



A podcast about the economics of trade & policy  
with Chad P. Bown

## Episode 197. Moving workers across Europe

[Episode webpage](#)

November 26, 2023

Transcript

(lightly edited)



**Chad Bown:** In the European Union, the movement of workers has been super controversial. Workers in richer countries have been worried that allowing migration from poorer countries would hurt their way of life. The concern over migrants arose first from Portugal and Spain in the 1980s and 1990s and then from Eastern Europe in the 2000s.

In France, this turned into a huge political problem

**Europe 1** *Il était une fois un plombier polonais...Bruxelles veut lutter contre le dumping social des employées de l'Est de l'Europe qui vient travailler en France ou en Allemagne pour moins cher que les employées locaux...*

Once upon a time there was a Polish plumber...The concern was whether EU rules would allow a Polish plumber to work in France for cheaper than a French plumber.

At the same time, the EU's freedom of worker movement was one of the foundational pillars of the European integration project. Policymakers in poorer European countries like Poland saw the movement of workers as one potential way to help their countries catch up.



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with Chad P. Bown

But what are the policies that guide the movement of workers across Europe? When workers move, what labor regulations are they subject to? What are the impacts of these policies and regulations on workers in a host country like France? On the flip side, what are the impacts on that posted worker's old community back home?

This episode examines European workers under one super interesting framework – the EU's posting policy.

To tackle all of this, I will be joined by a very special guest.

**Mathilde Muñoz:** Mathilde Muñoz, UC Berkeley.

**Chad Bown:** Mathilde Muñoz is an economics professor at the University of California Berkeley. She is an expert on trade, workers, and labor standards. Mathilde is European, she is French, and she is going to share results from some of her brand new research into the impact of the EU posting policy on European workers.

**Chad Bown:** Hi, Mathilde.

**Mathilde Muñoz:** Hi, Chad.

**Chad Bown:** You are listening to an episode of *Trade Talks*, a podcast about the economics of trade and policy. I'm your host, Chad Bown, the Reginald Jones Senior Fellow, at the Peterson Institute for International Economics in Washington.

## THE EPISODE

**Chad Bown:** Mathilde, to start, introduce us to the history and thinking behind this European integration project. Where did the European Union come from?

**Mathilde Muñoz:** The European Union, or the idea of the European Union, is actually an old one. I think the first person to actually talk about Europe as a 'United States of Europe' was Victor Hugo in 1850. And so what he said is actually very interesting. He said one day will come where the only fields of battle will be markets opening to trade, which I think is an amazing insight of what the European Union would become.



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with Chad P. Bown

Indeed, when the construction of this United States of Europe really started was after the war. After 1945, after years and years of battles and conflicts, there was this idea that the only way to go forward was to try to build this unified federal union that was going to solve those issues that led to the wars.

The way it worked in practice was that, in the 1950s – in 1957, to be precise – the core, old member states decided to sign the Treaty of Rome and committed to the four economic freedoms.

What we call economic freedoms in Europe are the free movement of goods, services, people and capital. Those are the four pillars of European integration that were meant to allow this construction of the United States of Europe.

**Chad Bown:** After the initial members signed the Treaty of Rome and committed to this path of European integration, how did they implement it in practice?

**Mathilde Muñoz:** Those member states signed the Treaty and then the implementation of the treaty worked in three main steps.

In the first decade, the member states worked on removing all of the EU's barriers to integration. They decreased tariffs and they signed agreements to make trade free in the way we would think about it when we think about trade policy in the world.

The second step really happened because we realized that the first step was not enough. Even if you decrease tariffs and don't have formal borders, there are many other ways to prevent trade or prevent integration.

One famous example was that Italy required pasta production to have 100 percent durum semolina to make pasta. And so those were what we call today nontariff trade barriers. But members state were really aware that we needed to go one step further if we wanted to build that United States of Europe in this united market.

What they did was to implement what's called the Single Market Act. The Single Market Act (or the single market approach) is really to have one single standard and not have these national idiosyncratic barriers to trade.



*A podcast about the economics of trade & policy*  
with Chad P. Bown

The last and biggest step – and the most politically controversial – was the political union. What do we do to be a political union?

When the Maastricht Treaty was introduced in the mid-1990s, that was the time when the European member states agreed to have a central bank and to have institutions that were meant to oversee this United States of Europe. And that's the last step that led to the European Union in the way we know it today.

**Chad Bown:** How far had economic integration gone as of the 1990s? When you look at those four freedoms at that stage, where was Europe integrated and where was it not integrated?

**Mathilde Muñoz:** The consensus in the 1990s was that trade policy for goods was pretty successful following the Single European Act and the end of tariffs. What we could see is that European countries were trading a lot within Europe after the end of those tariffs.

At that point, we were seeing a lot of integration in terms of trading goods, but perhaps not the level of migration or services trade or capital flows that would be consistent with the differences in, say, GDP per capita or wages. Obviously there were some huge migration waves from Spain to France or from Spain to Germany, but we think that the level of this migration flows were not big enough if you relate that to the differences in terms of growth or economic wellbeing or wages across European member states at the time.

If you think about it, Spain or Italy was much poorer compared to France, the UK or Germany, even accounting for the level of prices. So there were still a lot of dispersion in how those countries were doing economically and even socially.

**Chad Bown:** Europe was making progress but it was far from completely integrated economically by the 1990s. At the same time, you have the fall of the Berlin wall, then the breakup of the Soviet Union and end of the Cold War. What happened next in Europe?

**Mathilde Muñoz:** When the Berlin wall fell and ended the Soviet Union, this meant a huge change in the geography not only for the world but also for the European Union.

There was this open question of what would happen to all those countries in Eastern Europe that were leaving, or gaining their independence from, Russia and the Soviet Union. Is Europe going to integrate these countries and make them part of our project? Because it was always, I



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with Chad P. Bown

think, philosophically those countries would be part of this project just because of the geography and the history of the European Union.

This meant that in the 1990s, European countries also had to think ahead about how to integrate those countries – this massive number of people, from very different countries that had a very different history – into that project, and how were we going to handle trade liberalization, but also the potential migration flows and changes in the geography of the European Union.

What happened when those Eastern European countries became part of the European Union is that we started to see a huge take up of this existing policy that was called the posting policy.

**Chad Bown:** What is the EU's posting policy? How does the posting policy work? Maybe start with an example.

**Mathilde Muñoz:** The posting policy just means that if you are a construction firm located in Poland, you are allowed to sell your services or to export your services in order to serve, let's say, French customers.

In order to do that, obviously your business is to build houses or to do plumbing services. What you need to do is to have your own employees go temporarily to France to build that house for the French customer and then come back to your country.

Instead of having to open a shop in France and to hire French workers there and to build a house and then to come back to Poland, what the posting policy does is to allow you to export – just as any other firm – but because of the type of activity you do, you just need to send your own employees abroad. That's really the spirit of this policy.

**Chad Bown:** Was this EU posting policy some new policy designed for the eastern European countries just joining the EU?

**Mathilde Muñoz:** This policy was not new, it was actually established in the 1960s. And it was there because one of the four economic freedoms was to ensure freedom to supply services. European countries had to decide how to handle the freedom to supply services when services need to be supplied next to customers.



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with Chad P. Bown

While the policy was always there, there was very little take up in terms of numbers. Then, all of a sudden, after the accession of Eastern European countries, the number of posted workers really started to skyrocket in the EU. We started to see a lot of firms and workers using this policy in order to move and to work in the EU.

**Chad Bown:** You gave us the example of a Polish construction firm sending its workers to build houses in France. How does the EU's posting policy work in practice? What labor regulations does the Polish firm operating in France have to follow?

**Mathilde Muñoz:** What is difficult with this policy is that it is a joint trade and migration policy. All of a sudden, member states had to think about labor market regulations.

Normally, when a firm, say, sells a washing machine from Poland to France, we don't really care about what this firm is doing in terms of labor standards. We just buy this washing machine.

Now, all of a sudden, you have these Polish plumbers coming to France and working in France under a Polish employment contract. This meant that European countries had to take a stand on which – of the French or Polish – labor code was going to apply to that weird posting assignment.

In the EU, the decision that was taken was that social security contributions – e.g., payroll taxes – were always going to be set by the exporting country. In my example, the worker pays payroll taxes in Poland.

But during the contract performed in France, France has the right to impose its French minimum wage on the Polish workers. And that is the only time in the EU where one country was allowed to impose its domestic standards on foreign firms. It's the only exception to the free trade spirit of the European Union.

**Chad Bown:** Was this exception part of the original posting policy of the 1960s?

**Mathilde Muñoz:** No, this was a change. At the very beginning, we had this idea that free trade should be the same – for the construction firm or the firm producing washing machines – there was no idea that those importing countries would be allowed to impose their standards.



*A podcast about the economics of trade & policy*  
with Chad P. Bown

It all changed in 1996 following the accession of Portugal. Portugal was very poor when it was accepted as a member state in the EU, and rich member states started to worry. So they established this institutional framework to be allowed to protect themselves against competition from countries with lower labor regulations.

Even though there were a lot of changes in the institutions around this posting policy, and despite the fact that everyone was aware that there was a jump in the use of this posting policy, we still don't know a lot about it. There were very little in terms of numbers. It was a huge political debate, but the debate was never grounded in numbers.

And that is what got me interested in it.

**Chad Bown:** Now I want to turn to your research. One really big contribution of your project is very non-glamorous. You just built amazing data sets. You said, "The debate wasn't grounded in numbers," well that was partly because there were no numbers. You managed to create the data to provide numbers to explain the importance of this policy.

OK, to start, tell us about the sectors using the EU posting policy. You gave us the example of the Polish construction firm. In the overall data, is that example typical?

**Mathilde Muñoz:** The representative posted worker – i.e., the average posted worker in the EU – is not necessarily a plumber, but it does work in the construction industry. The top sector using this policy is construction, followed by manufacturing (manufacturing services) – i.e., workers from a temporary employment agency come to your factory to help you produce stuff.

Then you are going to have a lot of posted workers in road transportation – i.e., international drivers tend to be posted workers. Other important sectors include agricultural workers – i.e., temporary, seasonal workers come to a country to pick fruit or to help to produce wine. And finally, cleaners.

**Chad Bown:** Those are the industries. What do we know about these posted workers being employed by these exporting firms and sent from one country to work in another? How do those workers compare to migrants?

**Mathilde Muñoz:** What is interesting is that those posted workers are actually a bit different, even compared to migrants who come from the same country. The migrant who is going to



*A podcast about the economics of trade & policy*  
with Chad P. Bown

move from Poland to France is not the same as the posted worker who is going to be sent from Poland to France.

One big difference is gender. Posted workers are almost all men: 95 percent of posted workers are men, while migrants tend to be 50-50. And the reason is probably that the type of jobs that are required for posting tend to be male-dominated jobs – i.e., construction or manufacturing services.

Obviously, we might have thought that other jobs that also need to be close to customers – e.g., nurses – would have been affected by the posting policy, but it didn't happen. We don't really know why. One potential answer is that there are still a lot of nontariff barriers in those jobs that may prevent women from moving. Another obvious contributor – the elephant in the room – is that someone needs to stay home to take care of the kids. So you also have this gender discrepancy in the way posting can work.

**Chad Bown:** How else are posted workers different from migrants?

**Mathilde Muñoz:** Another interesting difference is the level of education and age.

In Europe, migrants tend to have higher levels of education compared to their counterparts in the origin country who do not move, but also sometimes compared to natives in the destination country. (I'm talking about European migrants here, to be clear.)

That's not the case for posted workers because more than 70 percent of posted workers have blue collar jobs that do not require a college education. Those workers do not have the same level of education as migrants. And in a sense, that's logical, because in order to move from one country to another, maybe you need some liquidity, maybe you need some money, maybe you need to gather some information. This is going to be very hard to do if you're plumber in Poland because you need to save and you need information about job opportunities in France. While maybe if you are a consultant, it's much easier to shop around for a job.

The age difference is also very striking because, at the time when they move, European migrants seem to be around 25 years old. According to the data we have for posted workers, they tend to be closer to 40 years old.





*A podcast about the economics of trade & policy*  
with Chad P. Bown

Those workers are older. And again, this is pretty logical. Maybe those workers have a huge attachment to their origin country. Maybe they have a family, maybe they have a house. For them, it's not really an option to leave everything they have in order to settle into a new life in another country.

But if their employer wants to find a customer abroad and wants to send those workers abroad in order to perform a job, maybe those experienced, blue collar workers are going to be very good at moving to perform those projects.

**Chad Bown:** How big is this European posting policy? In terms of the size of economic activity being impacted, is this EU policy important?

**Mathilde Muñoz:** This posting policy is not just some institutional curiosity it's actually big if you look at the numbers. In 2019, there were roughly 2 million workers – in terms of full time equivalents – that were engaged in this posting policy. While that is not so big in terms of the total stock of employment (it is roughly 2 percent of employment in Europe), but it starts to become very big if you scale that by employment in the sectors that are using the posting policy.

Another way to understand the magnitude of those flows is to compare them to other flows linked to the other economic freedoms – e.g., trade in goods or trade in services. If you look at the data, the flows that are triggered by those posting contracts represent roughly 2 percent of GDP. To give you an order of magnitude, this is equivalent to 10 percent of goods traded within the EU. That is not nothing, and it is one third of all traded services flows in the EU.

In terms of its contribution to how much we trade across European countries, it's actually as large or even larger than trade in financial services or technological services – i.e., those type of sectors we always obsess over when we want to liberalize trade, like when Brexit happened.

If you look at the numbers, we trade as many Polish numbers as we trade consultant services or accounting services in the EU.

**Chad Bown:** In trade terms, what are the patterns of these trade flows between EU countries?

**Mathilde Muñoz:** In terms of the geography of those flows, what is also very striking is that those flows are unbalanced, in terms of their origin and destination. They are much more unbalanced than trade in goods, for instance.



*A podcast about the economics of trade & policy*  
with Chad P. Bown

Posting tends to flow mostly from low to high wage countries. The main sending countries are going to be Eastern European countries and Portugal and Spain. The main destination countries are going to be almost exclusively rich countries. Roughly 85 to 90 percent of posting flows actually go to those older member states with higher levels of wages.

You have this huge imbalance, which is different from what you see for trade in goods, because trade in goods is pretty balanced in the EU, and the countries that trade more goods are the richer countries. France and Germany, for instance, trade a lot of goods between them, but don't trade a lot of posted workers compared to how many workers from Poland France imports.

**Chad Bown:** You have assembled all of this amazing data. There are so many economic questions to ask. You start by looking at what happens to local labor markets in France.

**Mathilde Muñoz:** This posting policy boomed because the Eastern European member states entered into the EU. There was a lot of heterogeneity in the way different places in France were exposed to the posting policy. Some regions got a lot of posted workers and some regions did not get a lot. That difference allows you to compare those regions to understand what happened in the places that got more.

**Chad Bown:** What did you find?

**Mathilde Muñoz:** What you see in the data is that the employment of French workers did decrease. The magnitude was not huge. It was a 6 percent relative decrease, but still it decreased in the heavily exposed sectors.

French workers in construction, manufacturing services, and agriculture were most hit – in terms of employment – in those regions.

However, their wages stayed pretty constant. The French labor market is pretty rigid, and it is very hard to decrease wages for existing workers. The adjustment worked through the employment margin. We just hired fewer French workers, and we hired more posted workers in those places.

**Chad Bown:** What else can you tell us about the negative impact of the posting policy on employment in France. Did it result in a lot of unemployment?



*A podcast about the economics of trade & policy*  
with Chad P. Bown

**Mathilde Muñoz:** One other interesting insight is that, when we think about employment decreasing, we always think about people losing their jobs and becoming unemployed. This is not exactly what happened because people didn't necessarily reallocate from the construction job to, say, a waiter job (at a restaurant) that was sheltered from the posting policy. We didn't see a lot of that happening in France – i.e., we didn't see a lot of sectoral reallocation.

Unemployment increased a bit, but not as much as what is implied by the change in local employment. This indicates that probably what happened is that either people retired earlier – i.e., they just left the labor force as this competition was kicking in – or maybe they stayed at university (at school) a bit longer.

**Chad Bown:** That is the impact of the EU posting policy on the country that receives the posted workers. France is the importer there. What is the impact on the sending country, the exporter? Let's start with the firms in Portugal sending those workers to a place like France. What happens to the Portuguese firms?

**Mathilde Muñoz:** What you can see in the data is pretty striking. Those firms, they are again construction firms, very small firms, hiring carpenters. The average number of employees is 10 people. Those are small firms, and not the tooled up exporters we usually think about.

Those firms do scale up a lot once they get connected to a foreign customer and they just earn more contracts abroad. They increase their sales in order to catch up to this increased demand. They hire more workers in Portugal, they increase their profits, and interestingly, they also substitute what they do in Portugal with what they do abroad. They start serving fewer Portuguese customers, and they shift most of their activity abroad during the posting assignment.

**Chad Bown:** How big are the gains to the Portuguese firm doing these posting contracts compared to the gains for a traditional exporter of goods. If you were to compare a firm posting carpenters to a firm exporting wine or a car manufacturer, what do you find?

**Mathilde Muñoz:** If you compare the gains from trade at the micro level in Portugal between the wine manufacturer and the carpenter, in terms of relative expansion, you get the same number. Those two firms gain equally in terms of relative increase in size and in employees .



*A podcast about the economics of trade & policy*  
with Chad P. Bown

And that was pretty surprising to me, because before starting this, I didn't really know whether I should expect that the small carpenter would have big gains (in terms of growth) from trading compared with the car manufacturer, which we all know is going to gain a lot from trade.

**Chad Bown:** Those are the posting firms in Portugal, the exporters. What about the workers in Portugal that go off to France to do the work for the firm. How well do they do economically?

**Mathilde Muñoz:** What happened to those workers in Portugal who got sent abroad by the employer is that they get wage gains. And those wage gains are pretty substantial – about a 14-15 percent increase in wages, after you get sent abroad.

But those wage gains are not as high as the profit gains for employers. And I think what this tells you is that, because you are now intermediating those migration flows with firms, you have to redistribute the surplus from immigration, and the surplus is really this new contract between the Portuguese firm and the French customer.

The surplus of that new link has to be split between those three entities. What you see in the data is that the Portuguese workers do get something. They don't get all of it. So the producer is also capturing part of those gains.

**Chad Bown:** Let's go back again to the issue of the minimum wage and the controversy you told us about that led to the 1996 change that said posted workers have to earn at least the host countries' minimum wage. How did you examine whether the minimum wage mattered for worker wages, and what did you find?

**Mathilde Muñoz:** One big question was always, obviously, do we need the minimum wage regulation in order to ensure that workers get something from the surplus?

There were some free market advocates who were saying that if the labor market is very efficient and competitive, then Portuguese workers should be able to bargain enough with their Portuguese employers and threaten to work for the French firm directly if they didn't get some wage gains.

I try to investigate that question, and the way I do it is by comparing the wage gains for workers that are in Portugal – so those workers are sent to high wage countries where the minimum wages are higher than the wage they receive in Portugal – but I also have the same data for Luxembourg.



*A podcast about the economics of trade & policy*  
with Chad P. Bown

Luxembourg is small but it does perform a lot of posting services and also in the same sectors as the Portuguese firms. But obviously Luxembourg has a very high minimum wage, so it is not constrained by any minimum wages abroad. By doing this comparison – between the wage gains in those different countries – you can get an idea of how much the minimum wage matters for the Portuguese workers.

What I find is that most of the wage gains in Portugal seem to be driven by the minimum wage abroad. It seems that this regulation that the EU put in place was really key in ensuring that the gains from integration and from migration were redistributed at least partially to the workers.

**Chad Bown:** Another way this EU posting policy could have a distributional impact between EU member states is through what country gets to collect the tax revenue from worker income. How does the EU posting policy work, and what did you find?

**Mathilde Muñoz:** One big aspect of the posting policy was its implications for taxation and tax revenues. And this is mostly because we don't have a European budget. So borders do matter for taxes and for redistribution.

Obviously, when we usually think about migration, one big worry we have is about what we call brain drain. Migrants leave Portugal and they go to France. They stop paying taxes in Portugal, and maybe they had productivity gains and were generating some economic activity in Portugal. Portugal loses those guys. But France is on the other end winning some new workers who are going to pay taxes there and who are going to contribute to the French economy.

What the posting policy did was to really reverse and switch this fiscal externality. It makes migration the same as trade.

So when a Portuguese firm sells more cars abroad, it's very good for Portugal because Portugal is taxing more employment and more profits, and that's the reason why countries want to win market shares abroad.

When, all of a sudden, a construction firm in Portugal is sending more people from Portugal to France, what happened is more social security contributions and more tax payments for Portugal. And nothing changes for France, except if there were some French workers who lost their jobs and were not paying taxes anymore.



*A podcast about the economics of trade & policy*  
with Chad P. Bown

The fiscal externality is really reversed here. What I document in the paper is that this policy was very good for the tax revenues in the sending countries, but not so good in the receiving countries.

**Chad Bown:** Those are the basics of the EU posting policy. You have this incredible new research documenting its size, who benefits from it, who is hurt by it, and by how much.

Now I want to go back to the mid-2000s, just after European enlargement that added all of these new member states in Eastern Europe. Tell us about the policy proposal to change the EU posting policy, and the controversy that resulted from that proposal.

**Mathilde Muñoz:** What happened is that, just after enlargement, Eastern European countries were very happy to be part of the EU. But they were very unhappy about something.

They were very unhappy about the idea that the construction firm had to pay the minimum wage abroad (when exporting services) while their neighbor – e.g., the car manufacturer – didn't have to worry about the French minimum wage when it was selling cars to French customers.

And so the Polish (European) commissioner Bolkestein had this idea that free trade can only exist or be guaranteed in the European Union if the EU got rid of this minimum wage requirement in the posting policy.

So in 2005, he introduced the infamous Bolkestein Directive at the European Parliament, and this created the first instance of coordinated strikes and protests across the western countries in the European Union.

Many people got very worried – especially, in France, Belgium, and the Netherlands, countries with very high standards – they got very worried that they would have to compete very soon with workers that were not subject to the same minimum wage as themselves. We had this huge wave of protests in all European capitals. It was so big that the French president had to go to Brussels to call for the withdrawal of the Bolkestein Directive.

**Chad Bown:** Why was the French president so worried about the Bolkestein directive?

**Mathilde Muñoz:** It was because France was actually at the same time voting for the European constitution. The Lisbon Treaty was supposed to be the last step of European integration and



*A podcast about the economics of trade & policy*  
with Chad P. Bown

was supposed to enforce a new European constitution. And some countries, like France, chose to put that project to the ballot and to have a referendum. And it was a simple referendum. “Are you for or against?” So “yes” was for European integration, and “no” was against.

And what you see in the numbers is that, the day the Bolkestein Directive was introduced at the European Parliament and everyone started to worry about Polish plumbers, the support for European integration among French voters dropped dramatically. It fell from 60 percent to less than 50 percent, and remained low until the end. As of today, we still believe that the reason why France rejected the Lisbon Treaty and the European constitution was because there was a proposal to remove the minimum wage requirement for posted workers.

After the failure of this referendum, the Bolkestein Directive was withdrawn. There was no further mention of this principle that was supposed to remove the minimum wage requirement. And France ultimately passed this European constitution, but by the Parliament to just avoid French voters.

**Chad Bown:** The Bolkestein directive is pulled – so it is not part of EU posting policy after all – but it creates such a big uproar in France that France sends the vote for the European constitution through Parliament to avoid its voters in a referendum. Amazing.

What do you think we can learn from that French voter backlash?

**Mathilde Muñoz:** What this tells us, I think, is that voters do care a lot about what is driving trade. If they perceive that European integration, or trade flows, are just based on differences in institutions – i.e., differences in the choice that French voters make for their minimum wage as opposed to the choice that Portugal makes – then they don't want to be in a unified market anymore.

I think this was the first time where France actually rejected a European treaty. And that's a big deal for a founding member of the EU. And as of today, we're still trying to recover from that big backlash that generated persistent cleavages among French voters.

**Chad Bown:** On that question – do labor regulations like minimum wages impact trade across European countries – what is the evidence? What do we know so far about this really important issue?



*A podcast about the economics of trade & policy*  
with Chad P. Bown

**Mathilde Muñoz:** On the topic of whether trade is driven by those differences in minimum wages across European countries, we don't know.

And we don't know why it has always been a very important issue for policymakers and trade economists. If you think about the debates around child labor and labor standards in the 1990s, for many countries in the world it has always been a very important and pressing question as to whether trade is also a way for countries to exploit those differences in standards and labor market regulations.

But this is very hard to study because you need very good data on workers' standards of working and on their wages, and that is hard to do.

**Chad Bown:** It is hard to do, but you are going to try to examine the impact of labor market regulations – like minimum wage laws – on international trade. How do you use the posting policy to do this?

**Mathilde Muñoz:** What is very interesting about the posting data is that it allows you to track the export of workers *and their labor institutions*, because you know exactly their minimum wage or the payroll taxes they're subject to.

What I do is use this data on posted worker flows to identify how those flows change when some countries decided to change their labor market regulations.

For example, one very interesting experiment that we had in the EU was the introduction of a minimum wage in Germany. What happened is that, before 2015, Germany didn't have a national minimum wage. They had minimum wages that were agreed at the firm level or the branch level. What that meant is that foreign firms engaging in posting were not legally bound by this minimum wage. German workers had to be paid at the firm-level minimum wage, but the Polish posted workers sent (to Germany) by the Polish firm didn't have to comply with any other regulation aside from the Polish minimum wage.

Before 2015, what we know from numbers and statistics from labor unions was that the average wage of a posted worker in the meat processing industry in Germany was around 3 euros per hour, while it was 16 euros per hour for German workers in the same industry.





*A podcast about the economics of trade & policy*  
with Chad P. Bown

As a result, 50 percent of workers in the meat processing industry in Germany before 2015 were actually sent by foreign suppliers of services.

**Chad Bown:** What happened?

**Mathilde Muñoz:** This situation led to a big political dispute. Belgium and France filed a trade complaint against Germany and said that Germany was gaining an unfair competitive advantage in trade in meat because of this weird minimum wage arbitrage that German firms were engaging in. Germany had to face this political controversy. In 2015, Germany decided to introduce a German minimum wage that was binding for everyone, including the foreign suppliers of services.

What you can do is to see what happens after 2015 to firms that had to match the new German minimum wage compared to firms that didn't have to match this minimum wage.

**Chad Bown:** You are establishing a control group of firms there. Who are the firms that didn't have to match the new German minimum wage?

**Mathilde Muñoz:** Those are the firms operating in the construction industry because construction was the only sector in Germany before 2015 that was allowed to have a sectoral minimum wage that applied to foreign firms.

You have this very neat experiment where you can ask what happened to the competitiveness of the Polish firm when they moved from the 3 euros to the 8 euros new minimum wage?

**Chad Bown:** Because of an intra-European trade dispute over the meat processing industry brought by Belgium and France, Germany has to impose a minimum wage for all sectors of its economy, and it has to impose it on foreign firms like these Polish firms that had been sending posted workers under the posting policy who only earned 3 euros per hour. Their wage suddenly has to go up to 8 euros per hour. Overall, what do you find?

**Mathilde Muñoz:** What you see is that imports of services in exposed industries in Germany after 2015 completely decreased. They were almost cut by half, and as of today are almost nonexistent.

This tells you that the bulk of the comparative advantage that those foreign firms had when supplying services to Germany was coming from this weird thing that they were subject to



*A podcast about the economics of trade & policy*  
with Chad P. Bown

different minimum wages from other firms, even though the services were supplied in the same country, in the same region, sometime in the same factory, using the same capital, the same infrastructure – you just had these weird differences in regulations.

**Chad Bown:** Amazing. Minimum wages – or the lack of minimum wages – clearly mattered for these trade flows. So the French referendum voters might have been a little bit right if what they were saying was differences in labor market regulations across countries can affect economic activity.

Taking a step back, what are some of the limitations to your results?

**Mathilde Muñoz:** So one limitation is that the effects I'm estimating on those domestic workers, for instance, in the French labor market are all in relative terms. That means I'm comparing workers in places that got more posted workers to places that got less. And that means that this is not the end of the story because that doesn't tell you that GDP decreased or that overall welfare decreased. It just tells you that there were some people that were more affected than others, accounting for aggregate trends in the economy.

Another important aspect of this – and that is always something we have in the back of our mind when we think about trade policy – is the potential effect on efficiency, on prices, and on customers. The only reason why the European Union is also trying to build this unified market and to have this freedom to supply services is because we think competition is very good for customers. We think that the French customers are going to benefit from houses built at lower prices, maybe the infrastructure is going to be better, and this is going to generate additional economic gains that are going to be redistributed and are going to benefit everyone in the end.

One issue with these approaches I've just described that use microdata and are trying to measure things – is that it is very hard to get to those aggregate efficiency and price effects. I'm not sure I can tell you right now whether customers really got decreases in prices, whether we had this kind of positive loop that was generated by the liberalization of the policies.

**Chad Bown:** Mathilde, as my last question, if you wanted to leave policymakers with one big takeaway from your research, what would it be?

**Mathilde Muñoz:** The main overall takeaway is that economic integration is tough, and you need to be very creative in terms of policy interventions to foster it. And the posting policy was, in the end, a very good example of that. It was a policy that really managed to connect some



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with Chad P. Bown

firms and some workers with each other, and we saw that it really contributed to the entire integration of the market.

But it also had important distributional consequences because economic integration also comes at the expense of some reallocation in the labor market and some more competition.

And if we come back to the initial motivation – how do we build a United States of Europe – we do need more integration and we probably do need more policies that foster migration and that foster trade.

But we also need political support. We also need the voters to say “yes,” when we ask them, “Do you want more Europe?”

One main lesson from my research on the posting policy is that it seems very hard to think about trade liberalization without thinking about the question of social convergence and institutions and redistribution.

**Chad Bown:** Mathilde, thank you very much.

**Mathilde Muñoz:** Thank you for having me.

## **GOODBYE FOR NOW**

**Chad Bown:** And that is all for *Trade Talks*.

A huge thanks to Mathilde Muñoz at the University of California Berkeley. Do check out Mathilde’s paper titled “Trading Non-Tradables: The Implications of Europe’s Job Posting Policy.” It will soon be published in the *Quarterly Journal of Economics*.

Mathilde has a hot off the presses second paper I recommend as well titled “International Trade Responses to Labor Market Regulations.”

I will post a link to both papers on the episode page of the *Trade Talks* website.

Thanks to Melina Kolb, our supervising producer. Thanks to Sarah Tew, on digital. As always, thanks to Collin Warren, our audio guy.



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<insert super funny double underscore joke here>. ■

### **Read more...**

- Muñoz, Mathilde. Forthcoming. [Trading Non-Tradables: The Implications of Europe's Job Posting Policy](#). *Quarterly Journal of Economics*.
- Muñoz, Mathilde. 2023. [International Trade Responses to Labor Market Regulations](#). NBER Working Paper no. 31,876, November.