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# The economic impact of the University of Exeter's international students

**APRIL 2010**

UNIVERSITY OF  
**EXETER**

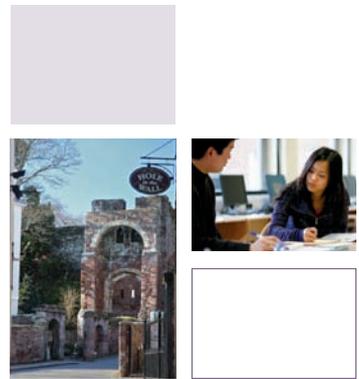


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**Oxford Economics** 121, St Aldates, Oxford, OX1 1HB  
 Tel: 01865 268900, Fax: 01865 268906 [www.oxfordeconomics.com](http://www.oxfordeconomics.com)

# Executive Summary



**The University of Exeter's international students paid around £30.3 million in fees...**

We estimate that the University of Exeter derived about £30.3 million of revenues from fees of all international students in 2009/10. This added, in total through direct and multiplier effects, £27.7 million to the city's economy.

**...with subsistence spending by these students contributing a further £24.4 million to GDP in Exeter...**

We estimate that the total contribution to Exeter's GDP in 2009/10 from subsistence spending by the 4,000 international students at the University of Exeter was around £44 million. Once allowing for imports we find that the impact upon GDP is around £24.4 million.

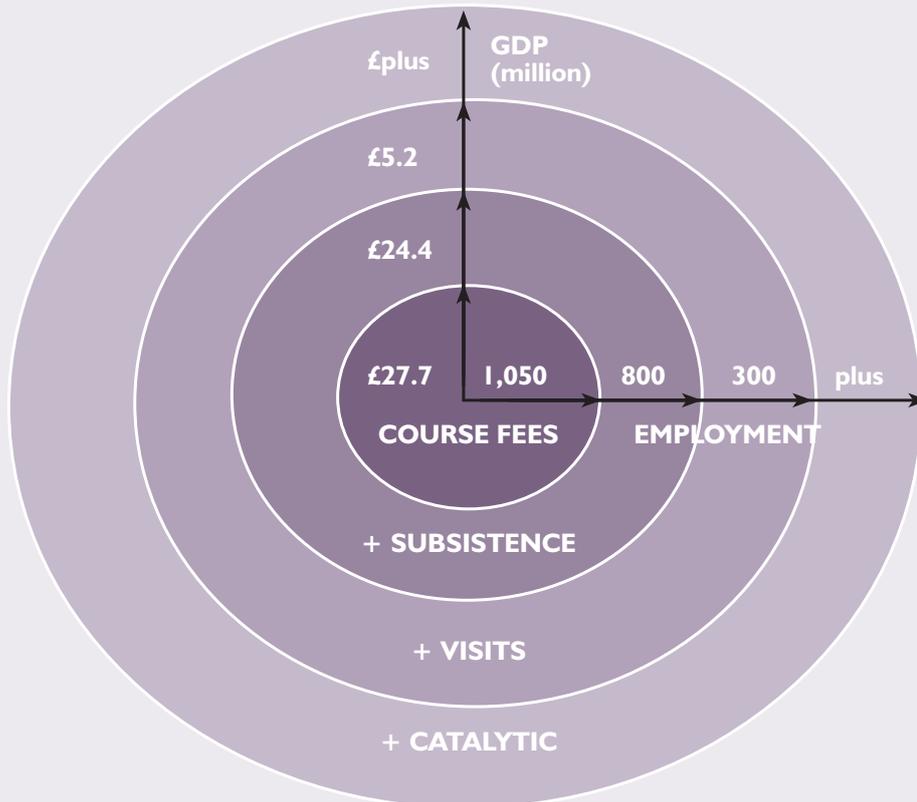
**...and visits by friends and relatives adding a further £5.2 million to Exeter's GDP in 2009/10**

Our estimates for the total amount of spending by visitors to Exeter whose primary reason for entry was to visit a student at the university is £8 million in 2009/2010. Adjusting for imports we find that the impact upon GDP is around £5.2 million.

**In total, international students studying at the University of Exeter will contribute £57.4 million to the city's GDP in 2009/10 at current prices and support over 2,100 jobs or 2.3% of all jobs in the city...**



## Executive Summary (cont)



**...but the catalytic effects mean the overall contribution of Exeter's international students to the economy is far wider than these direct and multiplier effects**

These wider benefits are more intangible and so less easy to measure, but nevertheless ultimately have a very real impact upon the city's and UK's economy. These economic benefits result from the social and cultural links that build up as a result of international students studying in the city.

For example, contact that is initially made by visitors studying in Exeter may eventually lead to other economic links as these students become more aware of what Exeter and the UK more generally have to offer and return to take up important roles in their home countries.



# I. Introduction

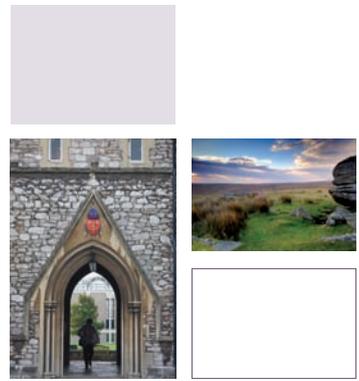
## I.1. The brief

The University of Exeter has requested Oxford Economics to undertake an impact study on the economic contribution of international students – i.e., students whose domicile is not in the UK, from a regional and a local perspective.

The key areas to be included in the quantification of this contribution are:

- Fees;
- Subsistence; and
- Family visits while studying at the University of Exeter.





## 2. Economic impact of the University of Exeter's international students

### 2.1. Introduction

This section of the report looks at the total economic contribution of international students studying at the University of Exeter's Exeter campuses in 2009/10 under three headings:

- Fees paid;
- Subsistence spending by international students; and
- Visits by family and friends to students while they are studying at the university.

These three drivers can in conjunction be seen as the direct impact of international students on the city's economy. The report also considers multiplier impacts on other sectors of the regional and local economy.

### 2.2. Fees

In order to derive income from fees we have made use of the Financial Statements from the University of Exeter. Here, the income from fees is presented disaggregated by degree type (Undergraduate or Postgraduate), study mode (Full-time or Part-time), and fee status (Home / EU or International).

The data does not distinguish between UK and non-UK domiciled for Home / EU students. Therefore, using the headcount by school, domicile, and campuses we have calculated the number of UK domiciled, and international students out of the total number of Home / EU students at the Exeter campuses, for each degree type, school, and mode of study.

Then, depending on the "Fee Bands" for each school, degree type, and mode of study, we have estimated the amount of Home / EU fees that correspond to UK-domiciled and international students. These figures are then summed and compared to the University's revenue forecasts, and, where different to the forecasts, are used to pro rata the University's fee income forecasts between UK-domiciled and international students in the Home / EU fee band.

Table 2-1 presents the fee revenue generated from international students at the Exeter campuses in 2009/10, disaggregated by degree level, and student origin. The table, together with Figure 2-1, shows that for each level of study, the primary source of international student fee income is from non-EU students – a result that is not unsurprising given the differential of the fees levied on non-EU and EU students (for example a full-time EU undergraduate pays £3,225 per year, while a non-EU student doing the same course will pay either £10,000 or £12,250 depending upon the area of study). All-told international students at the University's Exeter campuses spent £30.3 million on fees for the 2009/10 academic year.



**Table 2-1: Breakdown of fee revenue from international students 2009/10 (£ million)**

EU Undergraduate	1.7
Non-EU Undergraduate	8.8
<hr/>	
EU Taught Postgraduate	1.1
Non-EU Taught Postgraduate	14.0
<hr/>	
EU Research Postgraduate	0.7
Non-EU Research Postgraduate	4.0
<hr/>	
<b>Total Fee Income</b>	<b>30.3</b>

Source: Oxford Economics/University of Exeter





**Figure 2-1: Share of fee revenue from international students 2009/10 by origin**



Source: Oxford Economics/University of Exeter

From this fee income, we have estimated the direct contribution to local and regional GDP. This expenditure does not equal direct GDP, given that some of the expenditure of the University would consist of intermediate consumption, and therefore, would not contribute to direct local or regional GDP. On the other hand, some of this expenditure will go, for instance, to pay wages of University employees that would work in the region, and therefore would add to both direct local and regional GDP. We have estimated the direct GDP impact using the ratio between expenditure and GDP from our Exeter and South West input-output tables.

Having estimated the direct contribution to GDP, we then estimated the multiplier impact on GDP that is attributable to fee income using the same input-output tables. The multipliers capture:

- **Indirect impacts** – employment and activity supported in the local or regional supply chain, as a result of purchases of goods and services from local suppliers.
- **Induced impacts** – employment and activity supported by those directly or indirectly employed spending their incomes on goods and services in the local economy. This helps to support jobs in the industries that supply these purchases, and includes jobs in retail outlets, companies producing consumer goods and in a range of service industries.

Adding them all up, we will obtain the total contribution to GDP.



**Table 2-2: Contribution to GDP of fee revenue from international students 2009/10 (£ million)**

	Exeter	South West
Direct effect	21.9	21.9
Indirect effect	0.9	3.0
Induced effect	4.9	7.4
<b>Total Fee GDP Contribution</b>	<b>27.7</b>	<b>32.3</b>

Source Oxford Economics

Table 2-2 presents the contribution of international student fees to both Exeter's and the South West's GDP. Utilising the output-to-GDP ratio for education, the £30.3 million expenditure made by international students on course fees translates to a direct GDP contribution of £21.9 million. The direct GDP effect of international student fees is the same for both Exeter and the South West, due to the expenditure occurring only within Exeter. Differences in the results appear at the indirect and induced effect levels, consequently leading to different levels of total GDP contribution at the local and regional levels.

The payment of £30.3 million in fees by international students at the University of Exeter's Exeter campuses contributes a total of £27.7 million in GDP to Exeter's economy. By contrast, the same expenditure contributes £32.3 million to the South West's economy. The South West receives a high GDP contribution from fees than Exeter due to the lower level of leakage in the economy – for example the purchase of goods by the University from a supplier in Somerset creates GDP which is not captured in the Exeter economy, but is captured in the South West economy.

Overall, expenditure on fees by international students in Exeter generates a total GDP multiplier of 1.27 in the Exeter economy. The GDP multiplier for the South West economy from the same expenditure is higher at 1.47, due to lower levels of leakage.



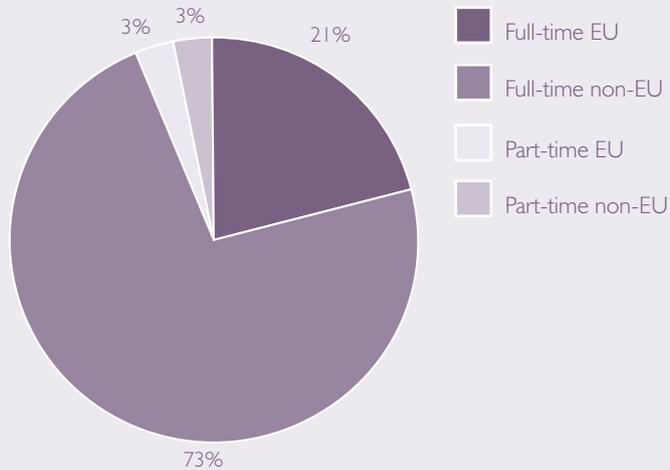


### 2.3. Subsistence

Subsistence spending refers to all spending by international students on goods and services other than their education fees. It includes, for instance, expenditure on food, rent, travel and entertainment. For estimating subsistence expenditure, we have made use of the Student Income and Expenditure Survey (SIES). The SIES provides a wealth of information on the spending habits of both full- and part-time students, indentifying the key areas in which these students make purchases. Unfortunately, this survey makes not distinction between domestic and international students. Therefore, we have adjusted the overall spending figure for students to reflect the different mode of study of international students compared to domestic students.

In the 2009/10 academic year some 4,052 international students were based at the University of Exeter's Exeter campuses undertaking full- or part time study; international students represented one-quarter of the campuses' student population. Six percent of the international students at the Exeter campuses were undertaking part-time study, with numbers evenly split between EU and non-EU nationals. The remaining 94 percent of international students were engaged in full-time study, with the vast majority coming from the non-EU nations (Figure 2-2).

**Figure 2-2: International Students at the Exeter campuses 2009/10**



Source Oxford Economics/University of Exeter

From the subsistence expenditure, we will have to calculate the direct contribution to local and regional GDP. Expenditure does not equal direct GDP, because some of the goods and services bought by the students would be sourced from abroad or in other regions of the UK and abroad. However, students will also spend their money for instance, on local pubs and restaurants employing local people, therefore contributing to direct regional GDP. Again, we have estimated what proportion of expenditure directly contributes to local and regional GDP, using regional input-output tables.

Having estimated the direct contribution to local and regional GDP, we again estimate the multiplier impacts on local and regional GDP, and adding them up, we obtain the total contribution to local and regional GDP.



**Table 2-3: Contribution to GDP of subsistence spending by international students 2009/10 (£ million)**

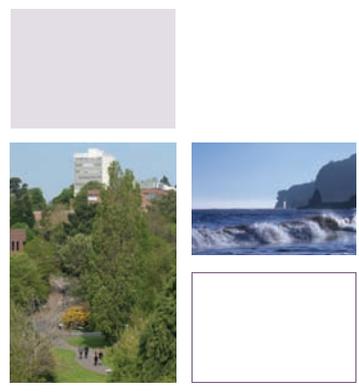
	Exeter	South West
Total international Subsistence Expenditure	43.6	43.6
Direct Effect	20.4	20.4
Indirect Effect	1.2	4.2
Induced Effect	2.8	4.6
<b>Total Subsistence GDP Contribution</b>	<b>24.4</b>	<b>29.2</b>

Source Oxford Economics

Table 2-3 presents the figures for expenditure by international students in Exeter in 2009/10. It is estimated that total spending by international students at The University of Exeter is £44 million. However, at least some of that expenditure is likely to be on imports and so will not result in a boost to the local or regional economies. Accounting for this we estimate that the boost to Exeter and South West GDP in 2009/10 from spending was about £21 million.

When local supply chains and employee expenditure are taken into account the boost to Exeter's GDP generated by the subsistence expenditure of international students at the University of Exeter's Exeter campuses grows to £25 million. This results in a GDP multiplier for subsistence spending of 1.20 in Exeter. As seen with expenditure on fees, the total boost to the South West economy from subsistence spending is greater than that experienced by Exeter, due to lower leakage levels. In total, the subsistence spending of international students at the Exeter campuses boosted South West GDP by £30 million; a GDP multiplier of 1.43.



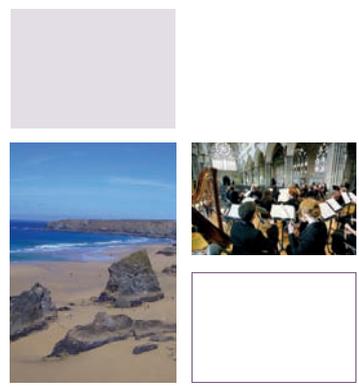


## 2.4. Additional visitor impact

The final element of the calculation of the impact of international students at The University of Exeter is the expenditure by friends and relatives from abroad visiting international students who were domiciled in Exeter during 2009/10. The source used for this data is the International Passenger Survey (IPS). This provides detailed expenditure by various types of visitor to the UK as a whole including data on those who describe the primary reason for their journey as visiting friends and relatives. The data is also partially broken down by the country of origin of the visitors. However, there are three areas in which the data is still insufficiently detailed:

- The IPS provides detailed expenditure data by visitor and country of origin for the UK as a whole. However, the breakdown of the data by each region of the UK, including South West, is less detailed. Consequently we have had to produce estimates based upon the available data.
- The IPS data merely specifies that visitors are visiting friends and relatives. It does not specify who their friends and relatives are, or whether or not they are students. We have assumed here that visitors are all visiting foreign nationals from their own country and that the percentage of these visits that are to students are proportionate to the percentage of the population of that nationality that is made up of students. For example, by growing the 2001 Census data by regional population growth to calculate population figures suggests that there were close to 11,000 persons of US citizenship living in the South West in 2009, while the HESA data shows that there were slightly less than 160 US students in Exeter at that time. Consequently we have assumed that around 1.4% of the American visitors to the South West in 2009/10 who claimed to be visiting friends or relatives were visiting students in Exeter.
- Finally, the IPS data does not specify where within the South West visitor spending takes place. Therefore, we have assumed that those visiting students at the University of Exeter conduct all their spending in Exeter.





**Table 2-4: Spending by visitors to Exeter visiting international students in Exeter 2009/10 (£ million)**

	Exeter	South West
Total Visitor Expenditure	7.8	7.8
Direct Effect	4.4	4.4
Indirect Effect	0.3	0.9
Induced Effect	0.6	1.0
<b>Total Additional Visitor GDP Contribution</b>	<b>5.2</b>	<b>6.3</b>

Source Oxford Economics

Table 2-4 shows our estimates for the total amount of spending by visitors to Exeter whose primary reason for entry was to visit a student. Total expenditure by all such visitors to Exeter in 2009/10 was £8 million. However, as some of this expenditure would have gone on imports the impact upon GDP would be smaller than this. Adjusting for this we find that the impact upon GDP is £4 million in both the South West and Exeter. Spending by visitors to students in Exeter has a GDP multiplier of 1.20, leading the additional visitors attracted by international students at the Exeter campuses to boost Exeter GDP by £5 million in 2009/10. Once again the corresponding GDP multiplier for the South West is greater, at 1.44, than that for Exeter due to lower import levels. Consequently, the GDP boost experienced by the South West as a result of these additional visitors equates to £6 million.





## 2.5. Total contribution to GDP

The overall contribution to GDP is summarised in Table 2-5 and Figure 2-3. The overall impact of the University of Exeter's international students on Exeter GDP at current prices in 2009/10 was £57.4 million. The largest contribution was from payment of fees by students, which is estimated at £27.7 million (or 48 percent of total GDP boost); subsistence expenditure by students is estimated to have contributed £24.4 million (43 percent), while the impact of spending by visitors was a relatively minor £5.2 million (9 percent). In the context of the Exeter economy, the GDP boost generated by international students at the Exeter campuses equates to 1.6% of total Exeter GDP.

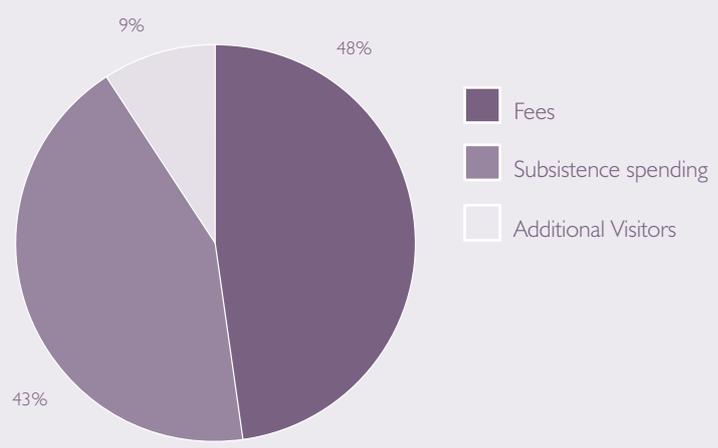
**Table 2-5: Overall contribution to GDP by international students 2009/10 (£ million)**

	Exeter	South West
<b>Fees</b>		
Direct Effect	21.9	21.9
Indirect Effect	0.9	3.0
Induced Effect	4.9	7.4
<b>Total</b>	<b>27.7</b>	<b>32.3</b>
<b>Subsistence spending</b>		
Direct Effect	20.4	20.4
Indirect Effect	1.2	4.2
Induced Effect	2.8	4.6
<b>Total</b>	<b>24.4</b>	<b>29.2</b>
<b>Additional Visitors</b>		
Direct Effect	4.4	4.4
Indirect Effect	0.3	0.9
Induced Effect	0.6	1.0
<b>Total</b>	<b>5.2</b>	<b>6.3</b>
<b>Overall Total GDP Contribution</b>	<b>57.4</b>	<b>67.8</b>

Source Oxford Economics



**Figure 2-3: Overall contribution to GDP by international students 2009/10**



Source Oxford Economics

Table 2-5 also presents the total GDP contribution of international students at the Exeter campuses on the economy of the South West. The overall GDP impact in 2009/10 was £68 million at current prices. As with the results for Exeter the payment of fees was the largest contributor to this boost, equalling £32 million. Subsistence spending by students contributed £30 million, while additional visitors generated a GDP boost of £6 million.

## 2.6. Impact on employment in Exeter

The impact of international students on employment can be calculated by dividing the GDP figure by an estimate for productivity. The productivity figures we have used here are GDP per employee in the South West. As with the GDP impacts it is possible to calculate the direct, indirect and induced employment impacts by dividing the direct, indirect and induced GDP impacts by relevant productivities. At each level of impact we use the productivity of the industry in which spending is taking place, which we determine using input-output analysis. For example, to calculate the direct employment generated by fees we have used an estimate of GDP per employee in higher education (which is in the order of £26,000 of GDP per employee).

Table 2-6 displays the results of these calculations, suggesting that the GDP generated directly from international students at the Exeter campuses supported over 1,770 jobs in Exeter. Further impacts throughout the supply chain and from employee spending lead to a total of 2,120 jobs supported by international students in Exeter, equating to 2.3 percent of Exeter's workforce. In the South West region as a whole, the spending of international students in Exeter supports 2,410 jobs.



**Table 2-6: Overall employment supported by international students 2009/10**

	Exeter	South West
Direct Effect	1,770	1,770
Indirect Effect	70	220
Induced Effect	280	420
<b>Total Employment Supported</b>	<b>2,120</b>	<b>2,410</b>

Source Oxford Economics

### 2.7. Catalytic effects of international students upon Exeter's GDP

The main focus of the report is on the direct and more easily measurable impacts of international students upon Exeter's economy. However, we will conclude by saying something about other effects which will be longer term are more intangible and so less easy to measure, but will nevertheless ultimately have a very real impact upon the UK and Exeter economies. We have termed these economic benefits, which result from the social and cultural links that build up as a result of international students studying in Exeter, catalytic effects. They include:

- The injection into the workforce of additional well educated and dynamic workers. However, even if these students return home rather than staying to work in Exeter the links that they build up with the city could show up in other ways. Some for instance will end up working for UK companies later on in their careers and the language and other social skills that they will have acquired in their time as students will undoubtedly help with that.
- International students who studied in Exeter are also likely to develop a predilection for UK products both in their personal and professional lives. Over time this should act as a considerable boost to UK exports.
- Indeed the benefits of these links should not be underestimated. Many of these international students will return home to eventually play important roles in their country. So a predilection for or even bias in favour of anything British will potentially have a considerable impact upon the UK economy.





Professor Neil Armstrong  
Deputy Vice-Chancellor  
(Internationalisation)  
University of Exeter  
Northcote House  
The Queen's Drive  
Exeter  
EX4 4QJ

Dr Shaun Curtis  
Director of International Exeter  
University of Exeter  
8th Floor, Laver Building  
North Park Road  
Exeter  
EX4 4QE

Email: [international@exeter.ac.uk](mailto:international@exeter.ac.uk)

[www.exeter.ac.uk/international](http://www.exeter.ac.uk/international)

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