Economic Globalization Under Pressure – Why People in Industrial Nations Are Increasingly Critical of Globalization

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I Main Impacts of Increasing Globalization on Industrial Nations

In this paper, economic globalization is understood to be the economic interdependence of all countries, with interdependence referring to both the exchange of factors of production (labor, capital, technology, knowledge) and the exchange of products (goods and services, intermediate and end products, consumer and capital goods).

1. Background

The growing economic interdependence among the world's countries essentially means that there is an increasing cross-border exchange of goods, services, labor, capital and technology. This only occurs, however, when levels of scarcity – and, consequently, prices – differ in the relevant countries.

- **International trade** takes place when prices for consumer goods or for intermediate goods and services differ among countries.
- **Investments** are made **abroad** when higher returns are to be had there than in the domestic market.
- **Migration** occurs when different living conditions – above all, opportunities for earning an income – exist in different countries.

This results in two key consequences:

- A better distribution of scarce factors of production occurs. This produces **positive growth effects** for all relevant **national economies** (see Section 2).
- The **relative scarcities** among the individual economies **change.** For example, when low-skilled workers are needed to create goods and the production of those goods is outsourced to low-wage countries, this worsens the prospects of finding a job and earning a decent income for low-skilled individuals in industrial nations such as Germany. Globalization thus produces **losers** in addition to **winners within** each country (see Section 3).

2. Globalization's Growth Effects

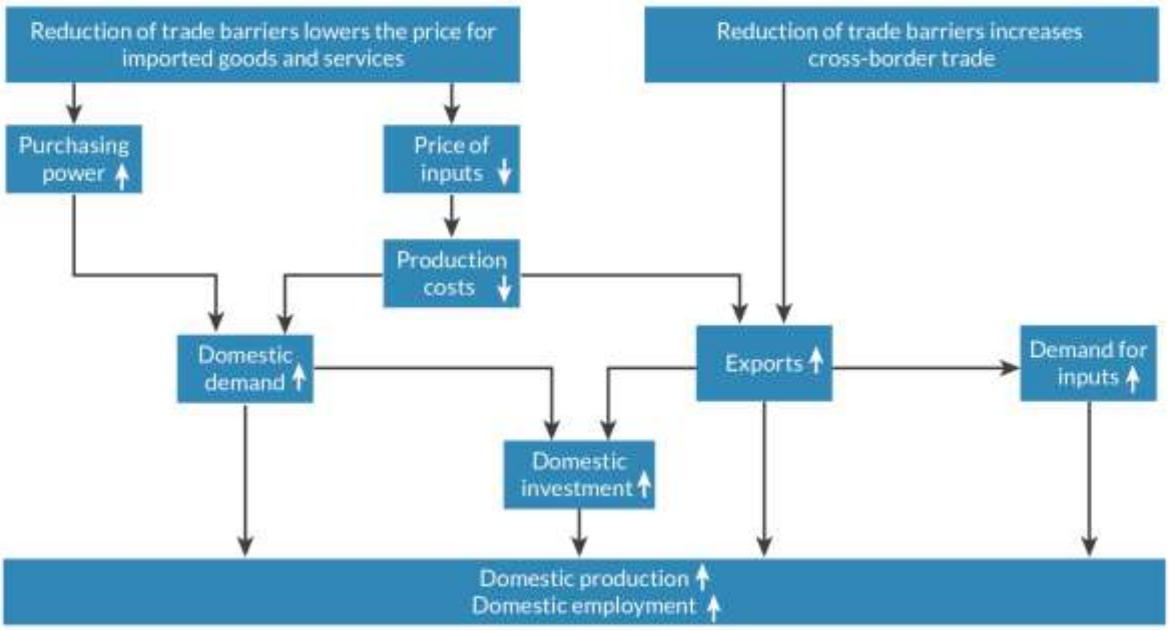
An intensification of economic globalization means, first, reducing obstacles to trade, i.e. customs duties and non-tariff barriers. As a direct result of this reduction, the costs of cross-border trade **decline** and, with them, **prices** for internationally traded goods.

- If Germany levies a 5-percent **duty** on a car **imported** from the United States and this duty is then eliminated, the price that German consumers must pay for the car goes down by 5 percent.
- **Non-tariff trade barriers** (e.g. special approval or oversight procedures for products from abroad) also lead to higher costs, including costs stemming from duplicate certifications, tests and approval procedures. Reducing these trade barriers thus also leads to lower prices.

Increasing economic globalization between two countries therefore leads to lower prices for the goods traded by those countries. This produces positive effects in terms of economic growth and employment in both countries (see Figure “Diagram of the relationship between reduced trade barriers and economic growth”)

- **Consumers** benefit from lower prices for imported products, since the purchasing power of their incomes increases. The **greater purchasing power** boosts demand for domestically produced consumer goods and thus boosts production and employment in the consumers’ own country.
- Domestic **companies** can acquire the **intermediate goods and services** they need for their own production at a lower price from producers abroad. This **reduces** their **production costs** and, subsequently, the price of their own goods. Domestic consumers benefit from falling prices, which leads to a further increase in production and employment.
- The lower production costs improve the **international competitiveness** of domestic companies, which can then **export** more goods to the rest of the world. The resulting increase in production also has a positive impact on employment.
- The dismantling of trade barriers makes it easier to **export** to economically integrated partner countries. Domestic companies can thus increase their exports even more and boost their production and employment levels.
- Companies that do not export directly also benefit from expanded export activities if they deliver **intermediate goods or services** to businesses that do export. These companies thus also experience an increase in production and employment.
- When both domestic consumer demand and exports grow, domestic companies must expand their **production capacity,** i.e. their inventory of machines and the buildings that house them. That results in greater **investment.** This leads to an increase in production and employment at the companies that create the corresponding production capacity.

Diagram of the relationship between reduced trade barriers and economic growth



Source: author's own diagram

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The growth effects outlined above which result from the increasing economic integration of two or more countries are essentially generated by a rise in the volume of cross-border trade between the relevant countries, which, in turn, is the result of **lower trade costs** (static growth effects).

In addition, economic integration leads to an **increase in innovation** and **productivity,** which then reduces the production costs and prices of the affected goods (dynamic growth effects). The reduction of trade barriers results in two key productivity-increasing effects:

- The dismantling of international trade barriers allows companies to produce for a larger market. The ensuing **economies of scale** result in lower unit costs and lower prices, so that consumers benefit from an additional increase in purchasing power.
- The greater trade between countries increases **competitive pressures.** If companies want to stay competitive internationally, they must respond to these pressures by innovating and achieving technical advances. A **reduction in costs** through **technical progress** generates an increase in productivity. This implies that more goods can be produced with same volume of production factors. In other words, the economy grows. At the same time, prices fall due to technical progress, which in turn increases domestic consumer demand.

When ongoing economic integration allows for a free cross-border exchange of **production factors,** additional increases in productivity result: Greater cross-border mobility of labor and capital means the available factors of production can be deployed where they create the greatest value. This targeted use of production factors improves productivity and, because of falling prices and increased international competitiveness, generates further growth.

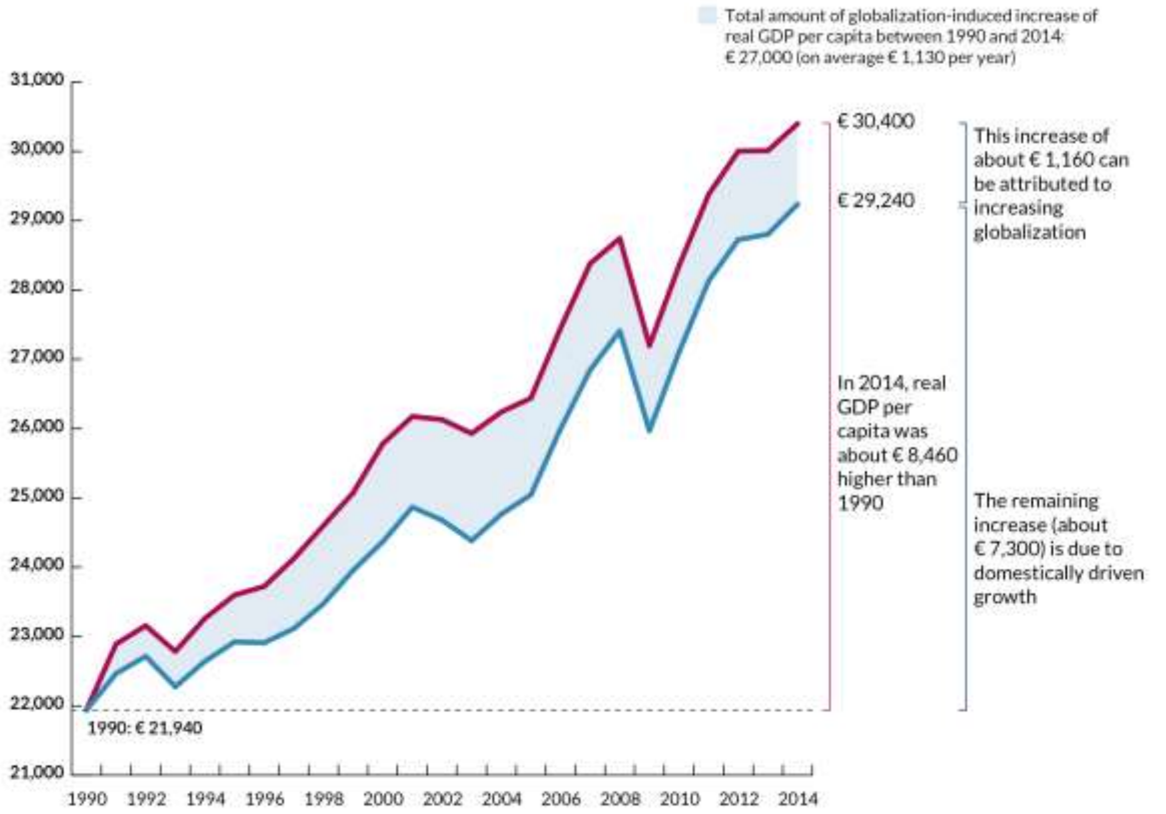
The static and the dynamic **growth effects** that occur in the relevant countries as part of increasing economic integration **mutually reinforce** each other. If production and employment increase in Germany, for example, consumer demand for goods and services subsequently rises. Greater demand also then exists for foreign products; production, employment and income all rise in foreign countries as well. The greater economic growth abroad thus leads to an increase in German exports to these countries.

These interrelationships are not merely theoretical, but documented by the Bertelsmann Stiftung in its **Globalization Report 2016** (Bertelsmann Stiftung 2016a). The growth-promoting effect of increasing globalization can be observed, for example, in **Germany's** economic development (see Figure "The development of real GDP per capita in Germany, with and without increasing globalization"):

- In 1990, Germany's real per capita GDP was €21,940. By 2014 it had risen to €30,400 (an increase of €8,460).
- Without increasing globalization, real per capita GDP would only have increased to €29,240 between 1990 and 2014. Real per capita GDP was therefore €1,160 higher in 2014 than it would have been without ongoing globalization.
- Over the entire time period, the increase in per capita GDP sums to €27,000. Distributed across the 24 years, that means increasing globalization resulted in an average annual increase in per capita GDP of €1,130 in Germany.

The development of real GDP per capita in Germany, with and without increasing globalization

in euro



Source: Prognos 2016 | BertelsmannStiftung

This calculation was carried out for 42 countries included in the report; all of the countries exhibited globalization-induced GDP growth (see Table 1). What is noticeable here is that absolute growth is lowest in the BRIC countries (Brazil, Russia, India and China). Above all, this can be attributed to the low starting level of per capita GDP: When the starting value is €1,000, then a 10-percent rise results in a gain in income of €100. If, however, GDP is €10,000 and growth is only 2 percent, then the result is a greater absolute increase in income of €200.

Gains in real GDP per capita due to increasing globalization during the period 1990 to 2014 in selected countries

Ranking	Country	Cumulative real GDP per capita gain from 1990 in euros*	Average annual GDP per capita gain from 1990 in euros
1.	Japan	35,300	1,470
2.	Switzerland	32,700	1,360
3.	Finland	32,100	1,340
4.	Denmark	29,100	1,210
5.	Ireland	27,100	1,130
6.	Germany	27,000	1,130
7.	Israel	24,900	1,040
8.	Austria	21,100	880
9.	Greece	21,100	880
10.	Sweden	20,400	850
:	:	:	:
12.	Italy	18,800	780
:	:	:	:
17.	Netherlands	16,500	690
18.	United Kingdom	16,200	680
19.	France	15,600	650
20.	Canada	15,500	650
:	:	:	:
23.	United States	11,700	490
:	:	:	:
39.	Brazil	2,900	120
40.	Russia	2,800	120
41.	China	1,700	70
42.	India	400	20

* in Euros (real = Y2000 prices)

Source: Prognos 2016

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3. Globalization's Employment and Income Effects[1]

The point of departure for the following is the fact that developing and **emerging countries** such as **India** have a relatively **large supply of labor.** Developed **industrial countries** such as **Germany,** however, have a comparatively **small labor supply.** As prices for labor, a production factor, are set in the market, this relative scarcity determines wage levels: In labor-poor industrial nations like Germany, the relatively high scarcity of labor, combined with a high standard of living, results in relatively high wages. In an emerging economy such as India, the relatively high supply of labor and low standard of living result in relatively low wages.

To the degree that international structures allow for a **migration** of labor among countries, the **difference in wages** serves as an incentive for Indian workers to move to Germany. Immigration increases the supply of labor on the German job market. In India, in contrast, the supply of labor diminishes. The changes in supply cause wage levels in both countries to shift:

1 Information in this section is taken from Petersen 2016a.

- In **Germany,** the increased labor supply results in a **decrease in wages.**
- In India, the smaller supply of labor causes an increase in wages. Theoretically, the migration flows would continue until the wages in both countries reach the same level.

Given this situation, industrial countries often resist opening their borders to foreign workers. Yet even when there are no migration flows between countries, the **international division of labor** can result in wage equalization. This occurs when individual economies specialize in producing certain products which are then traded internationally:

- Because of its large labor supply and the low wages that result, **India** has a **competitive advantage** internationally when it comes to manufacturing **labor-intensive** goods. India consequently focuses on producing these goods. This results in greater demand for labor, since more workers are needed to produce greater amounts of the goods. The increased demand for labor in India leads to higher wages.
- **Germany** has a competitive advantage when it comes to producing capital- and technology-intensive products. The production of these goods therefore increases. Conversely, Germany limits the production of **labor-intensive** goods. With that, there is a decline in demand for labor in Germany. This, in turn, results in a decrease in wages. Employment also declines.

In advanced economies, the international division of labor and the resulting foreign trade have caused a **decline in both employment** and **wages**. This phenomenon has now been extensively researched and documented:

- Autor, Dorn and Hanson show that **Chinese imports** in the **United States** have led to a rise in unemployment and a decrease in wages. Their analysis covers the time period from 1990 to 2007 (Autor, Dorn and Hanson 2013).
- The Bertelsmann Stiftung conducted a study which examined how imports from China, Eastern Europe and Latin America affected wage levels and employment in **Germany** between 1995 and 2007. Here, too, imports from labor-intensive, low-wage countries were seen to reduce wages and employment (Bertelsmann Stiftung 2016b: 12). Current research by Südekum, Dauth and Findeisen confirm these findings (Südekum, Dauth and Findeisen 2017).

In addition to the general impact of foreign trade on wage and employment levels in developed countries, an additional employment-related effect exists: The international division of labor exacerbates the **difference in wages** between **high-** and **low-skilled workers** in industrial nations. Developed countries such as Germany focus on production processes that primarily require capital, technology and highly qualified labor. The resulting stronger demand for these three production factors leads to a rise in the prices of these factors, meaning, among other things, that **wages rise** for **highly qualified** workers. Conversely, emerging and developing countries focus on production processes that require a large amount of human labor – low-skilled labor, above all. The result is a decline in the demand for low-skilled workers in industrial countries. There are therefore fewer job opportunities for low-skilled workers in industrial nations and the wages these workers receive decrease as well.

4. Interplay Between Globalization and Technological Progress

In industrial countries, the key economic disadvantages of globalization thus impact the workforce – above all, its low-skilled members. However, the negative income and employment effects for this group are **not exclusively** the result of increasing **globalization.** Another factor of at least equal importance is **advancing technology,** which results from the pressure to reduce costs that businesses in a competition-based economy face:

- In a market economy based on **competition,** companies must permanently reduce their production costs in order to remain competitive with their peers and to avoid being excluded from the market.
- An effective instrument for reducing costs is the **use of modern technologies,** which increase overall productivity and thus reduce production costs. In highly developed economies, technological advances generally lead to one production factor, **labor,** being **replaced by** another, **capital.** This results in a **decline** in the **employment level,** downward **pressure on wages** and thus an increased income flow for the production factor of capital.

These market mechanisms would function even in an economy that is completely isolated from the rest of the world. While it is true that globalization increases the need to reduce costs since it causes the number of potential competitors to rise dramatically, **economic isolation** would only partially diminish the downward pressure on costs; it would **not prevent it** completely. Competition-induced technological advances which lead to human labor being replaced by machines and digital technologies **cannot be stopped** over the **long term** even through economic isolation.

5. Preliminary Conclusion

In sum, the **international division of labor** and the subsequent cross-border trade activities in industrial nations result in an **increase in GDP** in the relevant economies. At the same time, this form of economic globalization produces **not only winners** in each country, but also **losers.** In industrial nations, these are the workers – in particular, **low-qualified** individuals and **employees** in sectors particularly exposed to **competition** from **emerging economies** (above all, China and Eastern European nations).

II Economic Globalization and Populism

1. Background

There are numerous factors that lead people in industrial nations to have a critical attitude towards globalization: falling minimum social standards, an increase in social inequality, and the transference of costs to society at large, for example in the form of environmental pollution. A new chorus of voices critical of globalization has recently made itself heard, expressing its criticism in the form of **populism** and **protectionism.**

I believe that the growing populism in industrial countries is essentially the result of increasingly critical attitudes towards globalization, which can be traced back to the **issue of global distribution.** This, in turn, is closely related to the **growing economic interdependence** of the world's national economies, since the reduction of barriers – which facilitates the cross-border exchange of goods, services, capital, technology and labor – leads to a worldwide equalization of the prices for scarce goods. This principle of **economic convergence** also applies to the prices for production factors, i.e. to wages and to interest rates (as the price of capital). As wages and interest rates converge, so do the incomes people earn, i.e. per capita GDP (for more relating to the following discussion, see Petersen 2016b). This trend means that the difference in income declines between people living in industrial nations and those in less developed economies. And when one considers that the populations of developing and emerging countries are expected to grow significantly in coming decades while Europe's population is expected to decline, a convergence of per capita GDP would mean that **per capita income** in **industrial nations** will also **decline.**

Industrial nations still benefit to a greater degree from increasing globalization as measured by per capita GDP. As Figure "The development of real GDP per capita in Germany, with and without increasing globalization" in Section 2 shows, the **absolute increases in per capita GDP** resulting from globalization are larger in the industrial nations than in the emerging economies. One reason for this is that the industrial nations are currently using **barriers** to **protect** themselves from the advances being made by emerging and developing countries:

- Barriers have been put in place to prevent the **immigration** of workers from less developed countries.
- The same is true for competition from **agricultural products** produced by developing and emerging countries, since industrial nations generally impose much higher import duties on agricultural products than on industrial products, for which advanced economies have a considerable competitive advantage (see Table 2).

Tariffs on imports for different product groups in selected industrialized countries, simple average

in percent

Country	All products	Agricultural products	Non-agricultural products
Switzerland	6.7 %	36.1 %	1.8 %
Canada	4.2 %	16.7 %	2.2 %
Japan	4.0 %	12.9 %	2.5 %
European Union	5.1 %	10.7 %	4.2 %
USA	3.5 %	5.2 %	3.2 %

Source: WTO 2016: 8–24. | BertelsmannStiftung

An intensification of economic globalization would mean dismantling these barriers. The danger would thus grow that the income and material well-being of people in the advanced economies would decline. In that case, there would **indeed** be a **redistribution** of **global wealth** in favor of the emerging and developing countries.

2. Key Reasons Why People in Industrial Nations Are Critical of Globalization

Despite the growth-promoting effects of increasing globalization (see Section "Globalization's growth effects") which have been shown to exist in industrial nations, globalization is under considerable pressure in advanced economies. I see three key reasons for this:

- The catalyst for critical attitudes towards globalization is, as previously mentioned, the **global distribution conflict.** Increasing globalization means that high-wage workers in industrial nations are competing to a greater degree with low-wage workers in emerging and developing countries. For workers in industrial nations, this generally means **falling wages** and **rising unemployment** – above all for low-skilled, but also for high-skilled individuals.

- The objectively recognizable disadvantages for workers in industrial nations lead to a subjective **fear of downward mobility,** which people also experience who are not yet unemployed. In addition to the **globalization-induced fear** of unemployment and reduced income, the fear also exists of **technology**-driven **unemployment** (robots replacing people) and of **elderly poverty** caused by **demographic** change.
- Overcoming these fears is the primary responsibility of the welfare state. However, as part of the **supply-side economics** implemented since the 1980s in many industrial nations, **social security mechanisms** (protection against dismissal, unemployment compensation, social transfers, pension levels, etc.) have been **weakened** in order to improve the international competitiveness of domestic businesses by lowering taxes and contributions to social security programs.

There is growing empirical evidence in support of the theory that the negative employment and income effects resulting from increasing globalization are leading to greater criticism of globalization and causing a surge in populism. The following briefly examines two studies supporting this view.

<u>Germany: Globalization increases support for right-wing parties</u>
Research by Christian Dippel, Robert Gold and Stephan Heblich has shown that globalization has had a statistically significant impact on how people in **Germany** vote (for more relating to the following discussion, see Dippel, Gold and Heblich 2016a). As an indicator of globalization, the authors use **Germany's foreign trade** with **China** and **Eastern European** countries. The study examines the impact of this trade on the share of the vote received by right-wing parties during national elections. The study covers the time period from 1987 to 2009. The right-wing parties examined in this period include the NPD (Nationaldemokratische Partei Deutschlands or National Democratic Party of Germany), Die Republikaner (The Republicans) and the DVU (Deutsche Volksunion or German People's Union) (Dippel, Gold and Heblich 2016b: 10). Results from 408 rural districts reveal the following:

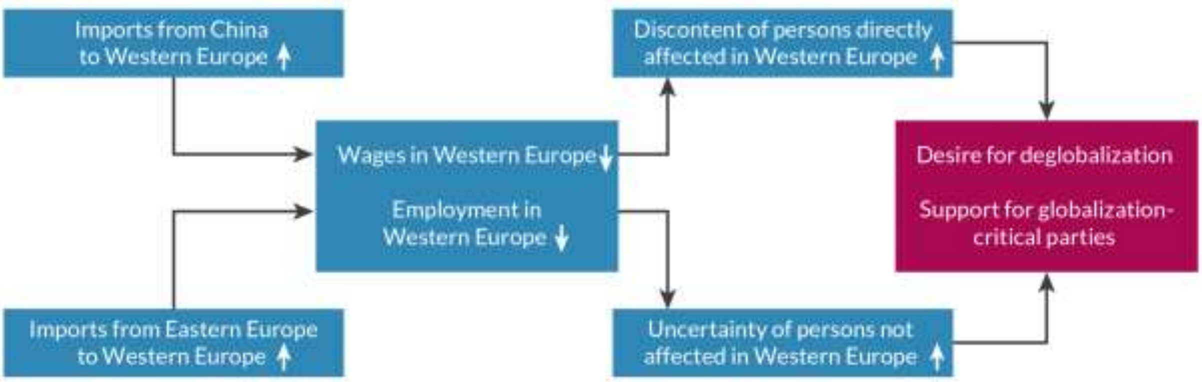
- In the **regions** that have experienced **especially strong competition** from **imports** from China and/or Eastern Europe, **right-wing** parties have received a **significantly higher** share of the vote in national elections. To the extent that a region's export opportunities improve, the share of the vote received by these parties declines.
- An examination of **individual-level data** shows that, in particular, low-skilled workers in manufacturing industries who are especially affected by competition from Chinese and Eastern European exports support right-wing parties.

<u>United Kingdom: Globalization increases support for Brexit</u>
Italo Colantone and Piero Stanig from Bocconi University examined the impact that various factors had on the **Brexit referendum** in the United Kingdom (for more relating to the following discussion, see Colantone and Stanig 2016). The authors researched the development of **Chinese imports** in the UK, among other aspects; more specifically, they looked at how imports developed in 167 regions between 1990 and 2007. Econometric calculations were used to see if higher levels of imports from China had a statistically significant effect on electoral results. The study's main findings can be summarized as follows:

- The **percentage** of voters **supporting the "Leave" option** was **consistently higher** in **regions** that have been **particularly impacted** by **Chinese imports.** These regions are largely those that originally had a significant number of companies in the manufacturing industry. The **percentage** of **immigrants** in the region had **no** statistically significant **impact** on how people voted in the Brexit referendum.
- Calculations based on **individual-level data** confirm these findings. There was a higher percentage of Brexit supporters in those regions that face particularly strong competition from Chinese imports, something which remains true regardless of the voter's specific employment situation: Even people working in the **service sector** in regions with high levels of Chinese imports tended to be in favor of leaving the EU, even though they were not directly affected by Chinese imports. The level of Brexit support did not depend on whether people were unemployed or if they were low-skill workers. Thus, the key factor determining a higher level of support for Brexit was not the situation of the individual or household, but the **economic situation of the region.**
- In sum, Colantone and Stanig state: "Hence, we can claim that globalization of trade, as captured by our import shock measure, is causally driving support for Brexit. In addition, voters seem to react sociotropically to the globalization-induced shock" (Colantone and Stanig 2016: 37).

The connection between globalization and populist tendencies can, I believe, be **summarized** as follows: The key factor giving rise to critical attitudes in industrial nations towards globalization is **competition** from **emerging economies,** which, because of their lower wage levels, have a competitive advantage for industrially produced goods. The result in industrialized nations is downward pressure on wages in the manufacturing sector and a decline in employment. This leads to **dissatisfaction** among individuals impacted by import-related employment effects. At the same time, people not yet affected experience increased **anxiety** about their own economic situation. The desire to eliminate the **cause of the dissatisfaction** and anxiety leads dissatisfied and anxious voters to turn to parties critical of globalization (see Figure "Diagram of the relationship between foreign trade with developing countries and voting behavior in Western European countries").

Diagram of the relationship between foreign trade with developing countries and voting behavior in Western European countries



Source: author's own diagram.

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This connection between globalization and populist tendencies was also confirmed by an **EU-wide survey** carried out by the Bertelsmann Stiftung in mid-2016. The survey shows that “those who feel close to populist parties are mainly motivated by fear of globalization” (De Vries and Hoffmann 2016: 3).

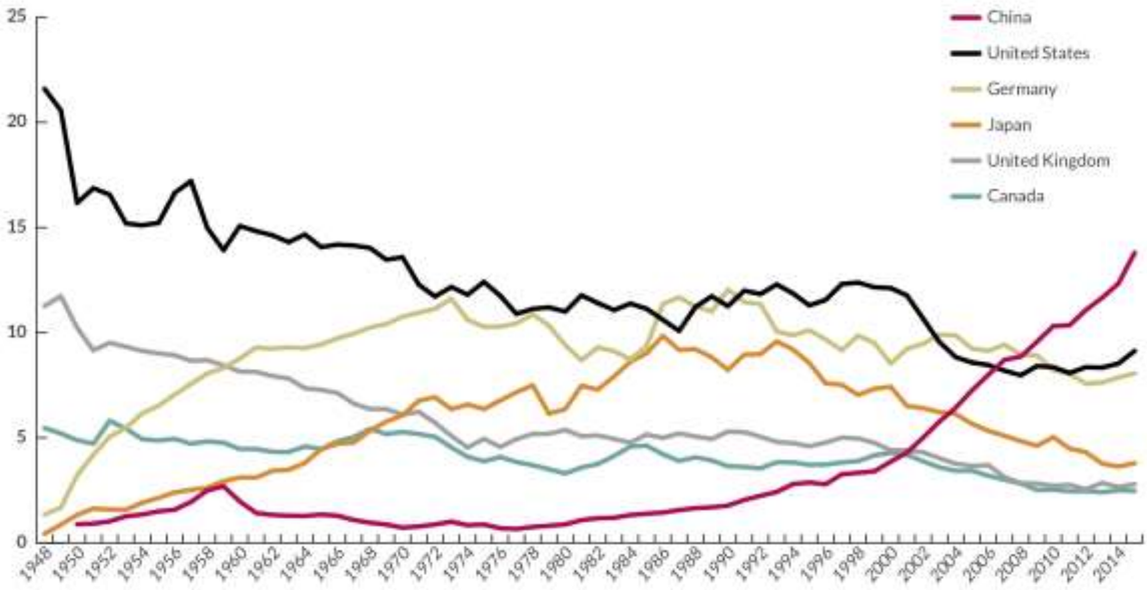
3. Why Has There Now Been a Surge in Critical Attitudes Towards Globalization?

I believe there are **three** key **reasons** for the rapid growth of critical attitudes towards globalization that we are now seeing in many industrial countries.

<u>Integration of Eastern Europe and China into the global economy</u>
Until the 1990s, the developed countries were the world’s leading exporters (see Figure “Share of global exports of goods for selected countries between 1948 and 2015”). Trade among industrial countries put only limited pressure on wages and employment, since wage levels in those countries are more or less the same. Once Eastern Europe (fall of the Iron Curtain) and China (WTO member since 2001) became part of the global division of labor and global trade flows, **competition from imports** from these countries caused employment and wages in Germany to fall. At the same time, benefits provided by social security systems were reduced, so that the wage and employment effects resulting from this competition had a noticeable impact on the lives of certain segments of the German population.

Share of global exports of goods for selected countries between 1948 and 2015

figures are percentages



Source: UNCTADstat, data downloaded on 21/06/2016. | BertelsmannStiftung

The impact on wages and employment in the industrial nations resulting from competition with emerging countries can be seen, above all, in the pressure stemming from imports from **China.** This pressure has increased markedly since China became a member of the World Trade Organization (WTO) in 2001. Moreover, China has been the **world’s largest exporter since 2009.** In 2015, Chinese goods accounted for almost 14 percent of all exports worldwide. As a result, the negative employment effects resulting from this form of globalization are increasing for industrial nations.

Lehman bankruptcy

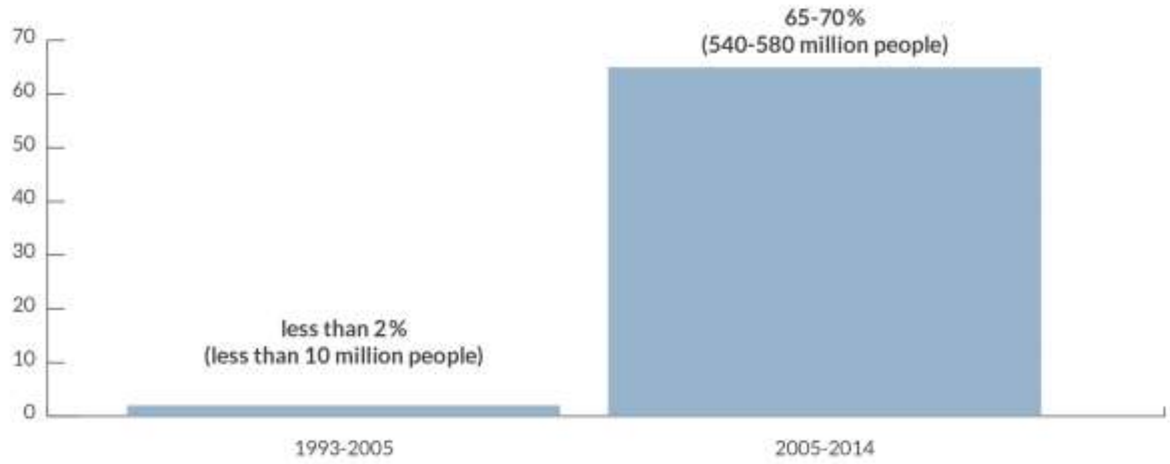
Another key cause of the increasing criticism of globalization is the **financial and economic crisis** that ensued after the Lehman bankruptcy in 2008. Three aspects are significant in terms of critical attitudes towards globalization:

- Helplessness in the face of **anonymous globalized market forces** which caused a local event to have worldwide repercussions in a very short amount of time and to which national governments were unable to respond, apart from spending billions on credit-financed measures for stimulating the economy and rescuing banks.
- The fact that after years of reductions in government expenditures and in benefits provided by social security programs, **billions** were **suddenly** available to rescue the banking and financial system, which was largely responsible for causing the Lehman bankruptcy.
- The economic recession that led to a global rise in **unemployment** and thereby reduced the income of the jobless, while also causing a **decline in wages** due to the weaker demand for labor.

Growing **competition** with producers in **low-wage countries** (above all in Asia and Eastern Europe), growing **unemployment** following the **Lehman bankruptcy** and the ensuing **wage pressures** are the main reasons why market incomes for households in many advanced economies were lower in 2014 than they were in 2005. The McKinsey Global Institute published a study in July 2016 that examined the change in market incomes in 25 industrial nations (for more information on the following, see McKinsey Global Institute 2016: 1–3):

- A comparison of the **market incomes** of households in 25 industrial countries in 2005 with market incomes in 1993 showed that for some **2 percent** of all private households, market income was **lower** or at best just as high **in 2005** as in 1993. In absolute figures, this was true for fewer than 10 million people.
- When the years **2014** and **2005** were compared, however, between **65 and 70 percent** of all households had a market income in 2014 that was lower or equal to their market income in 2005. This was true for between 540 and 580 million people (see Figure “Percentage of households with flat or falling market income in the past decade”).

Percentage of households with flat or falling market income in the past decade



Population-weighted average of 25 advanced economies (Australia, Austria, Belgium, Canada, Czech Re-public, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Luxembourg, the Netherlands, New Zealand, Norway, Portugal, Slovenia, Spain, Sweden, Switzerland, the United Kingdom, and the United States).
Source: McKinsey Global Institute 2016: 3.

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<u>Influx of refugees to Europe</u>
The final reason for **globalization-induced populism** is, in my estimation, the large influx of **refugees** to Europe. This has clearly demonstrated that opening borders – for people or for trade – changes the scarcity relationships in all participating countries and thus automatically creates winners and losers. It also shows that a more equal distribution of global GDP leads to a **decline in per capita GDP** for people living in industrial nations.

4. Which Responses Are Needed?

This paper does not offer sufficient scope for outlining a set of responses that could counterbalance the criticism of economic globalization and defuse the resulting populism. One key point must be mentioned, however: It is essential that the dividends from globalization be distributed **in Europe** in such a way that everyone shares in the increased income. This would require **strengthening social security systems** in order to reduce people's fear of change. In addition to compensation for lost income, **further training** must be offered to the jobless to make it easier for them to move into sectors that are benefitting from globalization. This, in turn, requires **governments** that are **capable of taking action** and that also have **sufficient tax revenues** at their disposal.

A consensus must be found within society on how, exactly, these policy instruments should be designed, both in terms of where the revenues to fund them should come from and how those revenues should be spent. This consensus must also take unintended side effects and other interdependencies into account. One crucial point: **Society at large** must make the **fundamental decision** to achieve a more equitable distribution of globalization's dividends, thereby placing a greater policy focus on **globalization's losers.** In terms of advanced economies such as Germany, Table 3 shows roughly which of globalization's winners and losers must be included when globalization's gains are redistributed. If such a redistribution is not undertaken, severe social and political tensions could arise which threaten the well-being of the overall economy (Heilmann 2017: 12).

Potential winners and losers of increasing globalization in advanced economies

Country	Potential winners	Potential losers
Factors of production	Capital, technology and skilled labor	Labor, especially unskilled labor
Products	Capital and technology intensively produced goods and services as well as local services	Labor intensively produced goods
Foreign trade relations	Exports to developed industrialized countries	Intense competition with suppliers from emerging economies (especially Asia) and Eastern Europe

Source: author's own diagram. | BertelsmannStiftung

A **redistribution** of globalization's gains must also be considered on the **global level.** If resistance to economic globalization grows in regions that have been left behind as globalization has progressed (above all, Africa), protectionist measures might be implemented that could lead to a global trade war. Advanced economies would also suffer as a result. **Better integration** of emerging and, even more importantly, developing countries would therefore be in the long-term interest of the industrial nations.

What is necessary here is a **reduction** of the **asymmetric barriers** currently hindering the globe's economic interdependencies (high capital mobility versus limited migration, high import duties on agricultural products versus low import duties on industrial products; see Section "Background"). This produces several irresolvable **dilemmas:**

- If these barriers are dismantled, the absolute difference in income will decline between industrial nations, on the one hand, and emerging and developing countries, on the other. This means, however, there will be a **fall** in the **real per capita GDP** in the **industrial nations,** since the difference cannot be overcome solely by growth of per capita income in emerging and developing countries. This fact would undoubtedly prove beneficial to populists in the US and Europe.
- If the barriers described above are not reduced or only reduced to a limited extent, the absolute difference in income will increase between the industrial nations and the rest of the world. Globally this would lead to **growing redistributive pressures** which could result in greater **migration flows.** This, too, would further the populist cause.

Thus, the **redistribution of global wealth** will be one of the key challenges of the coming decades.

III Recommended Action Plan for the EU

- Stabilization of the euro area through better coordination of economic and fiscal policy. This includes transfer payments within the euro area, which is not optimal as a currency area and which, for its long-term functioning, requires financial payments to redistribute resources from economically robust to economically weak regions.
- Stabilization of the EU through better compensation for those persons and regions which become disadvantaged in terms of income and employment due to the opening of borders to foreign imports. This applies to inner-European trade taking place within the Single Market and to trade with non-European nations resulting from free trade agreements and reduced trade barriers in general.
- Clearly demonstrating opposition to protectionist tendencies by signing free trade agreements with other countries and regions. In doing so, the EU should make concessions

to economically weaker countries, e.g. by providing temporary protection to agricultural producers and to not-yet-competitive industries in economically less developed nations.

- Reducing differences in income and prosperity between Europe and less developed countries, above all those in Africa. Possible measures include making it easier for businesses in these countries to obtain credit, increasing the amount of development aid provided, and voluntarily and unilaterally lowering trade barriers for these countries (renunciation of reciprocity).

IV Conclusions

The international division of labor and the resulting cross-border trade are leading to a rise in gross domestic product (GDP) in the world's developed **industrial nations**. At the same time, this form of globalization is producing **losers** in each country in addition to **winners**. In the industrial countries, the losers are workers, above all low-skilled individuals, and employees working in sectors that face a high level of competition from emerging economies (above all China and Eastern European nations). This competition has existed for decades. As for the **current** rise in critical attitudes towards globalization, I see **two** key causes:

- Until well into the 1980s, international trade took place largely between the industrial nations, which all had relatively high wage levels. Only after the fall of the Iron Curtain (1989), China's joining the World Trade Organization (2001) and the EU's eastward enlargement (2004) did competitive pressures increase vis-à-vis low-wage countries. The employment and wage-reduction effects resulting from the international division of labor have only made themselves felt to a noticeable degree since then.
- The key catalyst for the increasingly critical attitudes towards globalization is the **financial** and **economic crisis** that resulted from the bankruptcy of Lehman Brothers. Three aspects are significant here: (1) The helplessness in light of anonymous globalized market forces, which transported a local event around the globe, (2) the fact that after many years of reductions in government expenditures and in the benefits provided by social security systems, billions were suddenly available to save the banking and financial system and (3) the economic collapse that led to a worldwide increase in unemployment, thereby reducing the incomes of the jobless and putting downward pressure on wages as a result of the slackening demand for labor.

I see the following connections between globalization and **populist tendencies:**

- A key aspect fueling the critical attitudes towards globalization in industrial nations is the competition from emerging economies such as China and Eastern European countries. This competition leads to downward pressure on wages in the industrial nations' manufacturing industries and a decline in employment. The people **impacted** by these developments become dissatisfied as a result.
- At the same time, people not yet affected by the import-related employment effects experience greater anxiety about their own economic situation.
- The desire to eliminate the cause of the dissatisfaction and anxiety leads dissatisfied and anxious voters to support political parties that are critical of globalization.

As for counteracting this criticism, I believe it its crucial to distribute **globalization's dividends** in the industrial nations in such a way that everyone benefits from the increase in income. A general consensus must be found in society for how the relevant policy instruments should be structured;

this consensus must also take unintended side effects and interdependencies into account. What is crucial, however, is that society makes the fundamental decision to put a greater policy focus on globalization’s losers. If countervailing measures of this nature are not taken, serious social and political tensions could arise, threatening the well-being of the entire economy.

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