





This is a mercurial and hyper-competitive world. Trade takes place openly and vigorously among virtually all nations. Market-based approaches are used to face most contemporary challenges.

We are living in an exceptionally fast-paced, highly connected, and volatile world. The speed of every facet of life has been increasing year over year for the last several decades. Time is viewed as the scarcest commodity for people and businesses alike. In order to keep up with all of this rapid change, companies are constantly on the lookout across the globe to find the best talent, spot the newest trend, and identify new markets to serve and vendors to source from.

This, in turn, has led to a general consensus that the world is more connected than ever before. Imports and exports are both on the rise for most countries. In fact, global exports are three times higher than they were at the turn of the century; now representing over 60% of the global GDP. While there are still sporadic outbreaks of localized conflicts, the last 30 years have been relatively peaceful. This is due, in no small part, to the level and breadth of global trade.

Not only are physical products flowing freely between countries, so are ideas, money, and, most dramatically, people. Immigration has skyrocketed across the globe resulting in much greater exchange of cultures, languages, and customs. The percentage of US citizens fluent in two or more languages has tripled over the last 25 years. Large global or multinational firms have become the mixing pot for society at large. Two out of every three employees of Global Fortune 500 firms are working in a country that is not of their citizenship.

The interconnectedness and speed of this global market is not without its negative effects, however. For example, the level of volatility in all aspects of business has increased dramatically. A labor strike in South Korea can have huge ripple effects in a manufacturing plant in Brazil. This "butterfly effect" is exceptionally hard to detect ahead of time – so the frequency and magnitude of these disruptions continue to increase. As a result, firms are taking extensive precautions and steps to keep the flow of goods both smooth and secure.

There is also tremendous volatility in commodity prices. Trade barriers between countries are at an all time low which means that raw materials and commodities can be procured from all over the world. This increases the level of competition and reduces the ability of any local supplier to sustain a geographically based monopoly. In today's world, price – rather than access – is the key criterion for choosing a commodity, a product, or a supplier. The collaboration between firms across national boundaries has further expanded the regional markets to the point that they have overlapped and blended into a single, global market. U.S. firms have established and maintain intense collaboration with companies across the world. Affordable and seamless supply chains are encouraging companies to invest in global manufacturing capabilities with most large firms using a mix of off-shore and nearshore plants to remain low-cost and flexible. Vertically integrated firms are more the exception than the rule. The cost of moving goods anywhere in the world is very reasonable, primarily due to new and cheaper energy sources and technologies, and non-obtrusive environmental regulations. Energy costs, although relatively low, remain extremely volatile because of the continual natural and man-made supply disruptions of oil-based fuels.

Because the world is a single market, countries succeed by exploiting their specific comparative advantage. Countries and regions tend to specialize in producing what they do best and rely on other countries – halfway across the world in some cases – for everything else they need. Traditional powerhouses such as Japan, Germany and the United States no longer control the capabilities and resources needed to manufacture highly specialized, high-value products. Although developing countries are not at par with the advanced nations yet, they have found niches and are investing heavily in developing their industrial competencies.

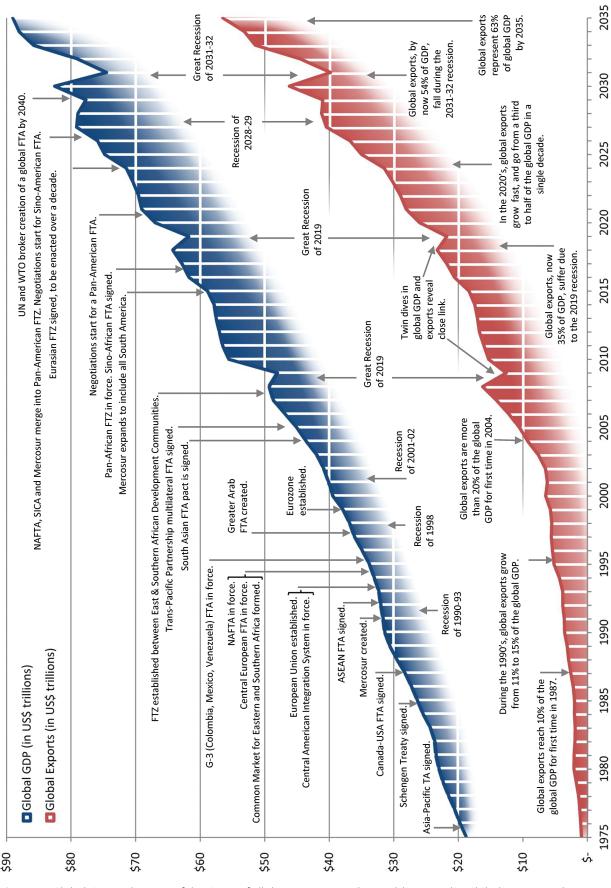
Faced with so many options and alternatives, customers have become increasingly fickle in their tastes. Customers today expect to have an infinite SKU selection coupled with immediate delivery. This has had many consequences. For example, retail sales are predominantly conducted online, even for grocery and low-value consumer packaged good items. With web-based storefronts, retail firms can be (and are) located virtually anywhere in the world. The individual

or "eaches" size of these web-based purchases has increased the level of local parcel delivery. With a significant proportion of the U.S. population living in large and dense cities, this individual delivery to residences is the cause of much of the congestion within urban areas. Last-minute postponement for final product customization is now common practice.

Even with the dominance of the market and industry, governments still play an active and vital role. Many citizens believe that one of the government's main jobs is to minimize those regulations that prohibit or hinder global commerce; to act as guard rails keeping firms on the right track rather than speed bumps slowing them down. This is reflected in the fact that the average number of regulations affecting a typical international business transaction has been cut in half over the last two decades. Intellectual property protection and enforcement of the Rule of Law are also on the rise globally.

This positive view is not universal, however. It is said by cynics that, in this brave new world, *"the only regulation is that there are no regulations."* Sizable segments of the population believe that too much of government policy is overly corporate directed with little protection for the environment, safety, health, or the poor and disadvantaged citizens. Many people feel disenfranchised and the level of income inequality has been stubbornly high for decades.

In this world, the private sector has taken the lead in addressing the pressing issues of the day. Any attempt by governments to get involved in regulating business is seen as an unwelcome intrusion. Citizens generally trust markets as the most efficient way to operate a market and they are more than willing to allow them to 'work their magic.' So far, their patience and confidence in the market forces has paid off. A case in point is the now routine hassle-free immigration across most nations and the dramatic increase in global food production.



\$90 Figure 1. Global GDP is the sum of the GDPs of all the countries in the world, just as the Global Exports is the sum of the value of exports of all the countries. Both are given in trillions of US dollars (converted to 2005 dollars as reference). FT stands for free trade; FTA for FT Agreement or Area; FTZ for FT zone.

GLOBAL GDP AND EXPORTS (1975-2035)

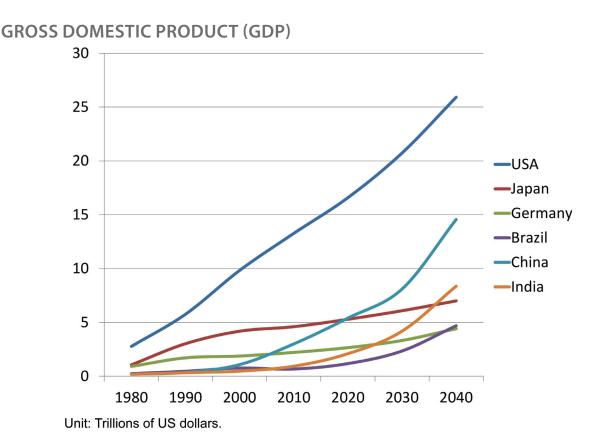


Figure 2. Propelled by a bullish global market, and unhindered by regulations or environmental concerns, the largest economies of the world have continued to grow. The United States not only retains its position as the number one economy in the world, but has taken its economic growth to previously unseen levels. China's economy races behind at an ever steeper growth rate, as do the economies of Brazil and India.

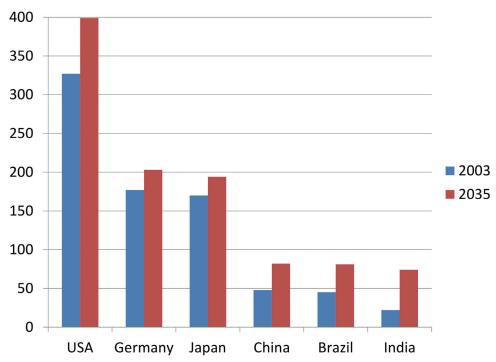
China Germany Japan Brazil India -3% -2% -1% 0% 1% 2% 3% 4% 5% 6% 7% 8% 9% 10%

CURRENT ACCOUNT BALANCE AS % OF GDP

Unit: Percentage of GDP. Source for 2009: International Monetary Fund/CIA World Factbook

Figure 3. The United States continues to be net importer, with net imports representing an even larger percentage of the country's GDP than 25 years ago. China continues to be a net exporter, as do Germany and Japan. India, on the other hand, with its growing middle class, has become a net importer of goods from China. A similar move is seen in Brazil, which nevertheless remains a net exporter, for the time being.

ENERGY CONSUMPTION PER CAPITA



Unit: GJ per person per year. Source for 2003 data: Wikipedia/World Resources/International Energy Agency

Figure 4. Low regulations and rampant consumption have continued to drive energy consuption per capita to higher levels. The average American citizen consumes about twice as much energy as the citizens from similarly developed countries, like Japan and Germany. The energy use of the average citizen in BRIC countries has doubled in the last 30 years, but on average it still remains much smaller than that of developed countries.

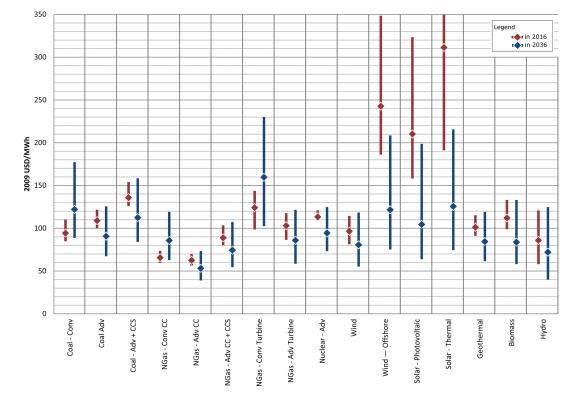
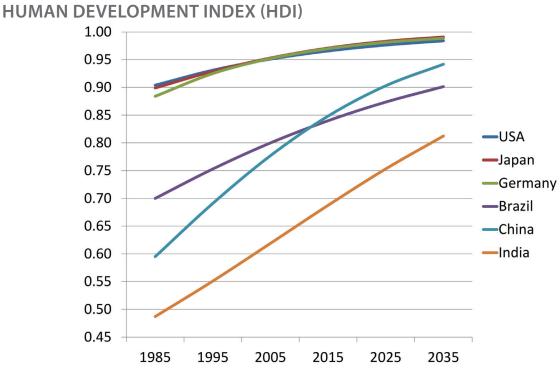


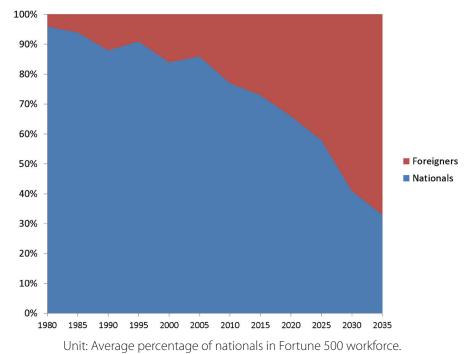
Figure 5. Generally speaking, during the last 20 years, the cost of electric energy has remained – on average - relatively unchanged, although the volatility of prices has increased. The exception to this is the cost of energy from renewable sources (wind and solar), which has been cut in half mostly due to innovation that has resulted to satisfy the demand from environmentally conscious consumers.

ELECTRIC ENERGY COST PER SOURCE



Unit: Index is in base of 1.0, where higher thank 0.8 is considered high development Source: United Nations Development Program.

Figure 6. The jumpy yet continuous growth in global trade has translated into a sustained increase in the standard of living around the world, as reflected in increases in the UN's human development index, a composite measure of literacy, longevity and relative affluence. Developed countries have maintained indices above 95%, while the indices of developing countries have skyrocketed in the last half century, significantly closing the gap between developed and developing countries.



% OF NATIONALS IN FORTUNE 500 WORKFORCE

Figure 7. The open market has resulted not only in an increase of goods exchanged, but also in an intense migration of skilled workers. In the span of a little more than half a century, the average fraction of the workforce in Fortune 500 companies that is composed of nationals (e.g. citizens of the country where the work is based) has shrunk from over 95% to 33%. This means that now, on an average Fortune 500 company, two out of three employees are working in a country that is not their country of citizenship.

PER CAPITA FOOD PRODUCTION

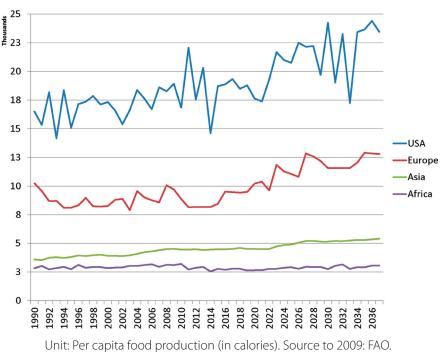


Figure 8. Food production in Africa, as measured using the FAO's calories per capita index, has remained steady at around 3 thousand. Although on average this is the amount required per person, income inequality results in famine for some parts of the population. Asia's food output has increased slightly over the last decades, but still remains largely a subsistence production. The food production of the US, at about four times that of Asia and twice that of Europe, far dwarves that of any other region, which makes it a food source for many other countries.

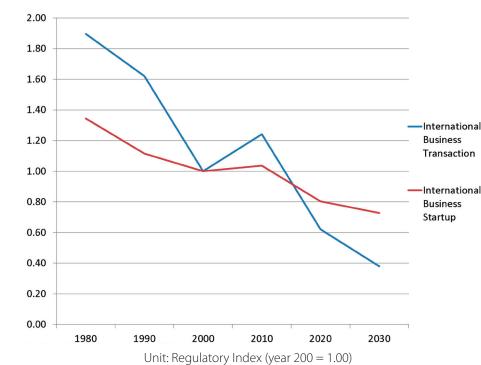


Figure 9. The average number of regulations affecting a typical international business transaction has decreased dramatically in the last decades. A regulatory index, which uses as reference the number of regulations in the year 2000, shows that the typical international business transaction of the year 2030 is affected by only about 40% as many regulations as the typical transaction back in 2000. Similarly, the number of regulations affecting a typical international startup has fallen by the year 2030 to 67% of the number of regulations that would have been involved back in 2000.

REGULATORY INDEX



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MILLIONS OF MARKETS SCENARIO RECAP

How would you characterize the future of Global Market place in terms of \ldots

Level of Global Trade	Low	Medium	High
Availability of Resources	Low	🗆 Medium	□High
Cost of Energy	Low	Medium	High
Commodity Price Volatility	Low	Medium	High
Environmental Awareness	Low	Medium	High
Migration Between Countries	Low	Medium	High
Currency Fluctuation	Low	Medium	High
Reach of Government Regulations	Low	Medium	High

C | SNAPSHOT OF THE WORLD **#** GLOBAL MARKETPLACE

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