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Impacts of Thailand's tourism tax cut: A CGE analysis

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ABSTRACT

This study examines Thailand's tourism tax cut policy aimed to alleviate negative impacts arising from the 2011 flood on the tourism industry and economy. The proposed TRAVELTHAI model, a medium-scale dynamic computable general equilibrium model, serves as a powerful analytical tool for effective policy decision making. Direct-tourism industries benefit the most from the industry specific tax policy, deemed a suitable short-run policy in response to the flood. Tax cuts on inbound tourism improves the terms of trade and marginally stimulates Thailand's GDP. It is recommended that the development of fiscal policies should be more inclusive, in order to achieve better national impacts in the long run.

Introduction

Tourism inevitably plays a substantial role in the economy (Goeldner & Ritchie, 2006). The Thai Tourism industry has for long now, continuously grown at climbing rates. In terms of inbound tourism, revenue has grown considerably with a total of 2175 million Baht in 1970 to 253,018 million Baht in 1999, ranking one of the top three major exporting sectors in Thailand for countless consecutive years (Tourism Authority of Thailand, 2012a, 2012b). The population of foreign tourists peaked at its highest in 2011 at 19.1 million visitor arrivals with a corresponding total revenue of 800.6 billion Baht; double the revenue in 2000 which had 9.51 million visitor arrivals, and 2.6 times higher in terms

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of revenue which was approximately 299.5 billion Baht that year (Bank of Thailand, 2012). These staggering numbers were reached despite the nation being hit with the worst flooding in 70 years.

This increasing trend could prove to be an important catalyst for economic development since Tourism does not only generate income, but also creates permeated employment nation-wide, mitigates migration to large cities, revives the culture of communities, stimulates regional and local economies and improves living standards amongst the local people (Chancharat, 2011). In response to the sector's fast-growing nature and economic significance, the Ministry of Tourism and Sports (MOTS) was established in 2002. The Tourism Authority of Thailand (TAT), which was officially assigned responsibility of this industry since 1979, was incorporated under its umbrella.

Overtime, the Thai Government had launched a series of promotional campaigns such as 1987's "Visit, Thailand Year", 1998's "Amazing Thailand", the 2003–2004's "Unseen Thailand", the revisited 2009's "Visit Thailand Year" and the 200 million Baht campaign "Miracle Thailand 2012" to reboot tourism from the 2011 flood. In addition, the second National Tourism Development Agenda (2012–2016) was launched in 2011 emphasising competitiveness and responsiveness to changing circumstances including instabilities caused by natural disasters.

Flooding is a major crisis considered as a striking setback for the tourism industry. Such a sudden shock may be regarded as temporary, however the series of effects on direct-tourism and tourism-related sectors could lead to economic costs due to instabilities and losses in revenue. The flood in 2011 devastated the country and its tourism sector. It dampened GDP in the fourth quarter down to a negative of 9 percent (NESDB, 2012). The Ministry of Tourism and Sports estimated the effects as a disappearance of 0.7 million visitor arrivals which equated to be approximately 19 billion Baht in revenue foregone in the last quarter of that year. A total of 175 attractions in 21 provinces were damaged with a minimal cost of 560 million Baht. Damage and losses in the Thai tourism and cultural heritage sectors were estimated at 94,808 million Baht and 7505 million Baht respectively (World Bank, 2012).

Other studies on Thailand's tourism sector employ Box-Jenkins autoregressive integrated moving average (ARIMA) models (Chang, Sriboonchitta, & Wiboonpongse, 2009) and comparative static analysis (Wattanakuljarus, 2006); there has never been a dynamic Computable General Equilibrium (CGE) model for Tourism in Thailand. The CGE model was used in this research. The main reason was that economic analyses of policies could be carried out by considering sectoral and macroeconomic effects. This paper proposes a dynamic computable general equilibrium model for the Thai economy, with a specification of tourism named as the TRAVELTHAI model to investigate the effects of a uniform half-percentage tourism tax cut on the Thai tourism industry and economy. The 2011 flood was a major catastrophic event that greatly affected the Thai economy. For Thai tourism, the deluge worsened both demand and supply sides and served as one apparent illustration amongst damaging disasters. Tax-cut measures served beneficial in alleviating negative impacts on Thai tourism. The model could be further applied for other disaster cases or even unfortunate circumstances such as political turmoil, with some tailored modifications to suit each particular situations. The 2011 tax-cut policy in this study is a hypothetically proposed what-if scenario. Since this is the first time using dynamic CGE modelling for Thai tourism and the tax cut policy, this article intends simplification to test the application of the dynamic CGE model, specifically on general tax cuts. As stated, the types of taxes on tourism and different circumstances will also be studied further to compare results with the base scenario of this research.

The next section reviews relevant literature, where the third section explains the theoretical structure of the dynamic CGE model of the Thai economy, database and model closure. The fourth section will analyse external shocks and policy simulations, where the final section will provide concluding remarks.

Literature reviews

The primary purposes of tourism taxation are to increase government revenues, provide public goods and solve external problems. Taxing tourism does not generate significant adverse effects on domestic welfare (Gooroochurn, 2009). Taxes imposed on tourist activities can be categorised into