

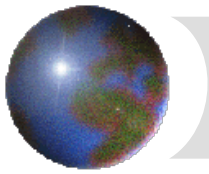
*Comments on*  
L. Caliendo, M. Dvorkin & F. Parro  
“Trade and Labor Market Dynamics”



by

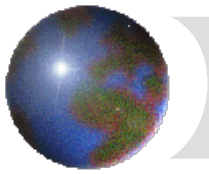
Jota Ishikawa





## *What does this paper do?*

- ✚ Developing a dynamic general equilibrium model with multiple sectors and regions to analyze the dynamic effects of trade shocks on labor markets and welfare
- ✚ Quantifying China's trade shock (i.e. increased import competition from China) to U.S. labor markets and U.S. welfare



# *Contributions*

## ✚ Model building

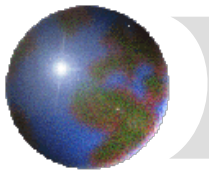
- ▣ A dynamic model with multiple countries & sectors and frictions

## ✚ Methodology

- ▣ No need to estimate the fundamentals of economy for calibration

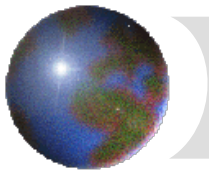
## ✚ Calibration

- ▣ China's trade shock to U.S. economy with 50 U.S. states, 37 other countries, and 22 sectors



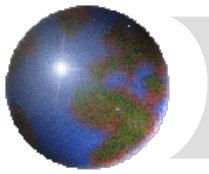
# *Model*

- ✚ Multiple locations (countries) & sectors
  - ▣  $N$  regions &  $J$  sectors in each region
- ✚ Continuum intermediate (IM) goods and a single final (F) good in each sector
  - ▣ F goods: non-traded → Consumption over local F goods
- ✚ 2 primary factors: labor & local structures
  - ▣ Workers: mobile across markets with costs



# *Model*

- ⊕ Perfect competition
- ⊕ IM-goods production (EK structure)
  - ⊞ Labor + structures + F goods in that region
- ⊕ F-goods production
  - ⊞ Assembled from both domestic & imported IM goods
    - Iceberg trade costs for imports



# *Results*

## Quantification of changes in employment & welfare

### ✚ Losers & winners

- ✚ Losers: Import competing sectors

- ✚ Winners: Sectors using cheaper IM goods

### ✚ Aggregate welfare gains

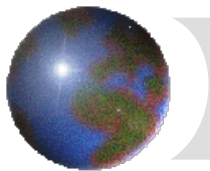
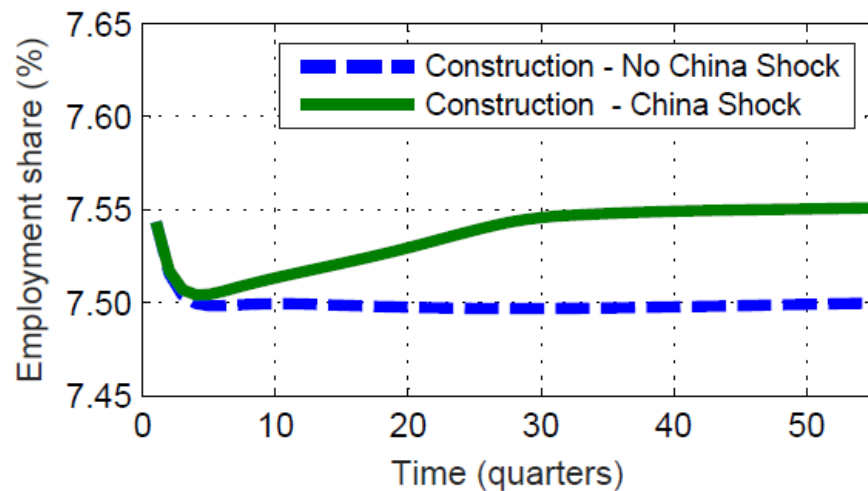
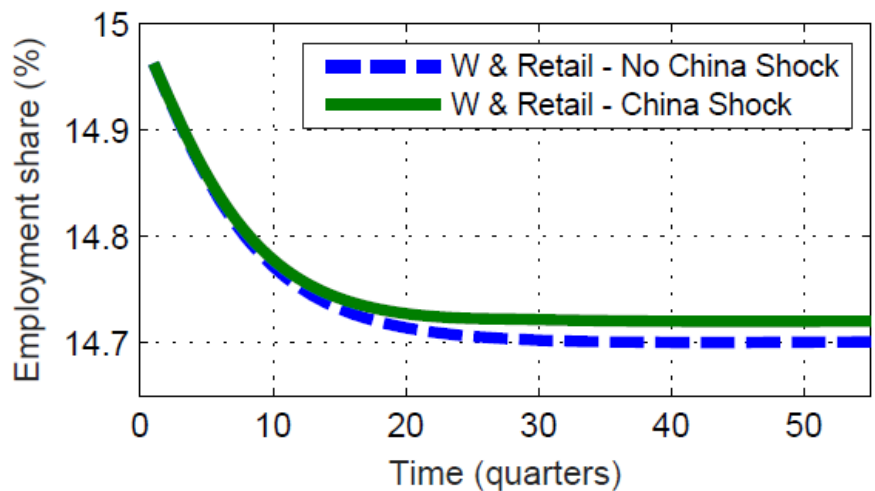
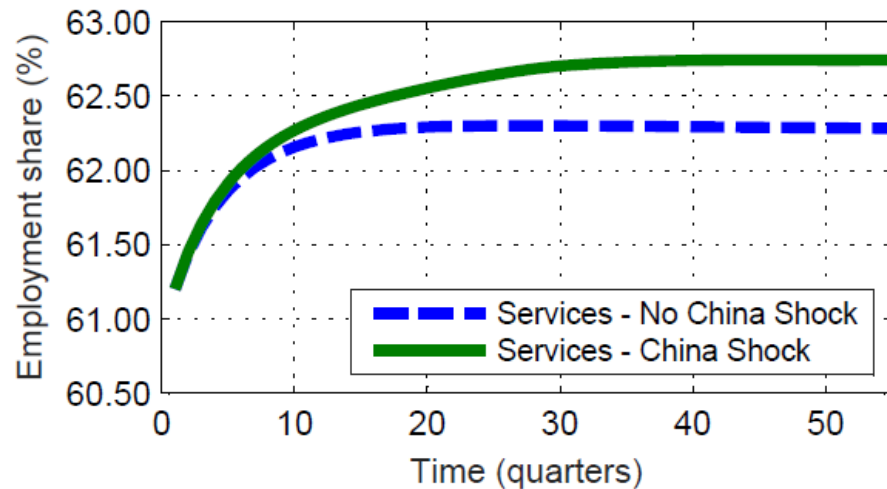
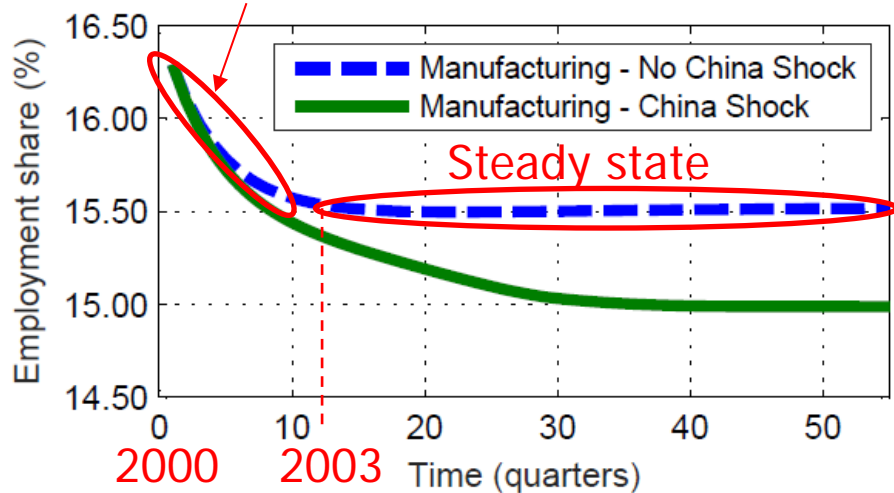
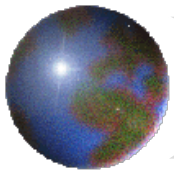


FIG. 2: The Evolution of Employment Shares

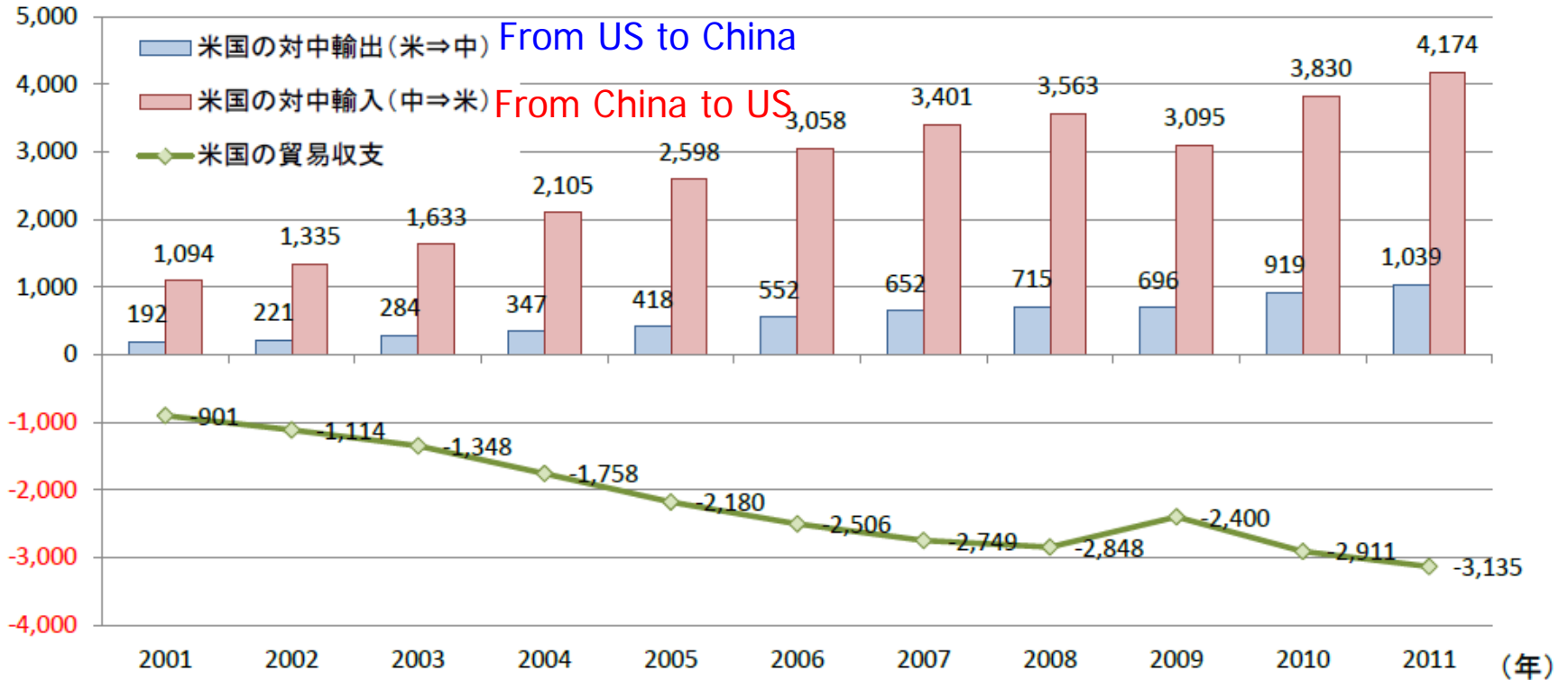
Transition to new steady state





\$100 million  
(億ドル)

## 米国の対中貿易額 Trade between US and China



出所: International Trade Centre





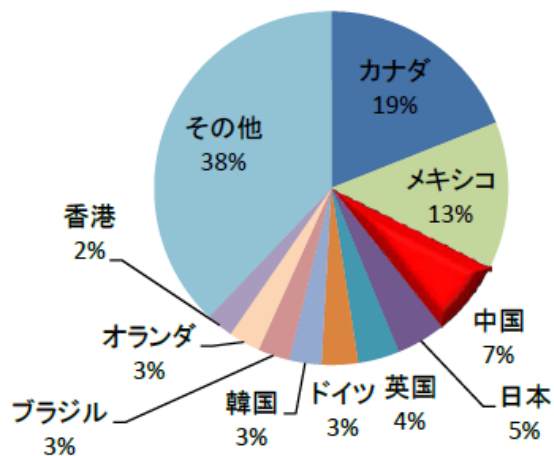
# 貿易の国別シェア



## Share of exports from US

### 米国の輸出先シェア

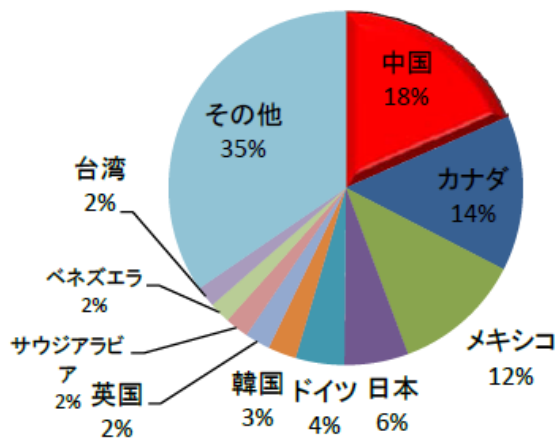
(総額1兆4797億ドル)



## Share of imports of US

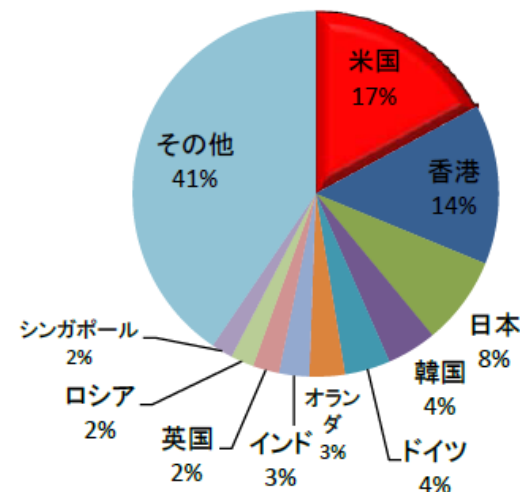
### 米国の輸入先シェア

(総額2兆2626億ドル)



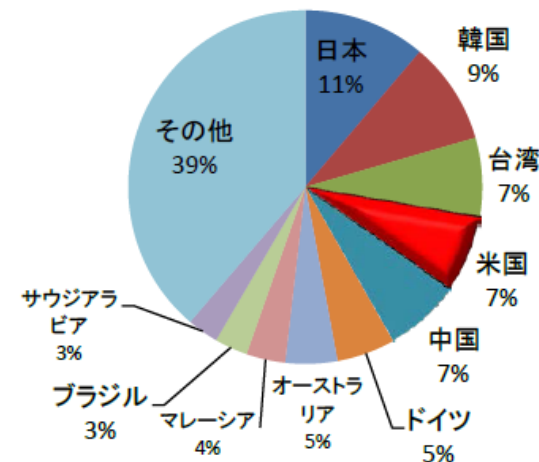
### 中国の輸出先シェア

(1兆8984億ドル)



### 中国の輸入先シェア

(1兆7434億ドル)

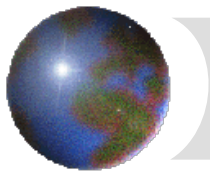


・米国にとって**中国は第一の輸入先**、中国にとって**米国は第一の輸出先**。

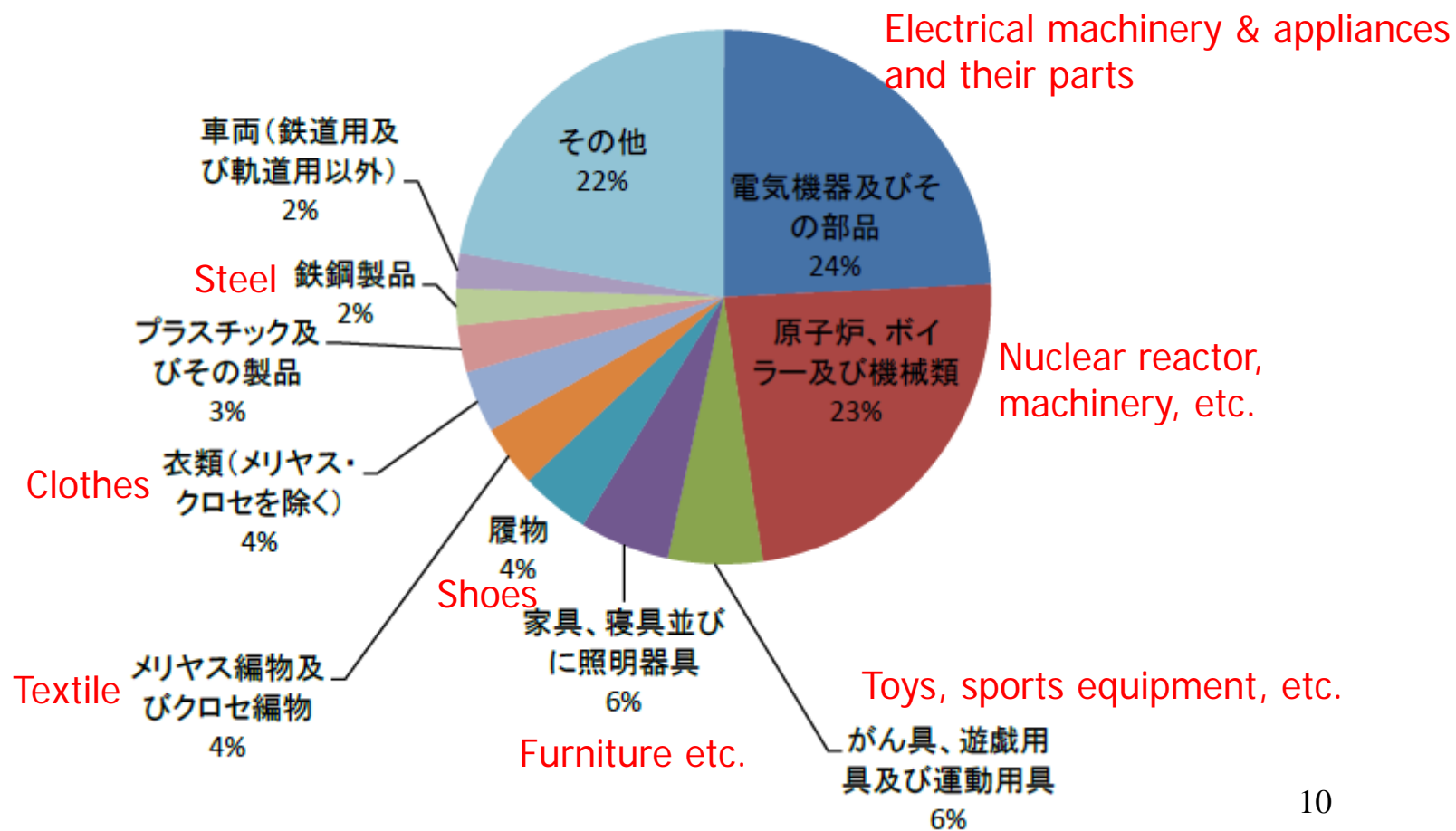
・中国の貿易に占める米国の割合は減少傾向(2001年15.8% ⇒ 2011年12.3%)にある一方、米国の貿易に占める中国の割合は拡大し続けている(2001年6.7% ⇒ 2011年16.4%)。

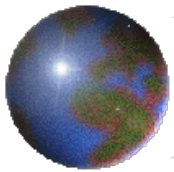
出所: International Trade Centre

注: データはいずれも2011年。



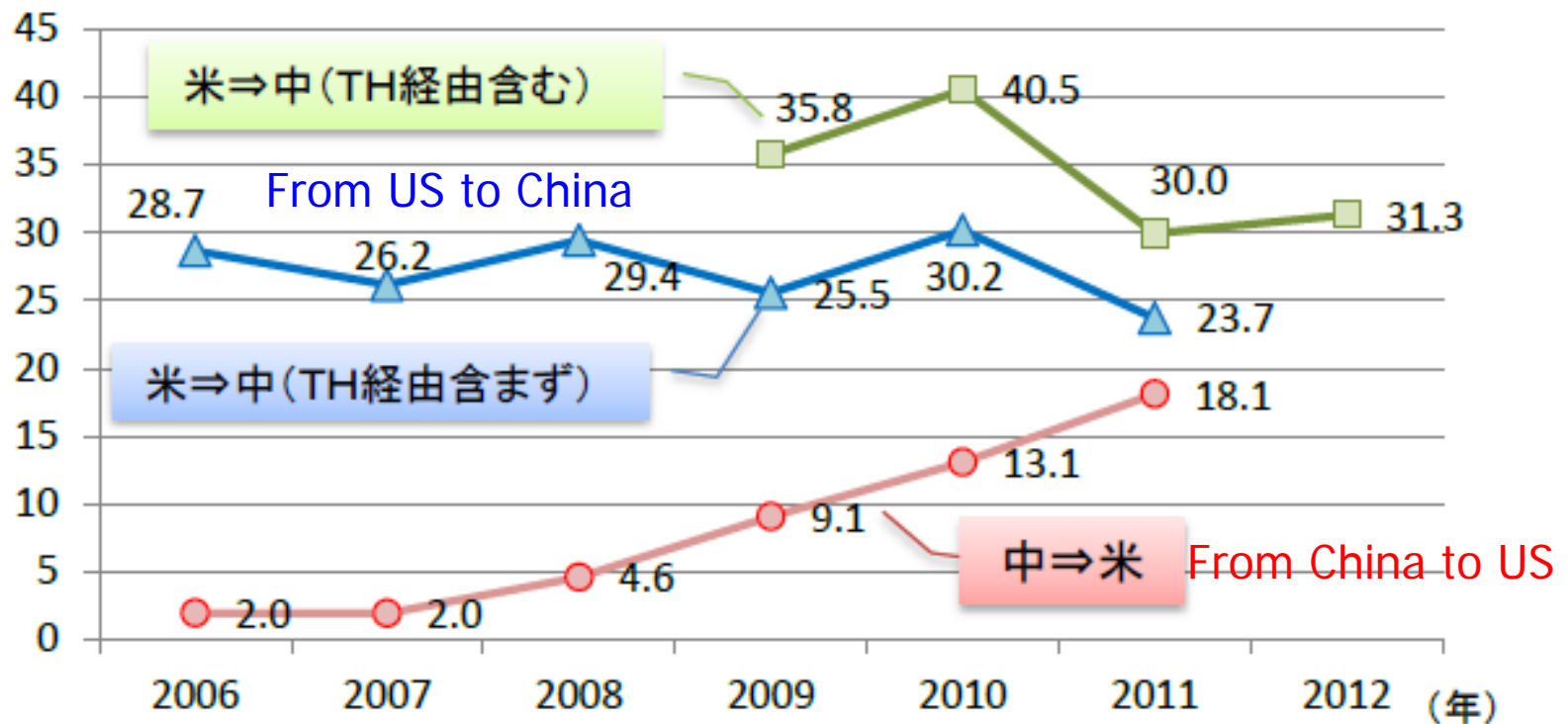
# US share of imported products from China 米国の対中輸入(中⇒米) (2011年)





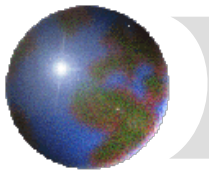
## FDI between US and China 米中相互の直接投資額の推移

\$100 million  
(億ドル)



出所: CEIC

注: 「TH」はタックスヘイブンの略。

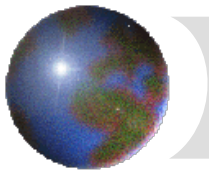


# *Comments & questions*

## ✿ Restrictive assumptions

- ❑ Without agriculture, mining, etc.
- ❑ No trade in F goods
- ❑ No FDI
- ❑ Homogenous workers
- ❑ No capital
- ❑ Perfect competition

➤ How much do the results depend on those assumptions?



# *Comments & questions*

- ✚ Production factors
  - ▣ Heterogeneous workers
  - ▣ Local structures? → capital??
- ✚ Time invariant parameters → methodology?
  - ▣ Technology, labor relocation costs, trade costs
- ✚ Any policy implications?
  - ▣ Intuitive results → novel policy implications?

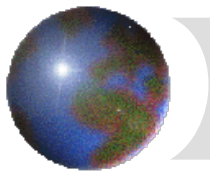
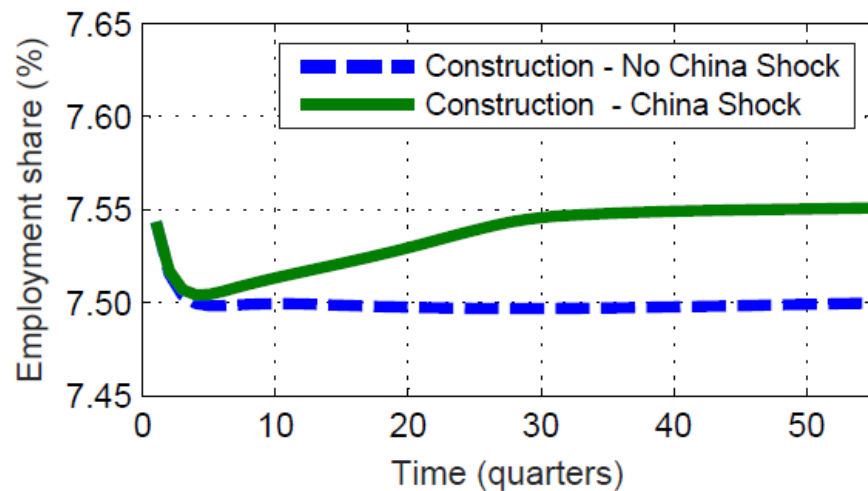
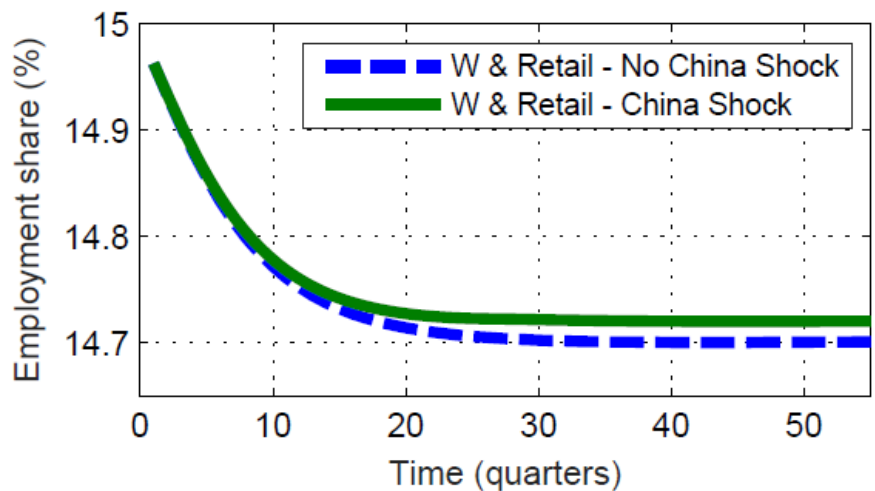
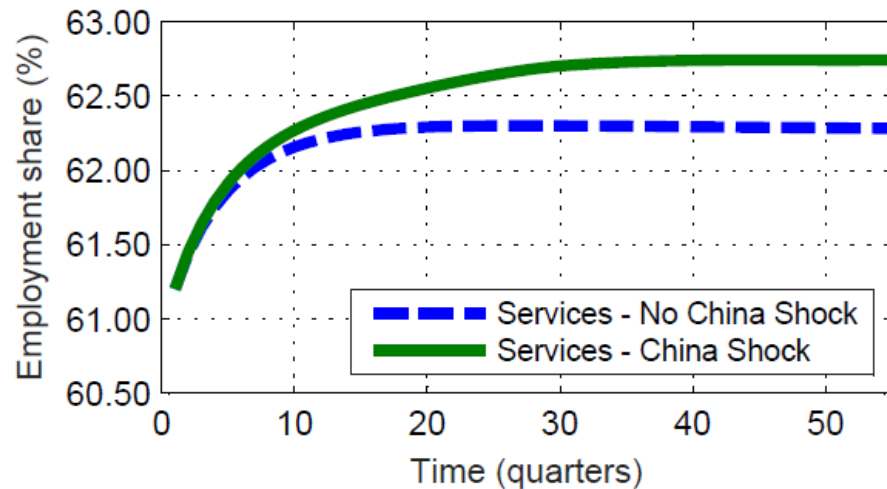
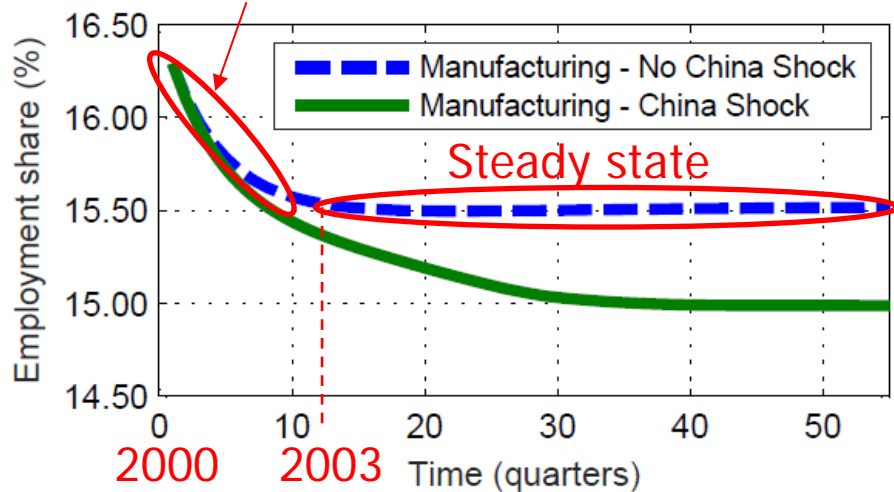
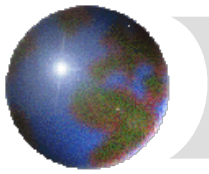


FIG. 2: The Evolution of Employment Shares

Transition to new steady state





# *Workshop on Aug 4*

## International workshop on “trade costs”

### ✚ Speakers

- ✚ James Anderson (Boston College)
- ✚ Alan Deardorff (Michigan)
- ✚ Dennis Novy (Warwick)
- ✚ Andreas Moxnes (Oslo)
- ✚ Yi Lu (National U of Singapore)
- ✚ Treb Allen (Northwestern)