

Factor Income Distribution: The Story Behind the Statistics Chong-En Bai & Zhenjie Qian Discussant Comments

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# Summary (1)

- 1. About China only
- 2. Calculate aggregate labor share since 1978
  - Use GDP by income approach at the provincial level
- 1. Large drop in the labor share between 2003 and 2004 mainly caused by change in categorization of income of state-owned and collective-owned farms and the self-employed
- 2. Analyze relative importance of each of two forces driving the movement in the labor share: sectoral transformations and changes in labor share within sectors

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# Summary (2)

- 5. Structural transformation from agriculture to nonagriculture sectors since the mid-1980 has had a negative impact on aggregate labor share
- 6. Main reason for the accelerated decline of the aggregate labor share since the mid-1990s is that the labor share in the industry sector, which had been rising, began declining from its 1995 peak after 1998
- 7. Main reasons for the shift in factor income shares within the industry sector are decline of the SOEs and increase in monopoly power

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# Summary (3)

- 8. Relative price shifts, the factor input ratio, and biased technological progress are all insignificant forces in the decline in labor share in the industry sector
  - Because the substitution between factors in the industry sector is nearly unit elastic

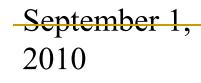
# Motivation

- The significant decline in the labor share may explain the steady increase in income inequality in China
  - In turn might hinder China's future development
- Studying changes in factor income shares improves our understanding of the investment ratio
  - Increase in the investment ratio in China might be related to the increase in the capital share since the mid-1990s.

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# International Comparisons (1)

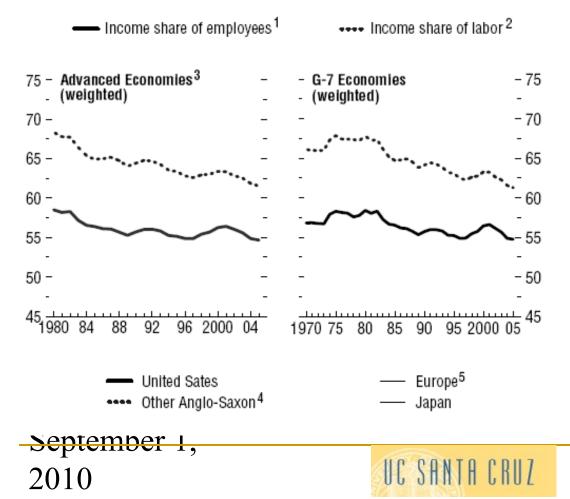
- Advanced economies have also seen declining labor shares
  - Technological change
  - Globalization of labor
  - Labor market policies
- Very different reasons from China



#### **Advanced Economies: Labor Shares**

#### Figure 8. Advanced Economies: Labor Income Shares

(Percent of GDP unless otherwise noted)



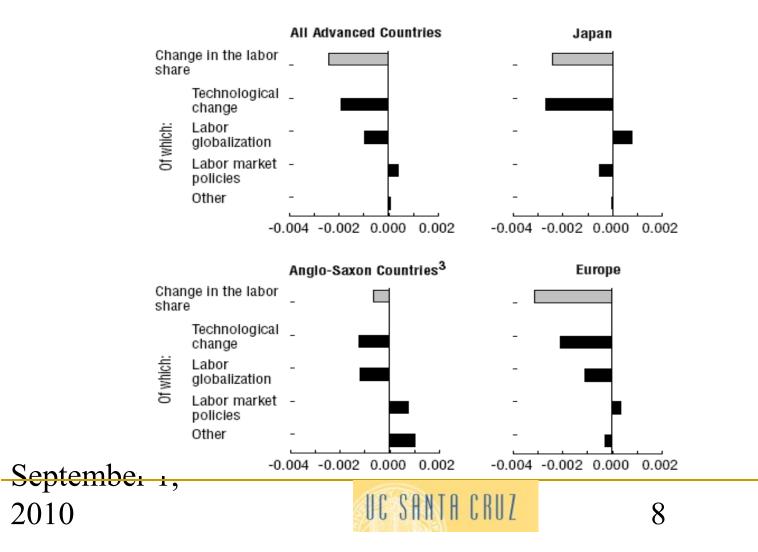
How Has The Globalization of Labor Affected the Labor Income Share in Advanced Countries?

Florence Jaumotte and Irina Tytell

#### **Advanced Economies: Decomposition**

#### Figure 14a. Explaining the Annual Change in the Labor Share<sup>1,2</sup>

(Average annual percent change)



# International Comparisons (2)

- Capital account openness may decrease labor shares in middle income countries
  - Mechanism not clear
  - Does capital flow towards lowest-cost labor?

## Capital openness and labor share

	Dependent variable: Compensation of employees /GDP	Low income countries	Lower middle income countries	Upper middle income countries
	Trend	-0.001 (-1.6)	-0.002** (-2.0)	0.001 (0.79)
	Real GDP per capita	0.00075 (0.42)	0.0037* (6.4)	0.0009 (2.8)
	Capital account openness	0.019 (1.5)	-0.018** (-2.5)	-0.023** (-2.4)
	Current account restrictions	0.0027** (1.9)	-0.0069 (0.1)	-0.0089 (-0.89)
	Crisis	0.012 (1.13)	-0.023* (-3.2)	0.012 (1.3)
	Government share of GDP	0.60* (4.17)	0.13 (1.2)	-0.13 (-1.03)
	Budget surplus	0.0006 (0.55)	-0.007 (-10.3)	-0.003 (-3.11)
	Real interest rate	0.001** (2.22)	0.0005* (2.97)	0.001 (3.5)
Septemb	Nominal exchange rate	-0.00075 (-0.83)	-0.00022 (-1.07)	-0.00013 (-1.8)
2010	Liquid liabilities to GDP	-0.22** (-2.1)	0.044 (1.3)	-0.00049 (0.01)

**"Capital Account Openness and its** Effects on Growth and **Distribution: A Review** of the Cross Country **Evidence**" Arjun Jayadev and Kang-Kook Lee, in Gerald Epstein, editor. Capital Flight and Capital Controls in Developing Countries, Edward Elgar, 2005.

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# Where is China Heading?

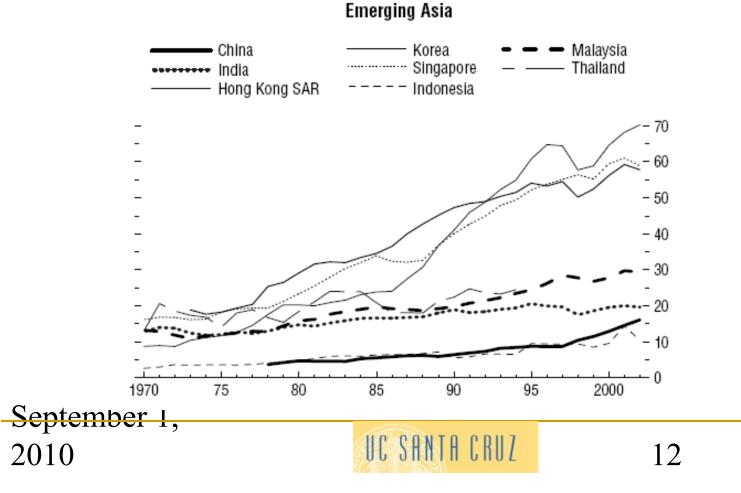
#### Rising wages

- Recent Economist magazine article
- Would normally lead to rising labor share
  - Could globalization effects kick in?
    - Vietnam, Indonesia?
- Capital and productivity matter

## **Emerging Asia: Wages**

#### Figure 11. Catch-Up by Emerging Markets' Manufacturing Wages

(Percent of U.S. manufacturing wages in constant PPP dollars)



# Industry Structure and Mix

- Model does not fully deal with changing composition of industry, particularly exports
- China moving up the value-added ladder
  - Greater complexity of products (Hausmann, Hwang and Rodrik)
  - Greater capital intensity
  - Impact on labor share depends on elasticity of substitution

### Industry sector model

$$\alpha_{i,jt} = a \cdot mkp_{jt} + b \cdot KtY_{jt} + \sum_{x=s,c,lp,f,hmt} \gamma_x \cdot req_x_{jt} + \gamma_{st} \cdot rs\_t$$
$$+ \sum_{t} \theta_t Dt + \sum_{t} \theta_t Di_j + \sum_{t} \theta_p Dp_t + c + a_j + v_{jt}$$

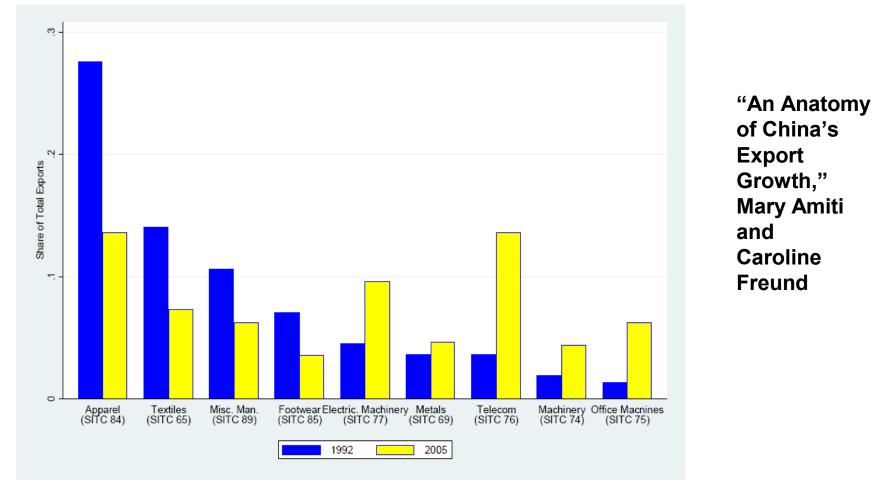
Mkp: Markup or proxy KtY: Capital-output ratio Req\_x: Ownership shares of different owner-types

Model presumes that labor does not share any of the monopolistic profit.

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### **Changing export patterns**

Figure 2: The Reallocation of Manufacturing Exports Across Major Two-digit Sectors\*



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\* A sector is defined as major if the sector's share of total trade is above 3% in 1992 and/or 2005. These sectors account for about 70 percent of manufacturing exports.



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# Conclusion

- Exceptionally thorough and detailed paper
- Sheds a great deal of light on evolution of China's economy
- Can be put more in context of processes of globalization, with respect to
  - Developed countries
  - Other developing countries
  - Patterns of trade