**Slide Show Notes**

**Regional Trade Agreements and Income Distribution**

When we turn from the WTO system, which is "multilateral" (or global), and turn towards "regional" cases where a smaller number of countries (maybe just two) do side-deals with one another, we are turning from a system that tries to minimize discrimination to cases that intentionally discriminate, favoring the participants over the rest of the world.

This type of agreement is probably what was envisaged in the original catalogue title for this course: International Economic Strategy and Trade Policy. The question was probably, "How can a sovereign — probably the USG — get the best possible deal for its country out of the world economy?"

That's an interesting question. The sovereigns have jointly answered it, by and large, by creating the institutions that this course studies.

But the temptation to do side-deals is always there. Also, some issues are specific to particular locations, where you don't need to get the whole globe involved. The global system set up in the late 1940s with the GATT recognized this from the beginning and has set standards for regional agreements that are aimed at allowing countries to maximize cooperation without increasing discrimination unnecessarily.

Since the 1990s, however, the economic environment has looked different from when the GATT was signed in 1947. To highlight two major changes:

* First, the global institutional system has matured, cross-border commerce is relatively open, especially in the industrialized countries, and some developing economies have "emerged" as rapidly industrializing participants in the global system.
* Second, industrial countries became increasingly aware of the major shift in their income distribution that started around 1980, with a bigger share of income going to the already wealthy and highly paid, while compensation to employees has diminished as a share of total income.

And we can identify two results.

* One is that further advances in cross-border cooperation since the Uruguay Round was completed and the WTO created in 1995 have become more incremental and are increasingly characterized by agreements limited to specific issues — like the fishing subsidies agreement of 2022 — or between smaller groups of countries, rather than new global agreements like the proposed "Doha Round."
* Another is that the sovereigns have come under increased internal political pressure relating to income distribution, which has affected how they approach cross-border cooperation.

As a result, the topic of regional trade agreements (RTAs), and the era since 1990 when they have become more prominent, needs to consider questions of income distribution.

So, I'll approach this subject via three sub-topics.

* Side-agreements outside the WTO framework, which I'll call "Regional Trade Agreements" (RTAs). We'll take note of how the WTO looks at them.
* NAFTA as a case study.
* Jobs and Income Distribution.

The North American Free Trade Agreement (NAFTA) is a good case study because it has been so carefully studied. Recent amendments changed some of NAFTA's details and introduced the name USMCA, but it's too soon to have any evidence about whether the changes might have much impact.

First, Regional Trade Agreements, or RTAs.

RTAs are particularly useful for logistical issues at a border between two countries, where third countries are not involved. (For example, they can streamline formalities that slow down a truck or train in crossing the border.) Logistics are especially important for value chains (intra-industry links) that cross borders.

Also, RTAs between neighboring countries have historically been important steps toward closer cooperation in general, and even political unification. A classic example is the customs union between the many German states that existed in the mid-1800s, which contributed to pulling together modern Germany politically.

The EU followed in this pattern, as it adopted a customs union before taking other measures of economic and political integration.

GATT Art. XXIV specifically envisions RTAs that aim to create (a) a "customs union" of common tariffs between the FTA and the rest of the world, and then (b) a "free trade area" (FTA) internally, where tariffs disappear on essentially all goods.

However, the GATT's FTA concept has become something of a loophole that countries use for side-agreements where they discriminate (don't observe the MFN principle) but that don't really create free-trade areas.

"RTA" is not actually the term used in the GATT, which only refers to FTAs and customs unions. When a group of WTO members reaches an agreement that is in the WTO framework but that does not include all WTO members, it's called "plurilateral" (rather than "regional").

On the other hand, the WTO, has set up a committee to assess whether RTAs meet the standards set in the GATT, and it does call it the committee for "Regional Trade Agreements."

An alternative term, which the reference book by Hoekman and Kostecki uses, is "preferential trade agreements." This reflects that the nature of the agreements is to give preference to certain countries over others. (Also, the participants in RTAs may not necessarily be in the same geographical region, so the agreement may not literally be "regional.")

For the WTO, however, "preferential" refers to one-way, non-reciprocal practices where one country gives concessions to another without asking for concessions in return. This is the case under the Generalized System of Preferences benefiting developing countries.

I hope the somewhat ambiguous use of terms by different sources isn't confusing for you!

You might also notice that the GATT uses the technical term "customs territory." This has to do with the fact that a country's territory may not be all be governed by the same customs rules. Some land, like an industrial park adjacent to a seaport, may be designated a "free zone" or "special economic zone" with a separate set of tariff rates and customs rules, making it effectively outside the country's customs territory, even though it is the sovereign's territory. Also, some separate ("overseas") territories may have customs regimes that differ from their sovereign's home territory, like Gibraltar's compared to the UK's.

RTAs have become much more common since 1990.

In the first years after 1945 (the early years of the GATT), cooperation agreements within Western Europe were an important source of RTAs. In recent years, East Asian countries have shown some of the same spirit of building closer regional ties through regional commercial agreements.

For its part, the U.S. started using RTAs in the 1980s to get concessions from other countries on regulatory issues that didn't fit in the multilateral agenda of that era.

Whatever an RTA's purpose is, it inherently treats insiders differently from outsiders.

And yet, in today's world, it's common that no product is 100% "inside," since it surely will have components coming from outside the region. Implementing an RTA therefore involves toleration for some degree of outside componentry in goods that are going to be treated as "inside" goods for the purpose of getting the RTA's benefits (zero tariffs, for example).

This requires the RTA's members to police products to verify that they conform to the RTA's componentry standards — otherwise, someone would claim benefits for a good with 99% outside componentry (that is, an imported good that was just re-packaged).

To give a more concrete example, suppose an RTA's purpose is to develop motor vehicle production in the region. It might give producers in each member's territory the ability to sell cars duty-free in other members' territories, while maintaining existing import tariffs on vehicles coming from non-members. This could allow "inside" producers to produce for the whole region, achieving economies of scale and reducing costs.

On the other hand, the RTA may not be intended to cut off "outside" sources of individual parts like radios or tires, so a vehicle with an "outside" radio could still be bought from a member as an "inside" vehicle, with no import tariff.

The problem is, what happens if a producer imports "too many" parts — maybe virtually all of them — from the "outside" and only does a relatively minor assembly operation inside the region? Should the resulting vehicle be duty-free within the RTA?

(If you're curious, do a web search on CKD, "completely knocked down," kits for assembling vehicles. In the bad-old days, firms in some countries with high import tariffs on cars bought CKD kits and used other imported inputs to assemble cars. Some of these cars ended up having higher import costs than the whole imported car would have cost!)

So, you must decide how much componentry of outside origin a product can have and still be considered "inside." It's a variable that can be set at whatever the RTA's parties want: 5%, 10%, 50%, whatever. You can make it different for different components. It can be a complicated as you like — or, more realistically, as complicated as lobbyists make it!

Notice that if an RTA's rules of origin end up forcing a producer to drop outside suppliers for a particular part, then that rule is a non-tariff barrier brought about by the RTA. For example, a componentry rule may effectively block the import of, say, car radios, without raising the tariff on car radios.

The key words in the componentry standards are "source" and "origin." The source, which is the seller, must be inside the RTA. The origin, which is where production (value added) of the various components took place, may be a combination of inside and outside, depending on the RTA's exact terms.

The WTO's concerns about RTAs start with the basic fact that RTAs do not observe the "most favored nation" precept. Instead, they discriminate, with all the usual issues that characterize discrimination.

A particular aspect of discrimination that's unique to RTAs is what's called "trade diversion."

Usually, you would think from economists' lectures on "free trade" that trade that expands when tariffs are reduced creates a "gain from trade." But when you're discriminating between multiple sources, this becomes tricky!

Read this slide about a three-sided relationship and try to figure out if you're sure that the new commerce between France and Germany, after France's tariffs are reduced under an RTA between just those two countries, is beneficial to France.

This slide reveals the trick that you might not see — but that Japan's producers would surely understand!

The discriminatory tax that France's consumers formerly (before the RTA) paid for German or Japanese products was 20%. Obviously, for French-origin products it was 0%.

If the RTA lowers France's rate on German products, then that lowers the discrimination between German and French cars. BUT, for every percentage point by which the original 20-percentage-point difference in taxation of German imports and French goods is reduced, the difference between France's rates on Germany and Japan — which used to be zero — is increased by the same percentage point.

For example, if France's discrimination between French and German cars is lowered from 20% to 10%, then France's discrimination between German and Japanese cars is raised from 0% (20% vs. 20%) to 10% (20% vs. 10%).

Whatever you do, you're reducing discrimination in one market and raising discrimination in the other market. That's the nature of an RTA where some sources are "inside" and some are "outside."

So, in this case, what's the relevant market for determining if the new imports are better for France? There are two possibilities.

* If previously France's imports came from Japan and now they come from Germany, then it's the increase in discrimination between those two sources that was relevant. France is worse off.
* If previously France's consumers bought the product in France but now import it from Germany, then it's the decrease in discrimination that was relevant. France is better off.

There have been cases in the past where the increase in discrimination dominated, which is called "trade diversion."

With the success of the multilateral process exhausting so much of the manageable agenda by the mid-1990s, RTAs became a way of making limited agreements in areas where some WTO members weren't ready to deal yet, but where other members were.

This slide summarizes the provisions made in the GATT, in Article XXIV, for RTAs as well as for the related concept of "preferences."

When the WTO started in business in 1995, it inherited not only the GATT's post-1947 approach to RTAs, but also a burgeoning tendency among the countries of the world in the 1990s to exploit GATT's free-trade area "loophole."

The WTO's efforts to respond have not been very successful. Apparently, the WTO's Committee on RTAs has not actually evaluated any agreements to judge their compliance with the norms of Art. XXIV, because it's clear that several big members' agreements do not comply and there's no appetite for confrontations between the WTO and its biggest members. (This illustrates once again that national sovereignty is alive and well in the WTO.)

The specific way in which many RTAs fall short is that they claim to be free-trade areas but do not "zero out" tariffs on a wide enough range of goods. An agreement that cherry-picks certain goods for preferential treatment within a small group of countries is not what GATT Art. XXIV had in mind when it said "free trade."

(Ditto for services. We'll look at the agreement on services — the General Agreement on Trade in Services (GATS) — later, but for now I'll just note that GATS has an article, Article V on "Economic Integration," that corresponds to the GATT's Art. XXIV.)

(The EU, by the way, is an example of an RTA that does meet the GATT's standards.)

More successful has been the WTO's effort to pursue its transparency principle relative to RTAs. Under procedures adopted in 2006, WTO members who plan to undertake negotiations on RTAs should notify the WTO ahead of time, and the WTO Secretariat staff prepares reports on the planned RTA. Eventually, the WTO's Trade Policy Review process publishes information about the RTA when it reviews the RTA's members, allowing all WTO members to discuss concerns.

In addition, the WTO seeks to reduce the discriminatory impact of RTAs by encouraging RTAs to reduce barriers against outsiders and to widen their membership by inviting more WTO members to join the RTA.

The North American Free Trade Agreement (NAFTA) is an RTA that claimed in name to be a free-trade area. (A visit to the website of the U.S. Trade Representative — the USG's "trade ministry" — will show you that the U.S. calls most of its RTAs "free trade" agreements.) Would NAFTA have withstood a WTO review of how closely it conformed to GATT Art. XXIV? We'll probably never know.

In any case, NAFTA has been thoroughly studied and some good references describing the agreement and its impact are available for you in Canvas. So, even though I don't want to make this course too U.S.-centric, NAFTA is still a good choice for a case study.

Some amendments to NAFTA under the name USMCA (note that the "free trade" term was dropped from the name) became effective on June 1, 2020. We'll have to wait a decade or so for the expert policy wonks to evaluate what impact may result from changing NAFTA's original parameters.

The success of previous agreements looms large in NAFTA's history. The Canada–United States Automotive Products Agreement of 1965 apparently did wonders for efficiency of automobile production, both in the U.S. and Canada, as it allowed plants in both countries to specialize in high-volume production of components and vehicle models that could be used anywhere in either country. (The paper by Melitz and Trefler in Canvas has a couple paragraphs on the impact of this agreement.)

By the way, the U.S.-Canada FTA of 1988 modified the 1965 auto-only agreement by changing the origin requirements for auto componentry, just as the 2020 amendments of NAFTA also did. This illustrates how RTAs' source-origin rules are somewhat arbitrary and subject to change.

Based on this successful example, Mexico proposed to the U.S. that they also move in the same direction, leading to NAFTA.

This slide contains a quick summary of NAFTA's provisions about phasing out tariffs, etc. The readings in Canvas have more details.

Some of NAFTA's provisions went beyond what the GATT contained at the time. In some areas, like patents (which we will study later), the multilateral process subsequently did some of what NAFTA did, although in other areas (like for the financial sector) the multilateral agreements are still more limited.

Probably the most important thing to understand about how NAFTA came about is that it was a part of Mexico's effort to modernize its economy. This was an effort that included more than NAFTA. In 1986, Mexico adopted the GATT, entered NAFTA negotiations with the U.S., and started courting other industrial countries to which it had previously closed its economy. In addition, Mexico made major changes affecting agriculture.

For the U.S., on the other hand, NAFTA was much less important than it was for Mexico. Canada was the largest single source of U.S. imports (until 2007, when imports from China became larger). Furthermore, the U.S. had been participating in the multilateral WTO process for decades and Mexico got the benefit of all the concessions the U.S. had made under that process when it (Mexico) adhered to the GATT in 1986.

So, the concessions in NAFTA were mainly Mexico's concessions, which Mexico was making as part of its new global economic strategy. Mexico's total exports have shifted away from the U.S. since NAFTA, reflecting the overall change in Mexico's policies favoring exports, which went on in parallel with NAFTA.

Since 1994 (when NAFTA came into effect), commerce has expanded more rapidly within the region than outside it, despite the subsequent growth of commerce with China. Political relations between the U.S. and Mexico appears to have improved.

U.S. firms have sold more in the NAFTA region than they have bought, except for petroleum products. In particular, U.S.-based firms sell more services in the NAFTA region than they buy from Canada and Mexico.

The individual NAFTA members have seen a lot of changes since 1994. Manufacturing in the U.S. has automated and relocated to low-wage states.

How does all this affect jobs and income distribution? What general principles can we use to help us understand the issue?

In the slides that follow, we'll first look at some characteristics of the jobs and income concentration issue. Then we'll turn to policy responses.

**Income Distribution by Firms: Profit Maximization**

The presentation on comparative advantage illustrated the point that eliminating barriers that divide markets should raise total income generated by producers on each side of the former barriers (and of course in the combined region).

That's an accurate illustration in two respects: (a) income rises, and (b) producers receive the income. "Income distribution" to persons is what producers do with that income.

(As you see, I'm using the term "income distribution" to refer to the act of distributing income to persons. But mathematical statistics also uses the term "distribution." To avoid confusion of two different things, I'll use the term "income concentration" to refer to the statistical result of the action of distributing income.)

The comparative-advantage analysis didn't get into what firms do with their income. (When applied to a family, the analysis assumed that income was shared among the family members.)

So, what principles guide firms in distributing to persons the income they receive?

Traditionally, the principle that guides firms is profit maximization. In terms of distributing income, this means that firms would seek to maximize the share of income that they distribute to the persons who control the firms ("profit") and minimize the amount of income that they distribute to other people.

Control over firms (including shares of stock as well as outright ownership) is the primary form in which wealth is held in the U.S. (taking the U.S. as a case, corresponding to the NAFTA case study).

In terms of persons, however, half of the U.S. population has no wealth (zero net worth). The median family is at the top of that half: they have good incomes but if they lose their income for as little as a couple weeks they are destitute. The nice cars driving up to food distribution centers during the 2020 Covid-19 crisis demonstrated this:

* The nice cars corresponded to the families' customary income.
* Their presence at a food distribution center corresponded to the fact that the families had no assets to draw on (except their cars!) when their income was cut off.

Another 40% of the population have wealth principally in the form of equity in the house they live in. The people at the top of this group, in the 9th decile of the population, also have good retirement accounts, but it's only the top decile (the top 10%) who have substantial amounts of wealth not just in owner-occupied real estate but also in financial form — shares of stock, etc.

The top 5% of wealth holders and on uphold the bulk of their wealth in the form of securities that symbolize their control over the economies' firms. So, profit, the share of firms' income paid owners, is paid to people on account of their being wealthy

This chart shows wealth held by four segments of the U.S. population over time.

The numbers reflect what a research center at the University of Chicago was able to find. Unfortunately, the very wealthiest families are underrepresented in the survey. Also, the wealth of a very wealthy family is difficult to quantify because it includes things that are infrequently traded and that therefore don't have market prices that are easy to look up.

This chart shows that control of firms is heavily concentrated.

Not only is control of firms concentrated in the hands of the very but, but also the very wealthy concentrate their assets in control of firms. (Note that the right-most bar should be 50 times as wide and 50 times as short as it is in the chart to be comparable to the left-most bar.)

To maximize profits, firms engineer the workplace to standardize output and reduce unit costs. A small number of relatively well-paid engineers devise work processes for the majority of employees, where the tasks are simplified, tightly defined, repetitive, and easy to monitor and measure.

A large part of the U.S. labor force thus can become adept at their tasks with a couple weeks of on-the-job experience. Since scarce skills aren't needed (even if the employees have them), premium pay to attract skills isn't needed, so that wage rates can be minimized.

Since wages are low and there is no job ladder, there is a lot of "churn" at the lower end of the job scale. People quit and then take other low-wage jobs with high frequency, around 3 million per month in the U.S., except during a bad recession.

[See chart: Mechanization in U.S. Motor Vehicle Manufacturing.]

[See chart: Churn in U.S. Employment.]

This engineering of the workplace is in large part characterized as "labor-saving mechanization," which has been the main driver of changes in the U.S. workplace.

In terms of sectors, there have been major changes in labor use.

* Agriculture: Motorized equipment took over much of U.S. agriculture in the period from the 1920s to the 1950s. Overall, the share of the work force on the farm fell from 40% in 1900 to under 2% by 2000. There was massive displacement of population and rural-to-urban migration: from the South to northern cities, and from the plains to California.
* Manufacturing: In U.S. assembly operations for motor vehicles, for example, labor time required per vehicle has been shrinking rapidly. As the NAFTA study by the Institute for International Economics showed (see pages 8-11), although value added in U.S. automotive parts and assembly rose after NAFTA through 2012, employment fell 30%.
* Correspondingly, there has been a transition in the U.S. from factory work to services: retail distribution (stores) and hospitality (restaurants), medical services, finance, and so forth.

[Table: U.S. Employment Structure.]

The table in this slide provides an economy-wide perspective on the roles people have in the U.S. production and income-distribution processes.

The table's four-way layout is inspired by Prof. James Q. Wilson's classic conceptualization in his book, *Bureaucracy*. (Prof. Wilson was thinking about government offices.) The percentage shares of the population come from Prof. Eric Olin Wright, reflecting his analysis of the U.S. situation as of about 1990.

There have been major changes in workers' roles over time. In the mid-1800s, the large number of people working for themselves in family farms would have made the northeastern "Proprietors" quadrant would much larger than it has become in our era. As firm size has grown, the successors of those people are now in the two western quadrants — workers and managers.

As Prof. Piketty and others have shown, the shares of personal income between segments of the population went through two big changes in the 1900s in the U.S., as well as in other industrialized economies.

In the U.S., the deep and sustained economic depression of the 1930s hurt the social standing of the business sector. As a result, a new social consensus emerged that was more favorable to workers and to government regulation of employment standards. (Under previous standards, the U.S. Supreme Court had forbidden minimum wage laws, for example.)

In the early 1940s, World War II elicited a broad social and economic war effort. This strengthened a social consensus between business and workers, exemplified by "the GI Bill" of benefits for people who had served in the military.

As a result, by the late 1940s the U.S. entered what Prof. Piketty has called a new "inequality regime," with a substantially reduced share of income being received by the top 10%.

This regime reached its high-water mark in the late 1960s. At that time, profit-maximization reemerged as a dominant social ethic, supported by opinion leaders like Prof. Milton Friedman, whose essay "The Social Responsibility of Business Is to Increase Its Profits" appeared in *The New York Times Magazine* in 1970.

In 1971, Lewis Powell, a corporate lawyer who was at that moment discussing with Pres. Nixon his nomination to the U.S. Supreme Court, wrote his now publicly famous memorandum to the U.S. Chamber of Commerce calling for the creation of national business associations to promote the business sector through systematic initiatives in universities and schools, public advertising, government lobbying, and judicial activism. The Business Roundtable, the Heritage Foundation, and the Cato Institute were founded between 1972 and 1974.

As a result, the U.S. inequality regime changed again and the low level of inequality in the U.S. between 1930 and 1970 turned out to be temporary.

[Chart: Distribution Changes in the U.S. and Europe: 1900s.]

In Western Europe, wealth concentration was disrupted by World War I, earlier than in the U.S., and the impact was greater and has been more long-lasting.

Although income concentration in the U.S. returned in the late 1990s to previous peak levels of the 1920s, the legacy of the 1930-1970 period continued in terms of the U.S. having "a mixed economy," where alongside the majority who receive their income from firms, a substantial portion of the population receives their income from employment with government agencies or non-profit organizations whose employment policies are not based on profit maximization but rather on social standards.

Also, when firms do work under contracts for the government, the USG and some states require that they pay the "prevailing" wage, which typically means a union wage that is above average. The prevailing wage concept is an example of a "social" decision that a union wage is appropriate.

Non-firm jobs tend to be more stable. Here in the university, we think of "tenure" as being confined to a privileged class of employees. But almost all USG civil-service jobs are "career" appointments. Over a million active-duty personnel of the U.S. armed forces can retain their positions for at least twenty years, and the over half-million career employees of the U.S. Postal Service have job tenure. Millions of schoolteachers, police officers, and fire fighters typically have job security.

Many of these non-firm jobs also come with medical and retirement benefits.

As a result of so many of these jobs being "good" jobs in terms of wages, benefits, and security, turnover from those positions (churn) is much lower than for private firms. That is even though many of these non-firm jobs are "worker" jobs (in the sense of the chart on U.S. Employment Structure in a previous slide), performing narrowly defined, repetitive tasks that are closely monitored.

With this background about distribution of income and its resulting concentration, let's turn to the question of what to do, including measures that affect cross-border commerce.

(This slide's cartoon is forceful, but it's supported by the findings reported by Prof. Diana Mutz that we read the "Framing" presentation earlier in this course.)

First, let's note that, like comparative advantage, income concentration isn't inherently a question of sovereign borders.

* The high level of income concentration that worries the U.S. today, after a long era of expanding cross-border commerce going back to the 1940s, is about the same as the income concentration the U.S. had in the 1920s when cross-border commerce was a much smaller factor in the economy.
* Mechanization and automation in agriculture and manufacturing, which have affected tens of millions of U.S. workers since the early 1900s (and are beginning to affect workers in service sectors), take place with or without cross-border commerce.
* Major relocations of industry between different regions within the U.S. have lowered average wage rates.
* U.S. cross-border trade grew rapidly between 1950 and 1970 with no change in income concentration.

Furthermore, in the continental-size U.S. economy, many tradable goods are only slightly affected by cross-border commerce (often beneficially) and 60% of the work force is employed in producing nontradables.

Thus, USG measures taken at the borders can at best be a marginal response to U.S. economic issues. (That may not be true in smaller economies that depend on outside sources of many goods and services. For them, measures changing the degree of openness to trade has big immediate impacts on the population.)

On the other hand, expanded trade has supported the increase in income concentration since 1970 in at least two ways.

* One: globalization expands market size and thus tends to expand dominance of large firms, who have higher profit rates, contributing to income inequality. (The overhead costs of dealing with cross-border formalities also bias growth to larger firms.)
* Two: developing economies participation in world markets accelerated in the 1970s (starting with "the Asian tigers"). The burden of adjustment to this transition has fallen mainly on wage earners rather than the wealthy.

With respect to the impact of transitions, reallocation of tasks to maximize profits may achieve allocative efficiency but also requires that productive resources move to new firms and tasks. This adjustment is costly.

The wealthy likely suffer some capital loss in part of their portfolio. However, their wealth is normally diversified so that only a portion of it is affected by the adjustment and they continue to receive income, probably increased income, from other firms. Being wealthy, their consumption expenditures are not affected.

Employees in the "worker" category, however, typically devote their entire work time to one activity and have no income from wealth. If their job is affected by changes in the competitive environment, they must reallocate their work time to other activities. Even if they succeed, no firm is paying them anything while they are in transition and they have no savings to draw in the meantime: they're living "paycheck-to-paycheck."

Furthermore, employees who are devoting full time to a job in a given place invest in housing and local infrastructure (schools and roads financed by local taxes). If the locality depends on firms that turn out to be marginal under new competitive conditions, local housing and infrastructure may have no alternative uses and employees who must leave them behind to seek other employment may suffer substantial capital losses (or be unable to leave).

In extreme cases like mines that are in remote locations and have limited economic life spans, the risk is so great that employees won't make those investments and firms must build their own "company towns." But in less extreme cases employees invest in local infrastructure based on what economists have referred to as merely "implicit contracts" that firms can subsequently break without incurring any financial liability when they move on to more profitable opportunities.

Location effects are mainly felt around smaller cities, where a substantial share of employment may be concentrated in one or two employers. In large cities, employers are equally affected by competition from other firms, but if an employer leaves the market the employees are within commuting distance of many other potential job sources, without changing their residence.

So, there is a "rural-urban" divide in impacts, with quotation marks because it really refers to a distinction between small and large urban areas.

Turning to the question of government policy:

What should we do about the issues of jobs and income concentration?

Note to start with that private business firms, which are the organizations that engage in cross-border commerce, can't be expected to take care of all the people who are not wealthy and need current income to buy basic needs. The list of reasons for why employment in firms isn't consistently adequate for this purpose includes:

1. Recessions.
2. Labor-saving mechanization.
3. Shifts in demand between sectors (new products replacing old).
4. Churn between individual firms (including between firms located in different countries), as some firms take markets away from others.
5. Employers' success in pushing wages down to increase profits.
6. Workers' limited abilities.

These factors all reduce employment and wage rates and are normal characteristics of the business sector that won't go away.

Keeping this context in mind, how would measures that focus on cross-border transactions work?

In terms of the business sector's limitations in dealing with the jobs and income concentration issues, border measures to address factor no. 4 — the churn between individual firms — and only the cross-border part of that.

Major aspects of the issue are not touched, or may be made worse, by border measures.

* In large economies or small economies that are already relatively closed, the vast bulk of job dislocation is because of internal competition or relocation.
* Traditional assembly tasks will either be done by low-wage labor or will be mechanized, but they can't survive as high-wage jobs.
* Costs created by barriers at the borders cost higher-wage jobs in other industries.
* The economy's globally successful industries will be hit by retaliation by other countries.

As a case, consider the U.S. tariffs of 2018 (which are still in effect). The costs to other industries from the tariffs and from retaliation turn out to have resulted in net reductions in U.S. manufacturing employment: see the paper by Flaaen and Pierce in the Canvas File section. In the WTO dispute triggered by these tariffs, the USG did not put forward an economic argument for the tariffs but rather argued that imports from China corrupted public morals in the U.S. — see page 34 of the report of the WTO dispute panel, in Canvas. The USG lost the dispute, facilitating retaliation against successful U.S. exports.

As a result of considerations like the ones we just reviewed, the most common responses to job and income concentration issues are internal rather than measures taken at the border.

Some government measures are characterized as "predistribution," because they directly affect how firms will distribute income to persons.

* Minimum wage laws.
* Overtime rules, which are based on standards for the length of working periods.
* Workplace safety standards.
* Mandatory participation in government-operated insurance for employee injuries, disability, unemployment, retirement (pensions), and medical costs.
* Encouragement for employee profit-sharing.
* Systems for employee participation in boards of directors (in some countries).
* Legal protections for collective bargaining organizations and procedures.
* Laws on social discrimination in hiring.
* Rules regarding job tenure, dismissal, and separation benefits.

However, given the limited ability of the business sector to address the underlying jobs and income concentration issue, there are many measures that "redistribute" income through the fiscal system (after income has been initially distributed by firms).

* Unemployment benefits.
* "Universal Basic Income" or guaranteed minimum income benefits.
* Specific social services that are universally available, rather than being limited to employed people.
* "Adjustment assistance" linked to employees of firms whose loss of sales is due to competition from across borders.

(An example of adjustment assistance that has arisen lately is the European "Just Transition" framework for decarbonization. Since public policy is accelerating decarbonization and thus sharpening the impact of the transition, the idea is that public policy should take responsibility for the transition costs that it is creating.)

The bottom line is that internal measures appear to be more effective than border measures at addressing issues of jobs and income concentration, for several reasons.

* Border measures may not work at all, but rather may reduce the amount of income available to address the issues while only postponing adjustment that will ultimately be unavoidable.
* Internal measures can resolve the issues created by all the factors that prevent firms from being able to implement solutions — factors from recessions to disabled workers.
* Border measures are more discriminatory, more subject to corruption, and more likely to create political conflict.

What are you going to do to benefit from the materials in this module?