Chapter 4: International Economic Cooperation

“Capitalism” is a dirty word for many intellectuals, but there are a number of studies showing that open economies and free trade are negatively correlated with genocide and war.

—Steven Pinker

Chapters 2 and 3 dealt with geopolitical risks that could lead to significant setbacks in the world economy and financial markets. From wars to terror attacks to commodity price shocks, we have looked at the three horsemen of the geopolitical apocalypse. To lift our readers up from the depths of their depression, I focus in this chapter on the geopolitical events and developments that lead to increased growth and are beneficial for the global economy and financial markets. I will examine the international institutions, often criticized, that promote economic cooperation and liberalization. Then, I will consider the benefits and drawbacks of globalization and free trade and discuss economic diplomacy as a means to attract foreign investment.

Building a New World Order

In order to follow the coming discussions, you need to understand the origin of today’s economic world order and why it was set up the way it was. This journey takes us to a warship in the Atlantic Ocean, a small town in New Hampshire in the United States, and the capital of Uruguay.

Atlantic Charter. In August 1941, World War II was in full swing. Nazi Germany occupied most of Europe and had recently launched its surprise attack on the Soviet Union. In a month’s time, Adolph Hitler, Chancellor of the German Reich, would set in motion his march on Moscow. Nazi Germany seemed unstoppable and destined to win the war in Europe. The United States had not yet entered the war; the attack on Pearl Harbor was still four months away.

It was in this environment that the British battleship HMS Prince of Wales and the US heavy cruiser USS Augusta met in Placentia Bay, Newfoundland, Canada. The two ships had some prominent passengers aboard: One carried Winston Churchill, the Prime Minister of Britain;
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the other carried Franklin Delano Roosevelt, the President of the United States. And what did they discuss? How to structure the world once they won the war.

The result of these meetings was the Atlantic Charter, published in December 1941. It formally confirmed that the United States would help the United Kingdom during the war, and it focused on eight principal points to guide the reconstruction after the war ended. Four of these points dealt with military and territorial issues, but four were decidedly economic in nature (O'Sullivan 2008):

• Trade barriers were to be lowered.
• There was to be global economic cooperation and advancement of social welfare.
• The participants would work for a world free of want and fear.
• The participants would work for freedom of the seas.

**Bretton Woods.** The principles of the Atlantic Charter became the guidelines that the participants of the meetings in Bretton Woods, New Hampshire, would use to create the new economic world order in 1944. During the Bretton Woods negotiations—which were led by some of the world’s brightest economic minds, including John Maynard Keynes—it was clear that the mistakes made in the aftermath of World War I and the Great Depression needed to be avoided to prevent another global war.

The famous chronicler of the Great Depression, Charles Kindleberger, showed how four different economic disasters combined to turn the stock market crash of 1929 into the worst economic decline in modern history and provide fertile ground for populists of all sides (see Kindleberger 2013):

• First came the global economic depression, triggered by a stock market collapse that led to a severe decline in investments and consumption.

• Then, politicians reacted to this depression with increasingly protective measures and, through tariffs and quotas, closed their markets to international trade. This process triggered a collapse of global trade that reinforced the depression.

• The depression led to a run on cash and other safe assets, but because most countries were on the gold standard, their central banks could stem the outflow of gold from their vaults only by dramatically increasing interest rates. This move worsened the economic depression and led to an even bigger run on specie. Eventually, the global monetary system collapsed
and many countries had to suspend the gold standard, creating severe inflation.

- Finally, the collapse of the global monetary system made it impossible for central banks to act as lenders of last resort, so lending activity came to a standstill.

This historical background clarifies why the current economic world order is set up the way it is. At Bretton Woods, it became clear that the United States would have to be the world’s economic leader and that the US dollar had to replace the British pound as the world’s reserve currency. These realities were simply a reflection of the fact that the United States not only had the biggest economy in the world (and had for several decades by that time), but it also was the only country in the world with an intact physical and financial infrastructure. Unlike the other belligerents of World War II, the United States was not suffering from crippling war debt and thus had sufficient funds to pay for the reconstruction effort.

Hence, the Bretton Woods agreement created a monetary system that set fixed exchange rates of other currencies versus the US dollar. Although the exchange rates were designed to be fixed, a periodic adjustment would be possible if economic imbalances increased. The dollar itself would still be backed by gold, thus providing an indirect gold standard for the global currency markets. The price of an ounce of gold was fixed in US dollars at $35.

The Bretton Woods system of currencies remained in place until 15 August 1971, when the United States had to abandon the convertibility of the dollar into gold. Since then, practically all currencies in the world have been fiat currencies, backed only by the faith and credit of the issuing governments and their ability to tax their citizens. Furthermore, the system of fixed exchange rates has been gradually abolished in favor of floating exchange rates, which automatically serve as a corrective mechanism when economic imbalances increase between countries.

The two major economic institutions that came out of the Bretton Woods agreement and remain prominent today are the International Bank for Reconstruction and Development (now called the World Bank) and the International Monetary Fund (IMF). The World Bank was originally tasked with providing financing for the reconstruction of Europe after the war, but it soon became clear that its funds were insufficient. The United States thus shouldered the cost of reconstruction in Europe directly through the Marshall Plan while the World Bank focused then, and does so to this day, on developmental aid and financial aid to build infrastructure (both physical and financial) in developing countries.
The IMF was intended to provide loans to countries in distress and act as lender of last resort, and it continues to do so. It is an organization owned by its member states. In 1945, the IMF started with 29 member states, but as of 2019, it had 189 members. Members have to pay fees (so-called quotas) that are proportional to the size of the country’s economy and the importance of its currency in the global financial system. Quotas also determine voting rights in the IMF. As of late 2019, the 14th review of the quota system is still in force, but a 15th review will be concluded soon and implemented in coming years. Under the 14th review, the United States has the biggest quota, 17.4%, and total voting rights of 16.5%. China has a quota of just 6.4% and only 6.1% of voting rights.

Overall, the quotas are typically criticized as being biased in favor of the advanced economies, with developed countries, together, having a quota of 57.6%. Developing economies in Asia have a quota of only 16.0%, Africa of 4.4%, and Latin America of 7.9% (IMF 2014). Furthermore, some changes in the IMF require a supermajority of 85% of votes, which effectively grants the United States a veto right. This dominance by the developed countries contributed to the establishment in 2016 of the Asian Infrastructure Investment Bank (AIIB), an institution that we will review in chapter 6 when we examine the increasing economic competition between the United States and China.

**World Trade Organization.** I describe the work of the IMF and the criticism of it in the next section, but first, I want to quickly review the third global institution that shapes the global economy today—the World Trade Organization (WTO). The Bretton Woods agreement did not create an institution to promote free trade. Originally, the plans were to create the International Trade Organization, but these plans quickly faltered in the face of domestic policy pressures in various countries. Instead, on 30 October 1947, 23 countries signed the General Agreement on Tariffs and Trade (GATT), which sought to reduce 45,000 tariffs affecting about one-fifth of global trade.

With the GATT not being a formal institution (rather, an international treaty), trade agreements progressed under it in consecutive rounds of negotiations. Originally, the GATT rounds ignored the contentious issues of tariffs on agriculture and textiles as well as services, but as globalization progressed, the need for a wider trade agreement became evident. In 1986, the trade negotiations in Montevideo, the capital of Uruguay, began. This Uruguay Round eventually led to the creation of the WTO on 1 January 1995.

The WTO is based on two principles—national treatment and nondiscrimination. **National treatment** means that all foreign goods must be treated the same way as domestic goods in each country. **Nondiscrimination** is embodied by the principle of most-favored-nation (MFN), which states that all
members of the WTO must treat each other as they do their most favored trading partner. This principle ensures that a country cannot favor one trading partner over others or favor some goods and services over others. In practice, the WTO is criticized for allowing multiple violations of these basic principles, and we will look at this criticism in more detail when I discuss the impact of global trade and free trade agreements.

Unlike the World Bank and the IMF, the WTO has judicial powers over trade disputes. Member countries can file suits at the WTO for perceived violations of trade agreements and WTO standards. Moreover, the WTO can allow retaliatory tariffs if it finds existing practices to be in violation of its rules. For example, on 2 October 2019, the WTO ruled that the government subsidies given to Airbus by various European countries violated its rules, so it allowed the United States to impose $7.5 billion in retaliatory tariffs. On 18 October 2019, the United States imposed those tariffs on European imports ranging from a 10% tariff on aircraft to a 25% tariff on Scotch whisky, French and Italian cheeses, and hundreds of other agricultural products.

**The IMF: Benefits and Criticism**

In all likelihood, the IMF is the most prominent and the most powerful global economic institution today. The IMF has unfailingly provided loans to governments in distress throughout most of the postwar period. Until the 1990s, however, IMF intervention was always needed in response to failed domestic policies. Thus, loans provided by the IMF come with requirements for political and market reform, a prerogative known as “IMF conditionality.”

This IMF conditionality is what has made the IMF probably the world’s most hated organization. The requirements in order for the IMF to provide loans can range from simple adjustments, such as the devaluation of a currency, to structural changes, such as a liberalization of local labor markets or improved governance to fight corruption. These interventions in domestic policies frequently create resentment against the IMF and draw criticism.

For example, in 1997, the “Four Asian Tigers” (the high-growth economies of Hong Kong SAR, Singapore, South Korea, and Taiwan) ran out of foreign currency reserves after the US dollar started to strengthen against their domestic currencies. Back then, many Asian countries controlled their exchange rates versus the US dollar in narrow bands. In the years before the Asian debt crisis of 1997, the US dollar tended to steadily depreciate against those currencies. This development attracted foreign investments from the United States into these Asian countries and motivated local banks to lend in dollars. When the dollar reversed course, the Asian central banks needed to sell dollars to stabilize their currencies against the greenback. Unfortunately,
they quickly ran out of foreign reserves, and the local banks fell into distress as nonperforming loans soared.

The resulting crisis in 1997 may be called the first modern financial crisis caused by the private sector rather than governments. The IMF had to support a range of Asian countries from South Korea to Indonesia with a total of $115 billion in loans. In return, the IMF demanded reforms in the local financial sectors. These reforms were widely criticized as counterproductive and based on a Western template that did not fit local economic circumstances (Bayne 2017). In response to this IMF intervention, most Asian countries started to accumulate vast foreign currency reserves to avoid calling on the fund again.

In the 21st century, it became apparent that in a globalized world, the IMF does not have sufficient funds to fight a major crisis. The Global Financial Crisis of 2008 (GFC) led to financing needs that dwarfed the means of the fund. Even though the fund’s reserves have now been increased to $1 trillion, they are insufficient if a major developed economy gets into trouble. Even the small developed economy of Greece could be saved only by a joint effort of the IMF, the European Commission, and the European Central Bank. Never mind the concerted efforts of these three institutions to save Greece in 2011 and 2012, the imposed austerity measures were so severe that Greece suffered a deep depression that led to rioting in the streets, a near-default of the country, and its exit from the eurozone.

Are the structural reforms imposed by the IMF really as harmful as its critics claim? Based on a comprehensive dataset of emerging economies, the IMF recently investigated the impact of structural reforms in six areas (IMF 2019). **Exhibit 1** shows the average impact a liberalization of the domestic financial system and the local product market have on GDP growth.

A liberalization of the domestic banking and financial system, like the one introduced in Egypt in 1992, opens the local market to international banks and lenders. These lenders are often global or regional banks based in developed markets, and critics claim that these lenders exploit local businesses and households by getting them into unsustainable debt.

Several studies have found, however, that the impact of a liberalization of the domestic financial market is uniformly positive (as shown in Exhibit 1) because these external lenders are often more sophisticated and can provide loans at lower prices and with less administrative burden than local lenders. The result is a more efficient allocation of capital than in the past that stimulates investment and employment and boosts growth. After six years, the GDP shown in Exhibit 1 is, on average, 2 percentage points (pps) higher than without financial liberalization.
A liberalization of local product markets is typically done in the form of the deregulation of the electricity or telecommunications markets, such as the one implemented in Latvia in 2001. This liberalization of crucial infrastructure leads, as Exhibit 1 shows, to lower prices and, typically, an increase in productivity and investments. Again, the impact of such reforms is positive for growth. After three years, the impact on GDP is an increase by 1 percentage point, although the effect lessens after that.

Other structural reforms that the IMF typically implements, if needed, are reforms of external debt financing and international trade. As the recent
increase in trade tensions between the United States and other countries has shown, trade liberalization is often perceived as a threat to domestic workers (read: voters) who might work in uncompetitive industries that are bound to decline if foreign competitors are allowed to enter the market.

Exhibit 2 shows that a liberalization of external finance—for example, lifting capital controls or restrictions on foreign direct investment (FDI)—boosts GDP by about 1.25 pps after six years. The main pathway for this growth benefit is through increased labor productivity as modern production methods are implemented by foreign investors.

Exhibit 2.  Effect of External Structural Reforms on GDP Growth

A. Liberalization of External Finance

B. Liberalization of International Trade

Trade liberalization through the reduction of tariffs and import quotas also leads to a significant increase in labor productivity and a boost for GDP of about 1 percentage point after six years (IMF 2019).

The effects of the liberalization of external finances and of international trade have been tested time and again on a large number of countries. Almost unanimously, the consensus is that these two measures lead to stronger economic growth (see Furceri, Loungani, and Ostry 2019 for financial liberalization; see Ahn, Dabla-Norris, Duval, Hu, and Njie 2019 for a recent discussion of the benefits of international trade).

However, the impact of the structural reforms discussed here develops slowly. As Exhibits 1 and 2 show, the impact on economic growth starts to materialize only about three to six years after the reforms have been made. In the short term, the adjustment process, if not managed carefully, can be sudden and painful. If such structural reforms are implemented in an election year, the incumbent government tends to lose, on average, about 3% of the vote share, reducing its reelection probability by about 17 pps. Reforms enacted in an off-election year, however, have little to no impact on an election outcome.

Similarly, if the reforms are enacted when the local economy is already in distress, the incumbent government faces a reduction of about 6% of its vote share during the next election and almost certainly the loss of power (IMF 2019). The rule for politicians is clear: Once elected, the government should enact structural reforms quickly and decisively, in the hope that by the time the next election comes along, the positive effects have kicked in.

The substantial political risks of structural reforms are also a main reason local politicians criticize IMF structural reforms imposed on them and why local news outlets are quick to side with these politicians. Structural reforms, especially when imposed by an outside bureaucracy such as the IMF, provide fodder for populist political messages. Yet, the empirical evidence shows that a country that enacts the four structural reforms discussed in this section—liberalization of domestic finance, liberalization of domestic utilities (telecoms), liberalization of external finance, and liberalization of international trade—can boost its GDP by 5.3 pps after six years. Together with structural reforms in governance (e.g., reduction of corruption) and a liberalization of the labor market, the GDP boost can reach 7 pps after six years, or more than 1 pp of additional growth per year (IMF 2019).

**Free Trade and the WTO**

The IMF is typically called upon only in times of crisis, but the WTO influences the global economy on a daily basis. In its prior incarnation as GATT, it was already remarkably successful in reducing barriers to international trade
over time. The push for a reduction in international trade barriers accelerated in the 1990s with the Uruguay Round and the formation of the WTO. **Exhibit 3** shows that the average tariff on imported goods declined from 8.6% in 1994, the year before the WTO was formed, to 2.6% in 2017. In the United States, average tariffs have declined from 3.8% to 1.7% and in the European Union from 6.3% to 1.8%. The decline in tariff barriers was even more pronounced in emerging markets. China had an average import tariff on goods of 32% in 1991. With the membership of China in the WTO in 2001, tariffs decreased rapidly and are now at 3.8%, on average, as shown in **Exhibit 4**.

The WTO, however, is concerned not only with tariffs; many other trade barriers may have been implemented. For example, import quotas on specific

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**Exhibit 3.** Average Tariffs on All Imported Goods: Developed Countries, 1988–2017

![Graph showing average tariffs on all imported goods by developed countries from 1988 to 2017.](image)

*Source:* World Bank.

**Exhibit 4.** Average Tariffs on All Imported Goods: BRIC Countries, 1988–2017

![Graph showing average tariffs on all imported goods by BRIC countries from 1988 to 2017.](image)

*Note:* “BRIC” stands for Brazil, Russia, India, and China.

*Source:* World Bank.
goods or from specific countries and such barriers as administrative hurdles and domestic regulations (e.g., for environmental protection or to comply with health and safety standards) increase the costs of trade. In fact, these nontariff trade barriers are often hard to address because to prove that these measures are illegal barriers to trade is difficult.

A classic example of nontariff trade barriers is some of the barriers on agricultural products. A free trade agreement between the United States and the European Union remains elusive because the European Union wants to prevent meat that comes from animals fed growth hormones—a common practice in the United States and in many global meat-producing countries, such as Brazil and Argentina—from entering the EU market. European Union producers are not allowed to feed their animals growth hormones. The European Union argues that hormone-fed meat is a health risk, and it is thus prohibited across the entire EU market. Meanwhile, international suppliers argue that no scientific consensus supports the idea that hormone-fed meat poses a health risk.

**Free Trade Agreements.** Ironically, while the WTO normally is adamant about reducing trade barriers, it allows trade barriers to rise in one area—namely, free trade agreements (FTAs). An FTA between two or more countries reduces trade barriers between the members of the FTA at the cost of nonmembers. For example, while countries within the European Union can trade goods and services freely without any tariffs, goods imported from outside the European Union are subject to (sometimes substantial) tariffs. This practice is in contradiction to the most-favored-nation rules of the WTO, but the WTO has taken the stance that it allows FTAs as long as the increase in trade between member states outweighs the reduction in trade with outsiders. Another reason the WTO is in favor of FTAs is simply that these pacts can act as a laboratory to experiment with new ideas and rules that can later be adopted on a global level.

Because FTAs are quick to negotiate and allow for solutions that are tailored to the various objectives of trade partners, they have become the most prevalent means of reducing trade barriers around the globe. Every FTA needs to be approved by the WTO, and each WTO member state must notify the WTO if it enters into a new FTA. In 1995, the founding year of the WTO, 49 FTAs were in force with 57 participants. In 2019, 302 FTAs were in force with 481 participants, as shown in Exhibit 5.

This massive growth of FTAs around the world has led to some confusion about the differences among them. In Europe, in particular, many countries are part of several FTAs with various levels of integration:
Partial trade agreements allow free trade between two or more nations in specific goods or services but not in others.

If the partial trade agreement is expanded to most or all goods and services, it becomes a classic free trade agreement. In Europe, the European Free Trade Association (EFTA) is one such example. The EFTA includes not only the members of the European Union but also Norway, Iceland, Switzerland, and Liechtenstein.

If the free trade agreement is expanded to include a common external tariff for imported goods, it becomes a customs union. In Europe, the European Union is in a customs union with Turkey that allows most goods and services (with the exception of agricultural products, services, and public procurements) to move freely within the customs union and ensures a common tariff on imports.

A common market consists of a customs union plus the free movement of capital and labor within it. The European Union, with its four freedoms (free movement of goods, services, capital, and people) is a classic example of such a common market.

Finally, if the members of the common market also introduce a common currency and harmonized economic policies, we get to an economic union. In Europe, the members of the eurozone are part of an economic union.

If integration increases even further, we quickly enter the realm where states become part of a federal union, or a political union of states, with an overarching legal setup. The United States, Germany, and Switzerland are
classic examples of such federal nations. Thus, a business in Germany is simultaneously the member of a federal republic (Germany), an economic union (the eurozone), a common market (the European Union), a customs union (European Union and Turkey), and several free trade zones (e.g., EFTA, European Union–Japan, European Union–Canada). Depending on its business area, it might also be a member of several partial free trade zones.

Each of these agreements has its own rules and regulations, although in the case of Europe, they tend to be harmonized. If you think this situation is confusing, think of the people who had to disentangle this complex network of trade agreements after the United Kingdom decided to leave the European Union.

**Global Trade Growth.** Despite this increasing complexity, global trade has grown dramatically since the end of World War II, as shown in Exhibit 6. As explained at the beginning of this chapter, the aim of the new world order of the Bretton Woods institutions and GATT was to avoid the mistakes made during the Great Depression. In reaction to the economic downturn that started in 1929, the United States tried to protect its economy with the infamous Smoot–Hawley Tariff Act of 1930. This law dramatically increased import tariffs on all kinds of goods and led to retaliation by US trade partners. The effect was that between 1929 and 1939, the onset of World War II, trade as a share of GDP almost halved—from 5% to 3.3% in the United States and from 10.8% to 5.8% globally. This decline in global trade led to a breakdown of global demand and turned a regular depression, which should have been short-lived, into the biggest economic decline since the Industrial Revolution.

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**Exhibit 6. Global Trade as Share of GDP, 1834–2014**

![Global Trade as Share of GDP, 1834–2014](image)

*Source: CEPII (Centre d’Études Prospectives et d’Informations) database.*
That this has not happened since and, instead, world trade as a share of global GDP had increased to 24% by 2014 is a major accomplishment of GATT and the WTO. These institutions have created tremendous prosperity around the world, especially in developing economies that opened themselves up to global trade.

Exhibit 7 shows trade as a share of national GDP for the BRIC countries (Brazil, Russia, India, and China), the fastest growing emerging economies. With the fall of the Soviet Union, Russia opened itself up to international trade (mostly of oil and gas), which helped that country overcome the giant slump in its economy after the breakdown of communism. Arguably the biggest success story of all the BRIC group is China. With Deng Xiaoping’s strategy to gradually open the economy to the world, the country managed not only to increase economic growth dramatically but also to lift a large part of the population out of poverty. The World Bank has estimated that between 1981 and 2015, China managed to lift more than 850 million people out of extreme poverty (defined as living on less than $1.90 in 2011 prices per day) and reduced its extreme poverty rate from 88% to 0.7%. That achievement is astonishing. In fact, free trade has been the most effective tool to lift people out of poverty globally. In the 1960s, more than half the world’s population lived in extreme poverty (a total of more than 2 billion people). By 2015, fewer than 1 in 10 people around the world, or about 734 million people, remained in extreme poverty.

With more people coming out of poverty, such countries as China can rely less on international trade to run their economy and can focus more on domestic consumption. For example, trade as a share of Chinese GDP has declined from a high of 43% in 2007 to 22% in 2014 simply because the

Exhibit 7. Trade as Share of GDP in BRIC Countries, 1944–2014

![Exhibit 7](image-url)

Source: CEPII database.
Chinese are now wealthy enough to form a massive domestic consumer base that allows Chinese companies to produce goods and services for the home market.

But *how* does free trade lead to a decline in poverty? The mechanisms through which free trade affects the economy have been widely studied, and three major pathways have been identified:

- Helpman and Krugman (1985) emphasized that free trade opens an economy up to international competition. This process has some negative effects at first because it lowers the profit margins of domestic businesses. In reaction to these lower profit margins, however, businesses are forced to innovate or look for economies of scale in order to lower their costs. The result is higher productivity of domestic businesses and stronger economic growth.

- Aghion, Bloom, Blundell, Griffith, and Howitt (2005) showed that trade liberalization leads to the import of new technologies and innovations, confirming the thesis that in an open economy, businesses have to innovate or die.

- Finally, trade liberalization broadens the variety of input goods for domestic producers and makes them available at lower prices, so they can produce better products at lower prices themselves (Ahn et al. 2019).

Ahn et al. (2019) showed that trade liberalization leads to a significant increase in productivity. They also showed that the increase in productivity depends on the type of business, how much of its inputs are sourced internationally, and whether the business is owned domestically or by a foreign company. In general, foreign-owned businesses are quicker to benefit from trade liberalization, which indicates that trade liberalization and FDI may mutually reinforce themselves to boost growth.

On average, Ahn et al. (2019) found that if input tariffs drop by 0.5% globally—about the amount witnessed between 1997 and 2007—productivity is boosted by about 1 pp per year. And because a 1 pp increase in productivity filters through to a 1 pp increase in GDP growth, even a small reduction in tariffs can lead to significant growth. Of course, the effect has been larger for developing economies because they could lower tariff barriers much more than industrial countries could during the 1990s and early 2000s, and their resulting growth boost was even bigger. No wonder emerging markets accounted for the majority of global growth during the great push for free trade in the 1990s and 2000s, as shown in Exhibit 8.
Is More to Be Gained from Further Trade Liberalization? Although emerging markets were the main beneficiaries of the trade liberalization during the last few decades, developed economies still have something to gain from continued liberalization. Ahn et al. (2019) estimated that abolishing existing tariff barriers could substantially boost the productivity of every advanced economy. Exhibit 9 shows that the estimated productivity gains from further trade liberalization range from 0.2 pp in Japan to more than 1 pp in the Netherlands.

Two developed countries not shown in Exhibit 9 have even more to gain from further trade liberalization: South Korea could expect productivity growth above 4 pps and Ireland above 7 pps. These two countries stand to benefit so much more than those in Exhibit 9 from trade liberalization because of the structure of their economies. South Korea has higher tariffs than most developed countries and thus has more to gain from further trade liberalization. Meanwhile, Ireland could benefit from reduced tariffs on crucial inputs to its pharmaceutical and chemicals industries.

Although no studies are available about the impact of trade liberalization on stock market returns, we can perform a back-of-the-envelope calculation of its impact. The average potential productivity boost in the developed countries shown in Exhibit 9 is 0.5 pp. The implication is that GDP growth could be boosted by 0.5 pp if trade were completely liberalized. Note that this effect would not be a one-time hit but, rather, an increase in productivity and
GDP growth every year into eternity. Productivity growth would be permanently lifted by 0.5 pp because the removal of trade barriers would lead to increased flexibility for businesses to enter new markets with their products and services and would motivate businesses to move their production to countries and areas with lower productivity and lower wage costs. By investing in the low-productivity countries, companies can raise productivity in those countries. Meanwhile, businesses in the low-productivity countries can more easily acquire technologically advanced goods that increase their productivity. This pattern is the beneficial spiral of globalization in action: Globalization allows poor countries to increase their productivity and their wealth; businesses in rich countries can reduce costs by relying on global supply chains that allow cost reductions and sourcing of the best inputs from all over the world. This result, in turn, allows businesses in rich countries to keep research and development (R&D) expenses at constant levels or even increase them and focus on their comparative strengths, which then leads to productivity gains in the rich countries. The entire path of potential growth can be lifted by further trade liberalization.

Because global sales tend to grow in line with nominal GDP in the long run, a 0.5 pp increase in GDP growth would lead to a 0.5 pp boost to sales growth. Because globalization increases competition, we have to assume that profit margins will decline somewhat, but a reasonable assumption would still be that 0.5 pp higher sales growth could lead to about 0.25 pp–0.5 pp higher earnings growth. If valuations remain constant, such a boost to earnings

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**Exhibit 9. Potential Gains in Productivity through Complete Trade Liberalization**

<table>
<thead>
<tr>
<th>Country</th>
<th>Potential Productivity Gain (%)</th>
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<tbody>
<tr>
<td>Netherlands</td>
<td>1.2</td>
</tr>
<tr>
<td>Hungary</td>
<td>1.0</td>
</tr>
<tr>
<td>Finland</td>
<td>0.8</td>
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<tr>
<td>UK</td>
<td>0.6</td>
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<tr>
<td>Sweden</td>
<td>0.4</td>
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<tr>
<td>Slovenia</td>
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<td>Germany</td>
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<td>Austria</td>
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<td>Australia</td>
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<td>Italy</td>
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<td>US</td>
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<td>Japan</td>
<td>0.3</td>
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*Source: Ahn et al. (2019).*
growth should lead to a boost in equity market returns of 0.25 pp–0.5 pp per year. In terms of the discounted cash flow model that guides the discussions in this book, trade liberalization directly increases future cash flows of a company and thus increases the present value of such assets as stocks.

**Criticism of Free Trade Agreements**

Despite the benefits of free trade, criticism of recent practices in FTAs and the lack of benefits for developed economies is increasing. I discuss the impact of trade liberalization and globalization on inequality later in this chapter, but certain other developments may have reduced the beneficial impact of FTAs over time.

The original GATT rounds covered only trade in goods and ignored trade in services or questions about intellectual property (IP) simply because these issues were not relevant at the time. Today, we live in a knowledge and service economy. Thus, FTAs have become more complex; they cover trade in services and protection of IP as well as trade in goods. This increased complexity means that FTAs are increasingly targeted by corporations and lobbyists to ensure a beneficial outcome for special-interest groups—potentially at the cost of other groups.

Rodrik (2018) described three main areas of such rent-seeking behavior. First, trade-related aspects of IP rights (TRIPS) were first tackled in the Uruguay Round of trade negotiations and the inception of the WTO. Since then, the United States and other developed countries have pushed for stricter and more comprehensive TRIPS because IP is a more substantial part of their economies than in developing countries. Furthermore, developed countries typically have better legal expertise in these subjects than do developing countries and a more sophisticated legal system to enforce IP rights. Therefore, including TRIPS in an FTA effectively shifts costs onto developing countries and creates an additional benefit to advanced economies.

Furthermore, because the legal system in developing countries is often less sophisticated and the risk of expropriation of assets by the local government is higher, the advanced economies increasingly demand investor–state dispute settlements (ISDS) to be included in any agreement. These ISDS install local arbitration courts that are outside the country’s regular legal system, so local governments can be sued by foreign investors and foreign investors only. These arbitration courts undermine the local legal system and allow a foreign investor to sue local governments for a virtually unlimited number of actions and inactions that may have led to a loss of profits for the foreign investor (Johnson, Sachs, and Sachs 2015). And to make things worse, no appeal of the rulings of these arbitration courts is possible. Arbitration courts
may make sense when politically unstable developing countries are involved in the FTA, but why would, for example, the United States insist on such arbitration courts in its proposed FTA with the European Union?

Additionally, modern FTAs increasingly include the requirement not only for free movement of goods and services but also for the free movement of capital. Although this freedom is a good idea in normal times, it can become a huge problem in a crisis when foreign investors might want to withdraw their capital as fast as possible. A “run on the country” can significantly worsen a financial crisis in an emerging market and may even be in conflict with demands by the IMF, which increasingly is in favor of imposing temporary capital controls in a crisis country to avoid the flight of capital.

Finally, the newest studies of the impact of FTAs on developed markets show that all this rent-seeking behavior by industries in developed countries may reduce the benefits of trade not only for developing countries but also for developed countries. Caliendo and Parro (2015) and Hakobyan and McLaren (2016) investigated the benefits of the old North American Free Trade Agreement (NAFTA)—not the new United States–Mexico–Canada Agreement (USMCA)—for the United States in terms of both growth and income distribution. These studies found that the overall welfare benefit for the United States was a mere 0.08 pp, half of which came through more beneficial terms of trade for the United States (i.e., at the cost of other trade partners, mostly Mexico). Although some US workers benefited from NAFTA, others suffered a significant drop in wages and employment. Blue collar workers without a high school degree in industries that were heavily affected by NAFTA (e.g., car manufacturing) suffered a decline in income of 17% relative to workers in industries that were unaffected by NAFTA. That these distributional effects can have a significant impact on the economy and markets through the political channel became clear with the 2016 election of Donald Trump as President of the United States, whose campaign focused on these disenfranchised US workers.

**Economic Diplomacy as a Means to Foster Growth**

The failures of FTAs in providing universal benefits have been an impetus for the revival of economic diplomacy since the GFC. “Economic diplomacy” is a rather elusive subject without a clear definition; if you read 10 papers on economic diplomacy, you will be left with at least 11 definitions of what it is and what it is not. My favorite definition was given by the Spanish Ministry of Foreign Affairs (2011) as “the use of the political influence held by states to promote their economic interests in international markets.” I will stick with this definition in this discussion.
As Bayne and Woolcock (2017) described, economic diplomacy was historically criticized as government intervention in free markets that could cause substantial market failures. With the recognition of market failures through modern FTAs, however, and the opening up of former communist countries and China, where governments remain major players in the economy, economic diplomacy has experienced a revival. After all, if a Western business wants to enter into a joint venture with a Chinese or Russian state-owned enterprise, the Western business leaders must be able to deal with local government officials. The help of ambassadors, trade representatives, and other government representatives from the home country of the Western business is indispensable in these negotiations. Today, economic diplomacy involves not only private businesses, diplomats, and members of the State Department but also members of other government departments—from trade to energy to agriculture. In some cases, the government may even enlist the help of specialized nongovernmental organizations.

The studies of economic diplomacy show that it can be highly effective in boosting exports and attracting FDI. Moons and van Bergeijk (2016) reviewed the empirical evidence on the effectiveness of economic diplomacy and found a substantial positive effect of most economic diplomacy measures. The only exceptions seemed to be state visits, where no economic benefit could be measured.

Investment promotion agencies, which are government-sponsored entities that try to attract FDI, have proven effective. Studies have shown that a 10% increase in the budget for such agencies on average leads to a 7.5% increase in FDI flows (Moons and van Bergeijk 2016). Similarly, export promotion agencies are highly effective in boosting exports. A 10% increase in the budget of export promotion agencies leads to an average 0.6%–1.0% increase in exports, which may not sound like much, but look at it this way: For every $1 spent on export promotion, local exporters earn an additional $40 in revenues.

Finally, economic diplomacy has the advantage that it can be targeted to a specific country. Studies have shown that opening an additional embassy in a country leads to a 6%–10% increase in exports to that country. This boost in exports is driven by the personal relationships built by diplomats with foreign businesses; hence, consulates, which have smaller staffs and typically no local trade representative, have less impact than embassies. Honorary consulates have no impact on exports because they typically do not have the resources to foster trade and business relationships (Moons and van Bergeijk 2016).

Furthermore, the evidence indicates that opening embassies and intensifying diplomatic relationships have an effect on trade and exports between developed and developing countries and between developing countries.
These efforts do not seem to have an effect on the trade relationships between two developed countries, however, which intuitively makes sense because most developed countries already have close business and diplomatic relationships with each other.

**International Tax Competition**

Although economic diplomacy can provide substantial benefits for exports and trade, other aspects of geo-economics may produce negative effects. Is international tax competition (i.e., the lowering of corporate income taxes to attract foreign businesses) the “dark side” of geo-economics? The idea is that one country unilaterally lowers corporate tax rates to attract investments from neighboring countries. In a world of fully mobile capital with many small economies and no dominating economic power, such a “beggar-thy-neighbor” policy would lead to retaliation by other countries, which would lower their tax rates. This tit-for-tat would create a race to the bottom, where corporate tax rates would reach zero and then remain there forever (Devereux and Loretz 2013).

A quick look at the corporate tax rates in various countries, however, as shown in Exhibit 10, indicates that this race to the bottom does not really happen. Yes, corporate tax rates have declined since the 1980s, but they are still not at zero. Hoyt (1991) showed that this race to the bottom stops the moment one assumes that capital is not fully mobile and recognizes that the world has both large and small economies. According to this line of thought, each country has a certain amount of market power in setting taxes because businesses cannot simply pack up their factories and move to another country and/or they need facilities in their own country to gain access to its customers.

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Source: OECD.
This market power allows countries to set corporate tax rates above zero. When competing with smaller economies, however, the small countries typically have less market power and thus will end up with a lower tax rate than larger countries (Wilson 1991).

Forslid (2005) showed that in a world where capital has become increasingly mobile, corporations tend to agglomerate around a common center (e.g., Silicon Valley for information technology, the City of London for European banking, Luxembourg and Ireland for other financial services). Countries can attract such global centers with the help of tax incentives, but a tipping point comes beyond which further agglomeration does not provide additional benefits and additional tax incentives fail to attract additional businesses. Once this tipping point is reached, further liberalization of trade and capital flows leads to dispersion because businesses can now cheaply build local business hubs. In this environment, the benefits of being closer to end customers outweigh the attraction of additional tax incentives.

That international tax competition leads to lower taxes is clearly visible in Exhibit 10. Also evident is that large economies (e.g., the United States, the United Kingdom, and Germany) have market power in setting their taxes and thus end up, on average, with a higher corporate tax rate than smaller countries. The ideal strategy for small open economies is to lower their tax rates as much as possible to attract as many businesses as possible and boost domestic growth.

Switzerland has had a top marginal corporate tax rate below 10% for several decades and is an example of how a low-tax strategy can lead to significant benefits for a country. Singapore is another example of how such a low-tax strategy can work. And Ireland is an example of the transformational power of lower corporate taxes. Historically, Ireland had corporate tax rates that were similar to its European neighbors, but in the late 1990s and early 2000s, the country drastically reduced its top corporate tax rate to 12.5%. This action attracted many businesses from across Europe and fueled Ireland’s economic boom (and its housing market bubble) in the early 2000s.

Would the Irish strategy work for every country? Economic studies are ambivalent regarding the impact of international tax competition on economic growth. Covering the years 1970 to 1997, Lee and Gordon (2005) showed that a 10 percentage point decline in the top marginal corporate tax rate can boost economic growth by 1 pp–2 pps. Shevlin, Shivakumar, and Urcan (2019) calculated the effective tax rate paid in each country and used this effective tax rate to show that a 10 percentage point decline in the effective tax rate can increase GDP growth by 0.75 pp and employment by 0.25 pp.
 Plenty of studies show no positive effect, however, of tax reductions on economic growth and, to the best of my knowledge, no study has looked at the impact of international tax competition directly on growth. All the studies have focused on tax reductions in isolation rather than in an international context.

In summary, international tax competition is clearly a legitimate activity, but the evidence that this strategy helps boost growth in the long run is effectively restricted to small open economies, such as Switzerland and Singapore.

**Globalization—A Multifaceted Development**

So far, this chapter has focused on the liberalization of trade and to a lesser extent on the liberalization of the movement of capital. But both free trade and free movement of capital are part of the much broader trend toward globalization. Gygli, Haelg, Potrafke, and Sturm (2019) recently revised the KOF Globalisation Index, which measures the extent of globalization for 203 countries and territories based on 43 variables in three dimensions. The political dimension measures globalization for each country on the basis of such indicators as international treaties signed, number of embassies, and participation in UN peacekeeping missions. Social globalization for each country is measured by looking at the number of tourists and foreign students, internet access, and press freedom—also, the number of IKEA stores and McDonald’s restaurants. Finally, the third dimension of the KOF Globalisation Index is economic globalization, which is measured by international trade in goods and services, FDI, tariffs, and taxes.

**Exhibit 11** shows the level of economic globalization as measured by the KOF Globalisation Index for high-income, middle-income, and low-income countries.

**Exhibit 11. KOF Index: Level of Economic Globalization, 1986–2016**

![Graph showing the level of economic globalization for different income groups from 1986 to 2016.](image_url)

*Source: Gygli et al. (2019).*
low-income countries. The high-income countries have always been more globalized than lower income countries; it is the middle-income countries that have made more progress in globalization since the 1980s and are thus more likely to have reaped the benefits of increased globalization.

Gygli et al. (2019) also differentiated between *de facto* globalization and *de jure* globalization. *De facto* globalization is measured by actual international transactions (e.g., the actual trade in goods and services and the actual FDI and portfolio investments). *De jure* globalization is measured by the legal framework that fosters globalization.

Gygli et al. (2019) showed that it is not the actual trade and capital flows that drive globalization and economic growth but, rather, the country’s regulatory framework. The critical factor in fostering growth in a country is the ease with which international trade and international investments can be conducted there. Actual trade flows are a reaction to this regulatory framework.

These authors thus emphasized that investors need to look at the development of *de jure* globalization in each of the three dimensions to assess the potential for future growth in each country. The sad news is that globalization in both trade and financial flows has stalled since the GFC, as shown in Exhibit 12. Financial globalization has even declined somewhat since the GFC. The stalled negotiations for the Transatlantic Trade and Investment Partnership (TTIP) FTA between the European Union and the United States, the renegotiated USMCA trade agreement, and the stalled Doha Round of the WTO for global trade negotiations are all examples of the lack of progress over the last decade. The proximate causes of this stalled progress most likely include increased skepticism by the public and politicians about the benefits of globalization, which is shown by more and more countries

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![Graph showing the KOF Index: Level of Economic (de jure) Globalization, 1986–2016](source: Gygli et al. (2019).)
electing populist and nationalist leaders, such as Donald Trump in the United States, Narendra Modi in India, and Jair Bolsonaro in Brazil.

These leaders were elected on platforms to protect their domestic economies from unwanted global competition and have acted on those promises with efforts to roll back the globalization process of the past several decades. Exhibit 12 shows that these efforts have so far not led to a major decline in globalization, but note that the data end in 2016 and hence do not include the US–China trade war, for example, or the announcement that the United States will not become a member of the Trans-Pacific Partnership (TPP).

For the time being, globalization seems to be taking a break. Countries remain largely locked into their existing international structures. With the efforts of some political leaders around the globe to unwind the integration of the global economy, however, certain countries and regions are arguably more at risk than others. A simple comparison of share of national GDP in international trade, as shown in Exhibit 13, provides guidance as to which countries have the most to lose. The East European countries are the most exposed to international trade. The vast majority of their trade, however, is with other member states of the European Union, and so far, little evidence shows that the European Union will unwind its commitment to free trade. After all, free trade is a big part of its raison d’être. In contrast to the East European countries, both South Korea and Germany are extreme export-oriented economies, with large trade flows going to the United States and China. Hence, as

Exhibit 13. Trade as a Share of GDP, 2014

<table>
<thead>
<tr>
<th>Country</th>
<th>Trade Share of GDP (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eastern Europe</td>
<td>50-60</td>
</tr>
<tr>
<td>South Korea</td>
<td>40-50</td>
</tr>
<tr>
<td>Germany</td>
<td>30-40</td>
</tr>
<tr>
<td>Russia</td>
<td>20-30</td>
</tr>
<tr>
<td>World</td>
<td>15-20</td>
</tr>
<tr>
<td>China</td>
<td>10-20</td>
</tr>
<tr>
<td>France</td>
<td>10-15</td>
</tr>
<tr>
<td>Australia</td>
<td>10-15</td>
</tr>
<tr>
<td>Japan</td>
<td>5-10</td>
</tr>
<tr>
<td>UK</td>
<td>5-10</td>
</tr>
<tr>
<td>India</td>
<td>5-10</td>
</tr>
<tr>
<td>Low income</td>
<td>5-10</td>
</tr>
<tr>
<td>Brazil</td>
<td>5-10</td>
</tr>
<tr>
<td>US</td>
<td>5-10</td>
</tr>
</tbody>
</table>

Note: Dark blue indicates developed markets; light blue indicates emerging markets. Source: CEPII database.
the US–China trade war has already proven, a decline in demand from China and/or the United States can quickly jeopardize economic growth in these exporting countries. In comparison, the United States, thanks in no small part to its large domestic market, is much more isolated from international trade flows.

Globalization and Growth

The impact of globalization on economic growth has been studied intensively. Potrafke (2015) reviewed more than 100 studies based on the KOF Globalisation Index alone and found statistically significant effects of globalization on GDP growth. Gygli et al. (2019) tested the impact of changes in each of the three dimensions of the KOF Globalisation Index on GDP growth. As Exhibit 14 shows, they found that a 10-point increase in the KOF Globalisation Index led, on average, to a 1.6 pp increase in GDP growth per year in the respective country.

Exhibit 14 shows that of the three dimensions of the KOF Globalisation Index, the most effective driver of growth has been social globalization. A 10-point increase in the social dimension of the index for a country led to a 1.7 percentage point increase in GDP growth; the impact of a 10-point increase in the political and economic dimensions was only about half that amount.

This result makes sense if we remember that social globalization is measured as the free movement of people, information, and culture. Thus, social globalization measures the flow of knowledge and inventions from one country to another. And because our modern economy is driven mostly by innovation and new technologies, the ability to attract the best people and gain

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Source: Gygli et al. (2019).

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access to the best ideas should be particularly good for economic growth. That the sum of social, economic, and political globalization was more than the effect of globalization overall is a reflection of interactions between variables that somewhat reduce the total impact of globalization on growth.

Even so, we should not ignore the beneficial impact of economic globalization. **Exhibit 15** shows the impact on annual GDP growth of a 10-point increase in the economic dimension of the KOF Globalisation Index as well as its trade and finance subindices. A 10-point increase in economic globalization led, on average, to a 0.8 percentage point increase in GDP per year; a 10-point increase in trade globalization led to a boost of economic growth of 0.5 pps.

Conversely, a decline of the globalization index by 10 points would probably have a substantial negative effect on economic growth. A 10-point decline in the economic globalization index in the United States would be like time travel back to the early 1990s before NAFTA was put in place. Such a reversal of previous progress would likely lead to a decline in US growth of about 0.8 pp per year (again, it would not be a one-time effect but a shift in the potential growth path in the future). In the case of the United Kingdom, its exit from the European Union without a deal would put the country’s trade relations back to where they were before it joined the common market in the early 1970s. This effect would imply a decline in economic globalization of about 20 points and a large decline in economic growth potential.

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**Exhibit 15. Growth Impact of a 10-Point Increase in the KOF Globalisation Index: Economic Components**

<table>
<thead>
<tr>
<th>Component</th>
<th>Increase in Annual GDP Growth (percentage points)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Economic</td>
<td>0.8</td>
</tr>
<tr>
<td>Trade</td>
<td>0.5</td>
</tr>
<tr>
<td>Finance</td>
<td>0.4</td>
</tr>
</tbody>
</table>

*Source: Gygli et al. (2019).*
Globalization and Inequality

Globalization can create enormous benefits for people around the world through higher economic growth and increased wealth generation. But the most important reason protectionist policies have become fashionable again in recent years and the reason globalization, at least in the economic dimension, has stalled is that globalization does not benefit all people equally.

From our introductory macroeconomics classes at university, we know from Ricardian trade theory that two countries that trade with each other are better off than if they did not trade with each other. The Heckscher–Ohlin theorem of international trade states, however, that two countries with different factor endowments (factors being capital, labor, and natural resources) will specialize in those goods and services where they have a relative comparative advantage in factor utilization. If, for example, Country A has a lot of capital and not a lot of labor, but Country B has a lot of labor but not a lot of capital, then the cost of capital will be lower in Country A than in Country B and the cost of labor will be lower in country B than in Country A. Hence, Country A will specialize in the production of goods that require a lot of capital but not a lot of labor (e.g., software) while Country B specializes in the production of goods that require a lot of labor but not a lot of capital (e.g., agricultural products). The losers in this world will be the workers in labor-intensive sectors in Country A and the workers in capital-intensive sectors in Country B.

Which is exactly what has happened in an increasingly globalized world. Emerging economies do not have a lot of capital, but they do have a lot of cheap labor. Developed countries have high labor costs but an abundance of capital. Hence, labor-intensive production has been outsourced by developed countries to countries such as China, India, and Mexico, and developed countries have specialized in the production of high-tech goods that require a lot of R&D and capital.

The losers in this game have been the blue-collar workers in labor-intensive industries in developed countries; the winners have been the owners of capital in developed countries. On a global scale, therefore, income inequality within both the developed and the emerging countries has increased, whereas income inequality on a global scale has declined.

Exhibit 16 shows the changing share of total income captured by the top 10% income earners across the globe, in some developed countries, and in some developing countries. The income share of the top 10% in the United States, the European Union, and Japan has increased gradually since the 1980s because the lower skilled workforce, which does not own capital,
experienced a decline relative to the higher skilled and better paid employees, who not only have better paid jobs but also have capital to save and invest.

The trend toward inequality has been even more pronounced in developing countries, such as the BRICs—although the effect overall has been one of a rising tide that has lifted both the working class and the middle class. Still, unlike the working class in these countries, the members of the emerging middle class have not only earned higher incomes as a result of globalization but also have been increasingly able to invest their savings internationally, where it will earn higher rates of return.

Thus, the income of the middle class in developing countries has grown even faster than the income of the working class. This catch-up effect of the developing world is visible in the World line in Exhibit 16. As income rose faster in the developing world than in advanced economies around the turn of the century, the share of global income captured by the top 10% started to decline, indicating declining inequality between countries and increasing inequality within countries.

**The Elephant in the Room.** Probably the most famous depiction of these trends is the *elephant graph* of Lakner and Milanovic (2016), shown in Exhibit 17. Christoph Lakner and Branko Milanovic collected household income data from surveys in 162 countries and territories between 1988 and 2008, 72 of which had the full data from 1988 to 2008 while another 90 countries’ data started in 1993. They transformed national income data into US dollars by using estimates of purchasing power parity (PPP) exchange rates for the year 2005. Then, they divided the global income distribution...

Source: Lakner and Milanovic (2016).

into 20 equal parts and tracked the growth in income in real terms for each percentile.¹

Exhibit 17 shows the authors’ original results. It is called the “elephant graph” because it outlines the shape of an elephant, with the poorest people in the world benefiting from modest income growth (the back of the elephant) and the people in the middle of the global income distribution experiencing far greater growth (the head of the elephant). The people in the 75th to 85th percentile of the global income distribution, on the other hand, seemed to experience almost no real income growth. And, although these people are generally well off in the global context, they tend to be the people in the bottom 20%–30% of the population in developed countries. In other words, these people are the blue-collar workers in labor-intensive industries in the United States and Western Europe who have been displaced by the rising middle class in China, India, and other emerging markets. As we move toward the highest incomes, we again see a dramatic increase in income growth (the trunk of the elephant).

The elephant graph achieved what few economic ideas ever do: It became a global megastar. Critics of globalization and rising inequality have pointed to this graph as evidence that globalization does not work and that the main beneficiaries of globalization are the global elites and the 1%. After all, in developed countries, those groups are the ones who seem to have disproportionately gained from globalization.

¹Technically speaking, the groups are ventiles because the researchers divided global income distribution into 20 equal parts, but the word “ventiles” confuses absolutely everyone.
Critics ignore the fact that if you were in the 10th–70th percentile of the global income distribution—six-tenths of the world’s population—you might be very happy.

**Examining the Elephant.** Remember that Lakner and Milanovic (2016) had data spanning only the time period 1988–2008 for 72 out of 162 countries. Some countries—the former Soviet Republics and the countries of Eastern Europe—opened up in the early 1990s and thus were not included in the original set of household surveys. In their original study, Lakner and Milanovic used data from 63 countries in 1988 and 115 countries in 2008, which is a statistical no-no because it compares two inconsistent samples with each other on the same metric.

Homi Kharas and Brini Seidel from the Brookings Institution looked at the data of Lakner and Milanovic (2016) more carefully and made several adjustments (see Kharas and Seidel 2018). First, they used a consistent sample of countries. The same 72 countries that were available in 1988 were also used in 2008. Second, they used updated PPP-adjusted currency exchange rates that were not available when Lakner and Milanovic made their study. And instead of using 2005 data, Kharas and Seidel used 2011 exchange rates—that is, exchange rates that reflected the dramatic shifts triggered by the GFC.

The result of these revisions is shown in **Exhibit 18**, together with the original elephant chart. Kharas and Seidel (2018) went one step further and looked at the larger sample of countries with household surveys starting in 1993 and tracked them until 2013. The resulting elephant graph from this 1993–2013 sample looks qualitatively similar to the revised elephant graph shown in Exhibit 18.

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**Exhibit 18. The Revised Elephant Graph**

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*Sources: Lakner and Milanovic (2016); Kharas and Seidel (2018).*
What we learn from this closer look at the elephant graph—other than that it matters tremendously to read the original research instead of just quoting a chart a journalist copied into an article—is the following:

- Just as the original elephant graph showed, the main beneficiaries of globalization have been the global middle class and, to a lesser extent, the poorest people.

- But the original elephant graph probably underestimated the gains made by the poorest people in the world. The poorest people in the world may have seen their incomes rise 10 pps more in real terms than originally estimated.

- The working class in the developed countries (i.e., the people in the 75th–85th percentile globally) were the ones who benefited the least from globalization, although the original elephant graph probably underestimated their income gains slightly. Nevertheless, an issue really exists in this regard that needs to be addressed by politicians.

- The global elite benefited much less from globalization than originally thought. The income gains of the top 1% of the global population were just about half of what the original elephant graph suggested. Nevertheless, clearly a strong disparity shows up between the top 1% and the working class in developed countries.

The elephant graph and the impact of globalization on inequality have become a major focus of both political scientists and economists in recent years. Twenty years ago, economists were predominantly concerned with the average effect of policy measures on a society. As the old saying goes: “An economist is a person who lies with his head in the oven and feet in the freezer and says that, on average, he feels fine.” This benign neglect of the distributional impact of policy measures has allowed inequality to rise to a level where a political backlash has gained traction, one that may influence the future economic world order.

Toward a New World Order?

Rising inequality in both developed and developing nations is one reason the current world order that was established after World War II under US leadership is under strain. Other factors include the pullback of democracy in several countries around the world and the rise of nationalist leaders who are skeptical of the neoliberal economic model and the value of international trade. Until the GFC, the economic foundations of the existing world order
had not been questioned because they created rising incomes—if not for all, at least for most people.

Since the GFC, economic growth has stagnated or been lackluster at best, so the tide has stopped lifting all boats. Now, the weaknesses of the existing system have become visible, and populist politicians across the globe are exploiting this rising skepticism with the old remedies of more socialist and/or more nationalist and isolationist agendas. These populist politicians emphasize agendas that put their own national interests above those of other nations. If enacted, such policies could undermine the gains of decades of trade liberalization and economic globalization.

To be fair, as we have seen in this chapter, the main beneficiaries of the existing world order have been a core group of liberal democracies in the West, most of which are located in North America and Western Europe. The United States, for example, has benefited tremendously from the current world order. The RAND Corporation estimates that, thanks to the existing world order, US GDP growth was boosted by about 2 pps per year for a number of years and about 300,000 jobs were created in the United States alone (Mazarr 2018).

Furthermore, economic prosperity and stability have meant that no major global wars have occurred for more than seven decades. And since the end of the Cold War, no country has challenged the military hegemony of the United States, which has potentially saved the country hundreds of billions in defense spending. What is the cost of all those benefits? According to the RAND Corporation, the direct costs of maintaining the current economic world order for the United States have been on the order of $15 billion per year (Mazarr 2018). It’s been a bargain.

For countries outside the core of liberal (Western-style) democracies, however, the experience has been mixed. I have discussed the various ways in which FTAs are increasingly shifting against developing countries and in favor of businesses in developed countries. Add to that the fact that both China and Russia have become increasingly assertive on the global political stage, and you get a third reason the current world order is under stress. As Exhibit 19 shows, the economic center of the world is moving away from the developed countries in the West and toward emerging markets in the East and southern hemisphere. By 2050, the United States is projected to be the only developed country of the seven largest economies in the world. Of course, by then, some of the now-developing countries may be considered developed, but that change is not guaranteed.

As their economic importance increases, emerging markets want to play a more important role in international institutions and challenge the existing rules. In the case of China and Russia, even some fundamental shared
values—such as liberal democracy and individual freedom—are being questioned.

The relative economic decline of the United States and other developed countries will probably lead to a relative decline in their importance in the future international world order. The existing world order will have to adapt and become more multipolar than it has been.

And therein lies the dilemma for the United States. How can international institutions—the IMF, the WTO, the World Bank—become more flexible and provide more opportunities for countries like China, India, and Brazil to take on leadership roles? In what activities would the United States want to retain a leadership role? Most likely, the United States will have to prioritize and retain leadership in areas that are of vital interest to it but become more flexible in areas that it considers of less importance. The risk is that as new leaders (e.g., China) take charge in some areas, the old rules will be softened so much that the entire system will no longer hold together and will simply disintegrate.

This dilemma cannot be avoided by the United States taking a more assertive role on the global stage. Under the Trump administration, the United States has increasingly pursued an “America First” agenda that has alienated traditional allies. In some cases, like the many trade wars with both allies and competitors, the United States apparently has felt free to break rules it set itself when it helped create the current world order. This tactic is extremely dangerous because history shows that global or regional economic orders tend to suffer soon after the leading nations are allowed to flout their own rules without

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Notes: The size of the bubble indicates PPP-adjusted GDP in US dollars. Developed countries are marked in green, and emerging markets in blue.

being punished. For example, the eurozone got into trouble in 2011 and 2012 not because of the excessive debt of Greece and Italy but because in the early 2000s, both France and Germany were allowed to break the Maastricht Treaty’s deficit limits without being punished for it. This example gave smaller countries in the eurozone license to break existing deficit rules, and neither France nor Germany could criticize them because they had no moral standing to do so.

If the United States—as the leading power in the existing world order—continues to resist challenges by emerging markets while breaking its own rules whenever convenient, it will face increasing resistance from emerging markets. The example of the AIIB shows that China is willing to take on a regional leadership role in Asia outside of existing global institutions (such as the IMF) if it is unable to lead within the existing system. The existing world order, then, is at risk of breaking down under its current weaknesses.

As discussed, the current world order has created more wealth and been a more effective remedy for poverty than any other system in history. We do not know of any economic or political system that is better at generating wealth and reducing poverty than the current one, and dismantling it risks throwing the baby out with the bathwater. What the world needs to do is not revolutionize but improve the current system so that the benefits are shared more widely and more equally. Maybe the answer is to heed what Henry Kissinger (then, the 93-year-old grandmaster of realpolitik) said in 2016:

To contribute to the establishment of a more stable world order, we need to foster a perception of a joint enterprise that is not just about buying into an American project . . . What we have not yet seen is a new vision of a future world order. (cited in Goldberg 2016)

**Conclusions**

In this chapter, I discussed the existing economic world order, which has been based on increasing liberalization and globalization of trade and finance. Despite the many criticisms launched against such institutions as the IMF, their policies tend to foster growth in the long run. In fact, a full set of liberalization measures in emerging markets can boost economic growth by 7 pps in six years, or by more than 1 pp per year, on average. Similarly, the efforts of the GATT and later the WTO to liberalize trade in goods and services have helped lift billions of people out of poverty and have boosted economic growth for both developed and developing countries.

But even though we live in a world of low trade barriers, significant potential still exists to boost economic growth through continued efforts to reduce trade frictions and barriers. This potential boost in growth is projected
to be about 0.5 pp for most developed countries but could surpass 7 pps per year for Ireland.

Yet, the trend towards further trade liberalization and globalization has stalled since the GFC. The election of populist and domestically oriented politicians in several major countries has suspended efforts to liberalize trade and risks putting globalization into reverse. Given that increased globalization leads to a permanent increase in annual GDP growth for both developed and developing nations, we can expect that a reduction in globalization will reduce economic growth.

Globalization is under attack not only from populist politicians but also from left-leaning intellectuals and politicians, who point to rising inequality as a source of concern and a failure of globalization. Indeed, globalization has increased inequality within countries. Yet, it has also reduced inequality between countries. People in emerging markets have benefited from rapidly rising incomes, while working class people in developed countries have gained little to nothing. These distributional effects of globalization have been ignored by economists and politicians for too long, and today, we face a political backlash to globalization and economic cooperation that risks the loss of benefits we have gained, and could continue to gain, through globalization.

As this chapter has shown, global economic cooperation has been the best tool for generating economic growth and wealth that we have ever developed. Reversing globalization in the name of decreasing inequality would be a mistake. Instead, we need to find a way to reform economic cooperation and economic policy so that the benefits of globalization are distributed more equally than they are today.

**Bibliography**


