

# **Terms-of-Trade Changes, Real GDP, and Real Value Added in the Open Economy: Reassessing Hong Kong's Growth Performance**

**Ulrich Kohli**  
Swiss National Bank

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## **Summary**

Over the past four decades, Hong Kong's terms of trade (measured by the price of exports relative to the price of imports) have improved by nearly 50%. A bettering of the terms of trade amounts to a windfall gain for the country as a whole and it implies without any question an increase in its real value added, its real income, and its economic welfare. An improvement in the terms of trade essentially means that the country gets more for less. This phenomenon is similar to a technological progress. Unlike a technological advance, however, a change in the terms of trade is treated by the national accounts as a price phenomenon, rather than as a real event. Consequently, the beneficial effect of an improvement in the terms of trade is not captured by real gross domestic product (GDP) as it is conventionally measured. A large foreign sector acts to magnify the terms of trade effect. Given the exceptional openness of its economy (the GDP shares of imports and exports have been in excess of 1.6 in recent years), one can suspect that this issue is particularly relevant in the case of Hong Kong and that its real GDP has significantly underestimated the growth of its real domestic value added over the years. This paper examines this question in more detail using a state of the art index number approach that also accounts for the impact of changes in the real exchange rate (proxied by the price of tradables relative to the price of nontradables) and a number of other measurement issues. All in all, we find that average real growth has been underestimated by real GDP by an average of 0.43% per annum between 1961 and 2003. For quite a few years, the discrepancy has been rather large, such as in 1967 (3.9%), 1968 (3.2%), 1976 (4.2%), and 1985 (3.8%). For some years, on the other hand, a temporary deterioration in the terms of trade has led to an overestimation of real growth by as much as 4.4% (in 1974 and 1986). While an average yearly shortfall of 0.43% might not seem like much, it adds up to close to one fifth of GDP when compounded over the entire period. One can thus conclude that Hong Kong's growth performance over the past forty years has been even more outstanding than what the official data suggest.