

Tall Tales:

Graduate prospects in the UK labour market

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The Intergenerational Foundation (www.if.org.uk) is an independent, non-party-political charity that exists to protect the rights of younger and future generations in British policy-making. While increasing longevity is to be welcomed, our changing national demographic and expectations of entitlement are placing increasingly heavy burdens on younger and future generations. From housing, health and education to employment, taxation, pensions, voting, spending and environmental degradation, younger generations are under increasing pressure to maintain the intergenerational compact whilst losing out disproportionately to older, wealthier cohorts. IF questions this status quo, calling instead for sustainable long-term policies that are fair to all – the old, the young and those to come.

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Executive summary

The Government has attempted to justify new higher education policies such as the introduction of £9,250 tuition fees, the elimination of maintenance grants and the establishment of the Teaching Education Framework with a number of claims:

- They will make the UK higher education system more financially sustainable;
- They are fairer to non-graduates, who were previously made to contribute towards the education of those who would go on to earn far higher incomes;
- They would ensure higher-quality teaching and thus result in a more skilled graduate workforce.

Recent Office of National Statistics (ONS) data, however, have provided evidence that can be used to **refute these claims**:

- Between 2011 and 2016 the proportion of recent graduates going into “non-graduate jobs” has stayed more or less constant throughout the period at around 46%;
- The proportion of non-recent graduates who occupy non-graduate level jobs has risen from 32 to 35% over the same period.

These statistics suggest **two potential problems**:

- If teaching quality has improved, it is not reflected in the current dynamics of the labour market;
- The fact that more than one in three graduates are in non-graduate work in the long run suggests that there is a mismatch – a state of “over-education” – in the economy.

This paper will argue that the government ought to also reconsider the implications it has drawn from the existence of a “graduate premium”. **The statistics have been misused**:

- The statistics do not prove that new graduates are using the skills they develop at university when they enter their occupations;
- There is no such thing as the “average” student — socioeconomic status, gender, subject, institution and quality of degree received all determine the size of students’ pecuniary benefits;
- There is evidence to suggest that the tuition fees are higher than the cost of teaching undergraduates (on average) and particularly among humanities and arts courses.

The paper concludes that the financial structure of higher education should be reconsidered. Reform could take the shape of a reduced interest rate on student debt, an increased repayment threshold or a reduction in the tuition fees universally, or for particular universities and courses. Moreover, since the cost of university education per student is higher than that of vocational training and since non-graduates are as effective as university-educated at the non-graduate jobs, there is a strong economic argument for the expansion of apprenticeships. This could manifest in:

- Providing better information to school-leavers about apprenticeships;
- Changing the attitudes of employers toward industry placements;
- Increasing the National Minimum Wage for apprentices;
- Offering free transport to apprentices.



Introduction

Changes in the UK's Higher Education system

Recent decades have seen significant demographic, financial, and regulatory changes in higher education. We are nearing New Labour's target participation rate of half of all young people attending university – in the decade leading up to 2015 the figure leapt from 42% to 48%.¹ Unsurprisingly, the growth in university attendance has been accompanied by a decline in other forms of education; for instance, the proportion of workers who have completed formal apprenticeships fell from 17.6% to 10.1% between 1989 and 2014.²

With regard to the financial transformation of the higher education system, 1998 witnessed the introduction of £1,000 tuition fees for domestic students. This figure was tripled in 2004, and tripled *again* in 2010. The fee has increased further still for students entering university from 2016/17 onwards and maintenance grants were replaced with additional maintenance loans in the Summer Budget 2015. With these new reforms in place, the average undergraduate student debt upon leaving university is £50,000–£55,000.

Regulations have been implemented to ensure high-quality academic research and teaching; the process, which began with the Research Assessment Exercise and teaching quality assessments introduced in the 1980s, has become embedded in modern university administration. Competition, based on an externally imposed framework in which value is determined in increasingly economic metrics, has come to dictate the funding of academic research, and the Teaching Excellence Framework was established to provide information to prospective students and ensure high-quality teaching in British universities.

Rhetoric and results

The aim of this report is to evaluate whether the government's financial and administrative reforms, and encouragement of high university participation, have been justified. Successive governments have attempted to justify these changes upon the following claims: the reforms will make the UK higher education system more financially sustainable; the system is now fairer to non-graduates, who were previously made to contribute towards the costs of educating graduates (who would go on to earn far higher incomes than them); and higher-quality teaching will result in graduates getting better jobs, becoming more productive than their predecessors and thus benefiting the national economy and themselves.

This paper will analyse recent ONS data and call upon findings from Chartered Institute of Personnel and Development (CIPD) and the Warwick Institute for Employment Research (WIER) reports and argue that the justifications of the recent education policy changes should be rejected. The paper will conclude that the rhetorical usage of the “graduate premium” has been grounded in highly fallacious reasoning and will call for a reversal of the tuition fees hikes and for an improvement in the provision of information and opportunities to access apprenticeships and other forms of vocational training.

¹ Department for Education (2016) *Participation Rates In Higher Education: Academic Years 2006/2007–2014 /2015* London: DfE

² Chartered Institute of Personnel and Development (2016) *Alternative pathways into the labour market* London: CIPD



Graduates in non-graduate jobs

Definitions

While many of the terms used in this report have commonsensical definitions, the question of what constitutes a “non-graduate job” is far from straightforward. While an extensive discussion of the term is beyond the scope of this paper, for the sake of conceptual clarity I provide the following definitions: a graduate is a person over the age of 20, who is not enrolled on any educational course and who has a level of education above A level standard; a “non-graduate”, correspondingly, refers to anyone to whom the above description does not apply, including those who have completed A-levels, apprenticeships, some other form of vocational training, or none of the above.

Defining “non-graduate jobs” purely in terms of the proportion of those employed in a particular occupation who have not received a degree would limit the utility of the term for the purposes of this report. Such a definition would leave the label susceptible to volatility in the labour market, changes in the proportion of the population who have attended university, and thus largely detached from the focus of this report. Instead, the term will be used in a way logically distinct from these factors, focusing on the nature of the work itself, and hingeing upon whether or not attending university equips workers with the skills necessary to effectively execute the functional demands of the occupation. Of course, the term does not embrace exceptions such as individuals who have not attended university, yet possess skills which are typically found only among graduates, or a particular job which shares the same label as other jobs which graduates and non-graduate are equally capable of executing. This report will adopt the definition provided by Elias and Purcell of “non-graduate jobs” as those which are associated with “tasks that do not normally require knowledge and skills developed through higher education to enable [employees] to perform these tasks in a competent manner”. The skills they determine to be unique to graduates concern expertise, orchestration and communication.³ In using this definition, one can make intertemporal comparisons, recategorise occupations which have become increasingly demanding due to recent technological changes, and use a term which is not affected by volatility in university participation rates and the labour market.

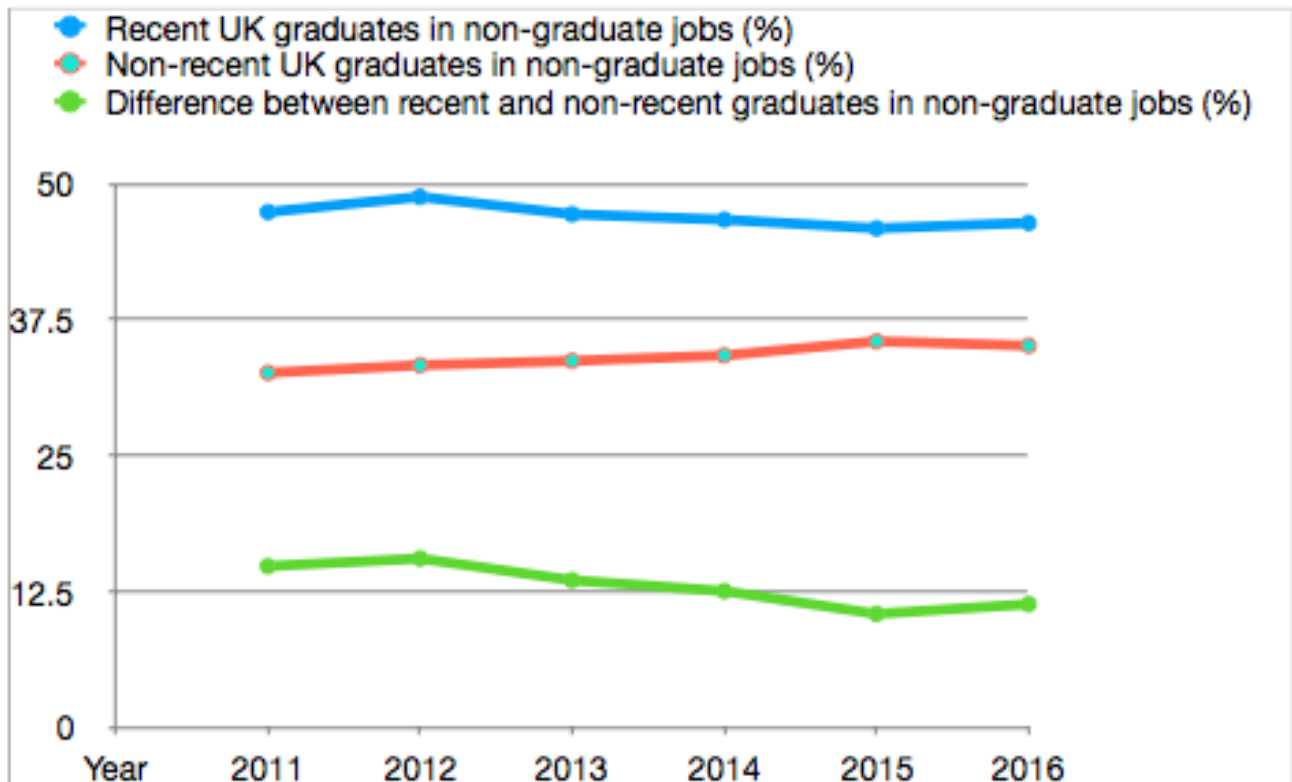
Findings

Recent data from the ONS give good reason to question the claims that the current system of higher education is providing graduates with the skills demanded by the labour market, that the recent reforms have made universities *more* financially sustainable, and that high university participation rates are desirable.⁴ As the graph below displays, the proportion of recent UK graduates — those who have graduated in the past five years — employed in non-graduate jobs dropped by just 1%, from 47.4% to 46.4% between 2011 and 2016. Further, the proportion of non-recent graduates — those who graduated over five years ago — in non-graduate jobs rose by 2.5% from 32.6% to 35.1% over the same period.

³ For a more detailed account of expertise, orchestration and communication, and Elias and Purcell's methodology see: Warwick Institute for Employment Research (2013) *Classifying graduate occupations for the knowledge society* London: WIER

⁴ Office of National Statistics (2017) *Percentage of recent graduates and non-recent graduates working in non-graduate roles, 2011 to 2016* London: ONS

The former statistic, regarding the static proportion of *short-term* engagement in non-graduate occupations, raises concerns that the new teaching reforms and change in the source of funding (via tuition fee hikes) has not been accompanied by an improvement in *quality*, or an increase in the *applicability* of skills developed by universities to the demands of the labour market (for the bottom 47%, at least). The latter statistic, regarding rising *long-term* employment in non-graduate jobs, gives reason to pose another fundamental challenge to the current higher education system: if 35% of graduates find themselves in long-term employment in a job that they are no more competent to execute than someone who has undergone vocational training, then is there not a problem of *over-education*?⁵ If we were to find that the cost of university education per student were considerably higher than the cost of teaching an apprentice, and more than a third of university students end up in the same long-term employment as apprentices, would it not make good economic sense for the government to discard the obsession with reaching ever-higher participation rates, and instead focus on the provision of information and opportunity for other forms of further education?



⁵ Of the 27 countries observed in an International Labour Organization (ILO) report, the UK had the fifth highest level of “mismatch”. A particularly relevant finding to this paper was that UK workers between the ages of 25 and 39 had by far the highest rate of over-education of any age group.
International Labour Organization (2014) *Skills mismatch in Europe – 2014* Geneva: ILO



Supporting literature

Certainly, these suggested implications of the ONS data are supported by recent reports by the CIPD and WIER, each of which also use the Elias and Purcell definition for non-graduate jobs. In its longitudinal analysis of graduates in non-graduate jobs, the Warwick report followed the employment statistics of the classes of 1999 and 2009 in the fifteen months after their graduation.⁶ It found that more than 50% of employed graduates held non-graduate roles in the summer after their graduation. Within just three months, however, only 44% were in non-graduate jobs, and by the end of the fifteen-month period the number had fallen to 31% — considerably below the rate for even the non-recent graduates (more than *five years* after their graduation) between 2011 and 2016. In 2009, however, while only 40% of those who went directly into employment went into non-graduate jobs, 15 months later 36% remained in these roles (5% higher than the 1999 cohort after the same period).

Because of the differences in time frame, the nature of the analysis and the focus on different cohorts, the ONS and Warwick results are not directly comparable, but some patterns can be established. Firstly, both sets of statistics point toward the trend that a growing proportion of graduates remain in non-graduate jobs long after receiving their degrees. Secondly, the Warwick report demonstrates, and the ONS report implies, that it is becoming increasingly difficult for graduates who initially enter non-graduate jobs to *transition* to graduate jobs. In the Warwick report, whereas the proportion dropped by 20% in 15 months for the 1999 cohort, it fell by just 4% for the 2009 cohort over the same period; the green line on the ONS graph shows a 3.5% drop in the difference between the proportions of recent and non-recent graduates in non-graduate jobs, which could be seen as suggesting a similar tendency.

Concerns raised by the ONS data are compounded by a 2015 CIPD report.⁷ The report compared the proportion of employees in occupations, historically undertaken by non-graduates, who had received university education in the UK and other European countries in 2008. There was wide variation between the rates across Europe, and the UK had one of the highest proportion of graduates in many of these occupations. Further, the report included an analysis of the differences in public expenditure per full-time student between universities and non-tertiary vocational education across Europe. University education per student in the UK was more expensive than non-tertiary vocational education by a larger amount than any other European country. Combining the OECD contention that UK productivity is a third lower than other developed European economies such as France and Germany with the recent trends displayed by the Warwick report and ONS data, we are led to the question: have the recent economic, administrative and demographic changes to British universities *helped* or *hindered* students and the national economy alike?

⁶ Warwick Institute for Employment Research (2016) *Graduates in non-graduate occupations* London: HEFCE

⁷ CIPD *op. cit.*



The irrelevance of the graduate premium

Questioning the utility of the graduate premium as a concept

Having identified empirical challenges to some of the government's claims about the state of the UK's current higher education system, it is useful to consider some of the evidence provided by the government in its attempt to display its success. A commonly cited (though statistically imprecise) concept used by the government is the "graduate premium" — the difference between the average life-time earnings of those who have received a university degree and those who have not. Supposing that we accept the accuracy of recent estimates that the graduate premium is somewhere around £100,000, *and* that this number has remained stable since the implementation of the newest reforms, what conclusions is it fair to draw?⁸

One suggestion has been that the graduate premium proves that graduates are being equipped with skills, and that these skills are highly relevant to the daily demands of their occupations. But this conclusion does not follow from the existence of the premium and if we take into account the demographic changes in the higher education system an alternative explanation can be given. Firstly, it is important to distinguish between two types of advantage in competing for jobs in the labour market with which graduates are endowed. The first is intrinsic: a university education develops skills, competencies and knowledge that are highly valued by employers who are thus willing to offer higher paid jobs to the graduates. The second is extrinsic: as well as *developing* graduates' skills, a university degree acts as a *signal* to employers — the very fact that they have attended university suggests to employers that the prospective graduate employees are hard-working, confident in their ability to learn and able to commit to the projects that they undertake. Hence, the insistence that the graduate premium demonstrates that graduates are being equipped with skills relevant to the demands of the labour market ignores the extrinsic, signalling benefit of university for the graduate; it may well be the case that degrees are simply being used to differentiate between the personal qualities of job applicants, and that the skills they have learnt are irrelevant to the work they will do.

A second factor ought to be considered in determining what conclusions should be drawn from the existence of a graduate premium: demographic changes. As referenced above, there has been a vast increase in the proportion of the population attending university in recent decades, with a 6% rise in the last ten years alone. The recent ONS statistics support the hypothesis that this proportion of the graduate population (who, if they had been born in a previous generation, would not have attended university) are in reality what Blenkinsopp unsympathetically refers to as "GRINGO fodder" (the term GRINGO referring to graduates in non-graduate occupations), who receive the same non-graduate jobs as they would have if they had not attended university.⁹ This group are now receiving university education, and thus contributing toward the average *graduate* lifetime earnings, as opposed to the average *non-graduate* lifetime earnings, used in the graduate premium calculation. Hence, if we were to suppose that exactly the same jobs and incomes were

⁸ Kemp-King, S. (2016) *The Graduate Premium: Manna, myth or plain mis-selling?* London: Intergenerational Foundation

⁹ Blenkinsopp, J. & Scurry, T. (2007) "'Hey GRINGO!': the HR challenge of graduates in non-graduate occupations" *Personnel Review* Bingley: Emerald Group Publishing



available to each generation, and we increased the university participation rate to include GRINGO fodder — who in previous generations would have been high-earning non-graduates instead of low-earning graduates — then both the graduate and non-graduate average life-time incomes would fall, and the graduate premium could remain constant. Put simply, the graduate premium tells us absolutely nothing about changes in the labour market and the opportunities available to graduates. If any intrinsic benefits of university are irrelevant to the skills they use in their non-graduate jobs, it follows that from an economic perspective their education represents a wasteful sunk cost both for themselves and for taxpayers; it is nothing but a costly signal, and one, as the CIPD report suggests, that is far higher than an alternative vocational qualification.

Questioning the existence of the graduate premium

Moreover, the graduate premium does not reflect socioeconomic particulars, and is therefore a remarkably blunt device for justifying a universal charge of £9,000 in tuition fees to university students. The average student does not exist: women, ethnic minorities; those from lower-income households and less prestigious institutions; and those who study arts and humanities degrees or receive lower-class degrees will attain a far smaller premium, if any at all.¹⁰ The graduate premium is a loose rhetorical keystone for explaining the decision to place current students into over £50,000 of debt upon entrance to the working world. It fails to account for difference in circumstance, for differences in the cost of providing different degrees (KPMG found that in 2012/13 these ranged from £13,965 for clinical dentistry to £5,539 for law per year) and it treats university education as a private commodity — for which the recipient is the only beneficiary — as opposed to a good with considerable positive social externalities.¹¹

¹⁰ Kemp-King, S. *op. cit.*

¹¹ KPMG (2014) *A Review of the Cost of Postgraduate Taught Provision* London: HEFCE



Conclusion

Higher Education

Successive governments' claims that the expansion of university participation, the increase in tuition fees, and the regulation and "neoliberalisation" of teaching and research have improved the skills and opportunities of graduates.¹² But the structure of the UK's current higher education system, and thus the prospects of the British economy, are built upon fallacious reasoning. The ONS data highlights the growing disequilibrium in the labour market. For many, a university education is becoming an enormous and wasteful sunk cost, irrelevant to the non-graduate jobs that they will eventually find themselves occupying, but essential nonetheless as a signalling device to differentiate themselves from non-graduate applicants. The government's decision to spend so much energy upon encouraging young people to go to university is baseless if it is unable to incentivise businesses to *use* the very skills that university education develops within graduates. If they cannot do this, then far more energy ought to be placed into providing useful information and accessible opportunities for apprenticeships, in order to meet the demands of the current labour market in a cost-effective manner.

Apprenticeships

The government has shown promising signs of acknowledging the imbalance between the quality and range of opportunities for university education and those for vocational training. The introduction of T-levels and the target set to provide three million apprenticeships by 2020 demonstrates a desire to give school-leavers a genuine, alternative route into the working world — but without appropriate informational and financial provision lofty goals and structural innovations will have little substantive impact. There is good reason to believe that if there is to be anything like the vocational success of other developed European economies, such as the German Dual Education system, the government needs to put its money where its mouth is. A recent canvas of 12,800 UK students found that just 18% believed that they received sufficient information to make a decision about taking an apprenticeship; 55% declaring that they had received "not much" advice, or "none at all".¹³ This deficiency is further compounded by news that the government is yet to appoint an advisory development panel for T-levels (which should have met for the first time over four months ago); that there is little available space in schools and colleges to provide adequate physical resources for the classroom learning necessary for an effective technical skills programme; and that there is uncertainty surrounding whether or not there is sufficient take-up from companies offering the high-quality opportunities in industry needed for apprentices to develop the skills, experience and networks for a well-rounded and enriching vocational degree.

Perhaps, as much as monetary resources and policy innovations, the government needs to foster a new attitude in British companies in order to ensure that both the supply and demand of apprenticeships and other vocational courses is as high as it ought to be for the national economy to reap the rewards of a well-rounded educational system. The

¹² For a detailed account of the neoliberalisation (marketisation, commodification, privatisation etc.) of England's higher education system, see: Amsler, S. (2014) "Beyond All Reason: Spaces of Hope in the Struggle for England's Universities" *Representations* Berkeley: University of California Press

¹³ Rule, P. (2017) "Awareness of alternative career paths would make apprenticeships more popular" *FE News* 14 September 2017



government needs to inspire a change in our conceptualisation of what vocational training means. It should not be viewed, as it has been historically in this country, as a matter of corporate social responsibility – of throwing a bone to those who have been unsuccessful in their academic pursuits – but rather as an opportunity for companies to gain access to skilled, thoughtful, self-reliant employees: problem-solving, talented young people who have chosen a legitimate route into their chosen occupation.¹⁴ A half-hearted attempt will do little to ease the strain upon an unsustainable university system, nor will it equip Britain's young people with the skills and knowledge necessary for the prosperity of our national economy in a cost-effective manner. In order to provide accessible opportunity to vocational training, the government ought to reconsider the meagre £3.50 National Minimum Wage offered to apprentices and to offer free transportation so that those from low-income backgrounds can enjoy the geographical mobility necessary to access the apprenticeships that suit them best.

Turning the tide

The ONS data point to an educational system that is burdening students with excessive debts while teaching them skills that simply do not match the current demands of the labour market. A cost-effective solution will result only from a two-pronged response: encouraging companies to utilise the skills graduates have developed and providing better vocational opportunities for those who will enter occupations for which such skills are surplus to requirement.

¹⁴ Jacoby, T. (2014) "Why Germany Is So Much Better at Training Its Workers" *The Atlantic* 16 October 2014



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