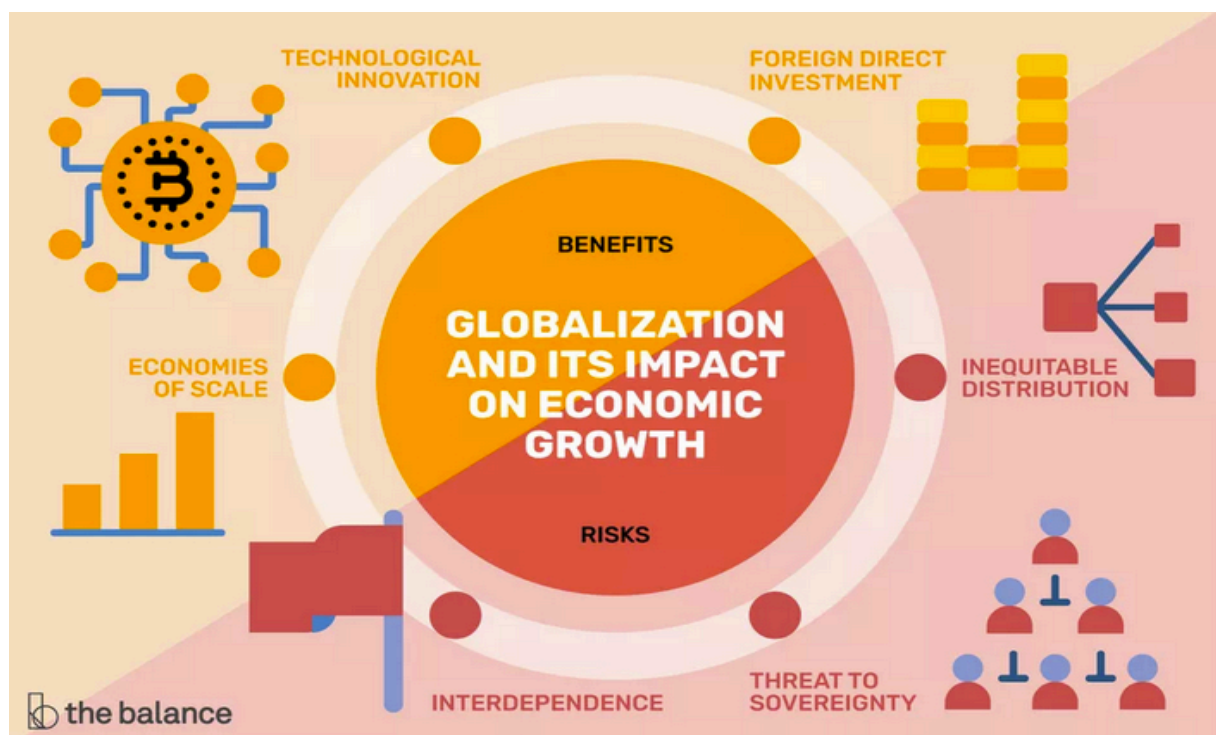


T°BFI

Geography Theme 2



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<https://internationalsection.edublogs.org/category/t-oib-hg/>

Geography Theme 2: Part One

Territorial Dynamics, Cooperation and Tensions in Globalization

Contemporary globalization leads to the assertion or confirmation of existing powerful actors and the emergence of new ones. **Territories, regardless of the scale** considered (states, infra- and supra-state regions, or metropolises) **have unequal access to globalization**. The effects of distance and trade barriers (protectionism), which limit international trade (and globalization) will be studied in addition to a country study of the **USA: The United States, a country in globalization: unequal integration of territories, tensions and international cooperation** and **France: differentiated international influence and unequal attractiveness in globalization**.

Local Scale

The hierarchy of global decision centres is constantly evolving. Among the largest financial centres, five are now in Asia, three in Europe (London, Zurich and Frankfurt) and two in North America (New York and San Francisco/Silicon Valley).

Intra-Regional Scale

The European Union has enabled the south of Europe to “catch up” considerably and quickly, compared to the north. However, inter-regional gaps persist. The issue of E.U. territorial inequalities, focusing on the persistence of inter-regional gaps (illustrative examples of which could include: North/South disparities within the E.U.) will be addressed.

Global Scale

Students will critically assess the role and varied effectiveness of regional economic agreements within the context of globalization. (Illustrative examples could include: ASEAN, USMCA, MERCOSUR, WTO).

Question Spécifique: France: differentiated international influence and unequal attractiveness in globalization.

France asserts its place in globalization, from diplomatic, military, linguistic, cultural and economic points of view. It rivals other countries and seeks to consolidate its alliances. France maintains its influence abroad through its diplomatic and educational network, cultural, scientific and linguistic organizations (French institutes, International Organization of the Francophonie, Louvre Abu Dhabi, French high schools abroad), but also through the establishment of French company subsidiaries outside of France.

In its territories, especially in Paris and in its major cities, France attracts the headquarters of international organizations, subsidiaries of foreign companies, sports and cultural events with global appeal, as well as tourists.

Key Questions

1. **General Question:** Why are different territories unequally integrated into globalization?
2. **General Question:** Analyze cooperation, tensions, and regulations at the global, regional, and local scales.
3. In what ways are (U.S.) territories unequally integrated into globalization?
4. How does cooperation among actors affect globalization?
5. What trade-related tensions surround globalization (at global, regional, local levels)?
6. To what extent do regulations influence globalization?
7. **QS: France** - To what extent is France a global power? To what extent does it attract or miss out on global flows?

Learning Objectives

- ❖ **Identify** the various actors involved in processes of globalization.
- ❖ **Understand** how globalization leads to shifts among actors and the emergence of new actors (e.g., countries or TNCs).
- ❖ **Analyze** the consequences of globalization on the U.S. at local, regional, and global scales.
- ❖ **Evaluate** the European Union's interactions on continental and global scales
- ❖ **Apply** a multi-scale (global-regional-local) analysis to globalization processes.
- ❖ **Evaluate** territories at different scales to recognize that they do not all benefit from equal access to globalization.

Key Terms

- **Cluster:** geographic concentration of interconnected firms, suppliers, and institutions in a particular field. British economist Alfred Marshall in the late 19th century identified three basic advantages of clusters which are still acknowledged and have come to be known as “Marshall’s trinity”.

- 1) a pool of skilled labour
- 2) knowledge spillovers; and
- 3) inter-firm linkages.

These factors are widely recognized to convey benefits to enterprises located in a cluster, but the benefits have proven difficult to quantify. In addition to the traditional sources of cluster advantages cited by Marshall, a number of contemporary analysts, notably Michael Porter, have argued that highly clusters localities in which intense competition for ideas occurs are more conducive to innovation.

- **Globalization:** the process by which business or other organizations develop international influence or start operating on a global scale.

- **Global decision centres:** a place where strategic decisions concerning and having an impact on the world economy are taken, such as London, New York and Tokyo.

- **Global cities:** a global city is a significant production point of specialized financial and

producer services that make the globalized economy run.

- **Core and periphery:** the core is a central region in an economy with good communications and high population density which is conducive to its prosperity as compared to the periphery which consist of outlying regions with poor communications, sparse population and less developed economies.

- **Sustainable Development Goals (SDGs) 2030:** these are 17 objectives to transform the world adopted by the UN in 2015. They include: No Poverty, Zero Hunger, Quality Education, Decent Work & Economic Growth, Gender equality...

- **TNCs:** Transnational Corporations are businesses that operate across international borders, though most of them have their headquarters in the USA, Europe and Japan.

- **USMCA/ NAFTA:** United States Mexico Canada Agreement is a free trade agreement between these countries which came into force on 1st July 2020 and replaced the earlier North American Free Trade Agreement.

- **ASEAN:** The Association of Southeast Asian Nations (**ASEAN**) is a regional grouping that promotes economic, political, and security cooperation among its ten members: Brunei, Cambodia, Indonesia, Laos, Malaysia, Myanmar, the Philippines, Singapore, Thailand, and Vietnam.

- **MERCOSUR:** South American trade bloc established by the Treaty of Asunción in 1991 and Protocol of Ouro Preto in 1994. Its full members are Argentina, Brazil, Paraguay and Uruguay.

- **Supranational Trading Blocs:** Because of the increasing importance of trade, many countries have strengthened their relationships with their most important trading partners. This resulted in the formation of **trading blocs**, groups of countries that agree to a common set of trade rules. Some examples include the U.S.-Mexico-Canada Agreement (USMCA), the Organization of the Petroleum Exporting Countries (OPEC), and **Mercosur** or *Southern Common Market*, which includes several South American countries. The European Union (EU) is also a trading bloc, but it is unlike most other ones. It also has *open borders*, which means it allows free movement of people as well as goods from one country to another.

- **World Trade Organization (WTO)** is a global organization. It was created in 1995 to monitor the rules of international trade by providing a forum for negotiating trade deals, settling disputes between its members, supporting the needs of developing countries, and helping companies follow similar international trade policies. As of 2020, the WTO included 164 member countries that accounted for 98 percent of global trade. Another 20 countries have applied for membership

1. What is the Role of Actors in Globalization?

TNCs, which represent 25% of the global economy are central to globalization. They make huge investments in innovation but their activities also degrade the environment. These companies are also present across all fields from industry (Toyota) and finance (Goldman Sachs) through to culture (Disney).

States also participate in globalization through free-exchange agreements (such as the WTO at a global scale or CETA, Canada-European Union Comprehensive Economic and Trade Agreement, at a transcontinental scale), and via supportive investment policies intended to attract FDI to their territories (for example through the creation of free-trade zones).

International organizations manage these exchanges. Free-exchange zones and/or customs unions such as the EU, promote an increase in the quantity and quality of flows. However, they are often criticized by NGOs such as Oxfam or WWF, who highlight the negative consequences of globalization in terms of the environmental, political and social costs.

These actors organize global networks which produce and supply multiple flows: material flows (merchandise), immaterial flows (capital, information, services) and human flows (tourists, students, migrants, refugees). Flows are concentrated into hubs (airport for example) in global cities and along the coastline.

Actors privilege certain territories with global cities and/or coasts so that their activities are sited as close as possible to the global transport and telecommunications network.

FDI benefits from the comparative advantages offered by different territories. Production activities locate in those territories that can offer low cost labour environment or less rigid labour protection regimes, such as Bangladesh and Indonesia, as a result of the international division of work under which R&D functions are concentrated in the developed countries.

Divergent viewpoints can exist between local and national actors regarding investment. For example the population of Brooklyn, in New York succeeded in preventing Amazon from locating its head in the borough. However, even within the same organization, actors can be rivals in the effort to attract FDI. A case in point is the fiscal competition within the EU whereby Ireland, with a level of taxation for businesses three times lower than that of France has been able to attract massive investment from Google, Yahoo and Amazon.

DOCUMENT: 2019 Global Cities Report
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The vibrancy of the world's most competitive cities—places such as London, New York, Singapore, and San Francisco—is no happy coincidence. With a focus on human capital, thoughtful municipal policies, smart corporate investment, and a commitment to building a technology pathway into the future, these cities have become bustling, global hubs that attract people and businesses alike.

The Global Cities Index and Outlook provide insights into the current performance and future potential of cities (see figure 1). Complete rankings and more details about the methodology are provided in the appendix. The Index reveals which cities are the most competitive now in key areas from business activity and culture to human capital, political engagement, and information exchange. New York, London, and Paris continue to hold the top three places. This trio has dominated the Index for the past decade, but even as their standings remain the same, changes in the broader Index scores suggest a fundamental shift is under way.

The top 25 cities in the Global Cities Index and Outlook

Global Cities Index rank

2019	2018	Δ	City
1	1	—	New York
2	2	—	London
3	3	—	Paris
4	4	—	Tokyo
5	5	—	Hong Kong
6	7	+1	Singapore
7	6	-1	Los Angeles
8	8	—	Chicago
9	9	—	Beijing
10	11	+1	Washington, D.C.
11	15	+4	Sydney
12	10	-2	Brussels
13	12	-1	Seoul
14	16	+2	Berlin
15	13	-2	Madrid
16	17	+1	Melbourne
17	18	+1	Toronto
18	14	-4	Moscow
19	19	—	Shanghai
20	22	+2	Amsterdam
21	24	+3	Boston
22	20	-2	San Francisco
23	23	—	Barcelona
24	25	+1	Buenos Aires
25	21	-4	Vienna

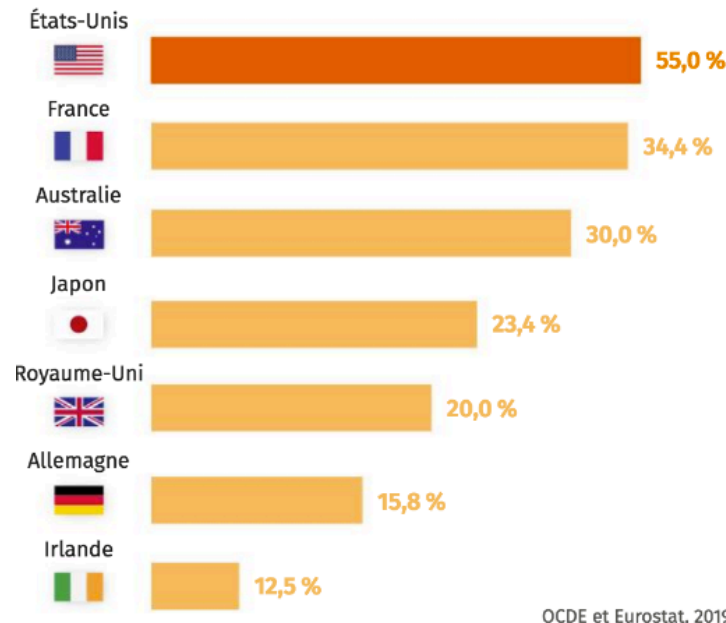
Global Cities Outlook rank

2019	2018	Δ	City
1	3	+2	London
2	5	+3	Singapore
3	1	-2	San Francisco
4	6	+2	Amsterdam
5	4	-1	Paris
6	14	+8	Tokyo
7	8	+1	Boston
8	7	-1	Munich
9	33	+24	Dublin
10	11	+1	Stockholm
11	12	+1	Toronto
12	16	+4	Geneva
13	19	+6	Sydney
14	10	-4	Melbourne
15	13	-2	Zurich
16	18	+2	Berlin
17	23	+6	Copenhagen
18	25	+7	Vienna
19	17	-2	Vancouver
20	50	+30	Abu Dhabi
21	9	-12	Houston
22	20	-2	Moscow
23	21	-2	Montreal
24	2	-22	New York
25	38	+13	Taipei

https://www.kearney.com/global-cities/2019?_hstc=209554509.63296358d602dbfeaa7ebbb3b677644d.1610630701649.1610630701649.1610642679423.2&_hssc=209554509.1.1610642679423&_hsfp=3181483351

Document: Fiscal competition between States to attract TNCs

Average rate of imposition on companies (in %)



2. How does globalization lead to a hierarchical ordering of territories?

Major global cities, metropolises, such as New York, Tokyo, London, Paris, Hong Kong and Shanghai dominate and organize the process of globalization. To illustrate the wealth and by association the influence of certain metropolises, at 1.5 trillion dollars, New York's Gross Urban Product is superior to the GDP of Spain (in 2018) which stood at 1.42 trillion dollars.

Metropolises are also emerging rapidly in the South, for example Mumbai in India, Sao Paulo in Brazil and Johannesburg in South Africa. However the three most powerful regions, sometimes referred to as the triad, still dominate the global economy: the megalopolis of the North-East USA, the Japanese and European megalopolis.

Coastal zones are also at the heart of globalization since they form the interface with the principal maritime axes. Cross-border spaces are also very important such as the US-Mexico border. It concentrates large flows of both a legal (goods and services) and illegal character (illegal migration, illegal products). Globalization thus reinforces socio-spatial inequalities and leads to a hierarchisation of territories. Areas which are marginal to this process develop into negative spaces (antimondes in French) which are marked by isolation and the presence of many illegal activities.

In sum, areas of power in both the North and in Asia with high levels of human and economic development dominate the planet, although these areas are growing less quickly due to successive economic crisis and massive inequalities. Next come emerging territories such as those in the BRICS which are becoming more important and experiencing rapid level of growth. Finally, there are the regions that are exploited by the great powers. These

include other southern countries, scarred by conflict, with low levels of development and often include enclaves. They are collectively known as the least developed countries. The 47 such states, mainly located in sub-Saharan Africa, are frequently conflict torn but still play an integral role in globalization due to raw material resource exploitation by TNCs and by FDI by states such as China.

DOCUMENT: North and South, outmoded terms?

The North/South division is story that is about to end. It remains correct that if one maps the human development index scores, then the majority of the poorest states of the world are in sub-Saharan Africa...

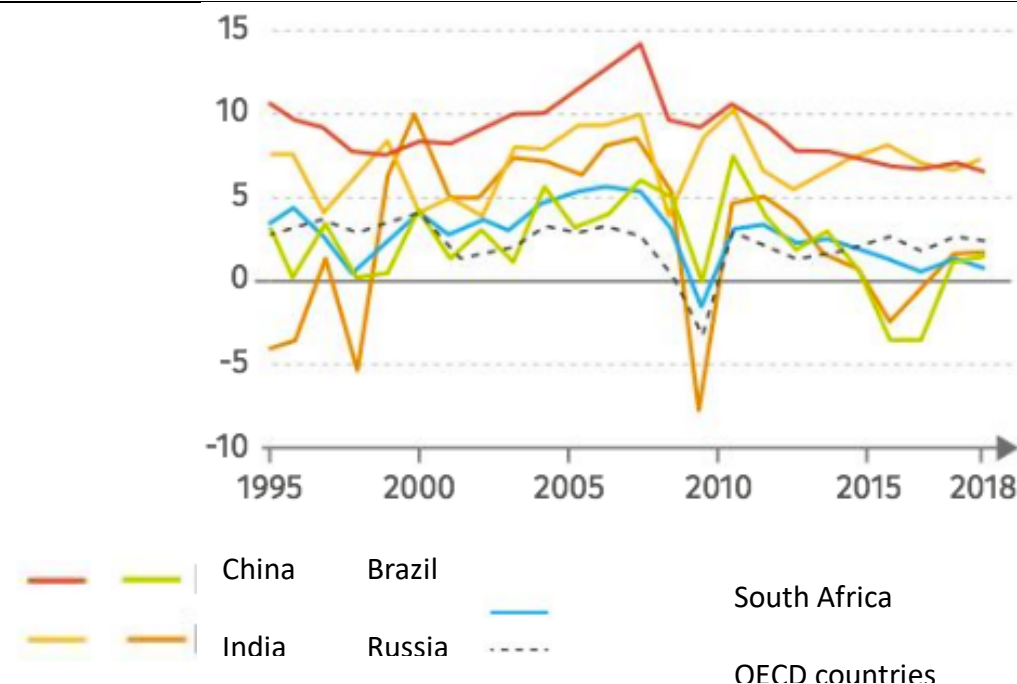
This division developed after the Second World War in the political context of decolonization. We subsequently used the terms 'developed countries' and 'less developed countries'. The corollary to this idea would be to say: 'We were all poor societies. But bit by bit we have taken steps to become developed'. This is progress.'

This North/South pairing is still widely used today but it is increasingly irrelevant. In terms of classifying countries, certain states in the South (geographically) can be classed as Northern countries and vice versa. The appearance of the emerging countries and the BRICS has called into question the North/South division.

The distinction between 'Northern countries' and 'Southern countries' is basically a western-centric vision of the world.

Translated from a conference by Christian Grataloup, Cafés géographiques, 2015.

Document: Comparison of growth in developed countries and BRICS



3. How does cooperation among actors affect globalization?

International Organizations

At a global scale, cooperation between States promotes competition for a better level of integration within the global economy. It also encourages the deregulation of exchanges through the decisions of major actors such as the World Bank, International Monetary Fund and the World Trade Organization and international summits of major powers such as the G7 and G20.

The WTO promotes free-exchange and help States resolve their differences and limits customs barriers. The IMF's mission is to maintain global economic stability and intervene in case of international crisis and by lending money to countries with balance of payments difficulties. The World Bank seeks to reduce inequalities by granting financial aid to promote development.

However, the decisions and actions of these institutions are controversial since their structural adjustment programmes impose austerity of States in crisis.

DOCUMENT: Extracts from: 'IMF and World Bank complicit in 'austerity as new normal', despite availability of alternatives'. 12 February 2020 by **Bretton Woods Project**



In October, a [report](#) by Matthew Cummins and Isabel Ortiz, entitled *Austerity: The New Normal; A Renewed Washington Consensus 2010-24*, established that most governments are on track to reduce public spending, as a percentage of [GDP](#) and nominally adjusted by [inflation](#), at least until 2024...

The report detailed that an initial phase of fiscal stimulus in response to the 2008 financial crisis was followed by a distinct second phase starting in 2010, in which governments started to reduce spending. This fiscal contraction phase is projected to continue at least until 2024

and is “characterised by shocks [in total spending] in which adjustment deepens, the first occurring in 2010-11, the second taking hold during 2016-17, and a third expected to initiate in 2020.” According to the report, this “forthcoming adjustment shock is expected to impact 130 countries in 2021 in terms of GDP,” adding that “the developing world will be the most severely affected,” and that “projections indicate that austerity will affect approximately 5.8 billion persons by 2021 – about 75 per cent of the global population.

The projected austerity measures include pension and social security reforms; cutting or capping the public sector wage bill; labour flexibilization reforms; reducing or eliminating subsidies; increasing regressive consumption taxes; strengthening public-private partnerships (PPPs); and privatising public assets, all of which exacerbate inequalities.

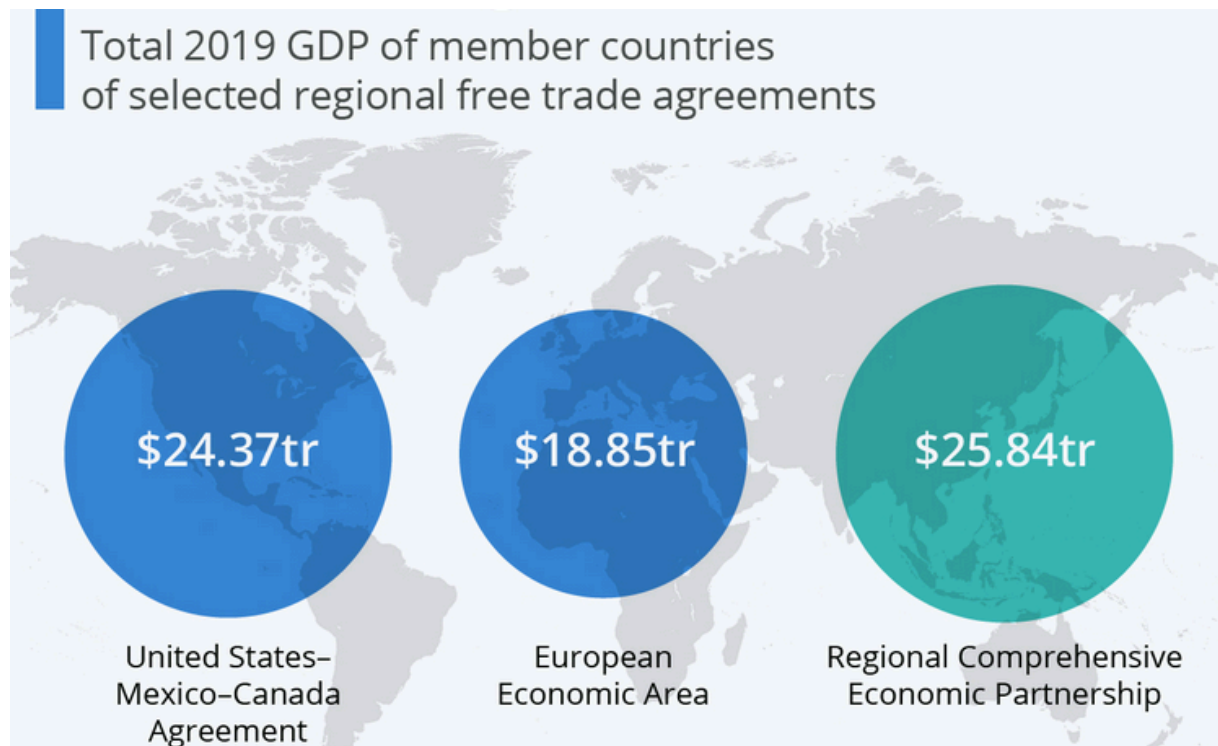
The IMF’s November working [paper](#), *Doing more with less: How can Brazil foster development while pursuing fiscal consolidation?* ... argues that Brazil has “room for public savings of about 3 per cent of GDP per year in the health and education sectors,” which, it estimated, is what would be “required...to reach satisfactory progress in the Sustainable Development Goals [SDGs]... given Brazil’s current fiscal consolidation needs.” As [pointed out](#) on online news platform *openDemocracy* in April, data indicates that three years of deepening austerity policies in Brazil have already led to a further lowering of GDP and an increase in public debt, while exacerbating social inequalities to detrimental effects, undermining Brazil’s ability to achieve its SDG (Sustainable Development Goals) targets.

A September [white paper](#) by the World Bank on rethinking social protection systems, meanwhile, was premised on the idea that governments can only finance a minimum safety net of last resort if, “they scale back widescale public social insurance schemes, lower the size of social insurance contributions and put greater emphasis on privately-managed mandatory and voluntary individuals savings and insurance schemes,” according to an October [blog](#), published by UK-based consultancy organization Development Pathways. In doing so, it argued, the World Bank proposed “a rollback of existing rights and protections for workers, both in terms of social security and labour market protections.”

<https://www.cadtm.org/IMF-and-World-Bank-complicit-in-austerity-as-new-normal-despite-availability-of> accessed 15/01/2021

Regional Organizations

Commercial agreements at a regional scale facilitate free trade, and flows of merchandise, capital and information at negotiated tariff rates e.g. EU, ASEAN) or concern flows of raw materials (such as OPEC which regulates oil exports). Numerous cross border projects and development corridors also lead to joint projects intended to link up infrastructure and further promote trade. Co-operation at this scale is led by public State actors particularly from the more developed North. Private actors, such as TNCs invest in projects to develop their activities whilst Non-Governmental Organizations undertake development projects.



<https://www.statista.com/chart/23503/combined-gdp-of-regional-trade-blocs/>

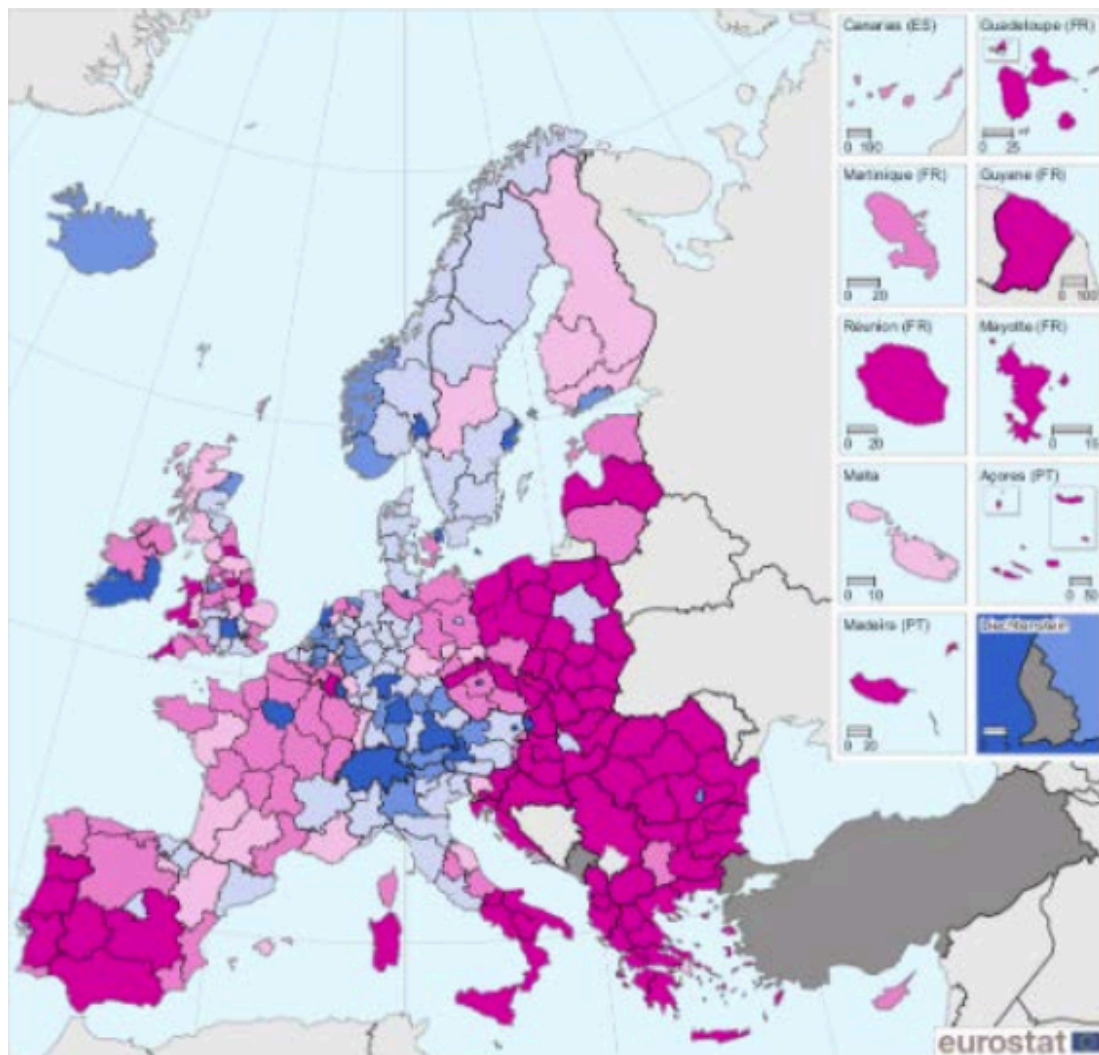
Document E.U. territorial inequalities: North-South Divide

The Gini coefficient is the most common measure of income inequality used internationally. It compares each household's income position to that of all other households in order to measure income distribution. For the EU-28, the Gini coefficient was around 30.7 % in 2017. The highest income disparities of at least 35.0 % were recorded in Bulgaria and Lithuania. A group of countries –Estonia, Italy, Romania, the United Kingdom, Greece, Portugal, Spain and Latvia – had a Gini coefficient above the EU-28 average (31.0 % – 34.5 %). On the other end of the spectrum were countries with a more even income distribution (26.0 % or less): Slovakia, Slovenia, the Czech Republic, Finland and Belgium.

Gini coefficient Definition

The Gini coefficient (sometimes called Gini index) measures the extent to which the distribution of income within a country deviates from a perfectly equal distribution. A coefficient of 0 expresses perfect equality where everyone has the same income, while a coefficient of 1 expresses full inequality where only one person has all the income. It can also be presented as a percentage with values ranging from 0 to 100.

GDP per inhabitant relative to EU average, 2016



EU average = 100



[https://www.europarl.europa.eu/RegData/etudes/BRIE/2019/637951/EPRS_BRI\(2019\)6379_51_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/BRIE/2019/637951/EPRS_BRI(2019)6379_51_EN.pdf)

Document a: Extract from the summary

To date, the European Union institutions have focused on the reduction of inequalities between Member States. However, the differences in average income only explain a small proportion of inequalities in Europe which are mainly the outcome of levels of inequality within countries. Consequently, European Union policies have difficulty in promoting more inclusive forms of growth. The rate of poverty in Europe which stands at 21% is the same today as it was in the mid-2000s.

While inequalities in Europe are significantly lower than in the United States, this is largely because the social and fiscal policies of the European States enable a more egalitarian distribution of income before taxation: in particular the educational and health systems are more egalitarian than in the United States. In future, if the European Union wishes to contain the rise in inequalities on the continent, it will have to create conditions for the long-term and equitable financing of the public services, in particular via more progressive taxation on individuals and firms at European level.

Document b: Extract from the conclusion

Thus, if the European Union wishes to contain the rise in inequalities in the future, it will have to give more support to Member States in their policies reducing inequalities. This involves in particular the implementation of common fiscal policies in order to end the race to the lowest tax rates in which Member States have been engaged for the past three decades. The implementation of a common set of policies for the income tax, the wealth tax or the corporate tax would not only enable the level of fiscal progressiveness to be raised in Europe (on the whole these are lower than in the United States) but also to finance in a progressive manner the high levels of social expenditures in Europe, which play an essential role in the reduction of pre-tax inequalities.

<https://wid.world/document/european-inequality-wil-summary-2019-en-pdf/>

What are the tensions and limits of cooperation?

Tensions and competition between territories reinforce protectionism

Tensions between States can be highly detrimental for co-operation. Bi-lateral agreements are often preferred in place of multilateral accords. The USA, for example, since 2017 has put much more effort into bi-lateral accords between countries such as the UK and Japan whilst simultaneously withdrawing from international agreements which are considered less relevant for their interests (e.g. the Vienna accords on the Iranian nuclear program and the Paris climate agreement).

States have also returned towards protectionist practises. Such moves throw into question the efforts made to reduce import barriers since protectionist practises mean protecting domestic economies from international competition (USA, Brazil) and relocating industrial activities. Examples include the American companies of Ford and Fiat-Chrysler which have displaced Mexican factories to Michigan and Ohio.

Competition between territories is also expressed at a local level since financial centres are in fierce competition with each other and their place in the global hierarchy is undergoing change. For example, the historic domination of New York and London has been threatened by new centres such as Shanghai and Hong Kong.

Limits to cooperation

A number of relationships have undergone changes in recent years. Following the Ukrainian crisis of 2014, Russia was excluded from the G8 and placed under international sanctions. Venezuela's membership of MERCOSOR was suspended in 2016 and the EU has been weakened by BREXIT with the UK withdrawing from the organization in 2020.

New agreements such as the abandoned TTIP (Transatlantic Trade and Investment Partnership) between the EU and the USA and CETA (Comprehensive Economic and Trade Agreement) between Canada and the EU have the potential to increase trade and employment but have also been criticised.

DOCUMENT: CETA toxic in France, why not in Canada?

Sujata Dey

On July 23 2019, the French National Assembly ratified the Canada-European Union Comprehensive Economic and Trade Agreement (CETA). At the same time, in Montréal, a group of EU and Canadian politicians were celebrating this apparent victory. While there was little criticism in Canada, a big political storm was brewing in France.

In fact, only a minority of French parliamentarians voted for the agreement. With 266 votes in favour, 213 against and 74 abstentions, there was not a clear majority for CETA. Only members of President Emmanuel Macron's ruling party, La République en marche, and a few members of the MoDem Party supported the agreement. Within the president's party, it

was the most contested policy ever put to a vote. Nine members voted against the agreement.



Meanwhile, on this side of the Atlantic, while many criticize the agreement, the government's blind faith in CETA is unfazed. Even while trade statistics show that Canada's exports to Europe have not increased since the provisional implementation of the agreement almost two years ago, and Canada has had to swallow policies that cut into our farmers' livelihoods, raise drug prices by extending patents, and hurt jobs by restricting our governments ability to buy local.

For example, because of CETA, Via Rail was prohibited from preferring Bombardier as a train supplier, contributing indirectly to job losses in La Pocatière and Thunder Bay. In fact, Canada's trade deficit with the EU has increased \$10 billion, reaching \$30 billion since the agreement went into force, according to economist Jim Stanford, something predicted by EU and Canadian economic studies. And it will only get worse when our largest EU trading partner, Great Britain, Brexits out of CETA.

<https://canadians.org/analysis/ceta-toxic-france-why-not-canada>

Exercises for consolidation of understanding

You could produce paragraph based or spider diagram responses. What is important is to understand the key concepts so you can draw on this case study as a country level study in either a DBQ or essay.

Use: What is the Role of Actors in Globalization?

1. Identify examples of the different actors in globalization (International Organizations, States and TNCs) and explain their role.

Use Document: 2019 Global Cities Report

2.

a) What criteria is used to determine city rank in the Global Cities report? Why is there competition between these cities?

b) What patterns exist in the Top 10? What conclusions can be drawn from the index rank and outlook rank positions of these cities?

Use: How does globalization lead to a hierarchical ordering of territories?

3. Why can territories be described as being ordered in a hierarchy due to globalization?

Use document: North and South, outmoded terms? AND Comparison of growth in developed countries and BRICS

4. To what extent are the terms 'North' and 'South' still relevant?

Use: How does cooperation among actors affect globalization? AND Extracts from: 'IMF and World Bank complicit in 'austerity as new normal', despite availability of alternatives'

5.

a) How do international organizations promote cooperation?

b) How is the impact of the contraction in government spending which began in 2014 likely to be felt in developing countries?

c) 'The IMF and World Bank recommendations for Brazil's economy, in terms of *'pursuing fiscal consolidation ... (and) ... rethinking social protection systems'* are viewed as likely to diminish its ability to meet the UN SDGs'. Explain why.

Use: Document E.U. territorial inequalities: North-South Divide AND Map AND Has the European social model withstood the rise in inequalities?

6.

a) To what extent is a regional North-South divide visible within the EU in terms of national economies?

b) Why has the EU poverty rate remained constant between 2000 and 2019?

c) How could these inequalities be addressed?

Use: What are the tensions and limits of cooperation? AND CETA toxic in France, why not in Canada

7.

a) How has the return of bi-lateralism and protectionism placed tension or limits on international cooperation?

b) What is Ceta? Why has it been criticised?

Case Study: Integration of the Caribbean Islands and West Indies into globalization



The West Indies and the Caribbean are located close to the north American population centre and form a major tourist basin at a global scale, notably for pleasure cruises. Tourism is a critical tool of development and integration for this region. Following the example of Florida and Miami, cruise ship capitals, numerous territories have developed resorts and these include St Dominic, the Bahamas and the West Indies archipelago. The clientele are mostly from the USA and the proximity of the USA has led to the delocalization of many companies in the free zones that have been established in many of the islands, particularly the Dominican Republic and Trinidad and Tobago. Innumerable financial flows emanating from North America and Europe are also concentrated in the fiscal paradises on the Cayman Isles, Bahamas, Panama and Aruba. The EU also makes its presence felt in this region in terms of tourism and FDI. China has also begun investing in the fiscal paradises as have those countries with resist US domination: Cuba and Venezuela.

Integration and globalization has clearly reinforced disparities between the islands of the Caribbean basin. Certain emerging countries have benefitted from comparative advantages. Aruba, the Caymans Isles and the Bahamas already have a HDI score in excess of 0.8 whilst other territories are excluded from this process. Haiti is the only less developed country in the region.

This development gap feeds migration flows, often illegal in nature, towards the USA. Florida and Texas receive immigrants from both Central American and the Caribbean basin. The USA

has sought to limit such flows via the construction of walls facing Mexico and Cuba. However under development inevitably leads to illegal migration flows. Two principal axes of such flows exist, one crossing Central America and the other stretching from the West Indies to Florida.

The Port of St-Thomas in the Virgin Isles, USA

This US territory is a free zone and attracts two million tourists annually. It is also a fiscal paradise.



Tourism: economic motor of the region

Pays ou territoire	Touristes internationaux, en milliers		Croisiéristes (2015), en milliers	Recettes liées au tourisme (en millions de \$)
	2010	2017		
Aruba	824	1 070	667	1 733
Bahamas	1 370	1 439	4 804	2 598
Cuba	2 531	4 594	n.d.	3 302
République dominicaine	4 124	6 188	435	7 178
Jamaïque	1 926	2 353	1 423	2 809
Martinique - Guadeloupe	476	489	177	NC
Porto Rico	1 368	3 797	1 356	4 090
Saint-Martin	443	2 001	2 001	646

Extracts from the Executive Summary:

Migration In the Caribbean: Current Trends, Opportunities And Challenges **25 Sept 2017**

In 2007, the Caribbean emigration rate was four times higher than Latin America's overall emigration rate. The Caribbean emigration rate has somewhat slowed, but the region nevertheless remains an area of net emigration. Guyana and Saint Vincent and the Grenadines show the strongest emigration movements: 9.65 and 9.6 per 1000 people respectively were emigrating in 2013. Of the countries included in this study, the only confirmed² net recipients of migrants are Antigua and Barbuda and Suriname, with

immigration rates of 2.23 and 0.57 per 1,000 respectively for 2013 (CIA World Factbook, 2015).

In absolute terms, Cuba, the Dominican Republic and Haiti have the largest diaspora communities: over a million emigrants each, with most living in the United States (World Bank, 2015). Guyana and Haiti are, in absolute terms, the primary countries of origin of intraregional migrants. In relative terms, Guyana and Saint Vincent and the Grenadines have the most emigrants. Respectively, the emigrant population is 58.2 per cent and 55.5 per cent the size of the population living at home (World Bank, 2015).

Over half of total Caribbean migrants to the US, Europe, and Canada are women. Furthermore, migrants are predominantly of productive and reproductive age. Cubans form an exception – the largest group of Cuban migrants is aged 45 and over (Thomas-Hope, 2000).

The Caribbean islands are especially vulnerable to extreme weather events and global climate change – events and processes that can cause internal displacement and set in motion emigration processes. Haiti and the Dominican Republic are amongst the world's countries most vulnerable to climate change: they occupy the third and eighth place on the Global Climate Risk Index (Kreft et al. 2015).

<https://reliefweb.int/report/haiti/migration-caribbean-current-trends-opportunities-and-challenges>

<p>Overview of the Dominican Republic's free zone sector By the General Directorate of Customs, Dominican Republic</p>
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By 2017, the free zone sector in the Dominican Republic consisted of 71 parks, bringing together 665 companies. The Free Zone Parks generate 165,724 direct jobs and account for exports amounting to just under 5,695 million US dollars. Industries established in the country's free zones are known for their production capacity and quality.

The free zone sector is a key driver of the country's development, creating jobs, generating foreign trade, and fostering technology transfer. In evaluating the sector, all the variables grew in 2018, with exports from free zones exceeding six billion US dollars, representing over 60% of the country's total exports. The dynamic nature of the sector is also worth noting: there are currently Free Zone Parks in 27 of the country's 32 provinces and, in 2018, a total of 126,095 imports, 75,091 exports and 157,284 merchandise transfers between companies were registered.

However, it has been detected that companies, which are not part of the free zone sector, have been trying to declare goods under this regime in order to benefit from import exemptions granted to free zone participants. Fortunately, these non-participating companies have not had much success, due to the vigilance of the Dominican Republic's General Directorate of Customs.

<https://mag.wcoomd.org/magazine/wco-news-88/overview-of-the-dominican-republics-free-zone-sector/>

Viewed regionally, the HDI (Human Development Index: a composite measurement based on health, education and economy) for the states of the Caribbean is above the world average. Only seven countries find themselves below the average of 0.693 in 2012, amongst whom one is very close: Suriname. The most worrying situation is that of Haiti, with an index 34% lower than the world average.



Rodolfo Sabonge: Making the Caribbean connection***Ria Chaitram Sunday 20 December 2020***

It has only been one month since the new general secretary of the Association of Caribbean States (ACS) took up office in Port of Spain, but he already has plans to significantly upgrade the convention of the organization to fit the changing landscape.

The ACS was formed in 1994 with the signing of its convention in Cartagena de Indias, Colombia. It aimed to provide a platform for dialogue for the 35-member and associate states which would allow dialogue in areas of common interests, concern, opportunities and solutions at a regional level.

He said an efficient ferry service was one of the mechanisms to achieve this and because of the large geographical spread. The transportation hub, which should include air sea and land, should be broken-up into various stations to accommodate trade and the movement of people.

Sabonge said, "To get an initiative like that going we need to remove a lot of barriers such as trade, health, immigration and a lot of the processes that have blocked harmonisation in the region.

"Digitalisation is a major part of this transition. If we are able to have other countries within the same digital platform then we can start facilitating trade, people and cargo. Competitiveness will be improved because we will now be facilitating intra-trade and international trade."

With this type of interconnectedness, protection of each sovereign states' borders and people become grave concerns. Security issues in a region that was already plagued with numerous cases of drug, human and animal trafficking, just to name a few are issues governments continue to struggle to get a handle on.

Sabonge's belief is that proper monitoring and control, by establishing good border controls at the transportation hubs, can be a mitigation mechanism in this fight. "For security nowadays, it is not just having physical security but having intelligence. Developing the intelligence network, understanding risk and how to manage it should be taken into account," he posits.

At the recently concluded Caricom-Cuba summit, participating members agreed to continue receiving covid19 assistance from Cuba and to also work towards covid19 management and the possible application of innovative Cuban biotech medicines, as epidemiological conditions in the region showed a common trend. This type of cooperation and inclusivity was welcomed by Sabonge.

And while manoeuvring covid19 was important for all nation-states, Sabonge said the pandemic has shown the importance of diversification and investments in areas taken for granted.

He said, “We need to diversify our economies. What covid19 showed was that food security was most important and if you do not have it and accustomed to importing it, then you see it was not easy.

“It also showed that instead of bring things from far away, you can now look to your neighbours. This has taught us to look at regional supply and demand of not only food, but every other product.”

Sabonge urged for cultural barriers to be broken because the Latin America and the Caribbean had many similarities. Rather than looking at the differences, he said, the similarities offered much more positive opportunities.

“Diversity is not bad; it increases the value of a culture. Many of the small islands have a French, Spanish or English background and you need to look at all of them as one.”

<https://newsday.co.tt/2020/12/20/rodolfo-sabonage-making-the-caribbean-connection/>

Exercises for consolidation of understanding

You could produce paragraph based or spider diagram responses. What is important is to understand the key concepts so you can draw on this case study as a regional study in either a DBQ or essay.

1. Identify the advantages of this region which aid its development.
2. Explain how tourism is a tool for integrating the Caribbean and West Indies into the wider global economy.
3. Comment on the persistence of inequalities across this region.

Case Study: How has Russia integrated into globalization?

Document: Russia Integrates: Deepening the Country's Integration in the Global Economy

Russia's early development successes resulted from undertaking ambitious structural reforms, a commodity cycle boom, and taking steps to promote greater economic openness, including becoming a member of the WTO in 2012. Between 2000 and 2012, Russia's gross domestic product (GDP) rose on average by 5.2 percent a year, slightly below the 5.8 percent average for all upper middle-income countries over the same period, but above the 2.9 percent average for the global economy as a whole.

Per capita GDP in real terms grew by about 80 percent between 2000 and 2012 (from 14,615 US Dollars to 26,013 US Dollars in purchasing power parity (PPP), 2017 prices).

Since 2003, Russia has been the sixth largest economy in the world in PPP terms, moving up from ninth position in 2000. A favourable external environment and strong macroeconomic fundamentals facilitated inclusive growth throughout the 2000s. Structural policies were also key drivers of growth, reflecting the impact of reforms and structural changes launched during this time.

Breaking the 2000s decade into early and late periods reveals that structural policies were the key driver of growth in the early 2000s (2000 to 2005). With better terms of trade, the contribution of the external environment to growth improved significantly from 2005 to 2010.

Prudent macroeconomic management and booming oil revenues facilitated fiscal surpluses, a reduction in external debt, and a rise in reserves. This helped Russia to respond with strong countercyclical policies to the recession during the 2008–09 Global Financial Crisis, limiting its impact on the economy.

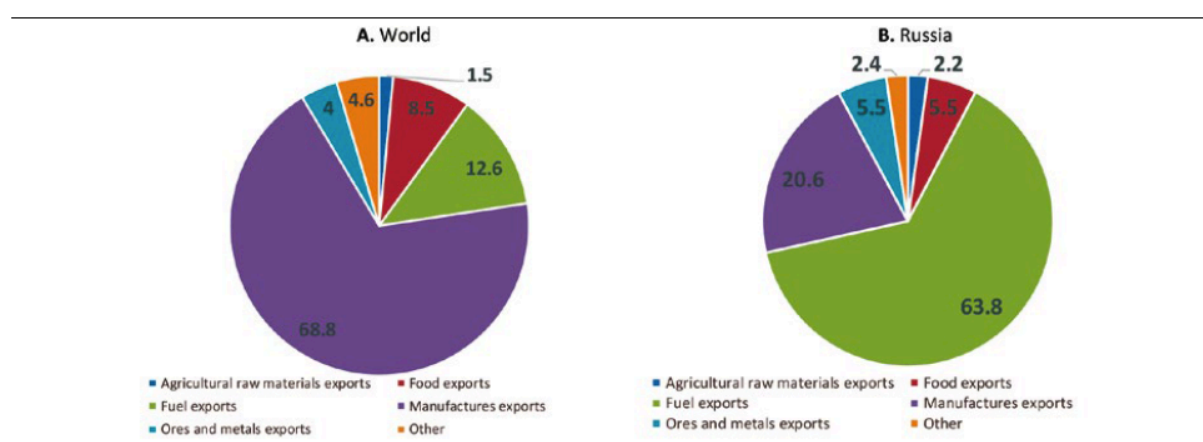
Meanwhile, potential growth estimates for Russia show that it peaked before the Global Financial Crisis and has since continued to decline. The estimated potential growth rate — the rate at which the economy can grow when labour and capital are fully employed — was 3.8 percent in 2000–09 and 1.7 percent in 2010–17.² This deceleration was due to a slowdown of productivity growth and a shrinking potential labour force, rather than a shortfall in capital accumulation.

In 2014, the economy suffered from adverse oil price shocks and the imposition of economic sanctions, which led to Russia becoming more insular and less integrated globally. One manifestation of this has been reduced foreign direct investment (FDI) inflows since 2014. Although economic activity in Russia has continued to recover from the 2015-16 recession, potential growth has continued to decline. A weakness in potential growth is not specific to Russia. Potential growth has been adversely affected in both advanced economies, where it was evident even before the Global Financial Crisis, and emerging markets and developing economies, especially since 2010-12. However, a faster-than-average decline in Russia's potential growth has raised concerns about its medium-term prospects and the risks of stalled convergence in GDP per capita with advanced economy levels.

Published by World Bank, 14/12/2020

<https://openknowledge.worldbank.org/handle/10986/34994>

Document: Global and Russian Exports Compared



Source: Comtrade

Document: What future for EU-Russia relations?

Sabine Fischer and Ivan Timofeev

Nov 9th 2020

The EU has been debating recently whether it should keep, amend or discard the five guiding principles for its Russia policy. When they were adopted in 2016, two years after the outbreak of the Russian-Ukrainian conflict, EU-Russia relations seemed to have hit rock bottom. However, developments since proved otherwise.

Mutual accusations of interference in elections and domestic affairs, the Salisbury incident, and, most recently, discord over the Navalny poisoning and the political crisis in Belarus have taken the relationship to even lower levels.

Today, the atmosphere between the EU and Russia is characterized by escalating contradictions and new sanctions, as Moscow and the EU are losing interest in each other. Negative trends in EU-Russia relations are strong, but not irreversible. It will depend on both sides whether relations will improve – or descend further into conflict in the coming decade. Such is the conclusion made by the EU-Russia Expert Network on Foreign Policy.

EUREN, an initiative of the EU Delegation to Moscow and the Russian International Affairs Council, is one of the few remaining platforms bringing together experts from the EU and Russia. It has just published a [Report on alternative futures of EU-Russia relations in 2030](#).

The first scenario takes the EU and Russia to the brink of war. The West rebounds after the COVID-19 pandemic. Putin still rules in Moscow. The Russian political system is authoritarian, based on state capitalism and the suppression of political opposition. An assertive and nationalist foreign policy helps to secure domestic legitimacy. NATO consolidates around the Russian threat. The negative dynamic between the Washington and Moscow leads to a new arms race, increasing hostility and, eventually, military confrontation.

In the second scenario, the EU disintegrates and the European continent descends into anarchy. EU member states prove unable to cope with the COVID-19 pandemic. Populists become the dominant political force. A radical course is gaining the upper hand in Russia, too. The United States is engrossed in a Cold War with China and forms selective coalitions with individual European states. In 2029, the Donbas conflict re-escalates and former European and transatlantic allies turn on each other.

The third scenario is the result of a political transition in Russia. Public protests bring to power a young politician with pro-Western ideas in 2024. He sets out to normalize relations with the EU. Russia no longer supports the breakaway territories in the Donbas, which paves the way for a sustainable resolution of the conflict. In response, the EU starts to lift the sanctions. By 2030, the EU and Russia are united in a “community of values”.

In the fourth scenario, both Russia and the EU cope successfully with the consequences of COVID-19. Russia is led by a technocratic leader, Vladimir Putin's successor. He successfully pursues administrative and economic reforms and curbs corruption. The investment climate is improving. Moscow opens up to a partial normalization of relations with the EU. Meanwhile, the EU transforms into a more active international player. Its diplomacy helps to facilitate the implementation of the Minsk Agreements. However, key security and political issues, including the discord over Crimea, remain unsolved. Relations between Russia and the EU turn into a "cold partnership."

Clearly, many in the EU would prefer the "community of values" scenario to become true by 2030.

A collapse of European integration may be the dream of Russian conservatives. EUREN members believed a "cold partnership" to be the most plausible scenario for the future of the relationship.

The EU and Russia will not be able to overcome their disagreements in the coming decade. But if they so choose, they can come to a pragmatic partnership that safeguards peace and stability in Europe.

<https://www.euractiv.com/section/global-europe/opinion/what-future-for-eu-russia-relations/>

Document: Permanent Mission of the Russian Federation to the European Union

Brief overview of relations

Russia and the EU enjoy intensive trade and economic relations. In 2015 trade with the EU accounted for 45 per cent of Russia's total foreign trade volume. For its part, Russia is EU's fourth largest trade partner which in 2015 accounted for 6 per cent of its foreign trade. In 2015, after visible contraction in comparison with 2013-2014, trade volume between Russia and the EU stood at 209.5 billion euros. EU companies make up a significant share of total investments to Russia. Russia firmly holds the position of key energy supplier to the EU, satisfying the EU demand for crude oil, natural gas and coal by a third.

Russia and all EU Member States are members of the United Nations, the Organisation for Security and Cooperation in Europe and the Council of Europe. In view of spreading cross-border threats and challenges Russia is interested in strengthening cooperation with the European Union in countering terrorism, organized crime, illegal migration, human trafficking and illicit drug trade. Furthermore, there is obvious interest in joining efforts in mitigating the effects of climate change.

<https://russiaeu.ru/en/brief-overview-relations>





An immense and unequally integrated territory











Development inequalities (HDI)



Special Economic Zones (SEZ)

-  Scientific Innovation zones
-  New SEZs (2014)
-  Port or industrial zones
-  Tourist development zones

Infrastructure enabling integration at different levels

-  Major ports undergoing development
-  Northern maritime route
-  International airports
-  Bridge connecting the Crimea and the Caucasus (2018)
-  Gas pipeline projects
-  Natural Liquid Gas Factories project
-  High speed rail line project
-  Infrastructure linked to 2018 Football World Cup

Exercises for consolidation of understanding

You could produce paragraph based or spider diagram responses. What is important is to understand the key concepts so you can draw on this case study as a country level study in either a DBQ or essay.

Use Document: Russia Integrates: Deepening the Country's Integration in the Global Economy

1. Explain how potential growth in Russia has encountered limits in the decade 2010-2020.

Use Document: Global and Russian Exports Compared

2. Explain and comment on how the pattern of Russian exports differs from that of global exports.

Use Documents: What future for EU-Russia relations **AND Permanent Mission of the Russian Federation to the European Union**

3. Survey the extent of economic and foreign relations between the EU and Russia.
4. How does the EERACTIV media network report see the EU-Russia relationship evolving over the course of the next decade?

Case Study: Development corridors in Latin America: a tool for integration and opening up.



Document: Belt and Road in Latin America: A regional game changer?

Pep Zhang

October 8th 2019

With one hundred and thirty-one countries signing on, and with more than \$575 billion worth of investments mobilized, the Belt and Road Initiative (BRI) could mark a paradigm shift in infrastructure development around the world. Will it help to advance countries' prosperity through improved interconnectivity, or is it primarily focused on extending China's reach? The answer is neither simple nor binary. Much depends on how BRI projects

are conceptualized, implemented, and enforced, and which interests are driving these actions.

Inspired by the ancient Silk Road trade routes, China initiated BRI in 2013 primarily as a project linking Eurasia through physical infrastructure, but it has since expanded into other sectors and regions. By late 2017, Beijing had formalized Latin America and the Caribbean as a “natural extension of the 21st Century Maritime Silk Road.” In November 2017, Panama became the first Latin American country to officially endorse BRI, five months after switching diplomatic ties from Taiwan to China. In the next two years, eighteen of the thirty-three countries in the region would join BRI, with some notable exceptions. Argentina, Brazil, Colombia, and Mexico—the four largest economies in the region, accounting for nearly 70 percent of its GDP—have closely followed the initiative, but have yet to sign on (**UPDATE: Argentina joined the BRI in early 2022**).

Many Latin American governments and companies consider BRI an opportunity for furthering international engagement. As in other regions of the world, a main allure of BRI is expanded access to China, a growing export destination and source of external financing. Over the past twenty years, China has transformed from one of the region’s modest commercial partners to one of its most important. Bilateral trade grew twenty-five times, from \$12 billion in 1999 to \$306 billion in 2018, placing China as Latin America’s second-largest trade partner, after the United States.⁴ Since 2005, Chinese policy banks have provided more than \$141 billion in loan commitments to Latin America—exceeding, in several years, the lending of the World Bank, the Inter-American Development Bank, and the CAF Development Bank of Latin America combined.⁵ China is also becoming an increasingly important foreign direct investor for the region, especially through mergers and acquisitions.⁶

... for many in Latin America and the Caribbean, BRI appears a low-risk gamble for greater economic growth and international cooperation—especially at a time of rising protectionism, and in the absence of truly global alternatives. At the minimum, BRI represents a useful mechanism for high-level dialogue and exchange, critical to cultivating long term commercial relations with China and other international players. The second Belt and Road Forum ... held in Beijing on April 25–27 this year ... saw the signing of more than twenty agreements between China and at least one Latin American or Caribbean country, covering different cooperation areas including energy, science, finance, and regulatory coordination. Some agreements involved Argentina, Mexico, and Brazil—each of which has yet to become BRI members, but still followed BRI and sent delegates to attend the BRF.

<https://www.atlanticcouncil.org/in-depth-research-reports/issue-brief/belt-and-road-in-latin-america-a-regional-game-changer/>

Document: Bioceanic Corridor: road from Mato Grosso to the Pacific

Pedro Silva Barros

6 October, 2020

After almost a century, it seems that the antagonism between the Atlantic and the Pacific is beginning to be overcome by road corridors in underdeveloped regions. The bioceanic road corridor is a physical integration project that will connect Porto Murtinho (Mato Grosso do Sul) with the ports of northern Chile, near the Tropic of Capricorn. The first road that crosses the Paraguayan Chaco in an east-west direction is being paved and should be completed in 2022. The sections in Argentina and Chile are ready and need rapid improvement. The resources for the bridge between Porto Murtinho, in Brazil, and Carmelo Peralta, in Paraguay, are already approved by Itaipu Binacional. The completed work is expected to be ready in 2023.



Location of Mato Grosso state, Brazil.

In the last four decades, investment in infrastructure in Latin America has been far below the world average and far below the region's needs... This corridor project was formalized in 2015 ... The Working Group (WG) created by the presidents of Argentina, Brazil, Chile and Paraguay resisted the changes of governments and political orientations in the four countries. The explanation for this exceptionality lies in the global geo-economic changes, the economic dynamism of Mato Grosso do Sul and its neighbouring regions, and the commitment of its sub-national governments.

The enormous Asian economic dynamism has recently exerted an impressive power of attraction. Twenty years ago, less than 2% of Brazil's exports went to China. In 2019, a record 28% was reached. In the first eight months of 2020, the Asian giant alone accounted for 34% of Brazil's total sales. This year, for the first time in history, more than half of Mato Grosso do Sul's exports were to China and more than 2/3 to the Asia-Pacific region as a whole. This movement is one of the factors of the boom of the Brazilian Midwest, an agro-exporter one, in the last four decades. This period coincides with the relative decline of the industrialized regions of the south and southeast.

If Brazil's total exports fell by 7% in the first eight months of 2020 compared to 2019, exports from Mato Grosso do Sul increased by 13% in the same period.

Studies by the Institute of Applied Economic Research (Ipea) and the Planning and Logistics Company (EPL), both Brazilian government institutions, show that logistical gains from

exports through the corridor could reach US\$500 million per year for Mato Grosso do Sul products in exports to the Asia-Pacific region, concentrated in pulp, maintaining current quantities.

The challenge is for the bioceanic corridor to be a catalyst for a development network that extends its benefits beyond the already consolidated export sectors, such as soybean, pulp, and traditional meats. As the corridor makes exports more competitive, it opens up opportunities to promote intraregional trade (which has been declining in recent years) through the development of regional value chains.

The corridor will enable the articulation of small and medium-scale production in central-western Brazil, Paraguay and northwestern Argentina with Chilean production chains that already have structured logistics in Asian markets. The production of dairy products from the Paraguayan Chaco will be expanded to markets in western Brazil and northern Chile.

The land corridor will be much better used if it is linked to the railroads and waterways.

<https://latinoamerica21.com/en/bioceanic-corridor-road-from-mato-grosso-do-sul-to-the-pacific/>

Document: New development corridors partially financed by China



Document : Special Focus: Latin America's Bi-Oceanic Railway Corridor January 2019

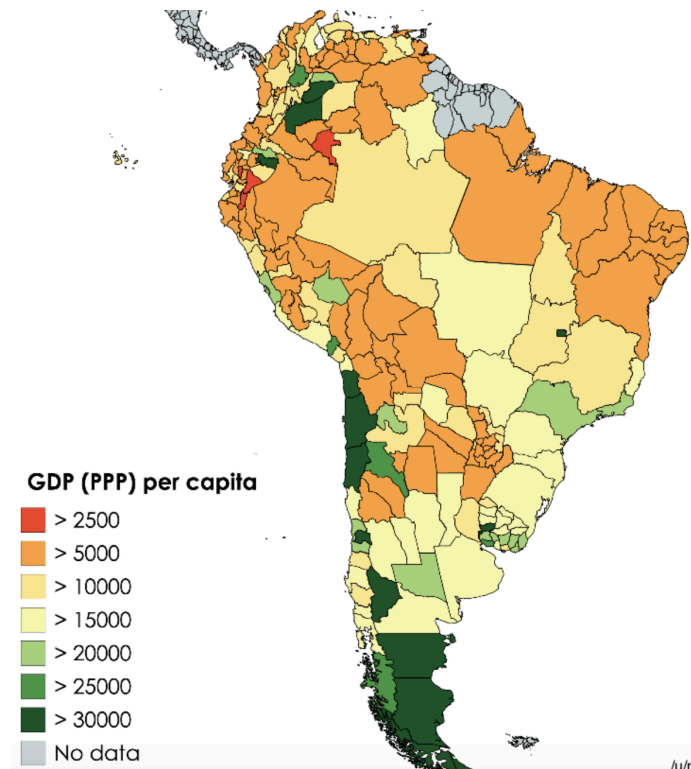
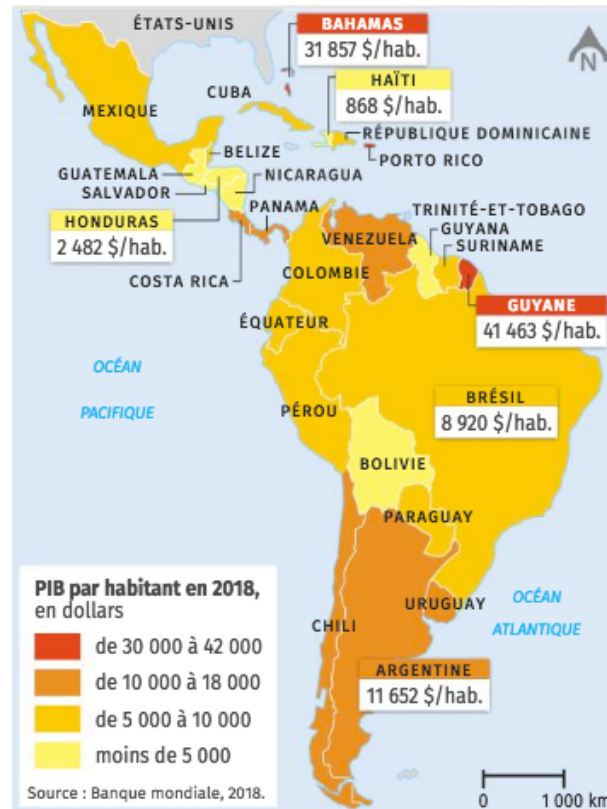
The Bi-Oceanic Railway Corridor aims to join the Pacific ocean with the Atlantic through a railway line running 3,755 km. This project has been dubbed “The Panama Canal of the 21st Century”, and is already considered as the largest infrastructure project in Latin America. The journey will start in Puerto Santo (Brazil) entering Bolivia through Puerto Suárez, passing through the eastern municipalities of Santa Cruz: Montero and Bullo Bullo, until reaching the high plateau of La Paz, to conclude at the Port of Ilo, in Peru. On its way it will cross the Andes mountain range and the Bolivian Amazon Rain Forest. The estimated cost of the works is 13.7 billion dollars. This project aims to increase transport capacity to 10 million tons per year at around 100 kilometres per hour. With regard to passenger traffic, the estimated speed for the transport of up to six million users is 160 km/h, more than double the current one.

The significance of this new connection lies in the major boost it will give to trading exchanges between the surrounding countries, as well as in the increase that exports and imports will experience to other markets, by reducing costs and transport times. Likewise, it will be an axis of territorial integration that will foster economic and social cohesion, thus driving the evolution of the population, sustainable development and improving competitiveness. The corridor will become a bridge between the Atlantic and Pacific Oceans designed to consolidate regional connectivity conditions and take advantage of cross-border synergies. Another of its great advantages for international trade is its increased outreach to the Asian market. In this sense, it is considered that the network would contribute to reduce to 25 days the journey between Brazil and Asia. In this way, the connection times would be considerably reduced.

In order for the entire 3,755-kilometre route to become operational, modernisation and expansion work must be carried out in the countries through which it will pass. On the one hand, in Brazil, 1,900 kilometres of track will be rehabilitated. On the other hand, the construction of another 340 kilometres is scheduled in Peru, between La Paz and the port of Ilo, the adaptation of the Brazilian infrastructure in the borders and the branch of Paraguay, which in turn would connect with Uruguay and Argentina. The bulk of the works will take place in Bolivia, through which 1,894 kilometres of the network will run. In this territory, around 1,500 kilometres of track must be modernised or added. It is in this country where the largest investment is planned (between 7 and 10 billion dollars / 8.163 and 11.661 billion euros) since it is necessary to connect its two rail networks (the Andean and the Eastern). Furthermore, 500 kilometres of network have to be built to connect Santa Cruz de la Sierra and Oruro / Cochabamba. In turn, the railway infrastructure must be updated to improve operations, since tons per axle and a speed of 70 kilometres per hour for passengers and 40 for freight.

<https://railbus.com.ng/index.php/policy/special-focus-latin-americas-bi-oceanic-railway-corridor/>

Document: Latin American GDP Disparities and South American national subdivisions by GDP per capita



South American national subdivisions by GDP per capita

Based on annual gross domestic product, which is the total amount of goods and services produced in a nation per year, Brazil heads the regional ranking, accompanied by Mexico, Argentina, and Colombia.

Uruguay is the South American nation with [the highest average income per capita](#), with about 16,190 U.S. dollars per person per year (2019). Chile ranked second, recording a gross national income of 14,896 U.S. dollars per person, based on current prices.

Mercosur: South America's Fractious Trade Bloc

Claire Felter, Danielle Renwick, and Andrew Chatzky

July 10th 2019

Mercosur is an economic and political bloc comprising Argentina, Brazil, Paraguay, Uruguay, and Venezuela. Created during a period when longtime rivals Argentina and Brazil were seeking to improve relations, the bloc saw some early successes, including a tenfold increase in trade within the group in the 1990s. However, many experts say Mercosur has since failed to live up to its ambitions of integrating the region.

In recent years, some have also questioned the bloc's commitment to democracy, especially since right-wing presidents in Argentina and Brazil have downplayed the severity of their countries' military dictatorships in the 1970s and 1980s. Mercosur's one-year suspension of Paraguay in 2012 and indefinite suspension of Venezuela in 2016 have also revealed fractures within the group.

However, Mercosur economies have recently signalled a willingness to open to other markets, reaching a landmark trade deal with the European Union in 2019 after long-stalled negotiations. If ratified, it would be the largest free trade agreement in the world.

Mercosur was created in 1991 when Argentina, Brazil, Paraguay, and Uruguay signed the Treaty of Asuncion [PDF], an accord calling for the "free movement of goods, services, and factors of production between countries." The four countries agreed to eliminate customs duties, implement a common external tariff of 35 percent on certain imports from outside the bloc, and adopt a common trade policy toward outside countries and blocs. The charter members hoped to form a common market similar to that of the European Union, and even considered introducing a common currency.

"Mercosur had grand ambitions," says CFR's Shannon K. O'Neil. "It was going to be a customs union with a political side." The Mercosur stamp is emblazoned on member countries' passports, and license plates display the Mercosur symbol. Residents of the bloc are authorized to live and work anywhere within it. In 1994, the group signed the Protocol of Ouro Preto, formalizing its status as a customs union.

Venezuela joined Mercosur's four founding countries as a full member in 2012, but was suspended in late 2016. Today, the four have a combined gross domestic product (GDP) of roughly \$3.4 trillion, making it one of the world's largest economic blocs. By contrast, Latin

America's second-largest trade group, the Pacific Alliance, which comprises Chile, Colombia, Mexico, and Peru, has a combined GDP of about \$2 trillion.

Bolivia, Chile, Colombia, Ecuador, Guyana, Peru, and Suriname are associate members. They receive tariff reductions when trading with the full members but do not enjoy full voting rights or free access to their markets. Bolivia was invited to join as a full member in 2012, but its accession is pending authorization from Brazil's congress and is not expected to be completed in the near future.

Experts say integration has been further stifled as Mercosur economies continue to fall back on protectionist policies and show reluctance toward creating value-added supply chains or regional production hubs. Instead, Latin America's traditional reliance on low-value-added commodity exports, particularly to China, continued during the commodities price boom of the 2000s. Many economists argue that this has contributed to the disappointing growth of trade within the bloc, which has fallen since 1998 as a share of members' total trade.

Since its admission to Mercosur, Venezuela had failed to comply with many of the group's trade regulations. Mercosur suspended Venezuela in late 2016, citing violations of human rights and the bloc's trade rules by President Nicolas Maduro's government. In August 2017, the group made Venezuela's suspension indefinite. And in 2019, Argentina, Brazil, and Paraguay called on Maduro to cede power to the Venezuelan opposition.

<https://www.cfr.org/backgrounder/mercosur-south-americas-fractious-trade-bloc>

Document: Top 10 Trade blocs in 2022-23

The top 10 global trade blocs in 2022-23 are mentioned in the list below:

1. APEC (exports: \$12.47 trillion, imports: \$12.55 trillion)
2. EU (exports: \$7.49 trillion, imports: \$8.11 trillion)
3. BRICS (exports: \$5 trillion, imports: \$4 trillion)
4. USMCA (exports: \$3.23 trillion, imports: \$4.55 trillion)
5. ASEAN (exports: \$1.95 trillion, imports: \$1.88 trillion)
6. GCC (exports: \$1.1 trillion, imports: \$691 billion)
7. SAARC (exports: \$567 billion, imports: \$935 billion)
8. MERCOSUR (exports: \$448 billion, imports: \$388 billion)
9. COMESA (exports: \$182 billion, imports: \$257 billion)
10. SACU (exports: \$141 billion, imports: \$131 billion)

[https://tradeimex.in/blogs/top-trading-blocs-in-the-world#:~:text=Top%2010%20Trade%20Blocs%20in%20the%20world&text=EU%20\(exports%3A%20%247.49%20trillion%2C,imports%3A%20%241.88%20trillion\)](https://tradeimex.in/blogs/top-trading-blocs-in-the-world#:~:text=Top%2010%20Trade%20Blocs%20in%20the%20world&text=EU%20(exports%3A%20%247.49%20trillion%2C,imports%3A%20%241.88%20trillion))

Document: A Tale of Two Trade Blocs: The Rise of the Pacific Alliance and the Eventual Fall of Mercosur

Rafael Paz

31st October 2019

It was the best of trade blocs, it was the worst of trade blocs. It was the age of free trade, it was the age of protectionism. Some trade blocs get a deal with the EU, some . . . don't. Mercosur, the South American customs union comprised of Brazil, Argentina, Paraguay, and Uruguay, found itself in this very situation after Austria on September 19, 2019, and France on October 8, 2019, chose not to sign the Mercosur-EU trade deal due to Brazil's controversial environmental policies.

On the other hand, the Pacific Alliance, a South American trade bloc comprised of Chile, Mexico, Colombia, and Peru, recently announced its commitment to greater ties with the EU at an EU-Pacific Alliance summit meeting on September 25, 2019 with no EU-member nation voicing objections. With Brazil's domestic policy driving away important Mercosur trade deals, it seems like Brazil is either knowingly or unknowingly sabotaging potential deals with other countries.

Established in 1991, the goal of the signatories of Mercosur was to "promote a common space that generates business and investment opportunities through the competitive integration of national economies into the international market." However, in the almost thirty years since, Mercosur seems to be constraining opportunity, particularly that of Brazil. For example, Mercosur imposes on all its members' common external tariffs that can be as high as 35% for certain goods. Because it has the highest GDP in South America, Brazil has great reason to feel stifled if these and other constraints continue at their current stature. The pressure on Brazil worsens when compared to what it stands to gain in a post-Mercosur universe. Some studies indicate that Brazil could receive an additional 1.25% bump to its annual GDP growth by moving beyond such high tariffs. Nevertheless, Brazil seems to have not completely dropped out of the bloc in recent years because of the potential of a future EU trade deal, which now seems dead for the time being.

The Pacific Alliance has everything to gain from remaining together. Not only does its founding treaty proclaim free trade and global economic integration as its objective, but it also actively searches for trade deals with the rest of the developed world. As of the summer of 2019, the Pacific Alliance expects to finalize an agreement that would bring Australia, Canada, New Zealand, and Singapore into the trade bloc as associate members. Indeed, the raw numbers alone indicate the success that the Pacific Alliance has achieved. Since its founding in 2011, its integration with global markets has skyrocketed, where exports to Asian markets comprise more than 30% of the exports of the member nations of Chile and Peru.

<https://inter-american-law-review.law.miami.edu/tale-trade-blocs-rise-pacific-alliance-eventual-fall-mercotur/>

Exercises for consolidation of understanding

You could produce paragraph based or spider diagram responses. What is important is to understand the key concepts so you can draw on this case study as a country level study in either a DBQ or essay.

Use Document: Belt and Road in Latin America: A regional game changer? AND some research

1.
 - a) What is the Belt and Road Initiative?
 - b) Analyse bi-lateral trade between Latin America and China? How/Why is the BRI of interest to Latin American countries?

Use Document: Bioceanic Corridor: road from Mato Grosso to the Pacific AND Document: New development corridors partially financed by China AND Special Focus: Latin America's Bi-Oceanic Railway Corridor

2. What are the bioceanic corridors, through which countries do they cross, what are their implications in terms of infrastructure and how are they anticipated to render the region more dynamic particularly in regards to the land-locked states?

Use Document : Latin American GDP Disparities

3. Describe the pattern of Latin American GDP (research up to date HDI GDP figures and assess to what extent these correspond to the GDP figures).

Use Document: Foreign investment in Latin America expected to halve in 2020

4. What is the likely impact of the Covid-19 pandemic on FDI in Latin America?

Use document: Mercosur: South America's Fractious Trade Bloc AND A Tale of Two Trade Blocs: The Rise of the Pacific Alliance and the Eventual Fall of Mercosur WITH GDP of Top five Trade blocs in 2016 PLUS any up to date information you research.

5. SHORT DBQ STYLE ESSAY: How do the Mercosur and Pacific Alliance trade blocs represent interregional cooperation and tension?

The United States, a country in globalization: unequal integration of territories, tensions and international cooperation

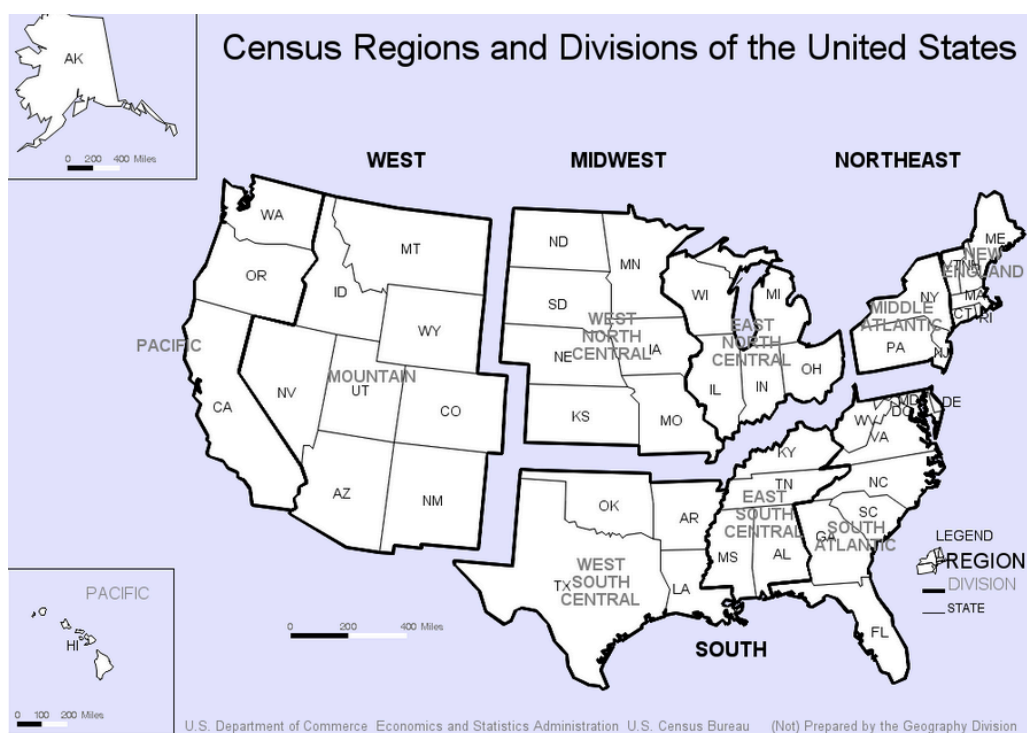
Key Question:

In what ways are (U.S.) territories unequally integrated into globalization?

Learning Objective:

Analyze the consequences of globalization on the U.S. at local, regional, and global scales.

Introduction



<https://www.businessinsider.com/united-states-regions-new-england-midwest-south-2018-4?IR=T>

This case study examines how the territories of the US are not homogenous in terms of their integration into globalization. At a local scale this includes how localities, such as Detroit, are seen as not having benefited from globalization whilst others, such as NYC, are extremely well integrated into the wider global economy. It also approaches this issue at a regional scale in terms of the relative integration of the Rust Belt compared with the Sun Belt and concludes with a survey of the USMCA as an example of international cooperation.

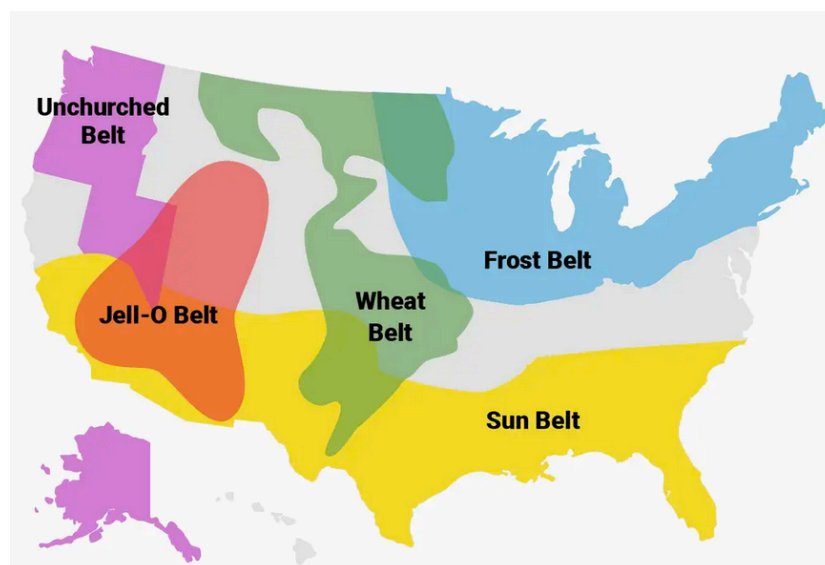
With an estimated population of 332.6 million, as of July 2020, the United States possesses the most technologically powerful economy in the world, with a per capita GDP of \$59,500. It hosts a diverse range of climatic types from arctic to subtropical, deserts to mountain ranges and flat prairie. Distinct differences can also be observed across the US between

rural, urban and exurban areas and at different scales from local through to regional and national.

The US can be divided and subdivided into countless regions, each sharing a unique set of characteristics that set it apart from the country as a whole. There is no consensus on defining these regions, even amongst government agencies. The above map is from the US Census Bureau which considers there to be four regions of the US however the Bureau of Economic Analysis uses a map that splits the country up into eight regions.

On top of these distinctions lie a plethora of further categorizations of US territory which divide the country into regions and belts based on a myriad of economic, cultural, climatic and religious characteristics. These include the Sun Belt, Rust Belt, Frost Belt, Bible Belt, Unchurched belt, Wheat Belt etc.

Examples of further, alternative regional divisions:



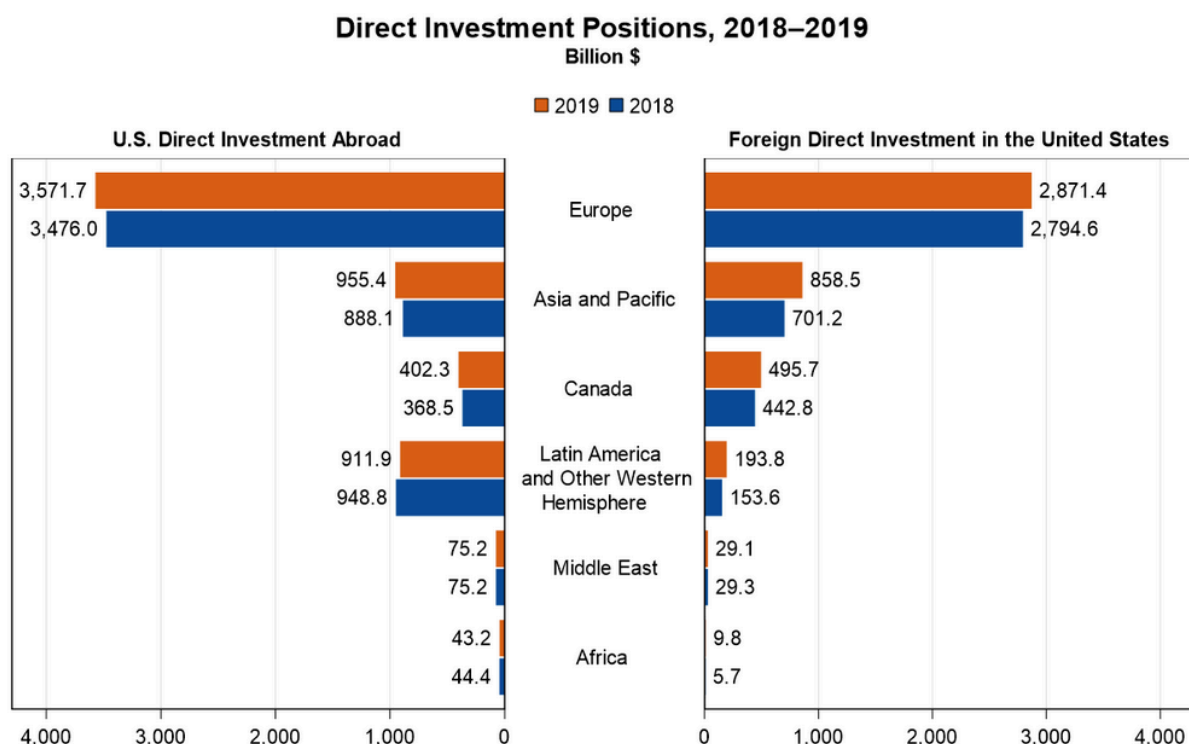
<https://www.businessinsider.com/regions-america-bible-belt-rust-belt-2018-4?IR=T#wheat-belt-13>

Foreign Direct Investment in the USA

The U.S. direct investment abroad position, or cumulative level of investment, increased \$158.6 billion to \$5.96 trillion at the end of 2019 from \$5.80 trillion at the end of 2018, according to statistics released by the Bureau of Economic Analysis (BEA). The increase reflected a \$95.7 billion increase in the position in Europe, primarily in the United Kingdom and the Netherlands. By industry, manufacturing affiliates accounted for most of the increase.

The foreign direct investment in the United States position increased \$331.2 billion to \$4.46 trillion at the end of 2019 from \$4.13 trillion at the end of 2018. The increase mainly reflected a \$157.3 billion increase in the position from Asia and Pacific, primarily Japan. By

industry, affiliates in manufacturing, finance and insurance, and wholesale trade accounted for the largest increases.



Source: U.S. Bureau of Economic Analysis

<https://www.bea.gov/data/intl-trade-investment/direct-investment-country-and-industry>

Nationwide, FDI in the United States contributes to productivity growth, generates U.S. exports, and creates high paying jobs for American workers.

In 2018 FDI is responsible for:



Competitive Jobs
7.8 Million direct jobs in the United States



R&D Activity
\$66.9 Billion in R&D Expenditures



Goods Exports
24% of all U.S. goods exports

<https://www.selectusa.gov/FDI-global-market/states-territories>

Further Evidence of Globalization within the US

Globalized society in the modern-day United States offers a complex web of forces and factors, bringing people, cultures, markets, beliefs, and practices into increasingly greater proximity to one another. In the United States, this has had a range of both positive and negative effects.

Free Trade

Free trade, which is a component of globalization, is a policy followed by many international markets in which countries' governments do not restrict imports from, or exports to, other countries. The relative costs, benefits, and beneficiaries of free trade are debated.

Economic liberals and neoliberals generally argue that higher degrees of political and economic freedom in the form of free trade in the developed world are ends in themselves, producing higher levels of overall material wealth. Globalization is seen by these proponents as the beneficial spread of liberty and capitalism. However, many in the United States oppose free trade for a variety of reasons. Free trade is often opposed by domestic industries that would have their profits and market share reduced by lower prices for imported goods. For example, if U.S. tariffs on imported sugar were reduced, U.S. sugar producers would receive lower prices and profits, while U.S. sugar consumers would spend less for the same amount of sugar because of those same lower prices.

The idea of free trade is opposed by many anti-globalization groups, based on the assertion that free trade agreements generally do not increase the economic freedom of the poor or the working class, and frequently make the poor even poorer.

Outsourcing

In business, outsourcing involves the contracting out of a business process to another party. The term "outsourcing" came from the words "outside resourcing," and it can include both foreign and domestic contracting. Globalization allows many American corporations to outsource manufacturing and service jobs from the United States to lower-cost locations (such as developing or Third World countries). The financial savings from lower international labor rates can provide a major motivation for companies to outsource, and many corporations take advantage of the lower wages and lack of benefits they can provide workers in lower-income countries. Some critics of globalization say that this harms poorer countries, while others argue it decreases the jobs available for American citizens at home.

Exporting American Culture

A 2005 report by the United Nations Educational, Scientific and Cultural Organization (UNESCO) showed that, while cultural exchange is becoming more frequent from Eastern Asia in recent years, Western countries are still the main exporters of cultural goods.

The term "Americanization" is used to describe the exportation of American culture across the globe, a process related to a period of high political American clout and of significant growth of America's shops, markets, and objects being brought into other countries.

Through the process of globalization, American culture has expanded around the globe by spreading pop culture, particularly via the Internet and satellite television. The diffusion of certain cuisines such as American fast food chains is a visible aspect of cultural globalization: the two most successful global food and beverage outlets, McDonald's and Starbucks, are American companies often cited as examples of globalization. Of the top ten global brands, seven are based in the United States; Coca-Cola, which holds the top spot, is often viewed as a symbol of Americanization.

Some critics of globalization argue that it harms the diversity of cultures. As a dominating country's culture (such as that of the United States) is introduced into a receiving country through globalization, it can become a threat to the diversity of local culture. Cultural practices including traditional music can be lost or turned into a fusion of traditions. While scholarly opinion typically states that globalization and Americanization are different phenomena, they are inherently linked.

Immigration and Population Changes

One of the ways in which internationalization has become apparent in the United States is through immigration and the resulting demographic changes occurring in the U.S. population. Through the continued process of immigration, the United States is becoming an increasingly ethnically diverse (and, hence, internationalized) country.

The American population more than tripled during the 20th century—at a growth rate of about 1.3% a year—from about 76 million in 1900 to 281 million in 2000. According to the Census Bureau's estimation for 2012, 50.4% of American children under the age of one belonged to so-called "minority" groups. Hispanic and Latinx Americans accounted for almost half (1.4 million) of the national population growth of 2.9 million between July 1, 2005, and July 1, 2006. Immigrants and their U.S.-born descendants are expected to provide most of the U.S. population gains in the decades ahead. The top twelve emigrant countries in 2006 were Mexico (173,753), People's Republic of China (87,345), Philippines (74,607), India (61,369), Cuba (45,614), Colombia (43,151), Dominican Republic (38,069), El Salvador (31,783), Vietnam (30,695), Jamaica (24,976), South Korea (24,386), Guatemala (24,146). Other countries comprise an additional 606,370.

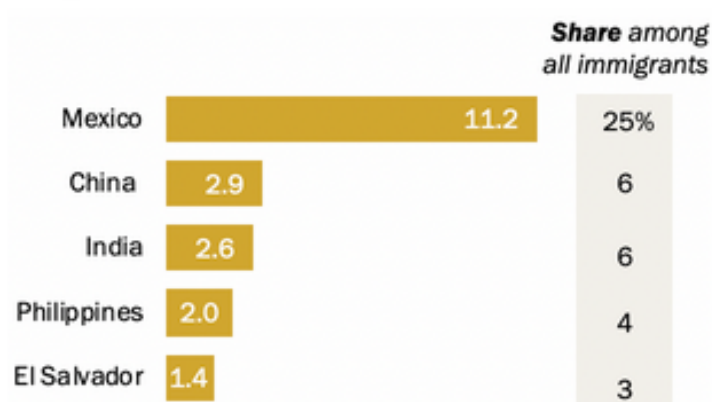
<https://courses.lumenlearning.com/boundless-ushistory/chapter/globalization-and-the-u-s/>

Immigration at a National Scale

The United States has more immigrants than any other country in the world. Today, more than 40 million people living in the U.S. were born in another country, accounting for about one-fifth of the world's migrants. The population of immigrants is also very diverse, with just about every country in the world represented among U.S. immigrants.

Mexico, China and India are among top birthplaces for immigrants in the U.S.

Top five countries of birth for immigrants in the U.S. in 2018, in millions



Note: China includes Macau, Hong Kong, Taiwan and Mongolia.

Source: Pew Research Center tabulations of 2018 American Community Survey (IPUMS).

PEW RESEARCH CENTER

Nearly half (45%) of the nation's immigrants live in just three states: California (24%), Texas (11%) and Florida (10%). California had the largest immigrant population of any state in 2018, at 10.6 million. Texas, Florida and New York had more than 4 million immigrants each. In terms of regions, about two-thirds of immigrants lived in the West (34%) and South (34%).

Roughly one-fifth lived in the Northeast (21%) and 11% were in the Midwest.

In 2018, most immigrants lived in just 20 major metropolitan areas, with the largest populations in the New York, Los Angeles and Miami metro areas. These top 20 metro areas were home to 28.7 million immigrants, or 64% of the nation's total foreign-born population. Most of the nation's unauthorized immigrant population lived in these top metro areas as well.

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Regional Scale: The Rust Belt

The Rust Belt is a colloquial term used to describe the geographic region stretching from New York through the Midwest that was once dominated by the [coal industry](#), steel production, and [manufacturing](#). The Rust Belt became an industrial hub due to its proximity to the Great Lakes, canals, and rivers, which allowed companies to access [raw materials](#) and ship out finished products.

The region received the name Rust Belt in the late 1970s, after a sharp decline in industrial work left many factories abandoned and desolate, causing increased rust from exposure to the elements. It is also referred to as the Manufacturing Belt and the Factory Belt.

KEY TAKEAWAYS

- The Rust Belt refers to the geographic region from New York through the Midwest that was once dominated by manufacturing.
- The Rust Belt is synonymous with regions facing industrial decline and abandoned factories rusted from exposure to the elements.
- The Rust Belt was home to thousands of blue-collar jobs in coal plants, steel and automotive production, and the weapons industry.

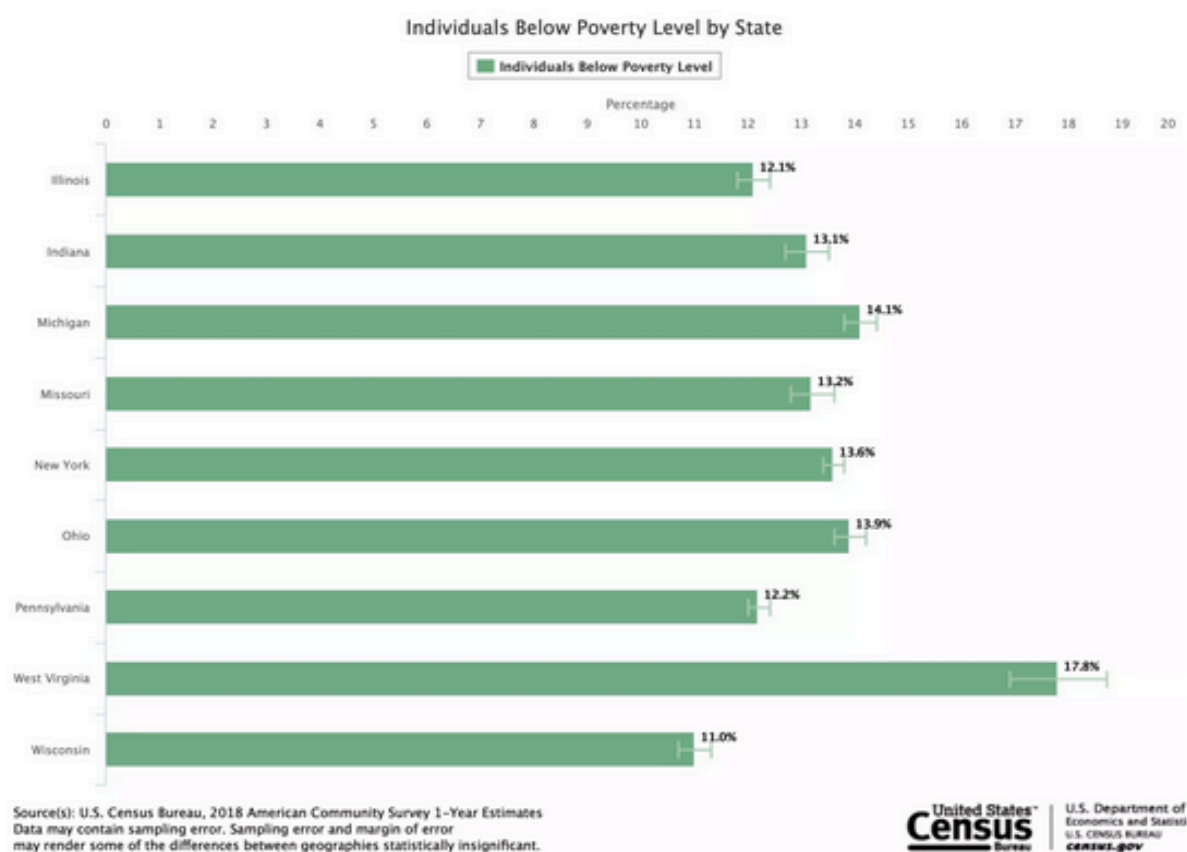


The term Rust Belt is often used in a derogatory sense to describe parts of the country that have seen an economic decline—typically very drastic. The rust belt region represents the deindustrialization of an area, which is often accompanied by fewer high-paying jobs and high poverty rates. The result has been a change in the urban landscape as the local population has moved to other areas of the country in search of work.

Although there is no definitive boundary, the states that are considered in the Rust Belt—at least partly—include the following:

- Indiana
- Illinois
- Michigan
- Missouri
- New York; Upstate and western regions
- Ohio
- Pennsylvania
- West Virginia
- Wisconsin

There are other states in the U.S. that have also experienced declines in manufacturing, such as states in the deep south, but they are not usually considered part of the Rust Belt. The region was home to some of America's most prominent industries, such as steel production and automobile manufacturing. Once recognized as the industrial heartland, the region has experienced a sharp downturn in industrial activity from the increased cost of domestic labour, competition from overseas, technology advancements replacing workers, and the capital intensive nature of manufacturing.



Poverty Rates in the Rust Belt. Investopedia

[Blue-collar](#) jobs have increasingly moved overseas, forcing local governments to rethink the type of manufacturing businesses that can succeed in the area. While some cities managed to adopt new technologies, others still struggle with rising poverty levels and declining populations.

<https://www.investopedia.com/terms/r/rust-belt.asp>

Revitalizing the Rust Belt

Automation has transformed the American factory, but as a result rendered millions of low-skilled jobs redundant. The reason for this shift is clear. To stay competitive, companies must keep costs low, and labour is the biggest cost for many organizations. Areas like the upper Midwest have felt this the most, with the automotive industry in areas like Michigan being hit hard between 1999 – 2007, according to 2017 research by Daron Acemoglu of MIT and Pascual Restrepo of Boston University.

As a new breed of manufacturing jobs arise, there may be too few Americans with manufacturing skills to fill them. LinkedIn's May 2017 U.S. Workforce found that demand for manufacturing skills is strong along the coasts, but not the in the old manufacturing heartland of the Rust Belt previously the hotbed for American factory jobs. It also found that cities that are gaining the most workers - like Portland, Los Angeles, Seattle and Denver - primarily attract talent from across the U.S. and abroad. However, the old manufacturing bases of Chicago, Detroit, Pittsburgh and St. Louis primarily attract workers from nearby towns. It may become increasingly challenging for cities in Middle America to attract businesses to an area that is losing workers, plus it's also hard to retain the top talent it already has. LinkedIn's report advised employers in the coastal cities that were hiring lean manufacturing and quality management skills to consider recruiting from the Midwest, where skills are abundant, but jobs are not. This could create a perfect storm of hollowing out the mid-west, as manufacturing returns to the U.S., but is heavily automated and requires new skills, not old ones.

The Rust Belt can be saved, but only if you see automation as the saviour and not the threat. The old jobs – production line operative, picker, packers, truck drivers are dead or dying. There is no point pining for what will not return. Building already frustrated workers up on the prospect of large-scale hiring in an increasingly automated, hyper-efficient manufacturing sector is not a wise move that will end up in broken promises and more frustration. It would be far better to focus on preparing workers for the rise of the robots than to promise them jobs that will be done by machines.

However, globalization and off-shoring production is not the whole story as to why the number of jobs is reducing -- the longer-term picture is one of continued efficiency improvements. To truly see the impact requires returning to a longer-term view and looking at the number of jobs required to produce each \$ 1 million of manufacturing output. In 1980, there were 24.9 jobs per \$million of manufacturing output. In 2015 that had dropped to 6.4 jobs per \$million. The reason for this is clear: if we are making much more with fewer people, then we must have become much more efficient at manufacturing. There are only two ways to achieve this. Either things are being made somewhere else, or by machines.

What technology enables U.S. manufacturers to do is be competitive again and where manufacturing goes, innovation, R&D and service follow. Advanced robotics can allow U.S. manufacturers to make goods at a price point that is competitive globally, but without the long lead times, excessive shipping costs and communication issues. The PAL supply chain – Personal, Automated and Local, is here.

So, let the coastal cities design the software and algorithms, but make the robots and their products in the cities where the property is cheap, labour available and desperate for a job with a purpose. Use the Rust Belt's apparent weakness – its location and rundown buildings – as a strength. Affordable property, especially disused mills, factories and warehouses, could make great and affordable innovation work spaces and apartments for the new entrepreneurs and knowledge workers. As the coastal cities becoming increasingly unaffordable, so this move will become increasingly attractive. Also, as autonomous, electric vehicles hit the road, transporting people and goods across the U.S. will be exponentially cheaper.

The jobs that are being automated away in manufacturing are rubbish jobs mostly – ways to earn money and not much else. Yes, they allowed people to feel the satisfaction of putting food on the table and a roof over their family's heads, but we deserve more than that. In addition to making some jobs obsolete, new technologies have also long complemented people's skills and enabled them to be more productive. Now is the time to create new jobs, with a greater purpose, more challenging activities and the potential to use technology as a positive force.



Ruins at the abandoned Packard Automotive Plant are seen on September 4, 2013 in Detroit, Michigan. The Packard Plant was a 3.5 million square foot car manufacturing plant built completed in 1911. Major operations ceased in 1958, though the plant was used in a limited capacity until the 1990s, with outer buildings used through the mid 2000s. (Photo by Andrew Burton/Getty Images) [-]

<https://www.forbes.com/sites/realspin/2017/09/08/revitalizing-the-rust-belt/?sh=55dd99b346f2>

Link to video about Why does the Rust Belt Keeps Shrinking? (5m):
https://www.youtube.com/watch?v=HfASWPpeZLE&feature=emb_logo

Globalization leading to problems and opportunities: Regional scale case study of Michigan and local scale case study of Detroit

Michigan

2019 Population Estimates

9,986,857

Source: Vintage 2019 Population Estimates

Median Household Income

\$ 57,144

Source: 2015-2019 American Community Survey 5-Year Estimates

Persons in poverty, percent

13.0 %

Source: 2019 American Community Survey 1-Year Estimates

Educational Attainment: Percent high school graduate or higher

90.8 %

Source: 2015-2019 American Community Survey 5-Year Estimates

Persons without health insurance, percent

5.5 %

Source: 2015-2019 American Community Survey 5-Year Estimates

Census Bureau 2019

Employment supported by FDI:



US

According to the 2010 US Census, Michigan was the only state in the country to see a population drop over the last decade, which is mostly caused by the sharp decline in the state's auto industry, which has indirectly led to the bankruptcy declaration from the city of Detroit in 2013. The state's labour force has remained heavily dependent on the stagnant US auto industry, and Michigan's declining population runs against regional trends. Some economists are hopeful that Michigan can push for new tax incentives to encourage new business in the state, but only time will tell how long it takes Michigan to rebound from what has been a bad decade.



Situated in the heart of the Great Lakes, Michigan is one of the largest states in the US both in terms of land mass and population.

With a total land mass of 96,716 square miles, (250,493 square kilometers), Michigan is the eleventh biggest state in the USA by area. The land is fairly densely packed, although not exceptionally so -- for every square mile of Michigan territory, there is an average of 174 people (67.1 per square kilometer). Those figures leave Michigan ranking 18th in terms of population density.

The largest city in Michigan is the Motor City, Detroit. The 2010 census confirmed that it was home to 713,862 people. This number has decreased to just over 677,000 according to 2015 estimates. If you take a look at the population of Detroit, it's clear that this is where much of the state's demographic problems lie. At its peak in 1950, there were 1.85 million people living in the city. In 2016, that number has declined by over one million people. Many of those leaving the city are actually not moving far -- they move out toward the suburbs. But following the city's bankruptcy filing and urban decay, it's likely that some are packing up completely and moving out of state, which doesn't help the state's overall population figures.

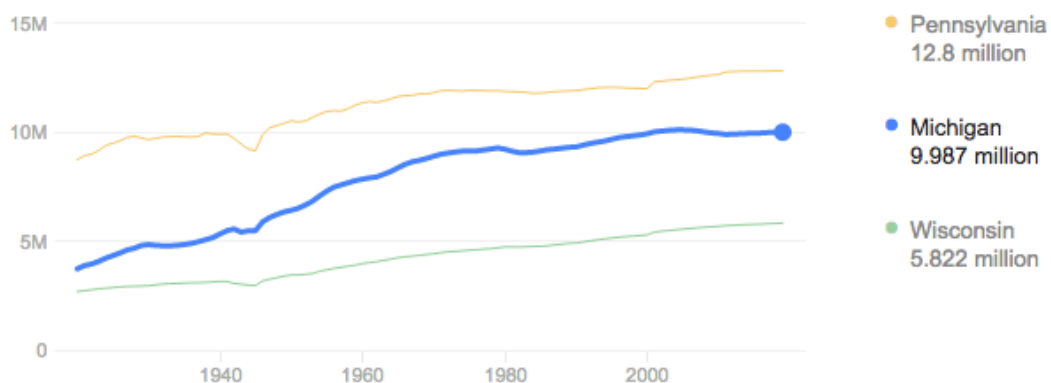
Other large cities in Michigan include Grand Rapids (pop: 195,097), Warren (pop: 135,358), Sterling Heights (pop: 132,052), Lansing (pop: 115,056), Ann Arbor (pop: 117,070), and Flint (pop: 98,310).

Larger counties in Michigan include Wayne County (over 1,700,000) and Oakland County (over 1,200,000).

<https://worldpopulationreview.com/states/michigan-population>

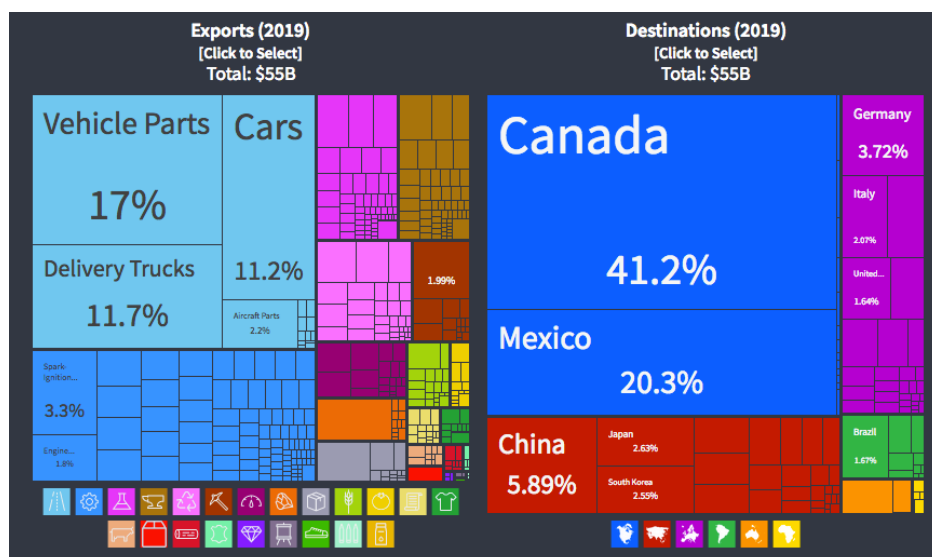
Evolution of the population in three Rust Belt States

9.987 million (2019)

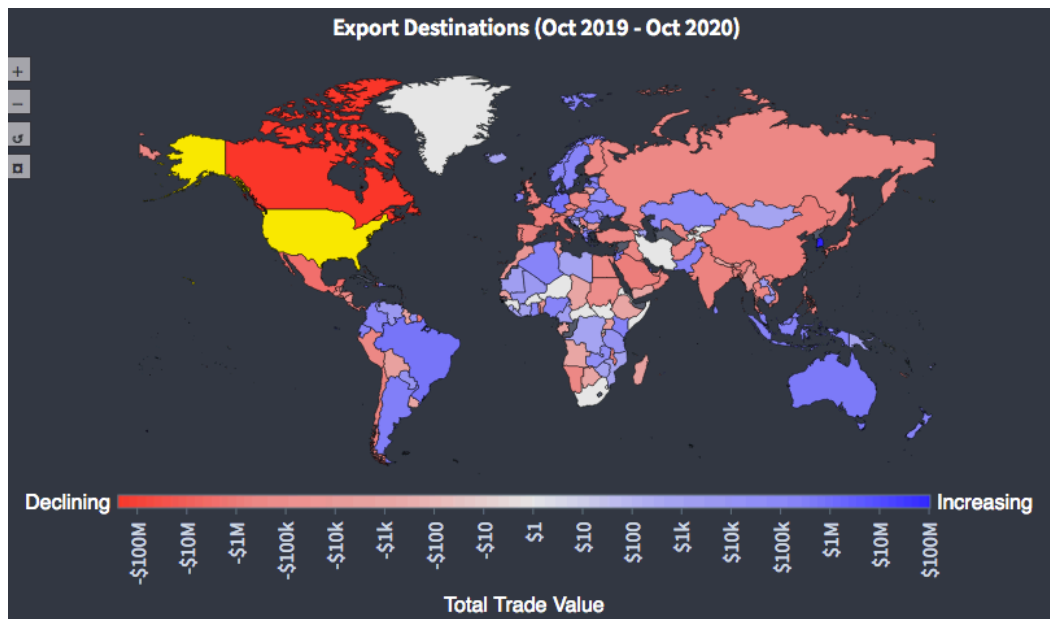


Sources include: United States Census Bureau

In 2019, United States Michigan exported \$55B, making it the 8th largest exporter out of the 53 exporters in the United States. Michigan also imported \$142B, making it the 4th largest importer out of the 53 importers in United States. In 2019 the top export destinations of Michigan were Canada (\$22.7B), Mexico (\$11.2B), China (\$3.24B), Germany (\$2.04B), and Japan (\$1.45B).



Michigan Export Destinations



Fastest Growing Exports Destination (Nov 2019 - Nov 2020)

- [Belgium](#), \$47.7M (120%)
- [Japan](#), \$17.5M (17.1%)
- [Spain](#), \$7.15M (15.3%)

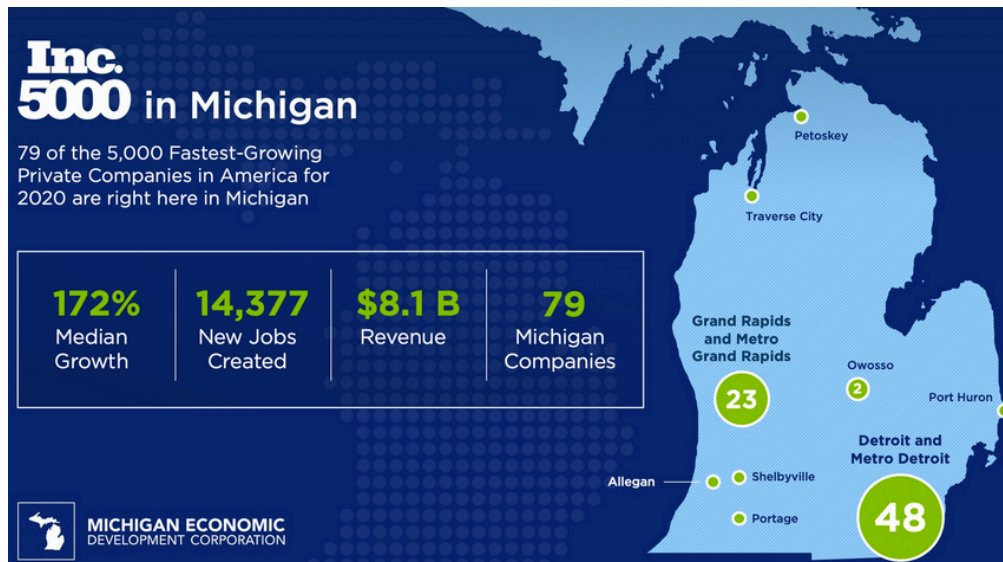
Rapidly Declining Export Origins (Nov 2019 - Nov 2020)

- [Canada](#), -\$207M (-12.1%)
- [Mexico](#), -\$81.5M (-8.85%)
- [China](#), -\$30M (-10.7%)

https://oec.world/en/profile/subnational_usa_state/mi?redirect=true

Michigan's New Battery Cluster

The steep decline in Michigan's auto manufacturing industry, which led to the loss of 800,000 jobs over the past decade, prompted state economic development officials to launch an intensive drive to develop new industrial clusters. The goal was to both diversify the state's industrial base and to expand on its existing strengths in automotive technologies and advanced manufacturing. Some 80 percent of U.S. automotive R&D is done within a 50mile radius of downtown Detroit.



After an extensive analysis, the Michigan Economic Development Corp. (MEDC) in 2005 targeted six industries: advanced energy storage, solar power, wind turbine manufacturing, bio-energy, advanced materials, and defense. The campaign to nurture a cluster in advanced batteries—a manufacturing industry that at the time was based almost entirely in Asia—was launched. Of the \$2.4 billion allocated by the Department of Energy to advanced battery manufacturing projects under the American Reinvestment and Recovery Act of 2009, \$1.3 billion went to Michigan-based factories. At a National Academies symposium on Michigan’s battery initiative, then Michigan Governor Jennifer Granholm declared that the state “is well on its way to becoming the advanced battery capital of the world.”

Michigan’s approach is characterized by a comprehensive strategy that included investments in R&D, generous tax incentives, extensive training programs for engineers and skilled production workers, and public-private partnerships that brought together universities, industry, government agencies, and the U.S. Army—a large potential customer for high-performance, energy saving rechargeable batteries. What’s more, the MEDC knew Michigan needed more than battery assembly plants and front-end R&D to build a sustainable industry and to compete with Asia. The state also needed an entire supply chain of materials and core components, most of which currently must be imported.

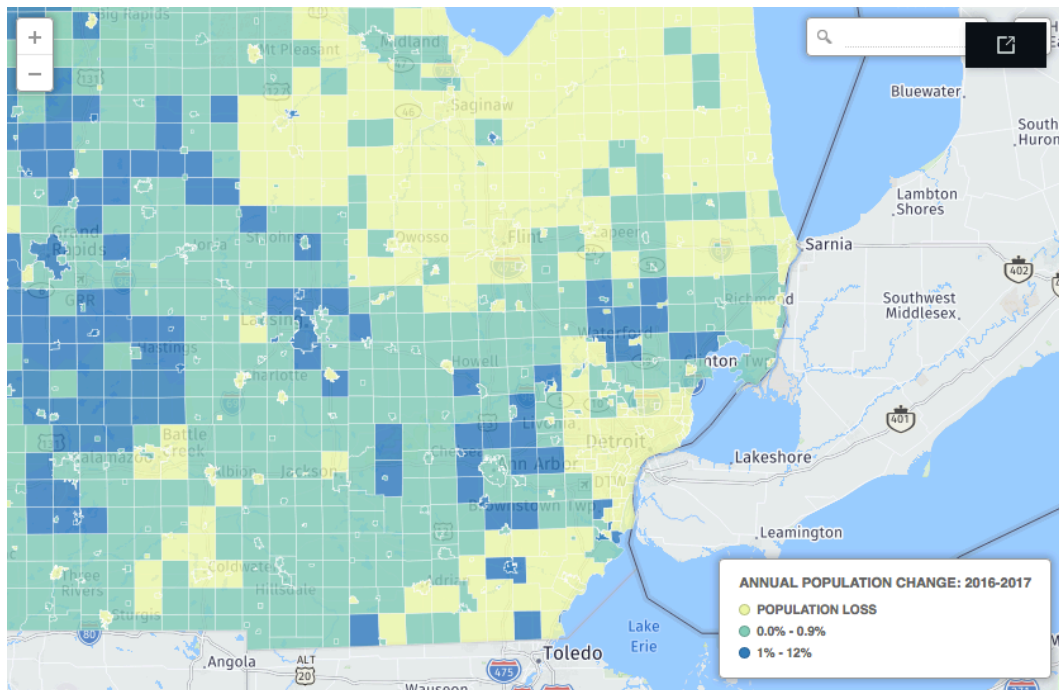
Michigan targeted advanced batteries well before federal aid was available. The MEDC believed the state’s base in car manufacturing and engineering gave it a clear advantage in an industry expected to surge as automakers boosted production of hybrid and electric vehicles. The MEDC viewed advanced batteries as strategically important because they represent the core technology of future automobiles. “Michigan did not want to stand by and cede leadership in power-train development to other states and countries,” explained Eric Shreffler, who leads the MEDC’s advanced energy storage program.

The MEDC began by recruiting battery pack manufacturing and vehicle electrification programs. Michigan launched the Centers for Energy Excellence, which granted \$13 million to lithium-ion battery developers Sakti3 and A123 on condition they secure federal funds and establish university partnerships. The agency also introduced the Michigan Advanced Battery Tax Credits program. Industry response was so strong that the legislature tripled

funding, to \$1.02 billion. Under the scheme, Michigan refunds up to \$100 million of a company's capital investment. Battery pack manufacturers receive a credit for each pack they assemble in Michigan. The \$1.3 billion in Recovery Act grants went to many of the same companies that received state aid.

<https://www.ncbi.nlm.nih.gov/books/NBK100322/>

Detroit population continues to decline, according to Census estimate



Most of Michigan's large communities saw annual population gains last year

Community	2016 Population	2017 Population	Numeric change	Percent change
Detroit	675,480	673,104	-2,376	-0.35
Grand Rapids	196,251	198,829	2,578	1.31
Warren	135,030	135,022	-8	-0.01
Sterling Heights	132,334	132,631	297	0.22
Ann Arbor	120,713	121,477	764	0.63
Lansing	115,797	116,986	1,189	1.03
Clinton Twp.	100,385	100,712	327	0.33

SOURCE U.S. Census Bureau

<https://eu.freep.com/story/news/2018/05/24/detroit-fife-lake-township-census-bureau-population-drop/633602002/>

Detroit Population

Detroit had 670,031 residents in 2019, according to the Census estimate. That's a decline of 2,496 compared to 2018's population, a 0.4 percent loss.

The Motor City's population has plummeted since 1950, when it was the fifth largest U.S. city with 1.8 million people. Last decade, the city lost more than 25 percent of its residents. Between 2000 and 2010, Detroit lost on average 23,700 residents every year, plunging the city's population to 711,131.

But since 2010, the city has halted those steep declines. From 2010 to 2019, it lost a total of 5.8 percent of its residents, or 41,100 people. The 2010s saw a revival of downtown and a number of neighborhoods where housing prices have surged and new retail has sprouted. In 2014, Detroit's white population had grown by 8,000 compared to the year earlier. It was the first significant increase in the white population since 1950 but it has not been enough to slow the overall population loss. Based on the 2019 estimate, Detroit now ranks as the 24th largest U.S. city, surpassed by Nashville. Nashville's downtown population grew by 130% in 2019, according to a report by the Nashville Downtown Partnership.

Experts cautioned the 2019 estimate could change after the 2020 Census count. Every 10 years, the U.S. government tries to count every person in the nation.

For each uncounted person in the decennial census count, Detroit stands to lose an estimated \$5,500 — or \$55,000 over 10 years — in federal aid, according to city estimates. Detroit receives about \$3 billion in funding for federal programs each year. Those federal programs range from Medicare and free lunch at schools to Head Start and roads. The counts help set hospital funding, and could determine how much of the coronavirus vaccine goes to communities once one is developed.

<https://www.bridgemi.com/urban-affairs/detroit-population-continues-decline-according-census-estimate>

Globalization and the North East Megalopolis

BosNYWash Regional to local scale case study on NY



The Northeast Megalopolis 2.0

April 8th 2019

The Northeast megalopolis is a unique multilayered region with a deep global footprint which still marks it as one of the truly great centers of international commerce. If the economic rise had happened in another place – like China, Japan or Europe – it would have been described as an economic “miracle” or a “revolution.” But in the highly industrialized Northeast, there was always an expectation of a growth in commerce, like an expectation of sunshine in southern California.

Over 56 million people live in the corridor and even with the rise of other U.S. megalopolis regions like the greater Atlanta corridor in the southeast or Los Angeles-Long Beach region in California, the original Northeast megalopolis is still the most densely populated region in the U.S. In rough terms, the corridor has a GDP of \$4.4 trillion – a little over 20% of the U.S. total. Individually four states have a GDP over \$500 billion, topped by New York at around

\$1.5-\$1.7 trillion. While California and Texas have higher GDPs, and the Chicago area is its own megalopolis, no other region has so many \$500 billion states in such close proximity. It is a major country's worth of GDP. To put it in a global perspective, the Northeast region has a slightly larger GDP than Germany – the world's fourth largest economy.

In his megalopolis study, Gottmann dubbed the Northeast corridor, "Main Street" USA. But over the ensuing 58 years, the north-south corridor built around Route 1, has become a superhighway of commerce not only linking the individual segments of the megalopolis but as the gateway to the U.S. Midwest – the North American hinterland. Two major economic influences of the last half century have shaped the Northeast corridor in ways even Gottmann couldn't have foreseen. The rise of consumerism and containerization – an unexpected attribute of globalization which began in Port Newark with the sailing of the world's first containership, the SS Ideal X in 1955.

The Big Apple. It is hard to overlook the enormous economic gravity that metropolitan New York exerts on the entire Northeast region. It is the Jupiter of cities with a dozen satellite cities in its orbit. Without it, the Northeast would still be a significant economic entity but the sheer volume of activity of the City has a defining impact on the region. There is something like a thousand corporate headquarters in metropolitan New York including 52 fortune 500 companies – such economic power is nearly unmatched, not only in North America but the world.

But it is the unquenchable demand for consumer goods that draws containership) services into the whirlpool. Virtually every containership operator wants to center their East Coast services – whether coming from the East or the West - around the call in the Port of New York/New Jersey. In a real sense, every port from Norfolk, Virginia to Boston, Massachusetts to Portland, Maine is in competition (or collaboration) with the Port of New York/New Jersey. With larger ships –over 14,000 TEU – and fewer port calls, the lure of 8.6 million consumers packed into a little over 300 sq./mi is nearly irresistible (**TEU**: Twenty-foot equivalent measurement based on the volume of a single twenty foot long intermodal container). For containership operators, it is the ship call that matches their mantra of economies-of-scale like no other. The containers are offloaded and their contents consumed within miles of the piers, only to be reloaded on the ships to start the process again – the perfect circle of life for container shipping.

But PANYNJ is both the destination and the gateway. Freight movements from New England to Virginia are pulled into the New York/New Jersey orbit. Equally the Port is key to moving freight to destinations like Chicago, St Louis and Kansas City. In recent years, Southeastern ports like Charleston and Savannah (which are growing faster) have also risen to compete for the U.S. heartland, as have the Ports of Virginia, Port of Baltimore and to a lesser extent the Delaware River ports of Philadelphia and Wilmington, Delaware. But the rotation of ships is largely set up by the allure of the bright lights of New York. Last year the Port posted over 7 million TEUs and the next closest rival, the Port of Norfolk was less than 3 million TEUs. And the draw of NYC is very long and the question can be posed of whether the \$5.25 billion expansion of the Panama Canal would have occurred without the economic promise of the Big Apple?

<https://www.ajot.com/premium/ajot-the-northeast-megalopolis-2.0>

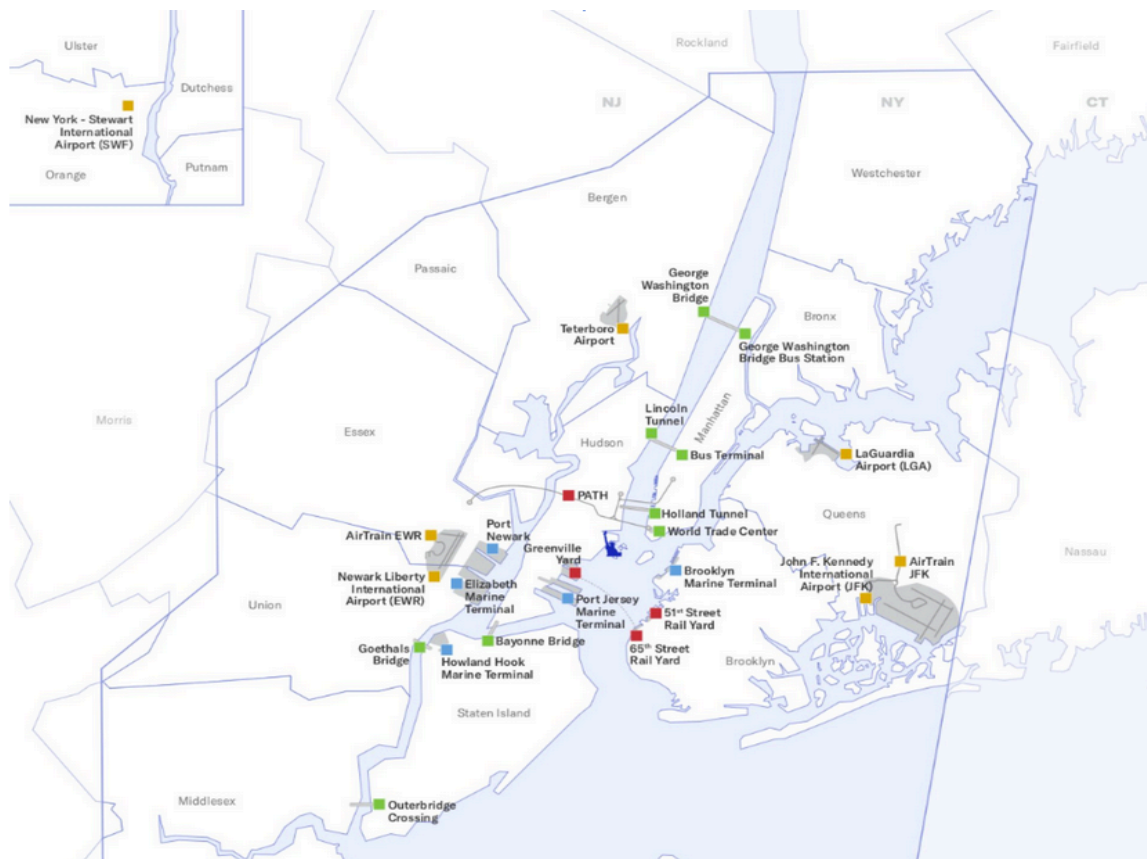
Port Authority of New York and Newark

This is a self-supporting corporate agency formed in 1921 by agreement between the states of New York and New Jersey for the purpose of developing and operating trade and transportation facilities in the northern New Jersey–New York City region.

This responsibility includes the maintenance and management of the Lincoln and Holland tunnels under the Hudson River and of the bridges linking the two states.

Kennedy, Newark, La Guardia, and Teterboro airports also are under the jurisdiction of the Port Authority, as are three bus-truck terminals, seven marine passenger ports, and a heliport. During the 1970s the Port Authority constructed the twin-towered World Trade Center in Lower Manhattan to house firms and agencies engaged in international trade in an effort to further encourage commerce in the region; both towers were destroyed in a terrorist attack in 2001 – the new World Trade Center is also operated by the PANYNJ.

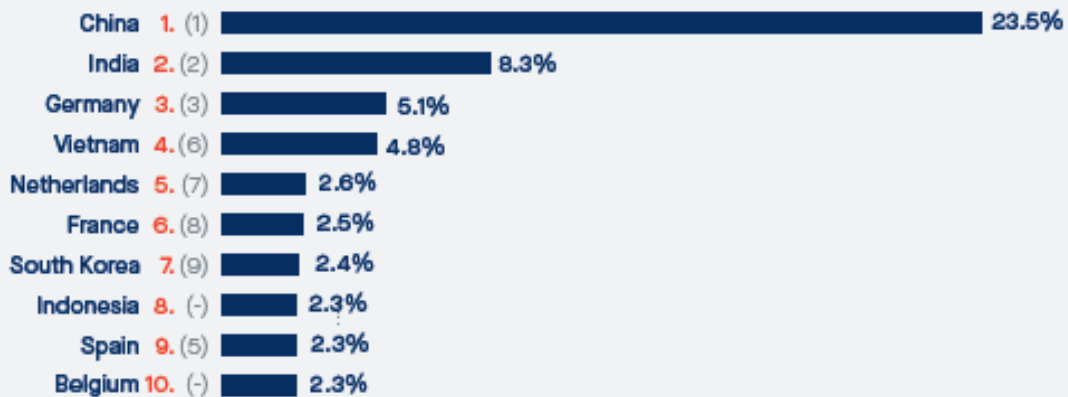
Britannica Online



Our Facilities ■ Air ■ Land ■ Rail ■ Sea

Total Volume

Imports/Exports: 2019 (2018 Rank) % of Trade

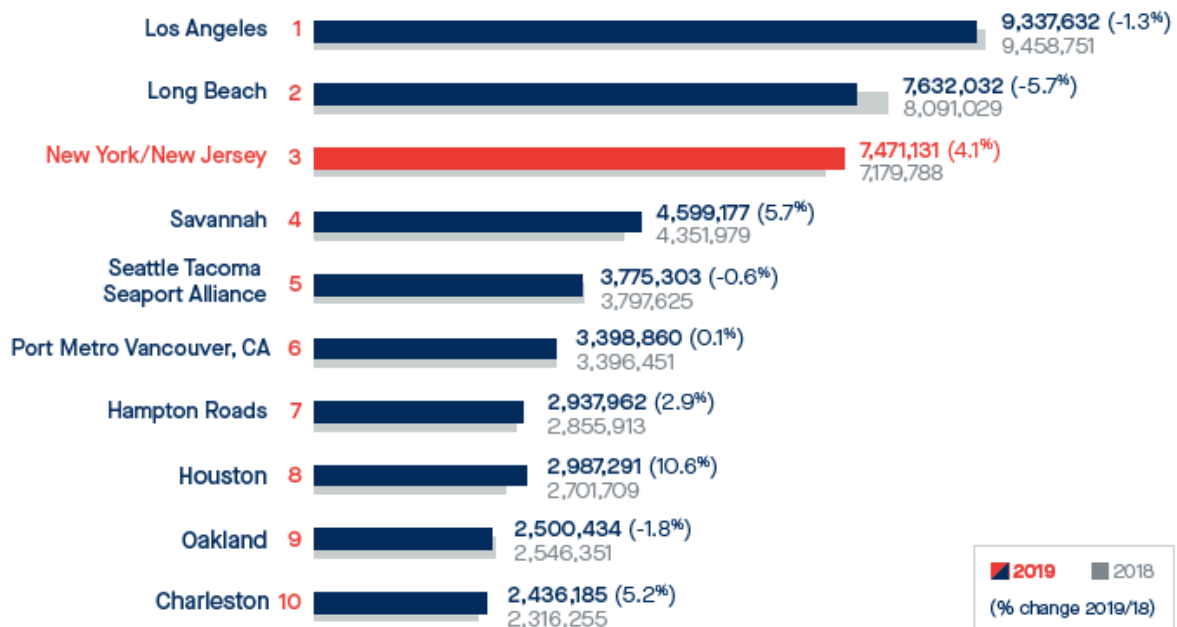


Map and both charts from:

<https://www.panyni.gov/port/en/our-port/facts-and-figures.html>

2019 Port Volume Rankings

(Top 10, U.S., unless otherwise noted)



Video (12m) on North east megalopolis (refer to 1°OIB Geog Theme 1):

https://www.youtube.com/watch?v=vKkdkDUssk&feature=emb_logo

The Sun Belt



The Kinder Institute defines the Sun Belt as the wide swath of the continental United States south of 36 degrees 30 minutes north latitude. In particular, the paper focuses on the 22 metropolitan statistical areas in the Sun Belt with populations of 1 million or more. Those metros accounted for more than 40% of U.S population growth between 2000 and 2016. Sun Belt economies also grew quickly, with jobs growing fastest in the highest- and lowest-paying sectors. And the Sun Belt was slower to lose manufacturing jobs than the Rust Belt, the paper concludes.

"There's a lot of manufacturing strength in the Sun Belt," said Bill Fulton, director of the Kinder Institute and the paper's lead author.

Sun Belt cities are also more dependent on automobiles, they have higher transportation costs and more pedestrians die on their streets, the report says. Although they have invested heavily in public transit in recent decades, on a per capita basis ridership remains low compared to other parts of the country.

And while Sun Belt metros have had a reputation for affordable housing, that phenomenon is fading, the report says. Homeownership rates are on the decline, and a high percentage of households are classified as "housing-cost-burdened." (In other words, they spend more than 30% of their income on housing and may have problems affording necessities such as food, clothing, transportation and medical care).

Poverty appears to be growing faster in large Sun Belt metros, the report says.

"The way Sun Belt cities are laid out, you're just more dependent on cars," Fulton said.

"That's a real strain on families who are filling these low-wage jobs, since transportation costs are higher than you think, not to mention the cost of housing, which is on the rise."

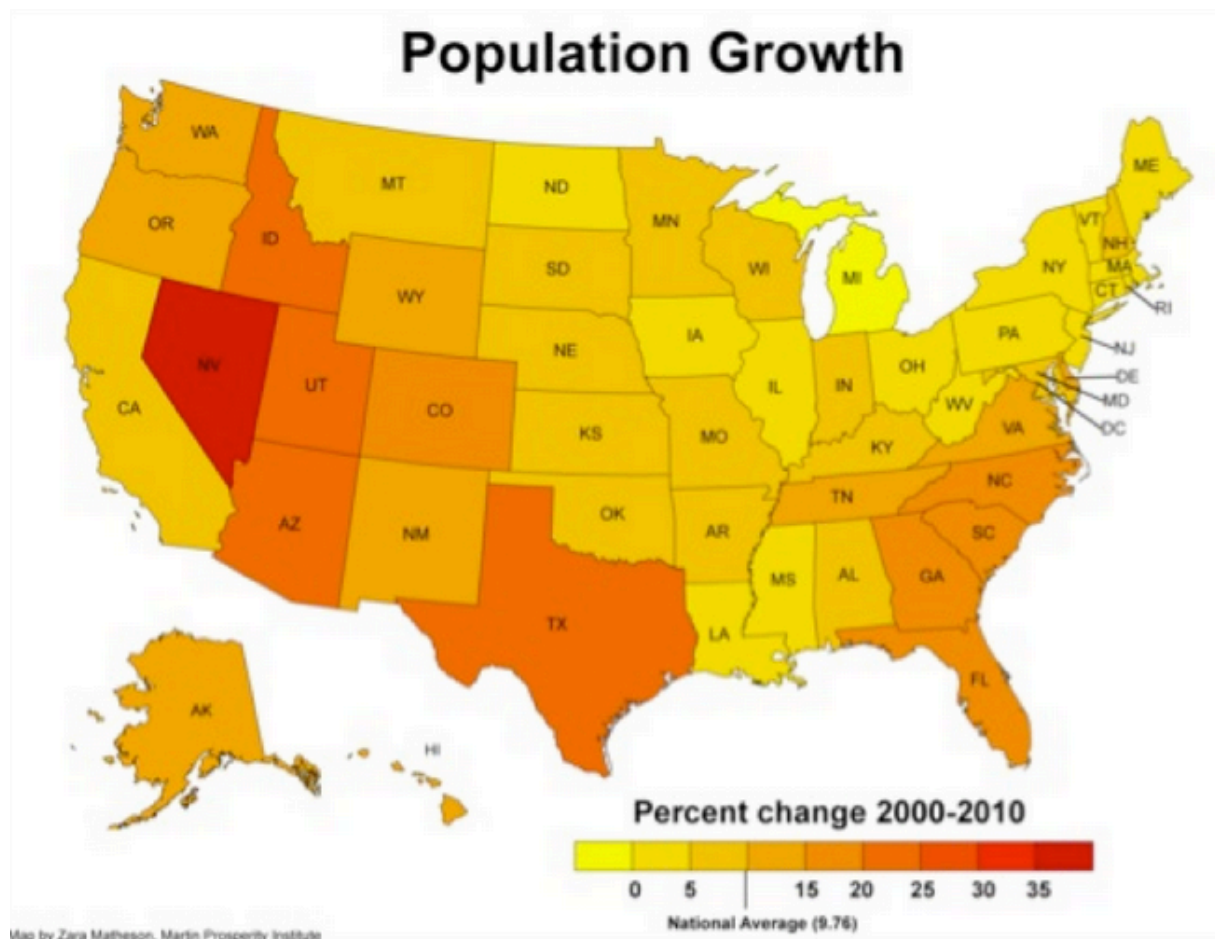
<https://phys.org/news/2020-06-sun-belt-cities-comprise-population.html>

Definition of the Sun Belt Region from Britannica online:

Sun Belt, region comprising 15 southern states in the United States and extending from Virginia and Florida in the southeast through Nevada in the southwest, and also including southern California. Between 1970 and 1990, the South grew in population by 36 percent and the West by 51 percent, both well above the national average. Large in-migration, along with a high birth rate and a decline in out-migration, all contributed to rapid growth of both the Sun Belt's population and manufacturing activities. Improvements in transportation and communications, abundant air conditioning in summer, and a favourable winter climate are attractive forces for retirees as well as workers.

Link to Video for Regional Scale Case Study– Why does the Sun Belt Keep Growing? (5m):

<https://www.youtube.com/watch?v=QAPXizkNtnE>



<https://www.theatlantic.com/business/archive/2011/04/the-state-story-growth-without-growth/73367/>

Population Growth. / Phoenix #2 in People & #3 in Percentage .

According to the Census, Southern, Western Cities Benefit From Population Growth.

April 2, 2020

Walter Unger

The fastest growing metropolitan area in the country last year was Austin. The state capital bordering Texas' hill country region retained its top spot, where the rapid-growth market has reigned throughout the decade. The Austin market rose from the 35th largest at the outset of the decade to the country's 29th largest metropolitan statistical area in 2019. It benefits from its booming technology sector and relative affordability compared to other tech-heavy coastal markets, as well as its unique culture: Keep Austin Weird is alive and well in the "Live Music Capital of the World."

Another tech hub, Raleigh, came in second for population growth last year, driven by migration from primarily the Northeast. Raleigh also benefits from the presence of major universities in the Research Triangle (RTP), including the University of North Carolina, North Carolina State and Duke University.

Phoenix and Las Vegas draw more residents from ever-expensive California cities as well as a large share of immigrants from Latin America. The Phoenix jobs market was on solid footing before the coronavirus outbreak. Las Vegas in particular may struggle through 2020 given the market's exposure to the leisure and hospitality industry.

Rounding out the top five is Jacksonville. This may surprise some, but the city's evolution as a logistics hub due to its growing port, combined with its relative affordability in relation to nearby metros such as Atlanta and Orlando, continue to attract new residents.

<http://walter-unger.com/population-growth-phoenix-2-in-people-3-in-percentage-according-to-the-census-southern-western-cities-benefit-from-population-growth/>

Local Scale Case Study of RTP an industrial cluster in the North Carolina Sun Belt

Situated on the east coast of the United States, North Carolina is just the 28th largest state in the country in terms of area but it has a relatively high population density.

North Carolina may only rank in the lower middle half of the US in terms of size but it more than makes up for those statistics with its population density. The total surface area is 53,819 square miles (139,390 square kilometers) and there is an average of 196 people for every square mile. This makes North Carolina the 15th most densely populated state in the US.

North Carolina has three major Combined Statistical Areas with populations over 1.6 million, as of 2016. This includes:

- Metrolina (Charlotte - Gastonia - Salisbury, North Carolina - South Carolina), pop 2.38 million
- The Triangle (Raleigh – Durham - Chapel Hill, North Carolina), pop 1.8 million
- The Triad (Greensboro-Winston-Salem-High Point, North Carolina), pop 1.5 million



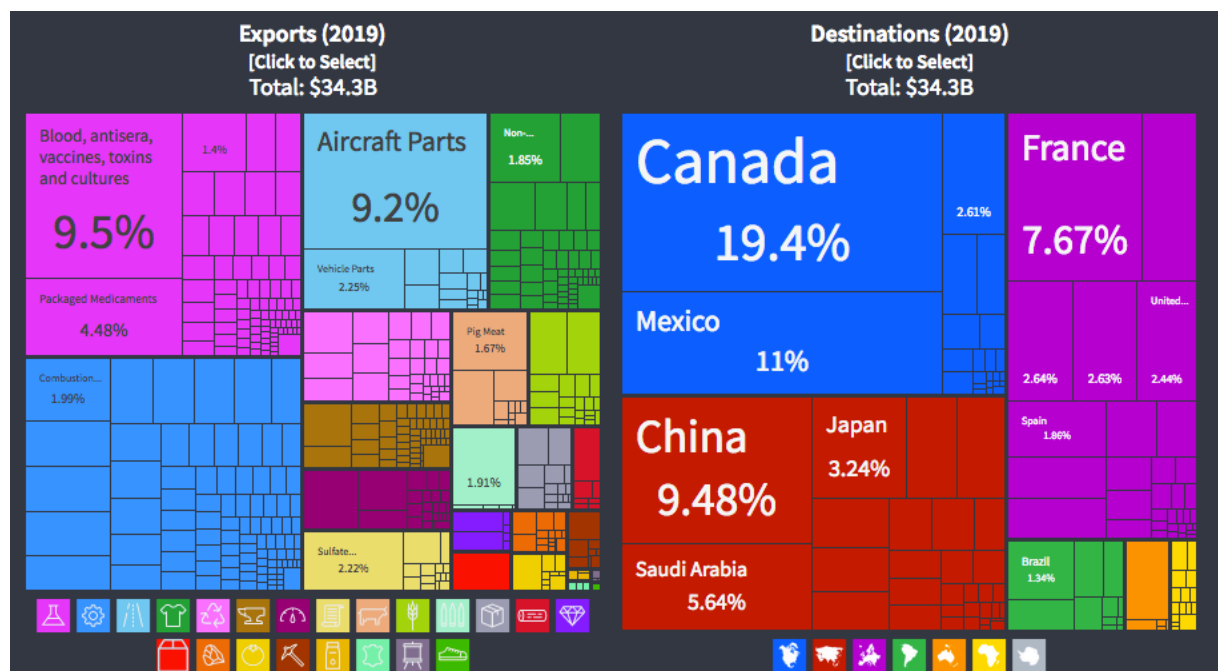
Charlotte is by far the largest city in North Carolina, claiming 827,097 residents out of the total population of over 10 million. While North Carolina has historically been a rural area, the past thirty years have seen a rapid increase in urbanization, like most of the United States. Today, most of the residents of North Carolina live in urban and suburban areas. The most populated counties in North Carolina are Mecklenburg (1,076,837), Wake (1,072,203), and Guilford (526,953) counties.

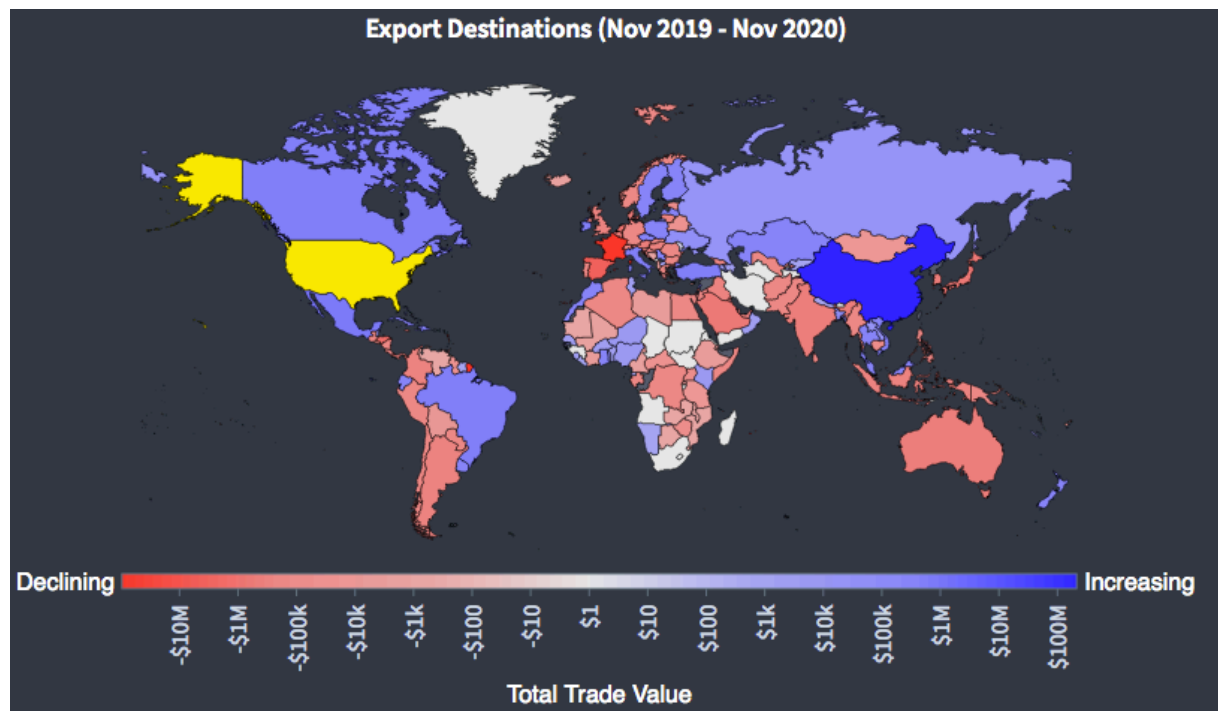
North Carolina has seen a large growth in diversity, mostly fuelled by immigrants from India, Southeast Asia and Latin America. There have also been high numbers of people moving from the Northeastern area of the US, Florida and even as far away as California.

<https://worldpopulationreview.com/states/north-carolina-population>

International Trade date for North Carolina

In 2019, United States' North Carolina exported \$34.3B, making it the 15th largest exporter out of the 53 exporters in United States. The top export destinations of North Carolina were Canada (\$6.63B), Mexico (\$3.78B), China (\$3.25B), France (\$2.63B), and Saudi Arabia (\$1.93B). In 2019 the top import origins of North Carolina were China (\$9.15B), Mexico (\$7.82B), Germany (\$6.01B), Canada (\$3.43B), and Japan (\$3.12B).





https://oec.world/en/profile/subnational_usa_state/nc

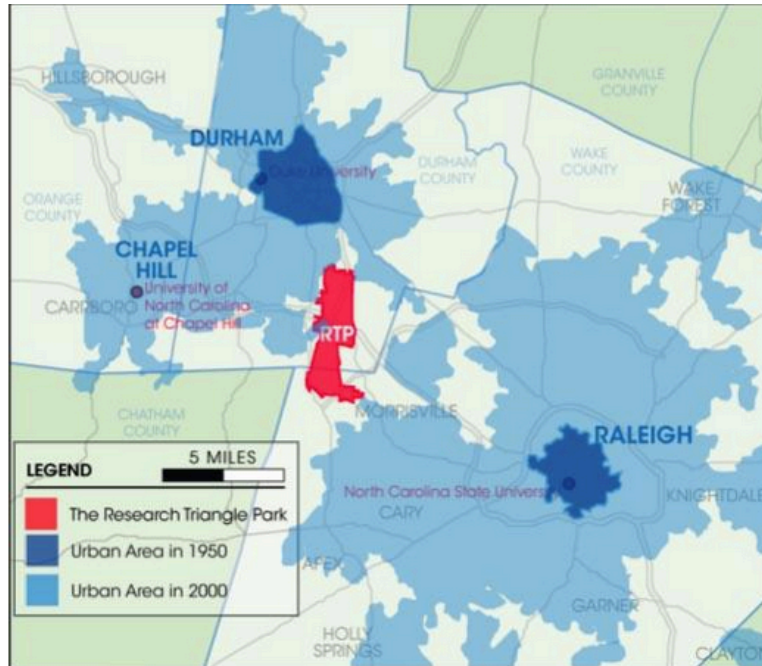


Influence of FDI on employment

<https://www.selectusa.gov/FDI-global-market/states-territories>

Research Triangle Cluster

Early U.S. innovation clusters such as Silicon Valley and Greater Boston emerged from the interaction between the private sector and major universities that received substantial federal research funding, but with little government design. By contrast, **Research Triangle in North Carolina** is the result of early, substantial, and patient public and private support. In recent decades, however, economic development agencies across the U.S. and around the world have devised policy strategies to stimulate the rapid development of regional innovation clusters. Governments are investing in universities, public private research partnerships, skilled workforce training, shared prototyping facilities, and early-stage capital funds for entrepreneurs.



RTP is at the centre of the dynamic Raleigh-Durham region with a population of 1.3 million within the defined metropolitan area and nearly 3 million within a 60-mile radius of the Park.

The "Triangle" from which RTP was named is formed by the geographic location of the region's three highly regarded educational, medical, and research universities: the University of North Carolina at Chapel Hill, Duke University, and North Carolina State University. In addition, RTP draws on the intellectual capacity of a host of other community colleges and higher education institutes. Together, these institutes create knowledge assets and provide a steady supply of trained scientists, engineers, managers, and technicians to the region's workforce.

Link to video about the Research Triangle Park local scale case study (5m):

https://www.youtube.com/watch?v=4MGSOcK_M_M

Local Scale: Case Study of New Mexico's Innovation Clusters

New Mexico

2019 Population Estimates

2,096,829

Source: Vintage 2019 Population Estimates

Median Household Income

\$ 49,754

Source: 2015-2019 American Community Survey 5-Year Estimates

Persons in poverty, percent

18.2 %

Source: 2019 American Community Survey 1-Year Estimates

Educational Attainment: Percent high school graduate or higher

85.6 %

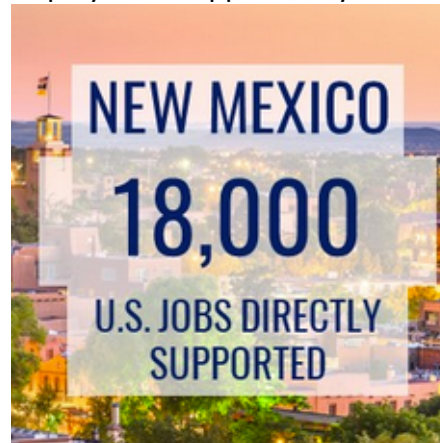
Source: 2015-2019 American Community Survey 5-Year Estimates

Persons without health insurance, percent

9.6 %

Source: 2015-2019 American Community Survey 5-Year Estimates

Employment supported by FDI:



US Census

Bureau, 2019

Comparison of population growth within a region: New Mexico

The State of New Mexico in the deep south of the United States in the fifth largest state in the US by area. However, it is the sixth most sparsely populated territory in the country, indicating that total population isn't that high. The vast area of New Mexico is filled with mountain ranges, deserts and huge forests. So it's not surprising that, although the total surface area of NM is 121,589 square miles (315,194 square kilometres), there is an average of just 17 people who live in each square mile. Overall, New Mexico is only the 45th most densely populated state in the United States.

Many of the state's residents are crowded into Bernalillo County. Despite being the second smallest country in the state, Bernalillo is home to more than one-third of its residents -- 676,685 to be precise. That's mainly because Albuquerque, the largest city in New Mexico, is within the county borders. The total population of Albuquerque is 559,121, making it the 32nd largest city in the U.S.

There are four other counties in New Mexico with more than 100,000 people -- Dona Ana (pop: 214,295), Santa Fe (pop: 148,686), Sandoval (pop: 139,394) and San Juan (pop: 118,737).



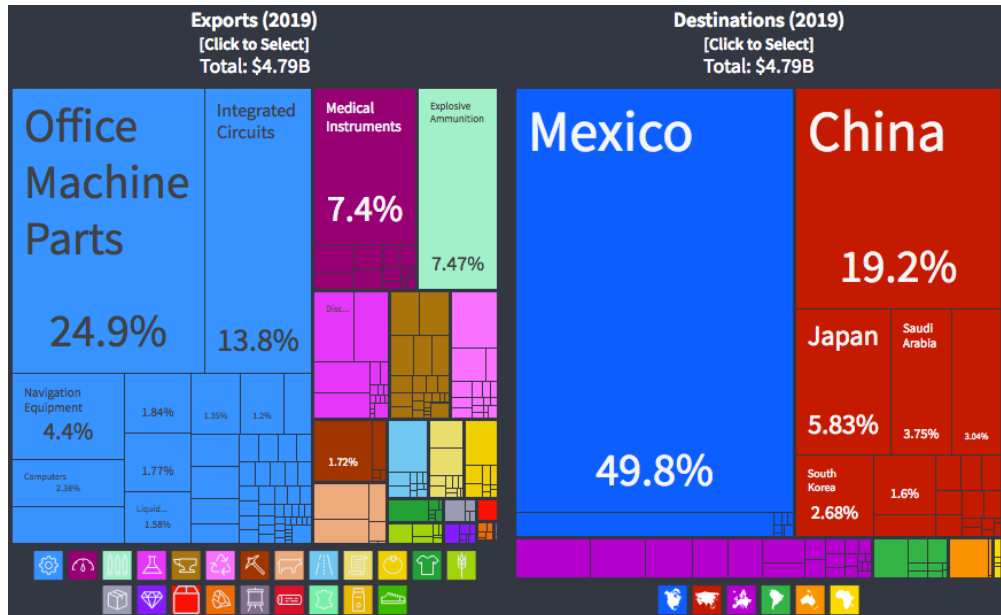
New Mexico has the highest percentage of Hispanics (48%) of any US state, which includes both recent immigrants from Latin America and descendants of Spanish colonists. 83% of the Hispanic population was native-born, while 17% was foreign-born. Most in the state claim a Spanish ancestry, particularly in the northern area of New Mexico. The state is one of four to be ethnically a minority-majority state... About 28% of the population over the age of 5 speaks Spanish at home.

Rank	City	Population
1	Albuquerque	559,374
2	Las Cruces	102,102
3	Rio Rancho	96,210
4	Santa Fe	83,922
5	Roswell	47,941
6	Farmington	45,258
7	South Valley	40,080
8	Clovis	38,891
9	Hobbs	38,375
10	Alamogordo	31,384
11	Carlsbad	29,158
12	Gallup	21,854

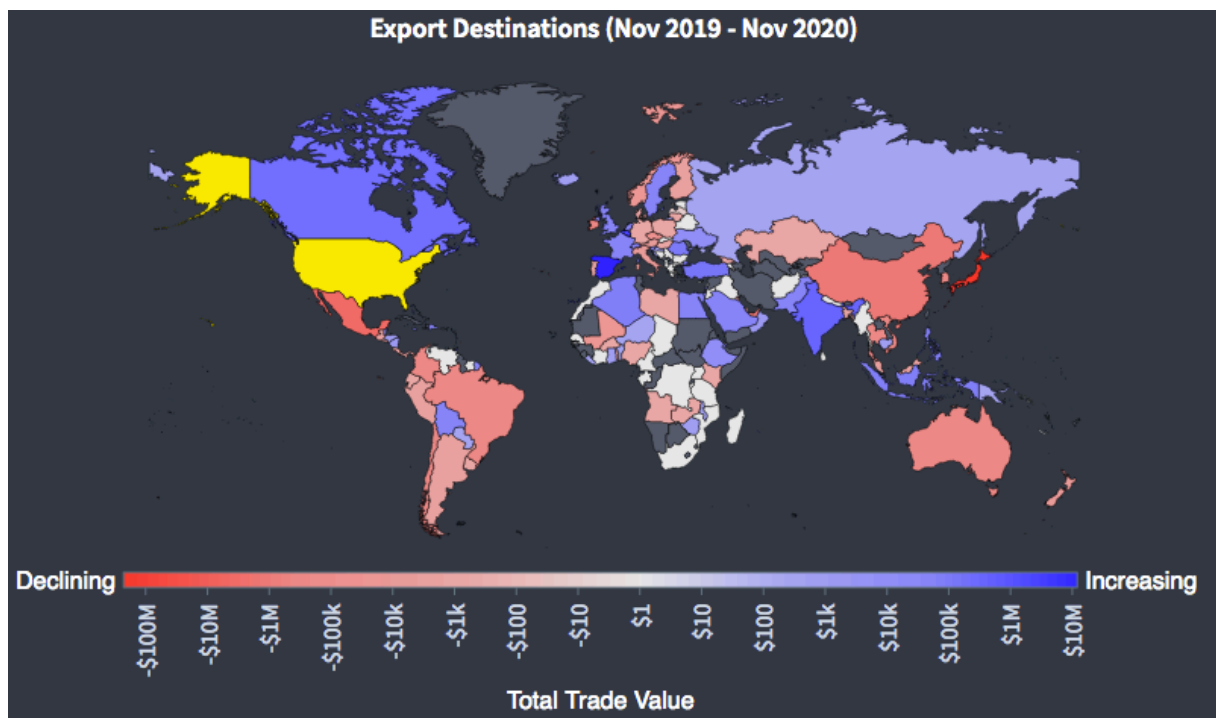
<https://worldpopulationreview.com/states/new-mexico-population>

The New Mexico Economy

In 2019 the top export destinations of New Mexico were Mexico (\$2.39B), China (\$921M), Japan (\$279M), Saudi Arabia (\$180M), and United Arab Emirates (\$146M).



New Mexico Export Destinations



Fastest Growing Exports Destination (Nov 2019 - Nov 2020)

- Spain , \$12M (3.37k%)
- Belgium , \$8.39M (273%)
- India , \$4.52M (91.9%)

Rapidly Declining Export Origins (Nov 2019 - Nov 2020)

- Japan , -\$228M (-97.9%)
- Mexico , -\$84.5M (-34.8%)
- China , -\$41.6M (-72.2%)

Innovation Clusters in New Mexico

New Mexico's predicament a decade ago was that the state had one of the highest concentrations of scientists in the United States and received \$6 billion in federal research dollars a year that went to its universities and major national laboratories, including Sandia National Laboratories, Los Alamos National Laboratory, and the Air Force Research Laboratory. Yet New Mexico had produced few technology start-ups and high-tech industries. It also had one of the nation's highest unemployment rates.

Ambitious initiatives since then have spurred growth in several innovation clusters. In 1999, Sandia inaugurated a science park in Albuquerque for commercial offshoots, the first of its kind for a U.S. national laboratory. Several years later, the state government developed a technology and economic-development roadmap. The plan called for developing clusters in energy and environmental technologies, aerospace, film production, bioscience, information technology, and nanotechnology. The goal was to create new industries and "bridge the gap between federally funded basic R&D and the commercial sector," explained Thomas Bowles, science advisor to then-Gov. Bill Richardson.

New Mexico invested in infrastructure, such as a supercomputer center and a \$250 million "space port" in southern New Mexico that would serve as a base for a future commercial space industry. It greatly expanded science and technology education at the K-12 level and at universities. The state even made direct-equity investments in private firms and in a small jet manufacturer, Eclipse Aviation.

The New Mexico Computing Application Center illustrates the state's use of public-private partnerships to build infrastructure for a 21st century knowledge economy. The center's 172-teraflop super computer, called Encanto, is billed as the fastest public-use computer in the world and is a collaborative effort by the state, Sandia, Los Alamos, the University of New Mexico, New Mexico State University, and the New Mexico Institute of Mining and Technology. Los Alamos's advanced simulation and computing program, which created a new hybrid supercomputer called Roadrunner that can perform 1,000 trillion calculations a sector, is a major contributor.

Economic development is the super computer's express mission, explained Mr. Bowles. Encanto provides R&D support to New Mexico businesses and is an asset for attracting large corporations to the state.

While not all of New Mexico's investments have paid off, a number of these initiatives have changed the dynamics in the state economy.

<https://www.nap.edu/read/13386/chapter/9#437>

Local Scale case study: Spaceport
SpinLaunch announces expansion at Spaceport America, to hire 59 more workers

The company is developing and testing a mass accelerator with the aim of launching satellites into space orbit — using kinetic energy instead of rockets.

Damien D. Willis | Las Cruces Sun-News

- The project will be supported with \$4 million in LEDA funds, paid incrementally
- The California-based company broke ground at the spaceport in May 2019
- The expansion could mean the addition of 59 new workers at the site
- Sierra County is the fiscal agent for the project; is expected to consider the LEDA ordinance soon.

SPACEPORT AMERICA — A company developing and testing a mass accelerator with the aim of launching satellites into space orbit — using kinetic energy instead of rockets — is expanding at New Mexico's Spaceport America, Cabinet Secretary Alicia J. Keyes announced Tuesday.

Despite an overcapacity of launch sites in comparison to demand, there are 11 commercial spaceports in the United States, and at least another six under consideration. While a spaceport can bring economic growth to a region, it requires significant and sustained investments of public funding in an uncertain and volatile market

SpinLaunch signed a lease at Spaceport America in 2019 and has since invested in test facilities and an integration facility. The company is now set to hire an additional 59 highly paid workers and complete the build of its suborbital centrifugal launch system for its next phase of development, according to EDD.

SpinLaunch expects to start test launches in New Mexico in 2021. The news comes just days after the facility's anchor tenant, Virgin Galactic, saw its test flight Saturday end prematurely as the spacecraft's rocket motor failed to ignite — then glided down safely to its landing site in southern New Mexico. It's unclear how soon another window will open for Virgin Galactic's next attempt at a powered flight to space.

The concept behind SpinLaunch is a novel centrifuge system that rapidly spins a vehicle around on the ground until it reaches hypersonic speeds. It then releases the capsule like a catapult to hurl to the edge of space.

It's a cutting-edge concept that, if successful, could radically change the way small satellites are launched in the near future. It could cut expenses to a fraction of today's costs as the world prepares to place tens of thousands of tiny, shoebox-sized "cubesats" into low Earth orbit

The state of New Mexico, through the Economic Development Department's LEDA job-creators fund, is supporting the expansion with \$4 million, which the department said will be paid out in phases as SpinLaunch reaches economic development benchmarks.

The company is expected to spend \$46 million of private money in construction and expansion over 10 years, the department projects, and is expected to generate an economic impact of \$239 million, statewide, over the same period.

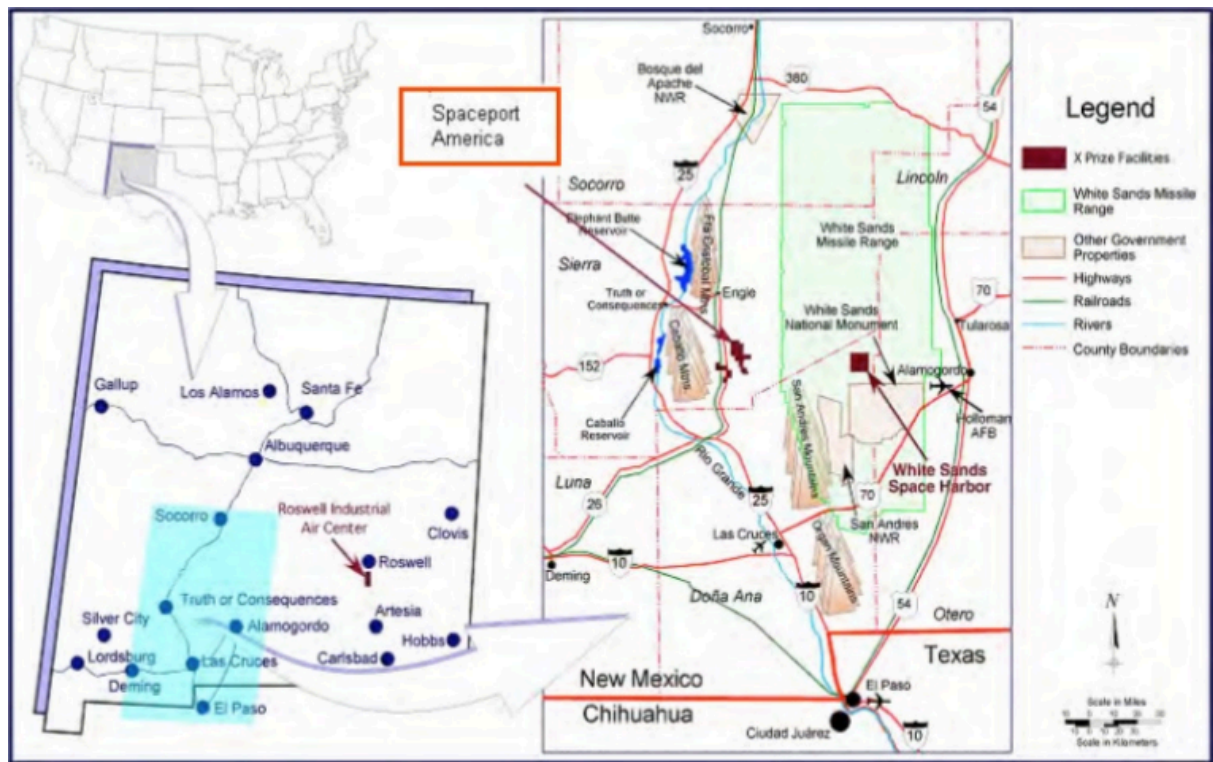
<https://eu.lcsun-news.com/story/money/business/2020/12/16/spinlaunch-spaceport-america-announces-more-jobs-expansion/3911733001/>

For a more critical view of the spaceport, see this video (2m):

State still waiting for Spaceport America to take off

https://www.youtube.com/watch?v=8a7wkpzn78E&feature=emb_logo

Spaceport America in Sierra County, Southern New Mexico between Las Cruces and Truth or Consequences



<https://science.thewire.in/spaceflight/spaceport-america-new-mexicos-protracted-hope-for-a-revived-economy/>

International Scale: Tensions in international cooperation

Survey of USMCA

The USMCA was negotiated under the Trump Administration, but the idea of a replacement for NAFTA dates back before President Trump's presidential term. Over the years, NAFTA had frequently been blamed for the export of U.S. manufacturing to Mexico and the accompanying loss of jobs and suppression of wages among U.S. workers. In 2008, then-presidential candidate Obama had pledged to renegotiate NAFTA in the interests of American workers but later declined to do so during his administration.

As a candidate in the 2016 election, President Trump campaigned on renegotiating NAFTA in order to try and get more favourable terms for the U.S. The USMCA began to officially take shape when the Trump administration sent the required 90-day notice to Congress that he was going to begin talks to renegotiate NAFTA. The talks officially began on August 16, 2017 and ended on September 30, 2018.

First, the Mexican Senate ratified the deal on June 19, 2019, and approved amendments to it on December 12, 2019. Then, on December 19, 2019, the U.S. House of Representatives passed legislation to approve the USMCA. The legislation passed the Senate in January 16, 2020, and on January 29, President Trump signed it into law. Finally, the Canadian Parliament ratified the treaty on March 13, 2020.

Several difficulties emerged before and shortly after the treaty went into effect on July 1, 2020. First, on May 31, 2019, President Trump said starting June 10, the U.S. will impose a 5% tariff on all Mexican imports. He threatened this increase in tariffs unless the Mexican government took sterner measures to lower the number of Central American asylum seekers entering the U.S. from Mexico. A deal was reached to avoid the tariffs on June 8, 2020.

On August 6, 2020, President Trump announced he would reinstate tariffs on Canadian aluminium, which had originally been put in place in 2018. The Canadian government responded, saying it was planning to place equal tariffs on U.S. aluminium products. On October 27, the same day the Canadian government was expected to unveil its retaliatory trade measures, President Trump suspended the tariffs, retroactive through September 1. However, the office of the U.S. Trade Representative said that the U.S. may reinstate the tariffs if aluminium imports from Canada "exceed 105 percent of the expected volume in any month".

Important Provisions of the USMCA

Per the Office of the United States Trade Representative, the USMCA is a "mutually beneficial win for North American workers, farmers, ranchers, and businesses." NAFTA aimed to create a free trade zone between the U.S., Canada, and Mexico, and the USMCA utilizes NAFTA as a basis for a new agreement. While the USMCA has a broad impact on trade of all kinds between the three named nations, some of the agreement's most important provisions include the following:

1. Dairy and Agriculture

The USMCA will increase U.S. farmers' access to the Canadian dairy market by raising the amount of U.S. goods that can be exported to Canada tariff-free. This will allow the U.S. tariff-free access to up to 3.6% of the Canadian dairy market. The amount of tariff-free exports allowed for some poultry products will also be expanded.

2. Automobiles

One of the most significant portions of the USMCA stipulates new trade regulations for automobiles and automotive parts. Under NAFTA, cars and trucks with at least 62.5% of their components manufactured in one of the three participating countries could be sold free of tariffs. The USMCA increases that minimum requirement to 75%. At the same time, the USMCA stipulates minimum wages for workers in the automotive manufacturing process: 40-45% of the work done on eligible vehicles must be accomplished by workers earning at least \$16 (USD) per hour.

3. Intellectual Property

The USMCA increases intellectual property protections. Among other changes to trade policy, the new agreement extends the copyright period to 70 years beyond the life of the creator, an increase of 20 years in some cases. The USMCA also addresses new products that weren't around when NAFTA was written in the early 1990s. The USMCA prohibits tariffs on digital music, e-books, and other similar digital products. The agreement also establishes copyright safe harbour for internet companies, meaning they can't be held liable for copyright infringements of their users if they make good faith efforts to stop infringement.

4. Sunset Provision

Unlike NAFTA, the USMCA will expire after 16 years unless it renewed, and all three nations are required to come together for a joint review after 6 years.

5. Labour

The USMCA sets up an independent investigatory panel that can investigate factories accused of violating workers' rights, and stop shipments from factories found to be in violation of labour laws. In addition, Mexico says it will enact a wide array of labour reforms to make it easier for workers to unionize, and stop violence and other abuses of workers. These provisions are meant to achieve two goals: to improving working conditions for Mexico's workers and create a more even playing field between U.S. and Mexican factories because Mexican wages are likely to rise.

<https://www.investopedia.com/usmca-4582387>

Comparison of USMCA vs NAFTA - USMCA vs NAFTA, explained with a toy car (6m) :

https://www.youtube.com/watch?v=371CRxnGkA8&feature=emb_logo

Joe Biden could find Mexico a truculent neighbour

Mr Trump's threats to withdraw from Nafta and impose sanctions on Mexican exports unless it cracked down on migrant flows strained relations at times, but Mr López Obrador refused to engage. Despite Mr Trump's insults towards Mexicans and insistence that the country pay for his border wall, Mr López Obrador broke his self-imposed ban on foreign travel to meet the US president at the White House. By contrast, Mexico's president took six weeks to congratulate Mr Biden on his election victory, eventually sending an uneffusive letter in which he reminded the president-elect he must respect Mexican sovereignty. Jeffrey Davidow, a former US ambassador, has likened Mexico's at-times prickly relationship with Washington to that of a porcupine facing a bear. "With Biden, López Obrador intends to be a porcupine again — he didn't show his spines with Trump, but he's going to now," said Denise Dresser, a political scientist and professor at Mexico's Itam university. "It's as if López Obrador were pre-emptively trying to create a straw man to fight with . . . using anti-Americanism and nationalism to score political points in Mexico, particularly in an election year," she added. Mexico holds midterm elections on June 6.

US experts monitoring Mexico's compliance with the tough labour provisions of the USMCA free trade treaty issued a stark warning before Christmas: "No more business as usual." Although they were referring to Mexico's slow progress in implementing commitments under the NAFTA replacement, the phrase could just as well describe bilateral relations as Joe Biden enters the White House. Strained security co-operation will loom high on the agenda between the neighbouring countries, overshadowing their \$600bn trade relationship, as will the two leaders' diametrically opposed views on climate change and renewable energy. Mexico's worsening business environment — with independent regulators and respect for contracts under threat from President Andrés Manuel López Obrador — promises to pile on the pressure. "A Biden presidency could be quite uncomfortable for Amlo," said one member of the US transition team, using the Mexican leader's nickname. Mr López Obrador kept things sweet with Donald Trump in exchange for little US "interference" with his domestic agenda, the person added. Mr Biden's approach will be more institutional and "there'll be no Jared for anyone to call". The outgoing president's son-in-law and senior adviser, Jared Kushner, was a frequent interlocutor with Mexico on migration and development co-operation.

Tensions in the energy sector, where US firms have big investments, have also been rising for months as Mexico has sought to clamp down on permits, curb renewable energy generation and favour its state oil and electricity companies, Pemex and CFE. Mr López Obrador is a fossil fuel champion, whereas Mr Biden wants to make the US carbon-neutral by 2050. In a January 11 letter to their Mexican counterparts, outgoing secretary of state Mike Pompeo, energy secretary Dan Brouillette and commerce secretary Wilbur Ross warned that "hundreds of millions of dollars" of US public investments in Mexico could be at risk as a result of Mexican policy. "While we respect Mexico's sovereign right to determine its own energy policies, we are obligated to insist that Mexico lives up to its USMCA obligations, in defence of our national interests, which include investments funded by the US taxpayer," the letter warned. Labour relations including collective bargaining agreements and union rights, preconditions for securing US Democrats' support of the USMCA trade deal, are expected to provide more friction. "I think it's only a matter of time before the first

case is presented [against Mexico under USMCA],” said Juan Carlos Baker, managing director of Ansley Consultores, who helped negotiate the revised treaty as deputy foreign trade minister. “The message could not be more ominous.” Vice president-elect Kamala Harris voted against the USMCA when she was a senator for California, and Mr Baker expected that the two countries, whose economies are closely intertwined, “are going to clash very, very quickly”. Mr López Obrador has already scrapped a partially built US brewery and renegotiated gas pipeline contracts he considered too onerous. Now he is taking aim at Mexico’s independent regulators, which he wants to amalgamate with ministries, something experts say could infringe on the new trade pact.

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