Abstract

On October 4, 2012, the United States International Trade Commission (USITC) hosted a roundtable discussion on the labor market effects of trade. The USITC assembled a group of 29 professionals representing a variety of perspectives and experiences for the roundtable discussion. The participants expressed wide-ranging views on how the business cycle influences the labor market effects of trade liberalization, and on the relationship between offshoring and domestic employment. The discussion highlighted recent methodological advances incorporating transition dynamics to measure the costs that workers face in switching sectors. Participants identified four overarching themes. First, recent empirical research suggests that short-term adjustment costs may be more important than previously thought, so there is a need to incorporate labor mobility into trade models in order to better analyze the effects of trade on labor. Second, research also suggests there is a need for comparative general equilibrium (CGE) modeling efforts to continue to expand into examining trade and labor under conditions of less-than-full employment, as well as to examine the impact on the labor market of reducing nontariff barriers in the services sector. Third, participants called for improved access to data—services data, value-added data, and U.S. firm-level data—and proposed new levels of data analysis, that might allow for research on topics like the possible effects of trade on the quality of jobs.

INTRODUCTION

The USITC Roundtable on the Labor Market Effects of Trade brought together professionals from government, intergovernmental organizations, academia, think tanks, labor, and industry, along with USITC staff, to discuss the linkages between trade, offshoring, and labor market outcomes. The roundtable discussion was divided into two panels, each moderated by a USITC Commissioner who asked a series of questions. The first panel discussion focused on understanding the insights from recent research on the labor market effects of trade and on identifying important open research questions. The second focused on advances in the methodological and theoretical frameworks used to analyze the relationship between trade, offshoring, and labor market outcomes, areas of methodological convergence between trade and labor economists, and challenges surrounding data availability. Participants presented diverse opinions on discussion topics, including: business cycle influences on the effects of trade liberalization on the labor market; labor mobility and trade; offshoring and domestic employment; and methodological advances, gaps, and data challenges. A brief summary of both panel discussions follows.

Panel I—Labor Market Effects of Trade and Offshoring:
Research Insights and Open Questions

The goal of the first panel was to take stock of recent empirical research on the labor market effects of trade. It focused on understanding insights from the research and identifying important open research questions in order to advance analysis aimed at informing trade policy. Key topics addressed in this panel included the impact of business cycles and trade liberalization on the labor market, the state of current research examining the impact of trade on labor mobility, and the impact of offshoring on the domestic labor market.

The Business Cycle, Trade Liberalization, and Labor Market Outcomes

Participants were asked to discuss what impact business cycles have on the labor market effects of trade liberalization.

The Business Cycle and the Labor Market

The participants put forward divergent views on this question. One speaker stated that trade agreements are phased in over a long period of time while business cycle fluctuations are short-run phenomena, making the latter irrelevant when it comes to the USITC’s analysis of the economic impact of trade liberalization.

On the other hand, a number of panelists indicated that the business cycle makes a difference when it comes to the effects of trade liberalization on labor markets. One respondent added that the effect depends on the level of a country’s development.

Another attendee suggested that trade liberalization could possibly be modeled as occurring both during periods of strong and weak labor markets, as the attendee’s understanding was that trade liberalization could be problematic for workers if the trade flows start when the labor
market is depressed. Others supported the idea of countries being prepared with policy responses to minimize the negative labor market effects of future shocks. These attendees described such complementary policies (e.g., social protection policies, an enabling regulatory environment, investments in human resources) as strategies that can help countries be prepared for future shocks, as well as complementing the benefits of trade.

According to a different panelist, it is not clear that current research has addressed the question of whether a country stands in the business cycle may influence the effect of trade liberalization on labor market outcomes. The panelist further noted that trade economists are not equipped with the tools needed to examine short-run effects, as both theory and empirics in international trade analysis are designed to understand long-run effects or transitions between different points of equilibrium. In addition, the panelist indicated that because a significant portion of the past literature relied on partial equilibrium models, the literature may not have captured broader effects, such as manufacturing workers that were able to obtain employment in services sectors.

Some argued that in addition to thinking about the effects of trade flows in the context of the business cycle, we should also consider the impacts of investment flows and investment provisions in trade agreements because U.S. trade agreements do much more than reduce tariffs. One attendee suggested that while investment may have a large impact on the labor market, it is not clear that there are sufficient data and research on this topic to really understand what is occurring. Later, another participant posited that in order for economic models to do a better job of determining the effects of trade liberalization, they need to do a better job of capturing how investment provisions and tariff commitments in trade agreements shift incentives and business behavior. This participant continued that economists need to be able to put more context around economic projections.

**Various Issues in Trade and Labor Economics**

The Endogeneity of Trade

Some panelists discussed the importance of accounting for the endogeneity of trade. One participant stated that trade is an endogenous and not necessarily a causal variable. That is, trade may cause changes in some variables, but other variables could cause changes in trade, and this endogeneity or two-way causation needed to be accounted for in empirical work. The participant stated that the real problem with a lot of discussion about the effects of trade is that it assumes that trade causes labor market outcomes instead of identifying the variables that actually are generating the outcomes and then tracing how those have an impact. Another respondent stated that an example of trade being endogenous was recent research by Autor, Dorn, and Hanson (2011) that accounts for the increase in U.S. imports from China caused by China’s increased productivity.²

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² Autor, Dorn, and Hanson, “The China Syndrome,” 2011.
Aggregate Employment versus Job Displacement
One participant described the need to clearly distinguish between the concepts of aggregate employment and job displacement. The participant stated that aggregate employment is a macroeconomic phenomenon while displacement is a microeconomic phenomenon experienced by particular workers. The participant gave the example of how these concepts get conflated when analysts move from aggregate numbers on trade (e.g., the value of imports) to infer a job equivalence, and then imply that there has been job displacement due to trade. Responding to this point, another panelist noted that there is long-recognized value in performing micro analysis, and added that a lot of interesting effects of trade on individual workers can be discovered at the micro level that might not be visible using macro level data.

Trade and Wages
An attendee stressed the integration of approximately 3 billion new low-wage workers in China and India and other countries into the global labor market. The attendee characterized this change as putting more workers into direct competition with workers in the United States, in turn putting downward pressure on wages for U.S. workers.

Another participant responded that the fact that Chinese wages are significantly lower than U.S. wages does not necessarily imply that it is impossible for U.S. workers to compete. As per the traditional Ricardian model of trade, U.S. productivity is high enough for the United States to support a much higher level of wages without losing the ability to compete in the global marketplace. One speaker suggested that despite productivity gains, U.S. wages are stagnant, and stated that on a global basis, the share of income going to labor has declined. The speaker added that this is not just true for unskilled labor, and a recent study out of the Wharton Business School suggests that employers are not willing to pay market rates at any skill level in addition to further trying to drive down wages by not hiring the unemployed. Another speaker noted that the increased global share of income going to capital was likely due to the fact that there is now more capital per worker, and less likely to be due to the strength of collective bargaining or international competition.

Trade Deficits, Intermediate Inputs, and Labor Markets
A speaker suggested that trade deficits displace large numbers of workers and pointed to the paper by Autor, Dorn, and Hanson (2011) as supporting this conclusion. Another participant responded by stating that the paper shows that despite the large negative impacts of imports from China on local U.S. labor markets, the overall gains from trade exceed the adjustment costs.

An attendee warned that it is important to distinguish the effects of the trade deficit from other general equilibrium effects. The attendee noted that the trade deficit is a macroeconomic phenomenon connected to the current account deficit and as such is a cause for concern. However, the attendee cautioned that focusing simply on trade will not have an effect on the current account deficit right away in the absence of offsetting domestic adjustments.

3 Ibid.
Other speakers emphasized the importance of recognizing that most trade today is in intermediate goods, that is, goods that are used to produce another good (such as steel that may be used to produce automobiles). One participant stressed the offsetting effects of imports of intermediate goods on the ability of producers to compete in export markets and grow. The participant mentioned that such imports can have positive effects on jobs in the industry that uses the imported inputs, but the effects may adversely affect workers in import-competing sectors. While trade liberalization can be important for enhancing competitiveness and generating employment, it is difficult to disentangle the employment effects of trade at either the micro or macro levels, especially given the large share of intermediate inputs in trade.

Another implication of increased trade in intermediate goods is that because firms and workers across different industries may perform similar tasks, competition between different nations’ firms and workers increasingly takes place at this task level. In some instances, imported intermediate inputs may lead to wage losses associated with shifting from one type of task to another. However, some imported intermediate inputs complement labor and productivity.

**Trade and Labor Mobility**

The moderator noted that while traditional trade models assume perfect mobility and substitutability of labor, there has been recent work that relaxes those assumptions. Participants were asked to describe the state of the research examining the mobility of labor and to identify gaps that need to be addressed.

**Trade and Occupational and Geographic Mobility of Labor**

Several speakers shared findings from recent research by Ebenstein et al. (2009) and other studies that suggests that the effects of trade are difficult to detect at the industry level, but easier to identify at the occupational level. One speaker noted that this research has shown that workers adversely impacted by trade are much less mobile across occupations than across industries. The upshot, according to the speaker, is that there is not as much mobility across occupations as was previously thought. Another participant supported this point by providing more detail on the research findings, noting that it shows that workers can face an approximately 10 to 15 percent loss in income if they switch occupations.

Various speakers then pointed to recent research by Autor, Dorn, and Hanson (2011) that suggests that the geographic locations of industries also matter in analyzing the extent of labor mobility in response to increased trade. One speaker indicated that geographic constraints to labor mobility may arise because some unemployed workers begin obtaining long-term disability benefits, and then find it difficult to re-enter the labor market. The speaker went on to say that there is research that then links this type of geographic immobility to housing prices, whereby depressed areas with few job opportunities also enjoy the most affordable housing, making workers there less likely to move to more expensive areas.

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5 Autor, Dorn, and Hanson, “The China Syndrome,” 2011.
Another speaker indicated that research on labor adjustment in response to increased imports in Brazil complement the findings of Autor, Dorn, and Hanson (2011) and suggests that the costs of mobility are more important than sector-specific human capital. The speaker added that the costs of mobility across industries may be capturing geographic mobility costs since industries tend to be located in different regions.

Worker Mobility and Adjustment Policy Challenges
Panelists then discussed the related challenges faced by policy makers when it comes to identifying incentives to facilitate mobility and adjustment for workers, especially in a less than favorable economic environment. One speaker indicated that research, especially on Europe, has found that once workers receive unemployment insurance they do not have an incentive to search for jobs because their welfare benefits are generous. On the other hand, the speaker noted that other research has shown that if, out of desperation, unemployed workers accept jobs that do not fit their skills because they do not have access to adequate social safety nets, those workers lose skills by taking such jobs. Other participants disagreed over whether U.S. benefits are generous enough to discourage worker relocation in response to trade effects, or whether U.S. benefits are considerably less generous both compared to those of other developed nations and to the lifetime earnings losses of displaced workers.

Several speakers confirmed that there is overwhelming evidence that at the firm-specific, occupation-specific, and geographic-specific levels, there are high costs of dislocation. However, one speaker argued that it is important to recognize that the real costs come from dislocation in general as opposed to those attributable to import competition.

One of the speakers pointed to recent research that suggests that complementary policies (e.g., an enabling regulatory environment for businesses to create jobs) are needed to leverage the benefits of globalization for workers. As a corollary, this speaker indicated that institutions matter a lot (i.e., workers having a voice, collective bargaining, social safety nets to assist workers with adjustment, active labor market policies) when it comes to the effects of trade on the labor market. Other panelists noted that labor market skill requirements are becoming higher and often very specific. They asked how to get the right mix of people being adaptable enough and having the general skills needed to switch from one sector to another, from one firm to another, and maybe from one occupation to another. The panelists suggested that matching people to jobs as well as providing better information to both employers and workers to assist in the employment/adjustment process are challenges that workforce and training systems need to meet.

Offshoring and Domestic Labor
The participants were asked to consider the relationship between offshoring and domestic jobs. Specifically, when does offshoring complement domestic jobs and when does it substitute for domestic jobs?

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6 Ibid.
Offshoring as a Complement or Substitute for Domestic Jobs
Participants held a wide range of views on the relationship between offshoring and domestic jobs. One respondent pointed to recent research using Danish data that has found that offshoring may be complementing the jobs of skilled workers and substituting for the jobs of unskilled workers. The respondent noted that this research finds that those workers displaced by offshoring suffer higher earnings losses than those displaced from firms that do not increase their offshoring substantially.

Another speaker posited that the advent of offshoring and outsourcing have introduced a situation where, for certain labor markets, workers across borders share a common destiny. The speaker stated that raising the costs of trade and offshoring by reversing NAFTA would jeopardize jobs on both sides of the border given the depth of the value chains that span the two countries.

One speaker responded that offshoring substitutes for domestic labor and that this becomes clear when one looks at the activities of U.S. multinational corporations (MNCs). According to this speaker, MNCs are creating significantly more jobs abroad than they are at home and the net impact in terms of American workers is negative. However, another participant posited that offshoring and domestic employment are complementary. The foreign affiliates of U.S. MNCs are the principal way in which U.S. companies sell their goods and services around the world. Thus, this speaker stated that it is misleading to suggest that increases in employment in those affiliates mean job loss in the United States. The speaker added that when the economy is going well, prominent U.S. MNCs expand hiring both in the United States and abroad. This participant indicated that the investment of foreign multinational corporations in the U.S. and the numerous jobs created here as a result should also be considered.

Offshoring and the Types and Quality of Jobs
Next, panelists turned their attention to the effects of offshoring on the types and quality of domestic jobs. One speaker highlighted that what has been happening in the U.S. labor market is a hollowing of the middle. That is, there is relatively high demand for high-skilled occupations and relatively high demand for low-skilled occupations, but the demand for the middle-skilled occupations has been declining. The speaker indicated that researchers have not been able to pinpoint whether or not offshoring has been contributing to this hollowing of the middle. The speaker noted that a large part of the problem may be that there is weak data on offshoring. Echoing what others had implied previously, this speaker pointed out that data currently measures trade in gross flows and what is needed to better examine the effects of offshoring on workers is data that measures trade in value added.

Another respondent gave the example of the state of Georgia having lost the auto manufacturing sector and having a foreign direct investor bring jobs back in. The respondent suggested that the jobs created and their quality (i.e., retirement security, salaries, and work performed) were not the same. The jobs were located in a different region where workers were now competing with workers on the other side of the state border where they might have lower standards, wages, less organized workforces and lower retirement benefits. According to this respondent,
this example suggests that economists should also be considering additional levels of competition (i.e., regional and state). Yet another participant brought up the importance of considering labor market conditions when measuring the likely impact of a trade agreement and suggested that this might be especially important in a weak labor market.

Panel II—Labor Market Effects of Trade and Offshoring: Theoretical Frameworks, Methods, and Data

The second panel examined methods used to analyze the relationship between trade and employment. The goal was to discuss recent theoretical and methodological advances, and to examine data limitations in the current research.

Disaggregated Analysis of Trade-Labor Linkages
Participants were asked to discuss in which areas of economic activity policymakers could use disaggregated analysis most fruitfully. Key topics examined in this panel included areas for improvement in the collection of disaggregated economic data, and ways to better incorporate real-world labor market imperfections into trade models.

Improved Analysis of Services
One participant described the lack of empirical research on the impact of trade on services employment, especially given the importance (50 to 80 percent of U.S. employment) of services employment. Other participants described services data as inadequate and needing more detail. In addition, even data on services trade policies are scant. To address that gap, one participant advocated joining USITC, OECD, and WTO efforts to develop databases of non-tariff measures (NTMs) so as to avoid duplication of efforts. However, another participant cautioned that describing the treatment of regulations in empirical analysis as technical barriers to trade is problematic because doing so might overlook the reasons for the regulations and obfuscate a broader understanding of their impact.

Increased Use of Value-added Analysis
Several participants described value-added data as important to understanding the interaction of trade policy and labor markets, and noted that the WTO and OECD are developing a value-added trade database. Some of these participants described China as not adding much value to its exports. However, another participant questioned whether current value-added analysis had underestimated China’s value-added because of difficulties with Chinese data, as well as inadequately-measured transshipments. This participant also noted that the increased globalization of supply chains did not change the fact that multinational corporations account for over half of the U.S. trade deficit.

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7 However, a later participant noted that there are still 11 million U.S. manufacturing workers, and that manufacturing remains a large portion of U.S. GDP.
Expanded Modeling
The panel also addressed expanding trade modeling into other non-traditional but important areas such as modeling under conditions of less-than-full employment or outside of equilibrium, modeling non-tariff barriers, modeling the effects of improved trade facilitation, and modeling adjustment processes in labor markets. One participant noted that recent work has begun to examine issues of how workers adjust to trade and what restricts their mobility to move to new employers in other regions.

Expanded Data Analysis
Panel participants proposed new levels of data analysis. One participant noted that limitations in the employment data made it difficult to analyze trade in tasks, i.e., what contribution particular individuals make to value-added. Another participant advocated the use of more firm-level data in general equilibrium analysis. Such data may help capture job churning within a sector. (This job churning is not captured in standard CGE models that estimate sector-specific effects.) Other participants noted that ideal analysis would track workers and firms over time, and link worker and firm data (including data on foreign direct investment abroad). Several participants expressed an interest in improving access to U.S. data that matches workers to individual firms. They pointed out that these data are accessible in some European and Latin American countries, facilitating more in-depth research on the effects of trade and offshoring on the labor markets in these countries. In the United States, there has been some work linking data on individuals and firms, but future potential work here depends on government agencies granting access to data.

One discussant asked researchers to focus on not only level of employment, but also quality of employment, both for jobs in the United States and abroad. Do new jobs offer the same workplace conditions as old jobs did? Another participant noted that some research has shown that workers often take a significant pay cut when moving from manufacturing to services, and that future research from international institutions should focus on the quality of employment.

Future Directions
Going forward, one participant forecast that the demographic mismatch between the global north and global south would provide an incentive for northerners to move to the south to access less expensive healthcare and education services, with potentially progressive distributional consequences. This participant also forecast that royalty payments would be an increasingly important issue in global trade flows. Other participants requested that the Commission analyze the effect of antidumping and countervailing duties on downstream producers. One of those participants also requested that future USITC Import Restraints studies focus on distributional issues resulting from U.S. tariffs, such as the U.S. sugar tariffs.

Labor Market Imperfections in Trade Models
Participants were asked to identify real-world labor market imperfections that should be integrated into trade models and discuss how this might be accomplished.
**Labor Regulations and Trade**

One participant characterized a recent USITC literature review on trade and labor as showing that increased worker rights do not increase costs for firms, but rather raise productivity. A later participant added that one study had found that relatively open economies deliver better employment conditions, but that the effects are linked to a country’s level of development and only indirectly to trade insofar as trade helps fuel economic development.

A discussant encouraged researchers to focus on issues of the effects of increased trade on union density (i.e., union membership as a percentage of all eligible workers) and bargaining power, and added that many regulations were not designed as barriers to trade, but rather to protect consumers and workers. Another participant added that some regulations, especially in the services sector, can improve market functions, especially when there are existing information asymmetries.

**Trade, Investment, and the Quality of Services Jobs**

Another participant noted that some recent international studies suggest that while increased trade may lead to growth in jobs, those jobs may be predominantly low wage jobs with little opportunity for advancement. Other participants developed this point, noting that some services subsectors (e.g., business services in law and finance) often generate high-quality jobs, while other services subsectors (e.g., retail) may not offer jobs of the same quality.

One participant stressed that business services in the United States accounts for two-and-a-half times more U.S. jobs than manufacturing does, and offers higher wages and growth. However, another participant added that business services jobs tend to go to college-educated workers, while manufacturing employs non-college educated workers. This participant continued that without manufacturing jobs, non-college workers (who can have significant skills) will more likely face a labor market consisting of retail jobs, not well-paid business services jobs, as an alternative. A discussant also urged examination of what it means for the U.S. labor market if the U.S. economy is mostly services-oriented.

In a similar vein, participants argued that the developed world should be “kicking down” developing-world barriers to exports of services such as engineering, finance, insurance, and logistic support, areas in which the developed world has a comparative advantage. One discussant advocated continuing efforts to quantify services trade restrictiveness, in the hopes that doing so would help lead to more liberalization of the services sector. Another participant questioned whether services exports translate into domestic jobs to the same degree that good exports do, as some U.S. firms’ services activities overseas involves hiring labor in that country rather than U.S. labor.

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Modeling Labor Imperfections
Other participants discussed the use of CGE modeling. An early participant stated that it was important to consider the results of econometric results in the context of general equilibrium analysis, which will take into account economy-wide effects, including those in nontradable sectors. A later participant critiqued USITC’s 2011 modeling update of the Korean FTA, noting that when the model incorporated an assumption of some unemployment, the model produced estimates of job growth in nontradable sectors. This participant encouraged integrating work of trade and labor economists in order to better model economies without full employment or not at equilibrium. Another described CGE models as typically assuming perfect competition, and not taking into account the growing concentration of wealth and power toward corporations and away from labor unions. Another participant suggested that CGE models could be enhanced if they took account of the adjustment that takes place between equilibria. For example, there is a good deal of job market churning; worker transitions in the actual economy exceed those that are captured in CGE model experiments.

Methodological Advances
Participants also described recent methodological advances in analyzing the effects of trade on labor. One participant noted that since 2005, there had been six or seven papers incorporating transition dynamics and measuring the costs that workers face in switching sectors. These papers also examined how these costs vary across demographic characteristics. Another participant described using Census data on individual workers over time to see whether workers moved from manufacturing to services as a result of trade. An additional attendee noted recent work on identifying services trade restrictions (including World Bank efforts and USITC work on retail trade restrictions) and examining which services sectors are exposed to competition from overseas.

CONCLUSION
Roundtable participants identified a number of insights and methodological advances from recent research efforts on the labor market effects of trade. These include insights from the analysis of trade and labor mobility that identify frictions at the occupational and geographic level, as well as the high costs of dislocation and switching sectors. Some participants called for relaxing the assumption of full employment in CGE models, modeling trade and labor with non-tariff barriers and complementing CGE models with case studies that examine firm-level effects. The speakers generally agreed that the analysis of the labor market effects of trade is challenging due to data constraints. In particular, they pointed to the need for increased value-added data, improved access to U.S. firm-level data, and more detail in services data. They also called for linking worker and firm data (including data on foreign direct investment abroad) over time in order to gain a better understanding of how trade and offshoring impact labor markets. They also noted that important research questions remain open. For example, participants pointed to the need for more research in several areas: services trade and its labor market effects; the relationship between offshoring and the hollowing of the middle in the U.S. labor market; the
relationship between services liberalization, immigration, and skilled labor; and the effects of trade and offshoring on the type and quality of jobs. The panel concluded with the moderator thanking the attendees for their participation, noting that the panel had identified many challenging questions for future research into the relationship between trade and labor economics, and expressing an interest in staying abreast of progress in the field.
LIST OF PARTICIPANTS AT THE USITC ROUNDTABLE ON THE LABOR MARKET EFFECTS OF TRADE ON OCTOBER 4, 2012

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   Minority Trade Counsel to the Committee on Ways and Means in the U.S. House of Representatives

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REFERENCES

