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## SINGAPOREAN DEMAND FOR TOURISM IN MALAYSIA

**Abstract.** Tourism is among the most important service industries in Malaysia. It plays a crucial role in the new economic model, in which the government is increasing its efforts to shift the border of economic activities from a resource-based to a service-based economy. One of Malaysia's major tourist origination countries is Singapore, which accounts for more than half of the annual tourist arrivals in Malaysia. Looking at the significant volume of tourist arrivals from Singapore, this paper investigated the determinants of Singaporean tourism demand in Malaysia from a macroeconomic perspective using quarterly data from 2000Q1 through 2010Q4. The empirical results suggest a long-term cointegration relationship between Singaporean tourist arrivals and specified macroeconomic variables, including real Singaporean income, tourism price, real travel cost, and currency exchange rate between Singapore and Malaysia. In particular, higher real income and stronger currency will induce Singaporeans to visit Malaysia, while higher tourism prices and travel costs will discourage tourists from Singapore. It is difficult to infer specific policy for the tourism industry using foreign real income and exchange rates, however, a detailed microeconomic survey on tourist demand behavior regarding tourism prices and travel costs should be conducted and addressed by the Malaysian tourism action plan.

**Keywords:** tourism industry; tourism demand; error-correction model; Malaysia; Singapore.

**JEL Codes:** C32, F20, L83

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### СІНГАПУРСЬКИЙ ПОПИТ НА ТУРИЗМ У МАЛАЙЗІЇ

**Анотація.** Туризм є однією із ключових галузей сфери послуг у Малайзії. Він відіграє пріоритетну роль у новій економічній моделі, у рамках якої уряд активізує свої зусилля з переходу від ресурсо орієнтованої до сервісно орієнтованої економічної діяльності. Серед важливих країн туристичної оригінації Малайзії виділяють Сінгапур, на частку якого припадає понад половина щорічних туристських прибуттів у Малайзію. Беручи до уваги значний обсяг туристських прибуттів із Сінгапуру, у цій статті автори досліджували фактори, що визначають сінгапурський туристський попит у Малайзії з макроекономічної точки зору, використовуючи дані, починаючи від першого кварталу 2000 року до четвертого кварталу 2010 року. Результати нашого емпіричного дослідження показали довгостроковий коінтеграційний взаємозв'язок між сінгапурськими туристськими прибуттями й такими макроекономічними змінними, як реальні доходи сінгапурців, ціни на послуги туризму, вартість проїзду, обмінний валютний курс між Сінгапуром і Малайзією. Зокрема нами виявлено, що більш високі реальні доходи й сильна валюта будуть підвищувати попит у сінгапурців відвідати Малайзію, а більш високі ціни на туристичні й транспортні видатки перешкоджатимуть туристам із Сінгапуру. На основі сукупності отриманих даних було запропоновано скласти План дій Малайзії у сфері туризму.

**Ключові слова:** індустрія туризму; попит у секторі туризму; модель корекції помилок; Малайзія; Сінгапур.

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### СІНГАПУРСЬКИЙ СПРОС НА ТУРИЗМ В МАЛАЙЗІЇ

**Аннотация.** Туризм является одной из ключевых отраслей сферы услуг в Малайзии. Он играет приоритетную роль в новой экономической модели, в рамках которой правительство активизирует свои усилия по переходу от ресурсо

ориентированной к сервисно ориентированной экономической деятельности. Среди важных стран туристической оригинации Малайзии выделяет Сингапур, на долю которого приходится более половины ежегодных туристских прибытий в Малайзию. Беря во внимание значительный объем туристов из Сингапура, в этой статье авторы исследовали факторы, определяющие сингапурский спрос на туризм в Малайзии с макроэкономической точки зрения, используя данные, начиная от первого квартала 2000 года до четвертого квартала 2010 года. Эмпирические исследования показали долгосрочную коинтеграционную взаимосвязь между сингапурскими туристскими прибытиями и такими макроэкономическими переменными, как реальные доходы сингапурцев, цены на услуги туризма, стоимость проезда, обменный валютный курс между Сингапуром и Малайзией. В частности, более высокие реальные доходы и сильная валюта будут повышать спрос у сингапурцев посетить Малайзию, а более высокие цены на туристические и транспортные услуги будут препятствовать путешествиям. На основе совокупности полученных данных было предложено составить План действий Малайзии в сфере туризма.

**Ключевые слова:** индустрия туризма; спрос в секторе туризма; модель коррекции ошибок; Малайзия; Сингапур.

**Introduction.** From the time it achieved independence in 1957 until the mid-1980s, the Malaysian economy was very much dependent on primary commodities and the manufacturing industry. In the late 1980s, realizing that most national natural resources were being depleted and that the manufacturing sector was sensitive to global economic crises, the government started to shift the border of economic activity to service-based economic activities. The government came to realize that Malaysia owned a specific comparative advantage in the tourism sector. In 1987, the government established the Ministry of Culture, Arts and Tourism – renamed the Ministry of Tourism in 2004 – with the vision of developing Malaysia as a world-class tourist destination. Under this ministry, tourism promotion campaigns were enhanced, which brought Malaysia to the eyes of the world as the host of various international events such as the Langkawi International Maritime and Aerospace Exhibition, the Rainforest World Music Festival, the Borneo International Jazz Festival, to name few.

The active promotion campaigns and tourism activities are noteworthy because, since 1994, the tourism sector has contributed more than 10% of the total gross domestic product (GDP) and employment in Malaysia. In 2013, the tourism sector contributed 16.1% (RM158.2 billion) of Malaysia's GDP, and according to the World Travel and Tourism Council (WTTC, 2014) [1], this is forecasted to increase to 16.4% (RM168.9 billion) in 2014. The total contribution of tourism to employment was 1.86 million jobs in 2013 (14.1% of total employment), and this is expected to increase to approximately 1.95 million jobs (14.5% of total employment) in 2014.

Under the Economic Transformation Programme (ETP), the tourism industry has been identified as one of the 12 National Key Economic Areas (NKEAs) that function as key engines of economic growth. The tourism industry in Malaysia is ranked in the top 10 in the world for both most visited country and tourist arrivals and ranked in the top 15 in global receipts (PEMANDU, 2010) [2]. Given the critical role of the tourism industry in the future development of the Malaysian economy, it is vital to study the factors that affect tourism demand in Malaysia.

In this regard, it is pertinent to pay attention to the major source of tourist arrivals in the country. One of the major tourist origination countries for Malaysia is Singapore, which contributes more than half of annual tourist arrivals. Singaporean tourism in Malaysia has recorded an average annual growth of 10.2% since 2000. In 2004, tourism from Singapore contributed 60.6% of tourist arrivals in Malaysia. As illustrated in Table 1, Singaporean tourist arrivals have continuously increased, except in 2003 due to the outbreak of severe acute respiratory syndrome (SARS).

**Brief Literature Review.** Studies that have used tourist arrivals as a measure of tourism demand includes those of Dritsakis (2004) [4], Garin-Munoz and Montero-Martin (2007) [5], Ouerfelli (2008) [6], and Habibi et al. (2009) [7]. [4] examined the German and British tourism demand for Greece with the explanatory variables of income, tourism price, transportation cost, and exchange rate. He discovered a long-term relationship among the specified explanatory variables for tourism demand for both countries. He further reported that income levels of the tourist-generating country are significant and elastic for tourists from both Germany

and the UK. An elastic coefficient of income also was found in other tourism demand studies, including Botti et al. (2007) [8], Brida et al. (2008) [9], and [6] for the cases of France, Mexico, and Tunisia, respectively. The finding of an elastic income coefficient suggests that tourism is a luxury good for tourists, as demand increases more than proportionally to changes in income.

On the other hand, [5] stated that a price variable should be selected with caution in tourism demand studies because for tourism activity, price constitutes several components. Most studies have relied on tourism price, or relative price, which measures a tourist's cost of living at the destination [7; 10; 11; 12]. The cost of living includes the prices of goods and services consumed by the tourist at the destination.

Another price variable that has often been used as an explanatory variable for tourism demand is travel cost or transportation cost [5; 13; 14]. This price variable measures the cost of traveling from the tourist origination country to the destination and represents a significant part of the total cost of the trip. For example, [4] and [14] used airfare to measure travel cost in their studies. However, as pointed out by [10], it is difficult to determine the exact flights of tourists abroad and thus to know the airfares they paid. Therefore, [10] suggested using the price of crude oil as the proxy for travel cost. This travel cost proxy was also used in studies by [5; 11; 12; 13].

Exchange rate has proven to be an important explanatory variable for tourism demand in studies [4; 6; 10; 11]. The appreciation of currency indicates that the currency of the tourist-generating country has strengthened. Currency appreciation will encourage more tourists to travel because their currency can be exchanged for more currency at the tourism destination, which means that tourists are wealthier and able to purchase more goods and services in the tourism destination.

In the case of war or terrorism, such as the Gulf War or terrorist attacks, tourists around the globe will cancel or delay their travel plans because they fear for their safety. Similar reasoning applies to the outbreak of diseases such as SARS and Avian flu; tourists will resist traveling to disease-affected countries. For example, the terrorist attacks of September 2001 revealed a significant disruption in tourism demand [5; 13; 15]. Meanwhile, the SARS outbreak also negatively affected tourist flows [7; 10; 11].

**Purpose.** This study aims to determine the factors that attract Singaporean tourist inflows into Malaysia from a macroeconomics perspective.

Tab. 1: Information of Singaporean Tourist in Malaysia, 2000-2011

Year	Tourist Arrival (Person)	Market Share (Percentage)	Annual Growth (Percentage)
2000	5,420,200	53.0	10.6
2001	6,951,594	54.4	28.3
2002	7,547,761	56.8	8.6
2003	5,922,306	56.0	-21.5
2004	9,520,306	60.6	60.8
2005	9,634,506	58.6	1.2
2006	9,656,251	55.0	0.2
2007	10,492,692	50.0	8.7
2008	11,003,492	50.0	4.9
2009	12,733,082	53.9	15.7
2010	13,042,004	53.1	2.4
2011	13,372,647	54.1	2.5

Source: Tourism of Malaysia [3]