A case study on Malaysia and Singapore
Nexus amongst competitiveness, cost of living, wages, purchasing power and liveability

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Abstract
Purpose – Malaysia and Singapore had parted more than five decades ago. Much of the existing literature concerned about the bilateral ties between two economies focusing on the political economy perspective. This paper aims to provide insights on the economic development and prospects of Malaysia and Singapore at the national level. In addition, this paper also makes a pioneering attempt at conducting a comprehensive comparative analysis between Malaysia and Singapore at the city level.

Design/methodology/approach – This paper offers a case study of Malaysia and Singapore by assessing their national economic competitiveness, urban standards of living and quality of life. The paper leverages on a series of indices such as the competitiveness index for ASEAN-10, the cost of living, wages and purchasing power of ordinary residents, as well as the liveable cities index to perform the analysis.

Findings – In terms of national competitiveness, the analysis shows that Singapore and Malaysia have been leading the ASEAN region from 2000 onwards, being the top- and second-ranked, respectively. Malaysia still lags Singapore in several aspects such as attractiveness to foreign investors and standard of living, education and social stability despite insignificant differences in the ranking. City-level analysis shows that the cost of living in Singapore is almost double of that in Kuala Lumpur, although living in Singapore is more affordable owing to the higher wage rate received by the ordinary citizens.

Originality/value – This paper contributes to the literature in several ways. First, this paper assesses economic development in Singapore and Malaysia instead of focusing on cross-strait relations. Second, the study reflects the view that the improvement of standards of living and quality of life for ordinary residents is paramount to economic development. The competitiveness index and city-level benchmarks used in the paper reflect the standards of living and the quality-of-life dimensions. Third, the focus on city-level analysis in addition to conventional national-level analysis helps to provide policymakers with practical policy implications against the backdrop of rapid urbanisation.

Keywords Competitiveness, Malaysia, Singapore, Liveability, Cost of living, Purchasing power

Paper type Case study

1. Introduction
Malaysia and Singapore were once parts of a single entity formed in 1963, the Federation of Malaysia, bound by the common bonds built upon their shared experience of British
colonisation and geographical contiguity. Additionally, Malaysia and Singapore also share similar social settings made up of multi-ethnic demography and culture. However, notwithstanding similarities in multiple aspects, divergence in their political agendas and development approaches had led to the separation of Malaysia and Singapore in 1965 (Bakar, 2008). While the two countries have parted into heterogeneous political entities, both remain connected and interdependent in multiple dimensions. In particular, Malaysia and Singapore continue to be the second largest trading partners to one another. In 2015, Singapore accounted for 13 per cent of total trade in Malaysia, while Malaysia accounted for 11 per cent of total trade in Singapore[1].

Malaysia and Singapore are also counted among the East Asian Miracle economies owing to their spectacular economic growth of above 7 per cent per annum on average from 1961 to 1997, as shown in Table I. Despite a slower speed of growth in the period of 1998-2015, Malaysia and Singapore still outperformed the average annual real gross domestic product (GDP) growth of the ASEAN-10. Similarly, for the Human Development Index (HDI), the performance of Malaysia and Singapore is above average among ASEAN-10.

As compared to Singapore, Malaysia is well-endowed with natural resources including plantation crops, commodities for export, natural gas, as well as a relatively bigger domestic market and a much larger population base. Nevertheless, Singapore’s real GDP level has closely tracked that of Malaysia’s throughout five decades of expansion as illustrated in Table II and Figure 1 despite great handicaps in terms of poor natural endowment as well as a smaller population and domestic market[2]. When Singapore left Malaysia in 1965, its real GDP was at 7.4 billion constant 2010 US dollars, less than half of Malaysia’s GDP. However, Singapore’s economy quickly expanded to over half of Malaysia’s GDP by 1975. The convergence between both economies continues as Singapore’s real GDP reached 87 per cent of Malaysia’s real GDP in 2015.

While Malaysia has been ahead of Singapore in terms of real GDP level, its performance is worrisome after taking into account an approximately five-fold larger population size relative to the city–state. The comparison of real GDP per capita between Malaysia and

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**Note:** The average annual growth rate of real GDP for ASEAN-10 in the period 1961-1997 is not available as ASEAN-10 was established only in 1967.

**Sources:** World Bank; World Development Indicators and United Nations Development Programme (UNDP)

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**Sources:** World Bank, World Development Indicators
Singapore is shown in Figure 2. Singapore’s real GDP per capita began to surge ahead of Malaysia’s since the 1970s although both economies started at similar levels in the 1960s. The low growth in GDP per capita in Malaysia may suggest that the rapid real GDP growth in Malaysia did not translate to equally strong advancement in living standards. In fact, Malaysia’s GDP per capita has remained stagnant at around 10,000 US dollars since 2010, indicating that the country may fall into the “middle-income trap”.

The comparison between Malaysia and Singapore makes an interesting paired case study given their similarity in historical background while having a stark contrast in development experiences. In addition to the evident divergence between Malaysia and Singapore in terms of GDP per capita, the exacerbated problem of brain drain in Malaysia especially with mass diaspora of high-skilled Malaysian to Singapore calls for particular attention. A World Bank report in 2011 found that there was significant migration among Malaysians to other countries such as Singapore, Australia and the USA. The diaspora in 2010 was likely to reach one million, a third of which were skilled workers. More interestingly, the diaspora largely concentrated in Singapore as the city–state hosted 57 per cent of total Malaysian migrants[3].
This paper aims to provide a holistic comparison of Malaysia and Singapore in terms of national economic competitiveness, urban standards of living and quality of life. For the national-level analysis, we leverage on the annual competitiveness index for ASEAN-10[4] in which Malaysia and Singapore are benchmarked against their ASEAN neighbours. For the latter part of the analysis, we will conduct a case study of Kuala Lumpur, the capital of Malaysia, and Singapore as a city–state in terms of cost of living, wages and purchasing power of ordinary residents as well as the cities’ liveability.

Drawing on the pioneering studies by Tan and Luu (2016) in measuring the cost of living, wages and purchasing power of ordinary residents, this topic has generated considerable interest on the issue of cost of living at the city-level including global media such as British Broadcasting Corporation (BBC), as reported in McDonald (2017). The main value-added of this framework is reflected in its differentiation between expatriates and ordinary residents in evaluating the cost of living, wages and purchasing power in major cities, of which is also acknowledged by Khaw (2017). Furthermore, the Global Liveable Cities Index (GLCI) approach utilised in this study is recognised by the World Bank for its comprehensiveness and transparency as well as the standardised framework which allows for methodological comparison across cities[5].

This paper contributes to the literature in several ways. Firstly, this paper differs from most of the existing literature on Malaysia and Singapore in that it assesses economic development in these two economies instead of focusing on cross-strait relation. Secondly, the study reflects the view that the improvement of standards of living and quality of life for ordinary residents is paramount to economic development. As Section 3 will discuss in more detail, both our national competitiveness index and city-level benchmarks reflect standards of living and quality of life dimensions. This marks a paradigm shift from only using traditional economic variables in evaluating development progress. Thirdly, the focus on city-level analysis in addition to conventional national-level analysis helps to provide policy-makers with practical policy implications against the backdrop of rapid urbanisation. Finally, the study corroborates the findings from other studies about the phenomenon of brain drain in Malaysia.

The rest of this paper is organised as follows. Section 2 presents an overview of the literature concerning Malaysia and Singapore, in addition to the notion of competitiveness, indices of cost of living, wages, purchasing power as well as liveability. This discussion will be followed by Section 3, which outlines the methodologies utilised in this paper. Section 4 then presents the findings of comparison between Malaysia and Singapore along the five dimensions mentioned earlier. Finally, Section 5 concludes with a brief discussion on the potential disruptive changes following connectivity advancement between two economies.

2. Literature review and theoretical framework
Malaysia and Singapore have been a topic of interest for many scholars. Nonetheless, the vast literature on comparative analysis of Malaysia–Singapore has mainly focused on the historical and political economy perspectives and scarcely on the topic of development. This strand of literature, as exemplified by Rogers (1971), Nathan (2002), Kesavapavy (2005) and Ooi (2008), centred around the ups and downs of the bilateral ties between Malaysia and Singapore caused by several contentious issues on water, immigration and land. While these literature provide insights on the development of Malaysia and Singapore bilateral relations, there is a shortfall in terms of economic performance comparison between the two economies.

In light of this, some scholars conducted comparative research between Malaysia and Singapore from the economic perspective. The comparative analysis between Malaysia and Singapore by Hu (2010) endeavoured to identify the general patterns of catching-up process in the two economies. While Hu focused on the early development stage of catching up,
Tan et al. (2015a) studied the prospect of sustaining growth momentum in Malaysia and Singapore in the context of rising global uncertainties by investigating the engines of growth in the two economies. Meanwhile, studies by Daquila (2008) and Abidin (2008) presented an indispensable complementary relation between the two economies in several dimensions, particularly trade and investment, in spite of their competition for export market and FDI.

Notwithstanding a strand of literature on comparative analysis of development between Malaysia and Singapore, the focus is rather narrow. As suggested by Seers (1969), Sen (1999) and Basu (2000), the goals of development should go beyond economic growth and encompass elements of living standards or quality of life. While alternative measures such as HDI is developed to quantify these ideas, none of the existing literature, to the best of our knowledge, is dedicated to Malaysia–Singapore comparative study in terms of standard of living per se. This paper, which aims to examine the economic development as well as standard of living and quality of life of ordinary citizens in Malaysia and Singapore, will, therefore, be a new contribution to the literature.

While macroeconomic indicators such as GDP and GDP per capita are useful in illustrating the economic growth and development of a country, it is not holistic enough to reflect other aspects that matter to the people such as public governance and quality of life. With the emergence of alternative measures of development, the notion of competitiveness, which has significant role in shaping national policy, deserves particular attention. The concept is popularised by Porter (1980) at micro or firm-level studies, which later escalated to national and regional domains (Porter, 1990; Kitson et al., 2004). Two of the most popular competitiveness studies in the field are the Global Competitiveness Report (World Economic Forum, 2016) and the World Competitiveness Yearbook (World Competitiveness Center, Institute for Management Development, 2017). While these competitiveness rankings do enable cross country comparison, this paper will adopt annual competitiveness analysis for ASEAN-10 instead (Tan et al., 2017b) for two main reasons. Firstly, as Malaysia and Singapore are the two most developed economies in the ASEAN-10, the competitiveness ranking at regional level will provide a closer scrutiny as compared to the global ranking. Secondly, the competitiveness framework encompasses broad dimension in the analysis including economy, government and institutions as well as quality of life and infrastructure, which we believe is able to provide holistic assessment of development in Malaysia and Singapore[6].

Such formulation of the competitiveness index reflects the authors’ view that improved national competitiveness or development is only meaningful if it is translated to advancement in living standards and higher quality of life for the people. This is in line with the growing research interest on quality life ever since the 1930s, whereby scholars have adopted economics, political and psychological frameworks in understanding and measuring quality of life (Wish, 1986). The topic has become so popular that a journal, Social Indicators Research, dedicated to the field of quality of life was founded in 1974. While there has been no consensus on the definitions of living standard or quality of life, definite progress has been made in operationalising their determinants (Andrews, 1974; Liu, 1976; Power, 1980; Bayless and Bayless, 1982; Rogerson, 1999).

As mentioned in Section 1, Singapore is incomparable to Malaysia in terms of its land area and population size. As such, one must go beyond national level analysis. Furthermore, city-level analysis is also becoming more relevant with rapid urbanisation happening all around the world. In Malaysia, the urban population has grown from 27 per cent of the total population in 1960 to 75 per cent in 2016[7]. Urban households also earn almost twice the income of rural families (Siwar et al., 2016). Meanwhile, Singapore itself is an urbanised city state. Thus, we move beyond the national level analysis and compare Kuala Lumpur as a
representative city of Malaysia with Singapore in terms of cost of living, wages, purchasing power and liveability. The first three are indicators tracking basic urban living standards, while the fourth measures the living conditions in cities.

The current literature on city-level cost of living is dominated by studies conducted by commercial research houses such as the Economist Intelligence Units (EIU), UBS and Mercer. However, these surveys are inadequate for policy analysis as they measure the cost of living for expatriates – white-collared professionals on international assignments – and not the ordinary urban dwellers. Furthermore, as discussed in Tan et al. (2017c), commercial studies may also suffer from serious methodological weaknesses. At the same time, the issue of cost of living at the city-level has not been adequately addressed in the academic literature. This study relies on the works of Tan and Luu (2016) to measure the cost of living, wages and purchasing power of ordinary residents.

As for measuring cities’ liveability, we utilise the GLCI constructed by Tan et al. (2012), Tan et al. (2014) and Tan et al. (2016). The GLCI framework adopts ordinary citizens’ perspective in assessing the liveability of a city, unlike other, mainly commercial, studies such as Mercer Quality of Living Survey and Knight Frank Global Cities Survey, which focus on expatriates.

3. Research methodology

3.1 Competitiveness framework

The competitiveness framework in Tan et al. (2017b) covers four environments that are related to economic, political, institutional and social in character including the following:

- Macroeconomic Stability;
- Government and Institutional Setting;
- Financial, Business and Manpower Condition; and
- Quality of Life and Infrastructure Development, as shown in Figure 3[8].

![Competitiveness framework](image-url)  

**Source:** Tan et al. (2017b)
Using the nested approach, these four environments are further divided into 12 sub-environments encompassing 121 indicators.

To combine the various indicators with different units into one meaningful measure of competitiveness, standardised scores for each indicator are computed using the following formula,

$$\text{Standardised Value} = \frac{\text{Original value} - \text{Mean}}{\text{Standard deviation}}$$

The scores are then aggregated at the sub-environment and environment levels, and finally aggregated again at the overall level with each environment sharing the same weight of 25 per cent. This enables a relative comparison of the performance across economies at multiple levels range from overall competitiveness to a specific indicator. A score of zero indicates that the country is an average performer, while a positive (negative) score indicates that the performance of the country is better (worse) than the average of 10 ASEAN member states in this study. Subsequently, each of the ASEAN member state is ranked according to the score. The higher the ranking of a country, the more competitive it is as compared to its peers in ASEAN.

### 3.2 Cost of living index, wages index and purchasing power index

This paper employs the 2016 Cost of Living Index for Ordinary Residents, which measures ordinary residents’ cost of living based on consumption baskets consisting of ten consumption categories. These categories are represented in Figure 4. The results from the study cover a study period from 2005 to 2014 in 103 cities, with New York as the base city [9].

The Cost of Living Index for Ordinary Residents in City $m$, Country $C$ is computed according to equation (1) as follows:

$$\text{Cost of Living Index for Ordinary Residents in City } m = \frac{CP_{C,m}^{EU} \times \frac{NP_{C}^{CP}}{NP_{C}^{NP}}}{CP_{US,NY}^{EU} \times \frac{NP_{US}^{NP}}{NP_{US}^{NP}}} \times 100 \quad (1)$$

where

- $m =$ name of the city;
- $C =$ the country where City $m$ is located in;
- NY = New York;
- US = USA;

![Figure 4. The components of ten consumption categories](image-url)

Source: Tan et al. (2017c)
\[ CP_{C,m}^{RIU} = \sum_{i=1}^{n} P_{C,m,i} \times W_{C,i}; \]

\( n \) = number of items in the consumption basket;
\( P_{C,m,i} \) = average price of item \( i \) in City \( m \) of Country \( C \);
\( W_{C,i} \) = weight of item \( i \) within Cost of Living Index for Ordinary Residents in Country \( C \);
\( \text{NP}_{C}^{CI} \) = mean \( CP_{C,m}^{RIU} \) from all cities within Country \( C \).

A smaller Cost of Living Index for Ordinary Residents implies that the city is cheaper for the ordinary residents to live in, and vice versa. In addition, the cost of living for ordinary residents in those cities is higher (lower) than their counterparts in New York if the Cost of Living Index is larger (smaller) than 100. After analysing the cost of living for ordinary residents in various cities, their gross hourly wage were computed.

Similar to the cost of living, Wages Index for Ordinary Residents is derived from this information and computed according to equation (2), as follows:

\[
\text{Wages Index for Ordinary Residents in City } m = \frac{\text{gross hourly wage}_{C,m}}{\text{gross hourly wage}_{US, NY}} \times 100
\]

where

- \( m \) = name of the city;
- \( C \) = the country where city \( m \) is located in;
- \( NY \) = New York;
- \( US \) = USA;

\[
\text{Gross Hourly Wage}_{C,m} = \frac{\text{monthly wages}_{C} \times 12}{\text{mean weekly hours actually worked}_{C} \times 52}
\]

Monthly wages\(_{C}\) = monthly wages in Country \( C \); and
mean weekly hours actually worked\(_{C}\) = mean weekly hours actually worked in country \( C \).

Cities with larger (smaller) Wages Index imply a higher (lower) wage received by the ordinary citizens in the cities. In addition, ordinary residents in those cities earn more (less) than their counterparts in New York for an hour's work if the Wages Index is larger (smaller) than 100.

Having examined the cost of living and level of remuneration in 103 cities, a comparison of these two sets of data is useful in reflecting the purchasing power of ordinary residents in these cities. The Purchasing Power Index for Ordinary Residents, which represents a basket of goods and services affordable by the ordinary residents in a given city for an hour of work in relative to those of their counterparts in New York, is devised using equation (3).

\[
Purchasing \text{ Power Index for Ordinary Residents in City } m = \frac{\text{Wages Index for Ordinary Residents}_{C,m}}{\text{Cost of Living Index for Ordinary Residents}_{C,m}} \times 100
\]

where

- \( m \) = name of the city;
- \( C \) = the country where city \( m \) is located in;
Wages Index for Ordinary Residents $C_{m}$ is as defined in equation (2); and Cost of Living Index for Ordinary Residents $C_{m}$ is as defined in equation (1).

The performance of Kuala Lumpur and Singapore in these three aspects, namely cost of living, wages and purchasing power are analysed in Section 4.

3.3 Global liveable cities index

While the aforementioned indicators are essential in measuring standards of living and quality of life, non-monetary factors should be taken into account as well. The GLCI developed by Tan et al. (2012), Tan et al. (2014) and Tan et al. (2016) drew inspiration from Franklin Roosevelt, the 32nd President of the USA, and conceptualised ordinary residents’ multi-dimensional character of liveability in 5 environments:

1. Economic Vibrancy and Competitiveness;
2. Environmental Friendliness and Sustainability;
3. Domestic Security and Stability;
4. Socio-Cultural Conditions; and
5. Political Governance, as summarised in Figure 5 below.

Subsumed under these environments are 18 sub-environments, which are measured by 86 indicators. This paper will refer to the latest result of GLCI in Tan et al. (2017a), which presents the assessment of liveability in 63 major global cities, including Kuala Lumpur and Singapore based on the 2013 data.

The standardised scores for each indicator are computed using the same methodology mentioned in Section 3.1, and are aggregated at the sub-environment and environment levels, and finally aggregated again at the overall level with each environment sharing the same weight. This enables a multi-level comparison of a city’s performance relative to the average performance of all 63 cities covered in the study. A score of zero indicates that the city is an average performer, while a positive (negative) score indicates that the city is more (less) liveable than the average of all cities in this study. Subsequently, the cities are ranked accordingly. The higher the rank, the more liveable a city is as compared to others.

Source: Tan et al. (2017a)
4. Empirical findings and discussion

4.1 National competitiveness analysis of Malaysia and Singapore vis-à-vis other Association of Southeast Asian Nations economies

Having tracked the national competitiveness of each individual ASEAN member state since 2000, we observe an evident disparity in national competitiveness level between Malaysia and Singapore. Figure 6 depicts the assessment of competitiveness for the ten members of ASEAN over the period 2000-2014, using competitiveness framework. The vertical axis plots each country’s competitiveness score, which reflects their relative overall economic competitiveness vis-à-vis the regional average.

As shown in Figure 6, Singapore tops the region in 2014, with a standardised score of 2.02, while Malaysia is ranked second among ASEAN-10 with a standardised score of 1.06. Ranking on its own, however, is deceptive as Malaysia’s performance does not stand up to scrutiny if we compare its score with that of Singapore. The widening gaps in the economies’ standardised scores from 0.91 in 2005 to 0.96 in 2014 indicates a larger competitiveness divide between Malaysia and Singapore despite the subtle difference in the ranking.

The disparity between Malaysia and Singapore is also evident at each environment level. As shown in the comparison below, Singapore dominates the ranking of all four environments except for Financial, Businesses and Manpower Conditions in 2014. The performance of Malaysia in Macroeconomic Stability (Table III) is of particular concern as it does not only fall in terms of ranking from the second in 2012 to the third since 2013 but also has attained the third lowest standardised score after 2009 and 2013.

Table IV depicts the comparison of Malaysia and Singapore in terms of Government and Institutional Setting. Despite Malaysia standing at the second among the ASEAN-10 throughout the study period, there remains a significant divide in the standardised scores between Malaysia and Singapore.

In terms of Financial, Businesses and Manpower Conditions (Table V), Malaysia has witnessed some improvement since 2000, while shrinking workforce as coupled with ageing
population has put a strain on the labour market flexibility in Singapore. This, in turn, has allowed Malaysia to overtake Singapore for the first time in 2014 for the particular environment.

The divergence between Malaysia and Singapore is manifested in the environment of Quality of Life and Infrastructure Development in which Malaysia remained at the third place for two consecutive years since 2013. As seen in Table VI, while Singapore has hit its third highest standardised score in 2014, Malaysia attains the third lowest score in 2014.

As mentioned in Section 3.1, the overall competitiveness score is constructed by aggregating scores for four environments discussed earlier. Figure 7 below provides an

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Source: Authors’ calculations

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<tr>
<td>2012</td>
<td>2</td>
<td>1</td>
<td>0.9430</td>
<td>2.2843</td>
</tr>
<tr>
<td>2013</td>
<td>2</td>
<td>1</td>
<td>0.9417</td>
<td>2.2463</td>
</tr>
<tr>
<td>2014</td>
<td>2</td>
<td>1</td>
<td>1.0322</td>
<td>2.2851</td>
</tr>
</tbody>
</table>

Source: Authors’ calculations
in-depth comparison of Malaysia and Singapore in these different facets of competitiveness. As seen from the figure, Singapore outperforms Malaysia in almost all sub-environments in 2014. However, we also note that in terms of labour market flexibility, Malaysia has surpassed Singapore and topped the region owing to the latter’s labour market constraints.

4.2 Cost of living index, wages index and purchasing power index of Kuala Lumpur, the capital city of Malaysia, and Singapore as a city-state

Figure 8 illustrates the comparison of cost of living between Kuala Lumpur and Singapore from 2005 to 2014, with the bars denoting the cities’ Cost of Living Rankings for Ordinary Residents out of 103 cities and the lines showing their Cost of Living Indices for Ordinary Residents.
Residents. Owing to the change in methodology adopted by the World Bank in the International Comparison Program (ICP; World Bank, 2014), the discussion will be split into two sub-periods: from 2005 to 2010 and from 2011 onwards for a more precise analysis[10].

Kuala Lumpur, the most developed and populous city in Malaysia has experienced an increase in cost of living index from 30.30 to 37.73 between 2005 and 2010, and a downward trend in the latter period. This corresponds with an edge up in cost of living ranking from 79th in 2005 to 78th in 2010, and a drop for the second sub-period. Singapore experiences a similar trend of increase in cost of living index from 48.87 to 62.96 in the first sub-period followed by a fall in the latter period. Despite a drop in the cost of living index during the latter period, Singapore constantly climbs up the cost of living ranking from 58th to 53th between 2005 and 2010, and from 55th to 49th in the second sub-period. Contrasting Kuala Lumpur and Singapore, the line in Figure 8 shows that in spite of similar fluctuation in cost of living index over the years, Kuala Lumpur and Singapore part from each other further from year to year. The comparison of the indices implies that living in Singapore (53.54) is almost twice as expensive as living in Kuala Lumpur (26.91) in 2013[11].
Figure 9 illustrates the comparison of wages index and ranking between Kuala Lumpur and Singapore, while Figure 10 compares the purchasing power index and ranking between the two cities from 2005 to 2014. The discussion on purchasing power is also separated into two sub-periods: 2005-2010 and 2011 onwards. The wages index of Kuala Lumpur is relatively stable over the study period, reaching its peak at 20.03 in 2013 (see Figure 9).

As such, the trend of purchasing power index of Kuala Lumpur correlates with the fluctuations of the cost of living index. The purchasing power index decreases from 55.84 in 2005 to 43.96 in 2010 as the cost of living index rose over the first sub-period. In the second sub-period, the purchasing power index increases since 2011 as cost of living index decreases over the period (see Figure 10). However, Kuala Lumpur’s purchasing power ranking has dropped from 70th to 75th between 2005 and 2010, and from 72nd to 73rd between 2011 and 2013. Singapore, on the other hand, has had a gloomier time during the first sub-period. The combined trends of decreasing wages index (from 74.90 in 2005 to 74.77 in 2010) and increasing cost of living index cause the Purchasing Power Index for Ordinary Residents in Singapore to decline from 153.27 to 118.76 between 2005 and 2010. Correspondingly, Singapore’s purchasing power ranking fall six places from 36th in 2005 to 42nd in 2010. In contrast, Singapore’s purchasing power index and ranking rise in the second sub-period.

Source: Authors’ calculations
As observed in Figure 10, there has always been a substantial gap between Kuala Lumpur and Singapore in terms of ordinary residents’ purchasing power over the study period. In fact, the 2013 purchasing power index values for the two economies indicate that ordinary residents in Singapore can afford more than two times the amount of goods and services that their counterparts in Kuala Lumpur can afford given the same number of working hours.

4.3 The nexus of cost of living, purchasing power and liveability for Kuala Lumpur and Singapore

Among all 63 global major cities covered in the overall GLCI rankings by Tan et al. (2017a), Kuala Lumpur is ranked at the 34th, while Singapore is ranked at the 7th. To gain a better insight, we take a deeper look at the sub-environment level of liveability for Kuala Lumpur and Singapore. The Web chart analysis in Figure 11 compares the standardised score of 18 sub-environments of liveability for Kuala Lumpur and Singapore as a city–state, and shows how they fare against the median and maximum scores among 63 global cities. The figure shows that Kuala Lumpur lagged behind Singapore in most sub-environments, especially in terms of Economic Openness, Policy Making and Implementation, Diversity and Community Cohesion and Crime Rate. Evidently, poor policy, social polarisation and alarming crime rate in Kuala Lumpur have negatively affected the city’s liveability.

Existing literature has shown that affordability and liveability are two interrelated dimensions contributing to city dwellers’ welfare (Evans, 2002; Lowe et al. 2015). To shed light on how a city fare when two factors, namely, cost of living and liveability are taken into account, and a scatterplot of Cost of Living Index for Ordinary Residents against the overall liveability score is constructed. As can be observed from Figure 12, Kuala Lumpur falls in the Low liveability–Low Cost quadrant, while Singapore is at the border between the High Liveability–High Cost quadrant and the High Liveability–Low Cost quadrant. This indicates that Singapore is one of the most liveable cities with a median level of cost of living. Meanwhile, whether cities in the first quadrant are more ideal than those in the third quadrant, or vice versa, depend on the preferences of ordinary residents living in those cities.

Figure 11. Median and maximum Web chart analysis on liveability of Kuala Lumpur and Singapore

Note: Plotted based on the latest 2013 results
Source: Tan et al. (2017a)
Having examined the relation between cost of living of ordinary citizens and liveability, Figure 13 provides an assessment of the purchasing power of ordinary residents relative to liveability between Kuala Lumpur and Singapore. As shown in the scatterplot, Kuala Lumpur is at a less favourable quadrant of Low Liveability–Low Purchasing Power, while Singapore falls in the most ideal quadrant of High Liveability–High Purchasing Power, and is the city with the highest purchasing power index and overall liveability score in Asia.

4.4 Explaining the mass diaspora in Malaysia

The comparative analysis between Malaysia and Singapore in multiple dimensions has come timely against the backdrop of deteriorating brain drain in Malaysia, as discussed in Ho and Tyson (2011), Foo (2011) and World Bank (2011). In fact, Singapore has been the top destination for Malaysian migrants. As of 2010, there were 385,979 of Malaysian-born residents in Singapore[12] (Singapore’s Department of Statistics, 2011). Of the Malaysian-born non-student resident population aged over 15 years, 60 per cent attained at least secondary education, and 43 per cent attained post-secondary education[13]. Meanwhile, another 350,000 Malaysians worked in Singapore, with 200,000 living in the city–state[14].

Undeniably, migration involves a complicated web of pull-and-push factors. The magnitude of migration, whether permanent or temporary from Malaysia to Singapore might be explained.
by the better opportunities offered by Singapore, which has topped the competitiveness ranking in the ASEAN-10 for 14 years. From the perspective of cost of living, however, the phenomenon of mass diaspora of Malaysian to Singapore, which has higher cost of living, seems puzzling for two reasons. Firstly, the average cost of living in Peninsular Malaysia as a whole, which consists of 11 states and 2 federal territories, is likely to be lower than that of the capital city, Kuala Lumpur. In other word, Malaysia is a much cheaper place to live in as compared to Singapore. Secondly, Malaysians enjoy higher mobility within their country, while the mobility in Singapore is constrained by the physical size of the city state. The living cost is also relatively uniform in Singapore as compared to Malaysia, which has varied levels of living cost across different states. This means that Malaysians have more choices and may opt to move to other cheaper states for a more affordable living.

However, a closer scrutiny on the purchasing power of ordinary citizens in Kuala Lumpur and Singapore has demonstrated that lower cost of living does not necessarily lead to better affordability. Notwithstanding a higher cost of living in Singapore, the compensation in terms of higher wages had offset the cost of living pressure and provided an incentive for Malaysians to migrate. Meanwhile, the deterioration in the value of Malaysian currency might have encouraged migration in Malaysia. As can be seen in Figure 14, the average annual exchange rate of Malaysian Ringgit (MYR) against Singapore Dollar (SGD) has been surging to its record

**Figure 13.**  
Scatterplot of purchasing power index for ordinary residents and score for overall liveability

**Notes:** Based on the 2013 data. The vertical and horizontal red lines represent, respectively, the median Score for Overall Liveability and the median Purchasing Power Index for Ordinary Residents of the 47 cities in the analysis  
**Source:** Tan et al. (2017c)
high of MYR 3.0/SGD in 2016, relative to MYR 1/SGD in 1971. This means that the value of remittance sent home by Malaysians working in Singapore has increased over time. In consequence, Malaysians might opt to work in Singapore to gain a higher purchasing power, both at home and in Singapore.

While we certainly note that Kuala Lumpur is not a perfect representation of Malaysia as a whole despite the city being the country’s capital and its most populous city, the outcomes of our comparison exercise corroborates the survey findings by Foo (2011) and the World Bank (2011). The dominant factors for brain drain, as listed by the participants in the World Bank’s 2011 survey, suggest that more than 50 per cent of the respondents are attracted to Singapore owing to better career prospects offered by the city–state. In addition, attractive salary also makes one of the major pulling factors of Singapore.

Apart from economic incentives, the survey shows that other factors such as social injustice, safety and security and politics have pushed for migration among Malaysians. The survey findings echo the findings on the differences between Singapore and Kuala Lumpur in terms of liveability, as discussed in Section 4.3. From the rising trend of migration from Malaysia to Singapore, we may reasonably induce that a better quality of life in Singapore as reflected in its high purchasing power and liveability have made it a more attractive city to live in.

5. Conclusion and policy implications
Malaysia and Singapore have witnessed different development outcomes after more than five decades of separation. In light of rising global uncertainties and growth slowdown, it is imperative at this juncture to take a step back and reflect on the past development in both economies. Additionally, the phenomenon of mass diaspora of Malaysian to Singapore raises further interest in studying the two economies. This paper endeavours to assess the development between Malaysia and Singapore through multi-dimensional comparison in terms of national competitiveness level as well as the cost of living, wages, purchasing power of ordinary urban dwellers and cities’ liveability.

In terms of national competitiveness, the ranking shows that Singapore and Malaysia have been leading the ASEAN region from 2000 onwards, being the top and second-ranked, respectively. However, a closer inspection in the scores for each sub-environment have revealed that Malaysia still lagged behind Singapore in multiple aspects such as attractiveness to foreign investors and standard of living, education and social stability despite insignificant difference in the ranking. Analysis at the city level shows that Singapore is much more expensive to live in as

![Figure 14. Average annual exchange rate of Malaysia Ringgit and Singapore Dollar, 1971-2016](image)

**Sources:** World Bank; World Development Indicators
compared to Kuala Lumpur. More specifically, the cost of living in Singapore is almost double of that in Kuala Lumpur. Nonetheless, living in Singapore is more affordable as compared to Kuala Lumpur owing to the higher wage rate received by the ordinary citizens. The wage difference between Malaysia and Singapore has allowed the ordinary citizens in Singapore to be able to afford almost fourfold the amount of goods and services that their counterparts in Kuala Lumpur can afford given the same number of working hours.

With the comparison, this paper also attempts to shed light on the issue of brain drain in Malaysia. The findings correspond with the survey results by Foo (2011) and World Bank (2011), which find that the outflow of Malaysians is mainly driven by better economic prospect and higher quality of life as well as liveability in the host country such as Singapore. The dynamics between national competitiveness and quality of life, which is reflected in this study of nexus between competitiveness, cost of living, wages, purchasing power and liveability, highlight the need of a holistic approach to growth and development.

Moving forward in less than ten years, with consensus reached on the enhancement of physical connectivity between Malaysia and Singapore including Kuala Lumpur–Singapore High Speed Rail (HSR) and Johor Bahru–Singapore Rapid Transit System (RTS) Link projects with expected completion in 2026 and 2024, respectively, we foresee more incoming disruptive changes to both economies. Firstly, manpower flows will be impacted the most. The concern can also be observed in the remark by a member of Johor State Assembly, Suhaimi Salleh, that easing border crossing between Malaysia and Singapore will open the floodgate for outflow of residents in Johor to Singapore[15]. Indeed, Malaysia and Singapore share the same concern on diminishing labour cost competitiveness and manpower shortage, which may hinder foreign investment and, consequently, the economic growth of both economies[16]. As discussed earlier, there is a significant outflow of manpower from Malaysia to Singapore, of which more than half are skilled. The profound improvement in connectivity may exacerbate the brain drain problem faced in Malaysia. This is unfavourable to Malaysia’s competitiveness ranking, while Singapore might be able to fill the talent gap through this and continuously improving their competitiveness.

Secondly, the improved connectivity might affect the living standard in both economies. As mentioned earlier, Singapore’s cost of living is almost double than that in Kuala Lumpur. A significant enhancement in connectivity with the expected completion of Kuala Lumpur–Singapore HSR in 2026 will make border-crossing logistics less tedious and, hence, attract more cross-border shoppers from Singapore. The demand–and–supply mechanism may lead to changes in goods prices in both Malaysia and Singapore. In addition to that, residing in Malaysia while working in Singapore, which is already a popular option among both Malaysians and Singaporeans, might be even more appealing owing to the commuting convenience and comparably low living costs in Malaysia. This phenomenon will subsequently affect the housing prices in Malaysia and Singapore, particularly in the neighbouring state of Johor. In short, strengthening connectivity indeed helps to stimulate the economy by reducing transaction costs. However, going forward, the potential disruptive changes and unintended consequences that it might bring about may paint a different picture for Malaysia and Singapore in terms of cost of living, purchasing power, liveability and competitiveness and, thus, should not be overlooked.

Notes
5. See the discussant note by Dr Bert Hofman, the World Bank Country Director for China, Mongolia, and Korea in Tan et al. (2017a).
6. Refer to Chapter 2 of Tan et al. (2017b) for a detailed discussion on the competitiveness framework and methodology.
7. Based on data from World Bank, World Development Indicators
8. Refer to Tan et al. (2017b) for a more detailed explanation on methodology and data sources.
9. Refer to Tan et al. (2017c) for a more detailed methodology and data sources.
10. See further explanation in Section 3.4.2 of Chapter 3 in Tan et al. (2017c).
11. In 2014, the Cost of Living Index for Ordinary Residents in Singapore was still almost twice as high as the Cost of Living Index for Ordinary Residents in Kuala Lumpur. Remarks about the trends of the index continues to hold true if we incorporate the latest results based on the 2014 data.
12. Figure includes naturalised citizens and Singapore permanent residents. See Singapore’s Department of Statistics (2011).

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Further reading


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