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# The outlook for international student mobility: amidst a changing global macroeconomic landscape

March 2024

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# Contents

<b>Executive summary</b>	<b>1</b>
<b>Introduction</b>	<b>5</b>
<b>1 Historic relationship between macroeconomics and student mobility</b>	<b>7</b>
1.1 Global international student flows and world GDP	7
1.2 Country-level relationships between macroeconomic drivers and student mobility	10
1.2.1 GDP growth	10
1.2.2 Household incomes	11
1.2.3 Exchange rates	11
1.3 Regression analysis	14
1.4 Conclusions from the historical analysis	15
<b>2 Macroeconomic outlook and risks for key outbound markets</b>	<b>17</b>
2.1 Current state of the global economy	17
2.2 Macroeconomic outlook for key outbound markets	19
2.3 Macroeconomic risks facing key outbound markets	23
<b>3 Outbound Students Opportunity and Risk Index</b>	<b>27</b>
3.1 Purpose and design of the index	27
3.2 Index results and assessment of outbound markets	29
<b>4 Conclusions</b>	<b>32</b>
<b>Annex A: Country outbound student mobility dashboards</b>	<b>34</b>
<b>Annex B: Index methodology</b>	<b>47</b>

# Executive summary

The number of international students studying at the higher education level around the world has grown significantly over the last two decades, rising from 2m in 1998 (when UNESCO records began) to 6.4m in 2020. The UK alone hosted a record 680,000 international students in the 2021/22 academic year, up 45 per cent on four years earlier.

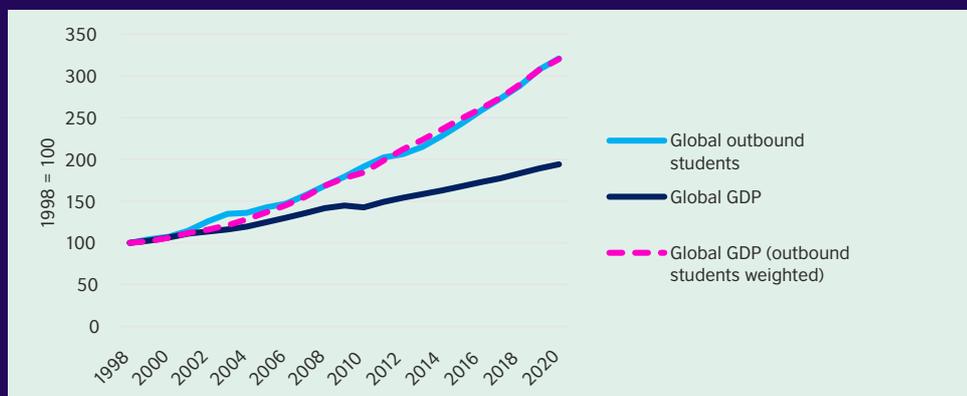
However, the outlook for global student mobility has become less certain, in the context of the volatile global economic environment of recent times, following the Covid-19 pandemic and Russia-Ukraine conflict. And the trend of slowing economic growth in key emerging economies such as China, and high current and forecast levels of macroeconomic and exchange rate risk in countries such as Nigeria and Pakistan.

The British Council commissioned Oxford Economics to assess the global outlook for the international student market, the specific geographies that present the most supportive macroeconomic conditions for future growth and the macro risk levels associated with each market. Policy-related factors, both in origin and destination markets, also play a pivotal role in shaping the future of outbound student mobility but are outside the scope of this report. Key findings of the study are summarised as follows.

## 1. The research confirms a strong positive relationship between global economic growth and global outbound student mobility.

This research indicates that outbound student mobility has been closely linked to global macroeconomic conditions historically. Indeed, while at face value, global outbound student growth has significantly outpaced global GDP growth, a new and bespoke indicator created as part of this research establishes a notably strong relationship. Specifically, when world GDP growth is recalculated based on outbound student market size, rather than the size of the economy, the new measure is shown to have tracked the volume of outbound students remarkably well since UNESCO records began in 1998. Given its strong historical correlation, the forecast outlook for this indicator can provide a strong indication of the future trajectory of global outbound international student numbers.

**Figure ES1:** Global outbound students vs. GDP



Source: British Council, based on data from Oxford Economics and UNESCO

**2. A slowdown in global economic growth is projected to result in a moderate deceleration in growth of international student flows to 2030.**

Global outbound weighted GDP growth is expected to slow to an average pace of 4.2 per cent per year in the period to 2030, from a rate of around 5.5 per cent per year in the two decades prior to the pandemic. This indicates that while the global outlook for international student numbers remains positive, the period to 2030 is likely to be characterised by modestly weaker but still robust growth at around 4-4.5 per cent per year on average in the period to 2030.

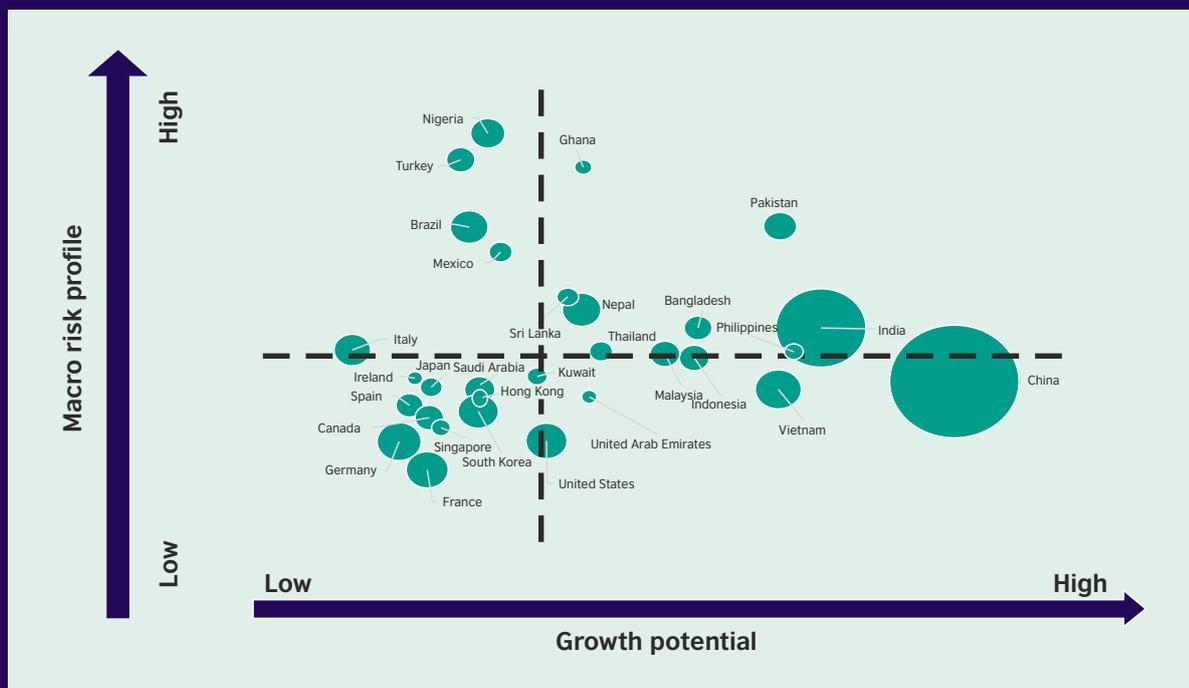
**3. At individual country level, key drivers of student mobility include economic growth, household income, and stable exchange rates.**

At individual country level, GDP growth and expansion of the middleclass have proven to be strongly correlated and statistically significant in explaining the variation in outbound student volumes across countries over time. In addition, several of the destination weighted exchange rates calculated as part of this research show a striking year-on-year correlation with outbound student growth, particularly in more price sensitive markets such as Nepal, Nigeria and Vietnam.<sup>1</sup>

**4. Prospects for outbound student mobility are based on the 'growth potential' and 'macro risk profile' of individual sending countries.**

A custom-built index produced as part of this research measures the extent to which macroeconomic conditions across 30 countries are supportive of growth in outbound student mobility to 2030. The index results are presented in terms of 'growth potential' and macroeconomic 'risk profile' as illustrated in the following chart. (Size of bubble refers to the number of outbound students in 2020 or latest available year).

**Figure ES2: Outbound Students Opportunity and Macro Risk Index results**



1. Destination weighed exchange rates are a weighted average of the exchange rates between the sending country currency and the currencies of the countries that are the main destinations for international students from the home country.

Analysis of the index results enables categorisation of the 30 countries into different groupings. (Summary dashboards are provided for eleven selected outbound markets in Annex 1 of this report).

- **China and India** are expected to remain the leading senders of international students at the global level to 2030.

Macroeconomic environments in China and India will remain strongly supportive of growth in outbound student mobility. While there are other countries with stronger projected economic and demographic growth rates, the scale of China and India means that slower rates of growth in key metrics will translate into growth volumes that far surpass other markets. For example, over the 2019-30 period, the number of middle- and high-income households in China is projected to increase by 66m, compared with India (9m), the US (8m) and Indonesia (4m). India's comparatively positive outlook will be contributed to by continued robust population growth and expansion of the working-age population, alongside continued high levels of investment in the economy.

- **Bangladesh, Indonesia, Philippines, Vietnam** represent 'rising stars' due to their favourable macro environments and low/moderate macro risk profiles.

The UK has a relatively low market share in these countries, compared with other study destinations, and thus should seek to capitalise on expected growth in outbound students from these markets to 2030. **Pakistan** represents an outlier in the index, possessing strong growth potential – based on its strong demographic and medium-term macroeconomic outlook – combined with a high level of macro risk in light of the ongoing economic crisis in the country.

- The countries of **Kuwait, Malaysia, Nepal, Saudi Arabia, Sri Lanka, Thailand, UAE and the US** stand in the 'middle ground' in the index.

In common with the 'rising stars' group, these markets represent low/moderate macro risk levels. However, the potential growth in total outbound mobility from these markets, while still robust, is generally lower. These countries may be considered as contributing towards a balanced portfolio of student recruitment markets, and several of these countries offer generous government funded scholarship programmes.

- High-income advanced economies including **Canada, France, Germany, Hong Kong (SAR), Ireland, Italy, Japan, Singapore, South Korea and Spain** combine relatively low growth prospects with benign macro risk profiles, consistent with slow but steady growth in outbound students over the medium term. As with the 'middle ground' countries above, these countries are attractive for the relative stability and diversity that they offer to the UK higher education sector.
- The countries of **Brazil, Ghana, Mexico, Nigeria and Turkey** face a range of macroeconomic challenges which weigh against growth in total outbound student mobility over the medium term. And their macro risk profiles suggests that growth in outbound mobility can be quickly reversed. However, countries within this group are major senders of international students and will remain important recruitment markets for the UK to 2030, though primarily in the context of winning market share from alternative study destinations.

1. **Amidst a more competitive international environment to 2030, continued growth in recruitment will depend on a more strategic and risk-based approach to targeting of markets and allocation of resources.**

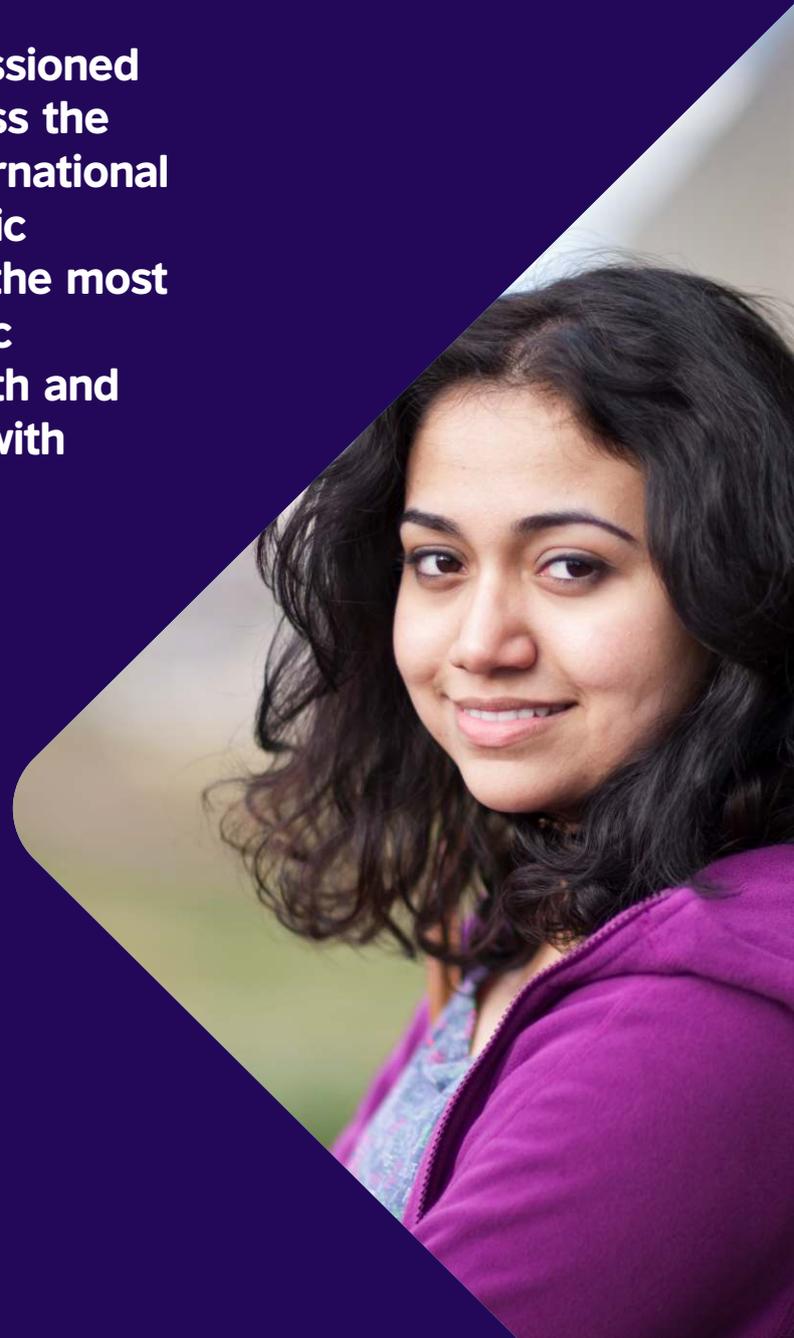
While the global outlook for growth in international student numbers remains positive, the period to 2030 is likely to be characterised by moderately slowing growth. However, the extent to which macroeconomic conditions will be supportive of growth will vary considerably across countries.

The analysis suggests a delayed passthrough of about one year from macroeconomic conditions to outbound student mobility. However, exchange rates have been shown to have more immediate impacts, particularly in lower income, more price sensitive markets.

Given the important role that these factors play in international student mobility, their outlook can provide important insights around the future of outbound student mobility across countries. The findings of this report are intended to support UK universities in developing their international recruitment strategies and in advocating for allocation of resources across selected markets.



**The British Council commissioned Oxford Economics to assess the global outlook for the international student market, the specific geographies that present the most supportive macroeconomic conditions for future growth and the risk levels associated with each market.**



# Introduction

The aim of this report is to provide analysis around the likely impact of current and future economic trends on outbound student mobility over the period to 2030, at an aggregate global level and for 30 selected source markets. The research has been designed to provide reliable and up-to-date information to the UK education sector as well as to help the British Council to better design policies to support the activities of UK HEIs in this area. The report will also be of interest to policymakers in understanding the likely future trends in outbound student mobility and the sending countries in which this demand will be concentrated.

The report is organised into four chapters:

- The first chapter analyses the historical relationship between macroeconomic conditions and outbound student mobility and identifies the macroeconomic drivers which contribute to the growth and macro risk outlook for outbound student flows across countries.
- Based upon the drivers identified in the first chapter, the second chapter of the report reviews the macroeconomic outlook in the period to 2030 and associated macro risks in the markets of interest.
- The third chapter presents the Outbound Students Opportunity and Macro Risk Index produced as part of this research, which aims to quantify both the growth potential and risks posed at individual market level across the 30 markets of interest in the study based on current and forecast macroeconomic conditions. The index results provide a holistic and rounded view of each market and facilitate cross-country comparison.
- The fourth chapter draws the key insights and conclusions from the analysis.
- Annex A contains a set of country factsheets, focussed on a subset of 11 large sending markets selected by the British Council project team based on broad geographical representation. Each factsheet provides context around each country's outbound student market and summarises the country's index results.
- Annex B provides a summary of the indicators included in the Outbound Students Opportunity and Macro Risk Index and associated computation methodology.

The 30 countries included in the analysis were selected by the British Council based on the current scale of international student flows to the UK, and include: Bangladesh, Brazil, Canada, China, France, Germany, Ghana, Hong Kong (SAR), India, Indonesia, Ireland, Italy, Japan, Kuwait, Malaysia, Mexico, Nepal, Nigeria, Pakistan, Philippines, South Korea, Saudi Arabia, Singapore, Spain, Sri Lanka, Thailand, Turkey, United Arab Emirates (UAE), United States (US) and Vietnam.

***It should be noted that throughout this report, the analysis focuses on total outbound student flows from the markets of interest, as opposed to UK recruitment specifically.***

# Editorial Team

The British Council commissioned Oxford Economics<sup>2</sup> via a competitive tender process to deliver this research project. The British Council played an active support role in contributing to the research design and providing feedback on report drafts. Details of project team participants are provided as follows:

## **Oxford Economics**

- Graeme Harrison - Director, Macro Consulting
- David Moore - Lead Economist, Macro Consulting

## **British Council**

- John McNamara - Global Head of Research, Education Insight Hubs
- Kevin Prest - Senior Analyst, Education Insight Hubs



# Historic relationship between macroeconomics and student mobility

## 1.1 Global international student flows and world GDP

The number of international students studying at the higher education level around the world has grown significantly over the last two decades. In 1998, when UNESCO records began, there were just under 2m international students enrolled globally. By 2020, the volume of international students had more than tripled to 6.4m.

Contributing to the strong growth has been the increasing globalisation of the world economy, increasing availability of financial aid for international students, and more widespread promotion of international education from both sending and host countries around the world. Many developing economies view international study as a means of providing high quality education opportunities to their youth where domestic capacity is limited, in the hope that the students will return home with qualifications, cultural experiences and linguistic skills to boost the domestic economy. Meanwhile, host countries for international students benefit both financially and in terms of the cultural and linguistic diversity that the students contribute to their societies and economies.

The growth in the volume of international students globally has averaged 5.4 per cent per year since 1998, which is well above the rate of global GDP growth over the same period, which stands at 3.1 per cent. However, when world GDP is recalculated based on outbound market size weights, the relationship with outbound student volumes is shown to be very strong historically. Specifically, in the context of international student flows, the standard measure of world GDP allocates too much weight to large, advanced economies (e.g. US, Germany) which have contributed less to growth in outbound student volumes from an origin perspective over the last two decades than emerging economies such as China and India. An illustration of the difference between the contribution to global outbound students and global GDP of the top 10 outbound student markets is shown in Figure 1.

The bespoke outbound students weighted world GDP measure calculated as part of this research, shown in Figure 2, whereby country weights are informed by outbound international student market size rather than the size of the economy, gives an annual average rate of growth between 1998 and 2020 of 5.4 per cent. This is exactly equal to the annual average rate of growth in global outbound student volumes over the same period. Therefore, while at face value, global GDP growth has lagged outbound student growth significantly, this research indicates that when analysed through a different, more nuanced lens, macroeconomic conditions in sending countries have been very strongly correlated with international student volumes at the global level since UNESCO records began.

Although the outbound weighted world GDP measure shows striking correlation with outbound student volumes, it is important to note that in the analysis presented above, the global outbound student series is necessarily a 'stock' measure, as opposed to

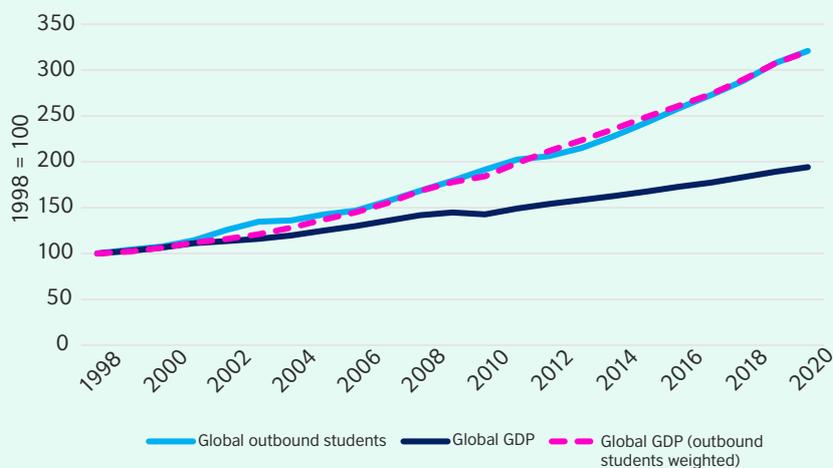
**Figure 1: Top 10 outbound student markets, contribution to global outbound students and global GDP (2020)**

	Share of global outbound students	Share of global GDP	% difference
China	17.1%	17.3%	-0.2%
India	8.1%	3.1%	5.1%
Vietnam	2.1%	0.4%	1.7%
Germany	1.9%	4.6%	-2.6%
United States	1.7%	25.1%	-23.4%
France	1.7%	3.1%	-1.4%
South Korea	1.6%	1.9%	*0.4%
Nepal	1.5%	0.0%	1.5%
Kazakhstan	1.4%	0.2%	1.2%
Brazil	1.4%	1.7%	-0.3%

Source: British Council, based on data from Oxford Economics and UNESCO

Note: Share of global outbound student data is based on UNESCO data for 2020. Share of global GDP is calculated for 2020 to facilitate direct comparison and is based on GDP in nominal US\$ terms.

**Figure 2: Global outbound students vs. GDP**



Source: British Council, based on data from Oxford Economics and UNESCO

being a 'flow' measure of newly enrolled international students each year. Stock measures are likely to be more stable year-on-year, whereas flow measures are likely to be more volatile. Nonetheless, the relationship identified between outbound weighted world GDP and outbound student stock levels is a powerful and insightful finding which underscores the central role that macroeconomic conditions play in the international student market globally.

'Flow' data relating to newly enrolled international students each year are not widely available, even amongst many of the main global host markets. However, when using the year-on-year change in the global stock as a proxy measure, it can be seen that although global outbound student volumes have never declined on a year-on-year basis since UNESCO records began, significant slowdowns in growth were seen in 2003/04 and 2011/12. Both of these periods of sharp slowdown occurred 1-2 years after significant global economic slowdowns (Dotcom Crash and Global Financial Crisis), suggesting a lagged passthrough from economic shocks to outbound student volumes.

The lagged passthrough to the international student market may be explained by the fact that, in many cases, international study is treated as an investment decision by prospective international students and their families, as opposed to a more impulsive, short-term decision. International study is often planned and saved towards for years in advance, meaning that it can take longer for unfavourable economic conditions to have an impact.

## 1.2 Country-level relationships between macroeconomic drivers and student mobility

### 1.2.1 GDP growth

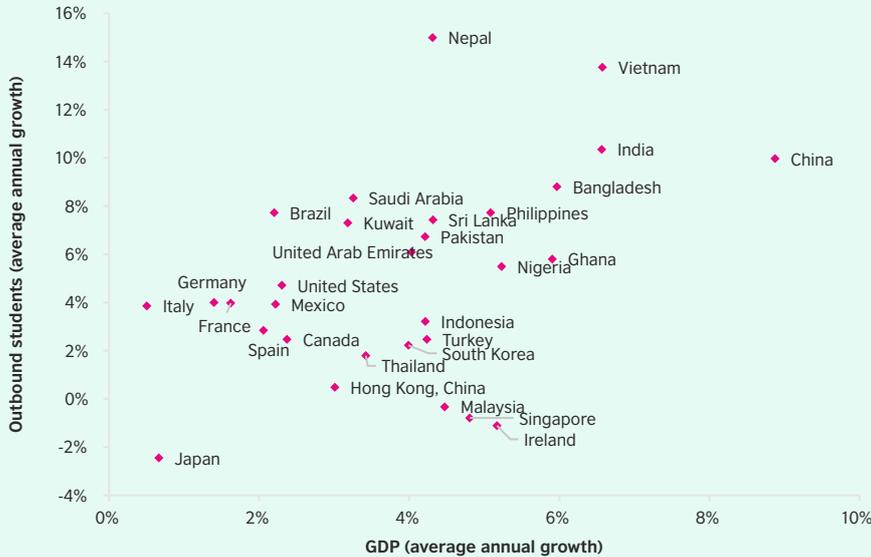
In common with the relationship observed at the global aggregate level, annual average GDP growth has proven to be strongly correlated with annual average outbound student growth over the 1998-2020 period at country level, with stronger GDP growth associated with stronger growth in outbound student flows in the 30 countries included in this research. Specifically, countries which have recorded the strongest growth in outbound student numbers have had amongst the fastest growing economies (e.g. China, India, Vietnam, Bangladesh), with slower growing economies like Japan, Hong Kong (SAR), Spain and Canada amongst the slower growing outbound student markets.

Of course, other factors such as demographic trends and policy-related factors will also play an important role in explaining the cross-country variation in outbound student volume growth over time, but the strong positive correlation displayed in Figure 3 indicates that the pace of economic growth is a significant driver of outbound student flows in the medium-term.

### 1.2.2 Household incomes

Household incomes, and specifically annual average growth in the number of middle- and high-income households has also proven to be strongly correlated with annual average outbound student growth over the 1998-2020 period at country level, with stronger growth in the volume of middle- and high-income households associated with stronger growth in outbound student flows in the 30 countries included in this

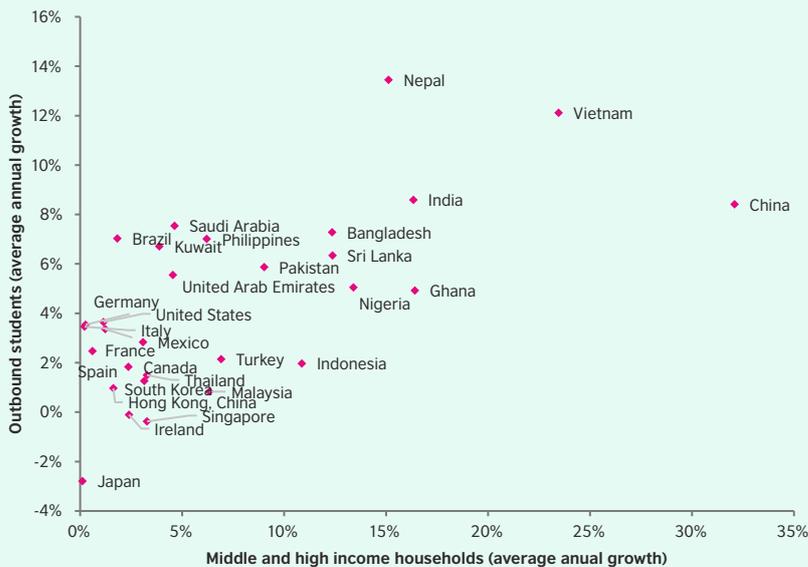
**Figure 3: Outbound students vs. GDP growth (1998-2020 annual avg. growth)**



Source: British Council, based on data from Oxford Economics and UNESCO

research.<sup>3</sup> Specifically, as shown in Figure 4, countries that have recorded the strongest growth in outbound student numbers have had amongst the fastest rate of expansion in middle- and high-income households (e.g. China, Vietnam, Nepal, India), with slower growing outbound markets over the period (e.g. Japan, Singapore, Hong Kong (SAR)) amongst the slowest growing in terms of middle- and high-income households.

**Figure 4: Outbound students vs. middle- and high-income households growth (2000-20 annual avg. growth)**



Source: British Council, based on data from Oxford Economics and UNESCO

3. Middle- and high-income households are defined as households with income greater than US\$35,000 per year, measured in constant 2015 prices.

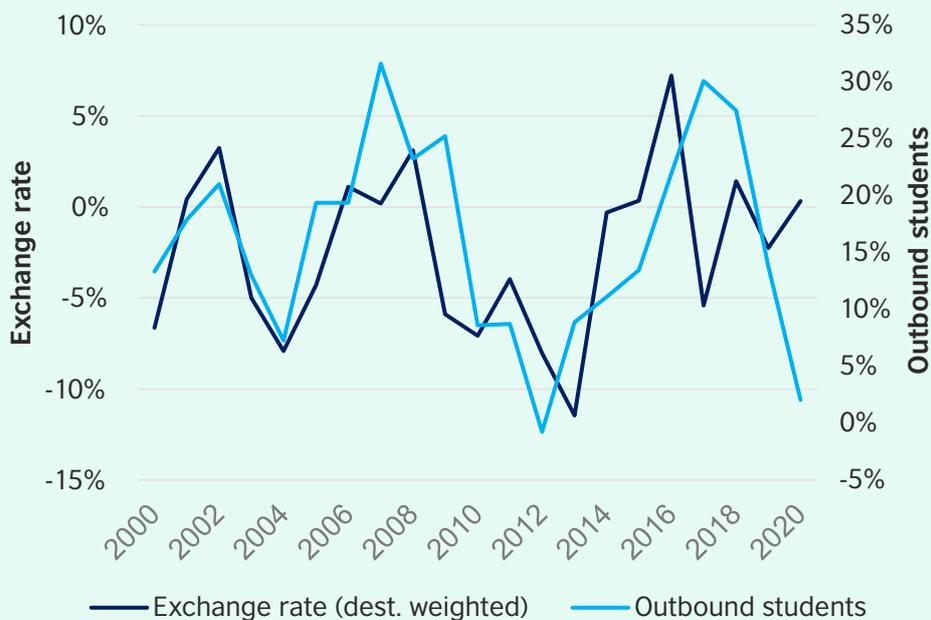
### 1.2.3 Exchange rates

Exchange rates can also have a significant impact on international students, as they have a direct and immediate impact upon the cost of tuition, living expenses and travel. If the value of the student's home currency depreciates against the currency of the host country, the costs faced by the student increase.

As part of this research, destination weighted exchange rates were calculated for each of the 30 markets of interest. A destination weighted exchange rate is a weighted average of the exchange rates between the sending country currency and the currencies of the countries that are the main destinations for international students from the home country. As such, whereas standard exchange rate analysis looks at the performance of one currency versus another, destination weighted exchange rates provide a more holistic measure of the performance of the sending country's currency versus a weighted basket of other currencies of relevance to international students.

Mapping the year-on-year performance of destination weighted exchange rates versus the year-on-year growth in outbound students across markets confirms the central role that exchange rates play in the decision-making process of international students, particularly in more price sensitive sending markets, such as Nepal, Nigeria and Vietnam. This analysis suggests that while GDP and household incomes are more useful as medium-term predictors, exchange rates have more immediate impacts, as illustrated in Figures 5-7. By contrast, and as discussed in the next section, exchange rates appear to have much less impact on outbound student flows from higher income countries, such as Italy, as shown in Figure 8.

**Figure 5: Nepal outbound students vs. destination weighted exchange rate (2000-20 year-on-year growth)**



Annual growth in outbound student volumes has closely tracked the destination weighted exchange rate historically.

Source: British Council, based on data from Oxford Economics and UNESCO

4. Basket weights are calculated based on UNESCO bilateral student flow data, averaged over the most recent 3-year period. For example, the weights used for Indonesia are as follows: Australia (28%), Malaysia (13%), US (12%), Japan (10%), UK (7%), Germany (5%), Egypt (4%), Saudi Arabia (3%), Turkey (3%), Canada (2%), Rest of World (13%).

**Figure 6: Nigeria outbound students vs. destination weighted exchange rate (2000-20 year-on-year growth)**



Periods of sharp currency depreciation have been associated with sharp slowdowns in outbound mobility.

Source: British Council, based on data from Oxford Economics and UNESCO

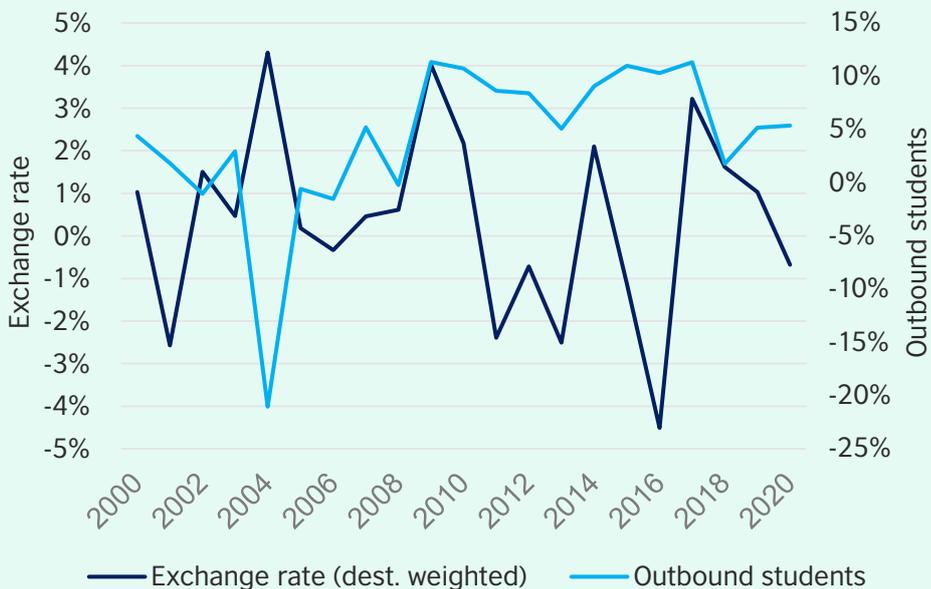
**Figure 7: Vietnam outbound students vs. destination weighted exchange rate (2000-20 year-on-year growth)**



Annual growth in outbound student volumes has closely tracked the destination weighted exchange rate historically.

Source: British Council, based on data from Oxford Economics and UNESCO

**Figure 8: Italy outbound students vs. destination weighted exchange rate (2000-20 year-on-year growth)**



Source: British Council, based on data from Oxford Economics and UNESCO

Annual growth in outbound student volumes remained stable in the 2010s despite significant volatility in the destination weighted exchange rate.

### 1.3 Regression analysis

In addition to analysing the statistical correlation and co-movement between outbound student volumes and the macroeconomic drivers outlined in section 1.2, Oxford Economics undertook regression analysis to understand the statistical significance of the macroeconomic variables in explaining variation in outbound student volumes over time. The regression analysis was conducted based on the panel of 30 countries included in this study, unless otherwise stated below.

In addition to the macroeconomic variables of real GDP, middle- and high-income households, and real destination-weighted exchange rates, the 18-22 population was included in the various regression models tested in order to control for demographic trends in the outbound markets. Key findings from the analysis were:

- Real GDP is statistically significant as an explanatory variable when included in a model including number of middle- and high-income households, real destination-weighted exchange rates and 18-22 population.
- Middle- and high-income households is statistically significant as an explanatory variable when included in a model including real destination-weighted exchange rates and 18-22 population. However, it falls marginally outside the 90 per cent confidence interval when real GDP is also included in the model. Indeed, for some countries within the panel, real GDP appears to be the more influential driver of outbound student volumes, whereas in other cases, middle- and high-income households has more explanatory power.
- Real destination-weighted exchange rates are statistically significant in each of the models outlined above, which underscores their significance in explaining trends in outbound student volumes across the countries in the panel.
- In each of the models outlined above, explanatory power is greatest when real GDP and middle- and high-income households are lagged by one year, which implies a delayed passthrough from macroeconomic conditions to outbound student markets.

However, this is not the case for exchange rates which are most impactful on a contemporaneous basis.

- In an extension to the analysis around the role of the real destination-weighted exchange rate, the regression results showed that this variable was statistically significant for the overall panel, and for lower-middle income countries but was not statistically significant for upper-middle and high-income countries when modelled separately. Furthermore, the coefficient on this variable was higher for lower-middle income countries than for the panel overall. Taken in aggregate, these findings imply that exchange rates are most impactful on outbound student flows in lower income, more price sensitive outbound student markets.

Overall, the econometrics results show that macroeconomic conditions in origin countries have important implications for outbound student flows. By design, the econometric models tested do not include unquantifiable policy-related factors which alongside macroeconomic and demographic conditions, have an influential role in outbound student markets.

#### 1.4 Conclusions from the historical analysis

The analysis presented in this chapter clearly shows that both at the global aggregate level and individual country level, macroeconomic drivers play a central role in the international student market. Global GDP growth, when weighted by outbound market size, has proven to be remarkably strongly correlated with global outbound student volumes. Furthermore, at the individual country level, the rate of GDP growth and pace of expansion in middle- and high-income households are strongly correlated with the rate of growth in outbound students. Meanwhile, destination weighted exchange rates have strong explanatory power on an immediate basis, particularly in more price sensitive markets. Regression analysis confirms the statistical significance of each of these explanatory variables. The analysis and relationships identified in this chapter have been used to inform the design and weighting of the Outbound Students Opportunity and Macro Risk Index presented in chapter 3.

For balance, it is important to note the following limiting factors within the historical analysis:

- Due to data availability constraints, the analysis presented in this chapter mainly focuses around the 'stock' of international students, as opposed to year-on-year 'flows' of newly enrolled international students. While the stock measure remains highly relevant in this analysis, a flow measure is likely to be more sensitive to changes in macroeconomic conditions.
- Linked to the lack of 'flow' data available, it is more difficult to evidence short-term year-on-year linkages between macroeconomic drivers and student mobility. Still, based on the proxy measure for international student 'flows' discussed earlier, the analysis suggested a 1-2 year lagged passthrough from GDP growth to student mobility. Exchange rates also appear to have a stronger short-term correlation with outbound student flows than GDP and household incomes. However, more in-depth cross-country analysis of these relationships is not possible due to the aforementioned data constraints.

While these data-related challenges are important considerations, they are not considered major obstacles to the objectives of this research. Specifically, this study is not intended as a precise year-on-year forecasting exercise but rather is focussed on the macroeconomic drivers and associated outlook and risks facing outbound student mobility over the period to 2030. Linked to this and as discussed previously, this research doesn't take into account geopolitical or policy-related factors which will also have important implications for the future of international student mobility but are outside the scope of this research.

# Macroeconomic outlook and risks for key outbound markets

## 2.1 Current state of the global economy

Events of the last 2-3 years have had seismic impacts on the global economy. In particular, the unprecedented health crisis caused by the Covid-19 pandemic led to a sharp decline in economic activity in many countries around the world due to widespread lockdowns, travel restrictions and business closures. Prior to the pandemic, the world economy had only contracted once on an annual basis over the last 50 years, which was in 2009 during the Global Financial Crisis. In 2020, such was the disruption caused by the pandemic, the global economy contracted again, this time by more than twice the rate observed during the Global Financial Crisis.

**Figure 9: World GDP growth**



World GDP contraction during pandemic was more than twice as severe as seen during the Global Financial Crisis.

Source: British Council, based on data from Oxford Economics

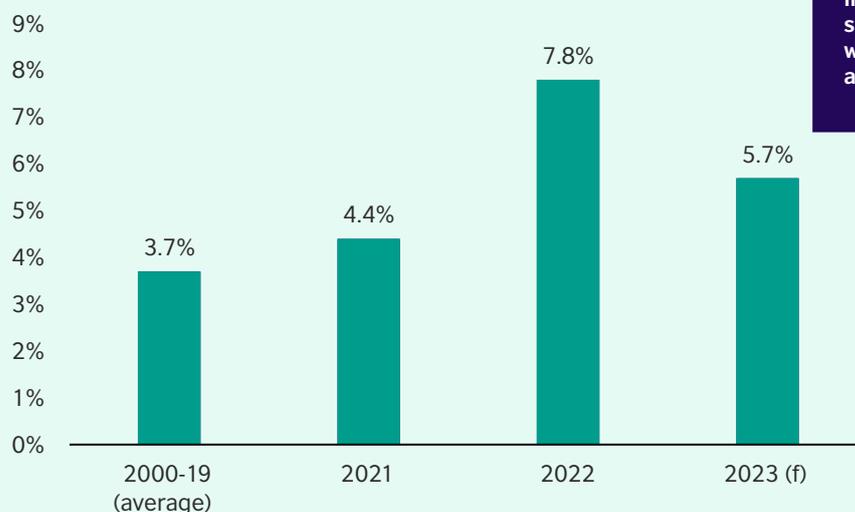
The impact of the pandemic on world GDP was short and sharp, with the global economy rebounding sharply with growth of around 6.2 per cent in 2021. However, while the impact on economic output was short-lived at the global level, the recovery period has been uneven across countries.

Just as the disruption caused by Covid-19 was dissipating, February 2022 saw a major escalation in tensions between Russia and Ukraine, with Russia launching a full-scale invasion into Ukrainian territory. Alongside the ensuing humanitarian crisis, the Russia-

Ukraine conflict has had a significant impact on the global economy. Russia is one of the world's leading energy exporters, both in terms of oil and natural gas. Global energy prices had been steadily rising since mid-2021 as pent-up demand spurred by the post-pandemic recovery fueled considerable tightness in the energy market. As the war escalated and sanctions were placed on Russian exports, further sharp price rises ensued. This dynamic was particularly pronounced in Europe due to the heavy reliance on energy imports from Russia. Alongside Russia, prior to the invasion, Ukraine played an important role in global supply chains too, as a major grain, sunflower oil, iron and steel exporter. Russia's blockade of Ukraine's Black Sea ports, through which Ukrainian farmers export agricultural products, created a global grain and cooking oil shortage, contributing to elevated food price inflation across the world.

As a consequence of the steep rises in global energy prices and supply chain disruptions caused by both the Russia-Ukraine crisis and Covid-19 pandemic, inflation has been running at unprecedented levels across much of the world. In the two decades prior to the pandemic, inflation had averaged 3.7 per cent at the global level; after rising moderately in 2021, world consumer price inflation spiked to almost 8 per cent in 2022. With energy prices falling and supply chain challenges easing, inflation is expected to slow to just below 6 per cent in 2023 on average. But while inflation is moving in the right direction, it remains stubbornly above historical average levels.

**Figure 10: World consumer price inflation**

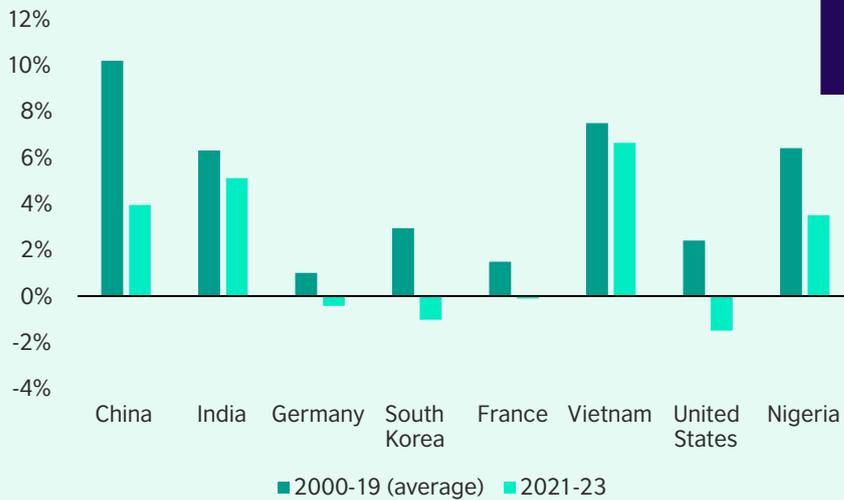


Inflation around the world spiked in 2022 and remains well above the historical average level in 2023.

Source: British Council, based on data from Oxford Economics

In an effort to reduce exceptionally high levels of inflation, monetary authorities around the world have responded with sharp increases in interest rates. However, with inflation remaining stubbornly high, households across the world are facing an extreme squeeze on disposable incomes in real terms. Looking at the world's largest outbound student markets according to UNESCO's latest data, each has faced a considerable slowdown in real household disposable income growth in the 2021-23 period compared to the average rate of growth over the last two decades. The slowdowns in growth have been most pronounced in China, South Korea, the US and Nigeria, and somewhat less severe in other major outbound markets such as India and Vietnam.

**Figure 11: Real household disposable incomes in largest outbound student markets (annual avg. growth)**



GDP growth is expected to slow across almost all of the focus countries compared to the decade before the pandemic.

Source: British Council, based on data from Oxford Economics

Note: 2020 is excluded from this chart to avoid distortion related to the Covid-19 pandemic

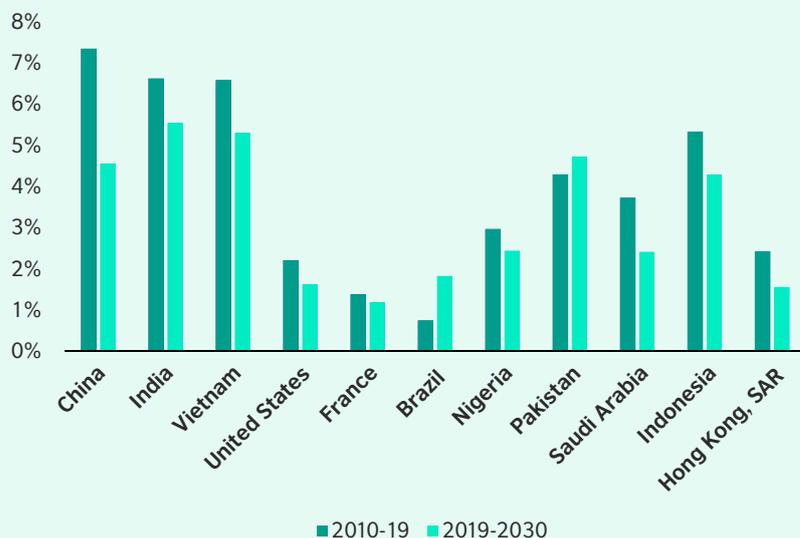
## 2.2 Macroeconomic outlook for key outbound markets

Looking at the 11 focus countries for this research selected by the British Council, it is clear that economic growth is expected to be slower in the 2019-30 period compared to the decade before the pandemic. Indeed, while Oxford Economics expects GDP growth to remain in positive territory across all markets, a slowdown in the pace of growth is forecast in 9 of the 11 markets. The most significant slowdown in growth rate terms is anticipated in China, with noteworthy slowdowns also expected in other key outbound markets including India, Vietnam, Nigeria and Indonesia. Only Brazil and Pakistan are projected to see an increase in the pace of growth in the 2019-30 period.

In China, the slowdown in growth in the period to 2030 will be driven by the weakening demographic outlook, with productivity growth unlikely to be enough to compensate for the shrinking working-age population. Furthermore, the trend in China's export growth has also been slowing for years as exports have been losing competitiveness. The pandemic gave exports a short-term boost as there was unusually high demand for goods during lockdowns when consumers couldn't spend on services. But exports of goods now face several major headwinds, from waning growth abroad to demand shifting away from goods towards services. Moreover, China is moving away from low-cost manufacturing, which is what made it an export juggernaut in the decades following the start of economic liberalisation. Add in the escalating trade frictions with the US and the medium-term economic growth challenge is acute. Linked to this, geopolitical risk is a major consideration related to China's outbound student market but is outside the scope of this research.

Taken in aggregate and considering the very strong historic relationship discussed earlier between world GDP growth weighted by outbound market size and the volume of outbound students globally, this indicates that the macroeconomic environment in the period to 2030 will be less conducive to growth in international student mobility and a slowdown in the rate of growth is likely, all else equal.

**Figure 12: GDP growth outlook, selected sending countries (annual avg. growth)**



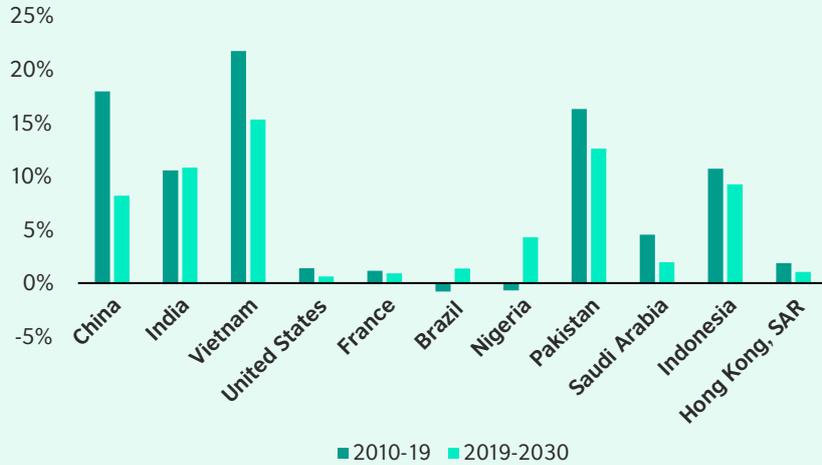
GDP growth is expected to slow across almost all of the focus countries compared to the decade before the pandemic.

Source: British Council, based on data from Oxford Economics

In common with the outlook for GDP, the majority of the 11 focus countries are expected to see a slowdown in the rate of growth in middle- and high-income households in the 2019-30 period compared to the decade prior to the pandemic as a result of weaker economic growth and ageing populations. Rapid growth of the Chinese middle-class has fueled much of the global growth in international students in the past. However, the annual average rate of growth is expected to more than halve from around 18 per cent per year in the decade prior to the pandemic, to around 8 per cent per year in the 2019-30 period. Vietnam, and to a lesser extent, Pakistan and Indonesia will also see significant slowdowns from particularly high rates of growth in the past. More positively, India, the world's second largest outbound student market is expected to maintain the rate of growth seen over the decade before the pandemic, while Brazil and Nigeria will see a modest acceleration after very weak performance in the 2010-19 period.

In India, its comparatively positive outlook in the period to 2030 will be contributed to by continued robust population growth and expansion of the working-age population, alongside continued high levels of investment in the economy which will sustain strong productivity growth and boost wage levels across the economy.

**Figure 13: Focus countries middle- and high-income households growth outlook (annual avg. growth)**

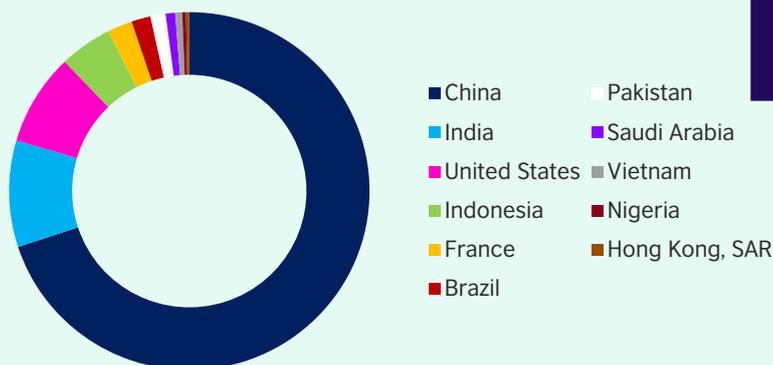


Expansion of middle- and high-income households is expected to slow across almost all of the focus countries compared to the decade before the pandemic.

Source: British Council, based on data from Oxford Economics

Although the pace of expansion in middle- and high-income households is set to slow across the focus markets, the absolute change in the number of middle- and high-income households will remain resilient, with growth in level terms expected across all of the 11 focus countries. As shown in Figure 13, despite the marked slowdown in its rate of growth, the largest increase in middle- and high-income households, by some distance, is expected in China. Specifically, over the 2019-30 period, it is expected that the number of middle- and high-income households in China will increase by 66m. This is more than double the increase expected in the other 10 focus markets combined and compares to an increase of around 37m in China during the 2010-19 period. Amongst the other focus countries, the largest absolute increases are expected in India (9m), the US (8m) and Indonesia (4m). This indicates that although China will undoubtedly experience a significant slowdown in the rate of growth of its middle class in the years ahead, in scale terms it remains well ahead of the other markets. Thus, China is likely to remain as one of the main growth markets for outbound student mobility at the global level for years to come.

**Figure 14: Focus countries absolute change in middle- and high-income households growth outlook (2019-30)**



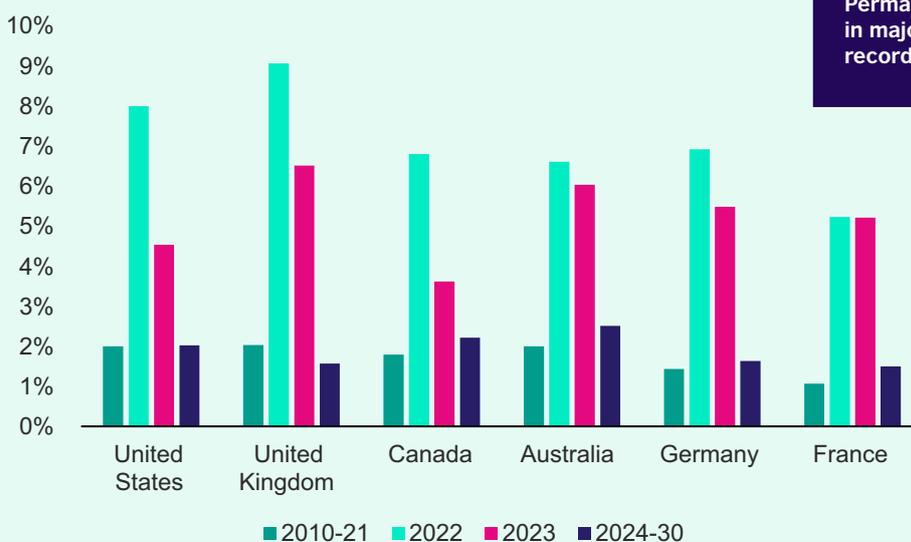
Expansion of middle- and high-income households in volume terms in China will be well ahead of all of the other countries combined.

Source: British Council, based on data from Oxford Economics

Inflation rates in the major international student host countries have been low and stable throughout the last decade, averaging around 1-2 per cent. However, with inflation spiking to record levels in 2022 and remaining high in 2023, there will be a significant increase in living costs for international students in these host countries. Inflation was highest in 2022 in the UK and US, the two largest host markets for international students, with very high inflation also recorded in Canada, Australia, Germany and France.

Although the rate of inflation is expected to return to more normal levels in the medium term, deflation is not expected, meaning that current elevated price levels will remain high, which will translate to a permanently higher cost of living for international students. Given that inflation has been very low and stable across the major host markets historically, there is little empirical evidence to gauge how the current record levels of inflation will feed through to the sending markets. However, it is likely that the increased cost of international study in the major host countries will dampen demand to some extent, particularly from more price sensitive, emerging economies.

**Figure 15: Major host countries inflation outlook (annual avg. growth)**



Permanently higher cost of living in major host countries due to record inflation rates.

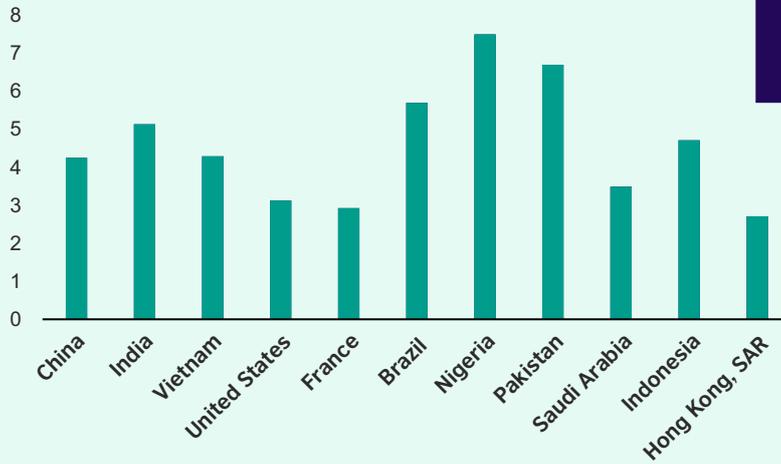
Source: British Council, based on data from Oxford Economics

### 2.3 Macroeconomic risks facing key outbound markets

Alongside the baseline macroeconomic outlook presented thus far, it is important to understand the relative scale of macroeconomic risk facing each outbound student market. To quantify risk levels in a succinct and comparable way, Figure 16 presents the economic risk scores from Oxford Economics' Economic and Political Risk Evaluator (EPRE) tool. Designed and delivered through a joint venture with Control Risks, the EPRE provides a framework for forecasting economic risks in 164 countries through regularly updated ratings, in-depth profiles, and event-driven updates.

The economic risk scores are calculated based on a wide range of indicators sourced from Oxford Economics' world leading Global Economic Model and seek to measure overall economic risk as a function of several key criteria including exchange rate risk, sovereign risk and business environment risk.

Figure 16: Focus countries macroeconomic risk rating (10 = highest risk)



Nigeria and Pakistan stand out as having the highest level of macroeconomic risk amongst the focus countries.

Source: British Council, based on data from Oxford Economics

<b>High macroeconomic risk</b>	Nigeria	Highest current and forecast level of overall macro risk of the 11 focus countries due to rising inflation, falling investment, tight foreign exchange liquidity and constrained fiscal space.
<b>High macroeconomic risk</b>	Pakistan	Devastating floods in recent months, combined with a legacy of corruption and macroeconomic mismanagement, have caused significant economic stress, with low levels of foreign reserves, a depreciating currency and record levels of inflation all causing concern. IMF bailout should prevent default, but sovereign and exchange rate risk levels remain high.
<b>High-moderate macroeconomic risk</b>	Brazil	Exchange rate risk is high compared with other emerging market economies, as the Brazilian real is still one of the most volatile free-floating emerging market currencies. Brazil operates a "dirty float" exchange rate regime, which means the exchange rate adjusts to external shocks and the central bank intervenes to rein in excess volatility caused by commodity price swings, changes in domestic politics, global monetary policy, and investor sentiment.
<b>Moderate macroeconomic risk</b>	India	Exchange rate risk well below regional and emerging market averages as rupee should benefit from relative GDP growth out performance compared to many other economies around the world in the medium term and should continue to attract robust capital inflows. But low level of GDP per capita, banking sector fragilities and substantial fiscal deficit add to the macro risk outlook.

<p><b>Moderate macroeconomic risk</b></p>	<p>Indonesia</p>	<p>Exchange rate risk well below regional and emerging market averages as rupiah should benefit from relative GDP growth outperformance compared to many other economies around the world in the medium term and should continue to attract robust capital inflows. Furthermore, all three major credit agencies rate Indonesia's sovereign credit as investment grade, thanks to relatively low government debt. But recurrent natural disasters represent significant downside risk to the outlook.</p>
<p><b>Moderate macroeconomic risk</b></p>	<p>China</p>	<p>Economy benefits from a healthy external financial position and current account surplus, while central government debt is relatively low, affording authorities considerable fiscal policy space. At the same time, the renminbi has proven generally very stable over the last decade, particularly compared to other emerging market currencies.</p>
<p><b>Moderate macroeconomic risk</b></p>	<p>Vietnam</p>	<p>Due to its sound policy framework and large foreign reserves, Vietnam's economy and currency have remained largely immune to international turbulence historically and ranks as one of the lowest macro risk emerging market economies across the world, particularly on exchange rate risk.</p>
<p><b>Low macroeconomic risk</b></p>	<p>Saudi Arabia</p>	<p>Strong and consistent non-oil GDP growth over last two decades underscores progress on economic diversification. Exchange rate risk will remain low, reflecting lack of volatility in the exchange rate in the past, and high reserve coverage to protect dollar peg.</p>
<p><b>Low macroeconomic risk</b></p>	<p>United States</p>	<p>Exchange rate and sovereign risk is low, reflecting the dollar's privilege as the world's largest reserve currency and global safe haven asset. Some concern over recent bank failures and the spike in banking-sector stress lingers, but not expected to pose systematic risk to wider financial system and macroeconomy.</p>
<p><b>Low macroeconomic risk</b></p>	<p>Hong Kong (SAR)</p>	<p>Dollar peg, backed by healthy reserve levels, will provide exchange rate stability. Government debt levels are low relative to other advanced economies and domestic inflation is expected to remain low and stable, in line with historic trends.</p>
<p><b>Low macroeconomic risk</b></p>	<p>France</p>	<p>Political stability and the credibility of EU and eurozone institutions mean exchange rate risk will remain low in future, while public sector debt sustainability is not a concern.</p>



# Outbound Students Opportunity and Macro Risk Index

## 3.1 Purpose and design of the index

In order to bring together the findings presented in chapter 2 in terms of the macroeconomic outlook and risks facing the markets of interest and to understand the implications for outbound student mobility, the British Council (working with Oxford Economics) has developed an Outbound Students Opportunity and Macro Risk Index. The index is based around two pillars:

### Pillar one: Growth potential

The objective of this pillar is to measure the extent to which current and forecast demographic and macroeconomic conditions, together with the state of the domestic higher education system, will be supportive of growth in outbound student volumes from each market in the period to 2030. Specifically, growth potential is measured as a function of the following thematic areas:

- **Demographic outlook:** Measurement of the extent to which the projected growth of the tertiary-aged population (both in relative and absolute terms) will be supportive of growth in outbound student mobility in the period to 2030.
  - **Macroeconomic outlook:** Measurement of the extent to which the macroeconomic outlook will be supportive of growth in outbound student mobility in the period to 2030. The macroeconomic outlook for each country is based around forecasts from Oxford Economics' Global Economic Model and in common with the demographic outlook theme, measures growth in both relative and absolute terms.
  - **Cost environment:** Measurement of the extent to which the exchange rate and domestic inflation outlook in sending countries will be supportive of growth in outbound student volumes. The exchange rate measurement is based upon destination-weighted analysis which considers study destination trends from each individual outbound market. Exchange rate and inflation forecasts are sourced from Oxford Economics' Global Economic Model.
  - **Domestic higher education system:** Measurement of the extent to which the development, quality and capacity of the domestic higher education system in each country will be supportive of growth in outbound student mobility in the period to 2030.
- 

## Pillar two: Macro risk profile

The objective of this pillar is to measure the degree of macro risk facing each outbound student market in the period to 2030. Risk is measured as a function of the following thematic areas:

- **Historic volatility:** international education: Measurement of the extent of historic volatility in key education indicators impacting upon international student mobility, e.g. tertiary enrolment ratio, outbound mobility ratio.
- **Historic volatility:** macroeconomic conditions: Measurement of the extent of historic volatility in key macroeconomic indicators that impact upon international student mobility, e.g. GDP, exchange rates.
- **Current and future macroeconomic risk:** Measurement of the current and future level of macroeconomic risk facing each outbound market, based upon scores from Oxford Economics' Economic and Political Risk Evaluator tool and Global Scenarios Service.
- **Domestic higher education system:** Measurement of the extent of improvement in the capacity of domestic higher education systems of each outbound market over recent years, where improvement reduces demand for international education.

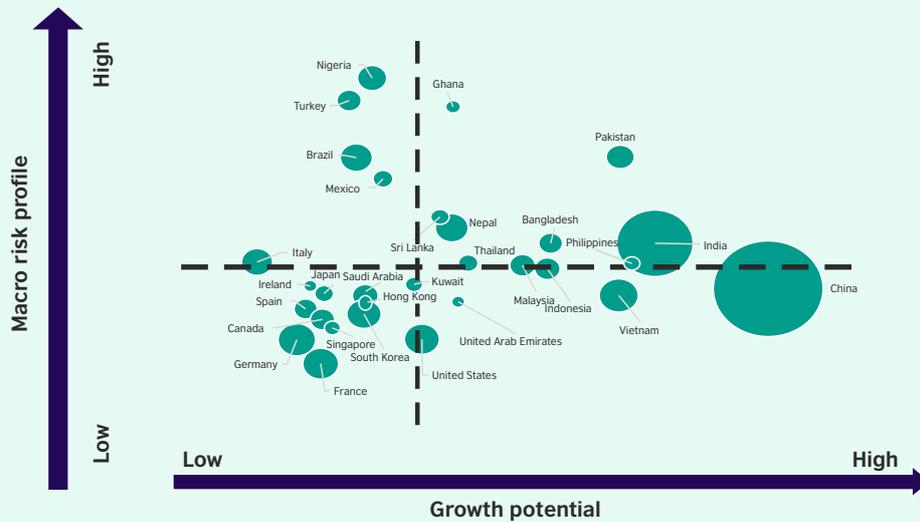
It should be noted that the index, by design, is not intended to measure or include geopolitical or education policy factors which may impact on the destination choices of outbound students, but rather the index focusses on total outbound mobility irrespective of the destination. Full details of the specific indicators included in the index, the direction of their impact upon growth potential and macro risk, and the weightings used are provided in Annex B.

Several of the countries included in the index appear to have a high degree of reliance upon government funded scholarships (Kuwait, Saudi, Ghana, Mexico, Indonesia, Turkey, Malaysia, Thailand, UAE and Singapore), according to analysis of HESA data on the funding sources for inbound international students to the UK. However, comprehensive and timely data on the share of total outbound students by origin market that are funded by government scholarships are not widely available. As such, this feature of the global international student market, which has implications for both the growth potential and level of macro risk attaching to each outbound market, is not captured by the index. However, the macroeconomic environment in each country will have implications for the ability of these countries to continue funding scholarships.

Combining the results from the two pillars provides a holistic and rounded view of each outbound market covered by this research, quantifying both the growth potential and degree of macro risk associated with each market. Furthermore, the index provides a quantitative framework, which facilitates the comparison of different markets and the allocation of countries to different groups based on their growth potential and macro risk profiles.

## 3.2 Index results and assessment of outbound markets

The results from the Outbound Students Opportunity and Macro Risk Index are summarised in Figure 17, which plots the growth potential score for each market against its macro risk score, with the size of each country's bubble used to indicate current outbound market size.

**Figure 17: Outbound Students Opportunity and Risk Index results**

Source: British Council, based on data from Oxford Economics and UNESCO

Note: Size of bubble indicates current outbound international student market size (no. of students). Axes have been positioned at the median country scores for growth potential and macro market risk.

Analysis of the index results has enabled the classification of the 30 markets into 6 broad groupings, as indicated in Figure 18.

According to this analysis, China and India are 'high volume, high potential' markets and will remain the leading growth markets in the global outbound student market in the period to 2030. Indeed, despite the fact that the rate of macroeconomic growth in China in particular is expected to cool over the coming years, the sheer scale of these two markets dwarfs the rest of the markets. For example, in China, although the rate of growth in middle- and high-income households is projected to ease in the years ahead, over the 2019-30 period, it is expected that the number of middle- and high-income households in China will increase by 66m, which compares to an increase of around 37m in the 2010-19 period. In India, the number of middle- and high-income households is expected to increase by 9m. While this is well behind China, it remains well ahead of all other markets except the US. As such, in scale terms, the growth opportunity presented by China and India will remain well ahead of the other markets in the period to 2030 and these markets will remain the engine for growth in outbound students at the global level for years to come.

This research identifies Bangladesh, Indonesia, Philippines and Vietnam as 'rising stars' in the global outbound student market. Each of these markets scores strongly in terms of growth potential, with moderate levels of macro risk associated. The key differentiating factor between the 'rising stars' and China and India is the scale of opportunity presented, with the current market size of the 'rising stars' well behind China and India. This means that even very strong expansion of these markets in growth rate terms would still leave them a long distance behind China and India in terms of the actual volume of outbound students for HEIs to target.

From the 30 countries of interest in this study, Pakistan stands out as a 'high potential, high macro risk' market. The country possesses strong growth potential thanks to its strong demographic and medium-term macroeconomic outlook, but with a high level of associated macro risk in light of the ongoing economic crisis in the country.

**Figure 18: Overall assessment of outbound markets**

<p><b>High volume, high potential</b></p> <p>Large markets with strongly supportive conditions for growth and moderate macroeconomic risk levels.</p>	China, India
<p><b>Rising stars</b></p> <p>Markets with significantly lower volumes of total outbound students compared to China and India, but with strongly supportive conditions for growth and moderate macroeconomic risk levels.</p>	Bangladesh, Indonesia, Philippines, Vietnam
<p><b>High potential, high macro risk</b></p> <p>Markets with strong medium-term conditions for growth, combined with high levels of macroeconomic risk.</p>	Pakistan
<p><b>Middle ground</b></p> <p>Markets with moderate conditions for growth and low/moderate levels of macroeconomic risk.</p>	Kuwait, Malaysia, Nepal, Saudi Arabia, Sri Lanka, Thailand, United Arab Emirates, United States
<p><b>Growth limitations, low macro risk</b></p> <p>Markets with low/moderate levels of macroeconomic risk, but with weaker conditions for future growth.</p>	Canada, France, Germany, Hong Kong (SAR), Ireland, Italy, Japan, Singapore, South Korea, Spain
<p><b>Growth limitations, high macro risk</b></p> <p>Markets with high levels of macroeconomic risk and weak/moderate conditions for future growth.</p>	Brazil, Ghana, Mexico, Nigeria, Turkey

Source: British Council, based on data from Oxford Economics



**This research identifies Bangladesh, Indonesia, Philippines and Vietnam as 'rising stars' in the global outbound student market. Each of these markets scores strongly in terms of growth potential, with moderate levels of market risk associated.**

The countries of Kuwait, Malaysia, Nepal, Saudi Arabia, Sri Lanka, Thailand, UAE and the US stand in the '**middle ground**'. In common with the 'rising stars' group, these markets represent low/moderate macro risk levels. However, the growth potential of these markets, while still robust, is generally lower.

High income economies including Canada, France, Germany, Hong Kong (SAR), Ireland, Italy, Japan, Singapore, South Korea and Spain make up the 'growth limitations, low macro risk' group. These markets are advanced economies that have exhibited a strong degree of historical stability. However, the potential growth of these markets is limited through a combination of less favourable demographics, slower economic growth and highly developed domestic higher education systems which reduce the demand for international study.

Finally, Brazil, Ghana, Mexico, Nigeria and Turkey make up the 'growth limitations, high macro risk' group. These markets come with high levels of associated macro risk. However, in contrast to the 'high potential, high macro risk' group, these countries face a range of challenges, both from a demographic and macroeconomic perspective, which are likely to be significantly less supportive of outbound student growth moving forward. However, despite the more challenging macroeconomic outlooks and higher macro risk levels associated with these markets, countries within this group are major senders of international students and so they will remain important markets in future, though primarily in the context of the UK winning market share from alternative study destinations.

It should be noted that the allocation of countries to the above six groupings is not a black and white exercise, with some markets on the border between different groups. For example, Malaysia sits on the border between 'middle ground countries' and 'rising stars'; and Ghana sits on the border between 'high potential, high macro risk' and 'growth limitations, high macro risk'. The country dashboards provided in Annex A delve deeper into the country scores and outline the key drivers of both the growth potential and macro risk scores and provide the rationale for the overall assessment of each market.

# Conclusions

This research leads to several important insights and conclusions regarding the outlook and macro risks surrounding outbound student mobility, both at an aggregate global level and in individual origin markets:

- The evolution of the global international student market has closely tracked macroeconomic conditions in sending countries historically, as evidenced by the bespoke global outbound weighted GDP measure calculated as part of this research. Extrapolating this relationship forward indicates that while the global outlook for international student numbers remains positive, the period to 2030 is likely to be characterised by moderately slowing growth. Oxford Economics expects that in the period to 2030, global outbound student volumes will grow at a rate of around 4-4.5 per cent per year on average.
- While a robust and moderate pace of growth in outbound student volumes is anticipated at the global aggregate level in the years ahead, there is likely to be significant variation in the rates of growth at individual country level. Specifically, the extent to which macroeconomic and demographic conditions will be supportive of growth in outbound student mobility will vary considerably across countries in the period to 2030.
- The rate of economic growth, growth in the number of middle- and high-income households and the size of the 18-22 population in sending countries, as well as destination-weighted exchange rates have all proven to be statistically significant drivers of outbound student volumes across the panel of 30 countries examined in this research. Furthermore, the analysis shows that explanatory power of real GDP and middle- and high-income households is greatest when lagged by one-year, which implies a delayed passthrough from macroeconomic conditions to outbound student markets. Meanwhile, exchange rates have been shown to have more immediate impacts, particularly in lower income, more price sensitive markets. Given the important role that these factors play in international student mobility, the baseline outlook and risks around the evolution of these factors can provide important insights around the future of outbound student mobility across countries.
- China is, by some distance, the largest outbound student market globally at present, and is likely to remain a key growth market in future. Indeed, although China's rate of economic growth and the rate of expansion in middle- and high-income households has been slowing and is expected to continue to slow in the period to 2030 compared to previous decades, the sheer scale of the market sets it apart. For example, in China, although the rate of growth in middle- and high-income households is projected to ease in the years ahead, over the 2019-30 period, it is expected that the number of middle- and high-income households in China will increase by 66m, which compares to an increase of around 37m in the 2010-19 period. As such, although the rate of growth is slowing, growth in absolute level terms is rising and the conditions for continued strong expansion of this outbound student market remain firmly in place. Growth

prospects must, however, be balanced against macroeconomic risk. In China, macro risk levels are moderate and significantly lower than in many other emerging economies. However, geopolitical risk is outside the scope of this report but is an important consideration in this market, especially given the UK's reliance on China as a source of inbound international students.

- Alongside China, favourable macroeconomic and demographic projections in India will provide strongly supportive conditions for future growth in outbound student numbers. India has the largest tertiary-aged population in the world and with significant domestic HE capacity and quality constraints, growth prospects remain very positive. Macroeconomic risk levels in India are moderate, with the low level of GDP per capita, banking sector fragilities and substantial fiscal deficit adding to macro risk outlook.
- This research also identifies a set of rising stars in the outbound student mobility market, which are Bangladesh, Indonesia, the Philippines and Vietnam. These are markets with significantly lower volumes of total outbound students compared to China and India, but with strongly supportive conditions for future growth and moderate macro risk levels.
- The measurement framework employed in this study identifies Nigeria, Turkey, Ghana, Pakistan, Brazil and Mexico as markets with particularly high levels of macroeconomic risk, with each of these countries having experienced significant levels of economic volatility and turbulence historically. However, macro risk levels must be balanced against growth prospects in forming a rounded view of each of these markets. In this context, Pakistan stands out as a market which, looking beyond its current macroeconomic challenges, has a strong medium-term demographic and macroeconomic outlook which can provide supportive conditions for strong future growth in outbound mobility.
- Many of the UK's current largest inbound markets outside China and India, fall into the 'middle ground' and 'growth limitations, low macro risk' country groupings identified in this research. While the demographic and macroeconomic conditions in these markets are likely to be less supportive of growth in outbound mobility in future, these primarily high-income economies pose a significantly lower level of macro risk and represent more stable markets which can play an important role in a diversified origin structure of international students for the UK in future.



# Annex A:

## Country outbound student mobility dashboards

This annex provides a series of one-page outbound student mobility dashboards for each of the focus markets selected by the British Council. The aim of the dashboards is to provide an overview of each country's outbound student market, and to provide insight into the drivers behind the 'growth potential' and 'macro risk profile' scores for each country.

### Interpretation of dashboards

- Each dashboard contains two column charts, which summarise the country's performance on the 'growth potential' and 'macro risk profile' pillars. The charts show the country's overall pillar ranking and also its ranking on each of the sub-themes within that pillar.
- In the 'growth potential' chart, higher rankings correspond to higher growth potential. Specifically:
  - A higher rank on '**demographic outlook**' means that the country's demographic position and projections are more favourable to growth in outbound student mobility.
  - A higher rank on '**macroeconomic outlook**' means that the country's macroeconomic position and projections (covering GDP, GDP per capita and household incomes) are more favourable to growth in outbound student mobility.
  - A higher rank on '**cost environment**' means that projections for the country's destination weighted exchange rate and domestic CPI are more favourable to growth in outbound student mobility in terms of the impact of these factors on the affordability of international study.
  - A higher rank on '**domestic HE system**' means that the quality and capacity of the country's domestic HE system are more favourable to growth in outbound student mobility, whereby lower quality domestic provision incentivises international study and vice-versa.
- In the 'macro risk profile' chart, higher rankings correspond to higher macro risk. Specifically:
  - A higher rank on '**historic volatility – international education**' means that the country's tertiary enrolment ratio and outbound mobility ratio have been more volatile historically, meaning that the market is likely to be more unpredictable and present greater macro risk in future.
  - A higher rank on '**historic volatility – macroeconomics**' means that the country's economy and exchange rate have been more volatile historically, meaning that the market is likely to be more unpredictable and present greater risk in future.

- A higher rank on '**macroeconomic risk outlook**' means that according to Oxford Economics' world leading macroeconomic risk and scenario tools, the market possesses a higher current and forecast level of macroeconomic risk, meaning that the market is likely to be more unpredictable and present greater risk in future.
- A higher rank on '**domestic HE system**' means that the country's domestic higher education system has seen improvement in quality and capacity over the last five years, which increases the risk that there will be less incentive for students from that country to pursue international study in future.

# Brazil:

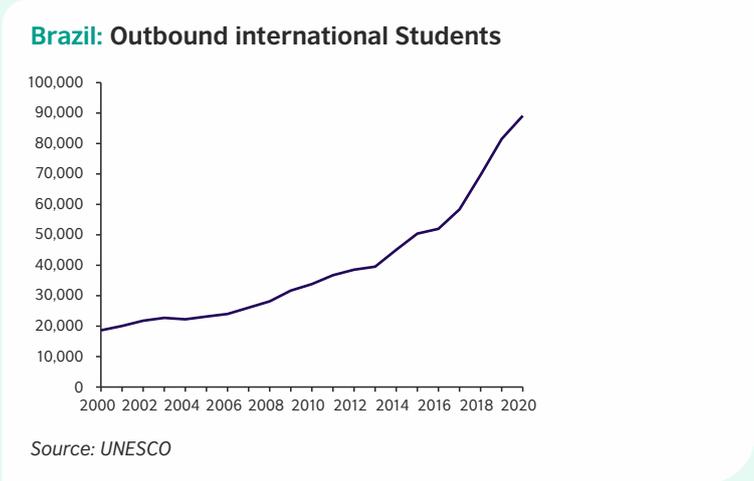
## Student mobility dashboard

Region: Latin America  
 Income group: Upper middle  
 GDP per capita (2022): US\$8,910  
 18-22 population (2022): 16.4m



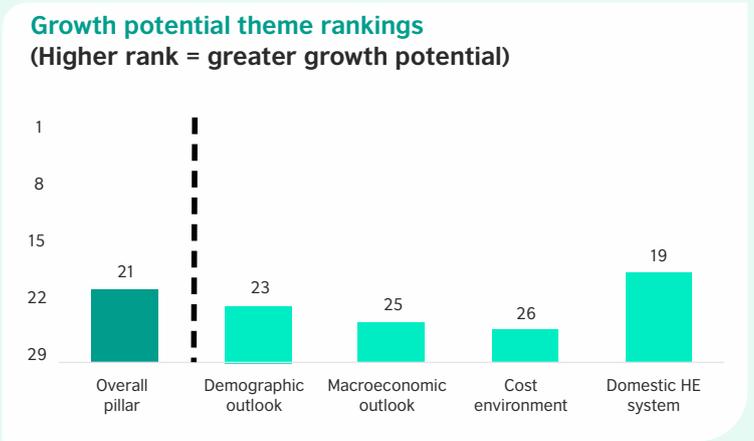
### Market assessment: Growth limitations, high macro risk

Brazil is Latin America's largest economy and most populous country. Despite facing significant economic challenges over recent years, the country remains a major sender of international students, with almost 90,000 studying abroad in 2020. The main study destinations for Brazilians are Argentina, Portugal and the US. The UK holds a relatively small share of the Brazilian outbound market, hosting less than 2,000 students in recent years.



### Growth potential: Low (21st out of 30)

- Relatively large but shrinking tertiary-aged population.
- Weak GDP and household income growth outlook.
- Weak exchange rate outlook and persistently high rate of domestic inflation which will reduce the purchasing power of Brazilian students abroad.



### Macro risk outlook: High (5th out of 30)

- High levels of macroeconomic volatility observed in the past and expected in the future.
- Exchange rate risk high compared with other emerging markets, as the Brazilian real is still one of the most volatile free-floating emerging market currencies.
- Legacy of fiscal mismanagement to constrain government finances in future which will weigh on economic growth.
- Domestic inflation expected to remain permanently above central bank target.



# China:

## Student mobility dashboard

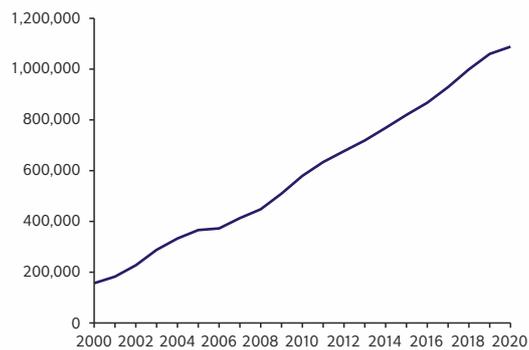
Region: East Asia & Pacific  
Income group: Upper middle  
GDP per capita (2022): US\$12,580  
18-22 population (2022): 80.3m



### Market assessment: High volume, high potential

After rapid economic growth over recent decades, China is now the second largest economy in the world and is projected to overtake the US and become the world's biggest economy in the coming decade. Alongside India, China is also the most populated country in the world. It has been the largest sending market of international students since UNESCO records began in 1998 and has recorded growth in outbound student volumes every year on record. The main study destinations for Chinese students are the US, UK and Australia.

#### China: Outbound international Students

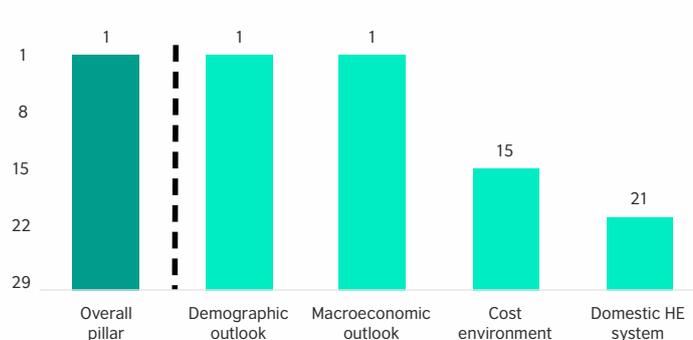


Source: UNESCO

### Growth potential: High (1st out of 30)

- Extremely large tertiary-aged population, with modest growth projected.
- While the rate of economic growth will slow in future, absolute growth in middle- and high-income households will dwarf the rest of the world.
- Continued exchange rate stability expected.
- Improving domestic HE system quality and capacity likely to weigh against outbound mobility.

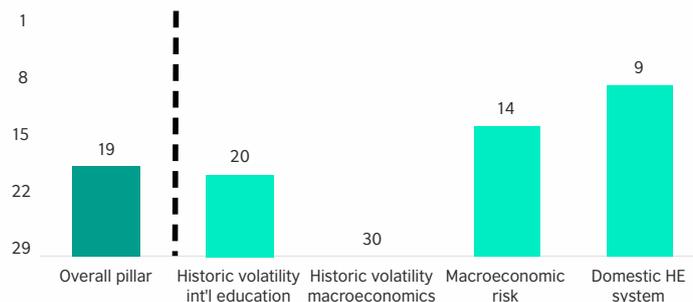
#### Growth potential theme rankings (Higher rank = greater growth potential)



### Macro risk outlook: Moderate (19th out of 30)

- Historically stable economy with decades of positive economic growth, even during Global Finance Crisis and Covid-19 pandemic periods.
- Exchange rate stability expected to continue into the future.
- Significant improvement in domestic HE system over recent years, which may begin to impact demand for international study in future.
- Geo-political risk is a significant consideration in China but is outside the scope of this research.

#### Market risk theme rankings (Higher rank = greater market risk)



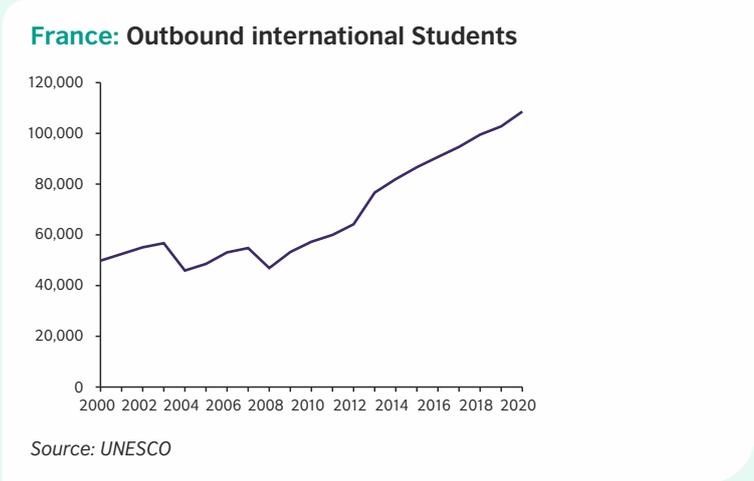
# France: Student mobility dashboard

Region: Europe  
 Income group: High income  
 GDP per capita (2022): US\$40,900  
 18-22 population (2022): 3.8m



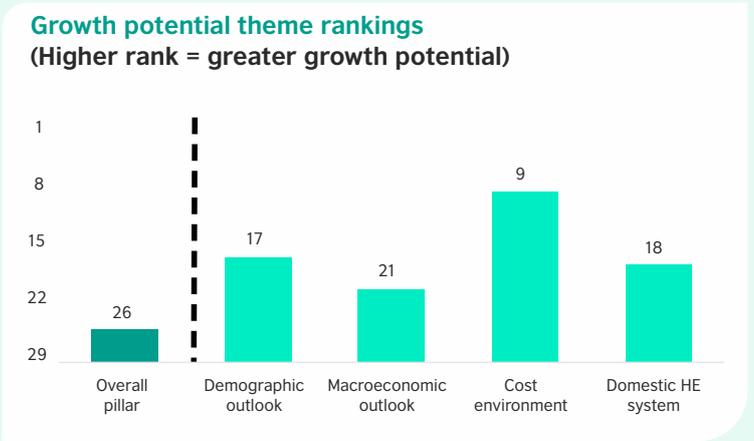
## Market assessment: Growth limitations, low macro risk

France is a highly developed nation and is a major political and economic power both within Europe and across the world. In 2020, almost 109,000 French students travelled abroad to study at the higher education level, making it the sixth largest outbound market in the world, only behind China, India, Vietnam, Germany and the US. Erasmus scholarships have traditionally been a key funding source for students and have incentivised study in other European nations. Canada and the UK are also popular international study options for French students.



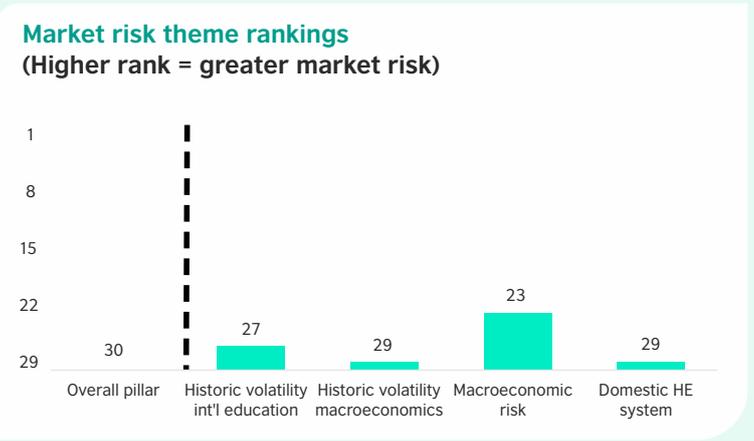
## Growth potential: Low (26th out of 30)

- Mid-sized tertiary-aged population, but growth has stagnated and negligible growth projected to 2030.
- Macroeconomic outlook remains positive, but economic growth will be relatively slow.
- Cost of study abroad will be generally stable given that other Eurozone countries are main destinations.
- Strong domestic HE system quality and capacity weighs against outbound mobility.



## Macro risk outlook: Low (30th out of 30)

- Lowest overall risk score of all countries.
- Steady upward trend in tertiary enrolments and outbound student numbers over last decade.
- Historically stable exchange rate and rate of economic growth.
- Political stability and the credibility of EU and eurozone institutions mean exchange rate risk will remain low in future.



# Hong Kong (SAR): Student mobility dashboard

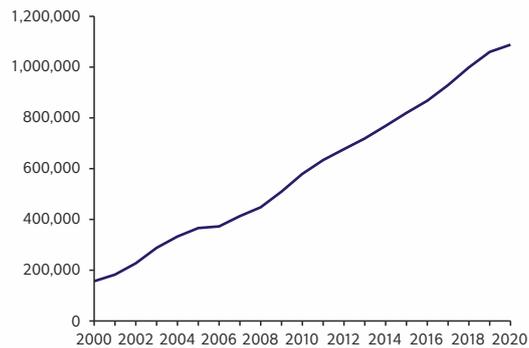
Region: East Asia & Pacific  
Income group: High income  
GDP per capita (2022): US\$48,090  
18-22 population (2022): 0.3m



## Market assessment: Growth limitations, low macro risk

Hong Kong (SAR) is a high-income economy located on the southeast coast of China. According to estimates from UNESCO, just over 35,000 students from Hong Kong (SAR) travelled abroad to study at the higher education level in 2020, excluding study in mainland China. This was the fourth consecutive year of decline since outbound student numbers peaked at above 37,000 in 2016, driven by a shrinking tertiary-aged population. The main overseas study destination for students from Hong Kong (SAR) is the UK, with smaller numbers of students also choosing to study in Australia, the US and Canada.

### China: Outbound international Students



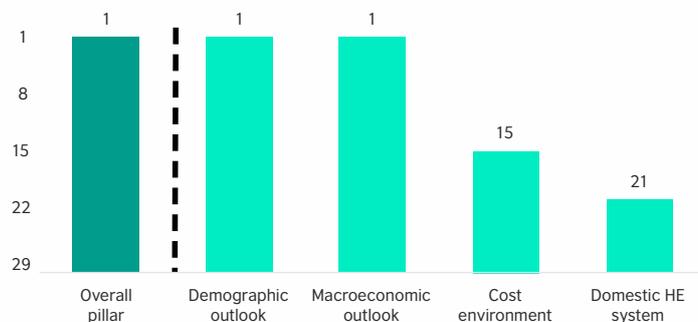
Source: UNESCO

## Growth potential: Moderate (20th out of 30)

- Small tertiary-aged population, with limited growth expected to 2030.
- Moderate GDP and household income growth outlook.
- Stable exchange rate outlook thanks to dollar peg.
- High quality domestic HE system with 5 universities ranked within the top 100 of the Times Higher Education world rankings in 2023.

### Growth potential theme rankings

(Higher rank = greater growth potential)

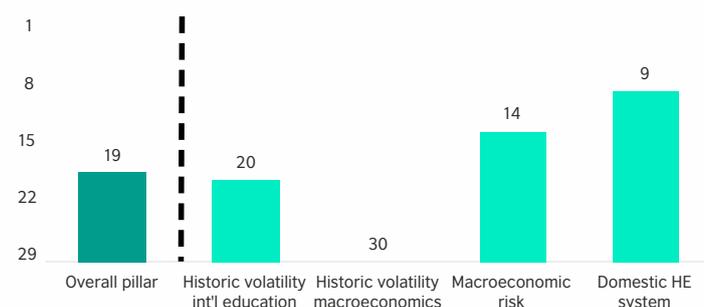


## Macro risk outlook: Low (23rd out of 30)

- Downward trend in outbound mobility ratio, which now stands at around 12 per cent from peak of 25 per cent in early 2000s, though decline has stabilised in recent years.
- Dollar peg, backed by healthy reserve levels, will provide exchange rate stability.
- Government debt levels are low relative to other advanced economies.
- Domestic inflation expected to remain low and stable, in line with historic trends.
- Domestic HE capacity has improved in recent years due to declining tertiary-aged population.

### Market risk theme rankings

(Higher rank = greater market risk)



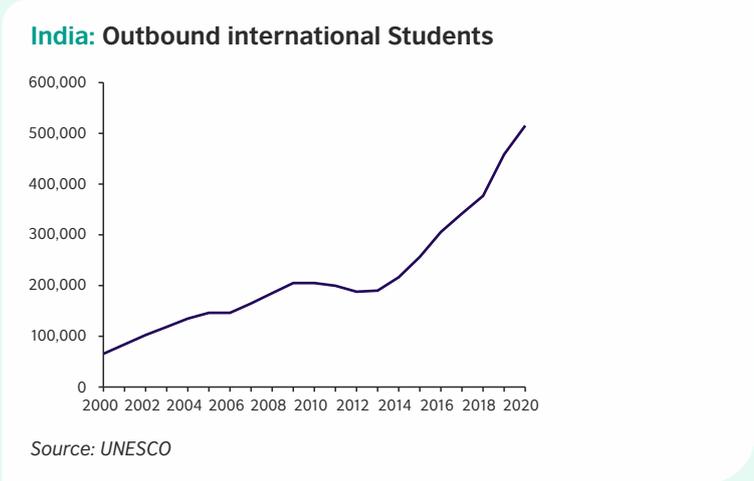
# India: Student mobility dashboard

Region: South Asia  
 Income group: Lower middle  
 GDP per capita (2022): US\$2,380  
 18-22 population (2022): 127.2m



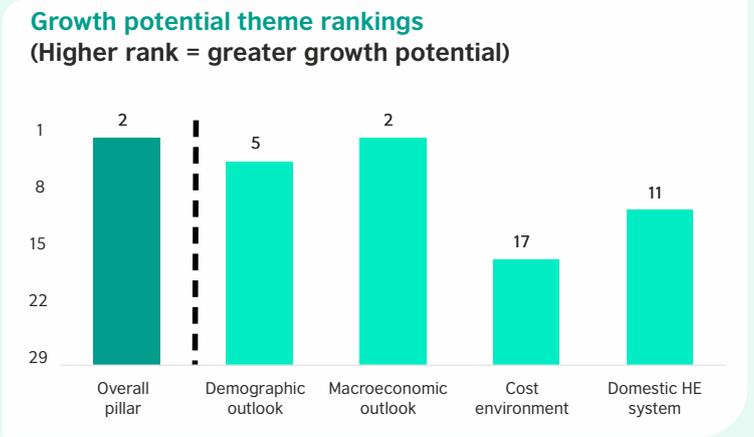
## Market assessment: High volume, high potential

India is currently the sixth largest economy in the world and with continued fast-paced growth forecast, is expected to become the third largest economy globally by the end of the decade, only behind China and the US. Furthermore, alongside China, India has the largest population in the world. India is the second largest outbound student market globally, with student numbers surpassing the 500,000 mark in 2020 after several years of strong growth. The US is the most popular study destination for Indians, followed by Canada, Australia, the UAE and the UK.



## Growth potential: High (2nd out of 30)

- Largest tertiary-aged population in the world.
- Very strong macroeconomic outlook, with fast paced GDP and household income growth expected.
- Rupee expected to depreciate modestly against currencies of main study destinations in years ahead, adding to the cost of international study.
- Domestic HE quality and capacity are limited, which should incentivise outbound mobility.



## Macro risk outlook: Moderate (10th out of 30)

- Strong upward trend in tertiary enrolments and outbound student numbers over last decade.
- 2020 only year of annual GDP contraction since 1970s.
- But low level of GDP per capita, banking sector fragilities and substantial fiscal deficit add to macroeconomic risk outlook.
- Domestic HE system capacity improving, but unlikely to keep pace with demand which is likely to drive continued strong outbound mobility.



# Indonesia:

## Student mobility dashboard

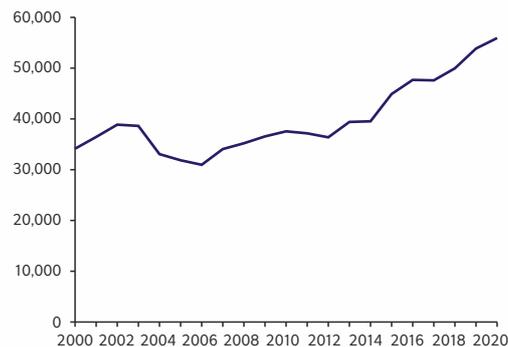
Region: East Asia & Pacific  
Income group: Upper middle  
GDP per capita (2022): US\$4,770  
18-22 population (2022): 22.1m



### Market assessment: Rising star

Indonesia is Southeast Asia's largest economy and is the fourth most populous country in the world, only behind China, India and the US. Its outbound student market has grown significantly over recent years, with student numbers increasing by 50 per cent over the last decade, from around 38,000 in 2010 to almost 56,000 in 2020. This makes it a moderately sized outbound market, comparable in size to the likes of Bangladesh and Malaysia, but still just a fraction of the size of China and India. The most popular study destinations for Indonesian students are Australia, Malaysia and the US.

#### Indonesia: Outbound international Students

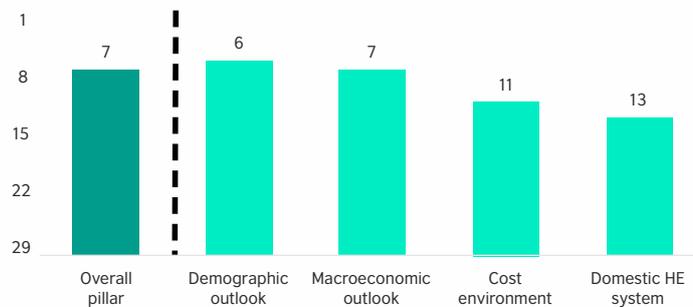


Source: UNESCO

### Growth potential: High (7th out of 30)

- Large tertiary-aged population, with continued growth projected.
- Very strong macroeconomic outlook, with fast paced GDP and household income growth expected.
- Rupiah expected to depreciate modestly against currencies of main study destinations, adding to the cost of international study.
- Domestic HE capacity limited which should incentivise outbound mobility.

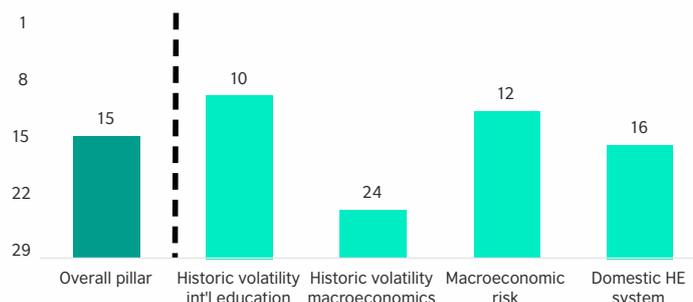
#### Growth potential theme rankings (Higher rank = greater growth potential)



### Macro risk outlook: Moderate (15th out of 30)

- Strong upward trend in tertiary enrolments and outbound student numbers over last decade.
- 2020 only year of annual GDP contraction since Asian financial crisis in late 1990s.
- Relatively low level of government debt should underpin growth.
- But recurrent natural disasters represent significant downside risk to the outlook.
- Domestic HE system capacity improving, but unlikely to keep pace with demand which is likely to drive continued strong outbound mobility.

#### Market risk theme rankings (Higher rank = greater market risk)



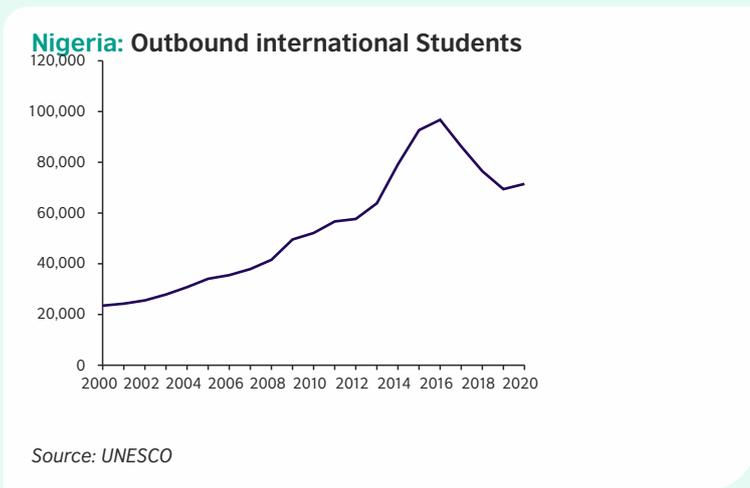
# Nigeria: Student mobility dashboard

Region: Sub-Saharan Africa  
 Income group: Lower-middle  
 GDP per capita (2022): US\$2,160  
 18-22 population (2022): 21.1m



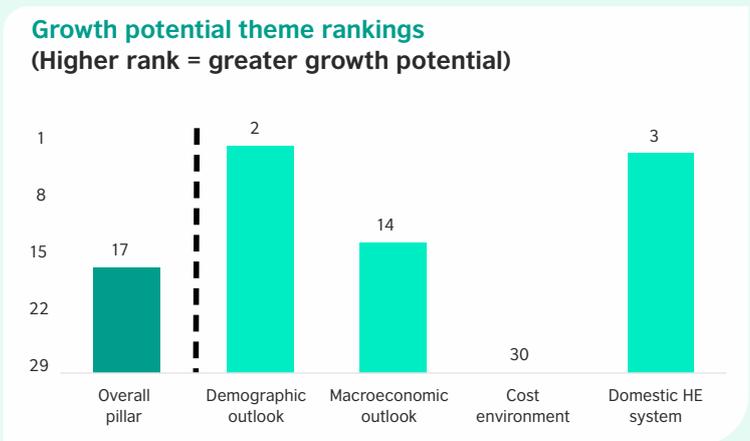
## Market assessment: Growth limitations, high macro risk

Nigeria is Africa's largest economy and most populous country. Fast paced economic growth combined with a booming tertiary-aged population and inadequate local higher education capacity has seen Nigeria become a major sender of international students over the last two decades, with almost 72,000 studying abroad in 2020. It had ranked in the top ten outbound markets globally, before a deep recession and currency crisis in 2016 led to sharp declines in outbound mobility. The main study destinations for Nigerians are the UK, US and Canada.



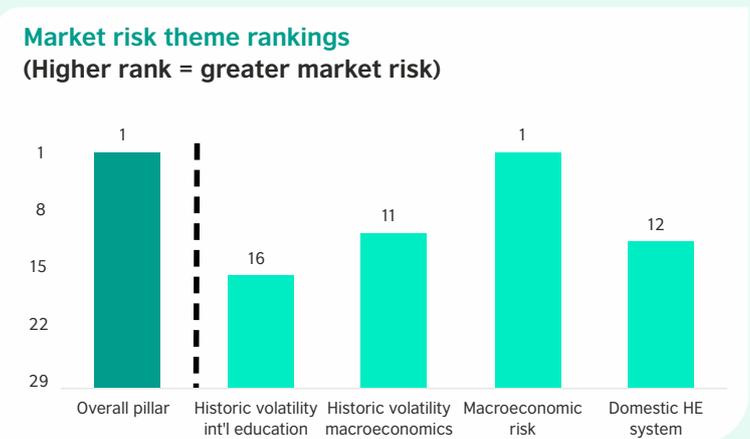
## Growth potential: Moderate (18th out of 30)

- Large, growing and very youthful population.
- Moderate GDP and household income growth outlook.
- Extremely weak exchange rate outlook, causing significant future escalation in cost of study abroad.
- Very limited domestic HE capacity which should incentivise outbound mobility.



## Macro risk outlook: High (1st out of 30)

- Highest overall risk score of all countries, driven by highest macroeconomic risk outlook of all countries.
- Rising food costs and fuel shortages continue to place upward pressure on domestic inflation and threaten price stability.
- Foreign exchange liquidity remains a concern and may prove inadequate to maintain exchange rate stability should reserves drop unexpectedly.
- Outbound mobility has exhibited significant volatility historically, linked to periods of macroeconomic volatility, but Nigeria remains a large market in volume terms.



# Pakistan:

## Student mobility dashboard

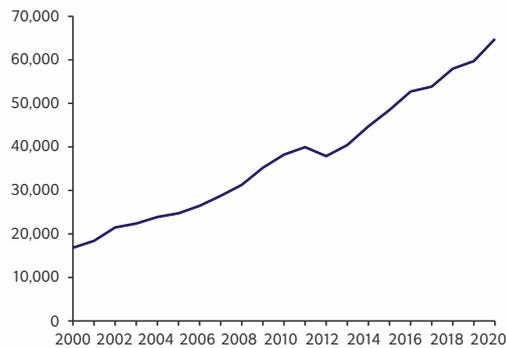
Region: South Asia  
 Income group: Lower middle  
 GDP per capita (2022): US\$1,385  
 18-22 population (2022): 23.6m



### Market assessment: High potential, high macro risk

Pakistan is the second largest economy in South Asia after India, and the fifth most populous country in the world, only behind China, India, the US and Indonesia. The country ranks just inside the world's top 20 outbound international student markets, with the volume of outbound students almost quadrupling since 2000, reaching almost 65,000 in 2020. Historically, China, Australia and the UAE have been the most popular study destinations for Pakistani students. However, the UK has seen exceptionally strong growth in the Pakistani market over the last couple of years, putting it amongst the market leaders.

#### Pakistan: Outbound international Students



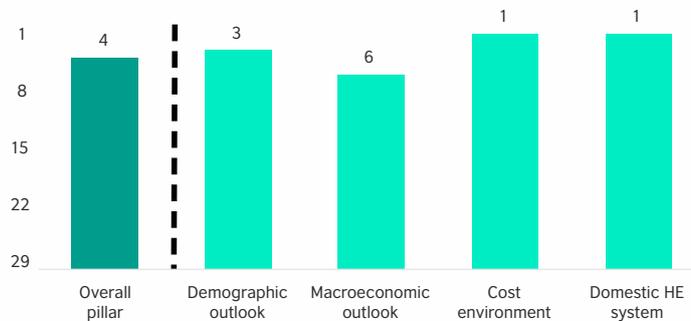
Source: UNESCO

### Growth potential: High (4th out of 30)

- Large, growing and very youthful population.
- Looking past current economic crisis, strong GDP and household income growth outlook in the medium term.
- Rupee expected to appreciate and regain pre-crisis value in medium term.
- Very limited domestic HE capacity which should incentivise outbound mobility.

#### Growth potential theme rankings

(Higher rank = greater growth potential)

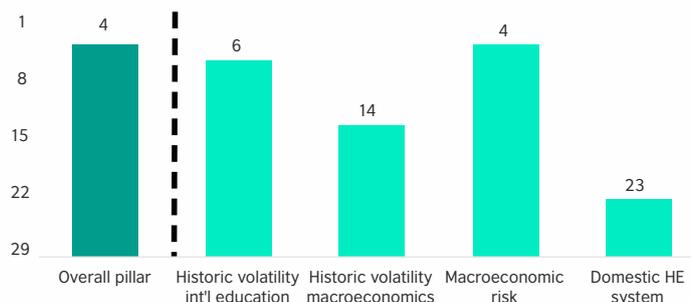


### Macro risk outlook: High (4th out of 30)

- Fourth highest market risk rating of all countries.
- Legacy of financial mismanagement, global energy crisis and severe flooding have left Pakistan close to default and requiring IMF bailout.
- Inflation at record levels with sharp currency depreciation seen since early 2022.
- Strict IMF economic measures may stifle short-term growth.
- Domestic capacity is improving, but unlikely to keep pace with demand which is likely to drive continued strong outbound mobility.

#### Market risk theme rankings

(Higher rank = greater market risk)



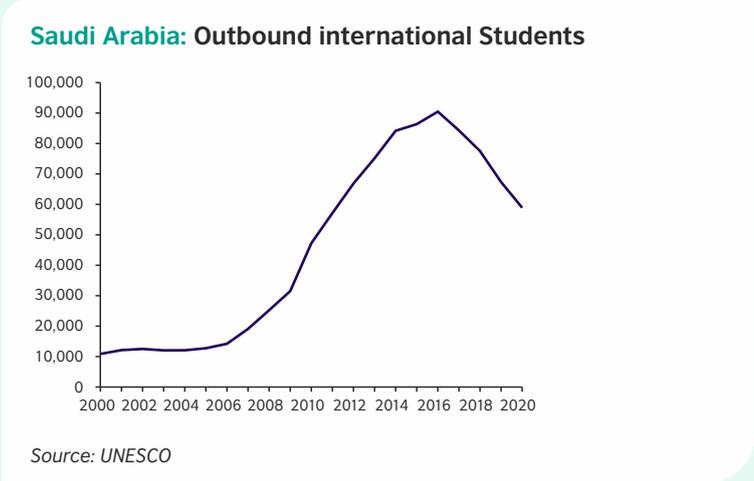
# Saudi Arabia: Student mobility dashboard

Region: Middle East  
 Income group: High income  
 GDP per capita (2022): US\$31,685  
 18-22 population (2022): 2.6m



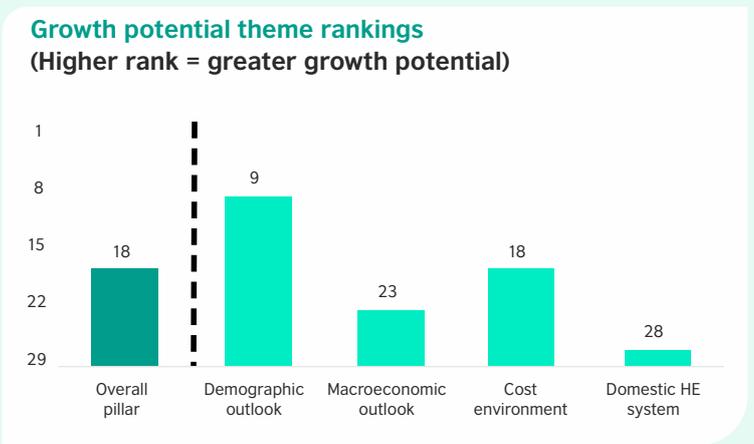
## Market background: Middle ground

Saudi Arabia is the largest economy in the Middle East and is one of the world's largest oil producers. The country ranks just inside the world's top 20 outbound international student markets, with almost 59,000 students studying abroad in 2020. However, this was the fourth consecutive year of decline after outbound student numbers peaked at 90,000 in 2016, driven by the winding down of the landmark King Abdullah Scholarship Programme which funded international study for tens of thousands of students. However, in 2022, the Saudi government announced a new scholarship program that will send 100,000 students to study abroad over the next five years.



## Growth potential: Moderate (16th out of 30)

- Relatively small but growing tertiary-aged population.
- Macroeconomic outlook remains positive, but growth will be relatively slow.
- Cost of study abroad will be generally stable thanks to dollar peg.
- Significant government-backed scholarship funding anticipated.
- Increasingly strong domestic HE system which may weigh against outbound mobility.



## Macro risk outlook: Moderate (17th out of 30)

- Significant downturn in outbound student volumes over recent years, highlighting reliance on scholarship funding.
- Strong and consistent non-oil GDP growth over last two decades, underscoring progress on economic diversification.
- Exchange rate risk will remain low, reflecting lack of volatility in the exchange rate in the past, and high reserve coverage.
- Significant investment and improvement in domestic HE system which may weigh against outbound mobility in future.



# United States:

## Student mobility dashboard

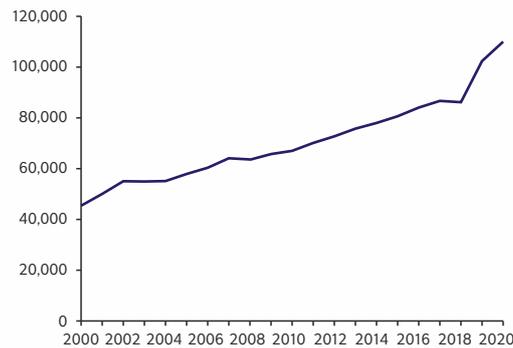
Region: North America  
Income group: High income  
GDP per capita (2022): US\$76,430  
18-22 population (2022): 22.2m



### Market assessment: Middle ground

The US is the world's largest economy at present and is the third most populous country globally. Despite having a world leading domestic higher education system, it is a large outbound student market. Outbound student numbers have increased steadily almost every year since UNESCO records began and reached almost 110,000 in 2020, making it the fifth largest outbound market globally. Leading destinations for international students from the US include the UK, Canada and Mexico, as well as European destinations including Germany, France, Spain and Italy.

#### United States: Outbound international Students



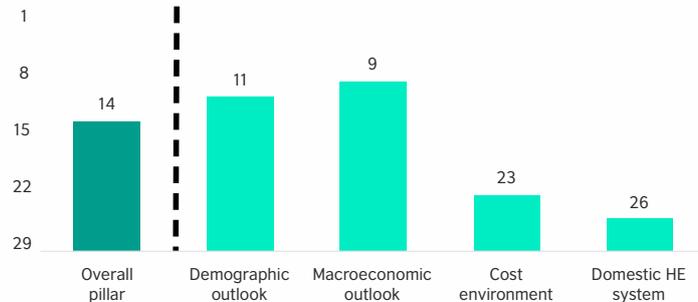
Source: UNESCO

### Growth potential: Moderate (15th out of 30)

- Large tertiary-aged population, but little growth expected to 2030.
- Positive macroeconomic outlook, but rate of growth will be well behind leading emerging economies.
- After strong performance in 2022, mild dollar depreciation expected in medium term, adding to cost of international study.
- World leading domestic HE system which reduces incentive for international study.

#### Growth potential theme rankings

(Higher rank = greater growth potential)

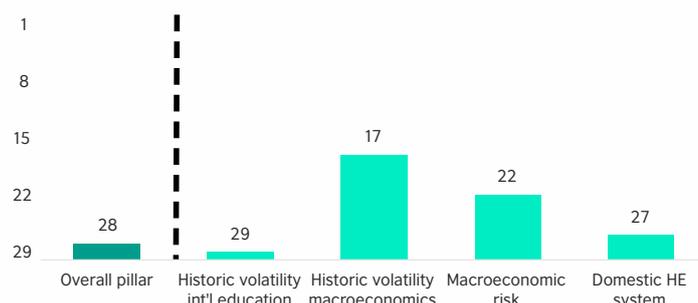


### Macro risk outlook: Low (28th out of 30)

- Strong upward trend in tertiary enrolment ratio and outbound student numbers over last decade.
- Historically stable domestic macroeconomic environment.
- Exchange rate and sovereign risk will remain low, reflecting the dollar's role as the global reserve currency.

#### Market risk theme rankings

(Higher rank = greater market risk)



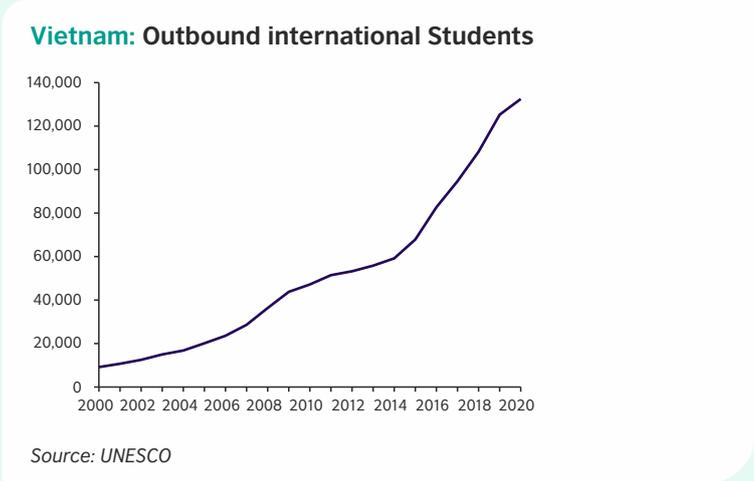
# Vietnam: Student mobility dashboard

Region: East Asia & Pacific  
 Income group: Lower middle  
 GDP per capita (2022): US\$4,140  
 18-22 population (2022): 6.9m



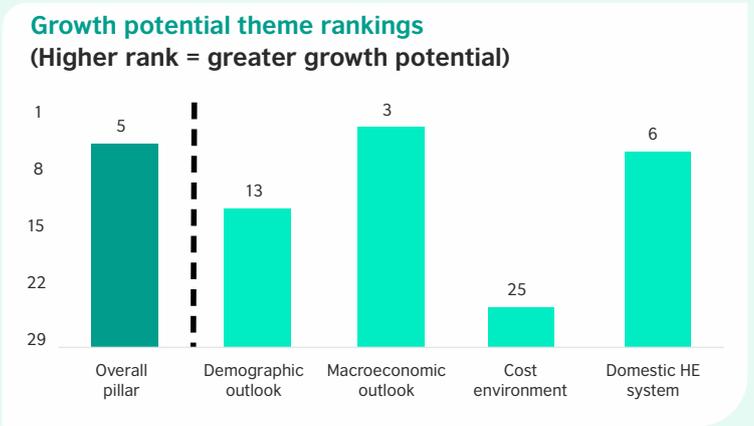
## Market background: Rising star

Vietnam has been one of the world's fastest growing economies over the last two decades. Fast-paced economic growth has fuelled a significant increase in the number of middle- and high-income households, which has seen Vietnam become a leading outbound international student market. With almost 133,000 outbound students, it was only behind China and India in 2020. Growth in Vietnam's outbound market has been remarkable, with student numbers almost tripling over the last decade. The main study destinations for Vietnamese students are Japan and the US, with the UK hosting less than 3,000 students in the last couple of years.



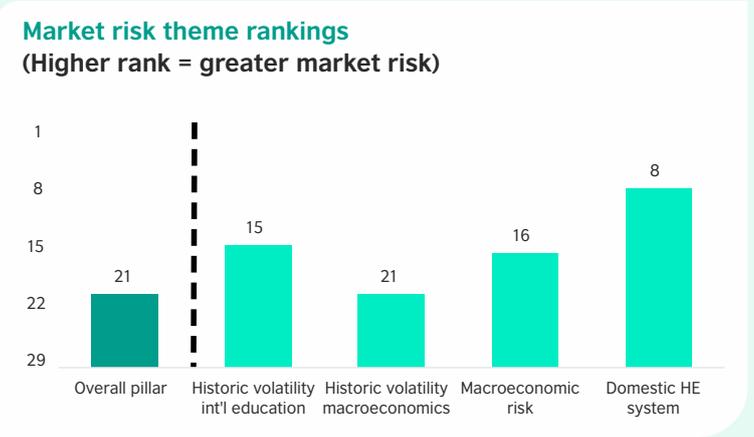
## Growth potential: High (5th out of 30)

- Moderately sized tertiary-aged population, with limited growth projected.
- Fast-paced economic growth forecast, both in terms of GDP and household incomes.
- Mild currency depreciation expected in medium term, adding to cost of international study.
- Limited domestic HE capacity which should incentivise outbound mobility.



## Macro risk outlook: Moderate (21st out of 30)

- Lowest overall market risk score outside high income economies.
- Historically stable economy with decades of positive economic growth, even during Global Finance Crisis and Covid-19 pandemic periods.
- Sound policy framework and large reserves will keep exchange rate risk low moving forward and will support continued strong and consistent economic growth.
- Domestic HE quality and capacity improving which may reduce incentives for international study in future.



# Annex B:

## Index methodology

This annex sets out the methodology employed in the calculation of the Outbound Students Opportunity and Macro Risk Index.

### Growth potential pillar indicators

Theme	Indicator	Description	Direction	Sources
Demographic outlook	18-22 population level	18-22 population in absolute level terms in 2022	+	UN
	18-22 population % growth	18-22 population annual avg. growth 2022-30	+	UN
	18-22 population absolute growth	18-22 population absolute change 2022-30	+	UN
Macroeconomic outlook	GDP (real) % growth	GDP (real) annual avg. growth 2022-30	+	OE
	GDP per capita (real) % growth	GDP per capita (real) annual avg. growth 2022-30	+	OE
	Household disposable income (real) % growth	Household disposable income (real) annual avg. growth 2022-30	+	OE
	Middle & high income households level	No. households with income > \$35k (real) in 2022	+	OE
	Middle & high income households % growth	No. households with income > \$35k (real) annual avg. growth 2022-30	+	OE
	Middle & high income households absolute growth	No. households with income > \$35k (real) absolute change 2022-30	+	OE
Cost environment	Domestic CPI % growth	Home country CPI annual avg. growth 2022-30	-	UNESCO, OE
	Destination-weighted exchange rate % growth	Destination-weighted exchange rate (real) annual avg. growth 2022-30	+	UNESCO, OE

Theme	Indicator	Description	Direction	Sources
Domestic HE system	Domestic quality	No. universities in Times Higher Education top 500 rankings, divided by average position of those universities	-	THE, OE
	Domestic capacity	No. universities in Times Higher Education top 500 rankings, multiplied by FTE places at those universities, divided by 18-22 population	-	THE, OE
	Tertiary enrolment rate	100 minus the current tertiary enrolment rate	+	UNESCO, OE
	Tertiary enrolment rate forecast	Forecast PP change in tertiary enrolment ratio by 2030 based on GDP per capita forecast	+	OE
	English proficiency	English Proficiency Index score	+	English First

Notes:

- Direction column indicates the relationship between the indicator score and the overall growth potential pillar score, whereby '+' indicates that a higher score on the indicator means that conditions will be more supportive of growth in outbound student volumes, and vice-versa.
- The destination-weighted exchange rate indicator is based on the destination profile of students from each outbound market, averaged over the last 3 years of data as published by UNESCO.

**Macro risk profile pillar indicators**

Theme	Indicator	Description	Direction	Sources
Historic volatility - international education	Tertiary enrolment ratio volatility	Tertiary enrolment ratio standard deviation (2000-20)	+	UNESCO, OE
	Tertiary enrolment ratio trend	Tertiary enrolment ratio number of year-on-year declines (2000-20)	+	UNESCO, OE
	Outbound mobility ratio volatility	Outbound mobility ratio standard deviation (2000-20)	+	UNESCO, OE
	Outbound mobility ratio trend	Outbound mobility ratio number of year-on-year declines (2000-20)	+	UNESCO, OE

Theme	Indicator	Description	Direction	Sources
Historic volatility - macroeconomic conditions	GDP growth (real) volatility	GDP growth (real) standard deviation (2000-19)	+	OE
	GDP growth (real) trend	GDP (real) number of year-on-year declines (2000-19)	+	OE
	Destination-weighted exchange rate volatility	Destination-weighted exchange rate standard deviation (2000-19)	+	OE
	Destination-weighted exchange rate trend	Number of year-on-year depreciations in destination-weighted exchange rate (2000-19)	+	OE
Current and future macroeconomic risk	Economic and financial risk	Overall economic and financial risk rating produced by OE's Economic and Political Risk Evaluator tool, based on a sub-set of relevant macroeconomic indicators	+	OE
	Risk-weighted GDP growth (real)	OE's Global Scenarios Service (GSS) provides a range of alternate macroeconomic scenarios based around key risks to the global economy. This indicator compares the risk-weighted outlook from the GSS scenarios to the baseline outlook to quantify the balance of risks facing each economy.	-	OE
Domestic HE system	Domestic capacity	No. universities in Times Higher Education top 500 rankings, multiplied by FTE places at those universities, divided by 18-22 population (2018-23 change)	+	THE, OE

## Notes:

- Standard deviation is a statistical measure of how spread out a set of data is from its mean value. It is often used as a measure of risk as it measures the underlying volatility in the data series.
- The risk-weighted GDP growth indicator compares the outlook for each economy under upside and downside macroeconomic scenarios quantified by OE's Global Scenarios Service (GSS). This analysis facilitates the quantification of risks to the baseline macroeconomic outlook and provides a measure of the balance of risks facing each economy under assumptions relating to the key risks facing the global economy – e.g. asset price crash (downside scenario), faster disinflation (upside scenario).
- Direction column indicates the relationship between the indicator score and the overall macro risk pillar score, whereby '+' indicates that a higher score on the indicator contributes to a higher overall macro risk pillar score, and vice-versa. (Higher macro risk pillar score = higher risk)

## Index weighting approach

In order to determine the weights to be used in the aggregation of the index, a 3-stage approach was employed:

**Theme weights:** The first stage of the process was to allocate weights to the thematic categories within each pillar. This was informed by cross-country analysis of historical relationships and Oxford Economics' prior experience in forecasting international student flows.

**Indicator weights:** To determine the indicator weights within each theme, Oxford Economics began from the default position of allocating equal weight to each indicator within each theme. Adjustments were then made based on cross-country analysis of historical relationships and OE's prior experience in forecasting international student flows, with indicators with stronger historical correlation allocated more weight within each theme, and vice-versa. This stage of the process culminated in a set of 'average' indicator weights for each indicator within each theme and pillar.

**Country-specific weights:** As a final step, the 'average' indicator weights calculated as outlined above were adjusted for country-specific factors. This was informed by dividing the sample into baskets of countries based on income and regional classifications and analysing the historical relationships at country/basket level to identify the indicators of more/less importance for each group.

Using country-specific weights, as opposed to using the same weights for all countries, enables the allocation of greater weight to indicators which have historically been more closely linked to outbound student flow trends in particular sets of countries. For example, as illustrated in Figures 5-8 and confirmed through econometric analysis, destination-weighted exchange rates have a much greater influence on outbound student flows from lower income, more price sensitive economies than in more advanced, higher income economies. As such, the index indicator weights adjust for this finding by allocating greater weight to the destination-weighted exchange rate indicator in the growth potential pillar for lower income economies compared to the weighting applied to this indicator for high income economies.

In order to understand the impact of using country-specific weights, sensitivity analysis was conducted to compare the scores in each pillar based on the country-specific weights versus using the 'average' indicator weights for all countries. This exercise concluded that the use of country-specific weights does not significantly alter the conclusions from the analysis, but as intended enables adjustment of the results for country-specific factors.

## Country baskets used for weighting

Country	Region	Income group	Basket
Canada	North America	High income	1
France	Europe & Central Asia	High income	1
Germany	Europe & Central Asia	High income	1
Ireland	Europe & Central Asia	High income	1
Italy	Europe & Central Asia	High income	1
Japan	East Asia & Pacific	High income	1
Spain	Europe & Central Asia	High income	1
United States	North America	High income	1
Kuwait	Middle East & North	High income	2
Saudi Arabia	Africa	High income	2
United Arab Emirates	Middle East & North Africa Middle East & North Africa	High income	2
Hong Kong, China	East Asia & Pacific	High income	3
Malaysia	East Asia & Pacific	Upper middle income	3
South Korea	East Asia & Pacific	High income	3
Singapore	East Asia & Pacific	High income	3
Brazil	Latin America &	Upper middle income	4
Mexico	Caribbean	Upper middle income	4
Turkey	Latin America & Caribbean Europe & Central Asia	Upper middle income	4
China	East Asia & Pacific	Upper middle income	5
Bangladesh	South Asia	Lower middle income	6
Ghana	Sub-Saharan Africa	Lower middle income	6
Indonesia	East Asia & Pacific	Lower middle income	6
Nepal	South Asia	Lower middle income	6
Nigeria	Sub-Saharan Africa	Lower middle income	6
Pakistan	South Asia	Lower middle income	6
Sri Lanka	South Asia	Lower middle income	6
Thailand	East Asia & Pacific	Upper middle income	6
Vietnam	East Asia & Pacific	Lower middle income	6
India	South Asia	Lower middle income	7

Note: The basket numbers in this table are used purely for classification purposes and the basket numbers have no bearing on the analysis.

**Growth potential pillar weightings**

Theme	Indicator	Basket 1	Basket 2	Basket 3	Basket 4	Basket 5	Basket 6	Basket 7
Demographic outlook	18-22 population level	8.3%	6.7%	8.3%	6.4%	5.3%	4.2%	4.2%
	18-22 population % growth	8.3%	6.7%	8.3%	6.4%	5.3%	4.2%	4.2%
	18-22 population absolute growth	8.3%	6.7%	8.3%	6.4%	5.3%	4.2%	4.2%
	Theme total	25.0%	20.0%	25.0%	19.1%	15.9%	12.5%	12.5%
Macroeconomic outlook	GDP (real) % growth	8.3%	6.7%	5.8%	6.4%	8.3%	8.3%	8.3%
	GDP per capita (real) % growth	8.3%	6.7%	5.8%	6.4%	8.3%	8.3%	8.3%
	Household disposable income (real) % growth	8.3%	6.7%	5.8%	6.4%	8.3%	8.3%	8.3%
	Middle & high income households level	10.4%	8.3%	7.2%	8.0%	10.4%	10.4%	10.4%
	Middle & high income households % growth	10.4%	8.3%	7.2%	8.0%	10.4%	10.4%	10.4%
	Middle & high income households absolute growth	10.4%	8.3%	7.2%	8.0%	10.4%	10.4%	10.4%
	Theme total	56.3%	45.0%	38.9%	43.0%	56.3%	56.3%	56.3%
Cost environment	Domestic CPI % growth	3.6%	6.7%	8.3%	8.3%	5.3%	8.3%	8.3%
	Destination-weighted exchange rate % growth	4.5%	8.3%	10.4%	10.4%	6.6%	10.4%	10.4%
	Theme total	8.0%	15.0%	18.8%	18.8%	11.9%	18.8%	18.8%
Domestic HE system	Domestic quality	2.0%	3.8%	3.3%	3.6%	3.0%	2.4%	2.4%
	Domestic capacity	2.0%	3.8%	3.3%	3.6%	3.0%	2.4%	2.4%
	Tertiary enrolment rate	2.0%	3.8%	3.3%	3.6%	3.0%	2.4%	2.4%
	Tertiary enrolment rate forecast	2.0%	3.8%	3.3%	3.6%	3.0%	2.4%	2.4%
	English proficiency	2.6%	4.8%	4.1%	4.6%	3.8%	3.0%	3.0%
	Theme total	10.7%	20.0%	17.3%	19.1%	15.9%	12.5%	12.5%

**Macro risk profile pillar weightings**

Theme	Indicator	Basket 1	Basket 2	Basket 3	Basket 4	Basket 5	Basket 6	Basket 7
Historic volatility - international education	Tertiary enrolment ratio volatility	2.3%	3.8%	2.3%	2.3%	2.3%	9%	0.9%
	Tertiary enrolment ratio trend	2.3%	3.8%	2.3%	2.3%	2.3%	9%	0.9%
	Outbound mobility ratio volatility	2.3%	3.8%	2.3%	2.3%	2.3%	9%	0.9%
	Outbound mobility ratio trend	2.3%	3.8%	2.3%	2.3%	2.3%	9%	0.9%
	Theme total	9.4%	15.0%	9.4%	9.4%	9.4%	3.8%	3.8%
Historic volatility - macroeconomics	GDP growth (real) volatility	7.0%	6.3%	7.0%	7.0%	7.0%	7.8%	7.8%
	GDP growth (real) trend	7.0%	6.3%	7.0%	7.0%	7.0%	7.8%	7.8%
	Destination-weighted exchange rate volatility	7.0%	6.3%	7.0%	7.0%	7.0%	7.8%	7.8%
	Destination-weighted exchange rate trend	7.0%	6.3%	7.0%	7.0%	7.0%	7.8%	7.8%
	Theme total	28.1%	25.0%	28.1%	28.1%	28.1%	31.3%	31.3%
Macroeconomic risk	Economic and financial risk	39.4%	35.0%	39.4%	39.4%	39.4%	43.8%	43.8%
	Risk-weighted GDP growth (real)	16.9%	15.0%	16.9%	16.9%	16.9%	18.8%	18.8%
	Theme total	56.3%	50.0%	56.3%	56.3%	56.3%	62.5%	62.5%
Domestic HE system	Domestic capacity	6.3%	10.0%	6.3%	6.3%	6.3%	2.5%	2.5%
	Theme total	6.3%	10.0%	6.3%	6.3%	6.3%	2.5%	2.5%

## Growth potential pillar scores

	Rank	Country	Score
More supportive macroeconomic conditions	1	China	100.0
	2	India	77.9
	3	Philippines	73.4
	4	Pakistan	71.1
	5	Vietnam	70.7
	6	Bangladesh	57.4
	7	Indonesia	56.7
	8	Malaysia	51.9
	9	Thailand	41.2
	10	United Arab Emirates	39.3
Less supportive macroeconomic conditions	11	Ghana	38.4
	12	Nepal	38.0
	13	Sri Lanka	35.8
	14	United States	32.2
	15	Kuwait	30.7
	16	Mexico	24.6
	17	Nigeria	22.5
	18	Saudi Arabia	21.1
	19	South Korea	20.8
	20	Hong Kong, China	20.7
	21	Brazil	19.4
	22	Turkey	17.9
	23	Singapore	14.7
	24	Japan	13.0
	25	Canada	12.8
	26	France	12.4
	27	Ireland	10.4
	28	Spain	9.4
	29	Germany	7.7
	30	Italy	0.0

Source: British Council, based on data from Oxford Economics and UNESCO

Note: Index scores have been transformed onto a Distance to Frontier scale, whereby the top scoring country is allocated a score of 100, and the bottom scoring country is allocated a score of 0, with the other country scores distributed based on their distance from the top scoring country.

**Macro risk profile pillar scores**

	Rank	Country	Score
Higher macroeconomic risk	1	Nigeria	100.0
	2	Turkey	92.3
	3	Ghana	89.9
	4	Pakistan	72.4
	5	Brazil	72.2
	6	Mexico	64.7
	7	Sri Lanka	51.3
	8	Nepal	47.5
	9	Bangladesh	42.1
	10	India	42.1
Lower macroeconomic risk	11	Italy	35.7
	12	Philippines	35.2
	13	Thailand	35.2
	14	Malaysia	34.4
	15	Indonesia	33.2
	16	Kuwait	27.7
	17	Ireland	27.2
	18	China	26.2
	19	Japan	24.5
	20	Saudi Arabia	23.9
	21	Vietnam	23.8
	22	United Arab Emirates	21.7
	23	Hong Kong, China	21.5
	24	Spain	19.1
	25	South Korea	17.4
	26	Canada	15.4
	27	Singapore	12.5
	28	United States	8.6
	29	Germany	8.3
	30	France	0.0

Source: British Council, based on data from Oxford Economics and UNESCO

Note: Index scores have been transformed onto a Distance to Frontier scale, whereby the top scoring country is allocated a score of 100, and the bottom scoring country is allocated a score of 0, with the other country scores distributed based on their distance from the top scoring country.



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