

**Technology, Trade, and Income Distribution in West Germany:
A Factor-Share Analysis, 1976-1994**

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This paper examines the determinants of functional income distribution in West Germany. The approach is to estimate a complete system of factor share equations for low-skilled labor, high-skilled labor, capital, energy, and materials, taking account of biased technological progress and increasing trade-orientation. Technological progress is found to reduce the share of low-skilled labor and to raise the share of high-skilled labor. The effect of technology bias on the two labor shares is enhanced by substitution of intermediate inputs for low-skilled labor, which is almost absent in the case of high-skilled labor. Trade-induced changes in the composition of aggregate output tend to mitigate these effects, due to the relatively favourable export performance of low-skill intensive industries. The year-to-year variation in the low-skilled share can be attributed to input prices, biased technological progress, and trade-induced structural change in the proportion 19:77:4. For high-skilled labor and capital, the output composition effect of trade contributes about one percent. The results are robust across several specifications examined.

Keywords: income shares, factor substitution, technological progress, trade

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