

THE
ECONOMIC IMPACT OF
**LONDON'S
INTERNATIONAL
STUDENTS**





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EXECUTIVE SUMMARY

Key finding: International students studying at London universities directly contributed £3 billion to the UK economy in 2013-14 and supported over 37,000 jobs.

This London & Partners report presents the findings of an assessment of the impact of London's international students on the UK economy in the academic year 2013-14.

We estimate that the contribution from subsistence spending (rent, food, travel and so on) was around £1.6 billion, while the impact of fees paid directly to London universities contributed a further estimated £1.2 billion.

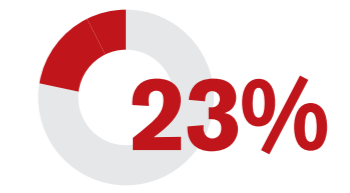
We also estimate that £131 million was spent by overseas friends and relatives visiting international students in London. Compared to a study undertaken by PA Consulting in 2011, the overall economic contribution has increased by 18 per cent over a four-year period.

When looking at the top ten markets of origin for London's international students, our analysis shows that China was by far the biggest contributor with an estimated spend of £407 million, followed by the US at £217 million and India at £130 million.

Students from the US were the highest contributors per capita, spending £33,600 a year on average. EU countries occupy the lower rungs of the top ten league, with per capita spending for Italian, German, French and Greek students averaging around £23,000 a year.



OVER ONE IN FOUR STUDENTS
ATTENDING LONDON'S HIGHER EDUCATION INSTITUTIONS ARE FROM OUTSIDE THE UK



LONDON ATTRACTS 23% OF THE UK'S INTERNATIONAL STUDENT MARKET



CHINA WAS THE BIGGEST CONTRIBUTOR WITH AN ESTIMATED SPEND OF £407M



USA WAS THE SECOND BIGGEST CONTRIBUTOR WITH AN ESTIMATED SPEND OF £217M



INDIA WAS THIRD BIGGEST CONTRIBUTOR WITH AN ESTIMATED SPEND OF £130M

USA WAS PER CAPITA THE BIGGEST CONTRIBUTOR OF TOP 10 INTERNATIONAL STUDENT MARKETS



- £33,600 USA**
- £32,000 HONG KONG**
- £31,800 MALAYSIA**
- £23,000 GERMANY**
- £22,900 ITALY**
- £22,600 GREECE**

Section 1

ABOUT THIS RESEARCH

Research focus: Understanding the economic contribution of all non-UK students in London and comparing findings to previous assessments.

Research aims

- Pinpoint economic impact by country of origin
- Extend previous impact study to include EU students
- Explore per capita spending habits

This piece of London & Partners research aimed to estimate the economic contribution of non-UK students to the UK economy and assess the impact of the top ten international student markets on London.

London has long been recognised as a magnet that draws students into the UK thanks to its 40 higher education institutions (making up a quarter of all UK education institutions¹). The city's higher education sector has a strong international focus and in many London institutions, international students account for over 30 per cent of the population.

Research carried out in 2007 and 2011 found a significant and increasing economic impact generated by these non-UK students on the UK economy. Following changes to international student numbers and tuition fees, we recognised that new research would be needed to make a more up-to-date economic assessment.

Our work builds on the findings of a report published by PwC and London First early in 2015², which explored the contribution made by international students to Britain's economy but excluded students from the European Union. We've extended the analysis to include all EU students outside the UK. Our report also pinpoints the respective direct economic impact of students from London's top ten international student markets, both overall and per capita.

We believe that this report will shed further light on the net contribution of London's international students to the UK economy, and will help us understand which countries bring most benefit to London and the UK.

¹ This report only covers the 40 publicly funded higher education institutions based in London. Satellite campuses of other UK institutions are not included in the calculations. Similarly, private universities and higher education colleges have been excluded from the analysis. A complete list of the 40 institutions considered in this report is available in the appendix table A5.

² PwC, London First, 2015. London calling: International students' contribution to Britain's economic growth. Available at: <http://londonfirst.co.uk/wp-content/uploads/2015/05/London-Calling-report.pdf>

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In many London institutions, international students account for over 30 per cent of the population
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Section 2

METHODOLOGY

Approach: Identifying spending categories in London's economy, quantifying impact by expenditure 'channel' and estimating direct economic benefit.

Source data

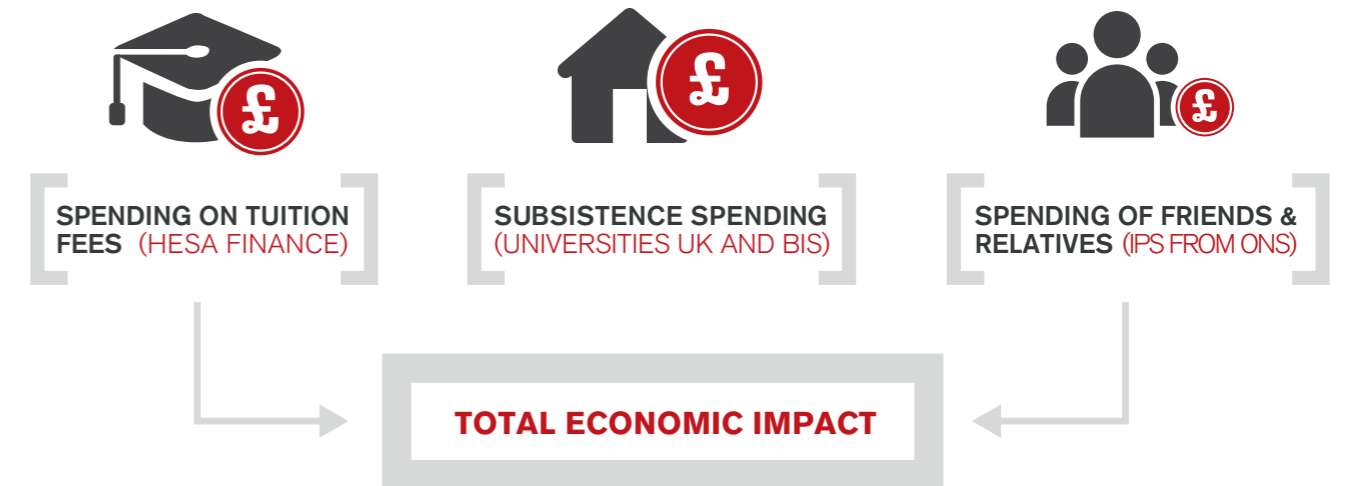
- Tuition fees paid to London universities from the Higher Education Statistics Agency (HESA)³
- Subsistence spending in the local economy adjusted from the Student Income and Expenditure Survey⁴
- Expenditure by friends and relatives (VFR) visiting London's international students according to the International Passenger Survey⁵
- Total direct economic impact in the academic year 2013-14 (a sum of the above three channels)

In order to estimate the total economic impact of international students it is important to look at their contribution to the economies of London and the UK. Firstly, students incur costs directly related to university attendance such as tuition fees, books and transport to and from university.

Secondly, students spend on accommodation and food. This expenditure varies across the UK, so the figures should be adjusted to reflect the characteristics of the London market. Finally, other spending items have to be considered, such as leisure, entertainment and holidays.

In line with previous analyses, we are classifying spending items in three categories – known as channels through which international students support the local economy:

- **Fee income** paid to higher education institutions
- **Subsistence spending** (eg rent, food, transport and leisure)
- **Expenditure of friends and relatives** who come to London to visit international students. This is known as VFR



Tuition fees are the most direct and clearly identifiable source of income for the local economy. The amount international students pay varies according to country of origin and university.

EU passport-holders are charged the same fees, irrespective of home country, while fees for non-EU residents can be up to three times higher. Bear in mind that scholarships and other exemptions can reduce the overall amount of fees paid, and have been taken into account when estimating fee income.

The main data source employed to estimate fee impact is the 2013-14 HESA publication *Finances of Higher Education Providers*. The main advantage of using HESA finance data compared to other sources is that it provides fee data as directly reported by HE Institutions, and therefore net of any kind of exemptions.

The second channel through which international students contribute to the local economy is subsistence spending. Day-to-day expenditure goes on rent, food, beverages and entertainment, transport to and from university and in some cases, childcare. Due to the mixed nature of these items, a number of assumptions had to be made in order to estimate the magnitude of this spending channel (see appendix on page 26 for detailed calculation steps).

In order to calculate spending figures, we combined data from the 2011-12 *Student Income and Expenditure Survey* (SIES) by the Department for Business Innovation & Skills (BIS) with data from the 2014 Universities UK report *The Impact of Universities on the UK Economy*⁶. These figures take into account the conditions of the London market such as higher housing costs.

Finally, international students indirectly generate further economic benefit by attracting international visitors (friends and relatives) from their country of origin to London. Their economic contribution is similar to that made by international tourists: while visiting, friends and relatives spend on accommodation, food, transport, entertainment and so on.

The main source for data on tourism spending in London is the 2013-14 edition of the *International Passenger Survey* (IPS) by the Office for National Statistics (ONS).

The sum of economic benefit across all three spending channels represents the overall direct economic impact of international students on the UK economy.⁷

³ Higher Education Statistics Agency (HESA), www.hesa.ac.uk

⁴ BIS, 2013. Student income and expenditure survey. Available at: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/301467/bis-14-723-student-income-expenditure-survey-2011-12.pdf

⁵ ONS, International passenger Survey 2013-14.

⁶ Universities UK, 2014. The impact of universities on the UK economy. Available at: <http://www.universitiesuk.ac.uk/highereducation/Pages/ImpactOfUniversities.aspx#.VZPTKvIvko>

⁷ In previous studies the indirect and induced economic impact of students spending was estimated. However in this research we looked solely at direct economic impact, ie excluding any multiplier effect, as recommended by GLA Economics as per GLA Economics Working Paper 61: London & Partners Evaluation Methodology Study.

Section 3

COUNTRIES OF ORIGIN

Key finding: The majority of international students in London are from outside the European Union.

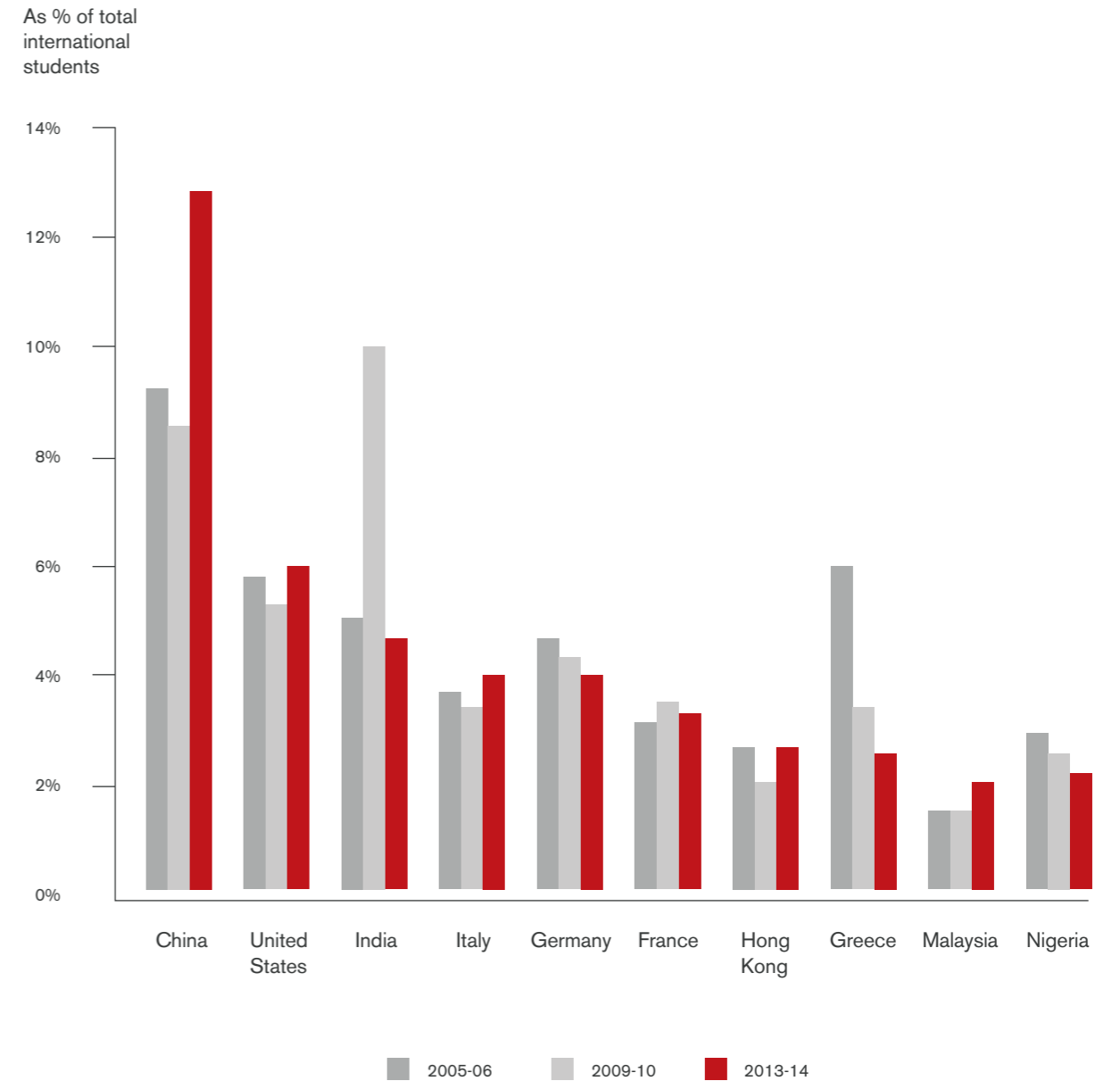
- Over one in four students attending London's higher education institutions are from outside the UK
- London attracts 23 per cent of the UK's international student market
- China is the dominant source country

To understand the economic impact of London's international students, London & Partners analysed the latest data published by the Higher Education Statistical Agency (HESA). The last academic year (2013-2014) saw London welcome 382,610 students studying at HEFCE-Funded⁸ higher education institutions. Of these, 28 per cent (106,795) were international students, a 1.6 per cent increase on the previous academic year.

The majority of international students (66 per cent, or 71,510) were from outside the EU, with the remaining 35,285 from within the EU. Regarding level of study, there was a fairly even split between international postgraduate (51 per cent) and international undergraduate students (49 per cent), but with a higher proportion of postgraduate students coming from outside the EU.

A breakdown of the ten top origin markets is provided opposite.

Figure 1: Top 10 countries of origin for London's international students as a proportion of total international students in the capital



Source: HESA Student Record
International students in London universities by country of origin and share over the total in the UK (AY 2013-14, 2009-10 and 2005-6)

⁸ Higher Education Funding Council for England (HEFCE), www.hefce.ac.uk

COUNTRIES OF ORIGIN

China remains the leading international student source market for London. Chinese student numbers have grown by 49 per cent since 2009-10⁹ and by 72 per cent since 2005-6¹⁰.

By contrast, the Indian market has continued to decline, falling by 11 per cent year on year. The drop in Indian students, started after the peak in 2009-10, followed a sharp expansion of the Indian student population that took place between 2004-5 and 2009-10. It is widely speculated in the press that the decline can be attributed to a change in post-study visa requirements.

Countries such as the US¹¹, Italy, Malaysia and Hong Kong have increased their share, while Nigeria and Greece now occupy lower positions in the top ten. Pakistan, ninth in 2009-10, dropped out of the top 20 this year.

International students in London make up 23 per cent of all international students in the UK. When comparing London to the UK as a whole, different countries dominate, as shown below.

Table 1: Students by country of origin in London and as a percentage across the UK

RANK	COUNTRY OF ORIGIN	NUMBER OF STUDENTS IN LONDON	% OF COUNTRY'S STUDENTS IN LONDON OUT OF ALL COUNTRY'S STUDENTS IN THE UK
1	China	13,460	15%
2	United States	6,440	36%
3	India	4,790	23%
4	Italy	4,375	43%
5	Germany	3,875	26%
6	France	3,570	30%
7	Hong Kong	3,275	22%
8	Greece	3,250	28%
9	Malaysia	2,840	17%
10	Nigeria	2,700	14%
Total in London		106,795	23%

Source: London & Partners' analysis
International students in London universities by country of origin and share over the total in the UK (AY 2013-14).

This table illustrates how London attracts a higher proportion of international students from countries such as Italy, the US and France, while countries such as China, Malaysia and Nigeria tend to be underrepresented in the capital.

⁹ PA Consulting, 2011. The Economic Impact of International Students to London's Economy: A Quantitative Perspective. Available at:

http://www.londonhighered.ac.uk/fileadmin/documents/Publications_2011/StudyLondon_EconomicAnalysis_2011.pdf

¹⁰ Oxford Economics, 2007. The economic impact of London's International students. Available at:

<http://www.oxfordeconomics.com/my-oxford/projects/129046>

¹¹ This report does not cover US students studying in London on study abroad programmes due to lack of official statistics.

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Section 4

ECONOMIC IMPACT

Key finding: Overall spending in the 2013-14 academic year totalled £2.99 billion, up 18 per cent from 2009-10.

- Subsistence spending comprises 55 per cent of the economic impact
- China, USA, India and Hong Kong are the biggest contributors
- Annual spending per student ranges from £23,000 (EU markets) to £33,600 (USA)

London & Partners' analysis found that international students contributed an estimated £2.99 billion to the London economy during the 2013-14 academic year. Subsistence spending had the highest impact, making up £1.641 billion (almost 55 per cent), followed by tuition fees at £1.218 billion (41 per cent). The remaining 4 per cent

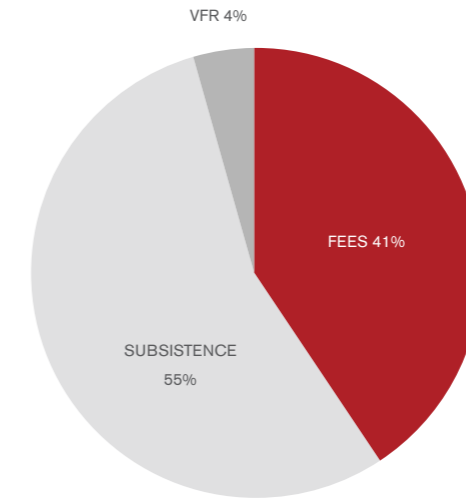
was spent by friends and relatives coming to London to visit international students (£131 million). Table 2 illustrates the total expenditure of international students in London during the academic year 2013-14, while figure 2 shows the relative contribution of each channel.

Table 2: Total spending by channel in the academic year 2013-14

SPENDING CHANNEL	IMPACT (£M)
Fees	£1,218
Subsistence	£1,641
VFR	£131
Total	£2,990

Source: London & Partners' analysis of overall expenditure by spending channel during the AY 2013-14 (ie 2013 Q4, 2014 Q1, 2014 Q2 and 2014 Q3).

Figure 2: Share of overall expenditure by spending channel

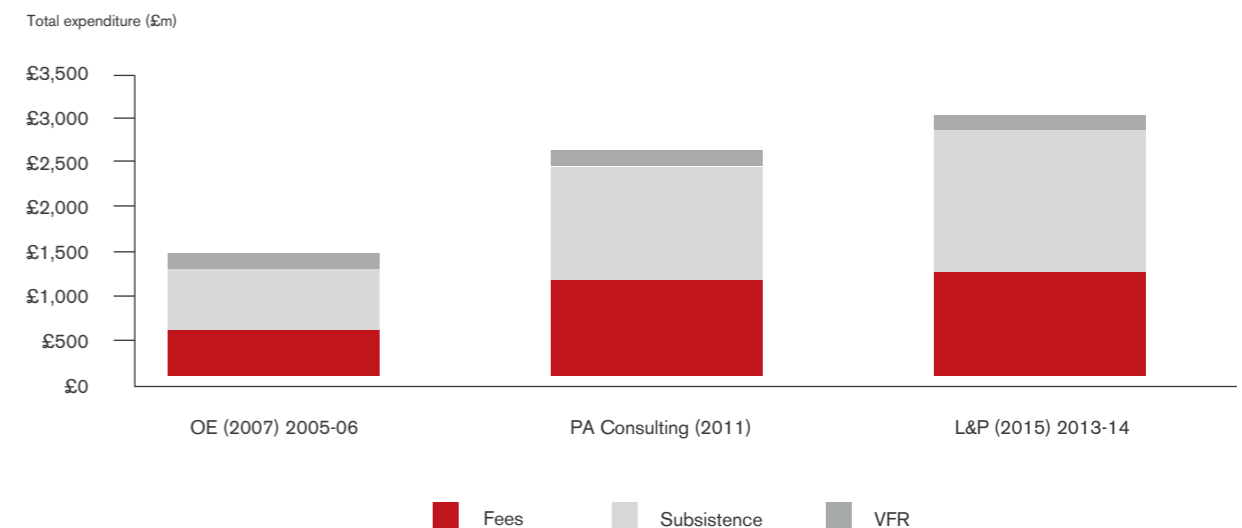


Source: London & Partners' analysis Share of overall expenditure by spending channel in AY 2013-14

By comparing the results of studies by Oxford Economics (2007) and PA Consulting (2011) with the estimated impact of international students in London on the UK economy, we can see that there has been an overall rise in spend.

Total spending amounted to £1.51 billion in 2005-6 and £2.529 billion in 2009-10. Figure 3 compares results from previous studies with the present analysis¹².

Figure 3: Overall expenditure broken down by spending channel (£m) - comparison



Source: London & Partners' analysis of overall expenditure by spending channel reported in previous publications including Oxford Economics (2007) and PA Consulting (2011). Note: PwC and London First (2015) not included as report only focuses on non-EU students.

¹² The studies carried out by Oxford Economics and PA Consulting do not employ exactly the same methodology and student base used for the present study. However, to the best of our knowledge, they remain the most comparable research pieces available and an extremely useful resource to study the evolution of the economic impact of international students over time.

ECONOMIC IMPACT

Overall spending has increased by 18 per cent in the four years since 2009-10 and by 98 per cent since 2005-6. A number of factors contributed to the estimated increase in the impact of international students: the growth in the number of international students enrolled in London institutions (up by 25 per cent since 2005-6); the rise in tuition fees charged by universities to undergraduate EU students¹³ and inflation (the average UK Retail Price Index increased by almost 34 per cent between 2005-2014¹⁴).

The magnitude of the visiting friends and relative channel (VFR) has changed very little over time. Conversely, both fee impact and subsistence spending have increased substantially since 2005-6 and have been responsible for a doubling in impact figures over the last eight years.¹⁵ Table 3 presents overall spending by channel broken down by London's top ten international student markets.

Table 3: Expenditure by channel and by country of origin (top 10 markets)

DOMICILE	NO. OF STUDENTS	FEES (£M)	SUBSISTENCE (£M)	VFR (£M)	TOTAL (£M)
China	13,460	£193.6	£206.8	£6.7	£407.2
United States	6,440	£103.0	£98.9	£14.6	£216.6
India	4,790	£55.9	£73.6	£0.7	£130.3
Italy	4,375	£26.4	£67.2	£6.6	£100.2
Germany	3,875	£24.2	£59.5	£5.2	£88.9
France	3,570	£23.4	£54.8	£6.1	£84.3
Hong Kong	3,275	£ 49.7	£50.3	£4.7	£104.8
Greece	3,250	£18.8	£50.0	£4.7	£73.6
Malaysia	2,840	£42.3	£43.7	£4.4	£90.3
Nigeria	2,700	£34.9	£41.5	£1.2	£77.6

Source: London & Partners's analysis of overall spending in the local economy by country of origin.

China was London's biggest market in terms of both student numbers and local spend. Chinese students in London spent £407 million in 2013-14, of which £207 million (51 per cent) was subsistence expenditure. Some £194 million (48 per cent) went on fees and the remaining £7 million (2 per cent) was spent by friends and relatives visiting the city.

£103 million (48 per cent of the US's contribution) went on tuition fees, but only £99 million (46 per cent) was spent on subsistence. The remaining £15 million (7 per cent, one of the highest proportions among the countries in our analysis) came from the spending of friends and relatives visiting American students in London.

The second largest market was the US, which injected £217 million into London's economy in 2013-14. Americans' spending patterns differed slightly from that of the Chinese:

Spending £130 million in 2013-14, India ranked third: 43 per cent (£56 million) went on tuition fees, 56 per cent (£74 million) on subsistence and less than 1 per cent on VFR spending¹⁶.

¹³ In 2004 a fee threshold of £3,000 a year for undergraduate EU students was set by the UK Government. By 2010-11 maximum fees had increased to £3,290. In 2012 the upper limit was further raised to £9,000 a year. Maximum capping only applies to undergraduate EU students, whereas universities are free to set tuition fees for undergraduate non-EUs and postgraduate students (irrespective of country of origin).

¹⁴ Source: Office for National Statistics, RPI Index.

¹⁵ The impact of tuition fees has remained substantially unchanged in the four years since 2009-10, but this might be due to the slightly different student base considered by PA Consulting in its last study. PA Consulting (2011) included offshore students in its account alongside EUs and non-EUs. International students studying offshore made up more than 20 per cent of the total fee income. Due to the lack of official records on the number of offshore (and in this case non-UK offshore) students paying tuition fees in London, we decided to omit offshore students in the analysis. Once offshore students are taken out of the PA Consulting analysis, the overall economic impact in 2009-10 drops to £2,283 million, and the growth rate to 2013-14 rises to 31 per cent.

¹⁶ Indian spending in the visiting friends and relatives (VFR) channel might be underestimated due to the methodology employed. See appendix for more details.

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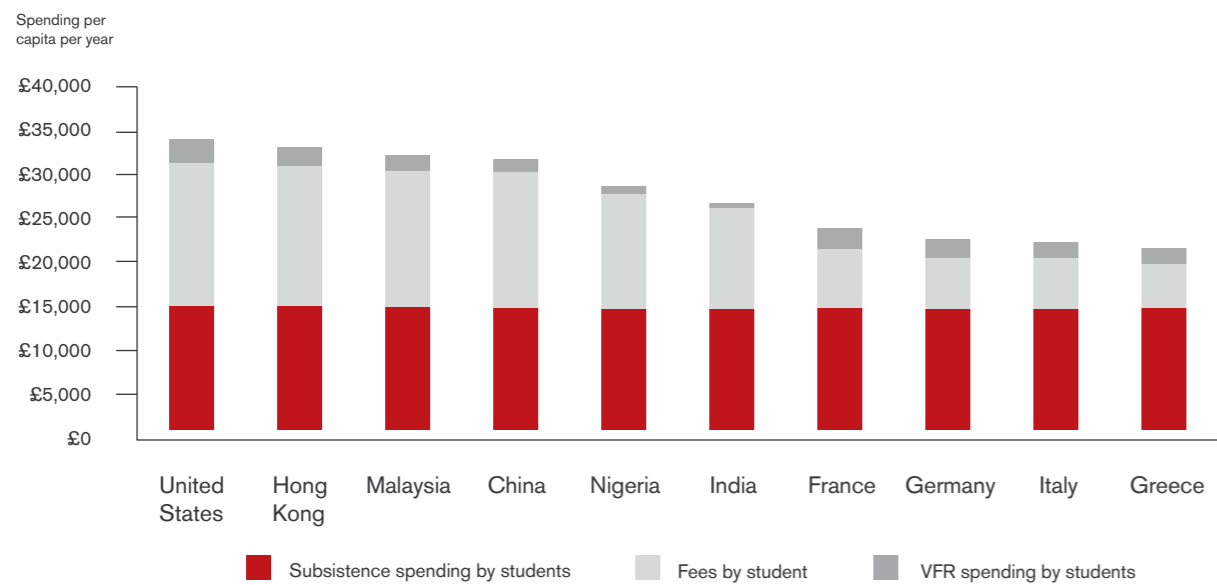
ECONOMIC IMPACT

Hong Kong was the fourth biggest market for overall economic impact, despite ranking only seventh for student numbers. Students from Hong Kong added £105 million to London's economy during the academic year, of which £50 million was fees and approximately the same amount subsistence spending. The remaining £5 million was spent by friends and relatives.

Collectively the top ten markets injected £1.4 billion into London economy, equating to 46 per cent of the total economic impact of international students.

Figure 4 shows individual average expenditure by student and by channel, for the top ten markets by student population size in London.

Figure 4: Individual spending by channel



Source: London & Partners's analysis of individual spending in the top 10 markets by spending channel.

Individual impact is lower for the four EU markets in our top ten league. This is due to the lower tuition fees charged by UK higher education institutions for European students. Individual spending for Italian, German, French and Greek students averaged around £23,000 a year, compared to Indian students, who spent around £27,000, and Americans, who spent on average £33,600¹⁷.

¹⁷ Due to the limited availability of data, it hasn't been possible to compute different subsistence spending figures for each of the markets in our analysis. Subsistence spending amounts to £15,365 per student, irrespective of country of origin.



Section 5

GROSS VALUE ADDED & EMPLOYMENT IMPACT

Key finding: Overall GVA in the 2013-14 academic year totalled £1.62 billion, supporting 37,419 jobs in the UK.

- Fee income made up half of total GVA
- China was the biggest market, contributing 14 per cent of overall GVA
- Average impact per student per annum is £15,141

In order to estimate the Gross Value Added (GVA) impact associated with international students' spending, sectoral turnover to GVA ratios from the Annual Business Survey, ONS¹⁸ were used. Adjustment factors to convert the gross economic output to GVA have been generated based on the following assumptions about the sectors benefiting from the additional expenditure:

- Fee income: The adjustment factor has been calculated using the ratio between total employment costs and total employment costs plus bought-in goods and services in the education sector, which provides a GVA adjustment factor of 67 per cent
- Subsistence: An average of the turnover to GVA ratios for food and beverage service (50 per cent), real estate activities (68 per cent) and retail trade (20 per cent) sectors. This provides an average ratio of 45 per cent
- Family and friends' visits: An average of the turnover to GVA ratios for the accommodation (56 per cent), food and beverage service activities (48 per cent), attractions and entertainment (19 per cent), transport (55 per cent)

sectors, shopping (22 per cent) and average for other sectors (26 per cent) have been used, resulting in an overall adjustment factor of 42 per cent¹⁹.

As a result we estimated the total direct annual GVA impact of international students on UK economy to be £1.62 billion in 2013-14²⁰.

Using the same assumptions about the sectors benefiting from students' additional expenditure, it is possible to translate GVA into jobs supported for the UK economy²¹.

As a result, our calculations suggest that the spending of overseas students and their visitors are responsible for supporting 37,419 jobs.

Table 4 shows spend allocation across fees, subsistence and spend generated by friends and relatives visiting, and its conversion into Gross Value Added (by London & Partners using ONS data), together with the number of jobs supported.

Table 4: Gross Value Added and jobs supported by channel

SPENDING CHANNEL	TOTAL EXPENDITURE (£M)	GROSS VALUE ADDED (GVA), £M	JOBS SUPPORTED
Fee income	£1,218	£814	17,191
Subsistence	£1,641	£747	18,875
Family and friends	£131	£55	1,354
Total	£2,990	£1,617	37,419

Source: London & Partners's analysis

When looking at GVA contribution by country, the results mirror the economic impact figures, with China and US the biggest contributors, followed by India and Hong Kong. Table 5 outlines GVA and jobs contribution broken down by London's top ten international student markets.

Table 5: Gross Value Added and jobs supported by country of origin (top 10 markets)

DOMICILE	NUMBER OF STUDENTS	TOTAL EXPENDITURE (£M)	GVA (£M)	JOBS SUPPORTED
China	13,460	£407	£226	5,180
United States	6,440	£217	£120	2,742
India	4,790	£130	£71	1,643
Italy	4,375	£100	£51	1,214
Germany	3,875	£89	£45	1,080
France	3,570	£84	£43	1,024
Hong Kong	3,275	£105	£58	1,329
Greece	3,250	£74	£37	889
Malaysia	2,840	£90	£50	1,145
Nigeria	2,700	£78	£43	982

Source: London & Partners's analysis

Using these estimates of direct GVA impact it is possible to assess the incremental value to the economies of London and the UK of attracting more overseas students to the capital. Table 6 summarises the per-student GVA impact (taking into account the three core sources of economic contribution from overseas students). This high-level analysis suggests that each overseas student in London made a direct GVA impact of around £15,141 for each year of their studies (in 2014 prices).

Table 6: Gross Value Added and jobs supported by country of origin (top 10 markets)

	UNDERGRADUATE	POST UNDERGRADUATE
Number of students	52,835	53,960
% of total students	49%	51%
GVA apportioned according to share of students (£m)	£800	£817
Annual impact per student	£15,141	£15,141
Average total impact per student ²²	£45,423	£15,141

Source: London & Partners's analysis and HESA student numbers (2013-14).

²² Total per-student impacts are based on conservative assumptions about the duration of undergraduate and postgraduate courses. We have assumed average durations of three years for undergraduates and one year for postgraduates. This latter assumption is conservative as postgraduate courses can last more than one year.

¹⁸ ONS, Annual Business Survey, November 2014. Standard Industrial Classification 2007 (SIC 2007) division 47,56 and section L used for subsistence spending expenditure to GVA conversion, see footnote 19 for family and friends visits conversion. London data.

¹⁹ See also GLA, 2015. Current Issue note 44. Available at: <https://www.london.gov.uk/sites/default/files/Value%20of%20Cultural%20Tourism-CIN%2044%20-%2025Mar2015.pdf>

²⁰ The impact on GVA of students who are working in London during their studies has not been considered in this study. The direct GVA impact excludes any multiplier effect (see footnote 7 for further detail).

²¹ This was done by estimating how much GVA is produced by each job in the sectors where students' money is spent (ratios of 'GVA per job'). See appendix 4 for details on methodology.

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Each overseas student in London generated a direct GVA impact of around £15,141 for each year of their studies.

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Section 6

CONCLUSION

International students provide a significant and growing dividend for both London and UK economies. We estimate the total expenditure of international students in London to be in the region of £3 billion in 2013-14. This represents an increase of 18 per cent in the four years since 2009-10. This upward trend is largely due to an increase in subsistence spending and, to a lesser extent, to fee levels.

China, the USA and India are the three leading international student markets in London and the biggest contributors, injecting £407 million, £217 million and £130 million respectively.

Looking at the top ten student markets, together they contribute almost half of all the spending from international students in London.

International students support over 37,000 jobs in London, and each student contributes £15,141 GVA per annum to the UK economy.

The results confirm the importance of international students for both London and UK economies, and particularly underscore the value of students from outside the European Union.



APPENDIX

This appendix outlines the calculations undertaken to successfully identify the local economic impact of international students coming to London to study in one of the city's 40 publicly funded higher education institutions.

This analysis is drawn from the methodologies employed by London First and PwC (2015), PA Consulting (2011) and Oxford Economics (2007) in their evaluations of the economic impact of international students in London. As discussed, three spending channels have been considered: university fees, subsistence expenditure and visiting friends and relatives (VFR).

A complete list of the 40 Institutions included in the analysis is available in table A5.

1. University fees channel

Data on overall fees by HE institution are drawn from the 2013-14 HESA publication *Finances of Higher Education Providers*²³. Individual fees charged to international students are also available on the websites of the HE institutions and from alternative data sources (for example the *Reddin Survey of University Tuition Fees*²⁴). However, as previously noted by Oxford Economics (2007), HESA provides fee data directly as reported by HE institutions, and thus net of scholarships and other fee exemptions. For this reason we have favoured HESA over alternative data sources.

Fee data are collectively reported for two student categories: EU students (including UK and EU non-UK) and non-EU students. For the purposes of this research, only fees paid by international students (ie non-UK students) are included in the calculations. EU students (UK-domiciled or not) pay the same amount in tuition fees, hence it is possible to isolate fees from internationals by simply computing the share of EU non-UK over the total EU students. Data on student numbers by country of origin are drawn from the 2013-14 HESA Student Record.

HESA Finance also provides a breakdown of tuition fees by level of study (undergraduate and postgraduate) and mode of study (eg part time, full time, sandwich) for EU students. This enabled us to be more accurate in the calculation of EU non-UK students within the four categories: FT undergraduates, PT undergraduates, FT postgraduates and PT postgraduates. Unfortunately, breakdowns by level or mode of study are not available for non-EU students.

In total, during the academic year 2013-14, international students contributed £1.218 billion in fee income to London universities, of which £211 million came from EU non-UK students and £1.006 billion from non-EU students. Table A1 displays the fee spend for the ten countries in our analysis.

Table A1: Gross Value Added and jobs supported by country of origin (top 10 markets)

COUNTRY OF ORIGIN	FT UNDERGRAD (£000S)	FT POSTGRAD (£000S)	PT UNDERGRAD (£000S)	PT POSTGRAD (£000S)	TOTAL (£000S)
China	-	-	-	-	£193,651
US	-	-	-	-	£103,043
India	-	-	-	-	£55,990
Hong Kong	-	-	-	-	£49,697
Malaysia	-	-	-	-	£42,324
Nigeria	-	-	-	-	£34,926
Italy	£12,015	£12,939	£305.37	£1,135	£26,395
Germany	£9,252	£13,542	£270	£1,144	£24,210
France	£11,927	£10,664	£133	£680	£23,404
Greece	£7,346	£10,470	£124.72	£899	£18,841

Source: London & Partners's analysis and HESA student numbers (2013-14).

2. The subsistence spending channel

This includes all spending by international students on goods and services other than tuition fees. Expenditure on food, rent, travel and entertainment all fall into this category.

The Department for Business, Innovation & Skills periodically carries out a comprehensive analysis of the expenditure patterns of England-domiciled students in the UK (*Student Income and Expenditure Survey* – SIES). The SIES provides detailed information on the spending of full-time and part-time students, identifying the key areas in which they make purchases: living costs, housing costs, participation costs and spending on children.

Since the SIES only covers England-domiciled students, we adjusted the figures for international students by employing the same methodology proposed by PwC and London First (2015). Firstly, estimates of total subsistence expenditure by international students in the UK in the academic year 2011-12 were drawn from *The Impact of Universities on the UK Economy* (Universities UK, 2014). By dividing total subsistence expenditure by the overall number of international students in the UK in the same academic year, we obtained average individual subsistence spending figures. However, this figure is likely to vary widely across the UK. In London, for example, we would expect average spending to be above the UK average, mainly due to housing costs.

SIES provides details on correction factors for students living in London and students not living with parents (the most common scenario for the majority of international students). By applying the adjustment factors for English students to international students we obtained a more reliable estimate of the real expenditure level of students in London, assuming correction factors are the same for English and international students.

According to Universities UK, individual subsistence spending of international students amounted to £12,866 on average in 2011-12. The correction factor drawn from SIES for students living in London without parents is 1.123 (ie on average a London student spends 12.3 per cent more than an average UK student a year). Figures have also been corrected for 2012-14 inflation using UK Retail Price Index (RPI) data from the ONS.

Average individual subsistence spending in 2013-14 for international students living in London amounted to £15,365.

Table A2 (overleaf) provides estimates of the economic impact from subsistence spending for the main markets in our analysis.

²³ HESA, *Finances of higher education providers*, April 2015 https://www.hesa.ac.uk/component/pubs/?task=show_pub_detail&pubid=1719

²⁴ <http://www.thecompleteuniversityguide.co.uk/university-tuition-fees/reddin-survey-of-university-tuition-fees/>

APPENDIX

Table A2: Number of students and subsistence impact for the top 10 markets in our analysis

DOMICILE	NUMBER OF STUDENTS	SUBSISTENCE IMPACT (£M)
China	13,458	£206.8
United States	6,440	£98.9
India	4,790	£73.6
Italy	4,374	£67.2
Germany	3,873	£59.5
France	3,570	£54.8
Hong Kong	3,275	£50.3
Greece	3,252	£50.0
Malaysia	2,842	£43.7
Nigeria	2,700	£41.5

Source: London & Partners's analysis

3. Visiting friends and relatives (VFR) channel

Alongside tuition fees and subsistence expenditure, international students generate further economic benefit by attracting visitors from their home countries to London.

Estimating this economic impact involves a key challenge: while it is possible to measure the number of visitors coming to London to visit friends and relatives, we don't know *a priori* how many of these people are actually visiting international students.

In order to overcome this problem we were consistent with the methodology employed by Oxford Economics (2007), PA Consulting (2011) and London First and PwC (2015)

and assumed the following: the proportion of VFR visitors with "c" nationality who come to London to visit students is equal to the proportion of "c" students over the total population in London with "c" nationality.

IPS provides data on 'visiting friends and relatives spend' in the London economy²⁵, while the most recent data source for 'London population by country of origin' is the 2011 Census.

In table A3 we show total spending by VFR visitors, the share of students over the total population in London, and the estimated 'impact by student' for the main markets under analysis²⁶.

²⁵ One limitation of our analysis is that the International Passenger Survey (IPS) only provides data on spending for the main tourism markets. When individual estimates are not available due to the small sample size, markets are grouped together and visitor numbers and spending are collectively estimated. For the purposes of our analysis, if anything this will lead to more conservative estimates of the overall economic impact for this channel.

²⁶ Economic impact by student figures might appear excessively low/high for certain markets (eg India). Unfortunately, estimated figures depend heavily on the proportion of students over the total population in London. Figures for markets having a relatively big London population but a relatively small student population might be underestimated (the opposite applies to countries with small non-student populations). Estimated figures also depend heavily on the assumption that foreign nationals are visiting friends/relatives of the same nationality. Despite this, we still trust the present methodology to be the most robust given the data sources currently available.

Table A3: VFR channel – calculation steps for the top 10 markets in our analysis

COUNTRY	TOTAL VFR SPEND (£M)	% OF STUDENTS OVER TOTAL LONDON POPULATION	TOTAL EXPENDITURE (£M)	TOTAL EXPENDITURE PER STUDENT (£)
USA	144.8	10.1%	£14.6	£2,264.9
France	113.4	5.4%	£6.1	£1,701.4
Malaysia	32.5	13.4%	£4.4	£1,534.2
Italy	94.3	7.0%	£6.6	£1,519.2
Greece	23.2	20.4%	£4.7	£1,459.8
Hong Kong	38.3	12.4%	£4.7	£1,447.4
Germany	74.1	7.0%	£5.2	£1,335.4
China	19.7	34.1%	£6.7	£499.9
Nigeria	48.9	2.3%	£1.1	£426.7
India	37.2	1.8%	£0.7	£141.8

Source: London & Partners's analysis

4. Employment impact calculations

The impact of international students on employment is calculated by dividing the Gross Value Added (GVA) impact associated with international students' spending by the relevant sectorial GVA per workforce job for London²⁷. In line with the assumptions about the sectors benefiting from the additional expenditure made to translate expenditures into GVA, the following sectors have been considered to translate GVA into jobs supported:

- Fee income: A GVA per workforce job of £47,374²⁸ for SIC code section P (education sector) has been used
- Subsistence: A GVA per workforce job of £39,585 has been used, calculated as average GVA per workforce jobs for food and beverage service (SIC division 56), real estate

activities (SIC section L) and retail trade (SIC division 47) sectors

- Family and friends' visits: A GVA per workforce job of £40,839 has been used. See section 6 and GLA Economics Current Issue Note 44 for a list of SIC levels used to derive the figure

5. Publicly funded higher education institutions based in London.

The following table shows the 40 higher education institutions considered for the calculations of the spending channels outlined above, and the relative number of international students enrolled in the academic year 2013/14²⁹.

²⁷ For full details of the methodologies used to derive estimates of GVA per workforce job, by section and division, for London and the UK as a whole, see GLA, 2015. Working paper 63. Available at: <https://www.london.gov.uk/sites/default/files/GLAE%20Working%20Paper%20-%20GVA%20per%20Workforce%20Job%20in%20London%20and%20the%20UK%20-%20February%202015%20-%20FINAL.pdf>

²⁸ All figures updated to 2014 prices using deflators from HMT.

²⁹ Calculations do not cover the circa 55,000 overseas students enrolled in one of the University of London's External Programs <http://www.london.ac.uk/aboutus.html>.

APPENDIX

Table A5: HE institutions based in London and number of international students enrolled in 2013/14

NAME OF INSTITUTION	NUMBER OF INTERNATIONAL STUDENTS
Birkbeck, University of London	1,605
Brunel University London	4,705
City University London	7,540
Conservatoire for Dance and Drama	395
Courtauld Institute of Art	205
Goldsmiths, University of London	2,335
Guildhall School of Music and Drama	275
Heythrop College, University of London	95
Imperial College London	7,875
Institute of Cancer Research	30
King's College London	8,140
Kingston University London	4,425
London Business School	1,325
London Metropolitan University	2,305
London School of Economics and Political Science (LSE)	7,125
London School of Hygiene and Tropical Medicine	635
London South Bank University	1,590
Middlesex University	4,895
Queen Mary University of London	5,180
Ravensbourne	145
Rose Bruford College of Theatre & Performance	95
Royal Academy Of Music	360
Royal Central School of Speech and Drama	235
Royal College of Art	930
Royal College of Music	390
Royal Holloway, University of London	3,190
Royal Veterinary College	320
SOAS, University of London	2,730
St George's, University of London	595
St Mary's University, Twickenham	410
Trinity Laban Conservatoire of Music and Dance	260
UCL (University College London)	11,985
UCL Institute of Education	820
University of East London	2,215
University of Greenwich	4,405
University of London (Institutes and activities)	140
University of Roehampton	1,065
University of the Arts London	7,740
University of West London	2,300
University of Westminster	5,795



CONTACTS

This research was undertaken by London & Partners' Strategy and Insight team. London & Partners is London's official promotional organisation. Our job is to promote London and attract visitors, businesses, students, events and congresses to this remarkable world city. As part of our work, we try to understand why individuals choose to visit, study and invest in London, and also attempt to quantify the economic contribution they make.

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