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The Exchequer benefits and costs associated with the Graduate Route visa

Report for the Higher Education Policy Institute, Kaplan International Pathways, and the National Union of Students

May 2024

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Head Office: Somerset House, New Wing, Strand, London, WC2R 1LA, United Kingdom.

w: londoneconomics.co.uk e: info@londoneconomics.co.uk
t: +44 (0)20 3701 7700 X: @LE_Education | @LondonEconomics

Authors

James Cannings, Senior Economic Consultant, jcannings@londoneconomics.co.uk

Maike Halterbeck, Divisional Director, mhalterbeck@londoneconomics.co.uk

Dr Gavan Conlon, Partner, gconlon@londoneconomics.co.uk



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Foreword

On 12 March 2024, the Migration Advisory Committee (MAC) was commissioned by the Home Office to conduct a rapid review of the Graduate Route visa, to be concluded swiftly by 14 May 2024.

In response to the Home Office, the Chair of the MAC, Professor Brian Bell, noted: ‘the timescales for this review are much shorter than a normal commission. As such, this will substantially limit the quality and quantity of evidence that we can provide’.

With the goal of improving the available evidence in order to support better policymaking, the Higher Education Policy Institute, Kaplan, and the National Union of Students jointly asked London Economics to consider the impact of the Graduate Route visa.

This report sets out to ground the discussion of the Graduate Route and its future in an economic analysis of the benefits its users bring to the Exchequer, and the findings are being shared with the MAC.

The report concludes that the gross benefits to the UK in higher tax revenue from hosting Graduate route visa holders was £588 million in 2022-23 (or £10,410 per main Graduate Route visa holder). After costs, the total net benefit to the UK was £70 million in 2022-23 (or £1,240 per international graduate). These benefits are set to increase substantially as the Home Office estimates an increase to 173,000 Graduate Route visas in 2023/24.

Moreover, it is widely believed that the Graduate Route visa is a significant attraction for international students to come to the UK to study in the first place. Earlier research commissioned by HEPI, Kaplan and Universities UK showed just one cohort of international students [contributed a net of £37.4 billion](#) before graduation – although it must also be noted that recent changes, including restrictions on dependents and increases in application fees and health surcharges, are currently reducing interest in the UK as a study destination.

Over and above the economic impact that international students bring to the UK, both while studying and – as this new report shows – as Graduate Route users, we urge policymakers to consider the students themselves who currently study in an unstable policy environment.

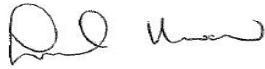
To move your life and your family across the world in search of a world-leading education is no mean feat. Delivering truly international education across the UK enriches the experience that every single student has on our campuses and maintains the UK’s global influence.

It is our fervent hope that this report brings more clarity to the public debate on student visas.



Nick Hillman

Director, HEPI



Linda Cowan

Managing Director,
Kaplan International
Pathways



Ellie Gomersall

President, NUS Scotland

Executive Summary

In the context of the ongoing rapid review of the Graduate Route visa by the Migration Advisory Committee (MAC), due to report its findings by 14th May 2024, and the significant political debate on restrictions on the number of international students and graduates (and their dependants) in the UK, London Economics was commissioned by the **Higher Education Policy Institute (HEPI)**, **Kaplan International Pathways**, and the **National Union of Students (NUS)** to estimate the UK Exchequer benefits and costs associated with Graduate Route (GR) visa holders in the 2022-23 tax year. This study follows our previous studies assessing the tax revenues associated with international higher education (HE) students post-graduation¹ and the economic benefits and costs of international HE students in the UK during study.²

Key findings

- There were an estimated **66,410** Graduate Route visa holders in the UK in 2022-23, including **56,460** main applicants (i.e. international graduates from UK HE) and **9,950** dependants (in other words, there were approximately **176** dependants for every **1,000** main GR visa holders). Note that the number of dependant GR visa holders is expected to decline substantially in subsequent years, following the removal of international postgraduate taught students' ability to bring in dependants on their student visas from January 2024 onwards.³ This is because the Graduate Route visa only allows international graduates to be joined in the UK by their dependants if the dependant also joined them on their previous UK student visa; in other words, the Government's restrictions to dependant student visas will automatically impose the same restrictions on Graduate Route dependant visas.
- The **total net Exchequer benefit** associated with these Graduate Route visa holders in the 2022-23 tax year was estimated at **£70 million**. This is equivalent to a net benefit per main Graduate Route visa holder (i.e. per international graduate) in 2022-23 of **£1,240**.
- The **gross Exchequer benefit** associated with Graduate Route visa holders in the 2022-23 tax year was estimated at **£588 million**, which is equivalent to **£10,410** per main Graduate Route visa holder.

¹ See London Economics (2019).

² See London Economics (2018), London Economics (2021) and London Economics (2023).

³ For example, as a result of these restrictions, the number of dependants accompanying international students to the UK on their study visas has already fallen by almost 80% in Q1 2024 (January to March 2024) compared to the same period in 2023. See Home Office (2024c).

- The **Exchequer cost** associated with Graduate Route visa holders in the 2022-23 tax year was estimated at **£517 million**. This is equivalent to **£9,160** per main Graduate Route visa holder.
- It is important to note that:
 - On the one hand, the **Exchequer benefits** associated with Graduate Route visa holders here are expected to constitute an **underestimate** of the true public purse benefit of this post-study visa route. This is because our analysis does *not* account for a range of wider benefits associated with GR visa holders (such as the substantial economic benefit to the UK economy that is generated whilst these graduates are undertaking their studies; the critically important financial cross-subsidies from international students' fee income towards UK higher education providers' key domestic teaching and research activities; or the benefits to UK employers of international HE graduates on the GR route filling key skills shortages). In addition, the analysis excludes any tax receipts generated by adult dependants on GR visas who are working in the UK. Furthermore, while our analysis focuses on the 2022-23 tax year, the net Exchequer benefits generated by GR visa holders are likely to increase substantially in subsequent years, given the significant ongoing and (currently) expected future growth in graduates taking up this post-study work route.
 - On the other hand, we undertake a **comprehensive assessment of the full Exchequer costs associated with GR visa holders** – including the costs of public service provision for international graduates themselves *as well as* their dependants. As outlined above, given the likely significant fall in the number of dependant GR visas in the future, this is expected to result in a decline in the Exchequer cost per GR visa holder in the future.

Overview of the analysis

To estimate the **Exchequer benefits** associated with GR visa holders, we assessed the estimated **tax revenues** (including income tax, employee and employer National Insurance (NI) contributions, and value-added tax (VAT) payments) associated with main GR visa holders working in the UK in the 2022-23 tax year. In addition to these tax receipts, we also estimated the **Exchequer revenues from GR visa holders' visa application fees** and their **immigration health surcharge (IHS) payments**, for both main GR visa holders and their dependants staying with them in the UK. There are a number of benefits that were **not** considered as part of this analysis. For example, these include (but are not limited to):

- The **benefits of GR visa holders during their prior HE studies in the UK**. Post-study work rights are an important factor in the decision making of international students in choosing the UK as their study destination, and there are significant economic benefits associated with these international students during their studies.
- The **tax revenues associated with the Graduate Route in subsequent tax years**. These include the tax contributions of current GR visa holders that continue to stay in the UK in future tax years (e.g. by switching to Skilled Worker Route visas subsequently, with an expected increase in earnings (and associated tax revenues) over time as they progress throughout their careers), as well as the tax contributions of current international HE *students* who are expected to take up the Graduate Route in the future (which are likely to be much higher than our estimates here, given the significant ongoing and expected growth in the number of GR visas over time);
- The **tax revenues associated with the income of adult dependants** of GR visa holders;
- The **benefits to UK employers** of having a wide pool of international HE graduates to fill key skills shortages; and
- **A range of additional wider/intangible benefits** that could not be quantified and therefore are not included in this study, such as longer-term investment, business, and trade links; soft diplomatic power; and wider cultural and social impacts of having a more diverse population.

In relation to the **Exchequer costs** associated with main GR visa holders and their dependants, we considered the **public costs of processing GR visa applications**, as well as the **costs of providing general public services** to GR visa holders. These general public services include the costs of public **healthcare** (i.e. the cost of visa holders' use of the National Health Service (NHS)); **housing** and **community amenities**; pre-primary, primary and secondary-level **education** received by dependent children; **public order and safety**; **defence**; **economic affairs**; **recreation, culture**, and **religion**; **environmental protection**; and other **general public services**.

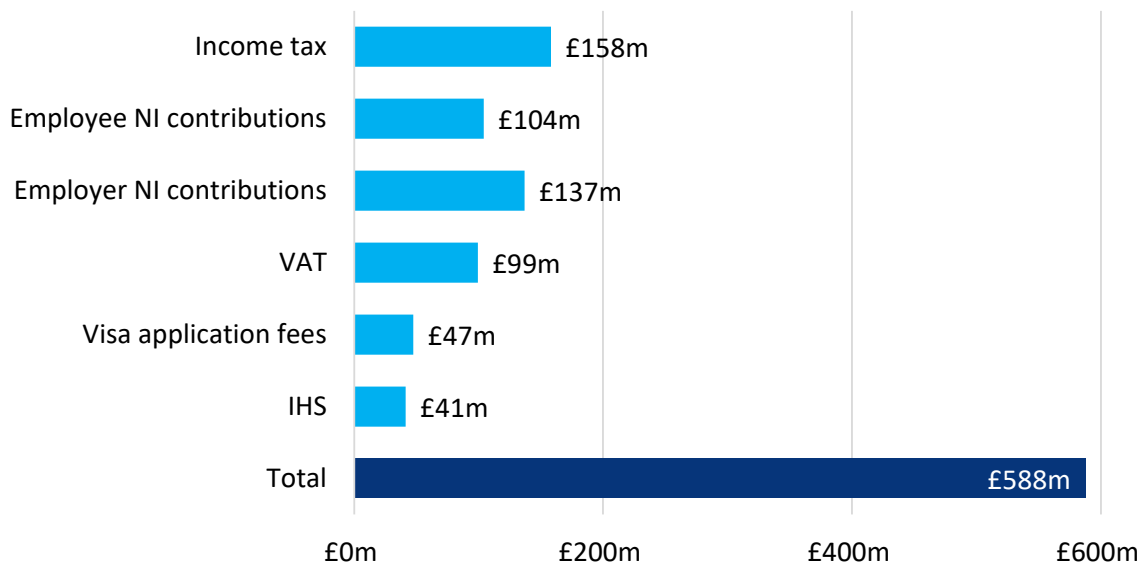
The analysis focuses on the Exchequer benefits and costs associated with the estimated **66,410** GR visa holders that were living in the UK for the whole of the 2022-23 tax year, including **56,460** main GR visa holders (i.e. international graduates from UK HE) and **9,950** dependants.

Exchequer benefits associated with the Graduate Route

We estimate total gross Exchequer benefits associated with (main or dependant) GR visa holders in the 2022-23 tax year of approximately **£588 million** (see Figure 1), which is equivalent to **£10,410** per main Graduate Route visa holder (i.e. per

graduate). Most of this benefit (**85%**) is generated through Exchequer tax receipts, including **£158 million (27%)** of income tax payments, **£137 million (23%)** of employer NI contributions, **£104 million (18%)** of employee NI contributions, and **£99 million (17%)** of VAT payments. The remaining **15%** was made up of Graduate Route visa application fees (**£47 million, 8%**) and immigration health surcharge payments (**£41 million, 7%**).

Figure 1 Total Exchequer benefits associated with Graduate Route visa holders in 2022-23



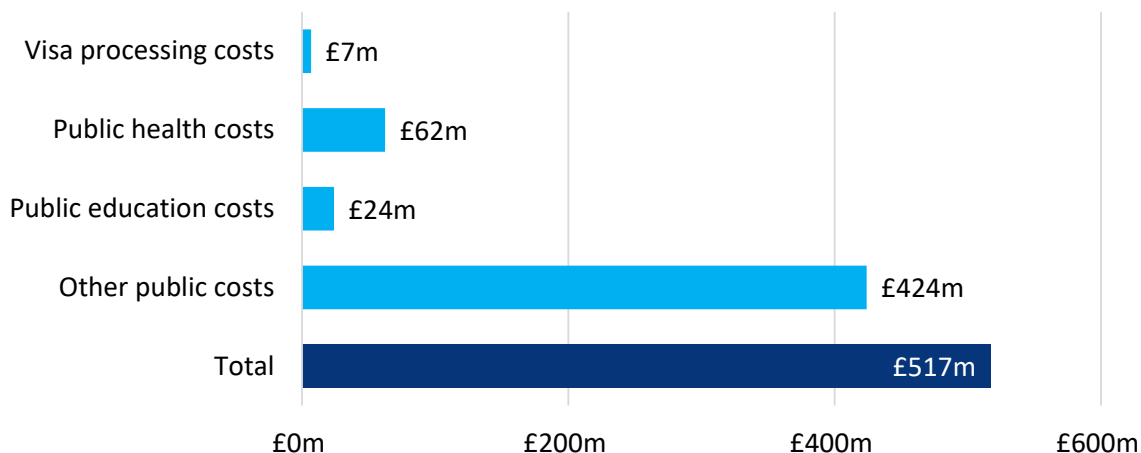
Note: Values are rounded to the nearest £1 million. All estimates are presented in 2022-23 prices. Totals may not sum due to rounding.

Source: *London Economics' analysis*

Exchequer costs associated with the Graduate Route

The total Exchequer costs associated with GR visa holders in 2022-23 were estimated at **£517 million**, which is equivalent to **£9,160** per main Graduate Route visa holder. As Figure 2 shows, the vast majority of these costs (**£424 million, 82%**) was associated with the provision of 'other' public services to main GR visa holders and their dependants, with the remainder made up of the costs associated with GR visa holders' use of the NHS (**£62 million, 12%**), the public costs of education provision to child dependents holding GR visas (**£24 million, 5%**), and the GR visa processing costs incurred by the Home Office (**£7 million, 1%**).

Figure 2 Total Exchequer costs associated with Graduate Route visa holders in 2022-23



Note: Values are rounded to the nearest £1 million. All estimates are presented in 2022-23 prices. Totals may not sum due to rounding. Public education costs are applicable to child dependants of graduates on GR visas only. Other public service costs include housing and community amenities; public order and safety; defence; economic affairs; recreation, culture, and religion; environmental protection; and general public services (including EU transactions).

Source: *London Economics' analysis*

Net Exchequer benefits associated with the Graduate Route

Combining these Exchequer benefits and costs, the total net Exchequer benefit associated with Graduate Route visa holders in the 2022-23 tax year of **£70 million** (see Figure 3). This figure is equivalent to **£1,240** per main GR visa holder.

Overall, as outlined above, our estimates here are conservative, as the benefits associated with the Graduate Route are defined relatively narrowly throughout the analysis, and we exclude a range of additional economic and wider benefits that are expected to be associated with GR visa holders living and working in the UK. In addition, while our analysis focuses on the 2022-23 tax year, it is expected that the net Exchequer benefits generated by Graduate Route visa holders will increase substantially in subsequent years, given the significant ongoing and (currently) expected future growth in graduates taking up this post-study work route. In spite of all this, even when taking a relatively 'narrow' view of the benefits associated with the Graduate Route, our findings indicate that the UK Exchequer achieves a net financial gain from the provision of this important post-study visa route.

Figure 3 Net Exchequer benefit associated with Graduate Route visa holders in 2022-23



Note: Values are rounded to the nearest £1 million. All estimates are presented in 2022-23 prices. Totals may not sum due to rounding.

Source: London Economics’ analysis

1 Introduction

1.1 Context

London Economics was commissioned by the Higher Education Policy Institute (HEPI), Kaplan International Pathways, and the National Union of Students (NUS) to **estimate the UK Exchequer benefits and costs associated with Graduate Route (GR) visa holders in the 2022-23 tax year**. This study follows our previous studies assessing the tax revenues associated with international higher education (HE) students post-graduation⁴ and the economic benefits and costs of international HE students in the UK during their study⁵.

The **Graduate Route visa was introduced in July 2021 as a dedicated post-study work visa route**, allowing individuals who have completed a UK bachelor's degree, master's degree, or PhD or doctorate degree to remain in the UK for two (for bachelor's and master's degrees) to three years (for PhD and doctorate degrees).⁶ The Graduate Route permits graduates to work in the UK after completing their studies, but, unlike other visa routes (such as the Skilled Worker Route visa), does *not* require visa holders to work in certain occupations or to earn a salary above a specific threshold.⁷ It also allows 'main' visa holders (i.e. international graduates from UK HE) to be joined in the UK by their adult or child dependants (i.e. a partner or child) if the dependant also joined the main visa holder on their previous UK student visa. In practice, this means that only former postgraduate students can generally be joined by their dependants on the Graduate Route, because only postgraduate students were eligible to bring in dependants on their student visas at the time that the Graduate Route was introduced.⁸

As an alternative to the Graduate Route, **international HE students who want to work in the UK after graduation can also apply directly for Skilled Worker Route visas**. However, these long-term work visas require sponsorship by eligible and licensed UK employers, are subject to salary thresholds, and require visa holders to work in certain occupations.⁹ The Skilled Worker Route is also available to Graduate

⁴ See London Economics (2019).

⁵ See London Economics (2018), London Economics (2021) and London Economics (2023).

⁶ See UK Government (2024a).

⁷ For more information on the Graduate Route, see UK Government (2024a).

⁸ From 1st January 2024, only students studying for doctorate or research-based higher degrees are eligible to bring in dependants on student visas (see House of Commons (2023) and UK Government (2024d)). However, during the period of interest here (focusing on graduates who completed their qualifications before the end of Q2 2022), all postgraduate students were still eligible to bring in their dependants on student visas.

⁹ For more information, see UK Government (2024c).

Route visa holders who meet these conditions and who want to remain in the UK after their Graduate Route visa expires.

On 11th March 2024, the Home Secretary wrote to the Migration Advisory Committee (MAC) to commission a **rapid review of the Graduate Route**, with the MAC due to report its findings by 14th May 2024.¹⁰ The Home Secretary cited potential ‘immigration abuse or visa exploitation’ of the Graduate Route as the primary reason for the review, with concerns that the Graduate Route might fuel a demand for study visas that is driven more by a desire for immigration rather than education. However, as the Home Secretary notes, the Graduate Route has helped the UK reach its target set out in its International Education Strategy¹¹ of hosting 600,000 international HE students per year. The resulting additional fee income from this increase in international HE students has been a critically important income stream for UK higher education providers to cross-subsidise their key domestic teaching and research activities.¹²

In responding to the Home Secretary’s request, Professor Brian Bell, Chair of the Migration Advisory Committee, noted that ‘the timescales for this review are much shorter than a normal commission’, which ‘will substantially limit the quality and quantity of evidence that we can provide to answer the questions included in the commissioning letter’, and which will prevent the MAC from being able to conduct a call for evidence.¹³

The review of the Graduate Route is being undertaken in the context of **a number of additional restrictions on both international students and other migrant visas**. In May 2023, the UK Government announced that from 1st January 2024, postgraduate taught students would no longer be able to bring dependants to the UK, meaning that only postgraduate research students (e.g. PhD students) will now be able to bring dependants to the UK (and, as a result, the number of dependants accompanying international students to the UK has fallen by almost 80% in the first quarter of 2024 compared to the same period in 2023¹⁴).¹⁵ In addition, in December 2023, the Home Secretary announced a ‘five-point plan’ to reduce immigration, which, alongside the review of the Graduate Route, increased the minimum salary for sponsorship on a Skilled Worker Route visa from £26,200 to £38,700; reduced

¹⁰ For more information, see UK Government (2024b).

¹¹ See UK Government (2019).

¹² For example, see PwC (2024).

¹³ Again, for more information, see UK Government (2024b).

¹⁴ See Home Office (2024c).

¹⁵ For more information, see UK Government (2024d) and House of Commons (2023). Note that first degree students were already unable to bring dependants. As a result of these restrictions, the number of dependants accompanying international students to the UK has fallen by almost 80% in Q1 2024 (January to March 2024) compared to the same period in 2023. See Home Office (2024c).

the number of occupations on the Shortage Occupation List¹⁶; prevented social care workers from bringing in dependants; and increased the minimum income requirement to sponsor a spouse or partner visa from £18,600 to £29,000.¹⁷

1.2 Overview of the analysis

Within this context, this study aims to add to the currently very limited evidence base on the Graduate Route, by assessing the Exchequer benefits and costs associated with GR visa holders in the 2022-23 tax year (which was the first full tax year in which the Graduate Route was available).¹⁸

In relation to the **Exchequer benefits** associated with GR visa holders, we assessed:¹⁹

- The estimated tax revenues associated with main GR visa holders²⁰ in work²¹; in particular:
 - **Income tax**;
 - **Employee National Insurance (NI) contributions** paid by the graduates themselves;
 - **Employer National Insurance (NI) contributions** paid by the organisations employing the graduates; and
 - **Value-added tax (VAT)** charged on the goods and services consumed by the graduates.
- The **visa application fees** associated with both main GR visa holders and their dependants; and
- The **immigration health surcharge payments** for both main GR visa holders and their dependants (which is designed to cover the cost of immigrants' use of the National Health Service (NHS)).

¹⁶ The list was since renamed to the Immigration Salary List. It followed a major review of the Shortage Occupation List by the MAC, which was published in October 2023 (for more information, see Migration Advisory Committee, 2023).

¹⁷ For more information, see House of Commons Library (2024b).

¹⁸ In relation to the ongoing MAC Review of the Graduate Route, note that the specific focus of the analysis here is to assess the Exchequer benefits and costs associated with the Graduate Route. In contrast, it is expected that the Migration Advisory Committee will *not* consider these Exchequer benefits (or costs) in its Review, but will instead focus predominantly on the economic activities of GR visa holders (including earnings, if possible), without analysing the associated tax revenues. Therefore, even in the context of the forthcoming MAC Review findings, our analysis here constitutes an important addition to the (very limited) evidence base on the Graduate Route.

¹⁹ See Section 2.2 for a detailed overview of the underlying methodology.

²⁰ Throughout the remainder of this report, 'main' GR visa holders refer to international graduates from UK HE holding GR visas themselves (as opposed to dependant GR visa holders, in terms of adult and child dependants joining international graduates in the UK).

²¹ Due to a lack of available data, we have excluded any tax receipts associated with adult dependants who are working in the UK. As a result, our analysis here likely underestimates the true Exchequer benefits associated with the Graduate Route.

In addition to the above-described Exchequer benefits, we also account for the Exchequer costs associated with main GR visa holders and their dependants.²² In particular, we assess the **public costs of processing GR visa applications**, as well as the **costs of providing general public services to main GR visa holders and their dependants**, including:

- **Healthcare** (i.e. the cost of visa holders' use of the NHS);
- **Housing and community amenities**²³;
- **Pre-primary, primary and secondary-level education** received by dependent children;
- **Public order and safety**²⁴;
- **Defence**;
- **Economic affairs**²⁵;
- **Recreation, culture, and religion**;
- **Environmental protection**²⁶; and
- Other **general public services and EU transactions**.²⁷

Combining the above-described Exchequer benefits and costs, we then estimate the net Exchequer benefits of the Graduate Route in the 2022-23 tax year.

The analysis focuses on the Exchequer benefits and costs associated with the estimated **66,410** GR visa holders that were living in the UK for the whole of the 2022-23 tax year, including **56,460** main applicants and **9,950** dependants. We only account for the Exchequer benefits and costs associated with these GR visa holders in the 2022-23 tax year (i.e. we do not account for any benefits or costs of these GR visa holders in subsequent years).

A range of caveats and limitations associated with the analysis are highlighted throughout the report and in Section 3.4. These limitations are driven primarily by the (currently) very limited information available on the characteristics, economic activities, and earnings of Graduate Route visa holders (driven by the fact that it was only introduced in July 2021). This lack of data is evidenced by the MAC's urgent

²² See Section 2.3 for a detailed overview of the underlying methodology.

²³ E.g. including housing developments for local authorities and other social housing; water supply; or street lighting services.

²⁴ E.g. including the provision of police or fire protection services.

²⁵ E.g. including the provision of transport services (including national and local roads, local public transport, and railway services).

²⁶ E.g. including public waste management.

²⁷ E.g. including the costs of executive and legislative organs, financial and fiscal affairs, and external affairs, or expenditure relating to the servicing of national debt. This grouping also includes a small rebate relating to EU transactions.

request for Home Office and HMRC data²⁸ in order to fully carry out its review of the Graduate Route.

In terms of the remainder of this report, **Section 2** describes the **methodology** underlying the analysis, and **Section 3** provides our **findings** on the Exchequer benefits and costs associated with Graduate Route visa holders in 2022-23. Based on these estimates, we also provide indicative high-level estimates of the net Exchequer benefit associated with international graduates from UK HE who were on Skilled Worker Route visas in 2022-23 (see Box 1 in Section 3.3).

²⁸ Again, see UK Government (2024b).

2 Methodological approach

Our analysis of the Exchequer benefits and costs associated with Graduate Route visa holders in 2022-23 involved **four key steps**:

- Assessing information on the **number of GR visa holders in the UK in the 2022-23 tax year**, broken down by type of visa holder (i.e. main applicant vs. adult/child dependant), domicile (prior to starting their studies in the UK), level of study undertaken in the UK, gender, and employment status (for main visa holders only²⁹, broken down into full-time employment, part-time employment, and not in paid work);
- Assessing the **annual earnings** of graduates working in the UK on GR visas in 2022-23 (separately for those in full-time vs. part-time employment);
- Estimating the **Exchequer revenues** associated with these GR visa holders, including their **income tax, National Insurance (employee and employer) contributions, and VAT** (where applicable); their **GR visa application fees**; and their **immigration health surcharge payments**; and
- Estimating the **Exchequer costs** associated with these GR visa holders, including:
 - The **costs of providing general public services** to both main GR visa holders (i.e. graduates themselves) and their dependants, including the costs of public healthcare provision; pre-primary, primary and secondary level education received by dependent children; and other public services (e.g. housing and community amenities, or public order and safety);
 - The Home Office's **processing costs associated with their GR visa applications**.³⁰

The following sections outline our methodology for each of these steps in more detail.

²⁹ As outlined in Section 1, note again that the analysis does *not* take account of any tax revenues from labour market earnings associated with adult dependants of graduates holding GR visas; therefore, we did not undertake a corresponding assessment of the employment status (or earnings) of adult GR dependant visa holders living in the UK.

³⁰ Note that our analysis only includes the costs of successful GR visa applications (i.e. GR visa holders), but does not account for the costs to the Home Office of processing unsuccessful Graduate Route visa applications.

2.1 Number of international graduates on GR visas in 2022-23

2.1.1 Total number of visa holders

To enable us to assess the aggregate Exchequer benefits and costs associated with the Graduate Route in 2022-23, we required information on the total number of Graduate Route visa holders living in the UK in 2022-23.

For this, we made use of Home Office immigration statistics³¹ on the number of GR visas granted in each quarter since 2021 Q3³². In other words, the data provide information on the effective ‘inflow’ of GR visa holders in each quarter – but *not* on the ‘stock’ of total GR visa holders in the UK in each instance. To estimate this ‘stock’ of total GR visa holders in the UK in the 2022-23 tax year, we assumed that all individuals who were granted a GR visa between 2021 Q3 (when the GR was first introduced) and 2022 Q2 (i.e. the beginning of the 2022-23 fiscal year) were living in the UK for the whole of the 2022-23 tax year. Applying this approach, we arrived at an estimated number of GR visa holders in the UK in 2022-23 of approximately **66,410**³³, including **56,460** main applicants (i.e. international graduates from UK HE) and **9,950** dependants (in other words, there were approximately **176** dependants for every **1,000** main GR visa holders).

It is important to note that the number of dependant GR visa holders is expected to decline substantially in subsequent years, following the removal of international postgraduate taught students’ ability to bring in dependants on their student visas from January 2024 onwards³⁴ (as the Graduate Route visa only allows international graduates to be joined in the UK by their dependants if the dependant also joined them on their previous UK student visa).

2.1.2 Breakdown by qualification level, gender, and adult vs. child dependants

While the above-described Home Office immigration statistics only provide high-level data on GR visa holders (by nationality), the assessment of their earnings and associated tax revenues (described in more detail in Section 2.2.1) required a more detailed breakdown of this information by gender and by level of HE qualification

³¹ See Home Office (2024).

³² Again, the Graduate Route was only introduced in July 2021.

³³ All numbers are rounded to the nearest 5, and may not add to totals due to this rounding. In terms of the assumed breakdown by domicile prior to starting their studies (based on the nationality of visa holders recorded in the Home Office immigration statistics data), this includes **66,355** GR visa holders from non-EU countries, and **55** from the EU.

³⁴ For example, as a result of these restrictions, the number of dependants accompanying international students to the UK on their study visas has already fallen by almost 80% in Q1 2024 (January to March 2024) compared to the same period in 2023. See Home Office (2024c).

attained in the UK. To achieve this, we estimated the gender and qualification level distribution of international graduates from UK HE in 2020-21³⁵ that remained in the UK post-graduation, by combining:

- Information published by the Higher Education Statistics Agency (HESA, 2023a) on the number of international students that obtained UK HE qualifications in 2020-21, by level of qualification achieved, domicile (i.e. EU vs. non-EU³⁶), and gender; and
- The probability of international graduates from UK HE remaining in the UK post-graduation (by domicile and level of qualification). In turn, this was based on information from the 2020-21 Graduate Outcomes Survey (see HESA, 2023b), which provides insights on the employment outcomes of students who obtained HE qualifications in the UK in the 2020-21 academic year, approximately 15 months after they completed their studies.³⁷ Using this data, we divided the number of international graduates working for a UK employer by the total number of international graduates who were in work (i.e. either in the UK or abroad).³⁸

³⁵ The graduating cohort of 2020-21 was used, as it was the most recent year for which data were available on the employment outcomes and salaries of non-UK domiciled graduates from UK higher education (from the Graduate Outcomes Survey). It is worth noting that the Graduate Route is open to students regardless of when they started their course (i.e. not just limited to recent graduates) (see Home Office, 2023a). However, given that the Graduate Route was introduced on 1st July 2021, it is likely that most of the initial visa applicants will have been from the 2020-21 graduating cohort rather than previous cohorts (as that cohort would have been the first for which students could transfer directly to the Graduate Route after completing their UK HE qualifications). In addition, note that applicants to the GR must be in the UK when they apply.

³⁶ In this respect, note that the Home Office statistics on GR visa holders provide information on individuals' *nationality*, whereas the HESA Graduate Outcomes Survey data are based on graduate's *domicile prior to starting their UK HE qualifications*. In the absence of alternative information, our analysis implicitly assumes that graduates' nationality equals their domicile.

³⁷ The employment data spans the 2021-22 and 2022-23 tax years, although most respondents will have been interviewed in the 2022-23 tax year. The respondents were split into 4 cohorts based on their completion date within the 2020-21 academic year. Graduates in Cohort A completed their studies between August and October 2020, and were asked to provide information based on the 1st week of December 2021; graduates in Cohort B completed their studies between November 2020 and January 2021, and were asked to provide information based on the 1st week of March 2022; graduates in Cohort C completed their studies between February and April 2021, and were asked to provide information based on the 1st week of June 2022; and graduates in Cohort D completed their studies between May and July 2021, and were asked to provide information based on the 1st week of September 2022 (see HESA, 2023b). We would expect that Cohort D includes the largest number of respondents (as this includes graduates who completed their learning towards the end of the 2020-21 academic year).

³⁸ The data on graduates working for a UK employer was based on respondents to the Graduate Outcomes Survey who reported that working for an employer (either paid or voluntary/unpaid) was their most important activity. Therefore, we based the number who were in work either in the UK or abroad on graduates in employment *excluding* any further study (i.e. we implicitly assume that graduates who were employed but also undertaking further study would *not* have reported their employment as being their most important activity).

Throughout these calculations, we excluded graduates who completed undergraduate qualifications other than first degrees, as Graduate Route visas are typically only available to graduates who completed a UK bachelor's degree, master's degree, or PhD or doctorate degree (see UK Government, 2024a).³⁹

We combined the estimated distribution with the number of **main GR visa holders (56,460)**, as above), to estimate the number of main GR visa holders by qualification level achieved in the UK, domicile, and gender.

Separately, we then estimated the breakdown of the number of **dependant GR visa holders (9,950)** in total, as above) by qualification level achieved (by the corresponding main GR visa holders), as well as broken down into child vs. adult dependants:

- In terms of qualification level, we assumed that there are no dependant visas associated with main GR visa holders who completed a UK first degree. This is because main GR visa holders can typically only bring their dependants to the UK if those dependants already joined them in the UK under a previous student visa. Since only postgraduate students were eligible to bring in dependants on their student visas at the time that the Graduate Route was introduced, we assume that no first degree graduates would be able to bring in dependants on the Graduate Route.⁴⁰ In terms of postgraduate students, we assume the same distribution of dependant GR visas by postgraduate study level as that for main GR visa holders (i.e. we assume the same likelihood of bringing in dependants among main GR visa holders who completed postgraduate taught vs. postgraduate research qualifications).
- In terms of adult vs. child dependants, no information is provided within the Home Office immigration statistics on the split between adult vs. child dependants holding Graduate Route visas. Therefore, we instead assumed a 60%/40% split between adult and child dependants based on our previous work assessing the benefits and costs of international students.⁴¹

³⁹ There are a small number of other qualifications that are eligible for Graduate Route visas, so a small number of graduates who completed 'other undergraduate' qualifications may be eligible for Graduate Route visas. Additionally, individuals who complete other undergraduate qualifications and who *previously* completed a UK bachelor's, master's, or doctorate degree would also be eligible for the Graduate Route.

⁴⁰ From 1st January 2024, only students studying for doctorate or research-based higher degrees are eligible to bring in dependants on student visas (see House of Commons, 2023). However, during the period of interest here (focusing on graduates who completed their qualifications before the end of Q2 2022), all postgraduate students were still eligible to bring in their dependants on student visas.

⁴¹ See London Economics (2023). This assumption was initially derived using data provided by Enrolly (from its Dependants Report, providing information on the number and characteristics of the dependants of a large sample of international students who started UK HE qualifications in the 2021-22 academic year). We implicitly assume that the split between adult and child dependants is the same for international students as for GR visa holders.

Based on the above-described calculations, a breakdown of the resulting estimated number of GR visa holders in the UK in the 2022-23 tax year is provided in Table 1.

Table 1 Estimated number of GR visa holders in the UK in 2022-23, by type of visa holder, domicile, and level of HE qualification attained in the UK

| Level of qualification ¹ | EU ² | Non-EU | Total |
|-------------------------------------|-----------------|---------------|---------------|
| Main visa holders | | | |
| First degree | 35 | 23,085 | 23,120 |
| Postgraduate (taught) | 15 | 30,490 | 30,505 |
| Postgraduate (research) | 5 | 2,830 | 2,835 |
| Total | 55 | 56,405 | 56,460 |
| Adult dependants | | | |
| First degree | - | - | - |
| Postgraduate (taught) | - | 5,440 | 5,440 |
| Postgraduate (research) | - | 505 | 505 |
| Total | - | 5,945 | 5,945 |
| Child dependants | | | |
| First degree | - | - | - |
| Postgraduate (taught) | - | 3,665 | 3,665 |
| Postgraduate (research) | - | 340 | 340 |
| Total | - | 4,005 | 4,005 |
| Total | | | |
| First degree | 35 | 23,085 | 23,120 |
| Postgraduate (taught) | 15 | 39,590 | 39,610 |
| Postgraduate (research) | 5 | 3,675 | 3,680 |
| Total | 55 | 66,355 | 66,410 |

Note: All numbers are rounded to the nearest 5. Totals may not sum due to rounding.

¹ Level of qualification relates to the level of HE qualification attained in the UK by *main GR visa holders* (i.e. by international graduates themselves).

² The small number of GR visa holders in 2022-23 who were EU nationals is likely driven by the fact that EU domiciled students who arrived in the UK before 1st of January 2021 could still apply to the EU Settlement Scheme to gain permanent residence rights (and, therefore, would be much less likely to apply for a Graduate Route visa). The number of EU nationals being granted a GR visa has increased substantially over more recent quarters.

Source: London Economics' analysis based on Home Office (2024), HESA (2023a), HESA (2023b), and London Economics (2023)

2.1.3 Adjusting for employment rates

The Graduate Route permits graduates to work in the UK after completing their studies (both on a full-time or part-time basis), but also allows them to be looking for work or do voluntary work (but, importantly, GR visa holders have no recourse to public funds, so are typically not able to apply for any social security benefits⁴²).

⁴² For more information, see UK Visas and Immigration (2023), UK Government (2024a), and Section 2.3.

Therefore, it was necessary to estimate the proportion of main GR visa holders in full-time or part-time employment.⁴³ To calculate these employment rates (again by domicile and level of qualification attained), we again made use of data from the 2020-21 Graduate Outcomes Survey on the activities of students who obtained HE qualifications in the UK in the 2020-21 academic year, approximately 15 months after they completed their studies (as previously described above). Specifically, we divided the number of international graduates who were in full-time or part-time employment by the total number of graduates who were undertaking economic activities permitted under the Graduate Route.⁴⁴

It is important to note that the above-described Graduate Outcomes Survey data do not provide information on the location of graduates, so the employment rates include graduates located anywhere in the world (i.e. both those that remained in the UK and those in other countries). In addition, the data also include individuals remaining in the UK on other visas (e.g. on Skilled Worker Route visas). Therefore, in the absence of alternative information, we implicitly assume that the employment rates for GR visa holders located in the UK are the same as for international graduates who return to their home countries (or move elsewhere), and the average employment rates used here implicitly include international graduates who remain in the UK on Skilled Worker Route visas instead.⁴⁵

Further note that, in the absence of information on the proportion of GR visa holders' adult dependants in work (or their associated earnings in the UK), we conservatively assume that *no* dependants of GR visa holders were in work. Clearly, this will underestimate the true value of the UK Exchequer tax receipts associated with GR visas, as it is likely that some/most adult dependants of GR visa holders will be in employment in the UK.

⁴³ Note again that our estimates here exclude any Exchequer tax revenues associated with GR visa holders' adult dependants who are in paid employment in the UK; therefore, the analysis likely provides an underestimate of the total net Exchequer benefit associated with the Graduate Route.

⁴⁴ Specifically, the denominator here includes graduates who were in full-time employment; part-time employment; voluntary or unpaid work; other (including travel, caring for someone or retired); or unemployed. Notably, any form of further study (including alongside work) was excluded from the denominator, as undertaking further studies is generally not a permissible activity covered by the conditions of the Graduate Route visa (again, see UK Government, 2024a).

⁴⁵ The Graduate Outcomes Survey data unfortunately includes no information on the number of international graduates who were in the UK 15 months post-graduation, or on their specific visa status (i.e. those holding GR visas vs. Skilled Worker Route visas/other types of visas). However, according to an analysis by the Migration Observatory at the University of Oxford (2024), 5% of former non-EU students who arrived on study visas in the UK in 2020 had switched to a Graduate Route visa one year after their arrival, compared to 2% that had switched to Skilled Worker Route visas instead; based on this, we would expect that the majority of those international graduates who responded to the 2020-21 Graduate Outcomes Survey and who were resident in the UK (15 months post-graduation) were holding a GR visa.

The estimated employment rates of main GR visa holders are provided in Table 2 (e.g. we assume that **75%** of main GR visa holders from non-EU countries in 2022-23 who previously completed a postgraduate taught qualification in the UK were in full-time employment, while a further **8%** were in part-time employment instead). These employment rates were then combined with the estimated number of main GR visa holders (see Table 1) to estimate the number of main GR visa holders in full-time and part-time employment. Overall, out of the estimated total of **56,460** main GR visa holders in the UK in the 2022-23 tax year, we assume that **40,050 (71%)** were in full-time employment and that **4,580 (8%)** were in part-time employment, while the remaining **11,830 (21%)** were not in paid employment (and, therefore, generated no tax revenues for the UK Exchequer).

Table 2 Estimated employment rates of main GR visa holders in 2022-23, by domicile and level of HE qualification attained in the UK

| Level of qualification | EU | Non-EU | All |
|-----------------------------|------------|------------|------------|
| Full-time employment | | | |
| First degree | 67% | 64% | 64% |
| Postgraduate (taught) | 78% | 75% | 75% |
| Postgraduate (research) | 85% | 84% | 84% |
| All | 72% | 71% | 71% |
| Part-time employment | | | |
| First degree | 12% | 9% | 9% |
| Postgraduate (taught) | 9% | 8% | 8% |
| Postgraduate (research) | 8% | 6% | 6% |
| All | 11% | 8% | 8% |
| Total employment | | | |
| First degree | 79% | 73% | 73% |
| Postgraduate (taught) | 87% | 83% | 83% |
| Postgraduate (research) | 92% | 91% | 91% |
| All | 82% | 79% | 79% |

Note: All numbers are rounded to the nearest 1%. Totals may not sum due to rounding.

Source: *London Economics' analysis based on HESA (2023b)*

2.2 Assessing the Exchequer benefits associated with the Graduate Route

2.2.1 Estimating tax revenues

To estimate the tax revenues associated with GR visa holders in 2022-23, we first estimated the earnings of main GR visa holders, and then estimated the tax revenues associated with those earnings (specifically, income tax, employee National Insurance contributions, employer National Insurance contributions, and VAT).

Estimating the earnings of main GR visa holders

To estimate the earnings of main GR visa holders, we again made use of the above-described 2020-21 Graduate Outcomes Survey data, in relation to the distribution of international graduates in full-time paid employment in the UK by domicile, gender, level of HE qualification attained in the UK, and annual salary band.^{46 47} The data provides the proportion of graduates by granular qualification level, so we aggregated the data to grouped qualification levels using the number of student qualifiers in 2020-21 within each group as weights (using the above-described separate HESA data on the number of international students that obtained UK HE qualifications in 2020-21, by level of qualification, domicile, and gender).

Figure 4 presents the resulting estimated distribution of main GR visa holders in *full-time* employment in the UK in 2022-23 by salary band (separately by level of qualification attained in the UK). Overall (on average across all qualification levels), a total of **54%** of these GR visa holders were estimated to earn between **£21,000 and £32,999** per annum, with **10%** earning **less than £21,000**, and the remaining **36%** earning **more than £33,000**. Note that there is significant variation of these estimates by level of HE qualification attained.

Salary data was provided in £3,000 bands, so we used the midpoint of each salary band as the basis for the tax calculations.⁴⁸ In the absence of data on the salaries of individuals in part-time employment, we pro-rated the midpoint of each salary band, based on the estimated employment intensity of individuals in part-time employment (**56%**, based on the average number of usual hours worked by recent

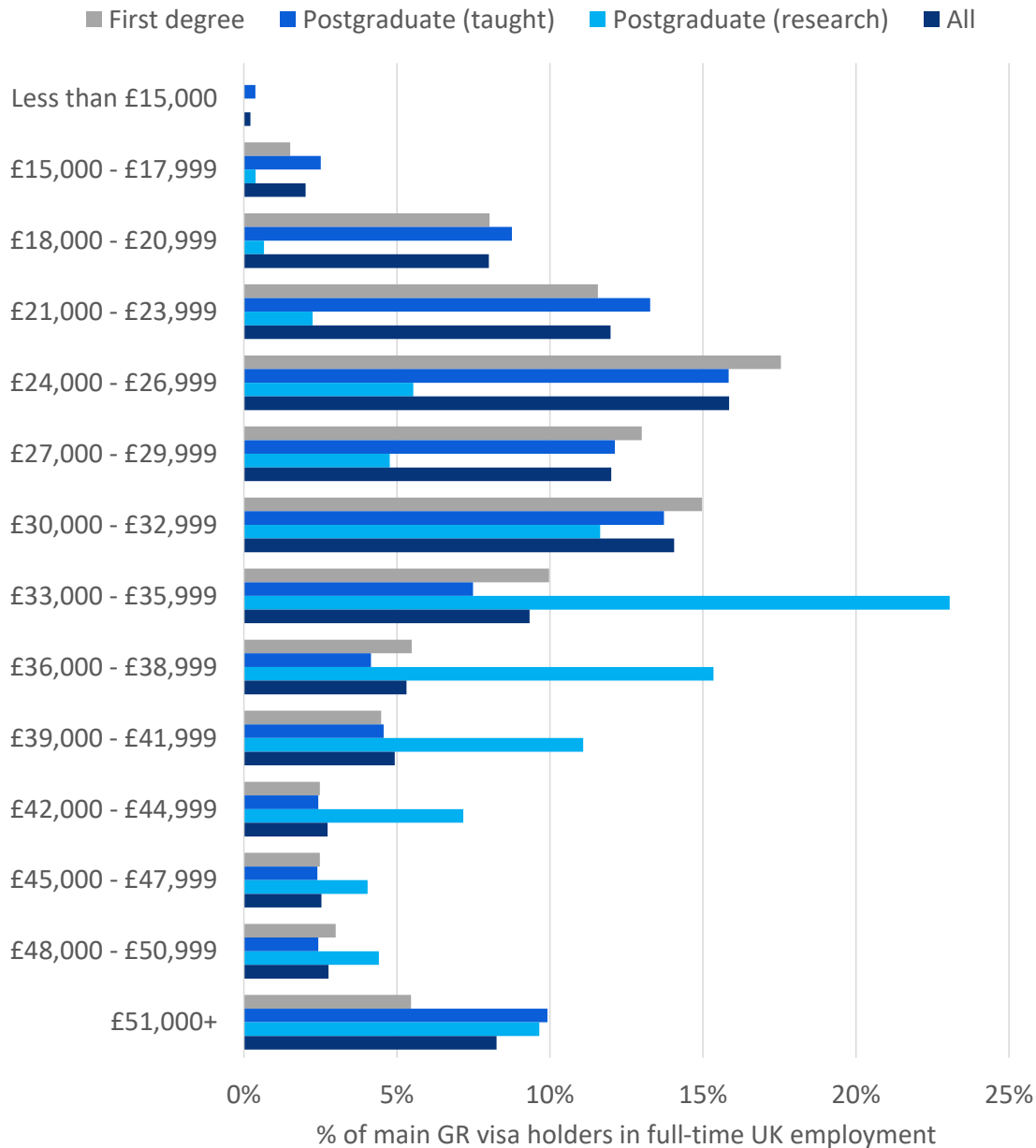
⁴⁶ As with other Graduates Outcome Survey data used throughout the analysis (see Section 2.1), we used data for graduates who reported paid employment as their most important activity. In cases where there were missing data (e.g. due to small sample sizes for specific levels of qualification), we imputed data using average figures among all non-UK graduates irrespective of domicile (broken down by gender where possible).

⁴⁷ As noted above (see Footnote 35), we expect that there would have also been some GR visa holders working in the UK in the 2022-23 tax year that graduated in previous academic years (i.e. before 2020-21, since the Graduate Route is open to students regardless of their course start date). We would expect that they would have higher earnings than more recent graduates, so our estimates here likely constitute an underestimate of the true Exchequer benefits of the GR visa.

⁴⁸ For the lowest salary band (below £15,000), we used £7,500 (i.e. the average between £0 and £15,000); for the top salary band (£51,000+), conservatively, we used £51,000, as there was no information on the distribution of salaries above this point (so our estimates will underestimate the true value of the total tax revenues from GR visa holders). This top salary band represented around 8% of main GR visa holders in full-time employment overall.

graduates in part-time employment compared to those in full-time employment⁴⁹), from an analysis of UK Quarterly Labour Force Survey data.⁵⁰

Figure 4 Estimated salary band distribution of main GR visa holders in full-time employment in the UK in 2022-23, by level of HE qualification



Source: London Economics' analysis based on Home Office (2024), HESA (2023a), and HESA (2023b)

⁴⁹ For example, for the 14% of main GR visa holders in *full-time* employment whose reported salary band was £30,000 to £32,999, we used £31,500 as the mid-point of this salary band as the basis for the tax calculations. For main GR visa holders in part-time employment, we assumed that 14% of these individuals instead earned a salary of approximately £17,580 (calculated as 56% part-time employment intensity multiplied by £31,500).

⁵⁰ Including Labour Force Survey data for Q1 2021 to Q4 2023; excluding overtime hours; based on individuals in possession of a first degree, masters degree, or PhD as their highest qualification (achieved some time over the previous 3 years); and excluding those who were in full-time education at the time of the survey.

It is important to note that:

- These Graduate Outcomes Survey data were used since, to the best of our knowledge, there is currently no alternative publicly available data source on the earnings (or employment outcomes) of GR visa holders;^{51 52}
- The data include information on the earnings of *any* international graduates in full-time employment in the UK, including those on other visas (e.g. the Skilled Worker Route); therefore, in the absence of alternative data, we assume that the earnings distributions of GR visa holders are similar to those of graduates on other types of visas. Skilled Worker visas are subject to minimum salary thresholds and require graduates to work in certain occupations, so that the implicit inclusion of Skilled Worker visa holders within the earnings data potentially results in an overestimate of the earnings associated with GR visa holders here;⁵³
- The salary bands included within the data are based on self-reported salaries (rather than administrative HMRC data on their actual salaries);
- As we assumed that no GR visa holders' dependants were in employment, we did *not* estimate the earnings associated with these dependants; and
- We also did not estimate any non-labour income of GR visa holders (i.e. income from other sources, such as capital gains, interest, or dividends); therefore, again, our estimates will constitute an underestimate of the total income (and therefore tax receipts) associated with GR visa holders.

⁵¹ Driven by this lack of information on the activities of GR visa holders, in the MAC's response to the commission to carry out a review of the Graduate Route, the MAC requested the Home Office to provide visa data linked to HMRC records, as 'this is the only source that will provide a comprehensive picture on whether those on the Graduate Route are in work and if so what types of roles they are doing, needed to assess the economic impacts of the route. Without this we will be unable to respond to some of the questions set out in the commissioning letter' (see UK Government, 2024b).

⁵² A potential alternative source of earnings information that we explored is the Longitudinal Educational Outcomes (LEO) dataset, which provides much more comprehensive and granular information on UK and non-UK domiciled graduates' earnings for each year post-graduation (and we used the LEO data as part of our previous analysis for HEPI and Kaplan International Pathways of the UK tax revenues from international students post-graduation; see London Economics (2019)). However, the Graduate Route was only introduced in July 2021, and corresponding LEO data for graduates on these visas is not yet available (as 2020-21 is the latest tax year for which the LEO data have currently published; see Department for Education (2023)).

⁵³ The Graduate Outcomes Survey salary data unfortunately includes no information on the underlying number of international graduates who were holding GR visas vs. Skilled Worker Route visas/other types of visas. However, as outlined above (see Footnote 45), an analysis by the Migration Observatory at the University of Oxford (2024) indicates that 5% of former non-EU students who arrived on study visas in the UK in 2020 had switched to a Graduate Route visa one year after their arrival, compared to 2% that had switched to Skilled Worker Route visas instead. Again, based on this, we would expect that the majority of those international graduates who responded to the 2020-21 Graduate Outcomes Survey and who were resident in the UK (15 months post-graduation) were holding a GR visa (as opposed to a Skilled Worker Route/other visa).

Estimating the tax revenues associated with main GR visa holders

Based on the above-described earnings distributions (by domicile, level of qualification held, and gender), we estimated the following tax contributions of main GR visa holders in full-time and part-time employment in 2022-23, based on the relevant thresholds and rates in the 2022-23 tax year:

- **Income tax;**
- **Employee National Insurance contributions**⁵⁴ paid by the graduates themselves;
- **Employer National Insurance contributions**⁵⁵ paid by the organisations employing the graduates; and
- **VAT** charged on the goods and services consumed by the graduates. This is calculated by assuming that individuals consume an average of **92%** of their annual after-tax income^{56,57}, and that **50%** of their consumption is subject to the standard VAT⁵⁸ at a rate of **20%**.

We combined the resulting estimates per main GR visa holder for each salary band with the above-described estimated number of main GR visa holders by salary band (separately by level of qualification, domicile, gender, and full-time vs. part-time employment) to arrive at an aggregate estimate of the tax receipts associated with GR visa holders in 2022-23.

2.2.2 Other benefits

In addition to the tax revenues received by the Exchequer associated with main GR visa holders who are in employment in the UK, the Exchequer also generates income by collecting visa application fees and the immigration health surcharge (which is designed to cover the cost of immigrants' use of the NHS). Both of these fees are charged in full for both main and dependant GR visa applicants and are paid during the application process. The visa application fee is a single fee paid regardless of the duration of the visa, whereas the immigration health surcharge is paid based on the

⁵⁴ Employee National Insurance contributions thresholds and rates changed throughout the 2022-23 tax year (in July and November 2022), so we applied the relevant thresholds and rates applicable in each separate part of that tax year (pro-rated based on the number of months within that year to which each set of thresholds and rates applied).

⁵⁵ Employer National Insurance contribution rates changed in November 2022, so (as for employee contributions), we applied the relevant thresholds and rates applicable to the appropriate months of the 2022-23 tax year.

⁵⁶ This is based on the 2022 savings rate of **8%** published by the Office for Budget Responsibility (2024a).

⁵⁷ i.e. after income tax and National Insurance employee contributions have been deducted.

⁵⁸ This is based on standard rated share VAT estimates provided by the Office for Budget Responsibility (2024b). A small proportion of expenditure (around 3% of total expenditure) outside of this standard rated share is taxed at 5% VAT. For simplicity, we assume that no VAT is charged on that expenditure, which will lead to a slight underestimate of total VAT receipts.

number of years for which the visa (i.e. GR visa applicants would have to pay 2-3 years' worth of the immigration health surcharge during the application process, depending on the length of their visa).

For visa application fees, we used Home Office Graduate Route visa fees for 2022-23, which amounted to **£715** per main or dependant visa applicant (see Home Office, 2024b)⁵⁹. For the immigration health surcharge, we used the relevant fee for 2022-23 of **£624** per main or dependant visa applicant (see House of Commons Library, 2024b). We accounted for the full application fee and one year's worth of the immigration health surcharge for each (main and dependant) applicant.⁶⁰

We combined these fees with the above-described estimated number of main and dependant GR visa holders to arrive at an aggregate estimate of the non-tax (i.e. 'other') Exchequer benefits associated with GR visa holders in 2022-23.

2.3 Estimating the Exchequer costs of Graduate Route visas

In addition to the above-described Exchequer benefits, we also account for Exchequer costs associated with main GR visa holders and their dependants. In particular, we assess the **public costs of processing GR visa applications**, as well as the **costs of providing general public services to main GR visa holders and their dependants**, including:

- **Healthcare** (i.e. the cost of visa holders' use of the NHS);
- **Housing and community amenities**;⁶¹
- **Pre-primary, primary and secondary-level education** received by dependent children;
- **Public order and safety**;⁶²
- **Defence**;
- **Economic affairs**;⁶³
- **Recreation, culture, and religion**;

⁵⁹ Alternatively, fees for the 2021-22 tax year (£700) could have been used instead (as it would be expected that a number of GR visa holders in the UK in 2022-23 would have applied for their visas in the 2021-22 tax year instead). When converted to 2022-23 prices, this would have resulted in higher Exchequer benefits than those estimated here (so, again, our analysis here potentially underestimates the true Exchequer benefits associated with GR visa holders in 2022-23).

⁶⁰ The costs associated with GR visa holders in terms of visa processing costs and NHS treatment costs are accounted for when calculating Exchequer costs (see Section 2.3).

⁶¹ E.g. including housing developments for local authorities and other social housing; water supply; or street lighting services.

⁶² E.g. including the provision of police or fire protection services.

⁶³ E.g. including the provision of transport services (including national and local roads, local public transport, and railway services).

- **Environmental protection**,⁶⁴ and
- Other **general public services and EU transactions**.⁶⁵

These costs were primarily based on data relating to the 2022-23 fiscal year from Public Expenditure Statistical Analyses (PESA) published by HM Treasury (2023) and supplemented with more specific information for immigrants and their dependants where possible/available.⁶⁶

2.3.1 Cost of public health services

In terms of the costs of public healthcare provision by the NHS, main GR visa holders and their dependants are eligible for UK public healthcare but have to pay a compulsory annual NHS immigration health surcharge (as outlined above in Section 2.2.2).

The assumed cost of NHS healthcare provision for GR visa holders was based on an analysis by the Home Office, estimating the annual cost to the NHS per IHS-paying migrant per year at **£940**.⁶⁷ We assume the same level of cost per head for all (main and dependant) GR visa holders. In addition, we assume that these costs – originally estimated for the NHS in England – are the same for international GR visa holders residing in Wales, Scotland, or Northern Ireland. We also assume that GR visa holders use the NHS in a similar way to other IHS-paying migrants (including having a similar usage of private health insurance).

2.3.2 Cost of education provision for child dependants

Child dependants of GR visa holders are eligible to access the UK education system.⁶⁸ To take account of this, based on the above-discussed PESA data, our analysis of the costs associated with child dependants includes the public purse costs of pre-primary, primary and secondary education per member of the child population.⁶⁹

⁶⁴ E.g. including public waste management.

⁶⁵ E.g. including the costs of executive and legislative organs, financial and fiscal affairs, and external affairs, or expenditure relating to the servicing of national debt. This grouping also includes a small rebate relating to EU transactions.

⁶⁶ Note that we assume that there are no public costs of providing social security/protection services (such as state benefits provided through Child Benefit, Child Tax Credit, Carer's Allowance, Employment and Support Allowance, Working Tax Credit, Job Seekers Allowance, or other social security benefits) to GR visa holders, as individuals on the Graduate Route generally have no recourse to public funds, so are typically not able to claim most public benefits, tax credits, or housing assistance (see UK Visas and Immigration (2023) and UK Government (2024a)).

⁶⁷ The cost was estimated at £1,036 in 2023-24 prices, which has been converted to 2022-23 prices using CPI inflation. See Home Office (2023b) and Office for National Statistics (2024a).

⁶⁸ See Home Office (2023c).

⁶⁹ Specifically, to arrive at the associated cost per child dependant, we divided the total UK public expenditure on pre-primary, primary, and secondary education in 2022-23 (see HM Treasury, 2023) by the number of

2.3.3 Cost of other public services

In addition to the costs of public healthcare and education, we also included the costs associated with a range of **other public services**, including **housing and community amenities; public order and safety; defence; economic affairs; recreation, culture, and religion; environmental protection; and other general public services not classified above**. To estimate these additional costs per GR visa holder, we first calculated the costs per head of each type of cost by dividing the total cost (across the UK) in 2022-23 by UK mid-2022 population estimates (Office for National Statistics, 2024b). We then added the estimates (per head) for each of these cost items contained separately within the PESA data.

2.3.4 Cost of visa processing

For visa processing costs, we made use of Home Office (2024b) data for 2022-23, which reported an estimated unit cost of processing GR visas of **£103** per visa. Importantly, this cost therefore stands at only around **14%** of the visa application fee charged to GR visa applicants (**£715**, see Section 2.2.2) - i.e. the Home Office charges nearly a **600% markup** to visa applicants on its own cost of processing Graduate Route visa applications.^{70 71}

2.3.5 Total public costs per Graduate Route visa holder

Combining the estimated costs associated with all of the above public services and the cost to the Home Office of processing GR visas, we estimated the total public sector costs per main GR visa holder, adult dependant, and child dependant in 2022-23.

In Table 3, we present the resulting total Exchequer costs **per head** (i.e., per main GR visa holder or dependant) in 2022-23 – broken down into main GR visa holder/adult dependants and child dependants. Adding the costs of providing public services to the GR visa processing costs, the total Exchequer cost for a main GR visa holder or associated adult dependant was estimated at **£7,428** per year. Driven by the additional costs of educational services (which are assumed to apply to child

children aged 0–18 residing in the UK in mid-2022 (see Office for National Statistics, 2024b). This approach assumes that there is a similar distribution of child dependants of GR visa holders by age as in the wider UK population.

⁷⁰ In general, the Home Office aims to generate a surplus on visa fees (aiming to generate twice as much in fees as the cost of processing visas) in order to cross-subsidise its other immigration-related activities (see House of Commons Library, 2024c).

⁷¹ Note that our analysis here does not take account of the cost to the Home Office associated with processing unsuccessful GR visa applications (since we focus only on those individuals who were actually *in possession of* GR visas in 2022-23).

dependants only), the corresponding costs per child dependant stand at **£13,407** per year.

We then combined these costs with the above-described estimated number of GR main and dependant visa holders to arrive at an **aggregate estimate of the Exchequer costs associated with GR visa holders in 2022-23**.

Table 3 Exchequer costs per main GR visa holder or adult/child dependant in 2022-23, by type of cost

| Type of cost | Per GR visa holder/adult dependant | Per child dependant |
|--------------------------------------|------------------------------------|---------------------|
| Health | £940 | £940 |
| Education ¹ | - | £5,979 |
| Defence | £821 | £821 |
| Public order and safety | £650 | £650 |
| Economic affairs | £1,850 | £1,850 |
| Environment protection | £205 | £205 |
| Housing and community amenities | £263 | £263 |
| Recreation, culture, and religion | £207 | £207 |
| General public services ² | £2,388 | £2,388 |
| GR visa processing costs | £103 | £103 |
| Total | £7,428 | £13,407 |

Note: All values constitute costs per head in 2022-23, presented in 2022-23 prices. Totals may not sum due to rounding. ¹The costs of pre-primary, primary and secondary education are applicable to child dependants only. ² This includes a small rebate relating to EU transactions.

Source: London Economics' analysis of various sources

3 Findings

3.1 The Exchequer benefits associated with Graduate Route visas

Table 4 presents our estimates of the average Exchequer benefits per main GR visa holder (accounting for the likelihood of having dependants, as well as the likelihood of being in full-time or part-time employment (or no paid employment)) in 2022-23, by level of qualification attained in the UK.

The average Exchequer benefit was estimated to be approximately **£10,410** per main GR visa holder (i.e. per graduate). This figure varies widely by study level, with the Exchequer benefits associated with first degree holders standing at **£9,170** and the equivalent figure for postgraduate (taught) and postgraduate (research) degree holders standing at **£10,930** and **£14,800** respectively. This variation is driven primarily by the difference in earnings depending on the level of qualification attained, which leads to higher taxation receipts (particularly for those who recently undertook postgraduate (research) qualifications). However, some of the variation is also driven by the additional benefits of the visa application fees and immigration health surcharge payments from dependant GR visa holders, applicable only to graduates who completed postgraduate qualifications in the UK (since, as noted above, only GR visa holders who previously undertook postgraduate qualifications in the UK are generally expected to be able to have their dependants stay with them in the UK).

Table 4 Average Exchequer benefits per main Graduate Route visa holder in 2022-23, by level of HE qualification attained in the UK

| Type of benefit | First degree | Postgraduate (taught) | Postgraduate (research) | Average |
|---------------------------|---------------|-----------------------|-------------------------|----------------|
| Income tax | £2,470 | £2,920 | £4,310 | £2,800 |
| Employee NI contributions | £1,630 | £1,920 | £2,810 | £1,840 |
| Employer NI contributions | £2,150 | £2,520 | £3,580 | £2,430 |
| VAT | £1,580 | £1,840 | £2,360 | £1,760 |
| Visa application fees | £720 | £930 | £930 | £840 |
| Imm. health surcharge | £620 | £810 | £810 | £730 |
| Total | £9,170 | £10,930 | £14,800 | £10,410 |

Note: Values are rounded to the nearest £10. The figures implicitly include any benefits associated with dependant GR visa holders (i.e. the numbers account for the likelihood of having dependants), and constitute weighted averages across men and women and across the estimated number of main GR visa holders who were in full-time employment, part-time employment, or not in paid employment in the UK in 2022-23. All estimates are presented in 2022-23 prices. Totals may not sum due to rounding.

Source: London Economics' analysis

Aggregating these benefits across all GR visa holders in 2022-23 results in a gross Exchequer benefit of **£588 million**. As presented in Table 5, the majority (**85%**) of this

benefit is generated through Exchequer tax receipts, including approximately **£158 million (27%)** of income tax, **£137 million (23%)** of employer NI contributions, **£104 million (18%)** of employee NI contributions, and **£99 million (17%)** of VAT payments. The remaining **15%** includes the Exchequer revenues from GR visa application fees (**£47 million, 8%**) and the immigration health surcharge (**£41 million, 7%**).

Regarding the impact by qualification attained in the UK, and predominantly reflecting the (estimated) distribution of GR visa holders by level of qualification attained in the UK⁷², graduates who completed postgraduate (taught) qualifications generated the majority of the estimated Exchequer benefits (**£334 million, 57%**), with the remainder generated by graduates who undertook first degrees (**£212 million, 36%**) and postgraduate (research) qualifications (**£42 million, 7%**).

Table 5 Total Exchequer benefits associated with Graduate Route visa holders in 2022-23, by level of HE qualification attained in the UK

| Type of benefit | First degree | Postgraduate (taught) | Postgraduate (research) | Total |
|---------------------------|--------------|-----------------------|-------------------------|--------------|
| Income tax | £57m | £89m | £12m | £158m |
| Employee NI contributions | £38m | £58m | £8m | £104m |
| Employer NI contributions | £50m | £77m | £10m | £137m |
| VAT | £37m | £56m | £7m | £99m |
| Visa application fees | £17m | £28m | £3m | £47m |
| Imm. health surcharge | £14m | £25m | £2m | £41m |
| Total | £212m | £334m | £42m | £588m |

Note: Values are rounded to the nearest £1 million. All estimates are presented in 2022-23 prices. Totals may not sum due to rounding.

Source: *London Economics' analysis*

In terms of the benefits associated with main GR visa holders vs. their dependants, of the total estimated benefit of **£588 million, £574 million (98%)** was generated by main visa holders (i.e. graduates themselves), while the remaining **£8 million (1%)** and **£5 million (1%)** were associated with their adult and child dependants, respectively. Again, the relatively low values for dependants here are driven by the fact that our analysis only accounts for the visa application fee and immigration health surcharge payments for these dependants, while we do *not* include any additional tax receipts associated with graduates' adult dependants who are themselves working in the UK.

3.2 The Exchequer costs associated with Graduate Route visas

Table 6 presents our corresponding estimates of the average Exchequer costs associated with each main GR visa holder in 2022-23. As with the above-presented

⁷² See Section 2.1.2 for more information.

benefits per main visa holder, these cost estimates are adjusted for the likelihood of main GR visa holders having dependants stay with them in the UK.⁷³

The average Exchequer cost per main GR visa holder was estimated at approximately **£9,160**. Again, this figure varies by study level, with higher estimates for postgraduate (taught or research) qualification holders (**£10,360**⁷⁴) and relatively lower costs for graduates who completed first degrees in the UK (**£7,430**). This variation here is entirely driven by the fact that main GR visa holders who completed postgraduate qualifications are eligible to have their dependants stay with them in the UK, whereas visa holders who completed first degrees are assumed *not* to be eligible to receive GR visas for their dependants.

Table 6 Average Exchequer costs per main Graduate Route visa holder in 2022-23, by level of HE qualification attained in the UK

| Type of cost | First degree | Postgraduate (taught) | Postgraduate (research) | Average |
|---|---------------|-----------------------|-------------------------|---------------|
| Visa processing costs | £100 | £130 | £130 | £120 |
| Public health costs | £940 | £1,220 | £1,220 | £1,110 |
| Public education costs ¹ | - | £720 | £720 | £420 |
| Other public service costs ² | £6,390 | £8,290 | £8,290 | £7,510 |
| Total | £7,430 | £10,360 | £10,360 | £9,160 |

Note: Values are rounded to the nearest £10. The figures implicitly include any costs associated with dependant GR visa holders (i.e. the numbers account for the likelihood of having dependants). All estimates are presented in 2022-23 prices. Totals may not sum due to rounding.

¹ Applicable to child dependants of graduates on GR visas only.

² Other public service costs include housing and community amenities; public order and safety; defence; economic affairs; recreation, culture, and religion; environmental protection; and general public services (including EU transactions).

Source: London Economics' analysis

Aggregating these costs across all GR visa holders, we estimate that the total Exchequer cost associated with these visa holders in 2022-23 stood at **£517 million**. As shown in Table 7, the vast majority of these costs (**£424 million, 82%**) was associated with the provision of 'other' public services to main GR visa holders and their dependants, with relatively lower costs associated with GR visa holders' use of the NHS (**£62 million, 12%**) the public costs of education provision to child

⁷³ Note that the adjustment for the likelihood of graduates being in full-time employment, part-time employment, or not in paid employment in the UK is not relevant here, as all costs were assumed to be the same irrespective of employment status.

⁷⁴ The fact that the estimated costs per main visa holder for postgraduate (taught) and postgraduate (research) qualifications are the same here is driven by the fact that we assume the same likelihood of bringing in dependants across these two groups of graduates, as well as the same cost per head for main GR visa holders irrespective of the level of qualification held (also see Section 2.3.5 for more detail).

dependants on the Graduate Route (**£24 million, 5%**), and the GR visa processing costs incurred by the Home Office (**£7 million, 1%**).

In terms of the breakdown of these costs by qualification level, as shown above in relation to Exchequer benefits, graduates who undertook postgraduate (taught) qualifications accounted for the majority of the total Exchequer costs (**£316 million, 61%**). Graduates who completed first degrees instead accounted for **£172 million (33%)** of the total, and graduates with postgraduate (research) qualifications generated the remaining **£29 million (6%)**.

Table 7 Total Exchequer costs associated with Graduate Route visa holders in 2022-23, by level of HE qualification attained in the UK

| Type of cost | First degree | Postgraduate (taught) | Postgraduate (research) | Total |
|---|--------------|-----------------------|-------------------------|--------------|
| Visa processing costs | £2m | £4m | £0m | £7m |
| Public health costs | £22m | £37m | £3m | £62m |
| Public education costs ¹ | - | £22m | £2m | £24m |
| Other public service costs ² | £148m | £253m | £24m | £424m |
| Total | £172m | £316m | £29m | £517m |

Note: Values are rounded to the nearest £1 million. All estimates are presented in 2022-23 prices. Totals may not sum due to rounding.

¹ Applicable to child dependants of graduates on GR visas only.

² Other public service costs include housing and community amenities; public order and safety; defence; economic affairs; recreation, culture, and religion; environmental protection; and general public services (including EU transactions).

Source: London Economics' analysis

In terms of the breakdown between main GR visa holders vs. their dependants, of the total Exchequer cost of **£517 million, £419 million (81%)** was associated with main visa holders. A further **£44 million (9%)** of costs were incurred in relation to adult dependants on GR visas, and the remaining **£54 million (10%)** were associated with child dependants on the Graduate Route (with the latter predominantly driven by the cost of public education provision for child dependants – while all other costs per head were assumed to be the same across main GR visa holders, their adult dependants, and their child dependants⁷⁵).

3.3 Net Exchequer benefits

Combining the Exchequer benefits and costs presented in Sections 3.1 and 3.2, the net Exchequer benefit per main GR visa holder in 2022-23 was estimated to be **£1,240** (see Table 8). Reflecting the variation in both benefits and costs, this net benefit figure varies significantly by level of qualification attained in the UK, with the

⁷⁵ Also see Section 2.3.5 for more information.

net Exchequer benefit per former postgraduate (research) student standing at **£4,440**, compared to **£1,740** and **£570** for first degree and postgraduate (taught) degree holders, respectively.

The high net benefit for postgraduate (research) degree holders is due to the large tax receipts associated with those individuals' higher earnings, which outweigh their relatively high public costs (driven by their dependants). Conversely, the net benefit associated with postgraduate (taught) degree holders is relatively low, as their tax contributions only marginally outweigh the public costs associated with these graduates and their dependants. Finally, while first degree holders are estimated to generate the lowest 'gross' Exchequer benefit per main visa holder (due to their lower earnings), they still generate an above-average net benefit because they are unable to bring in dependants (i.e. are associated with a relatively low public cost burden).

Table 8 Average net Exchequer benefit per main Graduate Route visa holder in 2022-23, by level of HE qualification attained in the UK

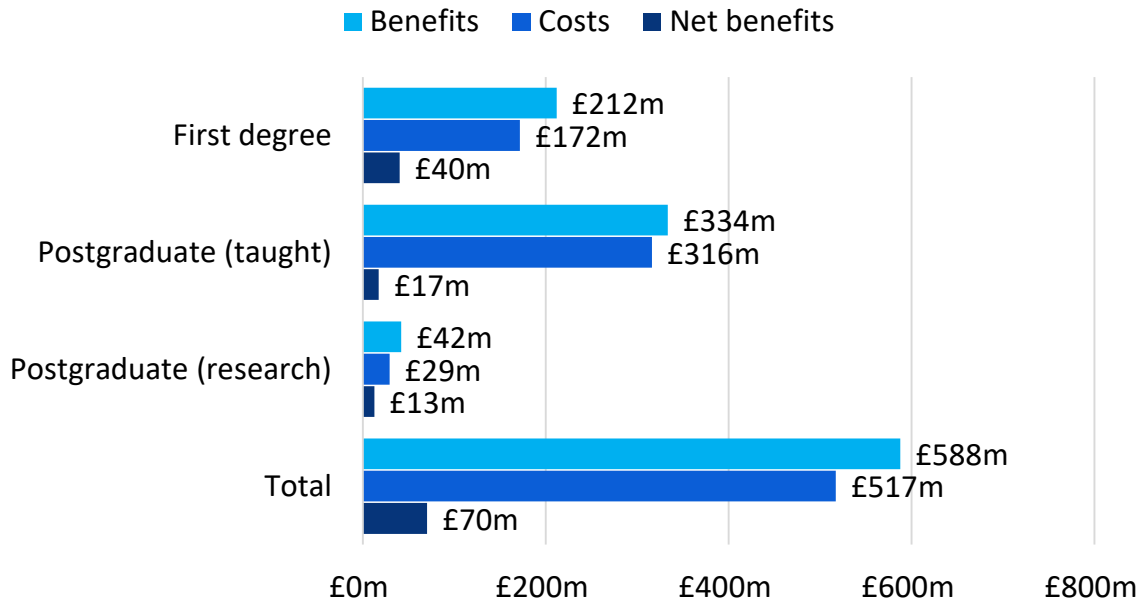
| Type of impact | First degree | Postgraduate (taught) | Postgraduate (research) | Average |
|--------------------|---------------|-----------------------|-------------------------|----------------|
| Benefits | £9,170 | £10,930 | £14,800 | £10,410 |
| Costs | £7,430 | £10,360 | £10,360 | £9,160 |
| Net benefit | £1,740 | £570 | £4,440 | £1,240 |

Note: Values are rounded to the nearest £10. The figures include any benefits or costs associated with dependants of GR visa holders (accounting for the likelihood of having dependants). All estimates are presented in 2022-23 prices. Totals may not sum due to rounding.

Source: London Economics' analysis

The **total net Exchequer benefit** associated with GR visa holders in 2022-23 was estimated to be **£70 million** (see Figure 5). The majority of this net benefit (**£40 million, 57%**) was generated by first degree holders, with the remainder being generated by postgraduate (taught) (**£17 million, 25%**) and postgraduate (research) (**£13 million, 18%**) degree holders.

Figure 5 Total net Exchequer benefit associated with Graduate Route visa holders in 2022-23, by level of HE qualification attained in the UK



Note: Values are rounded to the nearest £1 million. All estimates are presented in 2022-23 prices. Totals may not sum due to rounding.

Source: *London Economics' analysis*

Box 1 Net Exchequer benefits associated with international graduates on the Skilled Worker Route

As discussed in Section 1.1, instead of applying for a GR visa, international HE students who want to stay in the UK to work after graduation can also apply directly for a **Skilled Worker Route visa**. This Route is also available to eligible GR visa holders who want to remain in the UK after their Graduate Route visa expires.

In the following, we provide **indicative estimates of the Exchequer benefits and costs associated with international graduates from UK HE who were working in the UK on Skilled Worker visas** (rather than Graduate Route visas) **in 2022-23**. Since the Graduate Route was only introduced in July 2021, it is expected that the vast majority of these international graduates on the Skilled Worker Route went *directly* into this route after graduating (rather than applying for the Graduate Route first).

Importantly, the results presented here rely on the above-described estimates per main visa holder for GR visa holders – i.e. the figures presented below constitute an extrapolation of our findings for the Graduate Route. As a result, **the findings on the Skilled Worker Route here should be treated as indicative/exploratory**.

We made use of data from the Home Office's Migrant Journey 2022 Report⁷⁶ in order to estimate the number of international graduates from UK HE who remained in the UK on a Skilled Worker Route visa in 2022-23. Specifically, the data provide information on the number of individuals whose 'migrant journey' to the UK started on a sponsored study visa⁷⁷ and who held a UK worker visa in 2022.⁷⁸ The data is based on individuals' visa status at the end of 2022, and we assumed that all of these visa holders were working in the UK for the whole of the 2022-23 tax year⁷⁹.

Using this approach, we thus arrive at the estimated number of **main Skilled Worker visa holders** who were previously international HE students studying in

⁷⁶ See Home Office (2023a).

⁷⁷ This includes individuals who first entered the UK on a Sponsored Study visa at any point between 2004 and 2022. Here, sponsored study visas include individuals with previous Tier 4 Student visas (which were abolished in October 2020), and individuals with Student or Child Student visas (which replaced the Tier 4 (General) and Tier 4 (Child) Student visa from October 2020 onwards, respectively). In other words, the data include a (likely only small) number of individuals who initially arrived in the UK to undertake studies below HE level.

⁷⁸ The worker visa category includes Skilled Worker Route visa holders (which replaced the previous Tier 2 (General) work visa in December 2020), as well as a (likely small) number of other types of work visas (such as the Scale-up Worker visa or the Senior or Specialist Worker visa).

⁷⁹ Except those individuals who only received their study visa in 2022; since we assumed that these visa holders would have been in education (rather than in work) for most of 2022, we have excluded them from the analysis.

the UK. Again, to fully account for the Exchequer costs associated with these visa holders, it was necessary to also gain information on the number of **dependant Skilled Worker visa holders** that joined these international graduates in the UK. This was estimated based on the *total* number of individuals whose ‘migrant journey’ to the UK first started on a sponsored study visa and who still had valid leave to remain in the UK (on any type of visa) in 2022 and their associated number of dependants who still had leave to remain in the UK in that year. Taking the ratio of the two numbers, we thus assumed that there were approximately **199** dependants for every **1,000** international graduates that were in the UK on a Skilled Worker visa in 2022-23.

Applying this method, we arrived at an estimated number of international graduates from UK HE who were on Skilled Worker visas in 2022-23 of **67,170** (i.e. ‘main’ visa holders), with an associated **13,355** dependants (including **7,980** adult and **5,675** child dependants⁸⁰). Hence, our analysis here is based on a total of **80,525** Skilled Worker visa holders in 2022-23.

To estimate the **Exchequer benefits** associated with these visa holders, we assumed the same average tax receipts⁸¹ per main Skilled Worker Route visa holder as for main GR visa holders who were in *full-time* employment in 2022-23⁸². We also assumed the same immigration health surcharge fee as for GR visa holders (but excluded any Exchequer benefits from Skilled Worker Route visa holders’ visa application fees⁸³).

In terms of the associated **Exchequer costs** per Skilled Worker Route visa holder, we assumed the same costs per Skilled Worker visa holder as for GR visa holders, with the exception of visa processing costs, which we excluded from the analysis here (mirroring the approach on the benefits side⁸⁴).

⁸⁰ Again, we assumed a 60%/40% split between adult and child dependants (same as for dependant GR visa holders; see Section 2.1.2).

⁸¹ Again, this includes income tax, NI employee and employer contributions, and VAT payments. See Section 2.2 for more detail.

⁸² Given the various conditions (e.g. minimum salary thresholds) applicable to Skilled Worker Route visas, we assume that *all* international graduates who were on a Skilled Worker visa in 2022-23 were in full-time employment.

⁸³ This is because Skilled Worker visas are typically valid for a much longer period than GR visas (typically 5 years with possible extensions). In the absence of information on when each international graduate applied for their Skilled Worker Route visa, for simplicity, our analysis here excludes both the Exchequer benefit from these graduates’ Skilled Worker visa application fees as well as the associated cost of processing their visa applications incurred by the Home Office. Similar to the Graduate Route (see Section 2.3.4), we expect the cost of processing these visa applications to be lower than the visa application fee; therefore, it is likely that the analysis here underestimates the true Exchequer benefit associated with international graduates (and their dependants) on Skilled Worker Route visas.

⁸⁴ Also see Footnote 83 above.

Based on this approach, we estimated that (see Table 9):

- The gross **Exchequer benefit** associated with international graduates who were working in the UK on Skilled Worker visas in 2022-23 (and their dependants) stood at approximately **£852 million**. This is equivalent to **£12,680** per main Skilled Worker visa holder (i.e. per international graduate);
- The corresponding **Exchequer cost** stood at **£622 million** (equivalent to **£9,260** per main Skilled Worker visa holder); and
- The resulting **net Exchequer benefit** stood at **£230 million** (equivalent to **£3,420** per main Skilled Worker visa holder).

Table 9 Net Exchequer benefit associated with international graduates who were on Skilled Worker visas in 2022-23

| Type of impact | £ per main visa holder | Total, £m |
|-------------------|------------------------|--------------|
| Benefits | £12,680 | £852m |
| Costs | £9,260 | £622m |
| Net impact | £3,420 | £230m |

Note: Values per main visa holder are rounded to the nearest £10, and totals are rounded to the nearest £1 million. The figures implicitly include any benefits and costs associated with dependants visa holders (i.e. the numbers account for the likelihood of having dependants), and constitute weighted averages across men and women (where applicable). All estimates are presented in 2022-23 prices. Totals may not sum due to rounding.

Source: London Economics' analysis

The larger net Exchequer benefit associated with international graduates on Skilled Worker visas here (**£230 million**) compared to the results for Graduate visa holders presented above (**£70 million**) is driven in part by the relatively larger number of visa holders in 2022-23. In turn, this is because the Skilled Worker Route (and its Tier 2 work visa predecessor) has been in place for much longer and typically allows migrants to stay in the UK for up to 5 years (or more, if the visa is extended) – resulting in a relatively large number of international graduates who were in the UK on these visas in 2022-23. In contrast, the Graduate Route was only launched in July 2021, so that only very recent international graduate cohorts held GR visas in 2022-23.^{85 86}

⁸⁵ As outlined in the Home Office's Migrant Journey 2022 Report, 'Although open to students regardless of course start date, the 2020 cohort is the first for which students of any course length could transfer directly to the graduate route and the first who would have widely known about the route prior to applying to come to the UK to study' (see Home Office, 2023a). Further note that applicants to the Graduate Route must be in the UK to apply (see UK Government, 2024a).

⁸⁶ Though note that, according to an analysis by the Migration Observatory at the University of Oxford (2024), recent international student cohorts have a higher or equivalent *propensity* to move to GR visas post-graduation as compared to Skilled Worker Route visas (e.g. 5% of former non-EU students who arrived on

In addition, we assumed that *all* graduates on Skilled Worker visas are in full-time employment (driven by the associated visa conditions), compared to only **71%** of Graduate Route visa holders⁸⁷ (with the remaining **8%** and **21%** assumed to be in part-time employment or not in paid employment, respectively). This results in higher estimated tax receipts associated with graduates on the Skilled Worker Route as compared to the Graduate Route.

Nevertheless, similar to our findings on the Graduate Route, it is likely that the results here substantially **underestimate** the net Exchequer benefits associated with international graduates who were on Skilled Worker Route visas in 2022-23. This is because Skilled Worker Route visas are longer-term visas, allowing migrants to stay in the UK for up to 5 years (or more, if extended) compared to only 2-3 years for Graduate Route visas. As a result, the average earnings for graduates on Skilled Worker visas are expected to be significantly higher than the corresponding earnings of Graduate Route visa holders (since Skilled Worker Route visa holders are likely to have progressed much further in their careers than graduates on the Graduate Route). In addition, note again that our analysis here excludes the Exchequer benefit from Skilled Worker visa application fees and the associated cost of processing these visa applications - and we expect these processing cost to be lower than the visa application fee.

3.4 Key caveats and limitations

There are a number of key caveats and limitations associated with the above analysis:

- There were **significant data limitations**, particularly related to the earnings and employment outcomes of main GR visa holders. The Graduate Outcomes Survey data used throughout the analysis here constitutes the only publicly available source of this information for main GR visa holders (to the best of our knowledge). As outlined above⁸⁸, there are a number of caveats associated with the data, and a number of simplifying assumptions that had to be made when using the Graduate Outcomes Survey data. For its review of the Graduate Route, the Migration Advisory Committee has requested linked HMRC and Home Office data, which will likely provide more comprehensive, granular, and robust evidence on the earnings and employment outcomes (and associated tax receipts) of GR visa holders.

study visas in the UK in 2020 had switched to a Graduate Route visa one year after their arrival, while 2% had switched to Skilled Worker Route visas instead; the corresponding proportions for students who arrived in 2021 stood at 8% for both GR visas and Skilled Worker Route visas).

⁸⁷ See Section 2.1.3.

⁸⁸ See Section 2.

However, in this respect, note that the specific focus of the analysis here is to assess the Exchequer benefits and costs associated with the Graduate Route. In contrast, it is expected that the Migration Advisory Committee will *not* consider these Exchequer benefits (or costs) in its Review, but will instead focus predominantly on the economic activities of GR visa holders (including earnings, if possible⁸⁹), without analysing the associated tax revenues. Therefore, even in the context of the forthcoming MAC Review findings, our analysis here constitutes an important addition to the (very limited) evidence base on the Graduate Route.

- As well as not having a comprehensive understanding of the salaries and employment status of main GR visa holders, in the absence of any publicly available information on the corresponding information on adult dependants on GR visas, we have **excluded any tax receipts generated by adult dependants who are working in the UK**. As a result, our analysis here likely **underestimates the true Exchequer benefits** associated with the Graduate Route.
- This analysis **only considers the benefits and costs associated with GR visa holders in a single year** (2022-23), which was also the first full tax year in which the Graduate Route was implemented. Note that:
 - Firstly, **the total number of GR visa holders in 2022-23 is significantly lower than in subsequent years**. For example, the Home Office (2023b) estimates that **173,000** Graduate Route visas will be granted in 2023-24 and a further **179,000** will be granted in 2024-25. Assuming that all GR visa holders remain in the UK for their full visa duration, this would imply that there could be over **350,000** GR visa holders in the UK by April 2025 – i.e. more than five times the **66,410** GR visa holders in 2022-23 that the analysis here is based on.⁹⁰
 - Secondly, and at the same time, **the number of dependant GR visa holders (and the associated Exchequer cost) is expected to decline substantially in subsequent years**. This is due to the removal of international postgraduate taught students' ability to bring in dependants on their student visas from January 2024 onwards, since the Graduate Route visa only allows graduates to be joined in the UK by their dependants if the dependant also joined them on their student visa (i.e. the Government's restrictions to dependant student visas will automatically impose the same restrictions on Graduate Route

⁸⁹ i.e. if the requested linked HMRC and Home Office data can be provided to the MAC within the required timeframe.

⁹⁰ As outlined by the Higher Education Policy Institute and Kaplan International Pathways (2023), one potential reason for the relatively low initial uptake of the Graduate Route in its early years was a lack of understanding and/or knowledge of the Graduate Route among UK employers.

dependant visas). In turn, this is expected to result in a decline in the Exchequer cost per GR visa holder over time.

- Thirdly, **our analysis only estimates the short-term benefits of GR visa holders**. Many of those visa holders may choose to remain in the UK beyond their current visa (e.g. through the Skilled Worker route), which would generate additional tax revenues for the Exchequer. As GR visa holders progress through their careers, their earnings are likely to increase, which, in turn, will increase their associated tax receipts.
- The analysis **only considers the benefits associated with Graduate Route visa holders after completing their studies**. Post-study work rights are an important factor in the decision making of international students in choosing the UK as their study destination⁹¹, and there are significant economic benefits associated with these international students during their studies. For example, our previous research (London Economics, 2023) estimated that each international student in the cohort of first-year students starting HE qualifications in the UK in 2021-22 generated an average net benefit of **£98,000**⁹² to the UK economy. In addition, the international fee income received by UK higher education providers is crucial in cross-subsidising both domestic teaching and research activities;⁹³ a removal or reduction of this income stream would therefore result in the UK HE sector needing substantial additional financial resources from the Exchequer to support these activities and make up for the associated losses.
- Similarly, **there is a range of other economic and wider benefits associated with the Graduate Route that could not be captured here**, such as the benefits to UK employers of international HE graduates filling key skills shortages in the UK⁹⁴, and a wide range of additional intangible benefits from international students and graduates (such as longer-term investment, business and trade links; soft diplomatic power; and wider cultural and social impacts of having a more diverse population (see London Economics, 2023)).
- Finally, note that while we aimed to capture as wide a range of economic costs of the Graduate Route as possible, **there were some potential (likely**

⁹¹ For example, as outlined in recent research by Universities UK (2024a), data collated by IDP suggests that 45% of international applicants to UK universities would likely change or consider changing their study destination if the post-study work period was shortened, while 37% of applicants reported that the Government's intention (at the time) to review the Graduate Route has meant that they were re-considering study abroad plans or were inclined to choose another study destination. In addition, further modelling by Universities UK (2024b) estimates that the launch of the Graduate Route has directly contributed to 632,000 additional international first-year student enrolments over the 5-year period between 2019-20 and 2023-24.

⁹² In 2021-22 prices, and in net present values over students' total expected study duration in the UK.

⁹³ E.g. see UKRI (2023) and PwC (2024).

⁹⁴ For example, see Holford (2024).

relatively small) costs that we were not able to capture here, such as the effect of the Graduate Route on UK house prices or wages.

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ANNEXES

Annex 1 References

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LE
London
Economics

Somerset House, New Wing, Strand
London, WC2R 1LA, United Kingdom
info@londoneconomics.co.uk
londoneconomics.co.uk
@LE_Education | @LondonEconomics
+44 (0)20 3701 7700