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# **Working Papers in Input-Output Economics**

### **WPIOX 09-004**

Ling Yang and Michael L. Lahr

Sources of Chinese Labor Productivity Growth: A Structural Decomposition Analysis, 1987-2005

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Title: Sources of Chinese Labor Productivity Growth:
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#### **Abstract:**

Using four input-output tables and disaggregated data on total employment, we decompose labor productivity growth from 1987 to 2005. We do so by examining six partial factors: changes in value-added coefficients, labor inputs, shares of sectoral demands that are fulfilled domestically, technology, and the intra-sectoral shares and intersectoral mix of final demand. Our analysis confirms that simply because by virtue of its size and extremely low level of labor productivity, change involving China's farm sector weighs heavily. Indeed, it is largely due to labor shifts out of farming and some modest (and possibly consequential) rises in the industry's productivity that, among the six factors, labor-savings effects have levied the largest influence on the labor productivity upon all sectors across all three periods covered by our research. Nonetheless, changes in the intrasectoral shares and the intersectoral mix of China's final demand were quite strong and across the periods of study persistently and significantly increased their influence. Due to ever competitive pressures that have been increasing as China continues to open its economy to international markets, changes in value-added coefficients have tended to counteract some of the positive benefits of labor savings across time for most sectors. The effects on changes in labor productivity of technological change and changes in the use of imports have been comparatively negligible and variation in their sectoral effects waning over time.

**Keywords:** Structural change, Labor productivity growth, China

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