

# **Topic 6 – Trade and Unemployment**

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#### Introduction

- While trade economists emphasize the effects of trade on real incomes, much of the public discussion revolves around jobs
- In our models, trade creates and destroys jobs in certain industries but we have assumed that aggregate unemployment remains fixed
- In this lecture, we will briefly explore how reasonable this assumption is in the long-run and in the shortrun by looking at the emerging literature on trade and unemployment
- To date, this literature suggests that trade has no clear effect on long-run unemployment but can increase short-run unemployment in the adjustment phase



#### Long-run versus short-run

- As you may remember from macroeconomics, economists typically distinguish between natural and cyclical unemployment
- Natural unemployment captures the long-run trend in unemployment while cyclical unemployment captures short-run deviations from this trend
- Natural unemployment is commonly attributed to search and matching frictions (frictional unemployment)
   and wage rigidities (structural unemployment)
- Cyclical unemployment is usually thought to fluctuate with the business cycle, rising in recessions and falling in booms



#### Overview of the lecture

- Trade and unemployment in the long-run
- Trade and unemployment in the short-run
- Some context on labor market dynamics



#### Trade and unemployment in the long-run

- A plausible link between trade and frictional unemployment would be cross-industry variation in search and matching frictions
- Trade would then lead to a fall in frictional unemployment in countries which have a comparative advantage in low-friction industries and an increase in frictional unemployment elsewhere
- A plausible link between trade and structural unemployment would be downward wage rigidities for unskilled workers
- Trade would then increase structural unemployment in countries which would otherwise experience an increase in the skill-premium and decrease structural unemployment elsewhere

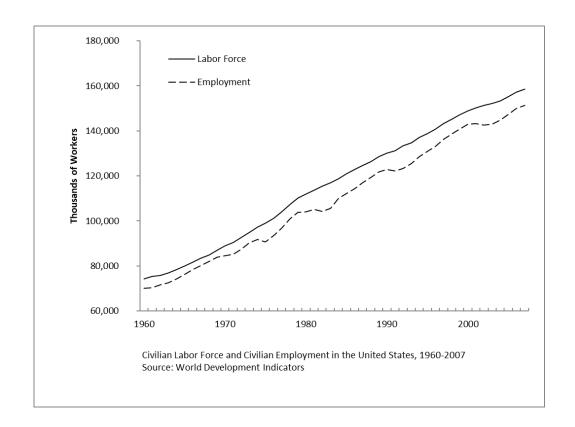


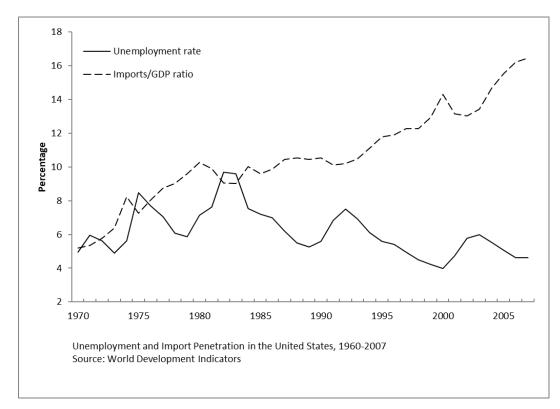
## Trade and unemployment in the long-run (contd.)

- This discussion suggests that the long-run effect of trade on unemployment is ambiguous and depends on labor market institutions
- This is also the general theme of the theoretical literature on trade and long-run unemployment which has suggested numerous additional effects
- Surprisingly, the literature has not yet produced any authoritative empirical study on trade and long-run unemployment although there are some recent attempts
- My conjecture is that trade may have contributed somewhat to structural unemployment in Europe but had little effect on long-run unemployment in the US



## Trade and unemployment in the long-run (contd.)





Source: World Bank



## Trade and unemployment in the short-run

- While trade liberalization is unlikely to cause cyclical unemployment, adjustment frictions should contribute to higher unemployment in the short-run
- For example, some industries expand and others contract following trade liberalization and it takes time
  for workers to move from the import-competing to the export oriented industries
- Recall from our discussion of the China shock in the previous lecture that such adjustment frictions appear to be surprisingly important in the US
- In particular, Autor et al (2013) find that reductions in manufacturing employment and increases in unemployment or labor force non-participation go hand in hand



## Trade and unemployment in the short-run (contd.)

- This then raises the question "how short is the short-run?". An interesting perspective is provided by Trefler (2004) who studies the effects of the Canada-US Free Trade Agreement (CUSFTA) of 1989
- He finds that CUSFTA led to a 5% reduction in Canada's manufacturing employment which amounts to a loss of 100,000 jobs
- However, he also argues that these job losses were temporary in nature in the sense that they were made up by job gains in other parts of manufacturing within 10 years
- Trefler (2004) again uses a differences-in-differences methodology so that his results on level effects
  have to be taken with a grain of salt

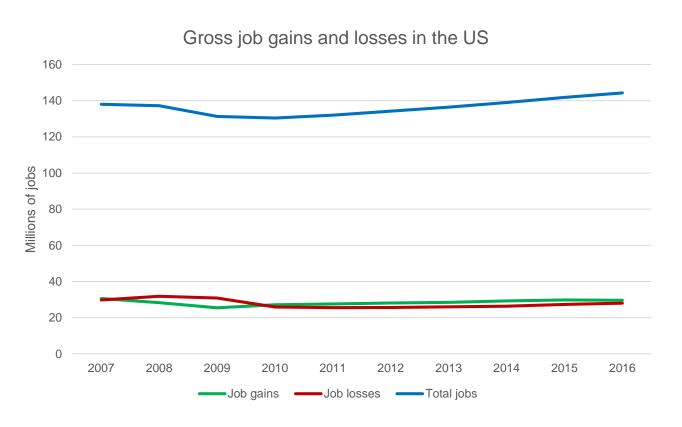


# Trade and unemployment in the short-run (contd.)

- Motivated by such evidence, some recent studies have attempted to quantify inter-sectoral mobility costs using structural models of labor and trade
- An early example is Artuc et al (2010) who use a stylized model to estimate that inter-sectoral mobility costs amount to approximately six times the average annual wage in the US
- Their estimate was then corrected downwards to approximately one to three times the average annual wage in a subsequent study by Dix-Carneiro (2014) which uses a more realistic model
- Karambourov (2009) has tried to open the black box of "mobility costs" and found that labor market regulations, specifically firing costs, play an important role



#### Some context on labor market dynamics



- In all of this, it is important to keep in mind that there is substantial turnover in the labor market
- For example, approximately 20% of all jobs get created and destroyed in the US every year
- This implies that almost 30 million jobs get created and destroyed in the US every year

Source: Bureau of Labor Statistics



#### **Conclusion**

- In this lecture, we took a brief look at the emerging literature on trade and unemployment
- So far, this literature suggests that trade has no clear effect on long-run unemployment but can increase short-run unemployment in the adjustment phase
- However, there is clearly a need for more research!



#### References

- E. Artuc, S. Chaudhuri, and J. McLaren. 2010. "Trade Shocks and Labor Adjustment: A Structural Empirical Approach". American Economic Review
- D. Autor, D. Dorn, and G. Hanson. 2013. "The China Syndrome: Local Labor Market Effects of Imports Competition in the United States". American Economic Review
- R. Dix-Carneiro. 2014. "Trade Liberalization and Labor Market Dynamics". Econometrica
- G. Karambourov. 2009. "Labor Market Regulations and the Sectoral Reallocation of Workers: The Case of Trade Reforms". Review of Economic Studies
- D. Trefler. 2004. "The Long and Short of the Canada-US Free Trade Agreement". American Economic Review