innovation (technological and non-technological innovation). The notion of what innovation is and what role policies to encourage innovation can play has changed considerably over the past decades.

Who is engaged in innovation?

Innovative firms. Firms are the main locus of innovation in market economies. These firms most often are founded by entrepreneurs and characterized as innovative businesses, young and high-growth businesses and small and medium-sized enterprises (SMEs).

Universities and public research institutes. PRIs play many roles in innovation systems including education, training, creation and diffusion of knowledge, development of new instrumentation, and storage and transmission of knowledge.

The public sector. Public entities are also increasingly engaged in innovation activities, undertaken by a variety of actors; individuals, organizations, and communities—and often involved in social innovation, that is, innovations that seek new answers to social problems.

What factors affect innovation?

Innovation depends on access to finance, availability of a skilled work force and market conditions that system innovators face including the state of competition and intellectual property rights. Another important factor is linkages, which may be mediated by networks and clusters, may be international in nature and may be capable of facilitating technology transfer and diffusion.

What types of policy interventions are needed?

The rationales and objectives of policy intervention in support of innovation are wide-ranging, as are the policy instruments used. The large variety of policy instruments and wider number of actors involved have increased the complexity of the policy landscape and made inconsistencies and redundancies more likely. At the same time, appropriate measurement of innovation and the conditions that affect it are critical for enacting policies to support innovation. Measurement and evaluation enable policy makers to justify particular types of interventions, design appropriate policies with higher chance of success and conduct suitable benchmarking exercises.

### **1.3. Introduction to Transnational Corporation in the Global Market**

A transnational corporation (TNC), is a commercial institution that operates in more than one country and doesn't consider any particular country as its base country, i.e. country of basic production startups. TNCs are enterprises comprising of host enterprises and their international correspondents. A host enterprise is one that controls assets of other entities in countries other than its home country, usually by owning a certain equity capital of the enterprise. An equity capital of an enterprise, is usually considered as the basis for the control of assets. An international affiliate is an enterprise which an investor, who is based in another country, owns a stake that permits a lasting interest in the management of that enterprise. One of the important advantage to transnational corporation is, they are able to maintain a greater degree of responsiveness to the local markets where they maintain facilities.



The growth in the number of TNCs has generated controversy because of their economic and political power and complex operations. Some urge that TNCs show no loyalty to the countries in which they are resident, but act only in their own best interests. U.S corporations have different motives for creating a corporate presence in other nations. One possible motive is a desire for increase. A corporation may have reached a height meeting domestic demands and anticipate little additional growth. A new foreign market might provide opportunities for new development, while other corporation desire to escape the policies of importing nations.

Through the aid of FDI, corporations can bypass extremely high tariffs that prevent goods from being priced. For instance, when the European Common Market (the predecessor of the European Union) placed tariffs on goods produced by foreigners. The U.S corporation replied by setting up European subsidiaries. Two other motives are more debatable. On the one hand, there is the prevention of competition. The most certain system for preventing actual or potential competition from international businesses. Another motive for creating subsidiaries in other nations is to reduce costs, mainly through the use of cheap international labor in developing countries. A TNC can hold down costs by moving some or all of its production facilities overseas.

TNCs with headquarters in the U.S have played an increasingly dominant role in the world economy. This dominance is the most prominent in the developing countries that depend mainly on a thin range of exports, usually primary goods. A TNC has the ability to disrupt local economics, impose monopolistic practice, and assert a political and economic plan on a nation. Another concern with TNCs is their ability to use international subsidiaries to minimize their tax liability. The IRS must analyze the movement of goods and services between a transnational domestic organization and international operations and then assess whether the transfer price that was assigned on each transaction was fair. IRS studies shows that the U.S TNCs have an incentive to set their transfer prices so as to shift income away from the U.S and its higher

corporate tax rates and to move reductive expenses into the U.S. internationally owned corporations doing business have a similar incentive in the United States. Critics argue that these tax incentives also motivate the United States transactional corporations to move plants and jobs overseas.

Globalization is one of the main reasons for growth of transnational organizations. A couple of businesses in order to grow and develop have to take into consideration global/international perspective. Most transnational corporations are based in more economically developed countries such as the UK and USA, with FDI coming from relating nations. However, an increasing number of transnationals are based in LDCs. There are a number of reasons why the transnational corporation might want to set up in any country, they include; cheap labor, cheap raw materials, good transportation links, a business friendly government (ones which adopt policies which encourage business development and growth such as low rates of corporation tax), exploitable property rights and so on.

TNCs exert a great deal of power in the globalized world economy. Many corporations are richer and more influential than the states that look to control them. Through mergers and acquisitions, corporations have been increasing very rapidly and some of the largest TNCs now have TNCs influence the global economy and input their influence over global policy creation.

### The Role of Transnational Corporations in the World Economy

Multinational corporations are often regarded as transnational corporations, as many people don't see the difference between both terminologies. However, there are differences between both of them. Transnational corporations are known for not having centralized branches in a host country. Multinational corporations on the other hand, have headquarters in every host country. However, the main involvement of both organizations take place in different countries/continents. Therefore, both corporations work beyond national boundaries. Also, MNCs are known to be alienated from government involvement. There are no orientation on precise countries while conducting direct business operations. They are known to make available goods and services to diverse countries. According to Michilie

(2003), transnational corporation are able to plan, control and implement business activities across diverse nationalities, countries. In other words, the perfect circumstance for MNCs is to use skilled workers from developed countries and have plants in developing countries. The products that are made in the base country are meant to be easily moved to developed countries and sold there in a certain price.

MNCs obtained popularity some years ago. They have their origins back to the years of the beginning of globalization. Until recently, there have been a double increment in the number of corporations comparing to the number of corporations years ago. There are 150 largest economies in the world, but, only 81 countries can be called largest economies. Therefore, there are 69 corporations that can be considered a world economy. The most widely known according to the economist (2012) are as follows; General Electric, Royal Dutch Shell, BP, Exxon Mobile, Toyota and many others. Most of these organizations have about 90% of their assets in foreign countries. For example, general electric has 52% of its foreign assets. Nestle is a leading company when it comes to leading percentages for international sales. It accounts for almost 99% of accumulated number of international assets. The sectors where most MNCs operate in are manufacturing and finance. However, financial industry has lost its popularity and credibility among transactional corporations due to crisis that occurred in past events. Afterwards, there's been some questions that nowadays corporation tend to prioritize more low industries and focus more on producing and selling food and drinks, apparels and books. MNCs are rarely competitive in such spheres as aircraft manufacturing. Some regard that multinational corporations only have good effects on the world economy, but there is a reverse side of it.

Beginning with the plus role, multinational corporations act as modernizers of the whole world economy. It is reflected as a result of constant promotion of newly introduced technology as well as introducing innovations across the world. They become active by introducing technologies to relatively remote places. Therefore, industries are being redesigned so they could be more competitive. The

innovations are seen not only in technologies, but also in medicine, education, and social policies. By bringing progress to the poorest economies, multinational corporations employ people and educate them. Also, by reducing the costs of the productions of many products, MNCs supply cheap products to the developed markets, these goods and services improve human lives, as well as improving people's standard of living. Notwithstanding, there's no guarantee that every single country would benefit from MNCs and that technologies reach every single undeveloped countries.

Corporations influence efficiency and increase in the economy of the world. MNCs are likely to establish interconnection between domestic economies of isolated nations and the countries with the greatest economies, they as well promote globalization. With this, they are considered very differently by different people.

Economic integration has likely been brought by corporations. They promote regional agreement and alliances. One of the most familiar is NAFTA, hence, it's very important for the creation of a singular world market. They in turn bring organizational structures. Companies improve their managerial level because national standards are increase upon arrival of major corporations into the country.

Another role can be seen in the increase of money in circulation in an economy. Their activities are prominent enough to result in the increase in profit because one company can provide the same service and use the same strategies in different countries, thereby creating competition for other companies. Though, some MNCs merge with some small companies in order to become more prominent in the world market. There is a question however, that globalization reduces the benefits for MNCs. It becomes not profitable for companies to seek for emerging markets, conduct research, educate the worker, launch plants, etc. sometimes, it's easier to export to other countries. Efficient distribution agent's management reduces the costs of transportation of goods and services to the economies of scale. This theory depicts that it is more sensible for a company to

expand on territories because the more it produces in one place, the less cost effective the whole production process would be.

TNCs are known to provide loans to the poorest countries for proper investment, according to economist magazine, MNCs are important for the investment sector as well as trade. For example, figures of growing FDI in many developing countries is vital for the economy of the world, but regardless of the non-changing investments, MNCs still prioritize in developed economies. Since FDI tend to create more jobs, they also determine wages, (they raise wages in host countries in most cases). This happens because such corporations have relatively high productivity and high profits. By increasing wages, people tend to have more disposable income (DI), they would spend more money and goods and services which lead to boost in the domestic economy. Another influence to increased wages is, other companies will be forced to raise wages in order to either preserve or gear up employees. Foreign direct investment have a positive influence on wages in the developing countries, they set the wage rates. Therefore, MNCs stimulate labor movement because they carefully choose the specialist for managerial positions.

The negative side to multinational corporations can be derived when companies make use of cheap labor and relatively rich natural resources of a nation. They are known to rarely take care of the standard of living of the country where they do their businesses. The main goal of such organizations is to derive as much maximum profits as possible, they strive to advance the development of a global capitalism. Much companies launch their factories in different countries in order to reduce their cost of production, the resources that are used to manufacture certain goods are usually imported from the country of origin (the headquarters). Therefore, some organizations rarely utilize the resources in developing countries. When it comes to job creation, multinational corporations create new jobs. Which leads to relatively low wages. The issues of accepting countries with relatively cheap labor force and land from Eastern and Central Europe tend to be very attractive for plenty of corporations.

Another negative role of MNCs is trying to hide the real profit and run away from high taxes, which is likely that many companies use developing countries and take advantage of them. Due to weak law enforcement and tax legislations in developing countries, many corporations do not pay taxes there, which in turn makes some countries lose tax revenues that they were supposed to get. Companies usually seek countries that are easy to avoid taxes, there are countries and specially islands where MNCs benefit from paying low taxes. Organizations usually move their profits because there are lots of ways to do it, one of the practices is to become indebted, and consequently, pay a reduced tax rate. After calculating this losses, many developing countries have found this problems, especially those that are rich in natural resources, they are the most vulnerable. However, tax burden is reduced because of these practices. Multinational corporations are known for creating conditions for uneven distribution of wealth in the society. Hence, developed countries advanced from them while the undeveloped lost, as such, the gap between industrialized and emerging market countries are getting wide.

Often times, different foreign investments are in power to crowd out the domestic investments, which consequently has a bad impact on the economy of developing nations. They are known for discouraging local organizations, they also tend to provide a superior quality product to local ones, as well as unique services. Since the developing countries are barely able to compete with major corporations, domestic activity is likely to fall behind. The success of technological changes that can be brought by transnational corporations is very questionable. There are cases where newly established plants do not have any impact on production level. When we talk about investments, it is important to be conscious of the fact that not all companies invest in the development of the countries where they are operating, however, there are some exceptions when MNCs are about the social issues. I believe that many organization choose the host country after having done some research concerning the most favorable conditions for them. There are different things to look out for before entering any host country, first, its tax competition.

The international mobility of capital is a well-known transaction. There are tax competitions not only among countries, but also among continents. What many countries to forward to is to attract MNCs, there is an annual ranking provided by the world banks to show this. Moreover, lots of countries change some domestic policies and made amendments so they could be more attractive for foreign organizations. For instance, it's easy to get credit in Singapore, another benefit is, investors grants protection and low tax rates. Also, the contracts are issued enforcements. Liberalization on entrance to the market is very important, sometimes, countries liberate some industries. These strategies are very important for any MNC.

MNCs tend to create some obstacles for government to control employment and standard of living. The standard of living are important for any economy and multinational corporation wages set directions for the standard of living of their employees. Due to such issues that affects the MNCs, such forums are dealing with all of them and creating policies. Developing countries themselves try to deal with the problems of exploitation, it is a vital thing since MNCs do not always act in the best interest of the country it operates in, this grants developing countries leverage that can be used in order not to be used by corporations. One of the policies is to close national boundaries, another is to implement some standards that would be followed by corporations if they are willing to employ local people. Some countries tend to create environmental standards and target that are not easy to be achieved.

As the world investment report shows, there has been a steady fall in the countries that create favorable investment conditions, the statistics shows that in year 2000, there was about 147 countries that were promoting incentives for multinational corporations, however, there was only 85 of such countries in the year 2008. This implies that foreign investors are being held back by protectionist policies of nationalistic countries. MNCs are undoubtedly known as holding significant role in the world economy. It is however difficult to take a stance on this matter, it is quite tricky to know whether their role on the global economy is

positive or negative. There are therefore lots of limitations that should be put into consideration while talking about Multinational Corporation's effect on the global economy. First, all MNCs are unique, they can't be placed together. It's up to the corporation to decide the percentage of workers they are willing to employ and the amount of foreign direct investments. They are to decide whether to partake in any social event of the host country, they also determine the quality of technologies and fairness of their business.

There are different types of TNCs:

- Horizontally integrated. Those are factories in different countries making the same product. An example is McDonalds
- Vertically integrated. Those are factories in certain countries making products that act as the input to the goods that are being made in factories in other countries. An example is Addis.
- Diversified. Those are factories in different countries making products that are neither horizontally nor vertically integrated. An example is Microsoft.

One way in which TNCs reduce cost is by outsourcing, which means they set up factories to produce those goods in developing countries where labor is cheap. Once it opens a company in a country, it provides jobs for the people. This makes government of countries lower their barriers to attract those corporations which causes those same corporations to be more powerful than their governments. Lower trade barriers means wages are lowered, cutting the cost of education and health care in order to provide money to help TNCs set up, which leads to issues like child labor and environmental issues.

Since TNCs are more prominent than the governments, they inform governments to allow sweatshop labor and child labor, thereby changing laws and policies to favor them. Major oil and mineral corporations in Africa hire military to kill workers who form union or protest because of low wages. Workers making goods for TNCs to sell usually work in unfavorable conditions which might in turn



cause health issues, and when the country tries to increase its wages, the TNCs would threaten the developing country by leaving to other countries.

## **Conclusions to Chapter 1**

Investments are resources used to increase wealth of nations. It's a long-term impact of resources for gain of more assets. There are 3 categories of investments which include; Real, Financial, and Intellectual investments. Investment strategies are plans by investors to guide investments and limit losses. They do not dive into every opportunity that comes their way because not all investment opportunities yield fruitful results. They therefore need to strategically reshape those investment opportunities. There are different common investment strategies, they include; Fundamental Analysis, Technical Analysis, Contrarian investing, dividend investing.

Innovations are process that focuses on the creation and usage of new and improved products and services, processes, and positions. It's the process of transforming an idea, or an invention into wealth. Actors involved in the innovation process include the firms (some deal specifically with technological innovation), governments, universities and public institutes. Innovation depends on access to finance, availability of skilled labor force, including the state of competition of an economy and intellectual property rights.

Transnational Corporations are commercial institutes that operates in more than one country and doesn't consider any particular country as its base country, that is, country of production startups. A corporation tends to spread after meeting domestic needs and anticipate additional growth in other nations. Through FDI, TNCs can bypass high tariffs that prevent goods from being priced. Globalization is the main reason for growth of transnational organizations. Also, economic integration was brought about by corporations.

## **CHAPTER 2**

### **ANALYTICAL APPROACH TO THE GLOBAL MARKET OF INNOVATION OF TNC**

#### **2.1. Analysis of the Global Market of Innovation**

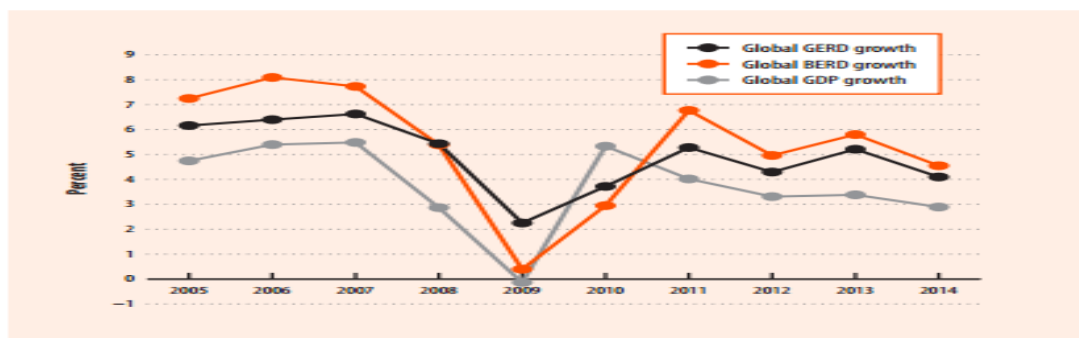
Since the upload of the global innovation index (GII) from the previous year (2015), the global economy has encountered different challenges that have led to further downturns of global economic growth projections. In such circumstance, countries will seek ways to move the global economy out of its current pattern, thus avoiding a prolonged low-growth situation. Innovation will be critical ingredients to achieving this objectives.

The world economy is not yet back on track with regards broadly shared and vigorous increase momentum. The world's leading economic institutions predict modest growth for 2016, no significant improvement from 2015, and a little growth in 2017. Growth forecast for 2015 and 2016 has been revisited for all regions of the world in recent months. Economic recovery has indeed slowed in most highly developed countries, including the USA, Japan, and some European nations. At the same time, under developed and developing countries now face lower growth perspectives than they did few years ago. Although economic activity is weakening, Asia, as a whole continues to show rapid growth despite the slow growth in china. In turn, growth in Africa, Latin America and the Caribbean, and other world regions has decreased considerably to moderate levels. The fall in commodity prices has seriously weakened economies totally dependent on commodities such as Brazil, Russia, Nigeria, South Africa, and other countries in the Middle East.

Relating with slowed recovery, concerns about disappointing future output growth are increasingly diverse. Today, lower capital and slower productivity growth, particularly compared with productivity boom of the late 1990s and early

2000s in high income economies, are global phenomenon, concerned about future growth and improvements in standard of living worldwide. The term productivity crisis, used to characterize this situation, is now in circulation widely. As a result, policy makers are urged to move beyond strict policies, which reduce rather than expand long term investments. Improved public investments in innovation would be good for short term demand process, and also good for raising long term growth potential. Realizing new sources of productivity and future growth are now the priority. Fostering innovation conducive business environments, interesting in human capital, and taking advantage of the opportunities that global innovation and cooperation offer are critical in this regard.

In the aftermath of the global financial crisis of 2009, this report and others have urged decision makers from the private and the public sectors to avoid a cyclical reduction of innovation expenses. Now, about seven years after the crisis, the worst case scenario of permanently reduced R&D growth seems to have been avoided, thanks largely to good government policies and the strong contribution of countries such as china, Korea, and other emerging countries. This situation, is far from irreversible, more efforts are needed to return to pre-crisis R&D growth levels and to counteract the observed innovation expenditure slowdown. On pertaining the slow development of the world economy, the preliminary estimates show subdued global R&D spending, particularly tighter government R&D budgets, in specific high income economies such as the USA, japan, and some European countries, and slower R&D spending growth in emerging countries, in particular china, partly explain this slowdown.



Source: Authors' estimate based on the UNESCO Institute for Statistics (UIS) database and the IMF World Economic Outlook database, April 2016.  
 Note: GERD = gross domestic expenditure on R&D; BERD = business enterprise expenditure on R&D.

Fig 2.1: Global R&D expenditures; Losing momentum [20]

Table 2.1

Gross domestic expenditure on R&D (GERD): Crisis and recovery compared  
[20]

Countries with no fall in GERD during the crisis							
CRISIS			RECOVERY				
	2008	2009	2010	2011	2012	2013	2014
Egypt	100	168	117	220	229	293	300
China	100	126	143	163	189	212	231
Argentina	100	115	128	145	165	171	n/a
Poland	100	113	127	138	166	166	185
Turkey	100	111	121	134	147	157	172
Korea Rep	100	106	119	133	147	155	166
India	100	106	113	125	n/a	n/a	n/a
Mexico	100	102	113	110	116	136	150
Hungary	100	108	110	116	121	136	138
Belgium	100	101	107	114	126	129	133
Colombia	100	101	106	120	125	161	129
Russian Fed	100	111	104	105	112	114	120
Ireland	100	110	110	107	110	109	114
France	100	104	105	108	110	111	112
New Zealand	100	107	n/a	109	n/a	108	n/a
Denmark	100	105	102	104	105	107	108
Australia	100	n/a	102	102	n/a	107	n/a

Table 2.2

Business enterprise expenditure on R&D (BERD): Crisis and recovery compared  
[20]

Countries with no fall in BERD during the crisis							
CRISIS			RECOVERY				
	2008	2009	2010	2011	2012	2013	2014
Poland	100	104	109	135	199	234	279
China	100	126	144	168	196	222	244

Turkey	100	101	116	131	150	168	193
Hungary	100	118	125	138	152	180	188
Korea Rep	100	105	118	135	152	162	172
India	100	102	111	124	n/a	n/a	n/a
Ireland	100	116	116	116	121	124	129
Greece	100	n/a	n/a	117	111	121	128
Egypt	100	105	110	112	115	117	120
New Zealand	100	104	n/a	116	n/a	117	n/a
France	100	102	105	110	113	115	116
Russian Fed	100	110	100	102	104	110	114
Mexico	100	109	113	111	n/a	n/a	n/a

In terms of the global use of intellectual property (IP), the latest figures point to a 4.5% patent filing growth in 2014. Although positive, this growth is lower than it has been in the previous years. Discovering new sources of increase has moved to become a priority for all stakeholders. Better public investments in infrastructure and innovation would boost aggregate demand in the short term, which is needed in a world of chaotic demand shortages, and it would raise long-term potential increase.

The analysis of global R&D trends calls for a stronger role by the governments, one that goes beyond the stimulus packages concluded after the financial crisis, to support continued innovation expenditures and research. Today, as well as in history, government and public researchers have been central to driving critical innovations with important growth potential. Also, in high income countries, the majority of basic R&D, which is critical to the progress of science, and hence to long-term growth, is financed and conducted by public figures. Moreover, the growth of innovation expenditures in the developing world had largely been driven by only a few countries, most notably china. The question faced by the innovation community is how to more systematically spread R&D to other low and middle income economies, avoiding an overreliance on a handful of countries to drive global R&D growth. Also, even leading countries still spend

only a part of their research budget on basic R&D, instead they focus on applied R&D and development.

Furthermore, GII is focused on R&D alone, but also on innovations, whether they are technological or non-technological need to be efficiently initiated in the market place to have a true impact. The trip from a scientific invention or a creative business idea to a commercial, widely deployed successful product is as risky and challenging now as it has ever been. A focus on large innovation inputs such as large R&D expenditures or a high number of scientific papers alone is not a recipe for sure success, promoting entrepreneurship and an innovation conducive environment are important.

### Winning with Global Innovation

It is now common that science and innovation are more globalized and collaborative than ever before. Moreover, thanks to facilitated cross-border flows of knowledge, a rising share of innovation is carried out through international innovation networks, leveraging talent worldwide. Debatably, everyone tend to gain from worldwide innovation.

First, in terms of the total effort, more innovation investments are initiated today than ever before, including sectors that were previously considered medium or low technology. The same time, information and communication technologies as well as the resulting data capabilities have shoved down the costs of innovation. Second, through increased global openness, the potential for international knowledge spillovers and technology transfer are on the increase by historical standards, via, for instance, cross-border trade, FDI, the mobility of highly skilled people, and the international licensing of IP as measured by the GII framework. The importance of international R&D spillovers has long been identified. Inbound and outbound flows in innovation inputs and outputs drive productivity and economic growth. These globalized efforts are no longer the affair only of large firms from rich countries. Building on research capacities at home, firms and entrepreneurs from developing countries are going abroad as they develop new products and services for international markets.

Finally, different innovation organizations in emerging countries now make meaningful contributions to the local and global innovation landscape. After significant catch up in human capital and research capacities, a number of middle income economies now play a prominent role in science and innovation. Indeed, the share of high income countries in global R&D expenditures and the production of international global scientific publications and IP filings worldwide have decreased, though often as a result of the rise of china alone. As a consequence, the quest for innovative solutions becomes wider and intense, cheap innovations are being sought more than ever. As original solutions are developed to suit markets, innovative goods and services are also becoming more useful for developing countries. With the right influence, a south-south market in cheap technologies for lower income consumers will develop. Despite the promising prospects, innovation is sometimes not portrayed as an international win proposition, on the upside, most metrics and innovation policies are designed for domestic level. When organization of one country produce more science or engineering graduates, their abundance is viewed by other nations as a competitive threat rather than as an opportunity. When countries import technologies or services from abroad, this is regularly considered to be more of a cost than a profit. Countries are rather considered as rivals rather than partners.

On balance, policy makers often worry that international innovation contributes to a hollowing out of domestic national innovation system. Their priority is to keep talent and investment at home. What is needed to better communicate and amplify the benefits of global innovation and related cooperation? Measurable evidence regarding the organization and outcomes of the current global innovation model is missing. Although empirical economic work has gone a long way towards supporting global trade as a win strategy and in constructing appropriate indicators, the same is not true for international innovation. Additional analysis is required to understand the circumstances under the globalization of innovation is positive and what obstacles need addressing. Second, business strategies and public policies need to better approach innovation



as a global positive and better compliment the realm of national innovation systems.

### Business Strategies and Innovation Policy Approaches to Maximum Benefits

Improved business strategies and policy approaches, along with new approaches to encourage global innovation cooperation and its governance, are required to maximize the benefits of global innovation. When trying to identify how business strategies and public polices can be better tuned to depict and leverage the advantages of global innovation, different challenges presents itself. First, a populous world of research and innovation has been introduced rather than one where the international innovation divide has been overcome. Despite the increasingly global nature of research and innovation activities, the most important activities are still concerned in high income economies such as Brazil, china, and India. Second, most middle income countries still depend on technology transfer from developed economies for solutions to mainly domestic problems. Better technology diffusion to and within developing countries will help these nations to narrow the gap with advanced countries. This must be a priority for all stakeholders in order to benefit from innovation. Third, appropriate research and innovation for and from low and lower income economies are desperately needed. On the upside, some experts are raising concerns that global innovation might harm rather than help this goal. As increasing numbers of prominent scholars work together across borders, top innovators are drawn away from focusing on local needs. As a result, lesser global research outcomes are being assimilated locally. Fourth, although difficult to measure, there seems to be beneficial scope to expand global corporate and public R&D cooperation. In particular, much unused potentials for innovation collaboration exists at the regional level, within Asia, Africa, Latin America, and other parts. The same is true for technology diffusion and cooperative research between rich and poor countries. Some of the resulting opportunities and challenges of global innovation can be outlined, both for firms and governments.

For firms, perceiving global innovation as a win opportunity has been a long time in the making. Multinational corporations have started to move R&D resources across the globe. They have located R&D resources in developing countries for more than a decade, playing an important role in edging the technological gap between high to low income nations. So rather than only just adapting goods to domestic markets, more and more frequent research are conducted that helps to solve local problems in developed and developing countries.

There is a need for global innovation analogy and discussions on new governance structures. Are new governance systems required to make better global innovation cooperation? Are the present frameworks insufficient? These questions should be at the center of future innovation policy debates.

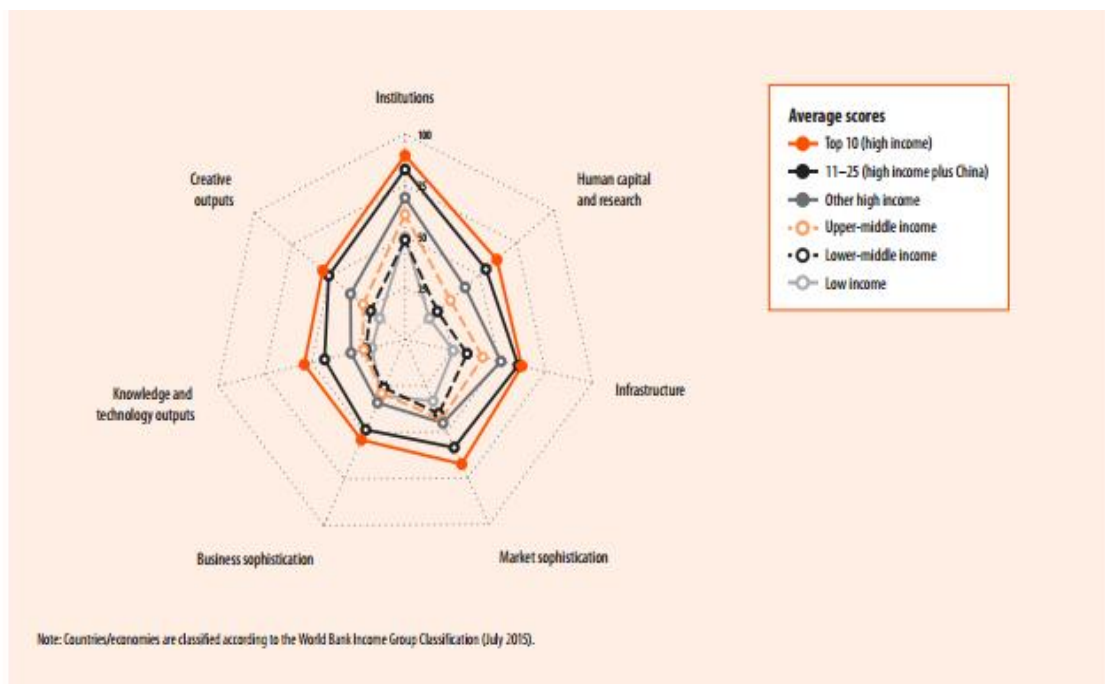


Fig 2.2: Innovation divide bridged; China reaches the top 25 [20]

On one hand, it can be said, for many innovation questions, there already is a global governance structure through organizations such as the International Telecommunication Union (ITU) for telecommunication issues, the International Organization for Standardization (ISO) for standardization issues, the World Intellectual Property Organization (WIPO) for IP matters. Researchers and institutions have called for complementary global governance mechanisms which

are more focused on improving international science and R&D cooperation. The argument is that innovation needs to be dealt with on relation with trade, health, and immigration issues that have been dedicated to international governance framework. Neither the scope of such international governance systems nor the proper institutional anchors have been fully expanded. Importantly, such frameworks will need to be flexible and timely enough to accommodate the dynamic nature of innovation processes. Another important aspect, is the development of global research utilities and how to best design and implement their optimal importance and sharing modalities.

In both cases, the challenges is to move towards increased global innovation cooperation via more inclusive governance instruments producing measurable outcomes that are evaluated and more clearly communicated overtime. Better cooperation will help inform all stakeholders more broadly about the merits of global innovation, simultaneously pre-empting the formation of new barriers in this regard.

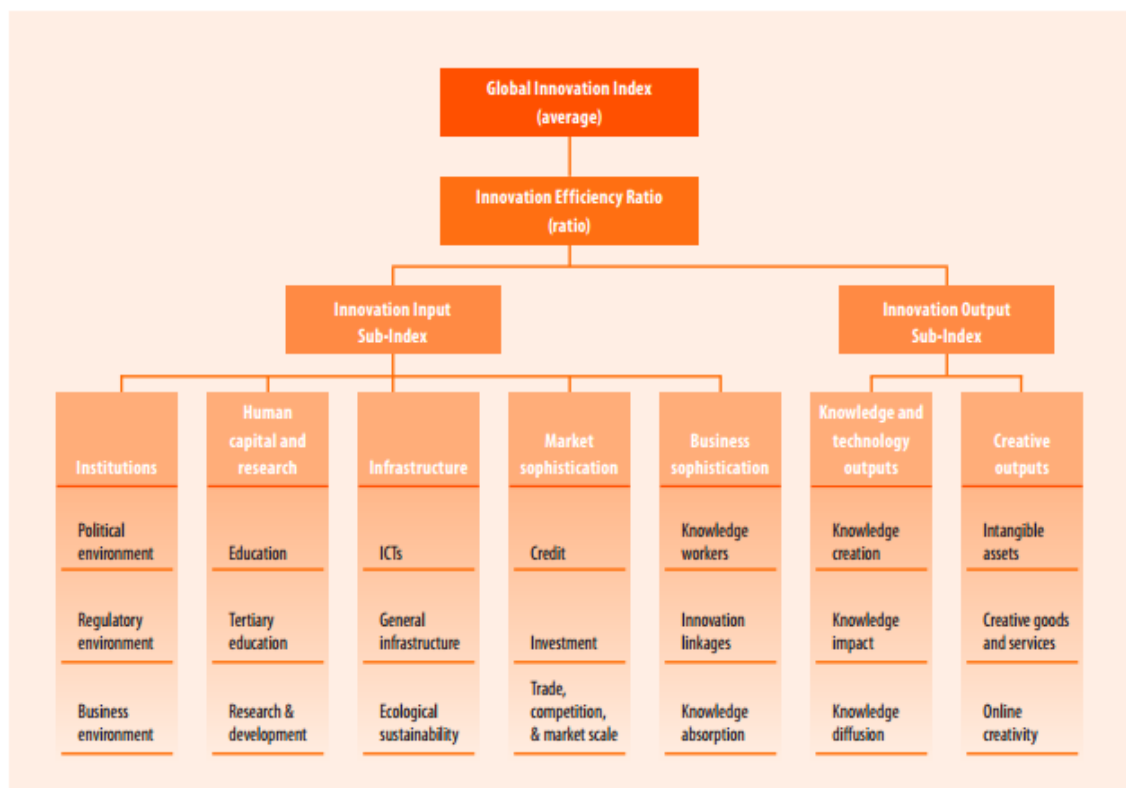
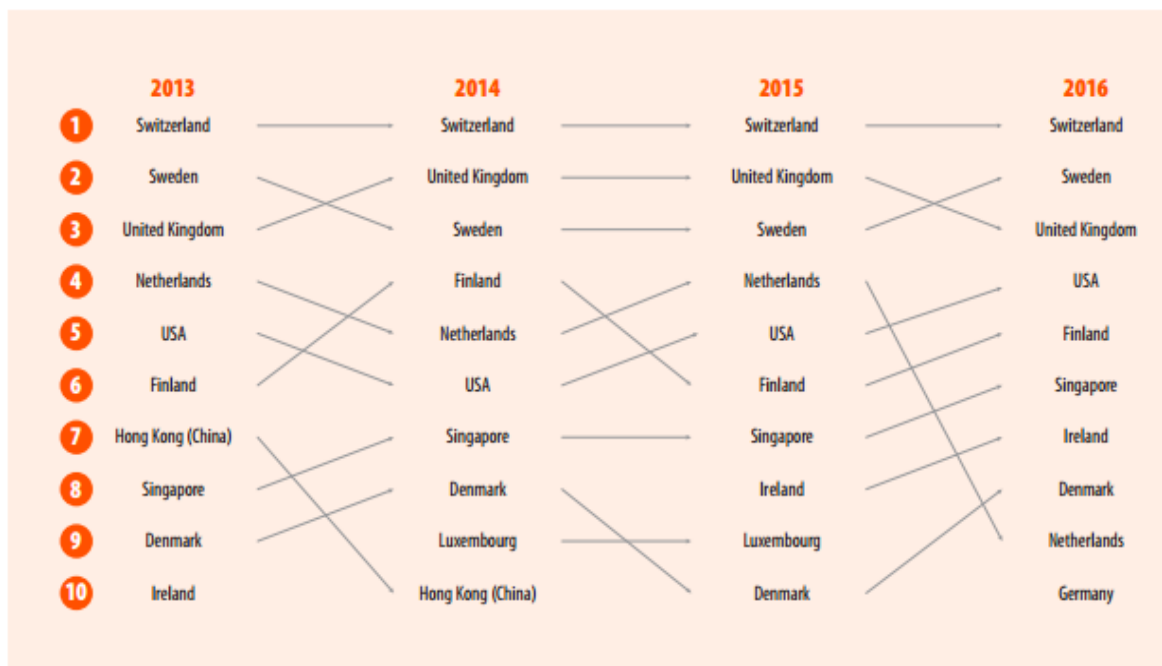


Fig 2.3: Framework of the Global Innovation Index 2016 [20]

The GII helps to initialize an environment in which innovation factors are continually evaluated. It provides an important tool of detailed metrics for 128

economies in the year 2016, representing 92.8% of the world population and 97% of the world GDP. Four measures are calculated; the overall GII, the Input and Output sub-indices, and the Innovation Efficiency ratio.

- The Overall GII score is the simple average of the input and output sub-index scores.
- The innovation input sub-index comprises of five input pillars that capture elements of the national economy that enable innovative activities which includes; institutions, human capital and research, infrastructure, market sophistication, and business sophistication.
- The Innovation Output sub-index provides information about outputs that are the results of innovative activities within the economy. There are two output pillars; knowledge and technology outputs and creative outputs.
- The Innovation Efficiency Ratio is the ratio of the output sub-index score over the input sub-index score. It shows how much innovation output a given country is getting for its inputs.



Note: Year-on-year GII rank changes are influenced by performance and methodological considerations; see Annex 2.

Fig 2.4: Movement in the top 10 of the GII [20]

The GII 2016 results have shown consistency in areas such as top ranking and the innovation divide. However, they also have some new high-level developments as described in the continuing statement.

Stability at the top, led by Switzerland, Sweden and the UK. In 2016, the GII remains relatively stable at the top. Switzerland leads the ranks for the sixth consecutive year, but for the first time, they see their distance from the second best scoring country getting closer, potentially reflecting in an association of methodological drivers. Sweden reigns in second place, which was last held in 2013, moving the UK down to third. The USA and Finland each move up one spot to take the fourth and fifth spots respectively. Singapore, Ireland, and Denmark also improved upon their 2015 rankings and remain in the top 10, while the Netherlands falls to ninth position, which was mostly driven by an FDI related variable and missing data points. Germany enters the top 10 this year as Luxembourg moves out, making them the only new entity among the top 10 this year. Figure 5 shows movement in the ranked economies over the years.

1. Switzerland
2. Sweden
3. United kingdom
4. United states of America
5. Finland
6. Singapore
7. Ireland
8. Denmark
9. Netherlands
10. Germany

Also, there is stability across the top 25 nations with one exception, the Czech Republic which dropped from 25<sup>th</sup> position to the 27<sup>th</sup> position in 2016 has china becomes the first ever middle income economy to enter top 25. Within the 25 nations, other economies moved up by two or more.

Switzerland has gained the first position in the GII for the sixth year in a row. It has maintained the spot since 2011, as well as its position in innovation output sub-index and in the technological knowhow since 2012. It ranks among the top 25 except from the sub-pillar side. Switzerland is a knowledge based nation with 8.3 million people resident in it, recording the highest GDP per capita in the world at ppp\$58,551, also ranks in the top 10 for all pillars with the exception of infrastructure. Its high innovation efficiency ratio allows it to benefit from its solid innovation abilities and help transform its resources into high-level innovation outputs.

Sweden sustains the second highest position in the GII, rank held from 2011 to 2013. They remain the top Nordic economy, showing improvements in both the input and output sub-indices of the GII. This high ranking is led by profits in investments and creative products and services. Sweden continues to rank among the 25 nations with improved rankings in 11 of 21 sub-pillars this year. Overall, it shows top 10 ranking in all pillars with the exception of institutions.

United Kingdom is ranked third in the GII this year, maintaining its position after a rise from 11<sup>th</sup> in 2011 to second in both 2014 and 2015. The UK ranks 7<sup>th</sup> overall in the innovation input sub-index and 4<sup>th</sup> overall in the innovation output sub-index, up one spot from 2015. It ranks in the top 10 economies on all pillars with two exceptions, institutions and business sophistication. On the sub-pillar side, the UK ranks in the top 25 economies across the input and output sub-indices with only four exceptions, education, general infrastructure, knowledge absorption, and knowledge diffusion. Although the UK is still far to the performance of the top 25 in sub-pillar, the increase in rank of the UK on general infrastructure was its largest rank increase on the input side, up by 14 positions since 2015.

The United States of America reaches the 4th position. It increases its rank in both the Input Innovation Sub-Index and the Output Innovation Sub-Index. The introduction of more vivid innovation indicators this year helps the USA in their upward momentum. The USA keeps its ranking in pillar, Market sophistication, and also this year in each of its three sub-pillars. In all other sub-pillars, the USA

ranks in the top 25 with just four exceptions, Education, Tertiary education, Ecological sustainability, and Intangible assets. At the indicator level, the United States of America takes the top spot in 10 different indicators, including QS university rankings, venture capital deals, computer software spending, and cultural and creative services exports. This year the country also ranks 2<sup>nd</sup> in the quality of innovation composite analysis for the first time since 2013.

Finland enters again the top 5 in the GII this year at the 5<sup>th</sup> position. Its ranking of 4<sup>th</sup> position in the innovation input sub-index can be slightly contributed to Finland's place within the top 5 for three of its pillars, institutions, human capital and research, and business sophistication. Nine of Finland's 16 relative strengths across pillars, sub-pillars, and indicators lie within Institutions and Human capital and research. The country takes the top spot in two indicators here, rule of law and ease of resolving insolvency. Finland's performance as part of the top 10 group relies on 16 of the 21 sub-pillars ranking in the top 10, including Business environment, Knowledge workers, Investment, Innovation linkages, Knowledge creation, Knowledge diffusion, and Knowledge absorption. Improvement opportunities for Finland are seen in Trade, competition, and market scale, Knowledge impact, Ecological sustainability, and Creative goods and services.

Singapore moves up one position to 6th in this year's GII, earning the top rank in the South East Asia, East Asia, and Oceania region. It also earns the top spot in the Innovation Input Sub-Index, led by its ranking in the top 5 for all Input pillars and 1st position in three input pillars, Institutions, Infrastructure, and Business sophistication. Singapore maintains its rank of 20th in the Innovation Output Sub-Index, moving up two spots in the Knowledge and technology pillar to reach the top 10. In addition to ranking 1st in three pillars, Singapore also takes the top spot in three sub-pillars, Political environment, Regulatory environment, and Knowledge absorption. At the analysis level, Singapore stability across pillars, with the most significant improvements since 2015 in five indicators, expenditure

on education, ICT services imports, intellectual property receipts, ICT services exports, and trademarks by origin.

Ireland is ranked 7th this year after entering the top 20 in 2010 and the top 10 in 2012. Ireland's rank rose this year in overall Innovation Outputs and is perceived as a more efficient economy in terms of innovation, as captured by an improved Innovation Efficiency Ratio. Ireland ranks in the top 20 across all pillars, with the greatest improvement in Infrastructure. This is the result of a better performance in gross capital formation, although this indicator remains a relative weakness for the economy. Relatively, Ireland sees its largest fall in Market sophistication, this shift can be related with two variables moving out of the top 25 in that sub-pillar, ease of getting credit and domestic credit to private sector, ranking now at 27th and 35th, respectively.

Denmark ranks 8th in this year's GII, a position it held in 2014. Denmark's improved positioning comes as it ranks in the top 25 economies across all pillars. At the sub-pillar level, Denmark improves in Tertiary education, Investment, Knowledge absorption, and Intangible assets. It has also achieved a spot in the top 25 economies in 15 of the 21 sub-pillars. Although the country has different amount of strengths in both the input and output sides of the GII, Denmark's most notable areas of opportunity are also in both sub-indices, Trade, competition, and market scale, Knowledge absorption, and Knowledge impact.

The Netherlands has been ranked in the top 10 nations of the GII since 2008, and the country remains in 2016 at 9th position. However, in part because of methodological considerations, this year its ranking is affected by its lower ranks on both the Innovation Input Sub-Index and the Innovation Output Sub-Index. The Netherlands achieves a top 25 ranking among all economies for all pillars of the GII, with a better ranking this year in Infrastructure and Business sophistication. Alternatively, the Netherlands' performance falls at the pillar level in Knowledge and technology outputs, where it ranks 16<sup>th</sup> position overall. This change is mainly a repercussion of lower rankings in the Knowledge diffusion sub-pillar and the



indicator FDI net outflows. The recent indicator, identified as highly loud in previous GII editions, partly moves the fall in the ranking of the Netherlands.

Germany rounds out the top 10 economies of the GII, moving into this group for the first time since 2009. Germany’s ranking increases are visible across five pillars: Institutions, Market sophistication, Business sophistication, Knowledge and technology outputs, and Creative outputs. Germany shows stability in its ranks in both the Innovation Input Sub-Index and the Innovation Output Sub-Index, and improves in its Innovation Efficiency Ratio. Ranking in the top 25 economies across all pillars, and in the top 10 economies for both output pillars, Germany shows improvements on the output side in Knowledge impact, Intangible assets, and Creative goods and services. In addition, specific strengths at the indicator level on the output side are behind the upward drive that now has Germany among the top 10.

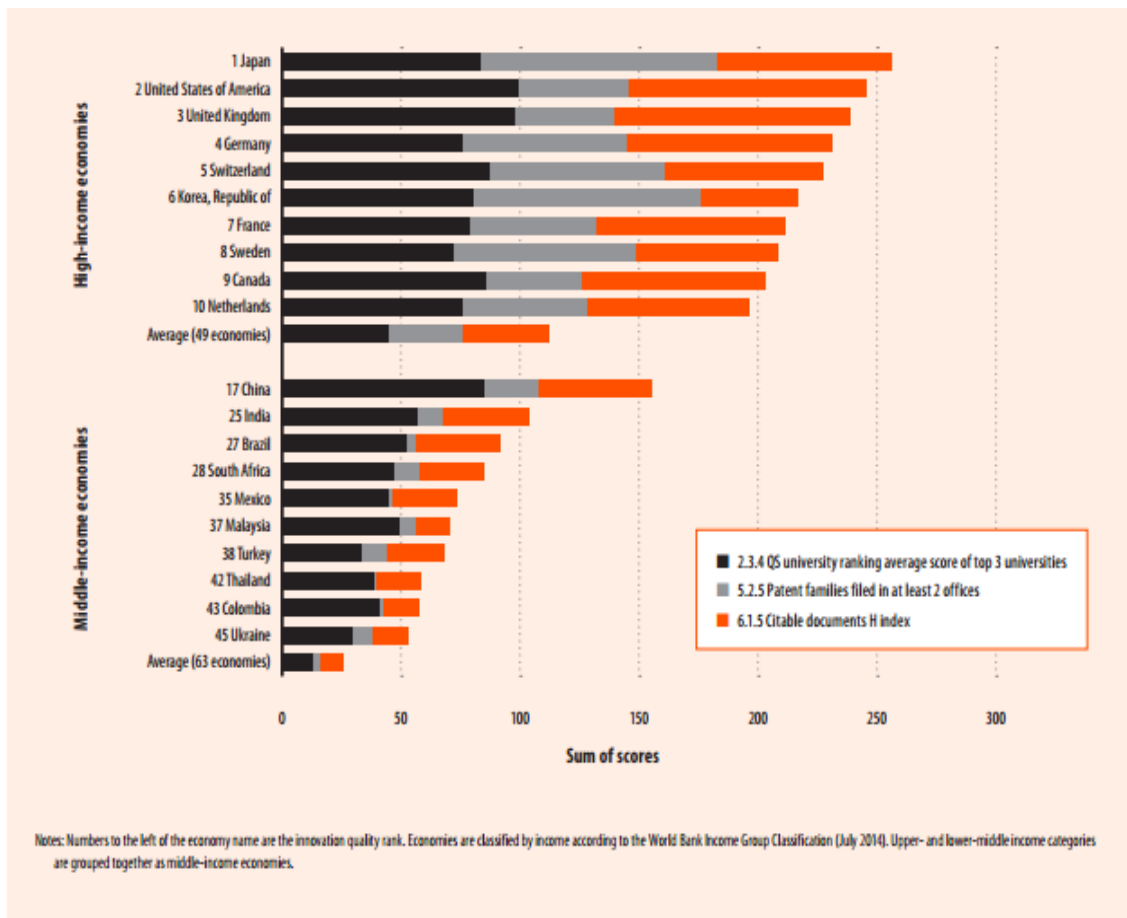


Fig 2.5: Metrics for quality of innovation; Top high- and top middle-income economies. [20]

Table 2.3

Ten best ranked economies by income group (rank) [20]

Global Innovation Index		Innovation Input Sub-Index	Innovation Output Sub-Index	Innovation Efficiency Ratio
High Income Economies				
1	Switzerland (1)	Singapore (1)	Switzerland (1)	Luxembourg(1)
2	Sweden (2)	Hong Kong (China)(2)	Sweden (2)	Malta(2)
3	United Kingdom (3)	United states of America(3)	Luxembourg (3)	Iceland(3)
4	United States of America(4)	Finland (4)	United Kingdom(4)	Switzerland(5)
5	Finland (5)	Sweden (5)	Ireland(5)	Estonia(6)
6	Singapore (6)	Switzerland (6)	Iceland(6)	Ireland(8)
7	Ireland (7)	United kingdom (7)	United States of America(7)	Germany(9)
8	Denmark (8)	Denmark (8)	Germany(8)	Sweden(10)
9	Netherlands (9)	Japan (9)	Netherlands(9)	United Kingdom(14)
10	Germany (10)	Canada (10)	Finland(10)	Hungary(17)
Upper-Middle Income Economies				
1	China(25)	China(29)	China(15)	China(7)
2	Malaysia(35)	Malaysia(32)	Bulgaria(35)	Turkey(13)
3	Bulgaria(38)	Montenegro(46)	Turkey(37)	Bulgaria(16)
4	Turkey(42)	South Africa(47)	Malaysia(39)	Lebanon(41)
5	Costa Rica(45)	Mauritius(48)	Costa Rica(44)	Romania(46)
6	Romania(48)	Bulgaria(49)	Romania(45)	Mongolia(47)
7	Montenegro(51)	Costa Rica(50)	Thailand(50)	Costa Rica(50)
8	Thailand(52)	Romania(52)	Mongolia(51)	Iran, Islamic Rep(51)
9	Mauritius(53)	Colombia(53)	Montenegro(52)	Thailand(53)
10	South Africa(54)	Peru(56)	TFYR of Macedonia(55)	Macedonia(56)
Lower-Middle Income Economies				
1	Moldova Rep(46)	Bhutan(54)	Moldova Rep(36)	Moldova Rep(4)
2	Ukraine(56)	Georgia(67)	Ukraine(40)	Viet Nam(11)
3	Viet Nam(59)	India(72)	Viet Nam(42)	Ukraine(12)
4	Armenia(60)	Moldova Rep(74)	Armenia(43)	Armenia(15)
5	Georgia(64)	Morocco(75)	India(59)	Cote d'voire(19)
6	India(66)	Ukraine(76)	Georgia(60)	Tajikistan(29)

7	Morocco(72)	Viet Nam(79)	Philippines(64)	Kenya(30)
8	Philippines(74)	Armenia(80)	Kenya(65)	Philippines(49)
9	Kenya(80)	Philippines(86)	Tajikistan(69)	Indonesia(52)
10	Tajikistan(86)	El Salvador(89)	Morocco(70)	Sri Lanka(54)
Low Income Economies				
1	Rwanda(83)	Rwanda(55)	Mozambique(73)	Ethiopia(18)
2	Mozambique(84)	Uganda(91)	Tanzania, United Rep(80)	Tanzania(22)
3	Cambodia(95)	Cambodia(94)	Malawi(83)	Madagascar(35)
4	Malawi(98)	Mozambique(96)	Ethiopia(85)	Mali(37)
5	Uganda(99)	Burkina Faso(105)	Madagascar(91)	Malawi(38)
6	Tanzania United Rep(105)	Malawi(110)	Mali(92)	Mozambique(45)
7	Ethiopia(110)	Benin(111)	Cambodia(95)	Cambodia(90)
8	Madagascar(111)	Niger(113)	Uganda(105)	Nepal(94)
9	Mali(112)	Burundi(114)	Nepal(112)	Uganda(106)
10	Nepal(115)	Nepal(116)	Rwanda(114)	Guinea(112)

Clustering leaders, innovation achievers, and underperformers: The GII bubble chart

The GII helps recognize nations that over or underperform on innovation relative to their level of development. The nations that appear relatively close to the trend line show results that are in accordance with what is expected based on their level of development. The further up and above the trend line an economy appears, the better its innovation performance is when compared with that of its peers at the same stage of development. Light-colored bubbles in the figure correspond to the efficient innovators, while the dark-colored bubbles represent those countries in the lower half of the Innovation Efficiency Ratio.

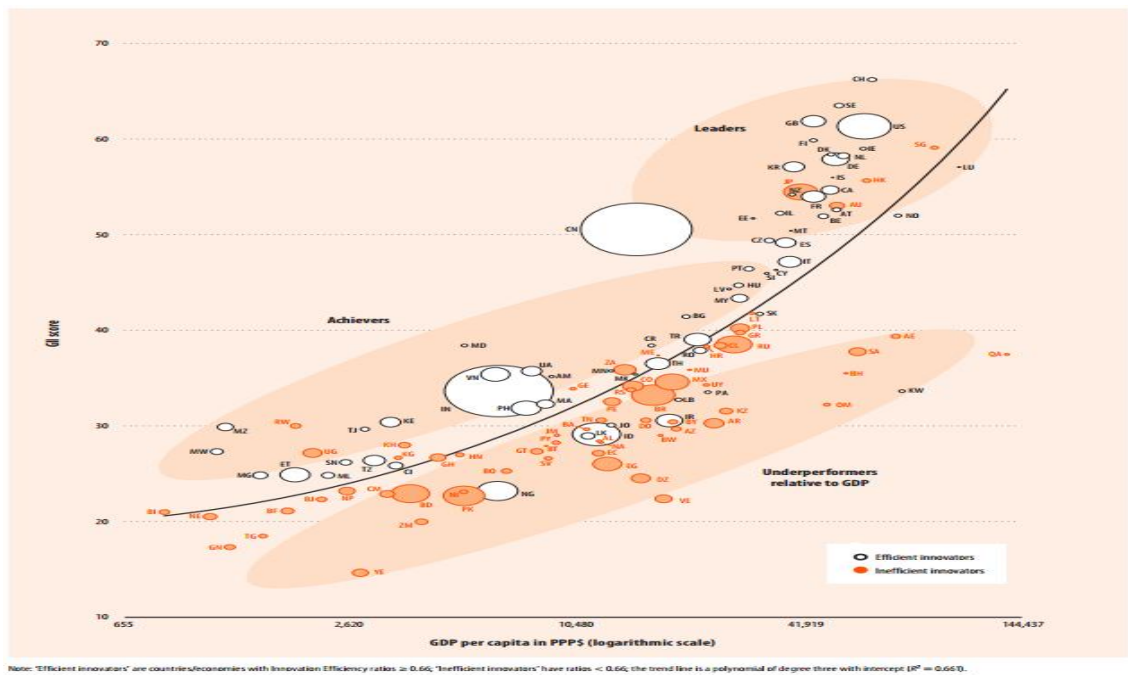


Fig 2.6: GII scores and GDP per capita [20]

Among the innovation actors found, the top 25 countries that, with two exceptions, China is now in and the Czech Republic is out, are the same economies as in 2015. A vast amount of economies in this section are in the high-income group and located in Europe or South East Asia, East Asia, and Oceania. All of these economies also have a GII score above 50. These all show solid innovation systems where investments in human capital excel in stable innovation infrastructures to create the topmost levels of innovation outputs internationally.

Economies that perform at least 10% higher than their colleagues for their level of GDP are called innovation achievers. Innovation achievers demonstrate better results in innovation because they continuously make improvements to their institutional setup, have a set of highly skilled workers who operate in more stable innovation systems, reveal a better collaboration with international markets, and display more strong channels of knowledge absorption. These traits result in higher economic growth rates per worker and in more sophisticated local business communities that are attractive for foreign investment. Progress on these dimensions are still not collating across their economies. The number of innovation achiever countries, a total of 15, is smaller this year than it was in previous years.

This is the result of having lesser countries covered by the GII this year, resulting from stricter minimum data requirement.

## 2.2. Analysis of Investment Strategies of Transnational Corporation

As it had been earlier reported in the World Investment Report 2014, UNCTAD projected the FDI flows to rise in 2014–2016, mainly pulled by investments in developed countries as their economic recovery starts to take shape and diversify. However, the fragility in some newly emerging markets and risks related to policy uncertainty and regional conflict could still hinder the expected upturn in FDI flows. Moreover, this prediction did not take into account huge deals such as the \$130 billion buy-back of shares by Verizon (United States) from Vodafone (United Kingdom) in 2014, which reduced the equity component of FDI inflows to the United States and affected the global level of FDI inflows.

Table 2.4

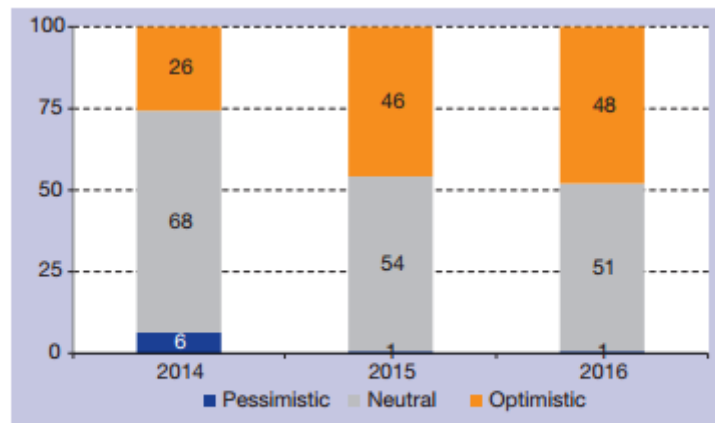
Percentage of response to UNCTAD [21]

<b>A. Global outlook</b>			
<b>Investment environment sentiment:</b> (Per cent of respondents indicating that they are optimistic)	<b>For TNCs</b>	<b>For IPAs</b>	
2014	26	54	
2015	46	80	
2016	48	87	
<b>TNCs FDI expenditure prospects (compared with 2013)</b>	<b>Increase</b>	<b>Remain the same</b>	<b>Decrease</b>
2014	50	38	12
2015	51	42	7
2016	51	42	6
<b>Entry mode prospects</b> (Per cent of survey respondents selecting the mode of entry as very important)	<b>In 2013</b>	<b>In 2016</b>	
Mergers and acquisitions	29	38	

Greenfield investment	27	34	
Follow-on investment in existing operations	39	38	
Non-equity modes	19	24	
TNC exports from home country	40	43	
<b>B. TNCs internationalization trends</b>			
<b>Level of expected internalization in 2016</b>	<b>Less than 20%</b>	<b>20% to 50%</b>	<b>More than 50%</b>
Sales	12	25	63
Employment	22	32	46
Investment expenditures	30	31	38
Assets	32	31	37
Research and development expenditures	57	24	19

Results from the World Investment Prospects Survey 2014–2016 supported this cautious scenario. According to this year’s WIPS, transnational corporations are aware of persistent downturn risks to the global economy and thus expressed uncertainty about the investment outlook for 2014 but had a bright forecast for the following two years. For the year 2016, almost half of the respondents had positive expectations and virtually none felt pessimistic about the investment climate

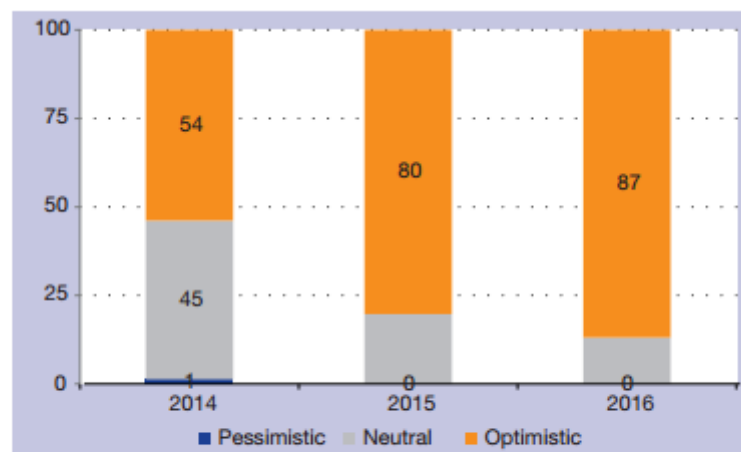
Responses to this year’s survey revealed that firms, mostly based in developed economies, are still cautious about recovery prospects in home economies and possible political uncertainties in emerging markets. This translated into a high share of investors (68 per cent) stating that they were undecided about the state of the international investment climate for 2014. However, almost half of the respondents (46 per cent) were confident about a positive global climate already for the year 2015, and 48 per cent of them expressed themselves as optimistic for the year 2016 (figure 2.7). The very low share of pessimistic answers suggests that while investors take into account possible risks in their investment plans they do not believe risks of a global recession can effectively upset the investment climate.



Source: UNCTAD survey.  
 Note: Based on 164 TNC responses.

Fig 2.7. TNCs of the global investment climate [21]

Investment promotion agencies (IPAs) were more advantageous in their assessment of the global investment climate and followed a close pattern. For 2014, IPAs also showed a high degree of uncertainty, with 45% of correspondents selecting undecided for the year (figure 2.8), for the medium-term years, their expectations turned positive with almost 90% of correspondents being optimistic for 2016. Although the different perceptions on global investment climate largely reflect differences in the geographical coverage, IPAs tend to be more confident of their economic increase perception despite fragilities and recent political uncertainties.



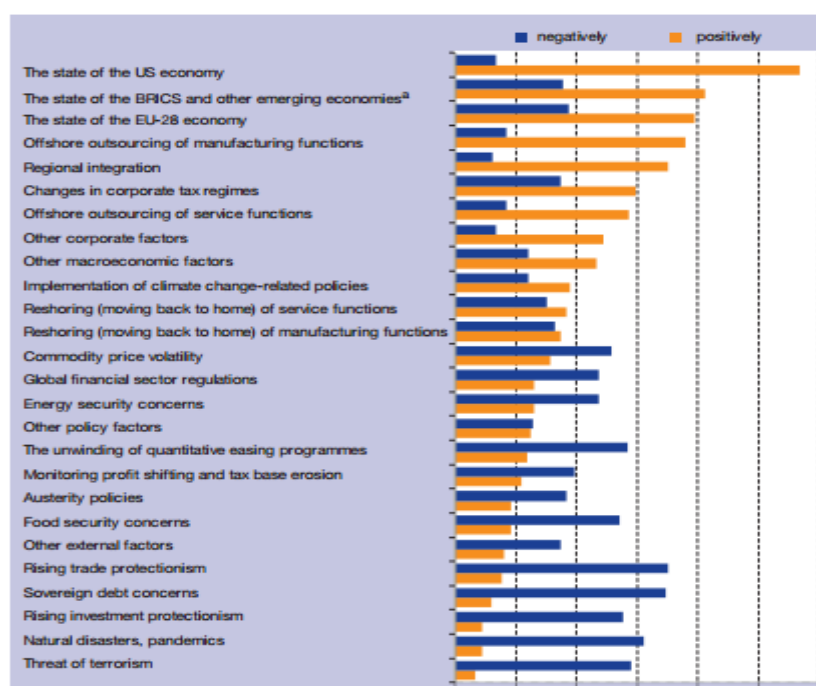
Source: UNCTAD survey.  
 Note: Based on 80 responses.

Fig 2.8. IPA's perception of the global investment climate [21]

The positive look on the investment conditions is backed by confidence in the economic comeback. When asked about the factors positively and negatively

affecting FDI flows in the medium term, TNCs put the state of the economy of both developed and developing economies at the top of their list of positive factors. The state of the economy in the United States tops the positive factors, followed by the economic conditions in BRICS (Brazil, Russian Federation, India, China, and South Africa) and other emerging economies, and in the 28 European Union economies (EU-28). This marks a turnaround in investor ideology especially with respect to the state of the European economy that last year was at the top of their concerns. Other factors ranked among the most positively affecting FDI flows are the process of outsourcing and offshoring of manufacturing functions, regional integration, and changes in corporate tax systems.

Likewise, uncertainty among investors about the global investment condition is related to risks and political factors such as the rise in trade and investment protectionism, sovereign debt concerns, natural disasters, the threat of terrorism and the unwinding of quantitative easing measures that is behind much of the financial volatility in emerging economies. The fact that political factors such as sovereign debt concerns are at the top of investors' negative factors list incorporates the idea that firms are still not confident about the solidity and sustainability of the economic recovery, especially in their home countries.

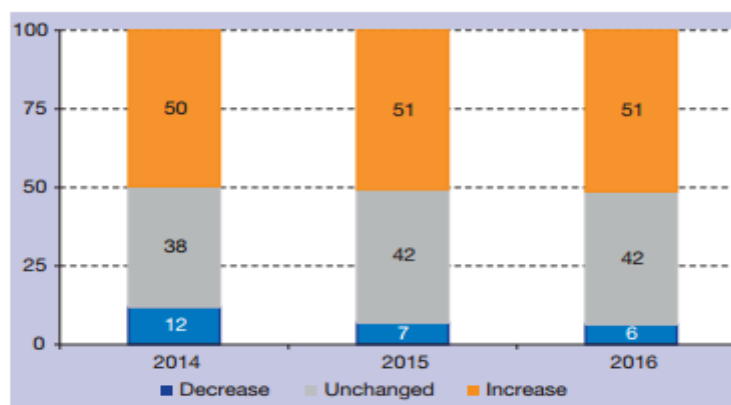


Source: UNCTAD survey.

Fig 2.9: positive and negative factors affecting FDI flows [21]



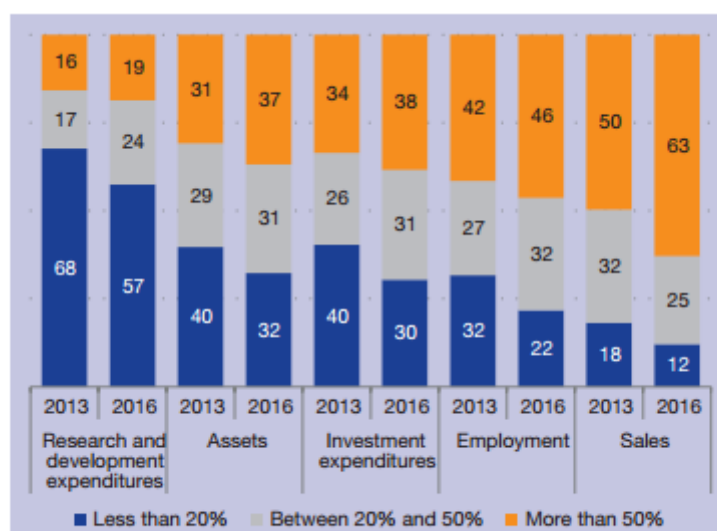
The careful approach accompanied by many TNCs is shown in a large proportion (between 38% and 42%) of enterprises maintaining their investment levels relatively stagnant over the short term. Responses to the survey show that more than half of the correspondents expect to increase their FDI expenditures in 2015 and 2016, compared to 2013 levels (figure 2.9).



Source: UNCTAD survey.

Fig 2.10: TNCs intended changes on FDI expenditures [21]

This year's statistics confirms a continued desire of TNCs to globalize their operations, bouncing back to an increasing trend after last year's slowdown. This is true for international sales where the share of correspondents stating that international revenues account for more than half of total sales is expected to jump from about 50 per cent of all respondents in 2013 to 63% in 2016. Similarly, the research reveals that in the next three years, firms intend to significantly increase their foreign operations by increasing the share of assets, investment expenditures and employment abroad. The share of those TNCs having less than 20% of operations overseas is expected to fall by between 6% and 10% in all areas of activity (figure 2.10). With regards to last year, the globalization drive is particularly marked for employment by 2016 about 46% of companies are expected to have more than half of their staff abroad. Research and development activities, while still showing increasing internationalization intentions by TNCs, will maintain their main location in their headquarters.

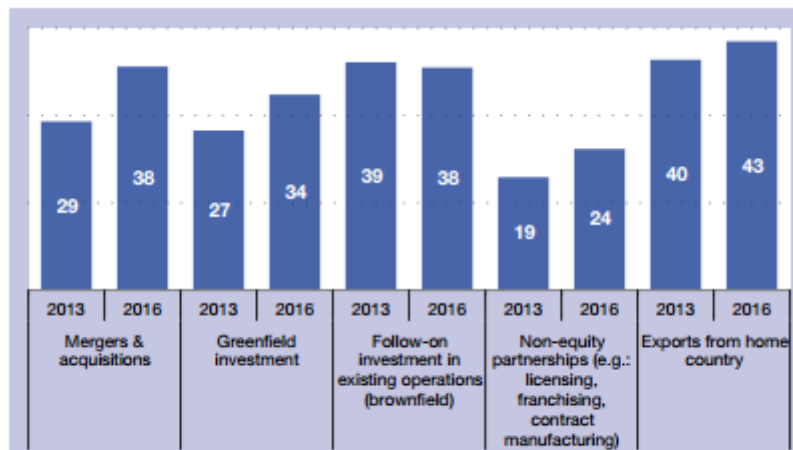


Source: UNCTAD survey.

Fig 2.11: Globalization trends [21]

This year's WIPS confirms TNCs' statistics on the ways transnational corporations enter international markets, with non-equity modes, the least preferred. Similar to last year's results, in 2014, only 19% (a percentage still higher than last year's) of TNCs executives considered them important in 2013, and 24% foresaw that they would be relevant in 2016 (figure 2.11). This compares with percentages above 30% just a couple of years ago. Lower interest in non-equity modes might be related to recent re-shoring trends and their underlying factors, favorable production conditions in developed nations and rising production and management costs in distant overseas markets. On the other hand, this could also signal better conditions for equity modes. After a difficult year on the equity markets, the importance of M&A's seems to have recovered, as almost 30% of correspondents considered M&A's an important mode of entry in 2013, and this increases to 38% of correspondents who considered M&A's to be important by 2016. Greenfield and brownfield investments maintained their relevance in TNCs' globalization strategies with 30–40% of TNCs rating them as important; however, both modes lost some ground in importance compared with previous years when these percentages were about 5 to 10 points higher. Nevertheless, Greenfield investments, are set to grow. On the other hand, brownfield projects are expected to remain stagnant between 2013 and 2016. Similar to last year's results, exports

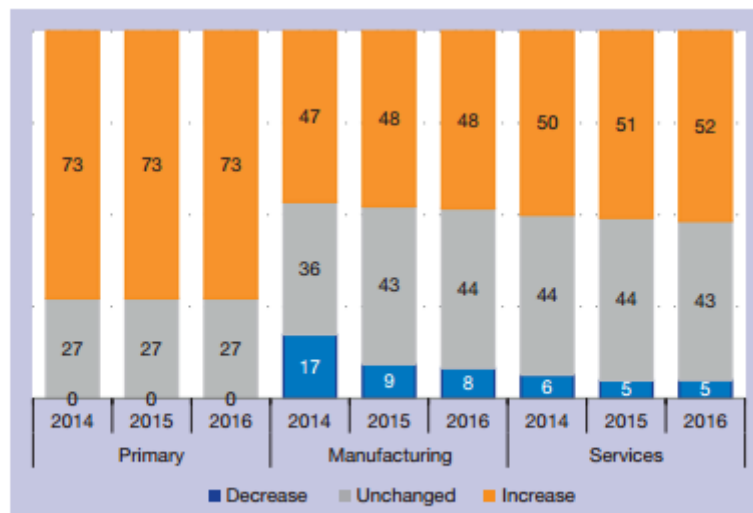
seem to be the most preferred mode of entry, selected by 40% of correspondents as important in 2013 and set to increase in the following years.



Source: UNCTAD survey.

Fig 2.12: Importance of mode of entry [21]

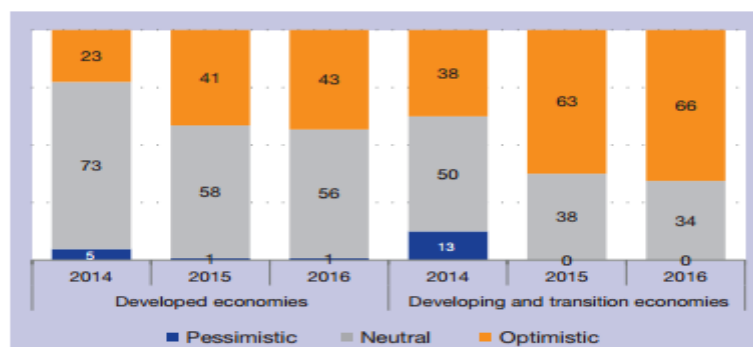
According to the WIPS, transnational corporations across all sectors will either maintain the current level or increase FDI in the next two years, 2015–2016. After a year of consolidation and falling investments, primary sector TNCs were the most bullish about their international investments in the next years, with more than 70% of correspondents indicating they will be increasing their FDI expenditures above 2013 levels (figure 2.12). 47% of TNCs in the manufacturing sector and 50% of those in services expected an increase in 2014. For the current year, investors in the secondary and tertiary sectors still expressed some uncertainties about their plans, with some low-tech industries in manufacturing such as textiles, wood and wood products, construction products, metals, and machinery forecasting decreases of expenditures in the short-term. However, by 2016, almost half of TNCs in all sectors expect to see an elevation in their FDI expenditures, in line with their rising positivism for the global investment environment.



Source: UNCTAD survey.

Fig 2.13: TNCs intended changes in FDI expenditures by sectors [21]

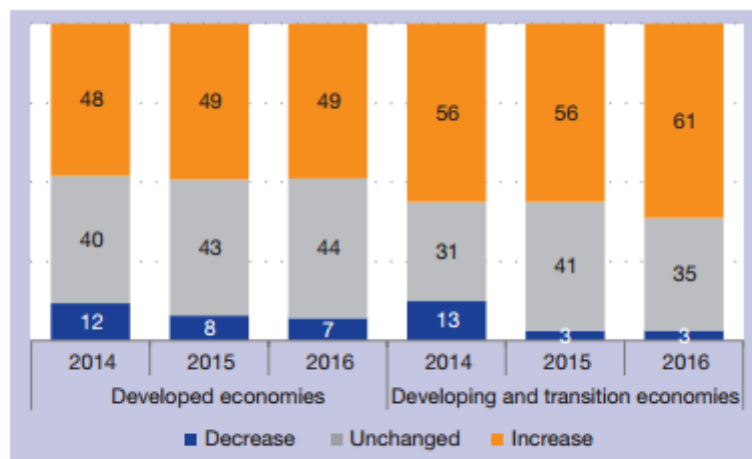
For 2014, global ideologies are uncertain with half of TNCs across the world being either neutral about the investment conditions. Over the medium term, TNCs from developed countries seem to be less uncertain while still holding on to some uncertainty about the global investment condition, with more than 56% of them responding that they are neutral for 2016 investment prospects (figure 2.13). TNCs from the developing and transition economies are more optimistic. Differences in perspectives across country groups are large for all years with the share of companies based in developing and transition economies stating they are optimistic about the global investment climate about 20% higher than their developed rivals. Interestingly, in spite of their pronounced uncertainty, TNCs in developed economies were less pessimistic than their peers in developing and transition economies about the global investment conditions in 2014.



Source: UNCTAD survey.

Fig 2.14: TNCs perception of the global investment conditions [21]

Differences in global ideologies across regional groups are partly translated into investments plans. Despite uncertainties for 2014, almost 48% of correspondents from developed countries and 56% of those from developing countries show an increase in their FDI expenditures over 2013 levels. Developed country investors' forecasts of their international expenditures are quite stable over the short term with only small changes in the share of those who would reduce their investment levels in the medium term, while there is an increase of investments of firms based in developing countries for the year 2016. In particular, about 7% of developed country TNCs expect their FDI budgets to go down in 2016, compared with 3% of TNCs from developing countries (figure 2.14). The consistent spending plans of investors in developed economies could be yet another indication of their cautious approach to foreign investment and their deep uncertainty about the world macroeconomic circumstances. On a different note, TNCs from developing and transition economies are more confident about growth and internationalization opportunities. These dynamics may strengthen the long-term trend of greater participation by TNCs from emerging economies in global FDI flows.

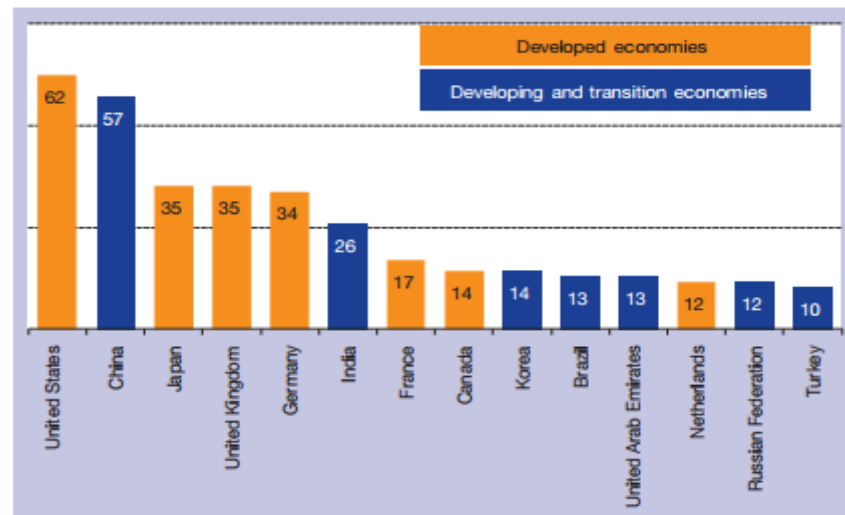


Source: UNCTAD survey.

Fig 2.15: TNCs intended changes in FDI expenditures [21]

According to this year's IPA, developed nations remain important sources for FDI, but they are now accompanied by major developing countries such as the BRICs, the United Arab Emirates, the Republic of Korea and Turkey. Indeed,

China is constantly ranked as the most promising source of FDI together with the United States (figure 2.15). Among the developed nations, the United States, Japan, United Kingdom, Germany, and France are ranked as the most promising developed economy investors, underscoring their continuing role in global FDI flows.

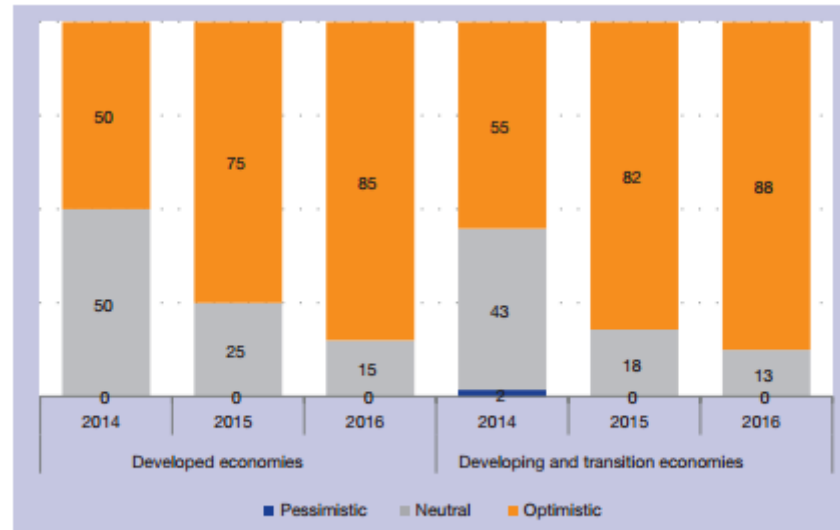


Source: UNCTAD survey.

Fig 2.16: IPA's selection of most promising investors [21]

IPAs, like transnational corporations, were also cautious about the global investment situation in 2014 but to a much lower degree. Over half of IPA respondents (55%) in developing and transition economies and 50% from developed economies were optimistic about FDI flows for the year (figure 2.16). This suggests that the consequence of recent political and economic uncertainties are known to remain locally circumscribed, not affecting global flows especially in the medium-term. In fact, for 2016 almost 90% of all IPA respondents, irrespectively of their home country, expressed high expectations about inflows to their country. However, the view from IPAs for inward FDI differed by region, particularly regarding specific industries. IPAs in developed economies look out for good prospects for FDI in machinery, business services such as computer programming and consulting, transport, and communications, especially telecommunications. African IPAs expect further investments in the extractive and

utilities industries, while Latin American IPAs emphasize the finance and tourism services. Asian IPAs report positive prospects in construction, agriculture, and machinery. IPAs in transition economies have high expectations for the construction, utilities, and textiles industries

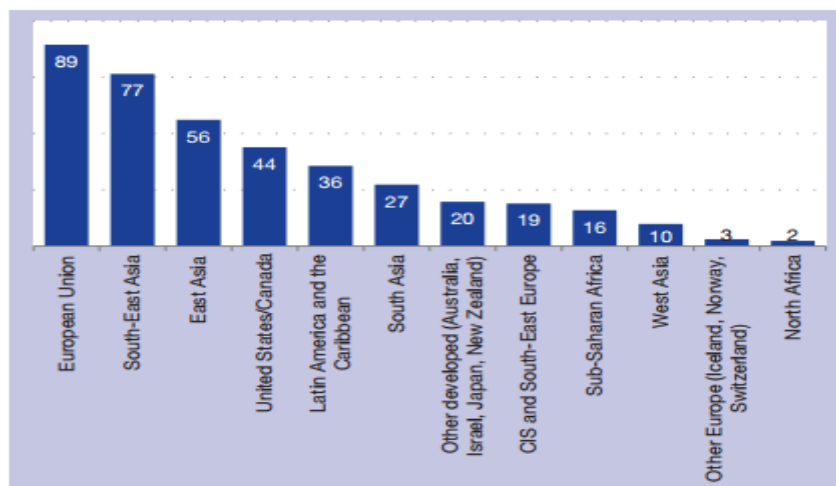


Source: UNCTAD survey.

Fig 2.17: IPA's perception of the global investment condition by host region [21]

For the medium term, IPAs, regardless of location, exhibited increasing optimism, although those in developing and transition economies were clearly the most hopeful when it came to their own countries' prospects for FDI inflows in 2016. Optimism from IPAs in developing and transition economies is not unwarranted. TNCs that respond to the research have increasingly ranked developing country host regions as highly important (figures 2.18 and 2.19). Confirming recent FDI trends, developing Asia attracts the highest interest from investors, in particular, South-East Asia has been sighted by almost 80% of correspondents as a possible destination of FDI in the next years, followed by East Asia with about 55% of preferences. Interestingly, EU countries have been selected as the most viable destinations by almost 90% of investors. This confirms the positive expectations about the economy of the EU and their investment opportunities that are emerging after the prolonged recession. North America comes fourth, after the EU and two Asian regions. The very low share of companies selecting North African countries as an investment destination in the

next years indicate that investors are still cautious about political instability in the region. By contrast, Sub-Saharan Africa, while still low in investors' rankings, is gaining some importance and is now considered more likely as an investment destination than West Asian and other developed European countries.

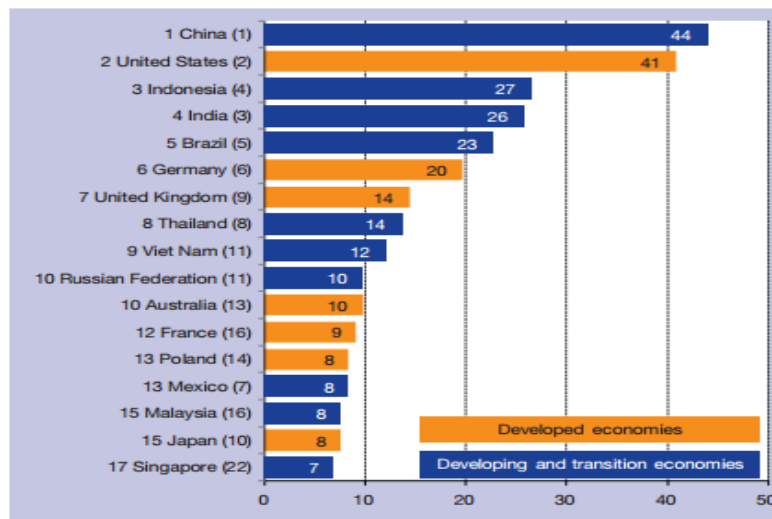


Source: UNCTAD survey.

Fig 2.18: Importance of host regions to TNCs [21]

Regional inflow trends are confirmed by individual country rankings. This year's ranking is largely consistent with the past researches, with only little changes. China leads the list, with 44% of all respondents, followed closely by the United States, cited by 41%, and only at a bigger gap in investors' preferences come Indonesia, India, and Brazil. South-East Asian countries like Viet Nam, Malaysia, and Singapore, and some developed economies such as the United Kingdom, Australia, France, and Poland rose some steps in the rankings while Japan and Mexico fell a few steps (figure 2.19).





Source: UNCTAD survey.

Fig 2.19: TNCs top prospective home economies [21]

Globalization was the talk of the town in the 1990s, but in the 21<sup>st</sup> century, there's been no proof that globalization will be extinguished. Importantly, globalization refers to the growth of trade and investment, followed by the increase in international businesses and the coming together of economies around the world. According to philosopher, the globalization concept is based on a number of simple premises:

- Technological developments have increased the ease and speed of international communication and travel
- Increased communication and travel has made the world smaller.
- A smaller world means people are more aware of events outside of their home country, and are more likely to travel to other countries
- Increased awareness and travel result in a better understanding of foreign opportunities
- A better understanding of opportunities leads to an increase in international trade and investment, and the number of businesses operating across national borders
- These increases mean that the economies around the world are more closely integrated.

Managers must be aware of the fact that markets, suppliers, investors, locations, partners, and competitors can be anywhere in the world. Successful businesses will use the opportunities wherever they are and will also prepare for downfalls/fallbacks. Successful managers, need to understand the contrasts and differences across national boundaries, in order to make full use of opportunities and deal with eventual fallbacks.

The internationalization of businesses is easy to recognize in the spread of many brands and services throughout the world. Moreover, companies have become transnational or multinational, that is, they are based in one country but have operations in others.

During the early 1990s, there were reasons to feel that globalization was working. The economic success of Singapore, the quick economic growth in the Asian Tigers (as the Asian countries that grew quickly were called), the industrializing of countries, such as Brazil and Mexico, and a variety of other positive economic events around the world suggested that the results of globalization was indeed good for development in underdeveloped countries, as well as in developed ones. During the 1990s, the United States experienced one of its most sustained periods of growth as well, and there was much talk of a "new economy", based on globalization, which was immune to economic shocks and recession. Unfortunately, this rapid growth was not without repercussions. The Seattle meetings of the World Trade Organization turned into a fiasco, with anti-globalization groups demonstrating against globalization on all sides ranging from animal rights to environmental concerns, poverty alleviation, and jobs for Americans. The anti-globalization forces have not merge into a whole because they represent such diverse and often opposite views. The urgency in their protests, however, make it clear that globalization is not a cure for the world's problems.

#### Types of Global Business Activities

Businesses may choose to globalize or operate in different countries in four distinct ways: through trade, investment, strategic alliances, and licensing or franchising. Companies can decide to trade tangible goods such as automobiles and

electronics (merchandise exports and imports). Alternatively, companies may decide to trade intangible products such as financial or legal services (service exports and imports).

Companies may enter the global market through various kinds of international investments. Companies may choose to make foreign direct investments, which allow them to control companies and assets in other countries. In addition, companies may decide to make portfolio investments, by getting the stock of companies in other countries in order to gain control of these companies. Another way companies tap into the global market is by forming strategic alliances with companies in other countries. While strategic alliances come in different forms, some allow each company to access the home market of their counterpart and thereby publicize their goods as being affiliated with the well-known host company. This method of international business also allows a company to bypass some of the difficulties associated with internationalization such as different political, regulatory, and social conditions. The home company can help the multinational company address and overcome these difficulties because it is accustomed to them.

Finally, companies can participate in the international market by either licensing or franchising. Licensing involves granting another company the right to use its brand names, trademarks, copyrights, or patents in exchange for royalty payments. Franchising, on the other hand, is when one company agrees to allow a company in another country to use its name and methods of operations in exchange for royalty payments.

### Overview of International Strategy Development

Generally, a company develops its international strategy by considering its overall strategy, which includes its operations at home and abroad. Let's consider four aspects of strategy:

- Scope of operations
- Resource allocation

- Competitive advantage
- Synergy

The first component encompasses the geographic locations, countries and regions, of possible operations as well as possible markets or niches in various regions. Since companies have limited resources and since different regions offer different advantages, managers must select the markets that offer the company the optimal opportunities.

The second component of the global strategy focuses on use of company resources so that a company can compete successfully in the chosen markets. This component of strategy planning also determines the relative importance of various company functions and bases the allocation of resources on the relative importance of each function. For instance, a company may decide to allocate its resources based on product lines or geographical locations.

Next, management must decide where the company can achieve competitive advantage over other companies in the industry. Management can identify their competitive advantage by determining what the company does better (or can do better) than its competitors. Companies may realize this advantage through a host of techniques such as using superior technology, implementing more efficient organizational practices and distribution systems, and cultivating well-known brands. This component of the strategy involves not only identifying existing or potential areas of competitive advantage but also developing a plan for sustaining areas of competitive advantage. Finally, global strategy should involve establishing a plan for the company that enables its various functions and operations to benefit one another. For example, a company can use one line of products to encourage sales of another line of products and thereby enabling different parts of a business to benefit from each other.

Many companies are now outsourcing many of their operations internationally. For example, if you call to get information on your credit card, you may well be talking to someone in India or Mexico. Equally, manufacturers often outsource production to low labor cost countries. Concerns over ethical issues,

such as slave and child labor, have led to companies outsourcing under controlled conditions—offshore production may be subject to surprise visits and searches and outsourced factories are required to conform to specific criteria.

### Stages of International Strategy Development

Strategy development itself generally takes place in two stages: strategy formulation and strategy implementation. When planning a strategy, companies identify their international objectives and put together a strategy that will enable them to realize their goals. During the planning stage managers propose, revise, and finally ratify plans for entering new markets and competing in them. After a strategy has been agreed on, managers must take steps to have it implemented. Consequently, this stage involves determining when to begin global operations as well as actually starting operations and putting into action the other components of the global strategy.

More specifically, the first stage—strategy formulation—entails analysis of the company and its environment, establishing strategic goals, and developing plans to achieve goals as well as a control framework. By assessing itself and the global business environment, a company can determine what markets, products, services, etc. offer opportunities for growth. This process involves the collection of data on a company and its environment, including information on global markets, regulation, productivity, costs, and competitors. Therefore, the collection of data should supply managers with economic, financial, political, legal, and social information on various countries and their markets for different products or services. Based on this information, managers can determine what markets and products offer economically feasible opportunities for global expansion. Once this analysis is complete, managers must establish strategic goals, which are the significant goals a company seeks to achieve through a particular pursuit such as entering a new regional market. These goals must be practicable, measurable, and limited to a specific time frame. After the strategic goals have been established, companies should develop plans that allow them to accomplish their goals, and these plans should concentrate on how to implement strategic plans. Finally,

strategy formulation involves a control framework, which is a process management uses to help ensure that a company remains on the right course when implementing its strategic plans. The control framework essentially responds to various developments while the strategic plans are being implemented. For example, if sales are lower than the projected sales that are part of the strategic goals, then a company might increase its marketing efforts and temporarily lower its prices to stimulate additional sales.

### Analysis of Two International Strategies

In the late 1990s after a significant amount of globalization had taken place, business analysts began to examine the success of various strategies for doing business in other countries. This examination led to the distinction between various orientations of international strategies. The main distinction was between multi-domestic (also called multi-local) international strategies and global strategies.

Multi-domestic international strategies refer to those that address competition in each country or region on an individual basis, whereas global strategy refers to addressing competition in an integrated and holistic manner across country and regional boundaries. Hence, multi-domestic international strategies attempt to appeal to the needs of customers in different countries or regions, while global strategies attempt to standardize products and marketing to work across boundaries. Instead of relying on one of these strategies, multinational companies might adopt a different strategy for different products or services. Critics of the standardization approach argue that it makes two questionable assumptions: that consumers' needs are becoming more homogenous throughout the world and that consumers prefer high quality and low prices over advanced features and functions. Nevertheless, standardized global strategies have some significant benefits. Companies can reduce their marketing expenditures.

Some people argue that companies must customize their products or services to meet the needs of various international markets, and hence must use a multi-domestic strategy at least in part. For example, KFC planned a standardized approach to its foray into the Japanese market, but the company soon realized it

had to change its strategy to meet the needs of Japanese consumers and customize its operations in Japan. Consequently, KFC introduced smaller pieces of foods to cater to a Japanese preference, and located restaurants in crowded areas along with other restaurants, moving away from independent sites. As a result of these changes, the fast-food restaurant experienced stronger demand in Japan.

### **2.3. Strategies of Coca-Cola Company on Global Market**

The Coca-Cola Company is the world's largest beverage company, refreshing consumers with more than 500 sparkling and still brands. Together with their bottling partners, Coca-Cola ranks among the world's top 10 private employers with more than 700,000 system associates. Their Company's portfolio features 20 billion-dollar brands, including Diet Coke, Fanta, Sprite, Coca-Cola Zero, vitamin water, PowerAde, Minute Maid, Simply, Georgia, Dasani, FUZE TEA and Del Valle. Globally, they are the number one provider of sparkling beverages, ready-to-drink coffees, and juices and juice drinks. Through the world's largest beverage distribution system, consumers in more than 200 countries enjoy their beverages at a rate of more than 1.9 billion servings a day. With an enduring commitment to building sustainable communities, the Company is focused on initiatives that reduce environmental footprint; support active healthy living by creating a safe, inclusive work environment for our associates, and enhance the economic development of the communities where they operate with.

On the 12<sup>th</sup> of November, 2012, the Coca-Cola Company dove headfirst into the uncharted waters of brand journalism by reimagining a corporate website as a dynamic digital magazine and owned media channel. Inspired by leading online publishers and powered by social media, the pioneering storytelling brings the compelling stories behind the company and brands, who we are, what we do and why we do it, to the forefront through a digital publishing experience designed to inspire, educate and provoke action. They made this big bet in digital content

because they believed, and still believe, that authentic stories matter, that exceptional writing and visuals win the day, and that building a global digital newsroom and real-time PR tool could transform how they engage with all readers which include fans, employees, stakeholders, critics and more. In addition to in-depth, magazine-style feature stories brought to life with compelling photography, video and audio, journey also includes eye-catching infographics and user-generated content (UGC). While their site continues to house corporate content such as a press center, company reports, investor information, job postings and executive bios, their design and editorial focus more closely resemble a digital magazine than a company website.



Figure 2.20: Countries within Coca-Cola’s reach [23]

The world is changing all around us. To continue to thrive as a business over the next ten years and beyond, they look ahead, understand the trends and forces that will shape the business in the future and move swiftly to prepare for what's to come. They begin to get ready for tomorrow today. That's what their 2020 Vision is all about. It creates a long-term destination for their business and provides them with a roadmap for winning together with their bottling partners.

Their plans starts with a mission, which is enduring. It declares their purpose as a company and serves as the standard against which they weigh their actions and decisions.



- To refresh the world
- To inspire moments of optimism and happiness
- To create value and make a difference.

Their vision serves as the framework for their roadmap and guides every aspect of their business by describing what they need to accomplish in order to continue achieving sustainable, quality growth.

- Be a great place to work where people are inspired to be the best they can be
  - Bring to the world a portfolio of quality beverage brands that anticipate and satisfy people's desires and needs
  - Nurture a winning network of customers and suppliers, together they create mutual, enduring value
  - Be a responsible citizen that makes a difference by helping build and support sustainable commodities
  - Maximize long term returns to shareowners while being mindful of their overall responsibilities
  - Be highly effective, learning and fast moving organization

The Coca-Cola Company's global diversity mission is to mirror the rich diversity of the marketplace they serve and be recognized for their leadership in diversity, inclusion and fairness in all aspects of their business, including workplace, marketplace, supplier and community, enhancing the Company's social license to operate. Diversity is at the heart of their business. They strive to create a work environment that provides all their associates equal access to information, development and opportunity. By building an inclusive workplace environment, they seek to leverage their global associates, which is rich in diverse people, talent and ideas. They see diversity as more than just policies and practices. It is an integral part of who they are as a company, how they operate and how they see their future. As a global business, their ability to understand, embrace and operate in a multicultural world, both in the marketplace and in the workplace, is critical to

their long-term sustainability and, specifically, impacts their ability to meet the 2020 Vision goal. Many people across the company continue to work diligently to help advance in their diversity journey and build their practices on diversity, inclusion and fairness. They also include their associates in the process. They garner their feedback through formal surveys and informally through their participation in their business resource groups, various diversity education programs and their resolution resources program, where associates can work to resolve issues they face in the Company.

The Coca-Cola Company and their largest U.S. bottler, Coca-Cola Enterprises (CCE), took actions to strategically advance their partnership in October 2010 when The Coca-Cola Company acquired CCE's entire North American business. Subsequently, the sales and operational elements of CCE's North American businesses and the vast majority of The Coca-Cola Company's U.S. and Canada businesses were folded into their North America Group, which is responsible for manufacturing, selling and distributing products. As a result, the data shown reflects the combined Corporate/NAG view (U.S. total workforce), their U.S. Corporate structure, and the new North America Group (NAG) structure.

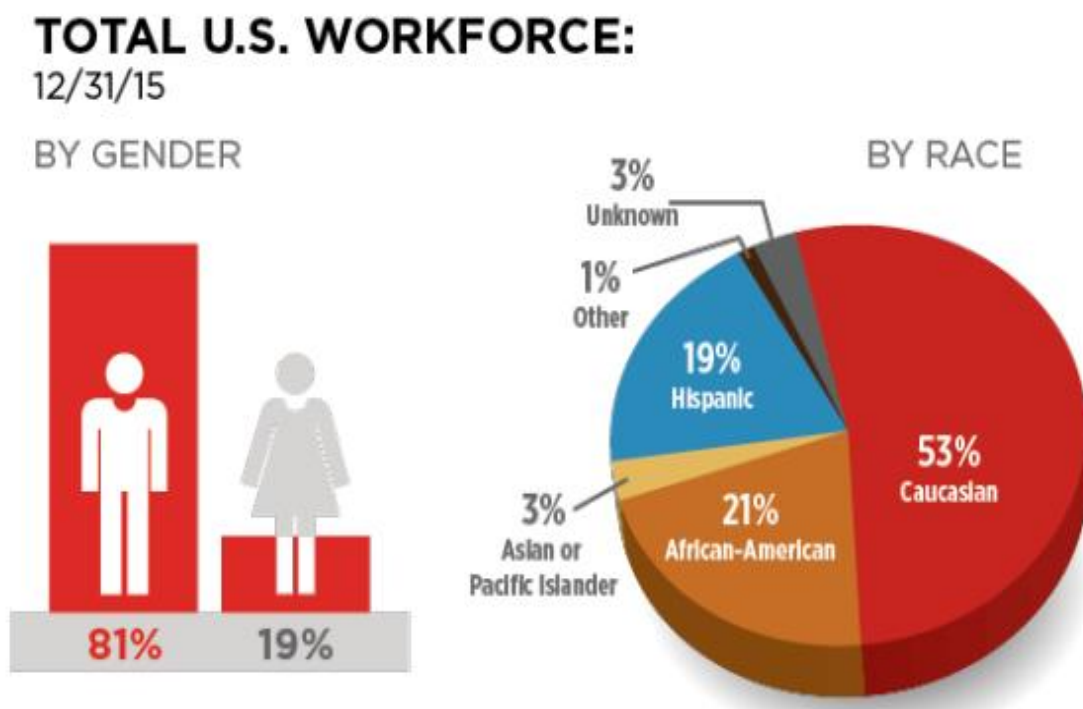


Figure 2.21: Coca-Cola's U.S workforce [24]

**TOTAL U.S. CORPORATE HEADQUARTERS  
WORKFORCE:**  
12/31/2015

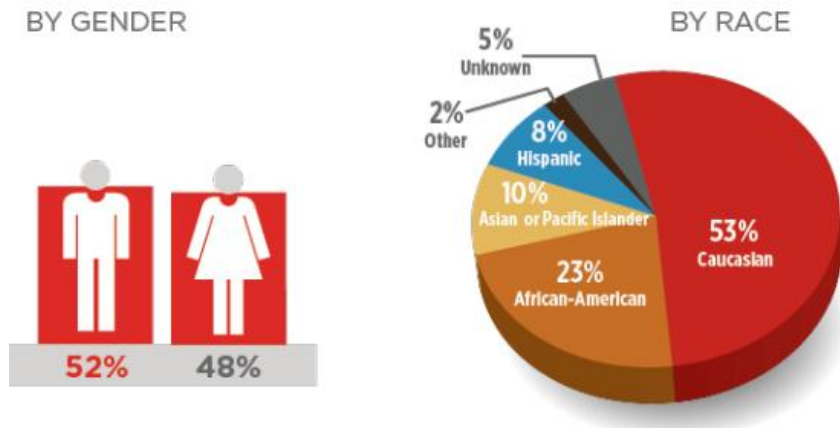


Figure 2.22: Corporate Workforce [24]

**TOTAL U.S. WORKFORCE,  
COCA-COLA REFRESHMENTS &  
COCA-COLA NORTH AMERICA:**  
12/31/2015

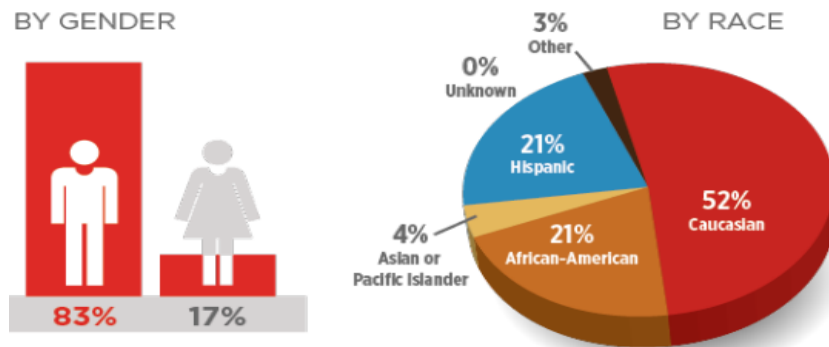


Fig 2.23: Workforce for North America [24]

Table 2.5.

Global Turnover rate [25]

2015 Global Turnover Rates (Estimate): Exempt Employees by Group and Gender			
	Female	Male	Overall
Asia Pacific	9.4%	8.7%	9.0%
Bottling Investment Group	6.8%	7.4%	7.3%
Corporate Group	10.8%	7.7%	9.0%
Eurasia & Africa Group	13.9%	7.7%	10.7%
Europe Group	7.4%	7.5%	7.4%
Latin America	7.0%	6.3%	6.6%
North America	9.4%	8.4%	8.7%

Table 2.6

## Global Workforce [26]

<b>Global Workforce</b>	<b>123,200</b>
North America Coca-Cola Refreshments	10,000 57,200
Latin America Bottling Investments	2,400 2000
Europe Bottling Investments	2,700 9,900
Eurasia & Africa Bottling Investments	2,200 800
Pacific Bottling Investments	2,600 33,400

They are a global business that operates on a local scale, in every community where they do business. They are able to create global reach with local focus because of the strength of the Coca-Cola system, which comprises their Company with more than 250 bottling partners worldwide. The Coca-Cola system is not a single entity from a legal or managerial perspective, and the Company does not own or control all of the bottling partners.

While many view our Company as simply "Coca-Cola," the system operates through multiple local channels. The Company manufactures and sells concentrates, beverage bases and syrups to bottling operations, owns the brands and is responsible for consumer brand marketing initiatives. The bottling partners manufacture, package, merchandise and distribute the final branded beverages to their customers and vending partners, who then sell their products to consumers. All bottling partners work closely with customers like grocery stores, restaurants, street vendors, convenience stores, movie theaters and amusement parks, among many others, to execute localized strategies developed in partnership with their Company. Customers then sell the products to consumers at a rate of more than 1.9 billion servings a day. In January 2006, their Company-owned bottling operations were brought together to form the Bottling Investments operating group, now the second-largest bottling partner in the Coca-Cola system in terms of unit case volume.

In April 2007, associates from The Coca-Cola Company and several of the largest bottling partners met for the first time to discuss the development of a core set of performance indicators for the Coca-Cola system. Working groups of Company associates and representatives from their bottling partners have been formed to determine the feasibility, due to the legal and management complexity of the Coca-Cola system, of collecting and consolidating economic and social data in addition to the environmental data already collected.

The Coca-Cola Company's core is the production, marketing, and selling of many of the world's most beloved beverages. Historically, for the bottling of their beverages, Coca-Cola has relied on independent bottling franchises, and this system has served them well. For a variety of reasons, circumstances arise where bottling franchises find they need help that is beyond their capability. The Bottling Investments Group (BIG) was created to ensure those bottling operations remain a part of their system and receive the appropriate investments and expertise to ensure their long-term success. Eleven years ago, BIG started the process of strategically investing in select bottling operations, temporarily taking them under Coca-Cola's ownership. Utilizing the leadership and resources of The Coca-Cola Company, BIG can drive long-term growth in critical markets and affect major structural or investment challenges. When an operation is stable and thriving, BIG's goals are to find a qualified bottler to assume operations and continue to grow the business. By treating each operation as if it will be owned by Coca-Cola forever, BIG has established a standard of excellence that extends to each of the 17 countries in which it currently functions.

BIG currently employs more than 40,000 people and operates in four continents. Its revenues have increased from \$11 billion in 2004 to over \$20 billion in 2015. With a focus on long-term sustainable profit growth, BIG achieved an operating income margin of ten percent over the past ten years.

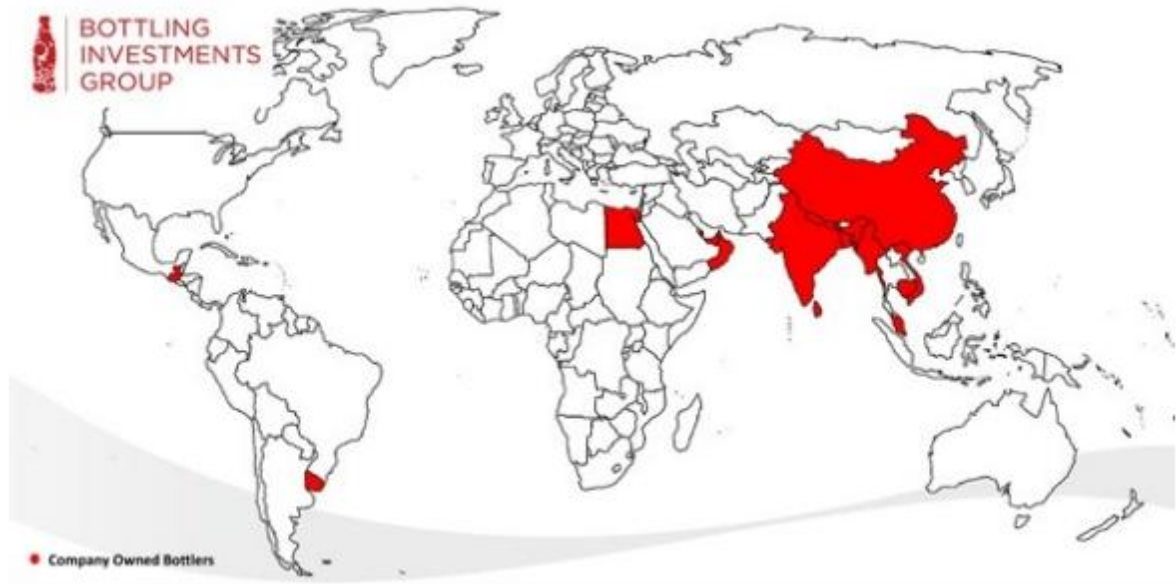


Fig 2.24: Bottling Investment Groups [26]

Everyone has heard of Coca-Cola, and it would be surprising to find somebody who is unable to recognize the historic white lettering against the bright red background of the global brand. Various sources see Coca-Cola as a billion dollar brand and that is not surprising, when one considers it was rated by Inter-brand as one of the most valuable brands in 2016, based on a brand value amounting to 73.1 billion U.S. dollars. The Coca-Cola Company is a global major player in the beverage industry. The firm comprises of corporate divisions, headquartered in Atlanta, GA, and over 300 bottling partners worldwide. According to its most recent annual report from 2015, Coca-Cola's net operating revenue summed up to 44.29 billion U.S. dollars. Bringing in 49.2 percent of the global revenue in 2015 was the North America segment, making it the company's flagship market. In the U.S., the Coca-Cola Company held a market share in the soft drink category with 42.5 percent in 2015. The company's leading four carbonated soft drinks brands in the U.S. market were Coke, Diet Coke, Sprite, and Fanta. The Coca-Cola Classic brand, held a market share of 17.7 percent in the United States in 2015.

Table 2.7.

## Company Details [27]

<b>Company &amp; Brand Facts</b>	<b>Values</b>
Global network operating revenue of Coca-Cola Co.	\$44.294m
Revenue distribution share of North America	49.2%
Product portfolio distribution share of juices/juice drinks	38%
Advertising spending of Coca-Cola Co. in TV segment	\$231.5m
Volume of Coca-Cola Co. in the U.S.	2.322.1m gal
<b>Company Overview</b>	<b>Values</b>
Number of Facebook fans of Coca-Cola	100.5m
Brand value of Coca-Cola	\$79.21bn
Coca-Cola company's market share in soft drinks market	51%
Coca-Cola company's market share in the U.S.	42.5%
<b>Sustainability</b>	<b>Values</b>
PET largest part of packaging distribution mix	57.2%
System energy use of Coca-Cola Co. worldwide	63.3bn MJ
Charitable contributions of Coca-Cola Co. to water stewardship	28%

Table 2.8:

## Facts and Stats on Coca-Cola Company [27]

<b>Coca-Cola Financial Statistics</b>	<b>Data</b>
Current Stock Value (KO) NYSE	\$38.58
Average stock value over past 10 years	\$26.25
Annual Revenue	\$47.51 billion
Total Cash Assets	\$16.97 billion
Enterprise Value	\$189.2 billion

Coca-Cola Company Statistics	Data
Number of worldwide Coke employees	146,200
Percent of the world's population that recognize the Coca-Cola logo	96 %
Total number of Coca-Cola products	3,500
Number of coke bottles sold each day	1.8 billion
Number of coke bottles sold its first year	25
Number of worldwide Coke bottling companies	275
Current value of a single share of Coke that was purchased in 1919	\$92,500
Consecutive years with increased Coke dividends	50
Number of Coca-Cola brand drinks that are consumed each second	10,450

Soft Drink Market Share	Data
Coke	26 %
Pepsi	15 %
Diet Coke	15 %
Moutain Dew	10 %
Dr. Pepper	9 %
Diet Pepsi	8 %
Sprite	8 %
Other	9 %

Worldwide Unit Case Volume Geographic Mix	Volume Percent
Latin America / South America	29 %
North America	22 %
Pacific	18 %
Eurasia & Africa	16 %
Europe	15 %

What is remarkable about this fact is that Coca Cola has seen 3 different CEO's guiding their shipment in the last 15 years. With products that are sold in almost every country on the planet and subsidiary beverages that many people don't realize are within the family of brands, there's a good chance we've all got something from Coca Cola in your refrigerator right now, including bottled water.

- Coca Cola has a 42.8% market share of the US carbonated beverages market.



- 3.1%. That's the percentage of beverages that are consumed every day that fall within the Coca Cola brand.
- If you drank one different Coca Cola beverage every day, then it would take you 9 years to try every single beverage that the company makes. There are more than 3,500 in total under 500 different brand names.
- Coca Cola's average revenues of \$35.1 billion places it as the world's 84th largest economy, having more value than the entire nation of Costa Rica.
- \$74 billion. That's the estimated brand worth of Coca Cola. In comparison, combining PepsiCo, Starbucks, Red Bull, and Budweiser would bring a combined brand worth of \$50 billion.
- PepsiCo had 38% more revenue than Coca Cola, but Coca Cola generated \$16 billion more in carbonated drink revenues.
- The number of Coca Cola vending machines that are estimated to be on the planet today: 2.8 million.

Coca Cola is a popular brand for a variety of reasons. They can enter the markets where other drink manufacturers are unable to be. Their drinks are considered to be a substitute for the water in some areas that is very unsafe. If you travel to Mexico, for example, you'll likely be drinking Coke products instead of the local water. They have brand circulation because they have created local, regional, and national relationships through sponsorships, scholarships, and other charitable giving.

- There are 33 brands of non-alcoholic beverages in the world today that generate at least \$1 billion in annual revenues. Coca Cola owns 15 of them.
- With 7.3 billion humans on the planet, each one of them will consume at least 1 Coca Cola product every 4 days.
- \$2.9 billion. That's the amount of money every year that Coca Cola spends on advertising. That's more than Apple and Microsoft combined [\$2.2 billion].

- The amount of sugar that the average American consumes thanks to the Coke products they consume: 10.8 pounds.
- Americans drink an average of 399 servings of Coke products per year, with 63% of those servings being Coca Cola Classic.
- Mexicans drink 665 servings of Coca Cola products every year.
- Coca Cola accounts for 17% of the total aluminum industry sales each year just to make soda cans.
- There are more than 1,000 different juice drinks in the Coca Cola brand.

For people who actively avoid Coca Cola products, it is nearly impossible to do. Popular juice drink brands like Minute Maid and Fruitopia fall under the corporate umbrella of Coca Cola. So go healthy with juice options like Odwalla and Fuze. With more than 60% of people actively avoiding soft drinks and sodas because of the sugar and calories that they contain, Coke has needed to relaunch its image to be able to keep up with drink demands. The healthier waters and juices have helped them do this, even as soft drink sales have remained remarkable static.

- The Coca Cola Facebook page has more than 17 million fans and 102 million likes, the most of any other brand in the world today.
- Net operating revenues for the last reported year alone topped \$46 billion.
- The share a Coke campaign with personalized names on bottles helped to increase sales for Coca Cola for the first time in nearly a decade.
- 38% of Coke's brands are either juices or juice drinks.
- Coca Cola donates an average of \$28 million annually to local community initiatives.

Maybe the biggest criticism of Coca Cola is, they don't do enough philanthropic work with the amount of revenues and profit they receive. Even so, and even with the difficulties of the soft drink market where people are drinking soda

at 1986 levels, this brand looks to be here to stay. That's because people love Coca Cola.

### Five Strategic Actions of the Coca-Cola Company

Focused On Driving Revenue and Profit Growth. Each of the 200-plus nations they serve plays a critical role in their growth plans. They used segmented revenue growth strategies across their business in a way that differs by market type, and they aligned their employee incentives accordingly. In emerging markets, they focused primarily on increasing volume, keeping their beverages affordable and strengthening the foundation of their future success. In developing markets, they struck a balance between volume and pricing. In developed markets, they relied more on price/mix and improving profitability by offering more small packages and more premium packages like glass and aluminum bottles. Creating value for the Company and customers looks different in different countries, and they did a good job segmenting their markets to drive revenue growth in 2015. While they still have more to do, they were encouraged by their results. Globally, price/mix rose 2% as did volume, helping increase organic revenue 4%. They also gained worldwide value share in the industry.

Invested In Their Brands And Business. Healthy businesses require continuous investment. They made a choice to invest in more and better marketing for their brands, increasing both the quantity and quality of their advertising. They increased spending on media advertising by more than \$250 million, and used these funds to share stronger, more impactful advertisements. At the same time, they invested across their expansive beverage portfolio. They improved their position in the energy category with a strategic new partnership with Monster Beverage Corporation. They invested in brands like Suja, a line of premium organic, cold-pressed juices, and agreed to buy China Green Culiangwang, a plant-based protein beverage brand. They also expanded nationwide, the U.S. distribution of fairlife ultra-filtered milk. In 2015, they developed their first global marketing campaign to support the entire Coca-Cola Trademark of Coke, Diet Coke, Coke Zero and Coca-Cola Life. Launched in early 2016, "Taste the Feeling"

emphasizes the refreshment, taste, uplift and personal connections that are all part of enjoying an ice-cold Coca-Cola. With this campaign and their broader “one brand” strategy, they’re letting consumers know they can enjoy Coca-Cola with calories, fewer calories or no calories and with or without caffeine. The choice belongs to each individual, every time he or she reaches for a delicious and refreshing Coca-Cola.

Became More Efficient. As they took steps to rebuild their growth momentum, they realized they needed to invest in more and better marketing while also increasing their financial flexibility. To these ends, they increased their capability and productivity while reducing costs. Part of the solution was “zero-based work”, a way of looking at the business that starts from the assumption that organizational budgets start at zero and must be justified annually, not simply carried over at levels established in the previous year. They also cut spending on non-media marketing like in-store promotions. They found new savings in their supply chain around the world. Overall, they were able to realize more than \$600 million in productivity improvement in 2015, which they used to invest further in their brands and business and also to return to their shareowners. For the future, they’re working to move productivity and continuous savings across their Company and system. They see productivity not as an event or series of events but as an ongoing, day-by-day process of becoming stronger, leaner and ultimately better.

Simplified Company. Few industries have changed more rapidly in recent years than the nonalcoholic beverage industry. Evolving consumer tastes and preferences, coupled with sweeping innovations in the retail and supply chain landscapes, have created an environment in which speed, precision and empowered employees determine who wins in the marketplace. To seize this opportunity, they took steps to reshape their business. They looked hard at their operating structure and identified areas where they could be faster, smarter and more efficient. They removed a layer of functional management and connected their regional business units directly to headquarters. They streamlined a number of important internal

processes and removed roadblocks and barriers that inhibited them from being as effective and responsive as they knew they could be. Most importantly, they began to look at ways to enhance further the employee experience across their Company with the goal of creating the world's most exciting, productive, fun and fulfilling career environment, with workplaces that nourish curiosity, learning, innovation and growth. While this journey has just begun, their associates have responded with the resolve, commitment and passion that have been hallmarks of Coca-Cola leadership since 1886.

Refocused on Core Business Model. The Coca-Cola Company has always been a creator of refreshing beverage brands. Today, our expansive portfolio includes more than 500 brands, including sparkling beverages, juices and juice drinks, coffee, tea, sports drinks, water, value-added dairy, energy and enhanced hydration drinks. Among these brands are 20 that generate more than a billion dollars in annual retail sales. Another core competency has been their ability to lead the world's most sophisticated system of independent bottling partners while creating value for their retail and restaurant customers. Over the years, they've acquired and managed a number of Coca-Cola bottling partners with the aim of improving performance, optimizing manufacturing and distribution systems, and ultimately refranchising the bottling territories back to independent status. In North America, they took aggressive steps in 2015 to accelerate the refranchising of Company-owned bottling territories with the goal of completely refranchising their North America bottling system by year-end 2017. They also announced a transaction to form a unified new bottling partner in Western Europe and took action to improve their bottling system in Southern and East Africa, Indonesia and China. By year-end 2017, they expect Company-owned bottlers to produce just 3% of their global volume, down from 18% today.

## **Conclusions to Chapter 2**

Since 2015, global economy has encountered different challenges that has led to downturns of global economic growth. Countries thereby seeks to move global economy out of its current patterns, thus avoiding a prolonged low growth situation. Innovation will be the critical ingredient to achieving this objective. Economic recovery has indeed slowed in most highly developed countries, including USA, Japan, and some European nations. Now, permanently reduced research and development (R&D) growth seems to have been avoided. Furthermore, GII is focused on R&D, as well as innovations, whether there are technological or non-technological need to be efficiently initiated in the market place to have a true impact.

This year, statistics confirms a continued desire of TNCs to globalize their operations, bouncing back to an increasing trend from last year's slowdown. Businesses may choose to globalize or operate in different countries in four different ways; Trade, Investment, Strategic Alliances, and Licensing/Franchising. Organizations develop its international strategies by considering its overall strategies, which include its operation at home and abroad.

Coca-Cola is the world's largest beverage company, refreshing consumers with more than 500 brands. This plan declares their purpose as a company and serves as the standard against which they weigh their actions and decisions. They are a global business that operates on a local scale. They are focused on driving revenue and profit growth, they are invested in their branch and businesses, more efficient, and a simplified company.

## **CHAPTER 3**

### **CONCEPTUAL REASONING OF GLOBALIZED MARKET THROUGH INNOVATIVE STRATEGY**

#### **3.1. Perspectives of Development of Global Market of Innovations**

The Global Idea market.

When we imagine the global market, we make up images of great tankers and huge container ships, or maybe ships laden with expensive cargoes of rum, coffee, and spices. Rather, global trade today involves much more than crude oil and bananas. We live in an international marketplace of ideas, where trademarks, patents, and research are moving from Argentina to Tanzania at light speed. In this modern age, people are trading ideas around the world.

These are the early rumblings of a tectonic shift in trade. Just as the electronic commerce challenged bricks and mortar, so does the trade in ideas challenge the traditional multinational corporation. A company with a new technology need not build a factory halfway around the world, with all the costs and risks that it contains. The innovative company can license the technology to a local partner, transferring only the necessary ideas. Will all countries benefit from the growing trade in ideas, or will some countries prosper at the expense of others? Since the days of Adam Smith and David Ricardo, economists have debated exactly how countries gain from global trade. More recently, Paul Krugman argued that countries gain from trade because they can take advantage of economies of scale and that consumer's benefit because they get more variety in their products. Krugman's Nobel Prize-winning work in the scale-variety tradeoff sent ripples through the field of international trade economics. But there was always something missing from these theories of profits from trade: they centered only on trade in goods and services, like air-conditioning units from China, machine tools from America, or call centers in India.

Contrary to these statistics, the world of trade is not made up of goods and services exclusively. Daniel Spulber, Elinor Hobbs Distinguished Professor of International Business and professor of management and strategy at the Kellogg School of Management, has developed a new theory of the sources of gains from trade, based on the trading of ideas and innovations rather than products and services. Globalized trade is growing with enormous speed, encompassing completely new entities. “Countries are literally trading patents, blueprints, copyrights, brands, and other ideas,” says Spulber. “These ideas are not necessarily embodied in goods or services, like IBM licensing its chip design and selling it to other countries. ”Patents and blueprints are joining cars and coffee in the great flow of international trade. Globalization means much more than trading goods; it means communicating and sharing down to earth ideas. Spulber created a model that looked into markets for technology in three stages; the points involving consumers, producers, and inventors. In the model, two countries with identical consumers trade goods with each other. The consumers act as workers in the system, each representing a unit of labor. This labor, when combined with technology, churns out human capital. Technology boosts this human capital, for example, information technology increases workers’ knowledge and productivity. The model shows that without international trade in technology, the country’s entire human capital is equal to the population times the base productivity, but with trade in technology, that human capital is increased directly by the amount of technology. This trade then benefits producers, who provide opportunities for inventors in the countries. The model shows that as the best technology moves to the top, it is used by producers to create technology for consumers, who can in turn increase their own output.

### Integrating Innovation

This massive idea change is essential to growth: a recent study found that outside of the five leading research economies (the United States, Japan, the United Kingdom, Germany, and France), all other countries in the Organization for Economic Co-operation and Development (OECD) obtain over 90 percent of their



productivity growth from ideas that originated abroad (Eaton and Kortum, 1996). There are other non-obvious profits when trade in innovation happens. As the body of innovative ideas gets larger with collaboration and trade, the quality of the best ideas is improved. “Everyone sees technology improve because you draw from a global pool of ideas,” says Spulber. These ideas are generated in more places than ever before—biotechnology innovation coming out of India, flat screen technology coming out of Korea, and computer designs coming out of China. Educational institutions also become more relevant as they can spread ideas around the world. In addition, international trade in innovations increases the returns to inventors. Inventors gain by selling their innovations to the international market, which stimulates additional research. When a country has a larger market for ideas, in contrast to reliance only on domestic research, the incentives for research will be greater.

Technology trade also increases each country’s income when innovations increase the productivity of human capital. When inventions such as computers, software, and industrial robots increase the productivity of human capital, it is as if a country’s labor force increases without changing the size of its population. Greater productivity increases the number of companies that will pay their workers and increases a country’s total income. Quality, efficiency, and capital aren’t everything to consumers, who also want variety. Spulber shows that profits in trade from innovation also increase the variety of products in international trade. People enjoy having many MP3 players to choose from, a reflection of the variety of fashions and cultural products traded globally. When trade in innovations increases the productivity of human capital and people then earn greater incomes, their countries will import a larger variety of products.

#### Intellectual Property Rights

For these gains in trade to become a reality, countries have to protect intellectual property. According to the OECD study, stronger patent rights in developing countries have the potential not only to attract technology transfer but also to encourage foreigners to transfer new technologies (Park and Lippoldt,

2008). When intellectual property rights protect international technology transfer, companies make money directly by renting out their ideas to each other. Properly protected, the efforts of innovative inventors profit their society as well as themselves. In order to keep earning rent on technologies, companies have to find ways to stop others from accessing their technology. Trademarks, patents, and copyrights are all systems of keeping the rent going to the company, and they work well in most technological activities.

In one OECD study, there were 32,000 families of patents each protecting a single innovation filed at the European Patent Office, the U.S. Patent and Trademark Office, and the Japanese Patent Office (OECD, 1999). A number of international treaties and the World Trade Organization's agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) extend protections to international technology transfers, including copyrights, trademarks, geographical indications, industrial designs, patents, layout designs of integrated circuits, and undisclosed information. Spulber's research shows that all countries experience benefits from the global trade in ideas. Countries obtain profits from international trade in technology as the best that science and technology has to offer is spread more evenly around the world. Patents and blueprints are joining cars and coffee in the great flow of global trade. International trade means much more than trading goods, it means communicating and sharing cutting-edge ideas.

#### The New Rules for Bringing Innovations to Market

It's hard to get consumers to adopt innovations, and it's getting harder all the time. As more markets take on the characteristics of networks, once-reliable tools for introducing new products and services don't work as well as they used to. The efficacy of advertising, promotions, and the sales force has declined; it is more difficult for innovators to rise above the realm of information from competing sources; and only hard to manage relationship skills seem to make any difference. Executives need to rethink the way they bring innovations to the market. By using game theory, they can develop new strategies for playing in today's networked world. By understanding how social, commercial, and physical networks work,

innovators can develop new tactics. And by working back from an endgame, they can change markets from competitors to allies.

Nature's Way. Markets, by their very nature, resist new ideas and products. Despite the risks involved with developing and launching new innovations, companies love them because they influence profits, growth, and shareholder value. Innovations reap such handsome rewards because they are risky. Markets, meanwhile, destroys most new products and services and accept the rest only reluctantly. For instance, television took more than three decades to become a mass medium in the United States, from the first experimental broadcasts in the late 1920s to widespread acceptance in the 1960s. Likewise, the number of transistors on a semiconductor chip has doubled every 18 to 24 months, as Intel cofounder Gordon Moore predicted, but the productivity gains from the improvements in information technology have come at only half that speed, a rule one might call demi-Moore's law. Markets are inimical to innovation because they crave equilibrium. Equilibrium, as defined by the beautiful mind of Nobel Prize winner John Nash, is a situation where every player in a market believes that he or she is making the best possible choices and that every other player is doing the same. Equilibrium in a market lends stability to the players' expectations, validates their choices, and reinforces their behaviors. When an innovation enters the market, it upsets the players' expectations and choices and introduces uncertainty in decision making. For example, the U.S. wireless communications industry had found equilibrium by 2002 with several big players, relatively stable technologies, and steady consumer-switching rates. The government's decision in November 2003 to let consumers take their telephone numbers with them when they changed carriers seemed likely to disrupt the status quo. Innovations try to change the status quo, which is why markets resist them.

A market's hostility to innovations becomes stronger when players are interconnected. In a networked market, each participant will switch to a new product only when it believes others will do so, too. The players' codependent behavior makes it tougher for companies to dislodge the status quo than if each

participant were to act autonomously. When America's first transcontinental railroads were built in the 1860s, for example, factories and businesses that were close to waterways did not immediately relocate near railways. They did so only when they felt their customers and suppliers were making the switch, too. Virtual connections between players can also affect the adoption of products. For instance, E. Remington and Sons introduced the first typewriter in 1874, a time when penmanship was still a highly respected skill. Most writers (with the exception of Mark Twain) initially shunned the typewriter. The growth of railroads, telephones, and telegraph lines led to the dispersal of companies and the depersonalization of communications. The typewritten document became the standard for written communications in business. Use of the typewriter spread. Thus, the railroads, the telephone, and the telegraph implicitly increased the speed with which consumers accepted the typewriter. In recent times, more markets have taken on the characteristics of networks—partly because of improved communications technologies and the spread of the Internet and partly because of business's increased reliance on the global market for products, capital, and labor. For instance, many companies design and assemble products at several locations, sell them in multiple countries via the Internet, and offer customer service from different sites in different countries. Networked markets allow for the rapid diffusion of news, ideas, and, in theory, innovations. But they also erect formidable barriers to the adoption of innovations—primarily because of the interdependencies between players. A bank, for example, cannot shift to a faster transaction-processing system if the change will affect how it communicates with other banks. Several banks have to change their systems around the same time for the innovation to gain acceptance. The mushrooming of virtual networks has made decision making more interconnected than ever before. And as markets become more like networks, it will be tougher than ever for innovations to catch on. Consider the case of Movielink, a joint venture between MGM, Paramount, Sony, Universal, and Warner Bros. studios, which offers consumers videos on demand. It has assembled a large digital movie library, but that may not be enough for the

project to succeed. For Movielink to really get off the ground, streaming-media companies such as Real Networks, Microsoft, and Apple have to develop technologies to ensure the security of the digital movie files. Other companies must come up with ways to compress video into digital files that can be quickly and easily transmitted. Cable TV operators, like Time Warner and Comcast, must grant Movielink access to their subscribers' homes. Manufacturers of set-top boxes, Philips and Sony, for instance, have to develop devices that will allow consumers to search, download, and watch movies. Some companies will resist the idea, including makers of VCR-DVD players, JVC and Panasonic, for instance, and video rental companies like Blockbuster. The manufacturers of video game consoles and PCs will see Movielink's set-top boxes as a threat to their ambitions to become home entertainment portals. Telephone companies, who were championing video on demand in the early 1990s, will not be happy about other companies taking over their idea. Regulators will be concerned about the antitrust implications of the consortium the studios have formed. Internet-based upstarts will try to ensure that consumers can freely exchange digital movie files, as Napster and others did with music files. Finally, consumers will have to change the ways in which they buy, rent, and watch movies. Clearly, the market will accept Movielink slowly.

Once enough players in a networked market decide to switch to a new product, other players' motivation to do so becomes stronger. Beyond that threshold, the network becomes innovation's ally rather than its foe. Take digital cameras, which have caught on rapidly, although film-based photography has dominated the market for more than 100 years. Back in 1888, Kodak more than lived up to its "You press the button, we do the rest" tagline. By manufacturing cameras and film, as well as developing rolls and making prints, the company limited the product network to two parties: consumers and the Eastman Dry Plate and Film Company (to whom you had to mail your camera so it could be reloaded). In 1891, when Kodak introduced cameras that allowed users to load film themselves, without using a darkroom, it brought retailers into the picture. By

developing inexpensive cameras and ensuring the widespread availability of film, Kodak succeeded single-handedly in popularizing photography by the turn of the last century. By contrast, many players were involved in popularizing digital photography. Several were unlikely new entrants. Among them were printer and PC manufacturers; the makers of software for editing, creating, organizing, and storing images online; broadband communication companies; and the manufacturers of cellular handsets. None of these players dominated the industry, as Kodak had; each had only limited influence. By the time digital photography began to make its debut, there were several groups of well-entrenched players, for instance, emulsion film manufacturers like Kodak and Fuji, camera makers like Nikon and Minolta, specialty retailers that sold cameras and accessories, and retail stores that sold film and developed prints. Rather than confront them head-on, the challengers bypassed them. The challengers' technologies ensured that consumers didn't need to use the old network if they switched to digital cameras. The challengers still needed to change consumers' habits since people were used to seeing prints, mailing them to friends and family, and storing copies in albums and shoe boxes. Each of the challengers had its own reasons for supporting digital photography. PC makers, like Apple and Dell, and software companies, like Microsoft, believed that digital imaging would help reposition the PC as the organizer of digital activities in homes. Printer manufacturers, like Hewlett-Packard, were keen on wresting Kodak's leadership in printing photographs. Software companies, such as Adobe, wanted to broaden the reach of their technologies. Cellular handset manufacturers, like Motorola and Sony Ericsson, saw their development of camera phones as a way to differentiate the product category, which was nearing maturity. Internet companies, like Shutterfly, felt they could offer digital image-processing services that consumers would pay for. Camera makers like Nikon and Minolta, as well as Kodak itself—though on the defensive, wanted to play an integral part in the shift from film photography to digital photography. Ordinarily, players whose objectives are different are reluctant to make big investments without assurances that others in the network will back

them. Yet in this case, the companies independently made decisions that collectively allowed the market to shake free of the status quo and move swiftly toward a digital future.

When a new product's adoption by one player depends on its adoption by other participants, there has to be a system wide switching of behaviors before change can take place. The traditional levers that executives use to launch products, such as targeting unique customer segments or developing compelling value propositions, alone cannot ensure that such a change happens. A group of companies may sometimes make a concerted push, as they did in the case of digital photography, but innovators cannot always count on such spontaneity. They must orchestrate the change of behaviors across the market, so that a sufficiently large number of players adopt their offerings or take actions that encourage others to do so. Innovators, therefore, have two challenges: First, they have to unravel the status quo systematically. Second, they have to create a new status quo, where many players have adopted the innovation and believe they are better off because of it. Posing the innovator's challenge as a quest to win over the network has powerful implications, which we will explore. I will outline three important characteristics of networks and will draw on them to create a framework that companies can use to launch innovations successfully. Then I'll describe how Adobe won over a networked market by using a campaign that mirrored the framework.

#### Network Characteristics

Networks have been a part of our social, business, and technological environment for centuries, but researchers have only recently uncovered many of their characteristics. The following three features of networks are critical to creating campaigns that allow innovations to take off.

**Network Effects.** Every network generates economies of scale. In a product network, there are usually two types of economies. First, products that have large networks around them are often cheaper to use than products that have small networks around them. Windows-compatible PCs are less expensive than Macintoshes, for instance. Second, a product's value to each user increases as the

size of the network grows. Sony's PlayStation, for example, becomes more desirable to each consumer as the number of users (who share games) and developers (who create compatible software) rises. These network effects explain why the status quo always benefits incumbents and why companies with superior products often can't topple market leaders. Computer-networking pioneer Robert Metcalfe captured the essence of network effects in Metcalfe's law: A network's value equals the square of the number of users. The idea took center stage in 1998 when the U.S. Department of Justice brought an antitrust lawsuit against Microsoft. Supporters of the lawsuit argued, among other things, that Microsoft's Windows had locked PC users into that particular operating system. Users' costs of switching to another operating system had become almost prohibitive because of the network externalities generated by Windows. The concept of externalities focuses companies' attention on the network around their products rather than on the products' features or uses. It forces them to frame the status quo in terms of the players in the network, their choices, and the drivers of those choices. The innovator's success depends on its ability to get enough participants to back its product—but the participants' choices will depend on whether they are, for instance, competitors, partners, policy makers, retailers, or consumers. To figure out how it can get different players to change their behaviors, the innovator must explore another characteristic of networks, the status quo.

**Equilibrium.** Like a market, a network also searches for a status quo, or equilibrium. Roger Myerson, the noted game theorist, wrote that “the formulation of Nash equilibrium has had a fundamental and pervasive impact on economics and the social sciences, comparable to that of the discovery of the DNA double helix in the biological sciences” because equilibrium unlocks the hidden structure of social and market interaction. As I described earlier, a market or network is in equilibrium when every player acts in its best interest while expecting that others will do the same. (To find out whether or not a market is in equilibrium, see the sidebar “The Three Tests of Equilibrium.”) The concept is important because it alerts executives to the obvious but frequently overlooked notion that companies



must choose their strategies only after systematically considering the decisions that other players will make. As the interconnections between players increase, the payoffs on their choices depend even more on others' decisions. To ensure the adoption of a new product, the innovator must analyze the causes of the existing equilibrium and carefully deconstruct it. The innovator must then try to create a new status quo by getting a large number of network participants to choose its product as their new "best" choice. Companies often have to strike agreements with other players or make sacrifices if they want to tip the balance in favor of their offerings. That's where a third characteristic of networks comes in handy, hubs.

Network Hubs. As networks become bigger, the interconnections between players tend to cluster around just a few, also known as network hubs. Chicago, Atlanta, and Denver are major railway hubs in the United States, for instance, and Google and Yahoo are two important hubs on the Internet. The simplest way to identify hubs is to map out on paper the relationships between all the players in the market, suppliers, partners, competitors, regulators, consumer groups, and any other influential parties, drawing lines to connect them. The absence of lines between two players would indicate that they had no business dealings while, say, five lines would suggest a strong relationship between them. In the picture that emerges, the players with the most lines connecting them to and from other players are hubs. There is also a distribution of power within networks, and power is mostly concentrated in the hubs because of the efficiencies that come with that concentration. For instance, Yahoo's influence is greater than that of any one online retailer on the Internet. According to one rule of thumb, if every player in a network were ranked according to its connectivity and influence, the power of the  $n$ th ranked player would be  $1/n$ . By tapping the most powerful parties in a network, innovators can reach virtually everyone in the network in a short series of steps. Network analysts call this the "small worlds" phenomenon.

The Framework for a Campaign

During the past 12 years, researchers studied large companies and start-ups that have launched innovations in the technology, communications, health care, and consumer care markets. Several of them created blockbusters, some failed, and the jury is still out on the rest. Based on these experiences, they have found that there are four crucial parts to a successful go-to-market campaign.

Reason back from a target endgame. The consequences of the strategy the innovator chooses will depend on other players' initial responses and counter responses. It is therefore impossible for executives to identify their best strategies for bringing an innovation to market without first anticipating and analyzing all the potential responses and counter responses to see where each option might lead the company. Companies should not choose strategies because of the immediate benefits that might come with them, or be tempted to follow the Napoleonic counsel, "*On s'engage et puis on voit!*" ("Jump in the fray, and find out what happens!"), which is so dear to the entrepreneurial spirit. Instead, sensible companies think several steps ahead and work back from the endgame they want. The endgame is a plausible but speculative guess about the new equilibrium the network participants will create in response to the innovator's strategy. After identifying the endgame it wants, the innovator should drop those strategies that will not generate the responses it wants from the other players. As the campaign progresses, the innovator should keep pruning its options, and, as far as possible, implement only those strategies that maximize its chances of getting to its desired endgame. For instance, Intel envisaged a scenario in which only brand names would stand in the way of the commoditization of semiconductor chips. Working backward, the company launched the Intel Inside campaign to increase its brand equity by making consumers aware that its chips were at the heart of most PCs. Intel anticipated a similar endgame in the wireless Internet market, and the company has unleashed a campaign around its Centrino brand, staking out its leadership in the market for mobile technology. It is common for companies to make guesses about where their strategies will lead and to act on those suppositions. But reasoning backward from the endgame suggests that, before

deciding how to act, executives must ensure that their guesses about the future are consistent with what they know to be true today. Companies can do that by mentally playing out their strategies to all the possible endgames that can result because of different reactions by the other players. For each strategy considered, companies must then identify the plausible endgames by anticipating when the other players' choices will be in equilibrium. Finally, the innovator must follow the strategy that yields the most preferred of the plausible endgames.

Complement the power players. To get to the desired endgame, the innovator has to change the behaviors of many players in the market. That can be tough, particularly when the network consists of a large, diverse, and connected group of companies and consumers. Fortunately, a few power players, the network hubs, can help propagate an innovation's benefits because of their ties with many other players. By allying with the hubs, the innovator can gain access to a large number of participants, induce them to change behaviors, and get to the desired endgame. However, most companies do not realize that it is difficult for innovations to gain footholds or develop critical mass without creating benefits for the hubs, too. Remember, Even Microsoft started as a vendor to IBM. Smart companies get the hubs to back them by positioning their innovations as complements to the power players' products and by giving power players a share of the value created by the innovation. Take, for instance, Research in Motion (RIM), which initially found it difficult to get consumers to use its BlackBerry handheld computer even though the high-tech set adored the device. RIM realized that service providers controlled the wireless communications industry and that they used devices from companies like Nokia, Motorola, and Sony Ericsson. RIM established partnerships with power players in both the service and manufacturing groups. It transformed the BlackBerry from a data device into a mobile telephone and added carrier-specific features in order to strike deals with service providers. RIM also licensed its software to manufacturers of wireless handsets, like Nokia. Through these complementary relationships with the power players, RIM sought to carve out a path to the wider market.

Offer coordinated switching incentives. While the innovator may have a better product or service than those in the market, it has no special powers to untangle the status quo. The innovator has to methodically convince players that their best choices ought to be different because the choices of other participants have changed. Most executives focus on changing the behavior of only the early adopters and then crossing over to mainstream consumers. However, if the innovator does not induce behavior changes among different parties, the market will snap back to the self-reinforcing status quo. To create momentum for a new product, the innovator must orchestrate changes in three core groups: the players that add to the innovation's benefits, the players that act as channels to adopters, and the adopters themselves. The innovator can do that by understanding how each participant's choice constrains or enables the others. By aligning the players' incentives to switch to the innovation, the challenger can make the adoption of the new product a matter of common interest. This will create a virtuous cycle. For instance, adopters will motivate complements and channel partners by boosting their revenues, and that, in turn, will induce the complements and channel partners to keep the innovation attractive and available. Contrast Apple's strategy to bring the Newton to market in 1993 with the strategy Palm used to roll out the Palm Pilot shortly after. Apple kept the technology proprietary and used specialized channels to sell the Newton. It priced the handheld at \$800 and positioned the Newton as a replacement for the PC. Meanwhile, Palm licensed its operating software to several companies, which created applications for the handheld device. By selling out to U.S. Robotics, Palm gained access to a wide range of channels and buyers. It also positioned the Palm Pilot as a complement to, not a substitute for, the PC. Not surprisingly, the Newton failed while the Palm Pilot was widely adopted.

Preserve flexibility. The innovator bases every potential endgame on its expectations about events that will happen or on the behavior of other players, which creates uncertainty. Hence, the innovator must build flexibility into its plans. Ideally, organizations should establish product and marketing plans that cover a variety of situations. Sometimes companies must make decisions about innovations

that involve high up-front investments and irreversible commitments; they have to make preemptive bets. For instance, GM, Ford, and DaimlerChrysler together created an auction and exchange platform for businesses in the automobile industry. In 2000, the Big Three set up Covisint (short for cooperation, vision, and integration) on a huge scale because they wanted it to serve as proof of their commitment to online markets. That, they hoped, would help the idea gain acceptance quickly and thwart any competition from third-party entrants to the market. At other times, innovators may find it more prudent to defer decisions until they have more information about the innovation's fate and other players' experiences with it. Take Microsoft. It has rarely taken the lead in introducing new applications. It has deferred commitments and reserved the option to co-opt early movers with decisive bets. For instance, the Windows operating system followed innovations in Apple's Macintosh interface; Internet Explorer came after Netscape's Navigator; ActiveX followed Sun's Java; Windows CE came after the success of the Palm OS; the MSN portal followed Internet pioneers Yahoo and AOL; Windows Media Player followed RealNetworks' RealPlayer; and the Xbox game console followed Sony's PlayStation. Finally, the innovator must sometimes move early with a big bet but retain some flexibility, too. Consider that Sony has positioned itself to enter the networked home-entertainment market from multiple entry points—through its Vaio laptops; through its investments in General Instruments, the largest maker of set-top boxes; through its dealings with DirecTV, the leading digital satellite system; and through its agreement with WebTV to market Internet terminal devices. Sony has signed deals with Spyglass for browser software and invested in the development of an operating system, AperiOS, that can be used in set-top boxes and game consoles. Sony has also invested in making Internet-ready wireless handsets. All these deals were insurance in case Sony's big bet for control of the networked home-entertainment market, the PlayStation, failed to pay off.

Manufacturing the Future: The Next era of Global Growth and Innovation

Manufacturing remains a potential force in both advanced and developing economies. The sector has changed, bringing new opportunities and challenges to business leaders and policy makers.

The global manufacturing sector has gone through a tumultuous decade, large developing economies leaped into the first tier of manufacturing nations, a severe recession choked off demand, and manufacturing employment fell at an accelerated rate in advanced economies. Still, manufacturing remains critically important to both the developing and the developed world. In the former, it continues to provide a pathway from subsistence agriculture to rising incomes and living standards. In the latter, it remains a great source of innovation and competitiveness, making outsized contributions to research and development, exports, and productivity growth, the manufacturing sector has changed, bringing both opportunities and challenges, and neither business leaders nor policy makers can rely on old responses in the new manufacturing environment.

Manufacturing the future: The next era of global growth and innovation, a major report from the McKinsey Global Institute, presents a clear view of how manufacturing contributes to the international economy today and how it will probably change over the coming decade. Findings include the following points:

Manufacturing's role is changing. The way it contributes to the economy changes as nations mature, in today's advanced economies, manufacturing promotes innovation, productivity, and trade more than growth and employment. In these countries, manufacturing also has begun to consume more services and to rely more heavily on them to operate.

Manufacturing is not monolithic. It is a diverse sector with five distinct groups of industries, each with specific drivers of success.

Manufacturing is entering a dynamic new phase. As a new global consuming class emerges in developing nations, and innovations spark additional demand, global manufacturers will have substantial new opportunities, but in a much more uncertain environment.

Manufacturing's role is changing

Globally, manufacturing continues to grow. It now accounts for approximately 16% of global GDP and 14% of employment. But the manufacturing sector's relative size in an economy varies with its stage of development. We find that when economies industrialize, manufacturing employment and output both rise rapidly, but once manufacturing's share of GDP peaks at 20 to 35% of GDP it falls in an inverted U pattern, along with its share of employment. The reason is that as wages rise, consumers have more money to spend on services, and that sector's growth accelerates, making it more important than manufacturing as a source of growth and employment. The sector is also evolving in ways that make the traditional view, that manufacturing and services are completely separate and fundamentally different sectors, outdated. Service inputs (everything from logistics to advertising) make up an increasing amount of manufacturing activity. In the United States, every dollar of manufacturing output requires 19 cents of services. And in some manufacturing industries, more than half of all employees work in service roles, such as R&D engineers and office-support staff. As advanced economies recover from the Great Recession, hiring in manufacturing may accelerate, and some nations may even raise net exports. Manufacturers will continue to hire workers, both in production and nonproduction roles (such as design and after-sales service). In the long run, manufacturing's share of employment will remain under pressure as a result of ongoing productivity improvements, faster growth in services, and the force of global competition, which pushes advanced economies to specialize in activities requiring more skill.

#### Manufacturing is not monolithic

No two manufacturing industries are exactly alike, some are more labor or more knowledge-intensive. Some rely heavily on transportation, while for others, proximity to customers is the critical issue. We have identified five broad manufacturing segments and analyzed how different production factors influence where they build factories, carry out R&D, and go to market. The largest segment by output (gross value added) includes industries such as autos, chemicals, and pharmaceuticals. These industries depend heavily on global innovation for local

markets, they are highly R&D intensive, and also require close proximity to markets. The second-largest segment is regional processing, which includes industries such as printing and food and beverages. The smallest segment, with just 7% of global manufacturing value-added, produces labor-intensive tradable.

Manufacturing is entering a dynamic new phase

By 2025, a new global consuming class will have emerged, and the majority of consumption will take place in developing economies. This will create rich new market opportunities. Meanwhile, in established markets, demand is fragmenting as customers ask for greater variation and more types of after-sales service. A rich pipeline of innovations in materials and processes, from nanomaterials to 3D printing to advanced robotics, also promises to create fresh demand and drive further productivity gains across manufacturing industries and geographies. These opportunities arise in an extremely challenging environment. In some low-cost labor markets, wage rates are rising rapidly. Volatile resource prices, a looming shortage of highly skilled talent, and heightened supply-chain and regulatory risks create an environment that is far more uncertain than it was before the Great Recession.

Manufacturers and policy makers need new approaches and capabilities

Companies must develop a highly detailed understanding of specific emerging markets, as well as the needs of their existing customers. They will also require agile approaches to the development of strategy, using scenario planning rather than point forecasts, for example. And they will have to make big bets on long-range opportunities, such as tapping new markets in developing economies or switching to new materials, but must do so in ways that minimize risk. A critical challenge for manufacturers will be to approach footprint decisions in a more nuanced way. Labor-intensive industries will almost always follow the path of low wages, but others, with more complex needs, must weigh factors such as access to low-cost transportation, to consumer insights, or to skilled employees. The result could very well be a new kind of global manufacturing company, a networked enterprise that uses "big data" and analytics to respond quickly and decisively to



changing conditions and can also pursue long-term opportunities. For policy makers, supporting manufacturing industries and competing globally means that policy must be grounded in a comprehensive understanding of the diverse industry segments in a national or regional economy, as well as the wider trends affecting them. For example, shapers of energy policy need to consider which segments will be affected by higher or lower energy costs, how great the impact is likely to be, and what magnitude of difference will trigger a location decision. Policy makers should also recognize that their long-term goals for growth, innovation, and exports are best served by supporting critical enablers for manufacturers (such as investing in modern infrastructure) and by helping them forge the connections they will need to access rapidly growing emerging markets. Two key priorities for both governments and businesses are education and the development of skills. Companies have to build their R&D capabilities, as well as expertise in data analytics and product design. They will need qualified, computer-savvy factory workers and agile managers for complex global supply chains. In addition to supporting ongoing efforts to improve public education, particularly the teaching of math and analytical skills, policy makers must work with industry and educational institutions to ensure that skills learned in school fit the needs of employers.

### **3.2. Base of Improvement of Investment Strategy on Coca-Cola**

The future of Coca-Cola's marketing lies in experimentation with new media channels and technology, says global boss of sparkling brands Katie Bayne. Coca-Cola's 'contour' bottle is 100 years old this year, and two weeks ago the brand held a launch event at its Atlanta headquarters for a global campaign to mark the occasion. Yet even as it celebrates its heritage of over a century, the future of its marketing lies with digital experimentation, according to senior vice president of global sparkling brands Katie Bayne. The bottle was born in 1915 out of a need

to differentiate the brand from competitors, but today Coca-Cola is focusing efforts on social and digital to stand apart from rivals. At Mobile World Congress, which took place last week in Barcelona (March 2-5), the brand spent two days gathering together its marketing heads from key global regions to discuss a social and digital strategy, particularly where the company is heading, the vision, capabilities and investment. “For all of us to spend two days in Barcelona on one topic is a big deal,” says Bayne, speaking to Marketing Week in Atlanta, ahead of Mobile World Congress. “We usually cover digital as part of something else but it is a key focus. It’s critical for us and it requires continued investment.”

The Coca-Cola bottle’s centenary campaign is a prime example of what she describes as a shift towards global marketing concepts with a “digital backbone”. Activity includes 14 new television and digital films, a new song available on iTunes, an app for consumers to explore the story of Coca-Cola and a social media competition. Other activity includes an exhibition at the High Museum of Art in Atlanta and a travelling art tour. Bayne says that when planning campaigns, the brand now asks: “Are we thinking digital, not as an afterthought, but at the center?” The scale of the global Coke Bottle 100 campaign means it’s not intended to be activated in full in every market, but each region takes a pick-and-mix of elements from a global hub of assets. In the UK the activity is centered on digital and outdoor in a campaign called ‘I’ve kissed’ featuring Elvis and Marilyn Monroe, as well as a YouTube and Xbox digital takeover. The UK will also see new packaging and messaging about choice as the campaign continues in the summer months.

The ambition for Coca-Cola is to increase trial, drive transactions and build connections in the 140 countries where the activity is being rolled out. Bayne rejects any suggestion that this worldwide marketing approach lacks sensitivity to local cultural differences, claiming that the aim is to have a “strong global center” with “breathing room for the brand to be locally relevant”. She adds: “Nothing will go into the UK market that hasn’t been tested with UK consumers. The ‘I’ve kissed’ creative resonated, which is why Europe has a localized [TV ad] running

and will run that heavier than other films.” In another indication of the autonomy that regional markets are allowed, last week Coca-Cola North West Europe and Nordics announced that it would unify the marketing for all its variants under a single strategy, so that Diet Coke, Coca-Cola Life and Coca-Cola Zero are placed firmly under Coca-Cola’s main brand identity, rather than being seen as discrete, independent products with their own personalities. It followed research showing half of consumers are unaware that Zero contains no sugar and no calories. Coca-Cola needs to reverse its sales decline in traditional markets. The latest quarterly results show that worldwide net income fell 55% in the fourth quarter to \$770 million from \$1.71 billion last year. On announcing the results last month, The Coca-Cola Company’s chairman Muhtar Kent noted that it sees 2015 as “a transition year” as the benefits from its marketing plans “will take time to materialize amidst an uncertain and volatile macroeconomic environment”. “In some of our developed markets Coca-Cola is not growing,” admits Bayne, adding that where this is the case, it is because one of three things hasn’t happened. “Either the quality of our work wasn’t good, our execution didn’t match up to the marketplace or we weren’t investing in making sure we remain relevant to today’s consumer.”

In essence, Bayne says that Coke needs to respect its heritage while being recognized as up-to-date. “Why not be modern through people’s interpretation of the brand today. We’ll keep thriving in the future because we are open to hearing what people have to say about it.” It’s an idea that Coca-Cola’s head of global design James Sommerville, who is curating a campaign that invites designers to reinterpret the brand, calls “progress heritage”. It’s not just the flagship Coca-Cola brand that the company is prioritizing, as it owns 500 non-alcoholic drinks brands across the world, the latest being Fairlife milk, which looks to take on soy and almond milk brands with a premium alternative. The company has also recently relaunched GlaceauSmartwater and debuted Coca-Cola Life, flavored with low-calorie natural sweetener stevia.

[Coca-Cola outlines 5 point marketing plan to turnaround fortunes](#)

The company's CEO Muhtar Kent explained on the 18<sup>th</sup> of February that it plans to make an extra \$1bn in productivity savings by 2016, the majority of which it will reinvest back into marketing , to overcome its "speed bump" year and achieve its plan to double revenues by 2020. Kent said on a call with analysts that the company plans to build on its marketing, in both quantity and quality, which it believes will restore "steady momentum" in 2014 and beyond. The turnaround plan covers five areas: accelerating growth of its sparkling portfolio, strategically expanding the profitable still portfolio, increasing media investments by maximizing systems optimization, making improvements to point of sale and investing in the next generation of leaders.

Accelerating sparkling growth, led by brand Coca-Cola. On using brand Coca-Cola as a catalyst for growth, Kent said: "There is quite simply no other brand in the world like Coca-Cola. It is the world's most universal beverage brand and we are fortunate to be its steward. "In many markets around the world, brand Coca-Cola is monadic but we need to work harder to enhance the romance of the brand over the world." Kent drew on the global Share a Coke campaign, which originated in Australia and New Zealand in 2012 and was executed in the UK in 2013, as an example of how the company will look to invest in the brand going forward, including a return to the activity year. He said the activity was much more than a marketing campaign, but rather a "system wide collaborative effort to engage with consumers in a meaningful and effective way". Coca-Cola says the effort helped increase volume sales, household penetration and brand love scores over the 20-plus markets it has appeared in to date.

Strategically expanding the profitable still portfolio. Coca-Cola says it is now the owner of four \$1bn still and juice brands, but it is keen to build on that number. Kent said the company would look to establish a sustainable formula for value creation in new stills categories, following on from its move to take a majority stake in the Innocent juices and smoothies business last year. Fresh from announcing a 10-year deal with Keurig coffee machine maker Green Mountain Coffee Roasters, Coca-Cola said this strategy could also include further

partnerships. Kent said: “If you look at the trend for the next 10 years, people are going to spend more time at home, work more from home, so home is going to be an even more important place for consumers and we need to be present there with different technologies, packaging and different ways to present our brands.”

Increasing media investments by maximizing optimizations. Coca-Cola plans to make \$1bn in productivity savings by 2016 through global supply chain optimization, data and IT standardization and more efficient resource and cost allocation. Those savings will be invested into global brand building initiatives with increased consumer-facing media spend. Kent said: “This is a global increase in marketing and every country we operate in, large or small, we know it works. When we invest in marketing, our global partners invest in feet on the street, more coolers, more trucks...that’s what will be happening and that’s what we will see happening in our business as we restore steady momentum in 2014 and beyond.”

Win at POS by unlocking the power of Coca-Cola’s global system. Kent heralded 2014 as the “year of execution at the point of sale”, which will begin with brand Coca-Cola. The company plans to work together with its bottling partners to align its systems across the world to improve how its products are displayed at the point of sale. It will explore enhancements to areas such as packaging, price and location-based marketing. The five-point strategy announcement came after the company reported its revenue fell by 2 per cent to \$46.9bn and operating income decreased by 5 per cent to \$10.2bn in the 12 months to 31 December. Kent said the lingering effects of the global recession in 2009 and concerns about obesity and nutrition in developed markets had negatively affected sales. In the earnings report, Coca-Cola said weak consumer confidence had also had an unwelcome impact.

### **Conclusions of Chapter 3**

Global trade today involves much more than crude oil and bananas. We live in an international marketplace of ideas, where trademarks, patents, and research are moving from Argentina to Tanzania at the speed of light. In this modern age, people are hiding ideas around and developing economies. Manufacturing remains a potential force in both advanced and developing economies. The sector has changed, bringing new opportunities and challenges to business leaders and policy makers.

The future of Coca-Cola's marketing lies in experimentation with new media channels and technology. The ambition of Coca-Cola is to increase trial, drive transactions and build connections in 140 countries where the activity is being rolled out.

## CONCLUSION

The master thesis prepared here is centered on the topic Investment Strategy of Transnational Corporation on the Global Market of Innovation. Having researched the theoretical and analytical basis of innovation as it affects investment strategy of transnational corporation in the world economy, taking Coca-Cola as a subject matter, this conclusion is drawn.

Investments are resources that are used to increase wealth of different nations. Though increase in wealth varies with different nations of the world, they in turn leads to increase in productivity of nations as a whole. It's a long-term input of resources for gain of more assets. Investors such as firms and other investment bodies tend to strategically involve themselves in opportunities to invest as not all opportunities are productive. Investment strategies help guide investments. The different common investment strategies help frame investment opportunities for different organizations.

Innovations are processes that focuses on the creation and implementation of new and improved assets such as technologies, services, processes and positions. Innovation is the process of transforming an idea, or invention into wealth. Technological innovation is regarded as the widely known influence of innovation in the globe and the major actors are innovative firms as well as the governments, others include universities and public institutes. Innovation depends on access to finance, availability of skilled work force, including the state of competition and intellectual property right. Without proper financial resources, the process of innovation cannot be actualized. A nation without the financial knowhow can't reinvent herself, which is why there are economies lacking in technological advancement, because of lack of ability to procure newly advanced technologies.

Transnational Corporations are commercial institutes that operates in more than one country and doesn't consider any particular country as its base of operation, unlike the multinational corporation which actually does. TNCs tends to

spread abroad after fulfilling its prime objective in a particular nation, by meeting their domestic needs. They in turn seek to diversify to maximum productivity and efficiency. With access to foreign direct investments, transnational corporations are able to bypass high tariffs that prevent goods from being priced. Through globalization and economic integration, nations tend to experience increase in access to different corporations. We can in turn say that globalization is the main reason for growth of transnational organizations.

Since 2015, global economy has encountered different challenges that has led to downturns of global economic growth. Countries thereby seeks to move global economy out of its current pattern which helps in avoiding prolonged low growth situations. Innovation is the key to achieving such objectives. When nations get more inventive, it tends to create more accessibility to global recognition and increase in the international standards. Globalizations helps to bring nations from being underdeveloped to a developed nation. Economic recovery has indeed slowed in most highly developed countries, including USA, Japan and some European nations. Now, GII is focused on research and development, as well as innovation whether there are technological or non-technological need to be efficiently initiated in the market place to have a true impact.

This year, statistics confirms a continued desire of TNCs to globalize their operations, bouncing back to an increasing trend from last year's slowdown. Businesses many choose to globalize or operate in different countries in four different ways; Trade, Investment, Strategic alliances and licensing. Organizations develop its international strategies by considering its overall strategy, which include its operations both home and abroad.

Coca-Cola is the world's largest beverage company, refreshing consumers with more than 500 brands. Their plans declare their purpose as a company and serves as the standard against which they weigh their actions and decisions. They are a global business that operates on a local scale. They are focused on driving revenue and profit growth, they are invested in branch and businesses, more efficient and a simplified company.



Global trade today involves much more than crude oil and bananas. We live in an international marketplace of ideas, where trademarks, patents, and research are moving from Argentina to Tanzania at the speed of light. In this modern age, people are hiding ideas around and developing economies. Manufacturing remains a potential force in both advanced and developing economies. The sector has changed, bringing new opportunities and challenges to business leaders and policy makers.

The future of Coca-Cola's marketing lies in experimentation with new media channels and technology. The ambition of Coca-Cola is to increase trial, drive transactions and build connections in 140 countries where the activity is being rolled out.

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# ANNEX A

Table 1

Global Innovation Index ranking

Country/Economy	Score (0–100)	Rank	Income	Rank	Region	Rank	Efficiency Ratio	Rank	Median: 0.65
Switzerland	66.28	1	HI	1	EUR	1	0.94	5	
Sweden	63.57	2	HI	2	EUR	2	0.86	10	
United Kingdom	61.93	3	HI	3	EUR	3	0.83	14	
United States of America	61.40	4	HI	4	NAC	1	0.79	25	
Finland	59.90	5	HI	5	EUR	4	0.75	32	
Singapore	59.16	6	HI	6	SEAO	1	0.62	78	
Ireland	59.03	7	HI	7	EUR	5	0.89	8	
Denmark	58.45	8	HI	8	EUR	6	0.74	34	
Netherlands	58.29	9	HI	9	EUR	7	0.82	20	
Germany	57.94	10	HI	10	EUR	8	0.87	9	
Korea, Rep.	57.15	11	HI	11	SEAO	2	0.80	24	
Luxembourg	57.11	12	HI	12	EUR	9	1.02	1	
Iceland	55.99	13	HI	13	EUR	10	0.98	3	
Hong Kong (China)	55.69	14	HI	14	SEAO	3	0.61	83	
Canada	54.71	15	HI	15	NAC	2	0.67	57	
Japan	54.52	16	HI	16	SEAO	4	0.65	65	
New Zealand	54.23	17	HI	17	SEAO	5	0.73	40	
France	54.04	18	HI	18	EUR	11	0.73	44	
Australia	53.07	19	HI	19	SEAO	6	0.64	73	
Austria	52.65	20	HI	20	EUR	12	0.73	43	
Israel	52.28	21	HI	21	NAWA	1	0.81	23	
Norway	52.01	22	HI	22	EUR	13	0.68	55	
Belgium	51.97	23	HI	23	EUR	14	0.78	27	
Estonia	51.73	24	HI	24	EUR	15	0.91	6	
China	50.57	25	UM	1	SEAO	7	0.90	7	
Malta	50.44	26	HI	25	EUR	16	0.98	2	
Czech Republic	49.40	27	HI	26	EUR	17	0.82	21	
Spain	49.19	28	HI	27	EUR	18	0.72	48	
Italy	47.17	29	HI	28	EUR	19	0.74	33	
Portugal	46.45	30	HI	29	EUR	20	0.75	31	
Cyprus	46.34	31	HI	30	NAWA	2	0.79	26	
Slovenia	45.97	32	HI	31	EUR	21	0.74	39	
Hungary	44.71	33	HI	32	EUR	22	0.83	17	
Latvia	44.33	34	HI	33	EUR	23	0.78	28	
Malaysia	43.36	35	UM	2	SEAO	8	0.67	59	
Lithuania	41.76	36	HI	34	EUR	24	0.63	75	
Slovakia	41.70	37	HI	35	EUR	25	0.74	36	
Bulgaria	41.42	38	UM	3	EUR	26	0.83	16	
Poland	40.22	39	HI	36	EUR	27	0.65	66	
Greece	39.75	40	HI	37	EUR	28	0.61	84	
United Arab Emirates	39.35	41	HI	38	NAWA	3	0.44	117	
Turkey	39.03	42	UM	4	NAWA	4	0.84	13	
Russian Federation	38.50	43	HI	39	EUR	29	0.65	69	
Chile	38.41	44	HI	40	LCN	1	0.59	91	
Costa Rica	38.40	45	UM	5	LCN	2	0.71	50	
Moldova, Rep.	38.39	46	LM	1	EUR	30	0.94	4	
Croatia	38.29	47	HI	41	EUR	31	0.65	68	
Romania	37.90	48	UM	6	EUR	32	0.72	46	
Saudi Arabia	37.75	49	HI	42	NAWA	5	0.61	85	
Qatar	37.47	50	HI	43	NAWA	6	0.56	97	
Montenegro	37.36	51	UM	7	EUR	33	0.62	80	
Thailand	36.51	52	UM	8	SEAO	9	0.70	53	
Mauritius	35.86	53	UM	9	SSF	1	0.57	95	
South Africa	35.85	54	UM	10	SSF	2	0.55	99	
Mongolia	35.74	55	UM	11	SEAO	10	0.72	47	
Ukraine	35.72	56	LM	2	EUR	34	0.84	12	
Bahrain	35.48	57	HI	44	NAWA	7	0.58	92	
TFYR of Macedonia	35.40	58	UM	12	EUR	35	0.67	56	
Viet Nam	35.37	59	LM	3	SEAO	11	0.84	11	
Armenia	35.14	60	LM	4	NAWA	8	0.83	15	
Mexico	34.56	61	UM	13	LCN	3	0.63	76	
Uruguay	34.28	62	HI	45	LCN	4	0.62	81	
Colombia	34.16	63	UM	14	LCN	5	0.56	96	
Georgia	33.86	64	LM	5	NAWA	9	0.65	67	



## ANNEX A

### Global Innovation Index ranking (cont'd)

Country/Economy	Score (0–100)	Rank	Income	Rank	Region	Rank	Efficiency Ratio	Rank	Median: 0.65
Serbia	33.75	65	UM	15	EUR	36	0.65	70	
India	33.61	66	LM	6	CSA	1	0.66	63	
Kuwait	33.61	67	HI	46	NAWA	10	0.73	42	
Panama	33.49	68	UM	16	LCN	6	0.66	61	
Brazil	33.19	69	UM	17	LCN	7	0.55	100	
Lebanon	32.70	70	UM	18	NAWA	11	0.73	41	
Peru	32.51	71	UM	19	LCN	8	0.51	109	
Morocco	32.26	72	LM	7	NAWA	12	0.66	64	
Oman	32.21	73	HI	47	NAWA	13	0.53	103	
Philippines	31.83	74	LM	8	SEAO	12	0.71	49	
Kazakhstan	31.51	75	UM	20	CSA	2	0.51	108	
Dominican Republic	30.55	76	UM	21	LCN	9	0.62	82	
Tunisia	30.55	77	UM	22	NAWA	14	0.60	86	
Iran, Islamic Rep.	30.52	78	UM	23	CSA	3	0.71	51	
Belarus	30.39	79	UM	24	EUR	37	0.45	116	
Kenya	30.36	80	LM	9	SSF	3	0.76	30	
Argentina	30.24	81	HI	48	LCN	10	0.56	98	
Jordan	30.04	82	UM	25	NAWA	15	0.67	58	
Rwanda	29.96	83	LI	1	SSF	4	0.38	123	
Mozambique	29.84	84	LI	2	SSF	5	0.73	45	
Azerbaijan	29.64	85	UM	26	NAWA	16	0.54	101	
Tajikistan	29.62	86	LM	10	CSA	4	0.77	29	
Bosnia and Herzegovina	29.62	87	UM	27	EUR	38	0.46	115	
Indonesia	29.07	88	LM	11	SEAO	13	0.71	52	
Jamaica	28.97	89	UM	28	LCN	11	0.53	104	
Botswana	28.96	90	UM	29	SSF	6	0.42	119	
Sri Lanka	28.92	91	LM	12	CSA	5	0.70	54	
Albania	28.38	92	UM	30	EUR	39	0.40	121	
Namibia	28.24	93	UM	31	SSF	7	0.54	102	
Paraguay	28.20	94	UM	32	LCN	12	0.62	77	
Cambodia	27.94	95	LI	3	SEAO	14	0.59	90	
Bhutan	27.88	96	LM	13	CSA	6	0.28	128	
Guatemala	27.30	97	LM	14	LCN	13	0.62	79	
Malawi	27.26	98	LI	4	SSF	8	0.74	38	
Uganda	27.14	99	LI	5	SSF	9	0.52	106	
Ecuador	27.11	100	UM	33	LCN	14	0.60	87	
Honduras	26.94	101	LM	15	LCN	15	0.53	105	
Ghana	26.66	102	LM	16	SSF	10	0.60	88	
Kyrgyzstan	26.62	103	LM	17	CSA	7	0.50	110	
El Salvador	26.56	104	LM	18	LCN	16	0.48	113	
Tanzania, United Rep.	26.35	105	LI	6	SSF	11	0.81	22	
Senegal	26.14	106	LM	19	SSF	12	0.66	62	
Egypt	25.96	107	LM	20	NAWA	17	0.63	74	
Côte d'Ivoire	25.80	108	LM	21	SSF	13	0.82	19	
Bolivia, Plurinational St.	25.24	109	LM	22	LCN	17	0.59	89	
Ethiopia	24.83	110	LI	7	SSF	14	0.83	18	
Madagascar	24.79	111	LI	8	SSF	15	0.74	35	
Mali	24.77	112	LI	9	SSF	16	0.74	37	
Algeria	24.46	113	UM	34	NAWA	18	0.49	111	
Nigeria	23.15	114	LM	23	SSF	17	0.67	60	
Nepal	23.13	115	LI	10	CSA	8	0.58	94	
Nicaragua	23.06	116	LM	24	LCN	18	0.41	120	
Bangladesh	22.86	117	LM	25	CSA	9	0.52	107	
Cameroon	22.82	118	LM	26	SSF	18	0.58	93	
Pakistan	22.63	119	LM	27	CSA	10	0.64	71	
Venezuela, Bolivarian Rep.	22.32	120	HI	49	LCN	19	0.46	114	
Benin	22.25	121	LI	11	SSF	19	0.43	118	
Burkina Faso	21.05	122	LI	12	SSF	20	0.28	127	
Burundi	20.93	123	LI	13	SSF	21	0.39	122	
Niger	20.44	124	LI	14	SSF	22	0.36	125	
Zambia	19.92	125	LM	28	SSF	23	0.64	72	
Togo	18.42	126	LI	15	SSF	24	0.36	124	
Guinea	17.24	127	LI	16	SSF	25	0.49	112	
Yemen	14.55	128	LM	29	NAWA	19	0.34	126	

## ANNEX A

Table 2:

Innovation Input Sub-Index ranking

Country/Economy	Score (0–100)	Rank	Income	Rank	Region	Rank	Median: 41.87
Singapore	72.94	1	HI	1	SEAO	1	
Hong Kong (China)	69.15	2	HI	2	SEAO	2	
United States of America	68.71	3	HI	3	NAC	1	
Finland	68.49	4	HI	4	EUR	1	
Sweden	68.48	5	HI	5	EUR	2	
Switzerland	68.38	6	HI	6	EUR	3	
United Kingdom	67.50	7	HI	7	EUR	4	
Denmark	67.06	8	HI	8	EUR	5	
Japan	66.00	9	HI	9	SEAO	3	
Canada	65.41	10	HI	10	NAC	2	
Australia	64.85	11	HI	11	SEAO	4	
Netherlands	64.03	12	HI	12	EUR	6	
Korea, Rep.	63.54	13	HI	13	SEAO	5	
New Zealand	62.64	14	HI	14	SEAO	6	
France	62.56	15	HI	15	EUR	7	
Ireland	62.44	16	HI	16	EUR	8	
Norway	61.98	17	HI	17	EUR	9	
Germany	61.91	18	HI	18	EUR	10	
Austria	60.86	19	HI	19	EUR	11	
Belgium	58.23	20	HI	20	EUR	12	
Israel	57.78	21	HI	21	NAWA	1	
Spain	57.26	22	HI	22	EUR	13	
Luxembourg	56.64	23	HI	23	EUR	14	
Iceland	56.64	24	HI	24	EUR	15	
United Arab Emirates	54.53	25	HI	25	NAWA	2	
Czech Republic	54.28	26	HI	26	EUR	16	
Estonia	54.15	27	HI	27	EUR	17	
Italy	54.07	28	HI	28	EUR	18	
China	53.12	29	UM	1	SEAO	7	
Portugal	53.05	30	HI	29	EUR	19	
Slovenia	52.99	31	HI	30	EUR	20	
Malaysia	52.05	32	UM	2	SEAO	8	
Cyprus	51.88	33	HI	31	NAWA	3	
Lithuania	51.18	34	HI	32	EUR	21	
Malta	51.01	35	HI	33	EUR	22	
Latvia	49.73	36	HI	34	EUR	23	
Greece	49.42	37	HI	35	EUR	24	
Hungary	48.94	38	HI	36	EUR	25	
Poland	48.71	39	HI	37	EUR	26	
Chile	48.25	40	HI	38	LCN	1	
Qatar	48.05	41	HI	39	NAWA	4	
Slovakia	47.96	42	HI	40	EUR	27	
Saudi Arabia	46.99	43	HI	41	NAWA	5	
Russian Federation	46.69	44	HI	42	EUR	28	
Croatia	46.38	45	HI	43	EUR	29	
Montenegro	46.13	46	UM	3	EUR	30	
South Africa	46.12	47	UM	4	SSF	1	
Mauritius	45.75	48	UM	5	SSF	2	
Bulgaria	45.30	49	UM	6	EUR	31	
Costa Rica	44.94	50	UM	7	LCN	2	
Bahrain	44.79	51	HI	44	NAWA	6	
Romania	43.99	52	UM	8	EUR	32	
Colombia	43.78	53	UM	9	LCN	3	
Bhutan	43.46	54	LM	1	CSA	1	
Rwanda	43.40	55	LI	1	SSF	3	
Peru	43.18	56	UM	10	LCN	4	
Thailand	42.98	57	UM	11	SEAO	9	
Brazil	42.73	58	UM	12	LCN	5	
Turkey	42.54	59	UM	13	NAWA	7	
Mexico	42.52	60	UM	14	LCN	6	
Uruguay	42.33	61	HI	45	LCN	7	
TFYR of Macedonia	42.31	62	UM	15	EUR	33	
Oman	42.10	63	HI	46	NAWA	8	
Belarus	41.99	64	UM	16	EUR	34	



## ANNEX A

### Innovation Input Sub-Index ranking (cont'd)

Country/Economy	Score (0–100)	Rank	Income	Rank	Region	Rank	Median: 41.87
Kazakhstan	41.75	65	UM	17	CSA	2	
Mongolia	41.56	66	UM	18	SEAO	10	
Georgia	41.02	67	LM	2	NAWA	9	
Serbia	40.94	68	UM	19	EUR	35	
Botswana	40.93	69	UM	20	SSF	4	
Bosnia and Herzegovina	40.54	70	UM	21	EUR	36	
Albania	40.53	71	UM	22	EUR	37	
India	40.49	72	LM	3	CSA	3	
Panama	40.31	73	UM	23	LCN	8	
Moldova, Rep.	39.57	74	LM	4	EUR	38	
Morocco	38.93	75	LM	5	NAWA	10	
Ukraine	38.91	76	LM	6	EUR	39	
Argentina	38.86	77	HI	47	LCN	9	
Kuwait	38.84	78	HI	48	NAWA	11	
Viet Nam	38.45	79	LM	7	SEAO	11	
Armenia	38.40	80	LM	8	NAWA	12	
Azerbaijan	38.39	81	UM	24	NAWA	13	
Tunisia	38.10	82	UM	25	NAWA	14	
Jamaica	37.96	83	UM	26	LCN	10	
Dominican Republic	37.80	84	UM	27	LCN	11	
Lebanon	37.78	85	UM	28	NAWA	15	
Philippines	37.23	86	LM	9	SEAO	12	
Namibia	36.66	87	UM	29	SSF	5	
Jordan	36.01	88	UM	30	NAWA	16	
El Salvador	35.92	89	LM	10	LCN	12	
Iran, Islamic Rep.	35.72	90	UM	31	CSA	4	
Uganda	35.63	91	LI	2	SSF	6	
Kyrgyzstan	35.61	92	LM	11	CSA	5	
Honduras	35.33	93	LM	12	LCN	13	
Cambodia	35.06	94	LI	3	SEAO	13	
Paraguay	34.75	95	UM	32	LCN	14	
Mozambique	34.55	96	LI	4	SSF	7	
Kenya	34.44	97	LM	13	SSF	8	
Sri Lanka	34.08	98	LM	14	CSA	6	
Indonesia	34.04	99	LM	15	SEAO	14	
Ecuador	33.92	100	UM	33	LCN	15	
Guatemala	33.69	101	LM	16	LCN	16	
Tajikistan	33.51	102	LM	17	CSA	7	
Ghana	33.37	103	LM	18	SSF	9	
Algeria	32.80	104	UM	34	NAWA	17	
Burkina Faso	32.78	105	LI	5	SSF	10	
Nicaragua	32.78	106	LM	19	LCN	17	
Egypt	31.76	107	LM	20	NAWA	18	
Bolivia, Plurinational St.	31.66	108	LM	21	LCN	18	
Senegal	31.47	109	LM	22	SSF	11	
Malawi	31.41	110	LI	6	SSF	12	
Benin	31.16	111	LI	7	SSF	13	
Venezuela, Bolivarian Rep.	30.52	112	HI	49	LCN	19	
Niger	30.08	113	LI	8	SSF	14	
Burundi	30.04	114	LI	9	SSF	15	
Bangladesh	30.02	115	LM	23	CSA	8	
Nepal	29.31	116	LI	10	CSA	9	
Tanzania, United Rep.	29.05	117	LI	11	SSF	16	
Cameroon	28.88	118	LM	24	SSF	17	
Mali	28.53	119	LI	12	SSF	18	
Madagascar	28.45	120	LI	13	SSF	19	
Côte d'Ivoire	28.29	121	LM	25	SSF	20	
Nigeria	27.80	122	LM	26	SSF	21	
Pakistan	27.51	123	LM	27	CSA	10	
Ethiopia	27.19	124	LI	14	SSF	22	
Togo	27.11	125	LI	15	SSF	23	
Zambia	24.25	126	LM	28	SSF	24	
Guinea	23.18	127	LI	16	SSF	25	
Yemen	21.67	128	LM	29	NAWA	19	



# ANNEX A

Table 3

## Innovation Output Sub-Index rankings

Country/Economy	Score (0–100)	Rank	Income	Rank	Region	Rank	Median: 26.35
Switzerland	64.19	1	HI	1	EUR	1	
Sweden	58.66	2	HI	2	EUR	2	
Luxembourg	57.57	3	HI	3	EUR	3	
United Kingdom	56.35	4	HI	4	EUR	4	
Ireland	55.63	5	HI	5	EUR	5	
Iceland	55.35	6	HI	6	EUR	6	
United States of America	54.08	7	HI	7	NAC	1	
Germany	53.97	8	HI	8	EUR	7	
Netherlands	52.54	9	HI	9	EUR	8	
Finland	51.32	10	HI	10	EUR	9	
Korea, Rep.	50.75	11	HI	11	SEAO	1	
Malta	49.86	12	HI	12	EUR	10	
Denmark	49.84	13	HI	13	EUR	11	
Estonia	49.31	14	HI	14	EUR	12	
China	48.02	15	UM	1	SEAO	2	
Israel	46.77	16	HI	15	NAWA	1	
New Zealand	45.82	17	HI	16	SEAO	3	
Belgium	45.71	18	HI	17	EUR	13	
France	45.51	19	HI	18	EUR	14	
Singapore	45.38	20	HI	19	SEAO	4	
Czech Republic	44.53	21	HI	20	EUR	15	
Austria	44.44	22	HI	21	EUR	16	
Canada	44.00	23	HI	22	NAC	2	
Japan	43.04	24	HI	23	SEAO	5	
Hong Kong (China)	42.22	25	HI	24	SEAO	6	
Norway	42.04	26	HI	25	EUR	17	
Australia	41.28	27	HI	26	SEAO	7	
Spain	41.11	28	HI	27	EUR	18	
Cyprus	40.80	29	HI	28	NAWA	2	
Hungary	40.47	30	HI	29	EUR	19	
Italy	40.28	31	HI	30	EUR	20	
Portugal	39.85	32	HI	31	EUR	21	
Slovenia	38.95	33	HI	32	EUR	22	
Latvia	38.92	34	HI	33	EUR	23	
Bulgaria	37.53	35	UM	2	EUR	24	
Moldova, Rep.	37.21	36	LM	1	EUR	25	
Turkey	35.52	37	UM	3	NAWA	3	
Slovakia	35.43	38	HI	34	EUR	26	
Malaysia	34.66	39	UM	4	SEAO	8	
Ukraine	32.53	40	LM	2	EUR	27	
Lithuania	32.34	41	HI	35	EUR	28	
Viet Nam	32.29	42	LM	3	SEAO	9	
Armenia	31.89	43	LM	4	NAWA	4	
Costa Rica	31.87	44	UM	5	LCN	1	
Romania	31.81	45	UM	6	EUR	29	
Poland	31.73	46	HI	36	EUR	30	
Russian Federation	30.31	47	HI	37	EUR	31	
Croatia	30.19	48	HI	38	EUR	32	
Greece	30.09	49	HI	39	EUR	33	
Thailand	30.04	50	UM	7	SEAO	10	
Mongolia	29.93	51	UM	8	SEAO	11	
Montenegro	28.59	52	UM	9	EUR	34	
Chile	28.57	53	HI	40	LCN	2	
Saudi Arabia	28.51	54	HI	41	NAWA	5	
TFYR of Macedonia	28.49	55	UM	10	EUR	35	
Kuwait	28.37	56	HI	42	NAWA	6	
Lebanon	27.62	57	UM	11	NAWA	7	
Qatar	26.88	58	HI	43	NAWA	8	
India	26.73	59	LM	5	CSA	1	
Georgia	26.71	60	LM	6	NAWA	9	
Panama	26.67	61	UM	12	LCN	3	
Mexico	26.60	62	UM	13	LCN	4	
Serbia	26.57	63	UM	14	EUR	36	
Philippines	26.43	64	LM	7	SEAO	12	

## ANNEX A

## Innovation Output Sub-Index rankings (cont'd)

Country/Economy	Score (0–100)	Rank	Income	Rank	Region	Rank	Median: 26.35
Kenya	26.28	65	LM	8	SSF	1	■
Uruguay	26.22	66	HI	44	LCN	5	■
Bahrain	26.17	67	HI	45	NAWA	10	■
Mauritius	25.97	68	UM	15	SSF	2	■
Tajikistan	25.74	69	LM	9	CSA	2	■
Morocco	25.58	70	LM	10	NAWA	11	■
South Africa	25.58	71	UM	16	SSF	3	■
Iran, Islamic Rep.	25.33	72	UM	17	CSA	3	■
Mozambique	25.13	73	LI	1	SSF	4	■
Colombia	24.55	74	UM	18	LCN	6	■
United Arab Emirates	24.18	75	HI	46	NAWA	12	■
Indonesia	24.10	76	LM	11	SEAO	13	■
Jordan	24.06	77	UM	19	NAWA	13	■
Sri Lanka	23.77	78	LM	12	CSA	4	■
Brazil	23.65	79	UM	20	LCN	7	■
Tanzania, United Rep.	23.65	80	LI	2	SSF	5	■
Côte d'Ivoire	23.31	81	LM	13	SSF	6	■
Dominican Republic	23.31	82	UM	21	LCN	8	■
Malawi	23.11	83	LI	3	SSF	7	■
Tunisia	23.00	84	UM	22	NAWA	14	■
Ethiopia	22.48	85	LI	4	SSF	8	■
Oman	22.32	86	HI	47	NAWA	15	■
Peru	21.84	87	UM	23	LCN	9	■
Paraguay	21.64	88	UM	24	LCN	10	■
Argentina	21.62	89	HI	48	LCN	11	■
Kazakhstan	21.27	90	UM	25	CSA	5	■
Madagascar	21.13	91	LI	5	SSF	9	■
Mali	21.02	92	LI	6	SSF	10	■
Guatemala	20.91	93	LM	14	LCN	12	■
Azerbaijan	20.88	94	UM	26	NAWA	16	■
Cambodia	20.82	95	LI	7	SEAO	14	■
Senegal	20.81	96	LM	15	SSF	11	■
Ecuador	20.30	97	UM	27	LCN	13	■
Egypt	20.16	98	LM	16	NAWA	17	■
Jamaica	19.98	99	UM	28	LCN	14	■
Ghana	19.94	100	LM	17	SSF	12	■
Namibia	19.83	101	UM	29	SSF	13	■
Bolivia, Plurinational St.	18.83	102	LM	18	LCN	15	■
Belarus	18.79	103	UM	30	EUR	37	■
Bosnia and Herzegovina	18.70	104	UM	31	EUR	38	■
Uganda	18.65	105	LI	8	SSF	14	■
Honduras	18.56	106	LM	19	LCN	16	■
Nigeria	18.50	107	LM	20	SSF	15	■
Pakistan	17.75	108	LM	21	CSA	6	■
Kyrgyzstan	17.63	109	LM	22	CSA	7	■
El Salvador	17.19	110	LM	23	LCN	17	■
Botswana	16.99	111	UM	32	SSF	16	■
Nepal	16.94	112	LI	9	CSA	8	■
Cameroon	16.76	113	LM	24	SSF	17	■
Rwanda	16.53	114	LI	10	SSF	18	■
Albania	16.24	115	UM	33	EUR	39	■
Algeria	16.13	116	UM	34	NAWA	18	■
Bangladesh	15.71	117	LM	25	CSA	9	■
Zambia	15.58	118	LM	26	SSF	19	■
Venezuela, Bolivarian Rep.	14.12	119	HI	49	LCN	18	■
Nicaragua	13.35	120	LM	27	LCN	19	■
Benin	13.33	121	LI	11	SSF	20	■
Bhutan	12.30	122	LM	28	CSA	10	■
Burundi	11.82	123	LI	12	SSF	21	■
Guinea	11.30	124	LI	13	SSF	22	■
Niger	10.80	125	LI	14	SSF	23	■
Togo	9.73	126	LI	15	SSF	24	■
Burkina Faso	9.31	127	LI	16	SSF	25	■
Yemen	7.43	128	LM	29	NAWA	19	■