

Impact Assessment, The Home Office

Title: Impact Assessment for the Graduate Route

Date: 4 March 2021

IA No: HO0386

Stage: FINAL

RPC Reference No: N/A

Intervention: Domestic

Other departments or agencies:

Measure: Secondary legislation

Enquiries:

StudentMigrationPolicyTeam@homeoffice.gov.uk

RPC Opinion: Not Applicable

Business Impact Target: Non qualifying provision

Cost of Preferred (or more likely) Option (in 2021 prices)

Net Present Social Value NPSV (£m)	18,600	Business Net Present Value BNPV (£m)	10,600	Net cost to business per year EANDCB (£m)	3.7
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What is the problem under consideration? Why is government intervention necessary?

The Government has introduced the UK Points-based Immigration System, a single, global immigration system. International students coming to study in the UK under the Student route can only stay in the UK to work if they qualify a work-based immigration route. The Government is introducing the Graduate route as an alternative to allow graduates from UK higher education providers, with a track record of compliance, the opportunity to work and look for work for two years (three years for PhD level graduates) after graduation.

What is the strategic objective? What are the main policy objectives and intended effects?

The Graduate route is introduced to enhance the offer to international students who choose, or are considering choosing, to study in the UK. It is intended to retain their talent upon graduation thus contributing to the UK economy. Through increasing the attractiveness of the UK as a destination of study, the policy will ensure the UK remains internationally competitive, assist to achieve the Government's ambition to increase the number of international students in higher education and increase the value of education exports.

What policy options have been considered, including any alternatives to regulation? Please justify preferred option (further details in Evidence Base)

The options considered are:

Option 0 – Do nothing: this option does not meet the Government's objectives.

Option 1 – Introduce the Graduate route to allow international students to stay in the UK to work or look for work after graduation for a number of years depending on their level of study. **This is the Government's preferred option.**

Main assumptions/sensitivities and economic/analytical risks

Discount rate (%)

3.5

The estimates of additional students who may choose to study in the UK due to the Graduate route and the estimates of graduates who will stay in the UK on the Graduate route are highly uncertain. Estimates are based on several assumptions to model students' intentions and behaviour. Assumptions about the activity of graduates on the Graduate route are also highly uncertain. Therefore, results should be considered indicative. Sensitivity analysis has been conducted to produce ranges around central estimates to capture uncertainty. Sensitivity has been conducted also to test the potential impact of the Covid-19 pandemic.

Will the policy be reviewed? It will be reviewed. If applicable, set review date: 2026

I have read the Impact Assessment and I am satisfied that, given the available evidence, it represents a reasonable view of the likely costs, benefits and impact of the leading options.

Signed by the responsible Minister:		Date:	4 March 2021
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Summary: Analysis & Evidence

Policy Option 1

Description: Introduce Graduate route

FULL ECONOMIC ASSESSMENT

Year(s):	Price Base	2021/22	PV Base	2021/22	Appraisal	10	Transition	1
Estimate of Net Present Social Value NPSV (£m)						Estimate of BNPV (£m)		
Low:	7,400	High:	25,100	Best:	18,600	Best BNPV	10,600	

COSTS, £m	Transition Constant Price	Ongoing Present Value	Total Present Value	Average/year Constant Price	To Business Present Value
Low	0	3,800	3,800	380	6
High	0.02	9,600	9,600	960	90
Best Estimate	0	7,000	7,000	700	60

Description and scale of key monetised costs by 'main affected groups'

Education providers: familiarisation and ongoing costs £60 million.

Home Office: processing costs of £120 million.

Exchequer: additional international students and graduates may increase in public service expenditure of around £6.8 billion.

Other key non-monetised costs by 'main affected groups'

Potential wider costs due to increased immigration from higher volume of international students and extended duration of stay when international students graduate, such as indirect costs on congestion and housing, have not been quantified. The impact of immigration on these costs are uncertain and particularly difficult to quantify.

BENEFITS, £m	Transition Constant Price	Ongoing Present Value	Total Present Value	Average/year Constant Price	To Business Present Value
Low	0	11,100	11,100	1,110	2,700
High	0	34,600	34,600	3,460	13,700
Best Estimate	0	25,600	25,600	2,560	10,600

Description and scale of key monetised benefits by 'main affected groups'

Education providers: increased tuition fee income through additional international students of £10.6 billion.

Home Office: fee income from Student route and Graduate route of £1.7 billion (includes IHS).

Exchequer: additional students and graduates may increase in revenue of around £13.3 billion.

Other key non-monetised benefits by 'main affected groups'

Benefits to employers from accessing a pool of candidates without sponsoring requirements and long-term impacts on skilled work migration have not been quantified. The introduction of the Graduate route may be associated with an increase in UK soft power and international reputation by having a well-regarded offer to international students, and through international students and graduates' positive perceptions of the UK.

BUSINESS ASSESSMENT (Option 1)

Direct impact on business (Equivalent Annual) £m: 3.7										
Cost, £m	3.7	Benefit, £m	0	Net, £m	3.7					
Score for Business Impact Target (qualifying provisions only) £m:										
Is this measure likely to impact on trade and investment?						Y				
Are any of these organisations in scope?			Micro	N	Small	Y	Medium	Y	Large	Y
What is the CO ₂ equivalent change in greenhouse gas emissions? (Million tonnes CO ₂ equivalent)					Traded:	N/A	Non-Traded:	N/A		

PEOPLE AND SPECIFIC IMPACTS ASSESSMENT (Option 2)

Are all relevant Specific Impacts included?	Y	Are there any impacts on particular groups?	N
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Evidence Base

A. Strategic overview

A.1 Strategic Objective

1. The main strategic objectives of the policy are to use the new Points Based Immigration System to attract talent from around the world and contribute to the UK economy. The policy will also contribute to advancing Britain's place in the world.

A.2 Background

2. Following the end of freedom of movement for citizens from the European Union, the Government has introduced a Points Based Immigration System for all non-UK citizens who move to the UK. International students can come and study in the UK under the recently launched Student route, which replaces the former Tier 4 study route. The Student route allows students to stay in the UK for up to four months after graduation to look for work.
3. As part of the UK Points Based Immigration System, the Graduate route has been developed to assist international students who graduate from UK higher education providers with a track record of compliance to remain in the UK for an additional finite length of time to work or look for skilled work in the UK.
4. In their report on the "*Impact of International Students*", published in September 2018, the Migration Advisory Committee found that international students generally bring an economic benefit to the UK¹. "*The International Education Strategy*"², updated in February 2021, re-stated the ambition to increase the number of international Higher Education (HE) students in the UK to 600,000 by 2030 (the number is currently around 485,000), and to increase the value of our education exports to £35 billion per year by 2030.
5. The Graduate route will contribute to making the UK an attractive country for international students and play a role in ensuring the UK's education sector remains competitive in the rapidly expanding global market of overseas education, thus contributing to achieving the Government's objectives on international students.
6. The Graduate Immigration Route will be available to international students who have completed a degree at undergraduate level or above, or a limited number of additional qualifications, at a higher education provider with a track record of compliance and who have existing permission under Tier 4 or the Student route, as applicable, at the time of application. Successful applicants on this route will be able to stay and work, or look for work, in the UK at any skill level for a maximum period of two years, or three years for PhD graduates. Graduates will be able to switch into the Skilled Worker route, or another work-based immigration route, such as the Start-up or Innovator route, at the end of the time spent on the Graduate route, if they have found a suitable job and meet the requirements of the route.
7. The new route will be launched in the summer of 2021, meaning that any eligible student who graduates in the summer of 2021 or after and meets the requirements will be able to apply for the route. This includes students who have already started their courses before the route is launched, provided they meet the requirements.

¹https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/739089/Impact_intl_students_report_published_v1.1.pdf

² <https://www.gov.uk/government/publications/international-education-strategy-2021-update>

8. Those on the Graduate route will not be able to bring new dependants (spouses/partners and dependent children under the age of 18 years) to the UK. They will only be able to include existing family members who were granted permission as their dependants on their Tier 4 or Student route permission and where those dependents are already in the UK, or when a child has been born in the UK during either a period of Student or Graduate permission and not yet regularised their immigration status. However, the route will not contribute towards settlement.
9. Immigration remains reserved across the whole of the UK. Requirements for the new Graduate route will apply across the nations of the UK equally.

A.2 Groups affected

10. The main groups that would be directly affected by the policy are:
 - International students³
 - UK education institutions who sponsor international students
 - UK employers and organisations who wish to recruit international students
 - The Home Office

A.3 Consultation

Within Government

11. The Government set out its overarching intent on the introduction of a points-based immigration system in a policy statement, '*The UK's points-based immigration system*⁴', in February 2020. Further details were published in a further policy statement, '*The UK's points-based immigration system: further details*' on 13 July 2020 and updated on 4 August 2020⁵, which includes details of the Graduate route.
12. The Student Migration policy team has engaged with business units across the Home Office and relevant other Government departments, to ensure that affected teams are aware of the changes and are satisfied that the plan is deliverable.

External Consultation

13. The Home Office has engaged extensively with the education sector through the Education Advisory Group. This group consists of representatives of the Government, the Devolved Administrations and representative bodies of the education sector. It meets regularly and the Home Office has used this group as a forum to request feedback on the policy and engage with the sector about policy development.
14. The Graduate route has also been discussed at other advisory groups, specifically the Employers Advisory Group, consisting of representatives of various employment sectors and businesses, and the National Advisory Group, consisting of representatives of employment sectors and business in the Devolved Administrations. The Simplification of the Rules Review Committee, established in response to Law Commission's recommendations, as set out in the Home Office's Response to the Law Commission Report on Simplifying the Immigration Rules on 25 March 2020, was consulted on the draft Graduate route immigration rules.

³ Including the dependent family members of international students

⁴<https://www.gov.uk/government/publications/the-uks-points-based-immigration-system-policy-statement/the-uks-points-based-immigration-system-policy-statement>

⁵ <https://www.gov.uk/government/publications/uk-points-based-immigration-system-further-details-statement/uk-points-based-immigration-system-further-details-statement>

B. Rationale for intervention

15. The Graduate route will form part of the recently launched UK Points-based Immigration System.
16. The route offers the opportunity to international students to work or look for work in the UK after graduation for a longer period than allowed under the Tier 4 and Student routes thus allowing the UK to retain talent and international students to contribute to the UK economy after graduation.
17. The route will also increase the attractiveness of the UK's offer to international students, ensuring the UK's higher education sector remains internationally competitive and assisting in the ambition to increase the number of international students in higher education as set out in the International Education Strategy⁶

C. Policy objectives

18. The broad objectives of the Graduate route are to:
 - Ensure graduates are able to apply for permission to remain in the UK under the route within the UK Points-based Immigration System from summer 2021.
 - Support the Government's manifesto commitment to help UK higher education providers attract talented students and allow students to stay on and apply for work after they graduate.
 - Enable employers to recruit the skilled graduates they need and ensure labour market pressures in key sectors are managed effectively.
 - Maintain and improve the UK's standing as a world-leading provider of international higher education.

D. Options considered and Implementation

D.1 Options Considered

Option 0: Do nothing

19. Under the 'do nothing' option, the analyses assume current arrangements would remain in place. Under current arrangements an international student on either the Tier 4 or Student routes⁷ can stay in the UK for up to 4 months after graduation. If they have not found work under the Skilled Worker route⁸, or another immigration route for which they meet the requirements by the end of their study visa, they are not allowed to stay in the UK and must leave the country. As such, the 'do nothing' option means the main route available to international graduates to stay in the UK for work related reasons is the Skilled Worker route.
20. Under the 'do nothing' option, international students who graduate in the UK have fewer options to remain in the UK to work or look for work. This option limits the ability to retain talent in the UK and graduates' contribution to the UK economy. Therefore, it is not considered a viable option to achieve the Government's objectives to help UK higher education providers attract talented students and allow students to stay on and apply for work after they graduate.

⁶ <https://www.gov.uk/government/publications/international-education-strategy-2021-update>

⁷ <https://www.gov.uk/government/publications/points-based-system-student-route>

⁸ <https://www.gov.uk/skilled-worker-visa>

Option 1: Preferred option

21. Under the preferred option, the Graduate route is implemented. The Government has committed to delivering a points-based system ensuring that the brightest and best students from around the world are able to study in the UK and continue to contribute to the UK economy after graduation.
22. The 'study' component of the points-based immigration system envisages a Student route, which has already been implemented, and the Graduate route to enable students to work or look for work after graduation⁹.
23. The Graduate route will also ensure the Government's objectives are met, including balancing the ability to attract and retain skilled and talented individuals whilst delivering a system that works in the interests of the whole of the UK¹⁰. As such this is the Government's preferred option.
24. The introduction of the Graduate route is only possible by introducing the requirements through Immigration Rules, which are used to regulate people's entry to and stay in the UK. Implementation of the Graduate route will also require changes to Immigration and Nationality (Fees) Regulations to introduce a fee for the Graduate route. Therefore, no alternatives to the introduction of secondary legislation have been considered.

D.2 Implementation plan

25. The new Graduate route will be introduced as part of the phased implementation of the UK's Points-Based Immigration System.
26. The Graduate route will be introduced through Immigration Rules under secondary legislation. Immigration Rules are planned to be laid in Parliament on 3 March 2021 and they are expected to come into effect on 1 July 2021. Changes to the Immigration and Nationality (Fees) Regulations 2018 will also be required to introduce a fee for the Graduate route, these are planned to be laid in Parliament on 10 March 2021. Applications under the Graduate route will be administered and processed by UK Visa and Immigration, which is part of the Home Office and runs the UK visa service¹¹.
27. The Home Office will keep the route under review and will continue to refine the system in the light of experience. The Home Office will engage with stakeholders, such as applicants and higher education providers to collect feedback on the Graduate route. The Home Office will also work with officers administering and processing applications to ensure the system runs smoothly and effectively. Depending on the feedback received adding further flexibility into the system will be considered.

E. Appraisal

28. The Graduate Route will be part of the UK Points-based Immigration System, which creates a single, global points-based system. The features of the UK Points-based Immigration system build on the immigration system in place for non-EEA citizens before the end of freedom of movement for EU, EEA, and Swiss citizens¹².

⁹ <https://www.gov.uk/government/publications/uk-points-based-immigration-system-further-details-statement/uk-points-based-immigration-system-further-details-statement>

¹⁰ <https://www.gov.uk/government/publications/the-uks-points-based-immigration-system-policy-statement/the-uks-points-based-immigration-system-policy-statement>

¹¹ <https://www.gov.uk/government/organisations/uk-visas-and-immigration>

¹² <https://www.gov.uk/government/news/immigration-act-receives-royal-assent-free-movement-to-end-on-31-december-2020>

29. The Graduate route will be open to all international students who have successfully completed a degree at undergraduate level or above, or another eligible professional qualification, at a compliant higher education provider during their most recent period of leave as a Student or under Tier 4 provided this is still held on the date of application. Graduates will be able to stay in the UK for work or to look for work for a period of two years if they graduate at undergraduate or master's level, and three years if they graduate with a PhD.
30. This IA considers the costs and benefits of the Graduate route. It estimates the number of graduates who are likely to apply for the route and the economic impacts associated with their stay in the UK while on the Graduate route. The IA also considers the impact that the Graduate route may have on international students' enrolment, as more students may apply to study in the UK due to the introduction of the route. The policy appraisal period is from 2021/22 to 2031/32, a period of 10 years.

E.1 General Assumptions and Data

E.1.1 Background

International students in Higher Education

31. The volume of international students coming to study in the UK has been increasing in recent years. The Higher Education Statistics Agency (HESA) provides data on students at HE level.
32. As freedom of movement from EU, EEA and Swiss citizens ended on 31 December 2020, data available on international students typically distinguishes them into EU and non-EU students, as the two groups were covered by different arrangements.
33. The HESA data shows that the total number of international students in HE in the UK has increased by around 6 per cent on average per year between 2015/16 and 2019/20, with a 12 per cent increase in 2019/20 compared to the year before¹³. There were approximately 145,000 EU domiciled¹⁴ and 390,000 non-EU domiciled students were enrolled in higher education providers in the UK in 2019/20.
34. Of these, there were around¹⁵:
- 130,000 full-time EU and 370,000 full-time non-EU students.
 - 10,000 part-time EU and 20,000 part-time non-EU students.
 - 100,000 EU undergraduate students and 180,000 non-EU undergraduate students.
 - 45,000 EU postgraduate students and 215,000 non-EU postgraduate students
35. HESA also provide estimates of the qualifications achieved¹⁶ by international students. The total number of qualifications achieved by international students has also been increasing since 2015/16, with 235,000 international students achieving a HE qualification in 2019/20¹⁷. Of these, 55,000 were from the EU and 180,000 were non-EU students.

¹³ <https://www.hesa.ac.uk/data-and-analysis/students/where-from>

¹⁴ EU domiciled students include Irish students. However, they will not be subjected to immigration restrictions under the UK Points-based immigration system. Of the individual domicile data that is available on HESA, it indicates that Irish students only account for a small proportion of EU students (around 5%) so it is unlikely to significantly impact the overall results.

¹⁵ <https://www.hesa.ac.uk/data-and-analysis/students/where-from>. Figures may not sum to rounding and are rounded to the nearest 5,000.

¹⁶ <https://www.hesa.ac.uk/data-and-analysis/students/outcomes>. Figures may not sum to rounding and are rounded to the nearest 5,000.

¹⁷ The pandemic did not have any notable impact on student enrolment figures for 2019/20 but did have an impact on qualifications awarded. The impact can be seen in the decrease in the number of qualifications achieved in 2019/20 compared with 2018/19, particularly among part-time students. (<https://www.hesa.ac.uk/data-and-analysis/students/outcomes>)

36. The decision to come and study in the UK is determined by many factors, such as cultural links, quality of education, employment, cost of education, language, or further study opportunities associated with chosen education course or institution and other reasons.
37. Hobson's International Survey (2017) found that the most important factors for choosing a country to pursue further study were: the quality of teaching (27 per cent), the openness to international students (23 per cent), the ability to obtain a visa (21 per cent) and the cost of living (20 per cent).¹⁸

Graduates outcomes

38. The HESA launched the Graduate Outcome survey in 2017 to collect data on students graduating from a higher education course in the UK. The survey replaces the Destination of Leavers from Higher Education survey (DLHE) which collected data on the destination of graduates since 1994/95.
39. The first release of Graduate Outcome survey data¹⁹ shows that for the 2017/18 academic year there were 49,460 EU-domiciled graduates and 149,880 non-EU domiciled graduates²⁰. The complete response rate from EU domiciled graduates was 46 per cent, while for non-EU domiciled graduates it was 29 per cent²¹.
40. Graduates are contacted 15 months after graduation. Of those who responded:
- 64% of EU and 61% of non-EU were in full-time, part-time or other forms of employment²²
 - 14% of EU and 15% of non-EU were in full time or part time further study
 - 11% of EU and 10% of non-EU were in employment and further study
 - 6% of EU and 7% of non-EU were unemployed²³
 - 5% of EU and 7% of non-EU had other graduate activities, including travel, caring for someone or retired.
41. The data is based on graduates' domicile prior to starting the course from which they graduated, this may not reflect the country where they are based when they respond to the survey. Therefore the data shown above includes responses from international students who could be based in the UK or abroad.

E.1.2 Assumptions

42. The analysis focuses on the impact of the introduction of the Graduate route for international students who graduate with a degree from a UK higher education provider with a track record of compliance. Approved providers include Higher Education Institutions (HEIs) and Alternative Providers (APs). In 2018/19 there were 165 Higher Education institutions and 103 Alternative Providers²⁴. HEIs include all publicly funded universities and other higher education institutions, while APs are Higher Education providers who do not receive recurrent funding from Office for Students (previously HEFCE) or other public body and who are not further education colleges²⁵. The analysis in this IA includes impact on both HEIs and APs.

¹⁸ This survey is based on the responsiveness of 28,000 prospective international students, and the percentages are based on the times each item was ranked the most important when ranking the five most important factors.

¹⁹ <https://www.hesa.ac.uk/data-and-analysis/graduates/activities>

²⁰ Domicile refers to the graduate's permanent home address prior to starting the course from which they graduated. This is used as a proxy but may not be exactly representative of nationality. <https://www.hesa.ac.uk/collection/c18051/a/domicile>

²¹ <https://www.hesa.ac.uk/news/18-06-2020/sb257-higher-education-graduate-outcomes-statistics>

²² Includes unknown patterns, voluntary and unpaid employment.

²³ Includes unemployed and due to start work (around 1%), and unemployed and due to start further study (less than 1%).

²⁴ <https://www.hesa.ac.uk/support/providers>

²⁵ <https://www.hesa.ac.uk/support/definitions/ap-student>

43. With the Immigration and Social Security Coordination Act 2020 freedom of movement for EU, EEA and Swiss citizens who come to the UK has ended. For simplicity EU, EEA and Swiss citizens will collectively be referred to as EU citizens in the IA. The UK Government has introduced the UK Points-based Immigration system for all non-UK citizens who come to the UK. Under the system, all international students are required to comply with route requirements administered by the Home Office, which has recently launched the Student route for all international students. The impact of the launch of the Student Route on EU students has been estimated in a previous IA²⁶. The analysis presented in this IA takes account of the impacts on the volume of students quantified in the IA on the Student Route.
44. As a consequence of EU exit, the Department for Education recently announced changes to tuition fees and access to student loans for EU students at English HE and FE providers. The impact of these changes has been estimated in a separate impact assessment produced by DfE²⁷. The analysis presented in this IA accounts for the impact that changes to tuition fees and access to student loans is expected to have on the volume of EU students in England.
45. The analysis in this IA also assumes that EU graduates would only apply for the Graduate route if they began their course and travelled to the UK after 31 December 2020, as any EU student who started a course before this date are assumed to be registered on the EU Settlement Scheme and will therefore not require permission under the Student route to study in the UK or comply with the requirements for workers under the UK Points-based Immigration System.
46. The analysis assumes that graduates stay for the entirety of the length of their graduate permission, which is two years for undergraduates and master's students, and three years for PhD students. It is likely that some graduates may switch at an earlier point of their permission, but there is limited evidence to estimate this proportion.
47. The analysis also assumes that all applicants to the Graduate route are granted permission, this is equivalent to 100 per cent grant rate. While this is an uncertain assumption and some applicants may not be granted permission, this is considered a reasonable approach as the eligibility criteria require applicants to have completed a degree, or other eligible qualification in the UK at an approved provider and to meet suitability requirements, such as not having a criminal conviction. As international students have previously passed similar requirements on the Student route²⁸, or a Tier 4 visa, the majority of applicants are expected to be granted permission on the Graduate route.
48. The analysis only estimates the impact on the higher education sector as a whole, it does not account for impacts on individual institutions.
49. The analysis produces a net present social value (NPSV) to the associated costs and benefits of the proposed changes and the discount rate is 3.5 per cent, as recommended by the Green Book (HM Treasury 2020). The appraisal period is assumed to be over the first 10 years of the policy.
50. Due to wide range of estimates outlined in this analysis, a standardised approach to rounding numbers has been implemented. If estimates in this analysis are less than £1 million, it is rounded to the nearest £0.1 million. If it less than £10 million, it is rounded to the nearest £1 million. If it is between £10 million to £100 million, it is round to the nearest £5 million. If it is between £100 million and £1 billion, it is round to the nearest £10 million and if it's above £1 billion, it is rounded to the nearest £0.1bn. Exemptions to this assumption will be set out where necessary.

²⁶ [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/916601/IA - students.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/916601/IA_-_students.pdf)

²⁷ <https://www.legislation.gov.uk/ukxi/2021/127/impacts>

²⁸ To enter the UK, the student would have already passed a background check on criminality as described in the Student Immigration Rules, "ST2.1. The applicant must not fall for refusal under Part 9: grounds for refusal". (<https://www.gov.uk/guidance/immigration-rules/appendix-student>).

E.2 Baseline Volumes

51. Analysis estimates the volume of students graduating from UK higher education providers over the appraisal period. The analysis is conducted for graduating EU and non-EU students separately. As noted above, baseline volumes of EU students are calculated to be in line with DfE published analysis. Baseline volumes for non-EU students are based on recent growth trends on the number of students entering the UK.
52. This IA uses inflows of students, adjusted for the policies described above, and data on course duration to produce an estimate of the outflows of students who are graduating from UK higher education providers each year. Assumptions on course duration are based on HESA data from 2018/19 on students' expected study length²⁹, by level of study. The analysis also assumes a non-completion rate applied to all HE students. In the low scenario, it is assumed all students become graduates, whereas in the high scenario, it is assumed 15% of students will not graduate, based on the minimum sponsorship requirement for Students sponsors³⁰. The central estimate is an average between the two scenarios, leading to a 7% non-completion rate.
53. The analysis also makes assumptions on the number of students who would switch into skilled work once they graduate. These assumptions are set out below.

EU Student Volumes

54. Baseline volumes for EU students are based on estimates of graduating students that take account of recent changes to migration and education policy following the end of Freedom of Movement for EU, EEA and Swiss citizens. These baseline estimates are produced using a joint model developed by the Home Office and the Department for Education, which was used to estimate the impact of introducing visa requirements and changes to students' finance on the inflows and stock of EU students following the end of Freedom of Movement.
55. Visa requirements and the conditions applied by immigration status include the impact of paying visa fees and Immigration Health Surcharge, changes to work rights, and changes to ability to bring dependants. The impact of these policies on the volume of EU students were quantified in the impact assessment for changes to the Immigration Rules for Students published by the Home Office on 10 September 2020³¹.
56. Changes to student finance include changes to tuition fees from domestic to international students and removal of access to student loans. The impact of these policies on the volume of EU students were quantified in the impact assessment on removing home fee status and access to student finance in England for EU, other EEA, and Swiss nationals published by the Department for Education on 8 February 2021³².
57. The DfE analysis only models the impact of policy changes for EU students in England, as education is a devolved matter. As the Graduate route applies to the whole of the UK, this IA always evaluates the impact to the UK as a whole. Therefore, the analysis assumes that EU students will be considered as international students for the purpose of tuition fee and student finance access across the UK. The analysis therefore applies the same percentage reduction on volumes of EU students in the Devolved Administrations as in England. This assumption is uncertain. While it is considered proportionate, it is possible that the analysis may overestimate or underestimate the impact of changes to fee status and

²⁹ <https://www.hesa.ac.uk/collection/c18051/a/splength>

³⁰ To be a compliant student sponsor, a HE provider must have a course completion rate of at least 85 per cent
https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/939470/Student_Sponsor_Guidance_-_Doc_3_-_Compliance_2020-12.pdf

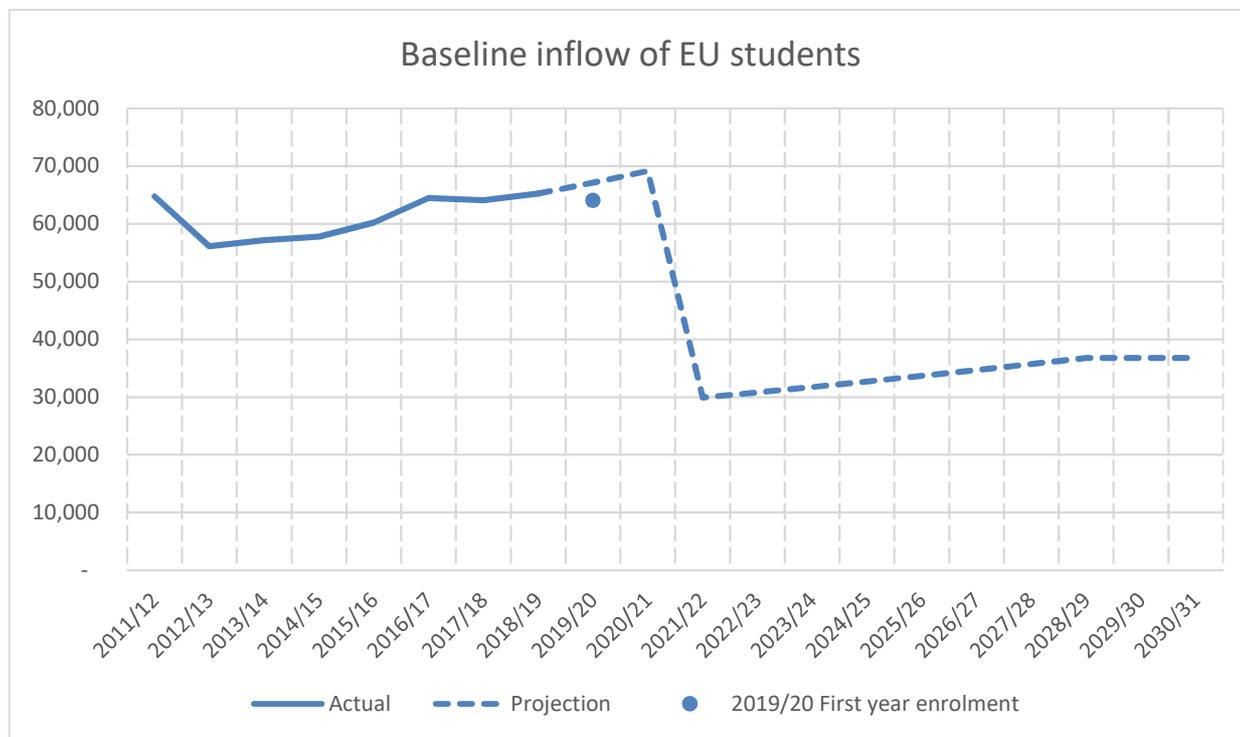
³¹ https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/916601/IA_-_students.pdf

³² <https://www.legislation.gov.uk/ukxi/2021/127/impacts>

access to student finance on the volume of EU students at higher education providers in the Devolved Administrations.

58. Figure 1 shows baseline inflows of EU students which take account of the recent migration and education policy changes. The analysis uses HESA data on first year enrolments up to 2018/19. Data for 2019/20 have been excluded for consistency with the approach taken for the non-EU baseline, which is set out below. Baseline analysis also excluded the impact of the Covid-19 pandemic, although sensitivity analysis has been conducted to account of the potential impacts of pandemic on students' enrolment and is set out in section G.

Figure 1: Baseline inflow of EU students, academic years 2011/12 to 2030/31.



Source: Home Office internal analysis. Data for all the United Kingdom.

Non-EU Student Volumes

59. This IA also models the inflows of non-EU students to produce estimate of outflows of non-EU students graduating from UK higher education providers. Estimates of inflows are based on HESA data on non-EEA domiciled first year students' enrolment up to 2018/19.

60. Data is available for 2019/20 when first year enrolment of non-EU students were 255,700³³. This figure represents a 23 per cent increase on the previous year, and given it follows the policy announcement on 11 September 2019³⁴, it is possible the increase may already include some behavioural impact of the Graduate Route on the inflow of students for the 2019/20 academic year. It is difficult to be certain about the extent of this response, but to be cautious, the 2019/20 enrolment data is not used for the purpose of producing a baseline student inflow.

61. First year non-EU students' enrolment have been on an upward trend since 2017/18, there was an 8 per cent increase in 2017/18 and 10 per cent in 2018/19. There is a high level of uncertainty around future enrolment of non-EU students, as this depends on demand for UK higher education as well as behaviour of UK higher education providers. Given the further increase observed for 2019/20, the

³³ Rounded to the nearest 100. <https://www.hesa.ac.uk/news/27-01-2021/sb258-higher-education-student-statistics>

³⁴ <https://homeofficemedia.blog.gov.uk/2019/10/14/fact-sheet-graduate-immigration-route/>

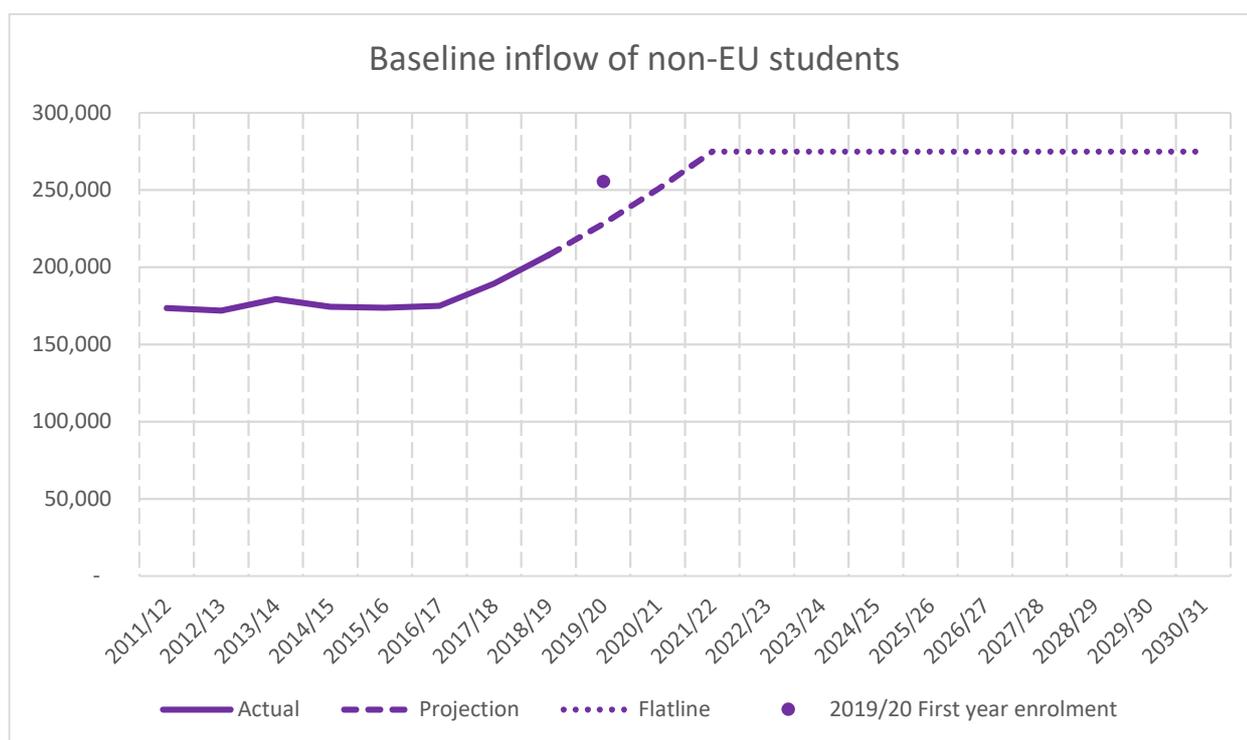
analysis assumes an upward trend would have continued in the absence of the policy change. But, as described above, not including the most recent increase of 23 per cent.

62. The analysis applies a growth rate of 10 per cent year-on-year, as observed in 2018/19, for three years from 2019/20 to 2021/22, and, due to the high level of uncertainty, is assumed to thereafter remain flat. Several factors may influence international students’ decision to study in the UK, including for example the attractiveness of the UK as a place to study, employment prospects in the UK and abroad, cultural factors, or family reasons.

63. The analysis also attempts to exclude the impact of the Covid-19 pandemic from baseline analysis, as the impact of the pandemic on student’s enrolment is still unclear. The HESA analysis of students’ enrolment data suggests that the pandemic did not have a notable impact on enrolments in 2019/20³⁵, but the impact on following academic years is still unknown. Sensitivity analysis around potential impacts of the pandemic on students’ enrolment are considered in Section G.

64. Figure 2 shows the modelled baseline inflows of non-EU students used in this analysis.

Figure 2: Baseline inflow of non-EU students, academic years 2011/12 to 2030/31.



Source: Home Office internal analysis. Data for all the United Kingdom.

E.3 Impact of policy on volumes

65. The impact of the Graduate route is very uncertain. Estimates of the impact are based on a number of behavioural assumptions, as to how the new route will affect the overall inflow of students to the UK, and the proportion of graduates that would take up the route.

E.3.1 Impact on inflows of international students

66. The introduction of the Graduate route is expected to increase the attractiveness of obtaining a degree from the UK.

67. Graduates will be able to stay in the UK for a longer period after graduation to work or look for work compared to what is allowed on the Tier 4 or Student routes. The route is unsponsored, and applicants

³⁵ <https://www.hesa.ac.uk/data-and-analysis/students/whos-in-he>

are not required to meet the more stringent requirements of the Skilled Worker route. Although the time a graduate may spend on the route is limited, and it does not offer a route to settlement, graduates may be able to find skilled work while on the Graduate route and switch to the Skilled Worker route, which will allow them to stay in the UK long term and is a route that leads to settlement. The Graduate route is therefore expected to attract additional international students to the UK.

68. The size of any increase is uncertain, but an estimate has been created based on evidence from the Tier 1 (Post-Study Work) visa which was in place in the UK from 2008 to 2012, which allowed international students to stay in the UK for two years after graduation to work or look for work. Estimates suggest non-EU enrolments might increase by up to 10 per cent on average, depending on the level of study. This assumption is based on the net increase in annual percentage growth of non-EU students' enrolments in 2008/09, when the last post-study work visa was introduced, compared to the previous year. Non-EU students' enrolments are based on HESA historical data. This result is very similar to the average annual growth between 2008/09 and 2011/12.
69. However, this assumption is highly uncertain, not least because other drivers could have affected non-EU inflows over the period of the Tier 1 (Post-Study Work) visa. Therefore, the analysis includes a range based on the lowest and highest annual percentage growth in non-EU enrolments between 2008 and 2011. Table 1 sets out the assumptions used by level of study in the scenarios considered.

Table 1: Estimated Annual percentage (%) increase in students due to the Graduate route

	Low	Central	High
Undergraduate	2	11	13
Postgraduate (taught)	5	13	20
Postgraduate (Research)	0	2	5

Source: Home Office internal analysis of Tier 1 (Post-Study Work) visa.

Behavioural impact of Graduate route requirements

70. Whilst the Graduate route is expected to attract more international students to the UK, the requirement to apply for the route and the costs associated with it may deter some of these students. This could reduce the additional inflow of students expected based on the assumptions set out above.
71. Home Office research on the evidence of a price elasticity of demand for visas has found the demand for visas to be relatively inelastic to changes in its price. However, the Home Office has developed a methodology to estimate the potential deterrent effect of changes to visa fees, which is used in the appraisal of changes to visa fees. The same methodology is used to estimate the behavioural impact of the requirements of the Graduate route on the inflow of international students. The analysis treats the costs of applying for the Graduate route as an additional cost to the cost of higher education in the UK and applies estimates of the responsiveness of demand for visa to changes in visa fees (price elasticity of demand for visa product).
72. The fee charged for a Graduate route is set at £700. This has been set taking account of fees charging powers set by the Immigration Act 2014. These powers enable the consideration of a number of factors when setting fees, which include taking account of the benefits and entitlements of a successful application, the cost of administering the application and providing funding towards the wider Border, Immigration and Citizenship System. The proposed fee is in line with the fee for an application for a Skilled Worker route made in-country. The Immigration Health Surcharge for the Graduate route is charged at the standard rate of £624 per year, with a reduced rate of £470 per year for child dependants. It is also expected that applying for the Graduate route will require some applicants time and effort, as a proxy for this cost in the absence of other evidence the analysis uses the Home Office cost of processing a Graduate application which is estimated to be £106. These assumptions are summarised at Annex L.

73. The expected increase in inflow of international students due to the Graduate route has been adjusted to reflect the potential deterrent effect of the requirements of the route. The central scenario applies an elasticity of -0.55 for undergraduate students and -0.21 for postgraduate students³⁶. The low scenario assumes a zero response to the application requirement costs of the graduate route and the high scenario uses an elasticity of -1.1 for undergraduate and -0.42 for postgraduate.
74. This impact reduces the percentage increase in international students by 6 per cent for undergraduate and 2 per cent for postgraduate students in the central case. There is no impact in the low scenario and a 12 per cent and 4 per cent reduction in the high scenario for undergraduate and postgraduate students respectively.
75. The wide range used as sensitivity reflects the available evidence and the uncertainty around the central estimates. The assumptions and methodology used are consistent with analysis produced for the Home Office IA on the Student route³⁷ and Home Office analysis on the impact of changes to visa fees³⁸. Further detail on the assumptions can also be found in the publication “*A review of evidence relating to the elasticity of demand for visas in the UK*” published in March 2020³⁹.

Summary of volume impacts on inflow of international students

Non-EU Students

76. The analysis assumes that the behavioural response to the introduction of the graduate route occurs from the date of the announcement on 11 September 2019⁴⁰, or in other words, the expected increase in non-EU students occurs from that date.⁴¹
77. The assumptions outlined above are estimated to lead to a central scenario average annual increase in non-EU enrolments of 25,400 to 30,600 per year over the first five years of the policy, with a low to high range of 7,900 to 9,500 and 35,100 to 42,200, as set out in Table 2.
78. Using the outflow methodology outlined above for non-EU students, the stock of non-EU students in higher education is estimated to gradually increase over the first five years of the period, leading to an estimated increase of around 55,000 additional non-EU students by 2023/24.

Table 2: Estimated impact on inflow of non-EU students, 2019/20 to 2028/29.

	19/20	20/21	21/22	22/23	23/24	24/25	25/26	26/27	27/28	28/29
Low	7,900	8,700	9,500	9,500	9,500	9,500	9,500	9,500	9,500	9,500
Central	25,400	27,900	30,600	30,600	30,600	30,600	30,600	30,600	30,600	30,600
High	35,100	38,500	42,200	42,200	42,200	42,200	42,200	42,200	42,200	42,200

Source: Home Office analysis. Figures are rounded to the nearest 100. Data for all the United Kingdom.

EU Students

79. The estimates of inflows of EU students in the baseline do not account for the effect that the Graduate route may have on inflows of EU students, through making the route more attractive. In the absence of any evidence specific to how EU students may respond to the introduction of the Graduate route,

³⁶ The analysis uses the same assumption used in the Impact Assessment for changes to the Immigration Rules for Students published by the Home Office on 10 September 2020.

³⁷ https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/916601/IA_-_students.pdf

³⁸ https://www.legislation.gov.uk/ukia/2020/48/pdfs/ukia_20200048_en.pdf and

https://www.legislation.gov.uk/ukia/2020/61/pdfs/ukia_20200061_en.pdf

³⁹ https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/872608/review-evidence-relating-to-elasticity-horr114.pdf

⁴⁰ <https://homeofficemedia.blog.gov.uk/2019/10/14/fact-sheet-graduate-immigration-route/>

⁴¹ As a simplifying assumption the fee behavioural response is also deemed to have occurred at the same time.

this impact assessment applies the same assumption used for non-EU students to the inflow of EU students, as set out in Table 1.

80. The increase in EU enrolments has been applied from 2021/22, because it is assumed that any impact on EU students will occur only after the EU Settlement Scheme is closed to new applicants.
81. The assumptions outline above are estimated to lead to a central scenario average annual increase in EU enrolments of 4,000 to 4,500 per year over the first five years of the policy, with a low to high range of 1,200 to 1,300 and 5,300 to 6,000, as set out in Table 3.
82. Using the outflow methodology outlined above for EU students, the stock of EU students in higher education is estimated to gradually increase over the first five years of the period, leading to an estimated increase of around 9,500 additional EU students by 2025/26⁴².

Table 3: Estimated impact on inflow of EU students, 2021/22 to 2030/31.

	21/22	22/23	23/24	24/25	25/26	26/27	27/28	28/29	29/30	30/31
Low	1,200	1,200	1,200	1,300	1,300	1,300	1,400	1,400	1,400	1,400
Central	4,000	4,100	4,200	4,300	4,500	4,600	4,800	4,900	4,900	4,900
High	5,300	5,500	5,600	5,800	6,000	6,200	6,400	6,600	6,600	6,600

Source: Home Office analysis. Figures are rounded to the nearest 100. Data for all the United Kingdom.

E.3.2 Estimate of graduates applying for Graduate route

83. In order to estimate the number of graduates who may apply for the Graduate route, applicants to the route are broken down into different categories:
- Additional inflow of international students who choose to study in the UK in response to the introduction of the route. Estimates are shown in Table 1 and 2. These individuals are assumed to apply to the route directly once they graduate.
 - Some international students might be displaced from the Skilled Worker route onto the Graduate route, although some are assumed to continue to apply to the Skilled work route.
 - International students who find a job that does not meet the eligibility requirement for the Skilled Worker route and those who do not have a job lined up after graduation may choose to apply for the Graduate route.
84. To model students' intentions and estimate the number of applications to the Graduate route, the analysis uses results from the 2017 Survey of Graduating International Students (SoGIS)⁴³. The Survey of Graduating International Students (SoGIS) is an online sample survey of final year non-UK national students at UK Higher Education institutions. Fifty-five institutions participated, with 3,000 complete and 560 incomplete responses received. The survey took place between 13 March to 30 April 2017 and was organised by the Office for National Statistics (ONS), Centre for Population Change (CPC) and Universities UK (UUK). The survey targeted students at all levels of study, and asked students' questions about their intentions after graduation, travel patterns during holidays, work and study. Uncertainty when applying this data has been described in the section on risks. Results on student intentions, split by EU and non-EU domicile, are presented in Table 4.

Table 4: Plans after study, by nationality, proportions (%), 2017, UK.

Plans after study	EU (excl. UK)	Non-EU
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⁴² Because of the impact of the EU Settlement Scheme, the five-year period for EU students is delayed compared to non-EU students when reporting the impact on stocks.

⁴³ Survey of Graduating International Students (SoGIS) by Economic and Social Research Council Centre for Population Change, Office for National Statistics and Universities UK. Further details on the survey can be found in the technical report published by the Centre for Population Change at http://www.cpc.ac.uk/docs/2017_SoGIS_Technical_Report.pdf

Further study in the UK	13.7	15.1
Further study outside the UK	16.5	8.2
I don't know yet	11.0	10.7
Look for a job in the UK	25.6	18.7
Look for a job outside the UK	13.5	21.3
Take up a job offer I already have in the UK	8.7	5.4
Take up a job offer I already have outside the UK	6.4	12.2
Travel in the UK	1.1	1.3
Travel in the UK + outside the UK	1.7	3.8
Travel outside the UK	1.8	3.2
Total	100.0	100.0

Source: Survey of Graduating International Students, 2017

85. While it is difficult to accurately predict the behaviour of graduates and their intentions towards applying for a Graduate route, the following assumptions were made:

- It is assumed that the category “*take up a job offer they already have in the UK*”, (8.7% of EU students and 5.4% of non-EU students), will include graduates intending to apply for the Skilled Worker route. Annex L provides further details of the methodology used to estimate the proportion qualifying for the Skilled Worker route, or choosing the Graduate route over the Skilled Worker route. The analysis also takes account of data on Tier 4 to Tier 2 switching for non-EU students⁴⁴. Under this methodology, it is assumed 67 per cent of the 8.7 per cent EU students and 5.4 per cent of non-EU students, apply to the Skilled Worker route (with the rest applying for the Graduate route).
- Those who answered that they “*do not know yet*” what their plans will be and those who plan to “*look for a job in the UK*” are assumed to be potential applicants for the Graduate route. This is 11.0 per cent and 25.6 per cent of EU students and 10.7 per cent and 18.7 per cent of non-EU students, respectively. In order to capture uncertainty around the behaviour of these two groups, a range is constructed using these assumptions as set out later in this section.
- The analysis does not include the proportion of those who plan to travel as it is considered that this group may choose to do so on a visit visa if they plan to travel in the UK.

86. When considering what proportion of graduates who do not have a job lined up may apply for the Graduate route, the analysis develops a range based on SoGIS responses from those who stated they “*do not know yet*” what their plans will be and those who stated they plan to “*look for a job in the UK*”. The range is constructed to capture uncertainty students’ behaviour, and it takes account of level of study, at undergraduate, postgraduate (taught) and postgraduate (research) level.

87. The scenarios are constructed as follows:

- **Low scenario:** In the low scenario it is assumed that only those “looking for a job in the UK” would apply for the Graduate route.
- **High Scenario:** In the high scenario, analysis also assumes half those who “do not know yet” about their plans after graduation would apply for the graduate route.
- **Central scenario:** The central case is an average between those two estimates.

⁴⁴ Under the immigration system in place before the launch of the UK Points-based immigration system, international students were required to apply for a Tier 4 visa and they could switch to a Tier 2 visa at the end of their study in order to take up skilled work. The requirements of a Tier 2 visa were similar, although not the same, to the Skilled Work route.

88. These scenarios constructed using assumptions based on SoGIS data on those who “do not know” what their plans are and those who “plan to look for a job in the UK” by level of study, are set out below in Table 5:

Table 5: Assumptions on the proportion (%) of graduates who apply for the Graduate Route, UK.

Domicile	Level of study	Low	Central	High
EU	Undergraduate	21	24	27
	Postgraduate ⁴⁵	34	37	40
Non-EU	Undergraduate	15	17	20
	Postgraduate ⁴⁶	21	24	27

Source: Home Office internal analysis based on 2017 SoGIS data. These assumptions apply to international students who do not apply for the Skilled Work route or choose the Graduate route over the Skilled Worker route under the policy.

89. These assumptions are extremely uncertain. There are limitations with using results from SoGIS 2017, for example data is based on responses from a small sample and on the cohort of students graduating in the 2016/17 academic year under different socio-economic conditions than at present. Survey respondents may also not eventually behave in line with intentions. Risks associated with using results from SoGIS 2017 are considered in further details in section H. In addition, Section G considers the impact of the COVID-19 pandemic on labour market conditions.

90. Additionally, it is assumed that those additional students who chose to study in the UK because of the Graduate route will go on to apply for the Graduate route. This assumption is also highly uncertain as some students may find a job under the Skilled Worker route, and some may decide not to stay in the UK after graduation. As this group was initially attracted to the UK because of the Graduate route, in the central estimate it is assumed 75 per cent would apply for the Graduate route to reflect the possibility that some students may decide not to apply for the Graduate route after starting their studies, due to changes in circumstances. A range of 50 to 100 per cent is used in the low and high scenarios respectively.

91. Graduates on the Graduate route will be able to bring dependants, (defined as a spouse, civil partner, unmarried or same-sex partner or child), where these were previously on the Student route, or where their child has been born during their time in the UK as a Student or Graduate. To produce a dependent’s ratio, the analysis used statistics of dependants based on Home Office migration statistics for the Tier 4 route for between 2015 to 2019⁴⁷ for non-EU students. As there is currently limited data on the volume of dependents for EU students, the analysis uses Survey of Graduating Intentions (SoGIS, 2017)⁴⁸ to produce a dependents ratio, in line with the methodology used in the Impact Assessment for changes to the Immigration Rules for Students⁴⁹.

92. Finally, the analysis adjusts for the effect of the EU Settlement Scheme⁵⁰ on EU students graduating in the first few years of the policy. EU students who are granted status in the UK under the EU Settlement Scheme be able to continue living in the UK and therefore are not expected to apply for the Graduate route. The analysis uses HESA data for 2018/19 on length of student course to estimate the

⁴⁵ Estimates for postgraduates are applied to both postgraduate taught and research courses.

⁴⁶ Estimates for postgraduates are applied to both postgraduate taught and research courses.

⁴⁷ https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/936849/entry-clearance-visa-outcomes-datasets-sep-2020.xlsx

⁴⁸ Survey of Graduating International Students (SoGIS) by Economic and Social Research Council Centre for Population Change, Office for National Statistics and Universities UK

⁴⁹ [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/916601/IA - students.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/916601/IA_-_students.pdf)

⁵⁰ <https://www.gov.uk/settled-status-eu-citizens-families>

cumulative proportion of students who began their course before January 2021 of the volume of graduates in each year. Any EU student who started a course before 1 January 2021 are assumed to be registered on the EU Settlement Scheme. As the HESA data is in academic years, the analysis adjusts data for the 2020/21 academic year for the proportion of students at each level of study who begin their course between September and December, based on HESA data for 2018/19.

Behavioural impact of Graduate route requirements

93. In order to stay in the UK on the Graduate route, applicants will need to apply under the Graduate route. The application will include a requirement to pay a fee and the Immigration Health Surcharge. These requirements may deter some international students from applying for the Graduate route once they graduate. This would therefore have an impact on the volume of Graduate route applications received each year.
94. The analysis takes a similar approach to the one taken to estimate the impact of the policy on the inflow of international students. Home Office research on the evidence of a price elasticity of demand for visa has found the demand for visa to be relatively inelastic to changes in its price. The Home Office has developed a methodology to estimate the potential deterrent effect of changes to visa fees, which is used in the appraisal of changes to visa fees. The same methodology is used to estimate the behavioural impact of visa requirements on demand for Graduate route applications. The analysis treats the costs of applying for Graduate route permission as an additional cost of staying in the UK after graduation and applies estimates of the responsiveness of demand for visa to changes in visa fees (price elasticity of demand for visa product).
95. As set out above, the fee charged for a Graduate route is set at £700. The Immigration Health Surcharge for the Graduate route is charged at the standard rate of £624 per year, with a reduced rate of £470 per year for child dependants. It is also expected that applying for the Graduate route will require some applicants time and effort, as a proxy for this cost in the absence of other evidence the analysis uses the Home Office cost of processing a Graduate application which is estimated to be £106. These assumptions are summarised at Annex L.
96. The reduction in Graduate route applications has been estimated by applying estimates of the wage elasticity of labour supply, which measures the responsiveness of the supply of labour to changes in wages, to the expected earnings over the duration of the permission granted. An increase in immigration costs is treated as equivalent to a reduction in the expected earnings over the duration of the permission period.
97. The central scenario assumes a small reduction in the willingness to supply labour as a result of changes in immigration costs, applying an elasticity of -0.3. The low scenario assumes a zero response to the change in wage and the high scenario uses an elasticity of -0.6. The wide range used as sensitivity reflects the available evidence and the uncertainty around the central estimates. Further detail on these assumptions can be found in the publication "*A review of evidence relating to the elasticity of demand for visas in the UK*" published in March 2020⁵¹.
98. As graduates on the Graduate route will be able to work but also look for work or conduct other activities while on the Graduate route, expected earnings are adjusted for a proportion of graduates on the Graduate route who may not be in work. Further detail on salary and employment assumptions can be found in the Annex.
99. This impact reduces the expected volume of applications for the Graduate route by 2 per cent. In order to avoid double counting, the behavioural impact is not applied to applications for the Graduate route

⁵¹ https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/872608/review-evidence-relating-to-elasticity-horr114.pdf

by the international students who are expected to come to study in the UK because of the Graduate route specifically, as the deterrent effect on this group is modelled separately as described above.

Summary of volume impacts on applications for Graduate route

100. Table 6 presents the estimated applications for the Graduate route over the appraisal period of the policy. Estimates include the behavioural impacts associated with route requirements. These figures are highly uncertain given the uncertainty in the underlying assumptions used to produce the estimates.

101. In the central scenario, the analysis estimates around 67,600 applications in the first year of the policy and around 100,500 applications by the end of the appraisal period.

Table 6: Estimated applications for Graduate route, 2021/22 to 2030/31.

	21/22	22/23	23/24	24/25	25/26	26/27	27/28	28/29	29/30	30/31
Low	44,400	54,600	60,600	62,700	61,500	61,700	62,000	62,300	62,600	62,800
Central	67,600	85,700	95,300	99,200	98,500	98,900	99,300	99,800	100,300	100,500
High	95,600	121,100	133,800	139,100	138,600	139,100	139,700	140,300	141,000	141,300

Source: Home Office internal analysis. Main applicants and dependants. Data for all the United Kingdom. Figures are rounded to the nearest 100.

E.3.3 Impact of the Graduate route on employment

Impact over the duration of the Graduate route permission period

102. A vital objective of the graduate route is to retain international students' talent and for them to join the UK labour market and contribute to the UK economy. Therefore, a benefit associated with the Graduate route is those on the Graduate route who will be in employment and their contributions to the economy. In order to assess this impact, the analysis makes assumptions on the proportion of Graduate route applicants who will be in employment and their salary. These assumptions are used to estimate their net fiscal contributions to the Exchequer, discussed in more detail in section E.4.5 and in Annex L.

103. As described in Section E.1.1, data on graduates in employment is based on data from the Graduate Outcome Survey for the cohort graduating in the 2017/18 academic year, for which latest data are available⁵². Graduates are contacted 15 months after graduation to take part in the survey and collect data on their activities after graduation. Data is available by domicile, and therefore assumptions are split by EU and non-EU students. The analysis estimates that 85 per cent of EU students, and 81 per cent of non-EU students will be in full time or part time employment.⁵³

104. The analysis makes assumptions on the salary distribution of those in employment based on ASHE 2019 data on the earnings of those in full time and part time employment, who are working for more than year, and are below 26 years of age in the UK.

105. Data on the earnings of those aged below 26 was chosen as it is considered the most reflective estimate of new entrants to the labour market, as graduates would most likely be. While international students may be expected to work in occupation at a higher skill level than the average UK population under 26 years of age, this salary distribution was chosen to reflect the fact that these graduates will

⁵² <https://www.hesa.ac.uk/data-and-analysis/graduates/activities>

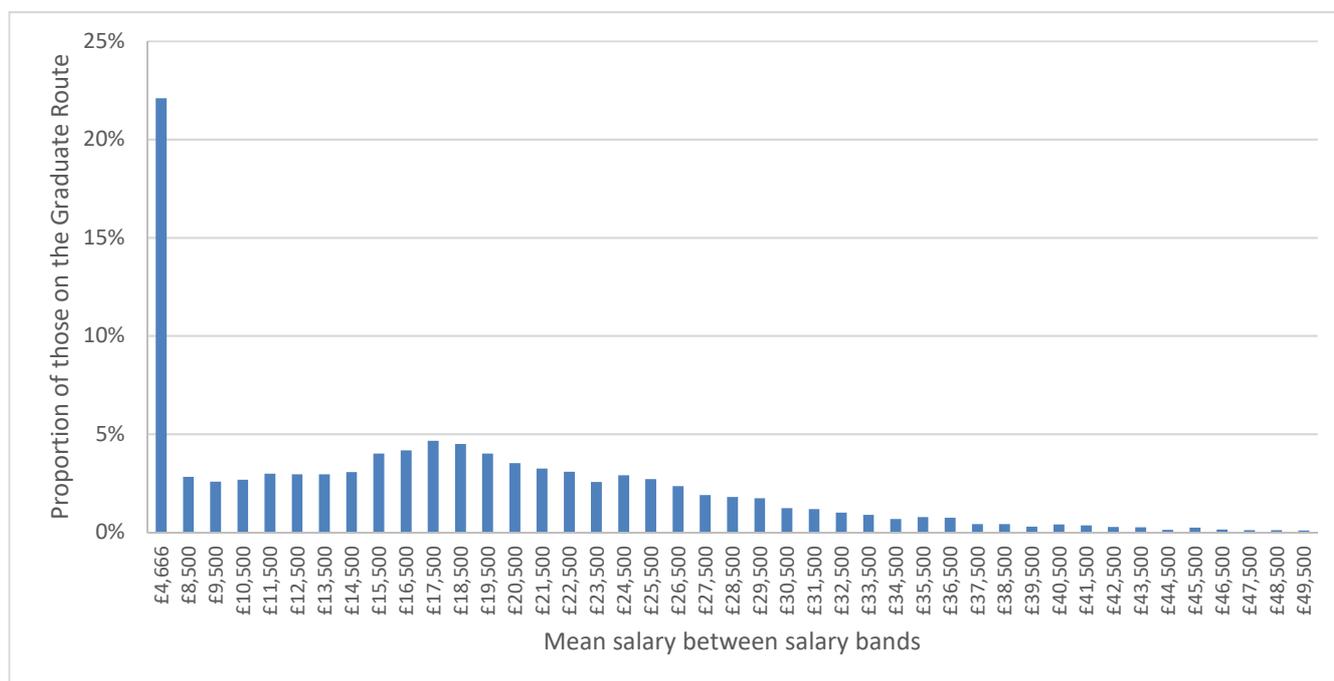
⁵³ Analysis excludes the proportion of graduates who went onto further study in the Graduate Outcomes Survey, as those individuals would not be participants of the Graduate Route.

not be on the Skilled Worker route and therefore may work in occupations that do not meet the salary requirements of the Skilled Worker route.

106. However, the data chosen includes individuals between 16 and 21 years of age, and individuals who are not higher education graduates. Therefore, the analysis may underestimate the salary of graduates who are in employment while on the Graduate Route. Given the uncertainty employment outcomes for graduates on the Graduate route, this is considered a cautious approach. The median salary is estimated to be around £18,000 per year.

107. Figure 3 shows the average earning profile of those below 26 years of age. The data show 22 per cent of employed graduates under 26 earn less than £8,000 per year, this is due to the grouping of multiple salary bands below such level.

Figure 3: Assumed salary distribution of graduates in employment on the Graduate route



Source: Internal Home Office analysis of ASHE 2019 data for under 26 years of age, working for more than one year.

108. The analysis assumes that these workers are a net increase in migrant employment. However, there may be some displacement from the Skilled Worker route, or other work-based routes. Some individuals, for example those unsure of their plans, may have left the UK after graduation to only return later on another work-based route in the absence of the policy. This means the analysis could overstate impacts of the Graduate route as it could not estimate the proportion of graduates that would have returned to the UK under the baseline.

Impact at the end of the Graduate route permission period

109. By the end of their Graduate permission, some graduates may find work under another work-based route, such as the Skilled Worker route, and move onto such a route from their Graduate permission. This group would therefore be able to continue to stay in the UK and contribute to the UK economy.

110. This is an additional positive impact that can be associated with the Graduate route. However, these impacts are not included in the analysis due to the limited evidence available to support assumptions. Graduates on the Graduate route will need to be able to meet the more stringent requirements of the Skilled Worker route, such as meeting salary thresholds and being sponsored by an employer to transfer to the Skilled Worker route. Whether they will be able to switch will depend on the activity they

will do while on the Graduate route, on the UK labour market conditions and labour demand at the time.

111. While some may well be additional Skilled Workers, for these reasons the number of additional Skilled Workers route applicants associated with the introduction of the Graduate route has not been quantified, but this omission is expected to lead to an underestimate of the potential benefits.
112. The increase in the volume of international graduates potentially entering the UK labour market may also affect the employment opportunities of UK residents. In previous Impact Assessments, the Home Office has included an assessment of this displacement effect of lower skilled workers in the central scenario. However, due to the lack of evidence on the skill level at which graduates on the Graduate route may be employed, the lack of evidence on how the employment prospects of domestic students are affected by studying with international students⁵⁴, and the latest evidence⁵⁵ suggesting a high degree of uncertainty around the extent of displacement / replacement effects on low skilled workers, this IA has not attempted to capture such effects as part of the central Net Present Value (NPV) estimates.

E.4 Cost and benefit analysis

113. The following section sets out the economic costs and benefits associated with the Graduate route. It quantifies the economic impacts to education institutions, the Home Office and the Exchequer. Where relevant, the analysis separates the impacts associated with the increase in the volume of students who chose to study in the UK due to the Graduate route, and impacts associated with the volume of graduates who are expected to stay in the UK on the Graduate route.
114. In line with previous Home Office analysis and following recommendations made by the Migration Advisory Committee (MAC)⁵⁶, this IA considers the impact of the Graduate route on the welfare of the UK resident population. The Net Present Social Value (NPSV) calculation includes a fiscal impact, based on contributions to direct and indirect taxes, the effect on consumption of public services, but excludes foregone migrant wages (net of taxes), and does not measure overall Gross Domestic Product (GDP) changes, as the impact is primarily attributable to migrants.
115. The analysis distinguishes between direct and indirect impacts of the policy. The primary direct impact of the Graduate route affects the post study choices of international students. There are also some direct impacts to the Home Office and to higher education providers, which are costs and benefits directly associated with its introduction, such as fee income and processing costs of Graduate applications. Changes to student behaviour, including increased Student Route applications, and decisions on post study activities will result in indirect costs and benefits, such as fiscal impacts and additional administrative costs.
116. Table 7 summarises the quantified costs and benefits associated with the Graduate route, split by direct and indirect impacts.

Table 7: Quantified costs and benefits

Costs	
Direct	Indirect
Set up costs:	Processing costs of Student route (from increased international student applications):
	<ul style="list-style-type: none"> • Home Office administrative processing costs

⁵⁴ https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/739089/Impact_intl_students_report_published_v1.1.pdf

⁵⁵ https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/741926/Final_EEA_report.PDF

⁵⁶ <https://www.gov.uk/government/publications/analysis-of-the-impacts-of-migration>

<ul style="list-style-type: none"> Familiarisation costs with Graduate route guidance to higher education providers <p>Ongoing costs:</p> <ul style="list-style-type: none"> Cost of confirmation of completion of studies for higher education providers Home Office processing costs of Graduate route applications 	<ul style="list-style-type: none"> Higher education providers administrative costs <p>Exchequer impacts:</p> <ul style="list-style-type: none"> Public service provision costs for those on a Graduate route Public service provision costs for additional international students on Student route
Benefits	
Direct	Indirect
<ul style="list-style-type: none"> Graduate route fee revenue to the Home Office Immigration Health Surcharge income to Department of Health and Social Care from Graduate route applications 	<ul style="list-style-type: none"> Student route fee revenue and sponsor fee revenue to the Home Office from additional international student route applications Immigration Health Surcharge income to Department of Health and Social Care from additional international students on Student route Tuition fee income to higher education providers from additional international students on Student route <p>Exchequer impacts:</p> <ul style="list-style-type: none"> Exchequer income from those on Graduate route Exchequer income from additional international students on Student route

Source: Home Office internal analysis

E.5 Costs

SET UP COSTS

E.5.1 Higher education providers – familiarisation costs

117. There will be familiarisation costs for higher education providers as they review the Immigration Rules on the Graduate route and understand its implications for students and their organisation. The Graduate route guidance is expected to be brief and simple. The analysis uses a central estimate of 1,400 words, with a low and high range of 1,000 to 2,000 words, based on the length of previous similar guidance. Estimates for reading speeds are based on *readingsoft.com* and it is assumed staff who work at HE providers can read 400 words per minute, with a low and high range of 240 and 1,000 words per minute⁵⁷. These ranges and impact on reading time are summarised in the table below.

Table 8: Estimated reading times for Graduate route guidance, 2021.

Time to Read Scenario	Number of words	Speed (Words per minute)	Total (mins)
Low	1,000	1,000	1

⁵⁷ <http://www.readingsoft.com/>. This analysis assumes that staff working at universities are good readers and are therefore able to read 400 words per minute.

Central	1,400	400	4
High	2,000	240	8

Source: Home Office internal analysis.

118. These assumptions are then multiplied by the following:

- **Value of time:** There is a degree of uncertainty regarding the types of occupations that higher education provider staff who review Immigration Rules are working in. It is assumed an average hourly salary across three different occupations⁵⁸ based on ASHE data on occupations⁵⁹. A Eurostat uplift of 22 per cent is applied to account for non-wage costs⁶⁰. Familiarisation costs are then calculated assuming the gross value of time is £28/hour based on ASHE data⁶¹.
- **Volumes:** Using HESA data on the number of international students at each higher education providers, it is expected that 168 universities and 98 alternative providers will be impacted⁶². As there is limited information on how many staff members will review the new guidance, this IA assumes 10 members of staff per higher education provider in the central case, with a low and high range of 5 to 15 members of staff.

119. Total familiarisation costs for higher education provider are estimated to lie in the range of **£0.00 and £0.02 million**, with **the central estimate of around £0.00 million (10-years Present Value, 2021/22 prices)**. The central estimate assumes that it will take 4 minutes to read the guidance per staff member, and there are 10 members of staff per higher education provider. These costs are considered as set up costs and apply only in the first year of the policy.

DIRECT ONGOING COSTS

E.5.2 Higher Education Providers – processing costs for Graduate route

120. The Graduate route will be open to international students who complete their degrees at a UK higher education provider with a track record of compliance. This places a requirement on eligible higher education providers to confirm with the Home Office that students have completed their degree. In order to estimate the cost of providing confirmation of studies to the Home Office the analysis considers the cost for higher education providers of sharing data with the Home Office and any additional governance costs separately.

Cost of confirmation of completion of studies

121. Similar to familiarisation costs, the analysis estimates the cost of confirming completion of studies by quantifying the staff costs associated with this activity. The analysis does not assume that the introduction of the Graduate route will generate additional IT costs as all providers are expected to have the necessary IT to comply with the requirements of sponsoring students under the Student route, and the same IT is expected to be used to comply with requirements of the Graduate route.

122. Data to confirm that international students have completed their studies and have been awarded their degree are expected to be shared with the Home Office by uploading data using existing IT systems.

⁵⁸ These occupations are '2319 Teaching and Other Educational Professionals', '2419 Legal professionals' and '4138 Human Resources Administrative Occupations'

⁵⁹ <https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/earningsandworkinghours/datasets/occupation4digitsoc2010ashetable14>

⁶⁰ Eurostat. Labour cost levels by NACE Rev. 2 activity 2000-2019. Last data update: 31/03/20.

⁶¹ The ASHE data is inflated to 2021 prices

⁶² This is based on the HESA data which provides information on the number of universities with EU and non-EU domiciled students.

The analysis makes assumptions on the length of time required to upload data, based on assumptions from internal Home Office operations. The low and central scenarios assume providers can make 'bulk uploads' of 100 cases, which mean that a provider can provide data for 100 students at a time. It is assumed that each 'bulk upload' may take 10 minutes per upload. The high scenario assumes that providers need to upload data for each international student individually, and this may take 5 minutes per student. These assumptions are summarised in the following table:

Table 9: Estimated times for data share

	Minutes	Cases	Case/Minute
Bulk upload	10	100	10
Single upload	5	1	0.2

Source: Home Office internal analysis

123. Similarly, to familiarisation costs, these assumptions are then multiplied by the following:

- Value of time:** There is a degree of uncertainty regarding the types of occupations that higher education provider staff who are expected to upload the data are working in. The analysis assumes an average hourly salary across two different occupations⁶³, based on ASHE data on occupations⁶⁴. A Eurostat uplift of 22 per cent is applied to account for non-wage costs.⁶⁵ Costs to share data are then calculated assuming the gross value of time is £20/hour based on ASHE data⁶⁶.
- Volumes:** To estimate costs, analysis requires volumes of graduates *per institution*. Estimates of the number of graduates per year by HEI are not available, so data on the number of first year enrolments was used as a proxy to estimate number of cases that each higher education provider is expected to process each year. There were approximately 267,000 international students entering the UK at universities in 2018/19 and 5,000 at alternative providers⁶⁷. This led to an average of 1,600 students processed per university per year, or 54 per alternative provider. This is then used to estimate the total amount of time expected to be spend by a staff member at each higher education provider to upload data.

124. Total costs to confirm completion of studies with the Home Office for higher education providers are estimated to lie in the range of **£0.1 and £3 million, with the central estimate of around £0.1 million (10-years PV, 2021/22 prices)**. These are based on a central case where data for 10 international students are uploaded per minute.

Additional Governance costs

125. As the Graduate route is a new route, it is uncertain whether higher education providers may occur any additional governance costs associated with it. As a cautious approach the analysis attempts to capture potential additional governance costs based on the evidence available on existing governance costs required for the higher education providers to support students' immigration applications.

⁶³ These occupations are "Information technology and telecommunications professionals n.e.c." and '4138 Human Resources Administrative Occupations'.

⁶⁴ <https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/earningsandworkinghours/datasets/occupation4digitsoc2010ashtable14>

⁶⁵ Eurostat. Labour cost levels by NACE Rev. 2 activity 2000-2019. Last data update: 31/03/20.

⁶⁶ The ASHE data is inflated to 2021 prices

⁶⁷ Figure 8 and 8a, <https://www.hesa.ac.uk/news/16-01-2020/sb255-higher-education-student-statistics/location>

126. The analysis is based on a study commissioned by the Russell Group on the cost of the UK immigration system to UK universities⁶⁸. Research by Ernst and Young found that the cost of supporting immigration applications for students during the academic year 2017/18 was £712,000 per institution.
127. The analysis assumes that these costs are the same for all higher education providers. However, as alternative providers are smaller in terms of the number of international students, we have developed different assumptions for those providers. Analysis estimates the cost per international student⁶⁹, and multiplies by the number of non-EU students entering the UK to attend alternative providers⁷⁰, leading to an estimate of £2 million spent on Student applications by alternative providers, or £56,000 per alternative provider.
128. Therefore, the total cost to supporting immigration applications is estimated to be approximately £120 million at universities and £2 million at alternative providers. Of these costs, 30 per cent related to in-house governance costs⁷¹. Based on the description of in-house governance cost used in the report, in-house governance costs are associated with activities such as liaising with UKVI, reporting on sponsored students and hosting a UKVI audit. As education providers will not be acting as sponsors for students who apply for the Graduate route, the governance costs to comply with the Graduate route are expected to be lower than those to comply with the Student route, and education providers will be able to use existing systems and processes already in place to comply with Student route and Sponsor licence requirements. However, this analysis assumes there may be a small increase in in-house costs due to the introduction of the Graduate route, for example, due to increased workload to liaise with UKVI and prepare for a UKVI audit/visit. In the absence of evidence about costs to education providers of complying with the UKVI requirements, the central case assumes that in-house governance increase by 10 per cent, with a low and high scenario of 0 and 15 per cent.
129. These are highly uncertain assumptions and the Home Office will keep engaging with the education sector to understand the impact of the policy on providers' costs.
130. Total costs associated with additional governance costs for higher education providers are estimated to lie in the range of **£0 to £47 million, with a central estimate of around £31 million (10-years PV, 2021/22 prices)**.

E.5.3 Home Office – processing costs of Graduate route

131. The Graduate route is a new route, and the Home Office will face increased costs in terms of costs to set up the route and ongoing processing costs. The unit cost of processing an application on the Graduate route has been estimated to be £106⁷². The figure is an initial estimate and will be kept under review as data on operating costs and volumes becomes available once the Graduate route opens. The additional cost of processing Graduate route applications is estimated to lie in a range of **£40 to £100 million with a central estimate of £70 million (10-year PV, 2021/22 prices)**.

⁶⁸ <https://russellgroup.ac.uk/media/5750/challenges-and-costs-of-the-uk-immigration-system-for-russell-group-universities.pdf>

⁶⁹ Analysis calculates the unit cost by estimating the annual cost of Tier 4 applications across all universities (£120m), and then dividing by the number of non-EU students entering the UK per year (204,000, HESA 18/19). The unit cost is estimated at £590 per student.

⁷⁰ Figure 8a, adjusted by First Year Marker, <https://www.hesa.ac.uk/news/16-01-2020/sb255-higher-education-student-statistics/location>

⁷¹ Examples of in-house governance costs listed in the survey included liaising with UKVI (including Sponsor Change of Circumstance (SCOC) submissions, escalations and complex policy questions), UKVI audit/visit (such as preparing for and hosting an audit as well as any necessary follow-up), internal audit (internal testing/checking of compliance), development of standard immigration guidance/advice for students (including work associated with guidance documents, online tools etc), involvement of high level governance staff, e.g., to sign off policy (such as agreeing and signing off internal immigration policies), training (tasks associated with delivering or receiving training).

⁷² Internal Home Office analysis.

INDIRECT COSTS

E.5.4 Processing costs associated with increased inflow of International Students

132. As described in Section E.2 on volume estimates, the analysis assumes that the Graduate route may have an impact on the inflow of international students as the Graduate route improves the attractiveness of the UK offer to international students. Costs and benefits associated with this behavioural impact are considered below.

Home Office – increase in processing costs of Student route applications

133. The Home Office will incur additional processing costs associated with the increased volume of international students who chose to study in the UK because of the Graduate route, as set out in Tables 1 and 2. Students who come to study in the UK will be required to apply for the Student route, which means that the Home Office's processing costs will increase, both for route applications and Confirmation of Acceptance of Studies (CAS) applications per student⁷³. This cost is calculated using visa fees transparency data, and this is multiplied by the estimated increase in student's volume⁷⁴. The visa fee transparency data indicates that the unit cost for each Student route application is between £153 and £252, depending on whether the application is out-of-country or in-country respectively. It is also assumed that there will be no additional up-front costs for the Home Office to accommodate the increased volume of students, as the increase should fall within the current capacity constraints.

134. The additional cost of processing student applications is estimated to lie in a range of **£10 to £60 million** with a **central estimate of £40 million (10-year PV, 2021/22 prices)**. The additional estimated cost of processing CAS applications lie in a range of **£4 to £9 million with a central estimate of around £6 million (10-years PV, 2021/22 prices)**.

Higher education providers – increase in processing costs of international students

135. As international students require permission on the Student route to come and study in the UK, there will be increased workload for universities as they will have to process these additional student applications. Research by Ernst and Young on Russell Group universities found that the average staffing cost per Tier 4 application was around £138⁷⁵. Assuming these costs are the same for a Student route, and are applicable for non-Russell group higher education providers, the total additional staffing costs as a result of an increased inflow of international students due to the Graduate route is estimated to lie in a range of **£10 to £50 million with a central estimate of about £30 million (10-year PV, 2021/22 prices)**.

E.4.5 Exchequer impacts – public service provision costs

136. The introduction of the Graduate route is expected to generate additional costs to the Exchequer in the form of public service provision costs through increased number of individuals in the UK who would use public services. These costs may arise through the number of graduates who stay in the UK on the Graduate route after graduation, and through increased volume of international students on the Student route.

⁷³ This does not apply to Irish citizens.

⁷⁴ <https://www.gov.uk/government/publications/visa-fees-transparency-data>

⁷⁵ [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/916601/IA - students.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/916601/IA_-_students.pdf)
Inflated to 2021 prices.

137. The Home Office has developed a methodology to estimate the fiscal impact of migration covering impact on public expenditure and on fiscal contributions. This methodology is used in the appraisal of migration policy, including to appraise the launch of routes under the UK points-based system such as the Skilled Worker route⁷⁶ and the Student route⁷⁷. This impact assessment uses the same methodology to estimate fiscal impact of the Graduate route. Annex L outlines the methodology used, including how data and assumptions are applied to the Graduate route analysis⁷⁸.
138. Estimate of public expenditures are derived using a top down approach to apportion total expenditure on public services at the individual level. This results in estimated unit costs for different types of public expenditure by age group and economic activity. The methodology used to estimate unit costs considers the impact of public services that are not expected to change with an additional individual, such as national defence, and those who are expected to change with an additional individual, such as health and education.
139. Data on expenditure on public services is obtained from Public Expenditure Statistical Analysis (PESA) published by HM Treasury, which provides data on public sector expenditure by functions. Data on migrant population characteristics is obtained from the Annual Population Survey (APS) produced by the ONS to produce unit cost estimates. Annex L provides further details on the methodology used to estimate impacts of the Graduate route on public expenditure.

Exchequer impacts – Graduates on the Graduate route

140. The analysis estimates the volume of applications for the Graduate route by international students. Their presence in the UK over the duration of the Graduate permission granted is estimated to lead to a cost in public service provision. This is estimated to lead to a cost of **between £4.3 and £7.6 billion with a central estimate of £5.9 billion (10-year PV, 2021/22 prices)**.

Exchequer impacts – International students on the Student Route

141. The analysis also estimates an increase in the number of international students in higher education institutions due to the introduction of the Graduate route. This is associated to an increase in public service provision during the duration of their studies and is estimated to lead to a cost of **between £0.5 and £2.4 billion with a central estimate of £1.9 billion (10-year PV, 2021/22 prices)**.

TOTAL COSTS

142. The total quantified costs are estimated to be between **£3.8 and £9.6 billion** over 10-years, with a central estimate of **£7.0 billion (10-year PV, 2021/22 prices)**.

E.6 Benefits

143. The following section sets out the economic benefits associated with the Graduate route. It quantifies the economic impacts to the Home Office, the Department of Health and Social Care (DHSC), and the Exchequer (HM Treasury). As for the quantified costs, the analysis distinguishes the direct and indirect benefits associated with the Graduate route.

DIRECT BENEFITS

⁷⁶ <https://www.gov.uk/government/publications/supporting-documents-for-skilled-worker-immigration-rules>

⁷⁷ [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/916601/IA - students.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/916601/IA_-_students.pdf)

⁷⁸ All references to data and assumptions used in the fiscal analysis are provided in the annex.

E.6.1 Home Office – Income from Graduate route fee

144. Applications to the Graduate route will generate income for the Home Office, through payment of the application fee, and this is estimated to increase Home Office income. The application fee for the Graduate route is set at £700. This is estimated to increase fee revenue to the Home Office by **between £310 million and £690 million with a central estimate of around £490 million (10-year PV, 2021/22 prices)**. The estimate is based on applications for the Graduate route as set out in Table 5.
145. As those on the Graduate Route are not required to be sponsored, the Home Office will not receive income from the £199 Certificate of Sponsorship (“CoS”) fee for Skilled Worker route employers. In the policy scenario, there are less Skilled Worker applicants, leading to a reduction of CoS revenue **between £4 and £9 million, with a central estimate of around £6 million (10-year PV, 2021/22 prices)**. As outlined in Section E.3.3 this may be an underestimate or overestimate of the true impact due to the scope chosen in this analysis.

E.6.2 Department of Health and Social Care (DHSC) – Increase in IHS income

146. Graduates on the Graduate route are required to pay the Immigration Health Surcharge (IHS)⁷⁹. The IHS is collected by the Home Office on behalf of DHSC and all IHS income (less an amount to offset the collection costs) is transferred to DHSC and the Devolved Administrations for health spending. The IHS for graduates on the Graduate route is set at the standard rate of £624 per year for the duration of the appraisal period.
147. IHS income from applicants to the Graduate route is estimated to increase to **between £590 and £1,290 million with a central estimate of around £920 million (10-year PV, 2021/22 prices)** over the ten-year appraisal period under the central scenario.
148. The total IHS and fee revenue, when including also the indirect impact on the Student route (see below) is estimated to increase to **between £900 million and £2.0 billion, with a central estimate of around £1.4 billion (10-year PV, 2021/22 prices)**.

INDIRECT BENEFITS

E.6.4. Income associated with increased inflow of International Students

149. There are indirect benefits associated with the modelled behavioural impact on international students and the additional inflow of students expected due to the introduction of the Graduate route. These indirect benefits include additional income from fees and Immigration Health Surcharge, and increased tuition fee to higher education providers.

Home Office – increase in Student route fee income

150. The additional inflow of students will be staying in the UK on a Student route. The fee for the Student route is set between £348 and £475, depending on whether the application is out-of-country or in-country respectively.⁸⁰ The analysis assumes all additional applications will be made outside the UK. This impact is estimated to increase fee revenue to the Home Office by **between £30 and £140 million with a central estimate of around £90 million (10-year PV, 2021/22 prices)**.

⁷⁹ <https://www.gov.uk/healthcare-immigration-application>

⁸⁰ <https://www.gov.uk/student-visa>

Department for Health and Social Care – increase in IHS income

151. The IHS costs students £470 per year. As students who come to the UK due to the Graduate route will be required to pay for the IHS to study in the UK, IHS revenue is estimated to increase **between £50 and £300 million with a central estimate of around £210 million (10-year PV, 2021/22 prices)**.

Higher education providers – increase in tuition fee income

152. The increase in students coming to study in the UK due to the Graduate route could lead to an increase in projected tuition fee income for education providers. The estimated increase in inflow of international students is estimated to be between 29,000 to 35,000 students per year in the central estimate. The increase in inflow is multiplied by average tuition fee at undergraduate, postgraduate (taught) and postgraduate (research) level⁸¹. Estimates of average tuition fees are based on internal Home Office analysis of HESA data, and are shown in Annex L.
153. This is estimated to lead to an increase in projected tuition fee income of between **£2.7 and £13.7 billion with a central scenario of £10.6 billion (10-year PV, 2021/22 prices)**.

E.6.5 Exchequer impacts – contributions to public finance

154. The analysis estimates the impact of the Graduate route on contributions to the public finances as individuals can be expected to contribute to direct and indirect tax receipts through their earnings and spending. Contributions to public finances may arise through the number of graduates who stay in the UK on the Graduate route after graduation, and through increased volume of international students on the Student route.
155. As set out above, the analysis uses the methodology developed by the Home Office to estimate fiscal impact of migration used in the appraisal of migration policy, including of recently launched routes under the UK points-based immigration system. This impact assessment uses the same methodology to estimate fiscal impact of the Graduate route. Annex L provides further details of the methodology used, including how data and assumptions are applied to the Graduate route analysis⁸².
156. The analysis uses a bottom-up approach to calculate the expected contribution to direct and indirect taxes from international students and graduates, based on individuals' characteristics, data on their earnings, and spending patterns. The analysis estimates contributions to direct tax, such as income tax and National Insurance Contributions (NICs), by applying current tax rates to the income distribution of those expected to be in employment. The analysis also estimates contributions to council tax using ONS estimates of council tax paid per household in each income decile. Estimates of indirect tax contributions include contributions to VAT, duties on specific products such as alcohol and tobacco, licences such as television and intermediate taxes. The analysis uses data from the Living Cost and Food survey to calculate the proportion of income spent on indirect tax for each earning decile. The analysis also included estimates of contributions to corporate taxes and business rates, using a per capita allocation based on an individual's contribution to indirect taxes.
157. The analysis is adjusted to reflect differences between students and graduates. When estimating fiscal contributions from international students, the analysis uses the same approach used in the Impact Assessment for changes to the Immigration Rules for Students⁸³. For example, students are assumed not to be in employment and thus do not contribute towards income tax and NICs, the analysis also adjusts council tax revenue to account for discounts in place for students.

⁸¹

⁸² All references to data and assumptions used in the fiscal analysis are provided in the annex.

⁸³ [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/916601/IA - students.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/916601/IA_-_students.pdf)

158. Graduates are assumed to contribute to the Exchequer to direct and indirect taxation as described above, although contributions to direct taxation are adjusted for the proportion of graduates that are expected to be in employment. As described in Section E, the salary distribution of those on the Graduate route is based on ASHE 2019 data on the earnings of those below 26 years of age in the UK and shown in Figure 3. The median salary is estimated to be around £18,000 per year. The proportion of those in employment is based on data from the Graduate Outcome Survey for the cohort graduating in the 2017/18 academic year, for which latest data are available. The analysis estimates that 85 per cent of EU students, and 81 per cent of non-EU students will be in full time or part time employment.

Exchequer impacts – Graduates on Graduate route

159. While on the Graduate route, graduates will be able to work and look for work, which is expected to generate income to the Exchequer from direct and indirect tax contributions. This is estimated to lead to a benefit to public finances of **between £6.7 and £15.2 billion with a central estimate of £10.7 billion (10-year PV, 2021/22 prices)**.

Exchequer impacts – International students on Student route

160. As the analysis estimates an increase in international students this suggests that there will be a benefit in Exchequer income from more students coming to study in the UK through indirect tax contributions over the duration of their studies. This is estimated to lead to a benefit to public finances of **between £0.7 and £3.4 billion with a central estimate of £2.6 billion (10-year PV, 2021/22 prices)**.

TOTAL BENEFITS

161. The total benefits are estimated to be **between £11.3 and £34.5 billion, with a central estimate of around £25.4 billion (10-year PV, 2021/22 prices)**. All of the total benefits are estimated to be ongoing benefits.

E.7 Other Impacts

E5.1 IHS third party payment income

162. The IHS is collected via a third-party private company who charge a percentage of the value of surcharge income handled. As IHS income will be increasing due to those on the Graduate route also being required to pay the IHS, this is likely to lead to a small increase in the collection fee income for the third party, which is a direct cost to the UK government. **This is estimated to be between £7 and £16 million with a central estimate of around £12 million (10-year PV, 2021/22 prices)**. However, as this is revenue that only arises because of the regulation, it is excluded from the NPSV.

E.8 Summary of Results

E.8.1 Net Present Social Value (NPSV)

163. Under the central assumptions, the estimated total quantified benefits and costs are **£25.6 billion** and **£7.0 billion** respectively, which provides an NPSV of around **£18.6 billion** over the 10-year appraisal period.

164. As there is inherent uncertainty with economic modelling, analysis has been conducted to estimate an upper and lower bound for the policy volume projections, varying the proportion of graduates who would apply, and the additional volumes of students entering the UK, as described above. Table 10 shows the impact of the different volume scenarios on the NPSV. The scenarios outlined here do not show the full extent of the range of impacts as further sensitivity analysis has been conducted in section G to provide a range of fiscal impacts, and sensitivities around COVID impacts.

Table 10: Costs and benefits of Option 1 under low, central and high-volume assumptions (PV, 2021/22 prices), £ million, 2021/22 to 2030/31.

Discounted Values – nominal prices FY	Low	Central	High
Benefits			
Fee income (Graduate route)	310	490	690
Fee income (Student route)	30	90	140
IHS income (Graduate route)	590	920	1,290
IHS income (Student route)	50	210	300
Sponsorship Fee income (Graduate route)	-4	-6	-9
Tuition fee income (Student route)	2,740	10,620	13,690
Exchequer income (Graduate route)	6,730	10,680	15,150
Exchequer income (Student route)	700	2,620	3,380
Total Benefits	11,140	25,630	34,620
Costs			
Processing costs for Home Office (Graduate route)	40	70	100
Processing costs for Home Office (Student route)	10	40	60
Sponsorship costs to education institutions (Student route)	2	6	9
Processing costs to education institutions (Student route)	10	30	50
Processing costs to education institutions (Graduate route)	0	30	50
Public service provision (Graduate route)	3,190	4,940	6,880
Public service provision (Student route)	500	1,860	2,430
Total Costs	3,760	6,980	9,570
Net Present Social Value	7,380	18,640	25,050

165. Changes to the volume scenarios also impact the overall NPSV. If the low volume scenario is used, then the estimated quantified total costs and benefits are **£11.1 billion** and **£3.8 billion** respectively, thus resulting in an estimated **NPSV of £7.4 billion (10-year PV, 2021/22 prices)**⁸⁴. Similarly, under the high-volume scenario, the estimated total costs and benefits are **£34.6 billion** and **£9.6 billion** respectively, leading to an estimated NPSV of **£25.1 billion (10-year PV, 2021/22 prices)**.⁸⁵

166. Further sensitivity analysis can be found in section G.

E.8.2 Business Net Present Value (BNPV)

167. Introducing a Graduate route is expected to generate some familiarisation costs for higher education providers. Detailed guidance will be available on GOV.UK. In addition, there will be costs for higher education institutions to confirm students have completed their studies, and governance costs associated with this activity.

⁸⁴ Rounded to the nearest £0.1bn

⁸⁵ Rounded to the nearest £0.1bn

168. The Business Net Present Value is estimated to be between **£2.7 and £13.6 billion**, with a central estimate of around **£10.6 billion** (10-year PV, 2021/22 prices) over the appraisal period. Table 11 below summarises the main direct and indirect impacts on higher education providers as a result of the introduction of the Graduate route.

Table 11: Overview of the impact to business associated with the Graduate route

Impact Category	Type of Impact	Cost/Benefit (Central case)	Magnitude of Impact
Familiarisation Cost associated with Graduate route	Direct	Cost <£1m	Higher Education Providers will need to familiarise with the guidance on the Graduate route, to understand implications for them. This is estimated to cost between £0 and £0.02 million over the appraisal period.
Processing costs associated with Graduate route (Confirmation of completion of study and additional governance costs)	Direct	Cost £32m	Higher Education Institutions will be required to confirm international students' completion of studies with the Home Office and therefore will incur costs to provide data and may incur additional governance cost, for example to liaise with UKVI or host a UKVI audit. This is estimated to cost between £0.1 and £50 million over the appraisal period.
Processing costs associated with increased inflow of international students	Indirect	Cost £30m	The introduction of the Graduate route may indirectly cause an increase in the number of students entering the UK, following a change in behaviour. This will increase the cost of processing Student route applications for higher education providers. This is estimated to be between £10 to £50 million over the appraisal period.
CAS Costs associated with increased inflow of international students	Indirect (excluded)	Cost £6m	Higher Education Providers will be required to apply for a CAS for each additional international student. This is estimated to cost between £4 to £9 million over the appraisal period. As this is a cost to the Home Office which is being reimbursed through a fee mechanism (to higher education institutions), it has been excluded from the NPSV.
Additional Tuition Fee income associated with increased inflow of international students	Indirect	Benefit £10.6bn	The increase in international students in higher education is estimated to lead to an increase in tuition fee income, and this is estimated to be between £2.7 and £13.7 billion over the appraisal period.

Source: Home Office internal analysis.

E.8.3 Equivalent Annual Net Direct Cost to Business (EANDCB)

169. The EANDCB lies between the range **of £0 and £5.9 million with a central estimate of £3.7 million per year**, based on the direct costs outlined in Table 3. This is based on the following direct cost components:

- **Familiarisation costs:** Outlined in Section E.4.1. This approach uses readingsoft.com to estimate the length of time it takes to read the Graduate route guidance (around 4 minutes), and ASHE data is used to estimate the hourly cost of reading the guidance which is applied to relevant number of staff members at each higher education providers.
- **Processing costs:** As outlined in section E.4.2. The analysis quantifies the costs associated with providing data to the Home Office to confirm international students have completed their studies. The analysis also estimates potential additional governance costs associated with complying with Graduate route requirements.

E.8.4 Impact on small and micro-businesses

170. In the Higher Education sector, provider size is traditionally based on its student population, as it is considered more relevant for most policy questions than the number of total employees. However, for the purposes of assessing impacts on small and micro-businesses, the analysis considers provider size based on the number of employees. Micro-businesses generally have fewer than 10 employees, whilst small businesses are defined as those employing between 10 and 49 full-time equivalent (FTE) employees⁸⁶.

Higher Education Institutions

171. There are unlikely to be direct impacts of the policy changes on small and micro businesses (SMBs) as the proposed changes primarily impact universities, the Home Office and the Exchequer. Data for 2018/19 from HESA suggests that there were around 439,955 staff members across 166 different universities, with an average of 2,650 staff members per HEI.⁸⁷

172. In absolute terms, the smallest higher education provider (in terms of total number of employees) had 95 members of staff. Therefore, is it considered that higher education providers fall outside of the scope of the assessment on small and micro businesses.

Alternative Providers

173. Evidence on the number of employees in Alternative Providers (AP) is limited, and therefore it is more difficult to assess impacts on these institutions.

174. However, there is evidence of the number of students, split by domicile, in each AP. Data for 2018/19 from HESA suggests that there were around 97 different alternative providers, with an average of 736 students per AP. However, there are only 55 APs with international students, the following analysis focuses on these providers.

175. Two different methods have been developed to estimate how many Alternative Providers, if any, may be small or micro-businesses. The analysis suggests that between zero and 20 APs may be small businesses, and no AP is expected to be a micro-business. The methods used are described in Annex L.

⁸⁶ Page 2, [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/827900/RPC case histories - Small and Micro Business Assessment SaMBA August 2019.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/827900/RPC_case_histories_-_Small_and_Micro_Business_Assessment_SaMBA_August_2019.pdf)

⁸⁷ Table 1 - HE staff by HE provider and activity standard occupational classification. <https://www.hesa.ac.uk/data-and-analysis/staff/working-in-he>

176. The analysis on costs to businesses suggests that the costs of the policy to higher education providers are likely to be small as providers are likely to be able to use existing systems to comply with the Graduate route requirements on education institutions.
177. Therefore, it is unlikely that the policy will have a disproportionate impact on small businesses. However, the Home Office will continue working with the industry and representative bodies to understand impacts and consider any possible mitigation where needed.

E.8.5 Placed based analysis

178. The Graduate route could have impacts on the different regions of the UK through two different channels; the regions additional international students would study, and the regions additional graduates would live and work.

179. In 2019/20, HESA data shows of the international students in the UK:

- 83 per cent study in England
- 4 per cent study in Wales
- 11 per cent study in Scotland
- 2 per cent study in Northern Ireland

180. Table 12 shows the percentage of international students by UK region in the 2019/20 academic year⁸⁸. London had the most international students, with over double the number of EU or non-EU students than any other English region.

Table 12: International Students by Region

Region	Percentage of EU Students	Percentage of Non-EU Students
London	26%	24%
Scotland	15%	10%
South East	12%	10%
East of England	9%	6%
West Midlands	8%	9%
North West	6%	9%
South West	6%	6%
East Midlands	5%	7%
Yorkshire and the Humber	4%	8%
Wales	4%	4%
North East	3%	5%
Northern Ireland	2%	2%
The Open University in England	0%	0%

Source: Home Office internal analysis.

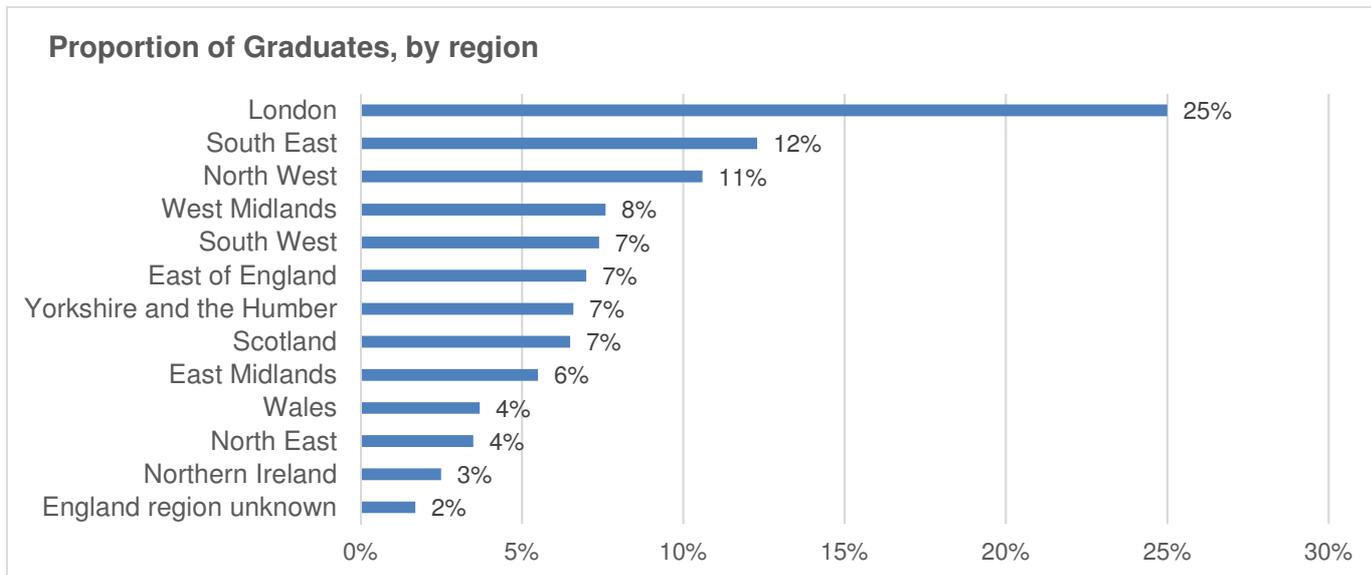
181. To show where international graduates live and work, analysis looked at the Destinations of Leavers from Higher Education Longitudinal survey (DLHE), from HESA.⁸⁹ The survey captures information about the activities and perspectives of graduates three and a half years after they completed their studies. The most recent survey of this kind had 107,340 responses in 2016/17 survey from individuals who graduated in 2012/13. It should be noted that the survey does not distinguish international students, and therefore, if there is significant difference between the regions that UK graduates and international graduates choose to work, it may not be shown in this data.

⁸⁸ <https://www.hesa.ac.uk/data-and-analysis/students/where-study>

⁸⁹ <https://www.hesa.ac.uk/data-and-analysis/publications/long-destinations-2012-13/employment>

182. Figure 4 shows most graduates live in London or the South East, where-as Wales, Northern Ireland and the North East had the fewest proportion of graduates. Analysis by the Centre for Cities⁹⁰ identifies two reasons for the high proportion of graduates in London: the ability to retain students who studied there, and to attract graduates from elsewhere.

Figure 4: Proportion of graduates by region



Source: Home Office internal analysis of DHLE survey.

183. This policy does not have geographically defined objectives, as it applies to the UK as a whole. Regions with higher student populations and regions that attract the most graduates may be expected to be the largest beneficiary, as described above. This is however uncertain as it will depend on international students and graduates' behaviour.

F. Proportionality

184. The analysis set out in this IA is based on changes to secondary legislation and builds on a number of impact assessments produced to support the introduction of the UK Points-based Immigration System. These include the IA for the Immigration Social Security Coordination (EU Withdrawal) Bill⁹¹, the IA for changes to the Immigration Rules for Students⁹², and the IA for changes to the Immigration Rules for Skilled Workers⁹³.

185. The approach taken in this IA is considered proportionate to the proposed introduction of the Graduate route, it quantifies the impacts on the volume of students who may choose to study in the UK due to the introduction of the graduate route and the volume of graduates who may choose to stay in the UK on the graduate route. It then estimates the consequential impacts on education providers, the Home Office, the Department of Health and Social Care and the Exchequer (HM Treasury).

186. The IA sets out where evidence is limited, or where assumptions have been made to conduct certain components of the analysis. Further details on the assumptions made and the methodology used are set out in the annexes.

⁹⁰ <https://www.centreforcities.org/reader/great-british-brain-drain/migration-students-graduates/>

⁹¹ https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/885682/2020-05-18_IA_ImmSSC_Bill_v21_with_Signature.pdf

⁹² https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/916601/IA_-_students.pdf

⁹³ https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/936121/Revised_Impact_Assessment_for_the_Skilled_Worker_Route_signed.pdf

G. Sensitivity analysis

G.1 COVID-19 pandemic Impacts

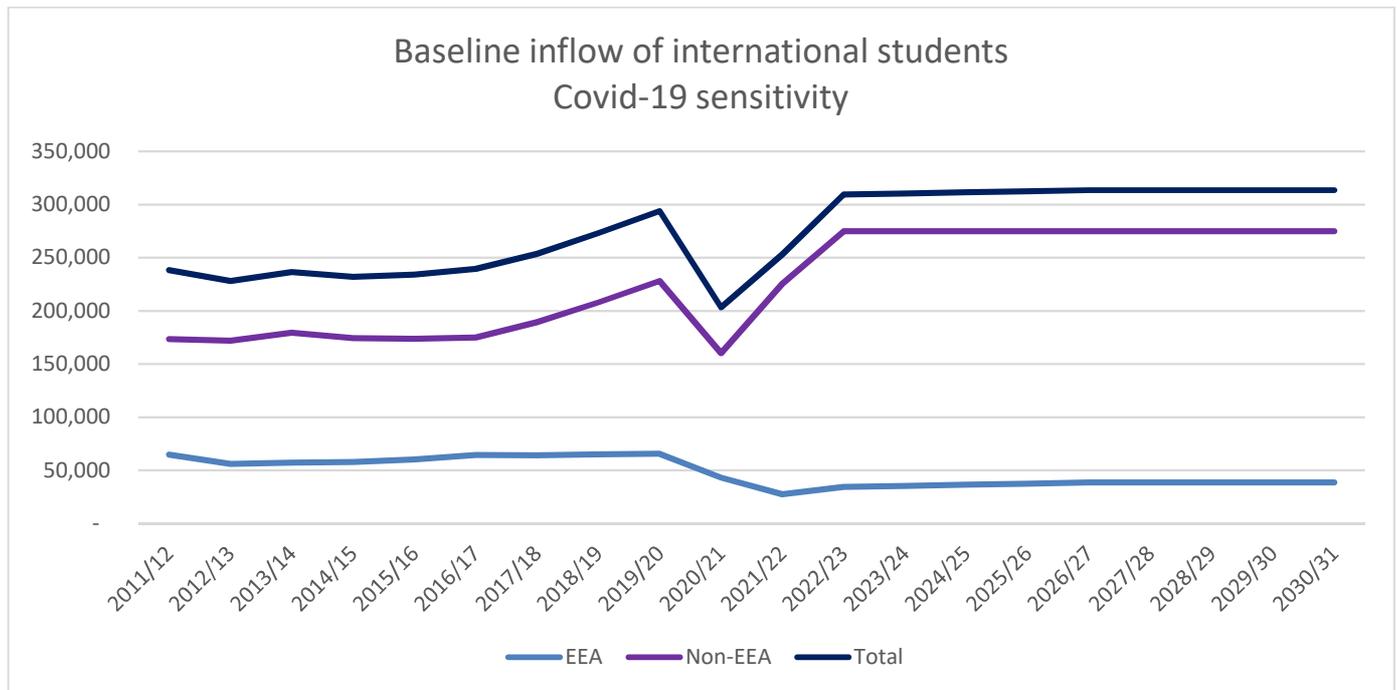
187. The estimates outlined in section E do not account for the impact of the COVID-19 pandemic. This could have a sizeable impact on volumes of students entering the UK, the number of graduates remaining in the UK, their employment opportunities and pay after graduation, in particular in the short term.
188. This section considers potential impact of the pandemic on the volume of international students who may be attracted to the UK because of the Graduate route, and on the volume of graduates who may stay in the UK on the Graduate route after graduation.

G.1.1 Impact on international students

189. It is difficult to estimate how COVID-19 may affect the decision of international students to study at a UK higher education provider and their decision to stay in the UK after graduation. Factors that may affect this include but are not limited to (a) the number of COVID-19 cases in the home country and in the UK, (b) rules around lockdown restrictions and easing of these globally, (c) whether UK universities choose to teach some of their courses virtually, or even delay the academic year and, (d) the perception of international students studying in the UK amidst the COVID-19 uncertainty.
190. Survey findings from Quacquarelli Symonds (QS) in April 2020⁹⁴ found that 53 per cent of respondents who are prospective international students stated that coronavirus has impacted their plans to study abroad, and 46 per cent of those intended to defer or delay their entry, indicating that students may be more inclined to defer rather than be deterred from coming to study in the UK (assuming universities accept their deferral requests). This suggests that COVID-19 could significantly impact the results set out above, both in terms of costs and income for universities and the Home Office, at least in the short term.
191. In order to capture the potential impact of the COVID-19 pandemic on students' enrolment, sensitivity analysis has been conducted to assess the impact of the pandemic if it did in fact deter students from coming to the UK. In the absence of data on first year students' enrolment for the academic year 2020/21, the analysis considered data on applications for student visas as a proxy for students' enrolment. In the year ending September 2020 there were 176,101 Sponsored study (Tier 4) visas granted (including dependants), a 36 per cent decrease on the year ending September 2019. Due to the delay between the grant of a visa, and a student beginning their course, a sensitivity was considered that reduced the volume of all students entering the UK in 2020/21 by 36 per cent. It also assumed some impact on the following year, reducing expected student volumes in 2021/22 by 18 per cent, before reverting to the expected student numbers in 2022/23.
192. This reduces EU student inflows by approximately 31,000 and non-EU student inflows by 140,000 in the two years impacted. The impact on the baseline inflow of students is shown in Figure 5.
193. This adjustment would be estimated to reduce projected tuition fee for universities by around -£1.8 billion over the appraisal period (10-year PV, 2021/22 prices). In the central case, the NPSV would reduce from between £18.6 to £16.4 billion (10-year PV, 2021/22 prices).

⁹⁴ <https://www.qs.com/how-international-students-are-responding-to-covid-19/>

Figure 5: Covid-19 sensitivity on international students' inflow



Source: Home Office internal analysis

194. These assumptions have limitations. For example, it is assumed that all students starting their studies in the 2020/21 academic year applied before the beginning of the academic year in September 2020. This does not capture students who may have commenced their studies later in the year and applied after the academic year has started. Therefore, the impact may be an over or under-estimate. The assumption also assumes that all international students who start their courses in 2020/21 academic year travel to the UK to undertake their courses, although some institutions may offer remote learning for which a Student visa is not required. These students would however be treated as if they were in the UK for the purpose of their studies if they enter the UK as a Student by certain dates and complete a certain proportion of their studies in the UK, under concessions offered to the education sector by the Home Office⁹⁵. In this case the impact of COVID 19 may be over-estimated.

G.1.2 Impact on graduates

195. The COVID-19 pandemic may also affect graduates' decisions to stay in the UK after graduation and apply for the Graduate route, and it may also have an impact on the employment opportunities of those who stay in the UK on the Graduate route.

196. In order to test the potential impact of the pandemic on the Graduate route analysis, two sensitivities have been considered, one on the assumptions used to estimate applications for the Graduate route and one on assumptions used to model the employment opportunities of those who stay in the UK on the Graduate route.

197. These are highly uncertain assumptions and only presented as an indication of potential impacts, as the effect of the pandemic remains difficult to estimate and may have different effects for different cohorts, and over the short or the longer term.

Sensitivity 1 – Fewer Graduate route applications

⁹⁵ <https://www.gov.uk/government/publications/coronavirus-covid-19-student-sponsors-migrants-and-short-term-students>

198. The first sensitivity considers a scenario where fewer graduates choose to apply for the Graduate route as the end of their studies, for example because they choose to pursue further study and postpone their entrance to the labour market, and/or because they choose to leave the UK at the end of their studies.
199. Evidence from previous recessions suggests that more students may choose to stay in education and postpone entering the labour market. For example, between 2008 and 2009, there was a 7 per cent annual rise in education participation rates among 21 to 23 year olds.⁹⁶
200. To test this impact, the SOGIS assumptions described in Section E have been altered by adjusting the proportion of graduates who are expected to apply for the Graduate Route. The sensitivity analysis considers a scenario that includes only half of the proportions modelled the low scenario, where only those who are looking for a job within the UK are included.
201. The analysis assumes that these proportions would apply until 2023/24, based on latest OBRs economic and fiscal outlook⁹⁷ estimate of when unemployment rates may return to pre pandemic levels. This is taken as a proxy for when economic conditions may be expected to return to pre pandemic levels.

Table 13: Assumptions on the proportion (%) of graduates who apply for the Graduate Route

Domicile	Level of study	Central scenario	Low scenario	Covid-19 Sensitivity 1
EU	Undergraduate	24	21	11
	Postgraduate ⁹⁸	37	34	17
Non-EU	Undergraduate	17	15	8
	Postgraduate ⁹⁹	24	21	11

Source: Home Office internal analysis

202. Under this scenario, Graduate route applications are reduced by 43% in the three years impacted, compared to the central estimate. The NPSV in the central scenario would reduce from £18.6 million to £17.4 billion (10-year PV, 2021/22 prices).

Sensitivity 2 – Lower employment rate of graduates on the Graduate route

203. The COVID-19 pandemic may also affect the employment opportunities of graduates who stay in the UK after graduation.
204. The impact of the pandemic on the labour market may have implications for new entrants to the labour market, by affecting the probability of finding employment. Evidence suggests that while employment outcomes worsen for the general population during economic crises, the impact may be larger for recent education leavers¹⁰⁰.
205. To test the impact of the pandemic on employment opportunities of graduates, the analysis adjusts the assumptions on the employment rate of graduates on the Graduate route. In the central scenario, the analysis assumes that 85 per cent of EU graduates, and 81 per cent of non-EU graduates on the Graduate Route will be in full time or part time employment, based on data from the Graduate

⁹⁶ <https://www.resolutionfoundation.org/app/uploads/2020/05/Class-of-2020.pdf>

⁹⁷ <https://obr.uk/efo/economic-and-fiscal-outlook-november-2020/>

⁹⁸ Estimates for postgraduates are applied to both postgraduate taught and research courses.

⁹⁹ Estimates for postgraduates are applied to both postgraduate taught and research courses.

¹⁰⁰ <https://www.resolutionfoundation.org/app/uploads/2020/05/Class-of-2020.pdf>

Outcomes survey. In this second Covid-19 sensitivity, the proportion of those not working is doubled from 15 per cent for EU and 19 per cent for non-EU to 30 per cent and 38 per cent respectively.

206. Under this scenario, NPSV in the central scenario would reduce from £18.6 billion to £17.9 billion (10-year PV, 2021/22 prices). However, the analysis does not adjust for potential impact of the pandemic on the level of pay and assumes the same salary distribution as under the central scenario, therefore the impact of the pandemic on employment outcomes may be underestimated.

Total Impact of COVID-19 pandemic

207. The analysis above has considered in turn the potential impact of the pandemic on the volume of international students who may choose to study in the UK, the volume of graduates who may apply for the Graduate route, and the employment rate of graduates on the Graduate route. If all the sensitivities were applied at once, the NPSV in the central case would reduce from £18.6 billion to £14.8 billion (10-year PV, 2021/22 prices). All these assumptions made are for illustration only, and should be seen as indications of the potential impact.

G.2 Fiscal Sensitivity

208. The central methodology used in the fiscal analysis of this IA represents a 'marginal' approach to measuring the impact of migration and therefore makes a distinction between spend and revenue that is unlikely to vary according to the number of individuals moving to the UK

209. Under the marginal approach, newly arrived migrants are assumed to have little or no impact on spending on services such as pure public goods, debt interest and EU transactions and revenue streams such as capital gains tax, inheritance tax and gross operating surplus. However, they are assumed to have an impact on congestible public goods and taxes paid by businesses such as corporation tax and business rates. Two sensitivity scenarios are included in order to test the impact of assumptions on which element of revenue and spend are apportioned to migrants.

Sensitivity 1 – Includes all Spend and Revenue Components

- Public goods, such as R&D, Defence are allocated on a per capita basis.
- Other indirect taxes such as capital gains tax, inheritance tax, the climate change levy, and environmental levies are allocated to individuals based on estimated consumption patterns and income. This assumes the same relationship between earnings and tax contribution as indirect tax.
- Other receipts such as gross operating surplus, interest and dividends and other income streams are allocated on a per capita basis.

Sensitivity 2 – Excludes all public goods and only includes taxes, such as: income tax, NIC, council tax and indirect taxes.

- Under this scenario, all public goods (pure and congestible) are excluded.
- Business rates and corporation tax are also excluded.
- Only income tax, NIC, council tax and indirect taxes are included.

210. The sensitivities outlined above are conducted for students and graduates under the policy scenario. Table 14 shows that under sensitivity 1, fiscal revenue increases by around 30 per cent and fiscal spend increases by 80 per cent relative to the marginal approach. Under sensitivity 2, revenue falls by around 20 per cent and spend falls by 44 per cent relative to the marginal approach.¹⁰¹

¹⁰¹ These are rounded to the nearest 5 per cent.

Table 14: Fiscal Results relative to the central scenario, FY 2021/22-2030/31 (£m)

	Marginal Approach (Central)	Sensitivity 1	Sensitivity 2
Increase in Revenue	13,300	17,600	10,700
Increase in Spend	6,800	12,200	3,800
Net Fiscal Contribution	6,500	5,400	6,900

Source: Home Office, internal analysis. Figures may not sum due to rounding.

H. Risks

211. The impacts assessed in this IA stem in the main from behavioural changes of students and of graduates, these estimates are therefore highly uncertain, and should be taken as indicative only. Projecting migration flows is challenging due to the wide range of drivers which themselves can be inherently uncertain. Analysis should be considered in the context of the wider economy and the labour market being dynamic and continually adapting to an evolving environment. The following main risks have been identified with the analysis presented in this IA:

- **Increase in inflow of international students**

212. The estimated increase in the inflow of international students due to the introduction of the Graduate route is highly uncertain. The assumptions used to estimate this impact are based on data on students' enrolment between 2008 and 2012 when the Tier 1 (Post Study Work) visa was in place. While the Graduate route offer is similar to the Tier 1 (PSW) visa, and the analysis adjusts for the underlying trend in students' enrolments, it is possible the other factors may have influenced students' enrolment at the time. This may result in the model impact being overestimated. It is also possible that international students' view of the value of living in the UK may have changed since that period, which would affect the overall result, the overall direction unknown.

- **Applications for Graduate route**

213. The estimated volume of applications for Graduate route is mainly based on results from the 2017 Survey of Graduating International Students. The 2017 SoGIS was chosen for this analysis because it provides evidence on the intentions of international students before graduation. As the graduate route is a new route, this evidence allowed to make assumptions on the potential future behaviour of international students. The survey is however based on a small sample of final year students graduating in the 2016/17 academic year. There are a number of limitations with using this survey:

- **EU exit:** The survey took place after the EU Referendum on 23 June 2016 but before the UK formally left the European Union on 31 January 2020 and before the end of freedom of movement for EU students and the launch of the UK-points based system on 1 January 2021.
- **Covid-19 pandemic:** The survey also took place before the Covid-19 pandemic.
- **Sample size:** The survey is based on a small sample of final year students
- **Intentions and behaviour:** The survey captures intentions of the respondents; and intentions may not always be the same as eventual behaviour.

214. It is possible that in the intentions of students graduating from the 2020/21 academic year onwards will be different from those of earlier cohorts and will change overtime. This makes the estimates of applications for the Graduate route particularly uncertain and should therefore be considered indicative. The high and low scenarios built around the central assumptions attempts to capture the uncertainty in future students' behaviour however, is it possible the actual data on applications for Graduate route may be outside the estimated range.

- **Displacement effect**

215. The analysis assumes that all graduates on the Graduate route who find employment in the UK are additional workers, and also that all international students who choose to study in the UK because of the Graduate route are additional students. However, it is possible that these additional workers / students may not be wholly additional but displace other workers or students in the baseline. If this is the case, the estimated policy impact would be an overestimate. These impacts have not been quantified because of uncertainty and lack or limited evidence available to estimate them. Displacement effects may arise from a number of sources:

- **Skilled Worker route or other routes:** it is possible that in the absence of the Graduate route some of these international students would have left the UK and returned on the Skilled Worker route or other work-related routes after completing their studies.
- **UK residents:** the analysis does not attempt to capture the impact that graduates entering the UK labour market may have on the employment opportunities of UK residents.
- **Home students:** the analysis also does not model the impact that additional international students may have on displacing domestic students.

- **EU Settlement Scheme**

216. All EU students who started their course by 31 December 2020 are eligible to apply for the EU Settlement Scheme. The analysis assumes that all these EU students apply to the EU Settlement Scheme by the deadline on 30 June 2021, and therefore are not included in the estimates of applications for the Graduate route. While it is possible that some EU students who are eligible for the EU Settlement Scheme do not apply for it, this group is expected to be small and not to have a substantial impact on the volume estimates presented in this IA.

- **Behavioural impacts**

217. The impact of behavioural assumptions is uncertain. For example, the estimated response of students and graduates to the costs of route requirements is uncertain as evidence on the price elasticity of demand for visa is limited.

I. Wider impacts

218. Migration, and changes in migration flows, can have Impacts on communities. Community impacts include access to local housing, congestion, access to public services, environmental impacts and crime. These are particularly difficult to quantify, as the MAC has found¹⁰². Previous MAC analysis considered the impact of migration on cohesion and integration and found at a national level there is limited scope for quantification and monetisation of impacts, although it was suggested analysis at a local level may provide a clearer picture of impacts¹⁰³.

219. Economic output is a function of labour used and capital employed and can be measured impartially by GDP. Each worker is a unit of labour and contributes to the creation of economic output. If all else is equal, higher work immigration means more workers in the economy and therefore higher economic output. Whilst aggregate economic output is an important measure, when considering the economic impact of immigration, it is also important to consider GDP per capita. On this measure, particularly in the short run, impacts will be small on aggregate as increased economic output are shared across a

¹⁰² Migration Advisory Committee, Analysis of the Impacts of Migration. January 2012. Page 94-96.
https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/257235/analysis-of-the-impacts.pdf

¹⁰³ Migration Advisory Committee, EEA migration in the UK: Final report. September 2018. Page 99.
https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/741926/Final_EEA_report.PDF

larger population. In line with MAC advice¹⁰⁴, it is important to note that although migration may affect GDP per head (by a small amount) mainly due to higher pay and employment rates of migrants compared to natives, it is the immigrants, rather than the resident population, who are the main gainers/losers. Therefore, it is important to focus on the impact migration has on the GDP of residents through dynamic effects on productivity and innovation.

220. Available evidence included within the MAC (2018) report suggests that “*high-skilled immigrants make a positive contribution to the levels of innovation in the receiving country*”¹⁰⁵. While the MAC acknowledged the significant uncertainty about the impact of immigration on productivity, they found that most studies conclude there is a positive impact, particularly for high-skilled migrants. This can be through the complementary nature of migrant and domestic labour, boosted competition, upskilling of domestic workers, and – particularly with the facilitation of migration of researchers through the global talent route – the facilitation of knowledge diffusion and conducting cutting-edge research. There was little evidence of the impact on training and investment, but the MAC concluded that “*there is no evidence that migration has had a negative impact on the training of the UK-born workforce*”.
221. In its report on EEA migration to the UK¹⁰⁶ the MAC considered the impact of migration on crime and well-being. The report did not find any evidence of migration having an impact on crime. This was found to be the case in either direction; namely migrants are not more likely to be either perpetrators or victims of crime than the resident population. The MAC acknowledged the impact of migration on wellbeing is particularly challenging, given the subjective nature of well-being. The MAC did not find evidence suggesting migration has had a negative impact on subjective wellbeing.
222. Overall, the evidence has not found causal links between migration and community impacts¹⁰⁷. The literature stresses the difficulty of doing this and it has focused on a qualitative discussion of the potential impacts. Community impacts are likely to vary at the local level and be subjective in nature.
223. As the policy changes outlined in this IA are estimated to have an impact on international student migration flows to the UK, it is also relevant to consider the wider impacts of international students. As part of its report on the impact of international students in the UK¹⁰⁸, the MAC considered the impact of overseas students on the wider community, including health services, transport and housing. The report noted whilst students may have some impact on the communities in which they live, hard evidence is difficult to find. The paper found that it is often difficult to separate the impacts of domestic and international students. There is no evidence to suggest that student neighbourhoods lead to a lower quality of life for other residents.
224. Whilst it is difficult to quantify the impact of students on local transport systems, the UCAS Student Lifestyle Survey¹⁰⁹ found that around 32 per cent of students walked to and around university, whilst a further 47 per cent use some form of public transport such as a bus, train or tube, and only a very small proportion of students drove to university. It is important to caveat that the survey covers all types of students, and therefore the results may differ for international students specifically. Assuming the behaviour of international students is the same as students as a whole, this could suggest that they may have a limited impact on congestion.
225. Data from HESA in 2017/18 shows that around a quarter of international students tend to live in university accommodation, with a further 50 per cent of them living in private sector halls or rented accommodation. This differs from the behaviour of UK students, with around half of all UK domiciled

¹⁰⁴ Migration advisory committee January 2012; “Analysis of the Impact of Migration”

<https://www.gov.uk/government/publications/analysis-of-the-impacts-of-migration>

¹⁰⁵ https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/766465/The-UKs-future-skills-based-immigration-system-print-ready.pdf

¹⁰⁶ Migration Advisory Committee, EEA migration in the UK: Final report. September 2018. Page 99-100.

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/741926/Final_EEA_report.PDF

¹⁰⁷ https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/741926/Final_EEA_report.pdf

¹⁰⁸ Migration Advisory Committee, Impact of International Students in the UK. September 2018.

¹⁰⁹ Page 9, <https://www.ucasmedia.com/sites/default/files/UCAS%20Media%20Student%20Lifestyle%20Report.pdf>

students either living in their parental/guardian home or living in their own residence. The impact of international student on housing depends on a range of factors, such as the number of international students choosing to rent privately and the supply of housing in the particular area. The MAC report also noted that it is difficult to separate the impacts on housing made by domestic students and international students.¹¹⁰

226. As there is limited evidence on the impact of international students on crime, it has assumed to be out of scope of the Justice Impact Test (JIT). There is also limited evidence on the impact of international students on the environment, and therefore it has assumed to be out of scope for the Environment Impact Test.

J. Trade Impacts

227. The policy changes outlined in this IA are estimated to have an impact on international student migration flows to the UK, and on international students post study choices. The policy proposal is expected to have an impact on the volume of international students who chose to stay in the UK after graduation, and on the activities they may conduct. Some are expected to be in work, and some may not, while on the Graduate route.

228. There is limited evidence to suggest whether student migration specifically impacts trade. However, there is literature on the impacts of immigrants more generally on trade flows and given that the policy influences the stock of migrants in the UK who may be in work, the policy may have an impact on trade between the UK and the rest of the world.

229. There are a number of channels through which immigration may affect trade and, in general, the external literature finds a positive relationship between the stock of immigrants and trade. At a macro level high immigration to the UK increases the UK population and consequently aggregate demand and the demand for imports. UK exports may also increase if immigration can enhance the international competitiveness of the UK. For example, Gould (1994)¹¹¹ argues that immigrants have individual-specific knowledge of home-country markets which could enhance trading opportunities. For example, immigrants may have a greater a knowledge of foreign languages which helps improve communication in trading relationships, and immigrants may have a greater understanding of legal arrangements which may help lower the fixed costs of trade. Other mechanisms through which immigrants may affect trade include a preference for home-country goods, which could increase the demand for UK imports through an increase in consumption.

230. Genc et al. (2011)¹¹² provide a meta-analysis of 48 studies and find that, on average, a 10 per cent increase in the number of migrants may increase the volume of trade by about 1.5 per cent. With regards to services, Ottaviano et al. (2016)¹¹³ find a 10 per cent increase in the immigrant share increases exports by 3-5 per cent, whilst reducing imports by 1-2 per cent. Dastidar and Balasubramanyam (2015)¹¹⁴ assess the impact of the immigrant stock on services exports for the EU and commonwealth countries separately and find a 10 per cent increase in the stock of immigrants from EU and Commonwealth countries raise services exports by 2.8 per cent and 4.3 per cent, respectively. The lack of common language, institutions and bureaucratic procedures may explain the lower elasticity for EU countries and the lower potential to contribute to services exports.

231. The extent to which the Graduate route may affect trade between the UK and the rest of the world is uncertain and will depend, for example on the activities those on the Graduate route will do during the duration of their permission, such as on their occupations for those in employment. Given the

¹¹⁰ Page 74

¹¹¹ Gould (1994) 'Immigrant Links to the Home Country: Empirical Implications for U.S. Bilateral Trade Flows'.

¹¹² Genc et al (2011). 'The Impact of Immigration on International Trade: A Meta-Analysis.'

¹¹³ Ottaviano et al., (2016). 'Immigration, Trade and Productivity in Services: Evidence from UK Firms'.

¹¹⁴ Dastidar et al., (2015). 'The Impact of Immigrants on the Foreign Trade of the UK'.

uncertainty about students' behaviours and on their activities while on the Graduate route, the impact of the policy on trade has not been estimated.

K. Monitoring and Evaluation

232. The Government's preferred option is to make changes to the Immigration Rules relating to students under Option 1.
233. The Home Office anticipates that data on the Graduate route will be collected and published as part of regular statistics¹¹⁵ to provide transparency and accountability for the department's work, meeting the needs of Parliament, the media, academia, and the wider public, in line with the Code of Practice for Statistics.
234. The Home Office will work to ensure the information needed for these purposes is collected. The Home Office is also developing plans to evaluate policies introduced under the UK Points-based Immigration System. This is planned to be an integrated analytical evaluation with multiple components of secondary data analysis and primary research that will report cumulatively over a period of five years post-implementation.

¹¹⁵ <https://www.gov.uk/government/collections/migration-statistics>

L. Annex

L.1 Overview

1. This annex provides more information on the methodology and data sources behind modelling used within the Impact Assessment. The analysis described here is designed to give an indication of the potential scale of the economic impacts of the Graduate route.
2. There is considerable uncertainty within this modelling and there are several ways in which the uncertainty manifests itself:
 - **Data sources** – imperfect data (such as the use of survey data) often mean that confidence intervals can be large;
 - **Assumptions** – any modelling requires the use of evidence-based assumptions and expert judgement and migration is no exception; and
 - **Behavioural response and change** – predicting response or changes to behaviour can be highly uncertain.
3. The potential impacts should be considered in the context of this uncertainty and treated as orders of magnitude rather than precise estimates.
4. This annex provides further details on some of the assumptions used in the analysis. Section L.2 sets out how estimates of applications for Skilled Worker route are made under the baseline. Section L.3 provides assumption used to estimate tuition fee income to higher education providers. Section L.5 summarises the public administration revenue and spend. Section L.4 sets out the methodology used to estimate the fiscal.

L.2 Baseline estimates of applications for Skilled Worker route

1. The analysis assumes that under the baseline some international students on graduation would continue to stay in the UK under the Skilled Worker route, rather than apply for the graduate route. In order to model this, the analysis makes assumptions on the proportion of students who would meet the requirement of the Skilled Work route which was launched on 1 January 2021 as part of the UK Points-based system from 1 January 2021 and replaces the former Tier 2 (General) work route.
2. The assumptions were based on SOGIS estimates for post-graduation behaviour as a guide to which students might apply for the skilled work route. As SOGIS results are from 2017, they predate recent changes to the immigration system and the skilled work route. SOGIS estimates are therefore interpreted differently for EU and non-EU students as the requirements of the Skilled worker route impact these two groups differently.
3. Before the introduction of the Skilled Worker route, Non-EU students had to meet the requirements of the Tier 2 (General) work route, therefore the analysis adjusts for the changes in route requirements under the Skilled Worker route, compared to the Tier 2 General route for this group.
4. EU students who moved to the UK up to 31 December 2021 are eligible to the EU Settlement Scheme and therefore can stay in the UK under EU freedom of movement, and do not need to meet any route requirements, but those who move from 1 January 2021 will have to comply with route requirements under the UK-points based immigration system, therefore the analysis adjusts for the requirements of the Skilled Worker route compared to no requirements for this group.
5. There are many criteria that must be met in order to be eligible for the Skilled Worker route¹¹⁶, the main ones considered for the purpose of the Graduate route analysis are summarised here:
 - Job offer: the applicant must have an offer of a job from a licensed sponsor;
 - Skill level: the job must be at or above the minimum skill level of RQF3 or equivalent (A level or equivalent qualification);
 - Salary threshold: the applicant must be paid the higher of the general salary threshold of £25,600 or the “going rate” for their particular job.
6. This analysis assumes that international students who move to the Skilled Work route under the baseline do so on a job at skill level RQF6 or equivalent (degree or equivalent) and therefore do not make any adjustments for skill level.
7. The analysis also assumes that job offers are made by employers with a sponsor licence.
8. The analysis however adjusts to reflect the criteria around salary thresholds under the Skilled Worker route. Different adjustments are made for EU and non-EU students.

Salary Thresholds adjustments for EU students

9. The analysis uses the 2017 SoGIS data on the proportion of EU students who are expected to have a job offer in the UK. 2017 SoGIS data shows that around 9% of EU students plan to “take up a job they already have in the UK”. As the survey was conducted in 2017, when freedom of movement for EU students was still in place, the assumption needs to be adjusted for the salary threshold required under the Skilled Worker route.
10. To estimate the proportion of EU students who would meet the salary threshold, the analysis makes assumptions on range of occupations they would have after graduation, considers the average salary

¹¹⁶ <https://www.gov.uk/government/publications/uk-points-based-immigration-system-further-details-statement/uk-points-based-immigration-system-further-details-statement>

distribution for those occupations and produces an estimate of the proportion of EU students with a job offer who would meet the salary threshold.

11. In order to estimate the occupations that EU students would enter, the analysis considers the subjects that EU students study using HESA data for 2018/19. The analysis uses pooled data from the Destination of Leavers for Higher Education survey for 2013 to 2016 to estimate the industry in which students are likely to work using the Standard Industrial Classification (SIC) definitions and the occupation they are likely to enter, within each industry, using the 4-digit Standard Occupations Classification (SOC) definitions. This approach gives a distribution of EU students by 4-digit SOC code. The analysis is conducted for each level of study, at undergraduate, postgraduate (taught) and postgraduate (research).
12. ASHE 2019 data for under 26 and those in work for longer than one year was used to produce an estimate of the salary distribution for EU students. ASHE 2019 data is not filtered by EU nationality because the sample size is considered too small to give robust results.
13. The analysis uses ASHE 2019 data on the salary of new entrants or public sector workers, where occupations are in the public sector. Data on experienced workers are not used as students who have just graduated are expected to be new entrants to the labour market. Data on the new entrant and public sector salary level at each 4-digit SOC code is used to determine the proportion of EU graduates earning below the salary threshold under the Skilled Worker route.
14. The analysis uses the salary thresholds outlined in the Further Details Statement on the UK Points-based immigration system to estimate the proportion of EU students who would or would not meet the salary threshold requirements of the Skilled Worker route.
15. The analysis estimates that around 50% of EU students that would be expected to “take up a job they already have in the UK” would not meet the salary threshold and therefore would not qualify for the Skilled Worker route.
16. Therefore the analysis estimates that around 5% of EU graduates would stay in the UK on the Skilled Work route under the baseline.

Salary thresholds adjustments for non-EU students

17. A different methodology is used to estimate the impact of salary thresholds under the Skilled Worker route on non-EU students. More non-EU students are expected to meet the salary thresholds compared to EU students, as non-EU students previously had to meet the requirement of Tier 2 (General) work route compared to EU students who had no requirements to meet.
18. Analysis also focuses on new entrants and public sector workers, excluding experienced workers, as students are expected to be new entrants to the labour market.
19. The analysis uses internal Home Office data from the system in place before the launch of the UK-points based system to estimate the proportion of non-EU students who would qualify for the Skilled Worker route. Under the immigration system in place up to 31 December 2020, non-EU students were required to apply for a Tier 4 visa in order to pursue their studies in the UK and could switch to a Tier 2 (General) work visa in order to continue to stay in the UK for work-related reasons.
20. Internal Home Office analysis of management information data on visa switching shows that around 4% of those on a Tier 4 visa switched to a Tier 2 (General) work visa. This data however does not take account of lower salary thresholds introduced under the Skilled Worker route compared to the Tier 2 (General) work visa.
21. The analysis therefore adjusts for the salary thresholds outlined in the Further Details Statement on the UK Points-based immigration system¹¹⁷. The analysis estimates an increase of 1% in the volume of non-EU students who would meet the public sector salary threshold, and an 11% increase in the volume of non-EU students who would meet the new entrant salary thresholds under the Skilled

¹¹⁷ <https://www.gov.uk/government/publications/uk-points-based-immigration-system-further-details-statement>

Worker route. The Tier 4 to Tier 2 switching assumptions are therefore adjusted to reflect the increased number of non-EU students who would meet the requirements, depending on whether the occupation is in the public sector or not.

22. Therefore, the analysis estimates that 4% of non-EU graduates would stay in the UK on the Skilled Work route under the baseline.

L.3 Policy estimates of applications for Skilled Worker route

23. The analysis builds upon the above baseline analysis to estimate the proportion of graduates who would still apply for the Skilled Worker route under the policy, where the Graduate route is introduced.
24. As done under the baseline, the analysis use SoGIS 2017 estimates for post-graduation intentions to estimate the proportion of EU students who may apply for the Skilled Work route, whilst internal Home Office management information data is used to estimate the same proportion for non-EU students.
25. Therefore, analysis under the policy begins with 9 per cent of EU students and 4 per cent of non-EU students assumed to be eligible for the Skilled Worker Route. However, these assumptions are adjusted to reflect the possibility that, once the Graduate route is introduced, some graduates who would otherwise be eligible for the Skilled Worker route may instead choose the Graduate route, and therefore may be displaced from the Skilled Work route to the Graduate route.
26. To estimate the proportion of displacement, analysis considered the impact of the closure of the Tier 1 (Post-Study Work) visa in 2012, called thereafter PSW visa.
27. The analysis considers the trend in Tier 2 (General) visa applications over the period while the PSW visa was in place and when it closed. Tier 2 (General) visa applications increased by 55 percent and 36 per cent in 2012 and 2013 respectively, after the PSW visa was closed. This is above the change observed in 2009, when after the PSW visa was launched and Tier 2 (General) visa applications increased by 13 per cent. Therefore, the analysis assumes that some graduates who would have applied for the PSW visa moved to the Tier 2 (General) visa after it closed.
28. The analysis estimates what proportion the increase in Tier 2 (General) visa applications in 2012, 2013, and 2014 above trend represents of PSW visa applications when it opened in 2008. These results are used as a proxy to estimate the proportion of graduates who moved to the Tier 2 (General) visa when the PSW visa closed. These estimates are shown in Table 1.
29. These proportions are applied in reverse to the Graduate route analysis and used as a proxy to estimate what proportion of graduates who are expected to apply for a Skilled Work route under the baseline, would choose the Graduate route under policy instead. This approach is highly uncertain as it assumes that all the increase in Tier 2 (General) visa application observed above trend was from potential PWS visa applicants, while other factors may have driven the increase.

Table 1: Additional Tier 2 (General) visa applications by year

Year	Additional T2 applications ¹¹⁸	Estimate of proportion of the PSW cohort
2012	8,000	21%
2013	16,000	41%
2014	14,500	37%

Source: Home Office internal analysis

30. The Graduate route analysis assumes that in the central case, 33% of those with a job lined up would apply for the Graduate route rather than the Skilled Work route, based on an average estimated proportion between 2012 and 2014. In the low scenario, it is assumed to be 21% and in the high scenario 41%, based on the low and high estimates in that period. This approach is highly uncertain and intended to produce indicative estimates of the potential displacement effect from the Skilled Work route to the Graduate route, therefore results should be considered indicative.

¹¹⁸ Rounded to the nearest 500

31. Under the policy, the central scenario assumes that 67% of those with a job lined up would continue to apply to the Skilled Worker route. Salary thresholds are then applied to these volumes as described under the baseline. Those individuals who would fail the salary thresholds are assumed to apply for the Graduate Route instead.
32. Therefore, under the policy the estimate of graduates applying for the Skilled Work route are those graduates who meet the salary requirements and are not displaced to the Graduate route. Therefore, the estimate of graduates who move to the Skilled Work route under the policy is lower compared to the baseline.
33. Table 2 shows the central estimate of Skilled Work applications in the policy scenario, and the difference compared to the baseline.

Table 2: Skilled Worker applications by graduates, 2021/22 to 2029/30.

	21/22	22/23	23/24	24/25	25/26	26/27	27/28	28/29	29/30
EU	90	620	1,150	1,230	1,020	1,020	1,050	1,080	1,110
Non-EU	6,190	6,810	7,080	7,300	7,370	7,380	7,380	7,380	7,380
Difference from baseline (EU)	-40	-290	-540	-570	-450	-450	-470	-480	-490
Difference from baseline (Non-EU)	-2,860	-3,100	-3,200	-3,300	-3,330	-3,340	-3,340	-3,340	-3,340

Source: Home Office internal analysis. Data for all the United Kingdom.

L.4. Fiscal impact of migration

34. A static analysis of the 2018/19 fiscal year is used to estimate tax revenue and government spending attributable to migrants of a given age, economic status and earned income. This analysis is applied to the estimated volume of additional international students and the graduates who are estimated to apply for the Graduate route to assess the order of magnitude of their impact on the public finances.
35. This analysis is not a projection of the future state of the economy; it is based on data on fiscal expenditure and tax rates which captures the UK economy in its current state, adjusting for productivity growth and inflation, allowing specific impacts of changes to migration to be explored, holding all other factors constant.
36. In the literature there are a number of different approaches to calculating the effect of policy changes on fiscal balances. The central methodology used here represents a 'marginal' approach to measuring the impact of migration and therefore makes a distinction between spend and revenue that is unlikely to vary according to the number of individuals moving to the UK.
37. The modelling framework considers initial impacts of specific policy changes. It does not consider dynamic responses of the economy and behavioural responses of individuals and education institutions. As such, fiscal impacts from a change in migration are presented over the short-term, defined as the first ten years of the policy (2021/22 to 2030/31). The approach considers the cumulative change in migrant volumes over this period.
38. No assumption is made for how migrants age over this period.
39. This analysis follows the same methodology used in previous Home Office impact assessments on immigration routes launched under the UK points-based immigration system, such as the impact assessment for the Skilled Worker route¹¹⁹ and the impact assessment for the Students route¹²⁰. At times the text is intentionally kept the same or similar to the annexes on the fiscal impact of migration published with these impact assessments.

L.1.2 Fiscal spend analysis

40. The analysis uses a top down approach to apportion total expenditure on public services at the individual level. This results in estimated unit costs for different types of public expenditure, by migrant age group and economic activity.

Data

41. Data on expenditure on public services is obtained from Public Expenditure Statistical Analysis (PESA) published by HM Treasury, which provides data on public sector expenditure broken down by functions. The analysis is based on data for 2018/19¹²¹ it has been adjusted for productivity growth and inflation and is reported in real 2021/22 prices¹²².
42. Public sector expenditure in PESA is broken down into the following functions:
 - General public services.
 - Defence.
 - Public order and safety.
 - Economic affairs.

¹¹⁹ <https://www.gov.uk/government/publications/supporting-documents-for-skilled-worker-immigration-rules>

¹²⁰ [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/916601/IA - students.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/916601/IA_-_students.pdf)

¹²¹ https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/818399/CCS001_CCS07195_70952-001_PESA_ACCESSIBLE.pdf

¹²² <https://www.gov.uk/government/statistics/gdp-deflators-at-market-prices-and-money-gdp-december-2020-quarterly-national-accounts>

- Environment protection.
 - Housing and community amenities.
 - Health.
 - Recreation, culture and religion.
 - Education.
 - Social protection.
 - EU transactions.
43. Data on migrant population characteristics is obtained from the Annual Population Survey (APS) produced by the ONS. APS data for 2018/19 is used to derive population characteristics such as volumes of existing residents by nationality and age distribution. When using estimates of total UK population, the analysis uses ONS 2018 data, which is considered more accurate than the APS.
44. Data on international student population characteristics is obtained from HESA (2018/19), including their age distribution. Length of study data is combined with the age distribution of students to estimate the age profiles of international graduates, at each level of study. For example, if a student starts a three-year university course at the age of 18, we know they will be 21 when they graduate. Internal Home Office data of Tier 4 to Tier 2 visa switches was used estimate the age distribution of non-EU graduates. Analysis found 85% of EU graduates, and 78% of non-EU graduates, are between the ages of 20 and 29.

Methodology

45. There are a number of different approaches to calculating fiscal impacts. The methodology attempts to represent a 'marginal' approach to measuring the impact of migration and therefore makes a distinction between costs that do not vary with additional individuals moving to the UK or extending their stay, and costs that do vary when one additional individual decides to move to the UK.

- **Treatment of public goods**

46. Goods and services that do not vary with an additional individual are known as pure public goods and are defined as 'non-rival' and 'non-excludable'. This IA makes a further distinction between pure and congestible public goods or services. The classification of public goods and services as pure and congestible is uncertain and open to debate.
47. Pure public goods are non-rival and non-excludable, and the additional cost of providing such a good or service to an individual is considered to be zero. Non-rival means that the consumption of the good or service by one individual does not exhaust the opportunity for another person to consume the good or service. Non-excludable means that once the good or service is provided, it is impossible to prevent individuals from consuming it. An example of this being national defence.
48. Congestible public goods are to some extent rival in consumption, but the additional cost of providing such goods and services is unknown and expected to be smaller than average costs. This category includes for example expenditure on transport and waste management. The definition and classification used in this IA is based on Dustman & Frattini 2014¹²³. This category includes for example expenditure on basic research, or on defence.
49. In the central scenario, only congestible public goods are included. This approach is tested in the sensitivity analysis where in one scenario all public goods are included and in one scenario none are included.

- **Treatment of all other public services**

50. For those categories of expenditure where costs would change when one additional individual arrives or stays in the country, with costs shared equally across the population, public expenditure is

¹²³ <http://www.cream-migration.org/files/FiscalEJ.pdf>

apportioned to the total UK population to derive a unit cost estimate using ONS 2018 population estimates.

- **Treatment of public services: Health, Education and Social Services**

51. In some cases, the consumption of public services is likely to vary by age, gender, family composition and other factors such as income and ethnicity. Migrants and the native population may therefore have different characteristics in relation to the consumption of public services.
52. Unit costs are calculated by apportioning PESA 2018/19 spend on education, health and social services by the proportion of each age group made up by non-EEA nationals. This uses APS 2018/19 data to identify the migrant population by migrant status such as worker, student or dependant.
53. Table 1 summarises how these data are apportioned on a per capita basis in the Graduate route analysis. Unit costs are based on 2018/19 prices these have been inflated to 2021/22 prices and adjusted using OBR long-term projections real labour productivity growth to account for future economic growth¹²⁴.

Table 1: Methodology to estimate fiscal spend

Major spend components	Marginal approach to international students on Student route	Marginal approach to graduates on the Graduate route ¹²⁵
Health	Office of Budget Responsibility (OBR) ¹²⁶ estimates on health spending by age of students and dependents are applied. An adjustment is made for lower usage of the healthcare system of non-UK nationals than the UK population based on Department of Health and Social care internal analysis.	Office of Budget Responsibility (OBR) ¹²⁷ estimates on health spending by age of graduates and dependents are applied. An adjustment is made for lower usage of the healthcare system of non-UK nationals than the UK population based on Department of Health and Social care internal analysis.
Social protection: benefits	Not applicable as the modelling assumes that international students and their dependants are not eligible for welfare payments whilst in the UK.	Not applicable as the modelling assumes graduates on the Graduate route are not eligible for welfare payments whilst in the UK
Social protection: personal social services	PESA unit cost apportioned by age of international students and their dependents.	PESA unit cost apportioned by age of graduates and their dependents.
Pre-primary education	Allocated evenly to 0-4 year-olds. Mainly applies to dependents.	Allocated evenly to 0-4 year-olds. Mainly applies to dependents.
Primary and secondary education	Allocated evenly to 5-17 year-olds. Mainly applies to dependents.	Allocated evenly to 5-17 year-olds. Mainly applies to dependents.
Tertiary education	Not applicable as international students and their dependants are assumed to be not eligible for tertiary education funding.	Not applicable as graduates on the Graduate route are not assumed to be in tertiary education and their dependants are assumed not to be eligible for tertiary education funding.
Public goods (i.e. R&D, Defence) Debt interest	Not applicable as under a marginal approach this spend is only allocated to the resident population. The rationale is that the marginal costs of providing these services to an additional migrant is zero/negligible. This approach is tested in sensitivity analysis.	Not applicable as under a marginal approach this spend is only allocated to the resident population. The rationale is that the marginal costs of providing these services to an additional migrant is zero/negligible. This approach is tested in sensitivity analysis.

¹²⁴ <https://obr.uk/efo/economic-fiscal-outlook-march-2019/>

¹²⁵ The same assumptions are applied to all graduates, including workers on the Skilled Worker Route and the Graduate Route

¹²⁶ <http://budgetresponsibility.org.uk/fsr/fiscal-sustainability-analytical-papers-july-2016/>

¹²⁷ <http://budgetresponsibility.org.uk/fsr/fiscal-sustainability-analytical-papers-july-2016/>

L.1.3 Fiscal revenue analysis

54. The analysis uses a bottom-up approach to calculate the expected contribution to direct and indirect taxes from migrants, based on individuals' characteristics, data on their earnings, and spending patterns. The results are applied to the estimated volumes of international students who are expected to be attracted to the UK because of the Graduate route and to the graduates who stay in the UK on the Graduate route at the end of their studies.

Data

55. Direct taxation contributions are based upon current tax rates being applied to the income distribution of those expected to be in employment. The analysis considers information on indirect taxes as a proportion of disposable income by nationality in the Living Cost and Food survey (data between 2015/16 and 2017/18¹²⁸) and information on council tax in ONS data on the effects of taxes and benefits on household income¹²⁹ 2018/19. Some revenue streams (Corporation tax, business rates and other taxes) are based upon the OBR's Economic and Fiscal Outlook¹³⁰ and then apportioned based upon modelled migrant contributions to indirect taxes.
56. The Student Income and Expenditure Survey¹³¹ is used to estimate the total disposable income of part-time and full-time students, and this is weighted by HESA 2018-19 domicile data¹³² to provide a unitary estimate of student expenditure data by domicile, which the indirect tax percentages are applied to.
57. Some international students are expected to be on a Student route with dependants, as set out in Section E. The analysis uses Annual Population Survey data 2016-2018 to estimate the proportion of working dependants and their occupations. ASHE 2019 data is then used to estimate the salary assumptions of working dependants by occupation.
58. To calculate the salary of graduates on the Graduate route who are in employment the analysis uses the occupation distribution given by ASHE 2019 data of those working for more than one year and under 26. The assumed salary distribution is outlined in Section E.
59. The analysis is adjusted for the proportion of those on Graduate route who may not be earning. The analysis uses evidence from the Graduate Outcomes survey using latest available data from the academic year 2017/18¹³³. Based on data on responses by EU and non-EU domiciled graduates¹³⁴, it is estimated that approximately 15 per cent of EU-domiciled graduates and 19 per cent of non-EU domiciled graduates, would not be earning due to unemployment or other reasons such as caring responsibilities or unpaid work. This assumption is tested with sensitivity analysis, in the low scenario only respondents who state they are unemployed are included, and in the high scenario the analysis the central estimate is doubled, giving a range of 5 per cent to 29 per cent for EU domiciled graduates, and 9 per cent to 37 per cent for non-EU domiciled graduates.
60. Dependants on the Graduate route are permitted provided they are in the UK and were granted permission as dependants of the main applicant on the Student route. Therefore, the analysis makes

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<https://www.ons.gov.uk/peoplepopulationandcommunity/personalandhouseholdfinances/expenditure/adhocs/11763householdexpenditureanddisposableincomebydisposableincomedecilegroupbyoriginofhouseholdreferencepersonukfinancialyearending2016tofinancialyearending2018>

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<https://www.ons.gov.uk/peoplepopulationandcommunity/personalandhouseholdfinances/incomeandwealth/datasets/householddisposableincomeandinequality>

¹³⁰ <https://obr.uk/efo/economic-and-fiscal-outlook-march-2020/>

¹³¹ <https://www.gov.uk/government/publications/student-income-and-expenditure-survey-2014-to-2015>

¹³² <https://www.hesa.ac.uk/data-and-analysis/students/where-from>

¹³³ <https://www.hesa.ac.uk/data-and-analysis/graduates/activities>.

¹³⁴ Domicile relates to the location of the graduate prior to the start of their course from which they have graduated. This is used in this analysis as a proxy of nationality, although it is acknowledged it may not be exactly representative of graduates' nationality.

<https://www.hesa.ac.uk/support/definitions/graduates#domicile>

the same assumption for dependants' family members of graduates on the Graduate route as for international students on the Student route.

61. The analysis assumes that some graduates may be eligible for the Skilled Worker route. The analysis uses the salary assumptions as set out in Section L.1 when estimating fiscal impacts for this group.

Methodology

62. The estimates of the fiscal contribution of migrants include the direct and indirect tax contributions from international students while on a Student route, graduates while on the Graduate route, and their dependants.

63. For direct taxation, the analysis applies income tax and National Insurance Contribution rates from 2020/21 to the estimated taxable income of the graduates in employment while on the Graduate route and working dependants of international students and graduates.

64. Council tax is allocated depending on earning deciles, based on the ONS estimates of council tax paid per household in each income decile. Full-time students are not required to pay council tax¹³⁵, but if they share accommodation with an employed individual (such as a dependant) or a part-time student, the household is liable to only pay 75 per cent of the council tax bill. Therefore a 25 per cent discount to council tax is applied to working dependants of international students.

65. Indirect taxes include VAT, duties on specific products such as alcohol and tobacco, licences such as television and intermediate taxes. Indirect tax contributions will depend upon tastes, preferences and characteristics. The lack of robust data on the expenditure of migrants results in uncertainty about their spending patterns. Therefore, for indirect tax contributions the analysis applies a similar approach as taken for council tax. Indirect tax contribution estimates from the Living Cost and Food survey are used to calculate the proportion of income spent on indirect tax for each earning decile. For international students these are applied to the estimated expenditure.

66. Profits and the capital stock change with the size of the workforce. In a marginal approach the assumption is made that any changes in migration will have an impact of company taxes and business rates. This assumes that contributions to company tax and business rates are ultimately driven by consumption in the same way as indirect taxes, and the per capita allocation is based on an individual's contribution to indirect taxes.

67. The estimates of the fiscal contribution of migrants only include the direct and indirect tax contributions from migrants and their dependants, and this analysis does not account for any impact that migrants have on the fiscal contribution of the resident population.

68. Table 2 summarises the methodology used to estimate fiscal contributions from international students on the Student route and from graduates on the Graduate route, and their dependants.

Table 2: Methodology to estimate fiscal revenue

Major revenue components	Approach to international students on Student Route	Approach to graduates on Graduate route
Income Tax	Students are assumed not to pay any income tax. Tax rates for 2020/21 are applied to estimated taxable income of working dependants	Tax rates for 2020/21 are applied to estimated taxable income for workers and working dependants.
National insurance contributions (NICs)	Students are assumed not to pay any NICs. NICs rates for 2020/21 are applied to estimated earnings of working dependants.	NICs rates for 2020/21 are applied to estimated earnings of workers and working dependants.

¹³⁵ <https://www.gov.uk/council-tax/discounts-for-full-time-students>

Council tax	<p>Full-time students are not required to pay council tax¹³⁶.</p> <p>Dependents of students are liable to pay 75 per cent of the council tax bill. Therefore a 25 per cent discount to council tax is applied to working dependants, based on ONS¹³⁷ estimates of council tax paid per household in each income decile.</p>	Council tax is allocated depending on earning deciles, based on ONS ¹³⁸ estimates of council tax paid per household in each income decile.
Indirect taxes ¹³⁹	Indirect tax rates are calculated depending on earning deciles. Data from the Living Cost and Food survey ¹⁴⁰ .	Indirect tax rates are calculated depending on earning deciles. Data from the Living Cost and Food survey ¹⁴¹ .
Corporation taxes Business rates	Per capita allocation is based on an individual's contribution to indirect taxes.	Per capita allocation is based on an individual's contribution to indirect taxes.
Capital gains tax Inheritance tax Gross operating surplus, interest and dividends All other taxes/income streams	<p>Not applicable as under a marginal approach this revenue is allocated only to the resident population.</p> <p>This approach is tested in sensitivity analysis.</p>	<p>Not applicable as under a marginal approach this revenue is allocated only to the resident population.</p> <p>This approach is tested in sensitivity analysis.</p>

¹³⁶ <https://www.gov.uk/council-tax/discounts-for-full-time-students>
¹³⁷

<https://www.ons.gov.uk/peoplepopulationandcommunity/personalandhouseholdfinances/incomeandwealth/datasets/theeffectsoftaxesandbenefitsonhouseholdincomefinancialyearending2014>

¹³⁸ <https://www.ons.gov.uk/peoplepopulationandcommunity/personalandhouseholdfinances/incomeandwealth/datasets/theeffectsoftaxesandbenefitsonhouseholdincomefinancialyearending2014>

¹³⁹ Include VAT, duties on specific products such as alcohol and tobacco, licences such as television and intermediate taxes

¹⁴⁰ <https://www.ons.gov.uk/peoplepopulationandcommunity/personalandhouseholdfinances/expenditure/adhoc/008529householdexpenditureannddisposableincomebydisposableincomedecilegroupbyoriginofhouseholdreferencepersonukfinancialyearending2015tofinancialyearending2017>

¹⁴¹ <https://www.ons.gov.uk/peoplepopulationandcommunity/personalandhouseholdfinances/expenditure/adhoc/008529householdexpenditureannddisposableincomebydisposableincomedecilegroupbyoriginofhouseholdreferencepersonukfinancialyearending2015tofinancialyearending2017>

L.5 Tuition fee prices

69. This impact assessment estimates the impact of increased volumes of international students on tuition fee income for UK higher education providers. The analysis uses a methodology to estimate a tuition fee price for international students in line with the methodology used in the impact assessment on produced by the Department for Education on removing home fee status and access to student finance in England for EU, other EEA, and Swiss nationals ¹⁴².
70. The Department for Education analysis only applies to England, whereas this analysis estimates tuition fee prices for all countries of the UK.
71. To calculate the average tuition fee price for international students, the total fee income by cluster, domicile, and level of study is divided by the Full Time Equivalent (FTE) student numbers. Data is based on data for the 2018/19 academic year.
72. HESA publishes data on the total fee income by provider, domicile (UK, EU, non-EU) of student and level of study (undergraduate, postgraduate taught, and postgraduate research) for all UK HEIs. Whilst HESA does not publish FTE data, the Home Office worked with the Department for Education to access this data, which is also split by provider, domicile, and level of study.
73. The average fees used in this IA are shown in the table below. This IA uses the same definition of cluster as outlined in the DfE analysis.

Table 3: International tuition fees by cluster and level of study

International Fee				
Level	Cluster	Undergraduate	Postgraduate (taught)	Postgraduate (research)
England	1	£22,600	£34,740	£27,800
England	2	£19,260	£22,110	£20,700
England	3	£15,250	£16,680	£15,920
England	4	£12,640	£13,210	£12,920
Wales	1	N/A	N/A	N/A
Wales	2	£12,600	£19,900	£18,800
Wales	3	£14,600	£11,400	£14,500
Wales	4	£14,500	£14,700	£14,600
Scotland	1	N/A	N/A	N/A
Scotland	2	£24,600	£21,300	£20,300
Scotland	3	£12,700	£12,400	£13,200
Scotland	4	N/A	N/A	N/A
Northern Ireland	1	N/A	N/A	N/A
Northern Ireland	2	£14,400	£16,400	£14,800
Northern Ireland	3	£11,200	£3,900	£3,300
Northern Ireland	4	N/A	£9,000	£9,000

Source: Home Office analysis. Figures are rounded to the nearest 100.

¹⁴² <https://www.legislation.gov.uk/ukxi/2021/127/impacts>

L.5 Public administration impacts

74. The analysis estimates the impact of the Graduate route on Home Office income and expenditure. Assumptions on visa fees and processing costs are based on visa transparency data¹⁴³. Assumptions on Immigration Health Surcharge are based on the latest rates¹⁴⁴.
75. The fee for the Graduate route will be introduced with changes to the Immigration and Nationality (Fees) Regulations 2018 planned to be laid in Parliament on 10 March 2021. The cost of processing a Graduate route application is based on Home Office internal analysis.
76. The assumptions used for international students on the Student route and Graduates on the Graduate route are summarised in the Tables below.

Table 4: Public administration components for Student route

Revenue		Spend	
<i>Visa fees</i>	<u>Out-of-Country: £348</u> <u>In-Country: £475</u>	<i>Processing costs (visa fees)</i>	<u>Out-of-country: £153</u> <u>In-Country: £252</u>
<i>Confirmation of Acceptance of Studies (CAS)</i>	£21 per student	<i>Processing costs (CAS)</i>	£26 per student
<i>Immigration Health Surcharge</i>	£470 per year	<i>Enforcement activity</i>	Not quantified

Table 5: Public administration revenue and spend components for Graduate route

Revenue		Spend	
<i>Visa fees</i>	<u>In-Country: £700</u>	<i>Processing costs (visa fees)</i>	<u>In-Country: £106</u>
<i>Immigration Health Surcharge</i>	£624 per year	<i>Enforcement activity</i>	Not quantified

¹⁴³ <https://www.gov.uk/government/publications/visa-fees-transparency-data>

¹⁴⁴ <https://www.gov.uk/healthcare-immigration-application>

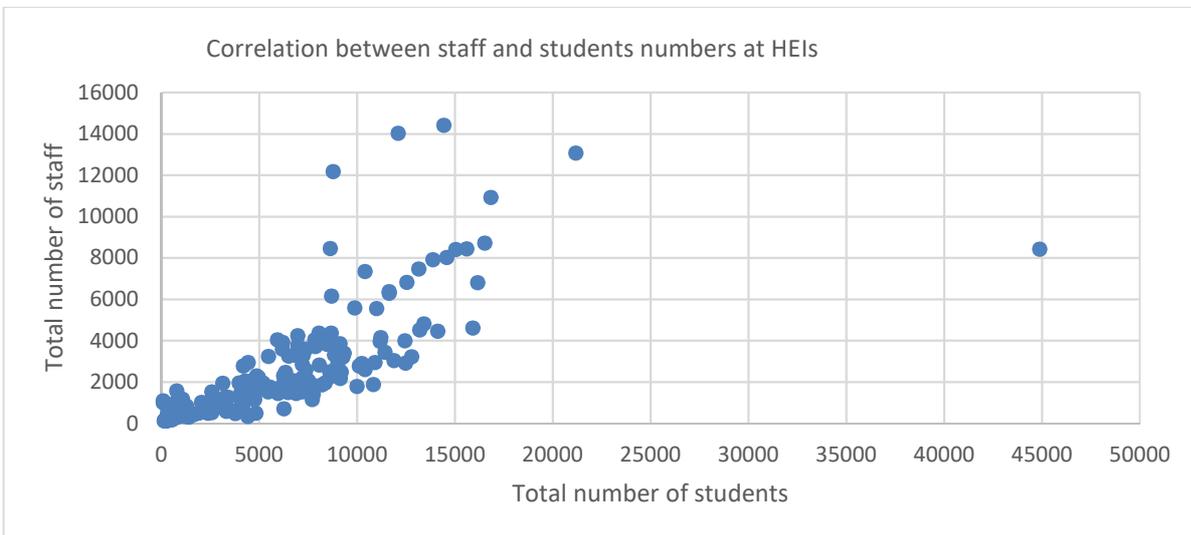
L.6. Size of Alternative Providers

77. The analysis considers the impact of the Graduate route on small and micro businesses. Evidence shows that higher education institutions do not fall in the category of small and micro businesses. However, evidence on the size of alternative providers is limited. Therefore, analysis has been developed to estimate their size. Two methods have been developed and are set out below.

Method 1

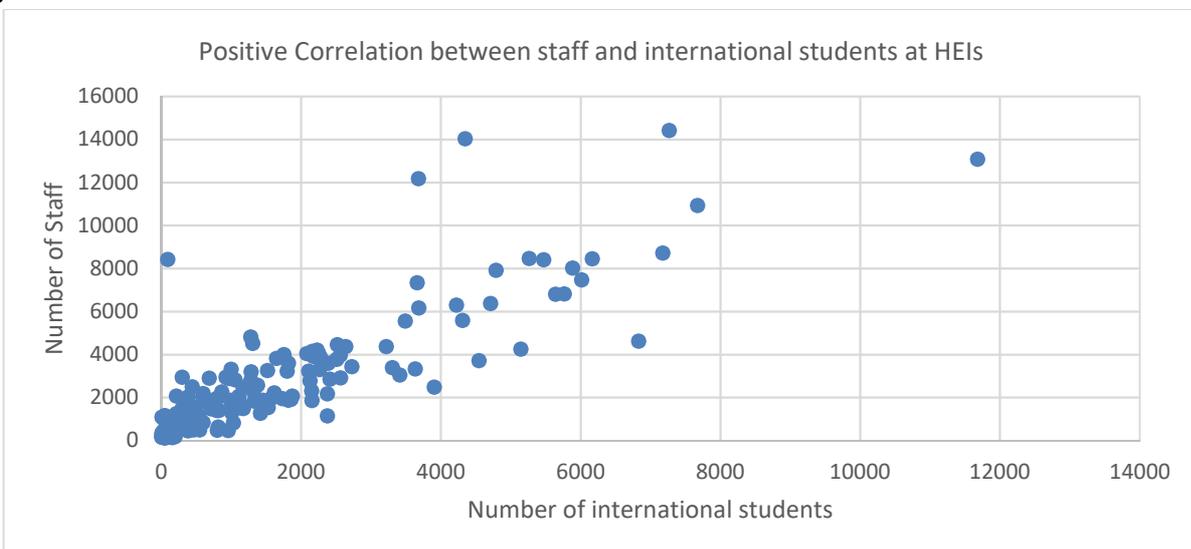
78. A methodology has been developed to estimate the number of staff in each AP and assess whether any of these providers can be considered a small or micro business. The analysis uses the ratio of number of staff to number of students in HEIs and applies it to the number of students at APs to produce an estimate of staff numbers at APs.
79. Figures 3 and 4 below show a positive correlation between the number of students (Graph 3), the number of international students (Graph 4), and the number of staff at each HEI.

Figure 3: Number of staff and number of students at HEIs



Source: Internal Home Office analysis

Figure 4: Number of staff and Number of international students at HEIs



Source: Internal Home Office analysis

80. There is an average of 0.6 students for each staff member, and there is an average of 4.9 international students for each staff member. Applying these ratios to the number of students or to the number of international students studying at Alternative Providers, suggests that between 9 and 20 APs may be considered small businesses, while no AP could be considered a micro business.

Table 6: Estimated number of staff at Alternative Providers – Method 1

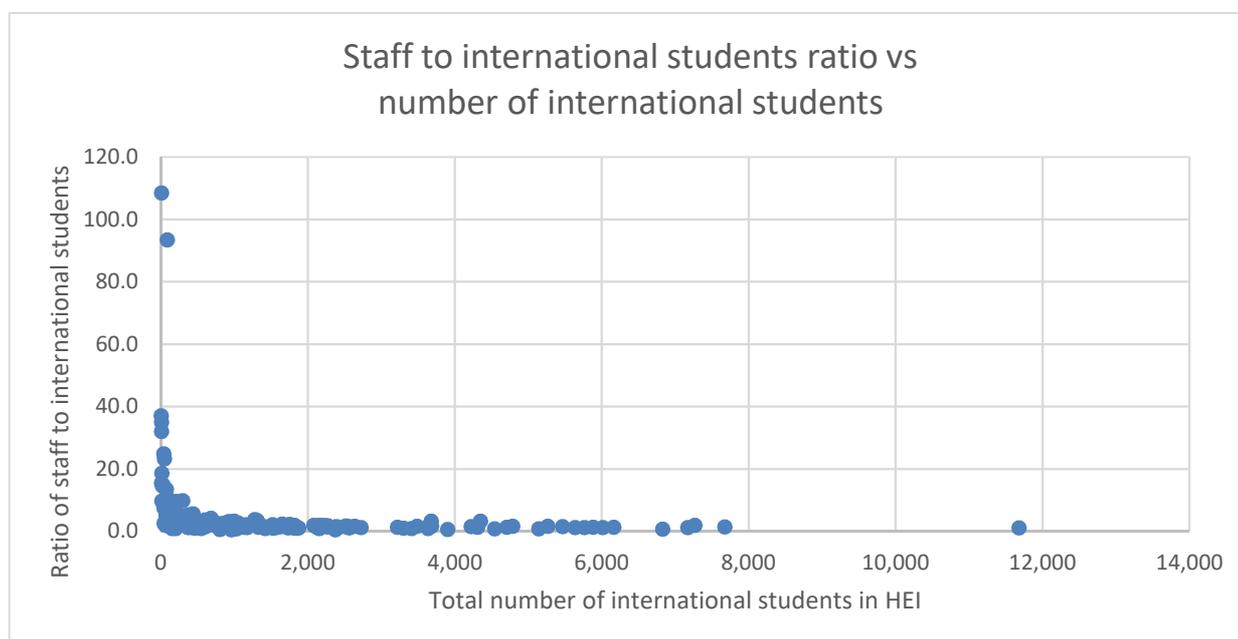
<i>Method</i>	<i>Estimated average number of staff at AP</i>	<i>Estimated total number of staff at smallest AP</i>	<i>Estimated number of APs considered small businesses</i>	<i>Estimated number of APs considered micro businesses</i>
Total number of students	573	15	9	0
Total number of international students	875	24	20	0

Source: Internal Home Office analysis

Method 2

81. To test Method 1, an alternative methodology has been developed. When looking in more detail at the staff to student ratio data at HEIs, there is a negative relationship between the ratio of staff to international students and the number of international students. This means that the higher the number of international students at HEIs, the lower the number of staff per international student, as shown in Figure 5. This relationship is also present when comparing staff to student ratio to the total number of students.

Figure 5: Number of staff and Number of international students at HEIs



Source: Internal Home Office analysis

82. The analysis identifies different ratios of staff to international students depending on the total number of international students at HEIs and applies these ratios to the total number of international students at APs. The ratios are set out in table 7. Table 8 considers a similar approach but for total number of students.

Table 7: Staff to international students' ratios, by total number of international students.

Number of international students	Ratio of staff to international students
0-49	25.3
50-99	14.1
100-249	3.9
250-499	3.4
500-999	2.2
1000-4999	1.6
5000-11,680	1.3

Source: Internal Home Office analysis

Table 8: Staff to students' ratios, by total number of students.

Number of students	Ratio of staff to students
0-999	1.5
1000+	0.4

Source: Internal Home Office analysis

83. The analysis also produces a ratio of staff to total number of students. Applying these ratios to the number of students, or international students, leads to the following estimated staff numbers at APs. As shown in Table 9.

Table 9: Estimated number of staff at Alternative Providers – Method 2

<i>Method</i>	<i>Estimated average number of staff at AP</i>	<i>Estimated total number of staff at smallest AP</i>	<i>Estimated number of APs considered small businesses</i>	<i>Estimated number of APs considered micro businesses</i>
Total number of students	639	23	1	0
Total number of international students	697	127	0	0

Source: Internal Home Office analysis

84. Based on this approach, no APs with international students are estimated to fall into the categories of micro or small businesses.

Impact Assessment Checklist

Mandatory specific impact test - Statutory Equalities Duties	Complete
<p>Statutory Equalities Duties</p> <p>The public sector equality duty requires public bodies to have due regard to the need to eliminate discrimination, advance equality of opportunity, and foster good relations in the course of developing policies and delivering services. [Equality Duty Toolkit]</p> <p>The proposed <i>policy, and fee</i>, for the Graduate route does not discriminate directly on the basis of the protected characteristics of: age; disability; gender reassignment; marriage and civil partnership; pregnancy and maternity; religion or belief; sex; or sexual orientation.</p> <p>The proposed <i>policy</i> also does not discriminate directly on the basis of the protected characteristic of race or nationality. However, we consider there is direct discrimination in the proposed <i>fees</i> policy for the route based upon the nationality of applicants because a reduction in visa application fee of £55 is provided to the main applicants of nationals of countries which have ratified the Council of Europe’s Social Charter of 1961 (European Treaty Series No. 35 known as CESC). However, we do not consider it unlawful discrimination as it can be justified as a de facto effect of the UK’s long-standing commitment to meet its obligations under international treaties and achieving the legitimate wider aim of the UK’s current and future international policy.</p> <p>There is no evidence to suggest that the proposed policy, and fee, for the Graduate route will result in indirect discrimination to those possessing the characteristic of: gender reassignment; marriage and civil partnership; race; religion or belief; or sex. We consider there is potentially indirect discrimination for the remaining characteristics.</p> <p>Although it is not a requirement of the route itself that applicants must be a certain age in order to be eligible for the route, they must hold extant leave as a Tier 4 (General) student or Student, which is only open to those aged 16 or over. Those wishing to study in the UK under the age of 16 are able to apply for leave as a child student, which will not confer eligibility for the Graduate route. However, this is not considered to be unlawful discrimination as it can be justified in achieving the legitimate aim of introducing a route that is simple, open to those who completed relevant higher education, and promotes the interest of the UK’s HE sector.</p> <p>There may be indirect discrimination with regard to pregnancy and maternity if, as per the proposed policy for the Graduate route, new dependents are not permitted to be registered. The Legal Strategy team are carrying out a wider project around the ability to sponsor new dependants in the case of children born in the UK and this policy will be reviewed as a part of that ongoing work.</p> <p>It is not known if the successful completion rates of international disabled students whose disability results in different educational needs differs from international able students. However, the Graduate route will be open to all students who successfully complete their degree or acceptable postgraduate programme and UK universities have their own responsibility to facilitate positive outcomes for those with different educational needs. Furthermore, Home Office policy does not set the criteria by which education providers determine successful completion of a degree or other postgraduate course.</p> <p>It is possible that international students who are in a same sex relationship but whose country of origin does not recognise such, or criminalises same sex relationships, will face difficulties in proving a genuine and subsisting relationship where they wish to sponsor a dependant partner under the Graduate route. However, the Immigration Rules permit multiple ways in which a relationship can be proven as genuine and subsisting to</p>	<p>Yes</p>

mitigate for those nationalities where circumstances such as same sex marriage or civil partnership are not legally permitted in such persons' home country. Any sponsored dependents on this route must already be in the UK in that category at the point an application is made, meaning proof of relationship will have been required before the new application.	
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The impact assessment checklist provides a comprehensive list of specific impact tests and policy considerations (as of February 2019). Where an element of the checklist is relevant to the policy, the appropriate advice or guidance should be followed. Where an element of the checklist is not applied, consider whether the reasons for this decision should be recorded as part of the Impact Assessment and reference the relevant page number or annex in the checklist below. Any test not applied can be deleted except **the Equality Statement**, where the policy lead must provide a paragraph of summary information on this.

The checklist should be used in addition to [HM Treasury's Green Book guidance](#) on appraisal and evaluation in central government (Green Book, 2018).

The Home Office requires the **Specific Impact Test on the Equality Statement** to have a summary paragraph, stating the main points. **You cannot delete this and it MUST be completed.**

Economic Impact Tests

Does your policy option/proposal consider...?	Yes/No (page)
<p>Business Impact Target The Small Business, Enterprise and Employment Act 2015 (s. 21-23) creates a requirement to assess the economic impacts of qualifying regulatory provisions on the activities of business and civil society organisations. [Better Regulation Framework Manual] or [Check with the Home Office Better Regulation Unit]</p>	Yes

<p>Small and Micro-business Assessment (SaMBA) The SaMBA is a Better Regulation requirement intended to ensure that all new regulatory proposals are designed and implemented so as to mitigate disproportionate burdens. The SaMBA must be applied to all domestic measures that regulate business and civil society organisations, unless they qualify for the fast track. [Better Regulation Framework Manual] or [Check with the Home Office Better Regulation Unit]</p>	Yes
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