Commonwealth Scholarship Commission in the UK

Successes and complexities: the outcomes of UK Commonwealth Scholarships 1960-2012

Abridged report

COMMONWEALTH SCHOLARSHIPS

This report was written by Dr Matt Mawer, Shireen Quraishi, and Rachel Day, and published in April 2016.

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Notes on the abridged report

This abridged report is an accompaniment to the following document:

Mawer, M., Quraishi, S. & Day, R. (2016). *Successes and complexities: the outcomes of UK Commonwealth Scholarships 1960-2012 – Full report*. London: Commonwealth Scholarship Commission in the UK

The abridged report focuses on the main findings and analysis presented in the full report, without including the methodological commentary that accompanies both the data and the conclusions drawn.

We refer readers interested in further detail about how our conclusions were reached – or in engaging with our discussion on the methodological challenges and opportunities of evaluating scholarship programmes – to the full report and Annex one: methodological notes.

For those wishing to cite this abridged report, we recommend the following:

Mawer, M., Quraishi, S. & Day, R. (2016). *Successes and complexities: the outcomes of UK Commonwealth Scholarships, 1960-2012 – Abridged report*. London: Commonwealth Scholarship Commission in the UK

Foreword

Higher education makes a critical contribution to international development. However, it was not a significant feature of educational targets in the Millennium Development Goals (MDGs), which, with justification, focused on primary education. During the course of the MDGs, analysts observed that a shortage of skilled professionals in many low and middle income countries limited progress across a range of goals in education, health, and other areas. The new Sustainable Development Goals (SDGs) address this need, with specific targets for increasing higher education provision, focusing education on development priorities, and, significantly, increasing the number of scholarships for professional training available to developing countries.

Over the years, many high income countries have offered scholarship programmes to strengthen the professional workforce in low and middle income countries. While the broad value of such investment is rarely challenged, there is a paucity of evidence regarding the specific contribution to development of these scholarship programmes. This evidence base is needed today as aid budgets decline and demands on them diversify. Further, the range of approaches proposed for supporting higher education in development is growing. How can we make decisions whether to invest aid funds in scholarships, local university capacity building, north-south university partnerships, mass online learning, or other interventions, if we have little information about the development impact of any of these?

The Commonwealth Scholarship and Fellowship Plan (CSFP) has been operating – and the UK contributing – since 1959. It is one of the longest running schemes in the world and provides a unique resource for the evaluation of scholarship programmes aimed specifically at international development outcomes. Between 2009 and 2013, the Commonwealth Scholarship Commission in the UK (CSC) produced a series of studies on the impact of its contribution to the Plan on development outcomes, with a focus on different sectors and geographic regions. This was a landmark contribution to impact evaluation of scholarships schemes; yet, like many such efforts, it relied substantially on individual case studies and less on quantitative data collected about the development contributions of scholars.

Since then, the CSC has invested considerable energy into developing its approaches to evaluation. This report represents a new milestone in that effort: it analyses over 50 years of data on the careers of recipients from each of the CSC's scholarship schemes. From this data, it produces an analysis of many outstanding questions about scholarship impact, including:

- Do scholars return home after completing their scholarship?
- How have the careers of scholars unfolded after their scholarships have concluded?
- To what extent are appreciable gains in knowledge and skills realised, and are these put into practice within the workplace?
- Are links maintained between scholars and their UK host institutions and colleagues?
- How far are scholars' activities catalysing wider development impact in their communities and countries?

The conclusions drawn strongly support the development value of scholarships schemes such as the Commonwealth Scholarship and Fellowship Plan, and challenge a range of preconceptions about them.

This is a valuable report not only for its analysis, but also for its methodology. Evaluating scholarship programmes is extremely difficult; dependency on self-report survey responses, retrospective analysis over varying periods, a lack of counterfactuals, and other limitations pose challenges for both statistical analysis and the interpretation of findings. The methodology introduced in this report should make an important contribution to the work of a growing community of specialists involved in the evaluation of international higher education and of development interventions.

Professor Jeff Waage OBE
Commonwealth Scholarship Commissioner
Director of the London International Development Centre

1. Evaluating Commonwealth Scholarships and Fellowships

We started a hospice facility in Lucknow by the name of Aastha, which was the first palliative care facility in north India. Before, terminally ill patients in our state were admitted to intensive care units (ICUs) at tertiary care hospitals and were compelled to take acute medical care/intensive care instead of palliative/ supportive care during their final stages of life. Those who could not afford this care took their last breath in their houses, in lots of pain and suffering.

Initially, it took us a lot of time and effort to explain to people the need for palliative care and how could people benefit from our hospice. We organised several health camps, discussions on media forums, and training programmes for caregivers of terminally ill patients, and made the masses feel how important hospice care is for both the patient as well as the family. After the hospice facility came into existence in our state of Uttar Pradesh, more and more people started realising the need and the benefits of palliative care. Now even the oncology clinics and hospitals refer their patients to us for hospice care. Patients have also realised that there is no benefit to admitting a terminally ill patient with a limited life expectancy to a tertiary care hospital, as firstly it's very expensive, and secondly it blocks a bed for a patient who may die due to the unavailability of an ICU bed.

Before we started the hospice facility, in our state almost 50% of patients who were terminally ill died in their houses in pain and distress. They had no other option, as ICU care at a tertiary care centre was not affordable for most people because we have no health insurance system in our county for old people. But now Aastha Hospice has emerged as an option for all people who want social, emotional, spiritual, mental, and medical support during the final journey of life. Now family members of the terminally ill don't prefer to take their loved ones to ICUs and acute care hospitals, and by our efforts hospice care facility has been well accepted and recognised by various government and corporate organisations in our country. We have the privilege to be the first hospice in north India to be recognised by the Ministry of Defence, Government of India.

Dr Abhishek Shukla
Cardiff University, 2010

1.1. Commonwealth Scholarships and Fellowships in the United Kingdom

The Commonwealth Scholarship Commission (CSC) is a Non-Departmental Public Body created by Act of Parliament to administer the United Kingdom's contribution to the Commonwealth Scholarship and Fellowship Plan (CSFP). The Plan was established at the first Conference of Commonwealth Education Ministers in 1959, on the basis of five main principles:

a) The Plan should be additional to, and distinct from, any other plan in operation.

b) The Plan should be based on mutual cooperation and the sharing of educational experience among all the nations of the Commonwealth.

c) The Plan should be sufficiently flexible, to take account of the diverse and changing needs of Commonwealth countries.

d) While the Plan will be Commonwealth-wide, it should be operated on the basis of a series of bilateral agreements to allow for the necessary flexibility.

e) Awards should be designed to recognise and promote the highest standards of intellectual achievement.

These principles remain the same and have been reinforced at subsequent meetings of Commonwealth Education Ministers. The United Kingdom has continued its long-term commitment to the Plan and, and through the CSC currently offers around 900 awards every year for study at postgraduate and doctoral level and for shorter mobility awards to professional, academic and medical staff.

The initial focus of the Plan was on supporting individuals and encouraging international collaboration and understanding through education. Over time, however, international development objectives have become increasingly influential in shaping the outlook of donor governments. Since the late 1990s in particular, CSC policy has emphasised development impact - particularly in relation to the Millennium Development Goals –

and both intellectual and operational leadership. Applicants for awards are thus expected to demonstrate not only academic merit and to submit high-quality study proposals, but also explain the likely development impact of their work on their home countries.

1.2. Overview of scholarship schemes

In the early days of the CSFP, the CSC offered scholarships for study leading to doctoral and Master's level qualifications, as well as separate fellowships for medical training and academic staff. Medical Fellowships for senior and junior medics were merged with the broader scholarship and fellowship programmes in the 1990s, reducing the number of programmes on paper, if not in practice. In the past 15 years, however, and as of 2015, the range of schemes has once again expanded to include not only the reintroduction of a separate Medical Fellowship scheme, but also Professional Fellowships of typically three months in length, Split-site Scholarships for doctoral students registered for PhD study in their home country allowing for a period of research at a UK university, and Distance Learning Scholarships for Master's study. The former Overseas Development Agency Shared Scholarship Scheme was also brought under the umbrella of the CSC in 2002, adding a further Master's study scheme to the overall portfolio of awards.

Each type of award offered involves a different funding arrangement with institutions, level of study, government department providing funding, length of tenure, or primary focus. To better understand our analysis, it is useful to understand the different characteristics and histories of these scholarship schemes, and for this purpose each has been outlined briefly below.

Split-Site Doctorate – Commonwealth Split-site Scholarships: Introduced in 1998, a scheme in which PhD students registered at a 'home institution' in another Commonwealth country apply to spend up to one year at a UK institution. Applicants were previously nominated by their home institution but can, as of 2015, apply directly.

Academic Staff – Academic Staff Scholarships: Scheme for Master's (prior to 2015) or doctoral study in the UK. Applicants are academics nominated by their higher education institution.

Fellows – A series of short-term mobility schemes. Although each fellowship scheme is distinct, we have combined them into a single category for the current report, as often there were too few Fellows from each individual scheme to include as a separate category. The constituent elements of the Fellows category are the participants in:

1. Commonwealth Academic Fellowships: Short-term mobility scheme for established academic researchers and medical professionals to build skills and contacts at a UK institution. Eligible lengths of tenure have varied from 12 months to six months to three months at different times across the history of the scheme; currently, as of 2015, awards are offered for a period of 10-12 months.

2. Commonwealth Medical Fellowships and Senior Medical Fellowships: historical scheme for medical training fellowships, subsequently merged with Commonwealth Academic Fellowships scheme or discontinued in some elements; reintroduced as a separate programme as of 2015.

3. Commonwealth Professional Fellowships: Introduced in 2001, a short-term mobility scheme for professionals to build skills and contacts at a UK host organisation.

Agency: Developed – 'General' Commonwealth Scholarships: Broad scheme for Master's or doctoral study in the UK for citizens of developed countries. Applicants are nominated by an agency partner in the home country, often within ministries of education, training or human resources, or in some cases by a university or other higher education body.

Agency: Developing - 'General' Commonwealth Scholarships: Broad scheme for Master's study, doctoral study, or medical training in the UK for citizens of developing countries. As before, candidates apply through a national nominating agency, most often within ministries of education, training or human resources.

Shared Scholars – Commonwealth Shared Scholarships: Scheme for Master's study in the UK with different cost-sharing arrangements between the CSC and universities. Applicants are put forward by UK universities.

Distance Learners – Commonwealth Distance Learning Scholarships: Introduced in 2002, a scheme for Master's courses run by UK institutions and studied at distance (i.e. in home countries). Awards are offered for selected courses.

1.3. Survey methodology

Almost 2,100 Scholars and Fellows responded to the survey, representing participants from each scholarship programme operated by the CSC, who are currently residing in 84 countries, having studied over 100 academic disciplines, and having been hosted at over 300 UK institutions. The survey gathered responses from Scholars and Fellows that had held scholarships as far back as 1960 and in *every subsequent year* until 2012.

Data was collected through an online survey designed and administered by the CSC evaluation team. The survey was sent to members of the CSC's alumni network between 2012 and 2015. The following broad topics were explored:

1. Current employment trajectory
2. Perceptions of knowledge and skills gained from Commonwealth awards
3. Involvement in developmental activities
4. Scientific collaboration and international business or personal networks
5. Attribution and counterfactual scenarios

The survey was sent to a population of 6764 alumni, divided across the four survey iterations administered between 2012 and 2015. Additionally, a catch-up exercise in which one group of Fellows – Professional Fellows – were surveyed using a similar instrument was conducted in 2012, yielding a further cohort of respondents that were included in the dataset for analysis. Almost a fifth (18.3%) of survey invitation emails failed to be delivered due to incorrect contact details. The aggregate response rate from the remaining, successful survey emails was 36.6%: a total of 2090 respondents.

The survey was a non-random and non-stratified census of current alumni network members. Although the methodology did not apply any specific criteria for participation, the possible respondents were restricted insofar as the CSC needed to hold current contact details and permission for their use in order to send the survey to a Scholar. In order to examine potential bias we conducted an analysis of the representativeness of our survey respondents in relation to the population of all Scholars and Fellows (see Annex One: Methodological notes). The comparisons indicate a high level of representativeness in most areas, including candidates' scores in the CSC's scholarship selection processes, age at award uptake, gender, doctoral submission time (where appropriate), scholarship scheme, and degree type, with slightly larger variation between respondents and population in their region of origin (specifically, Australasian and North American (Canadian) Scholars are somewhat over-represented in the survey respondents).

Data has been analysed through descriptive and inferential statistical techniques and, where appropriate, free-text coding. Statistical techniques are not discussed in detail within this report, but, for reader's reference, have primarily been a combination of logistic and ordinal logistic regression. For further statistical information see the accompanying full report and Annex One: Methodological notes.

2. Individual trajectories

I designed the undergraduate and postgraduate agricultural statistics programmes at the then Institute of Statistics and Applied Economics, now School of Statistics and Planning, of Makerere University. In 1990, I was the Founding Secretary of the Uganda Statistical Society, which played a critical role in the revival of statistics in Uganda after the Amin government years (1971-1979).

As a statistician, in the Central Statistics Office and the Central Bank, I have been involved in designing and carrying out surveys and censuses to provide data to decision-makers, the private sector, and other stakeholders. For example, while heading the Central Statistics Office (CSO) between 1994-1998, there was a revival of data collection in several areas related to economic growth, including the Uganda National Household Surveys. Efforts also started for the provision of data on gender and poverty. This data was critical for any gender equality and poverty reduction. I was also a consultant for the censuses of agriculture in 1990/1992 and 2002.

My work has improved the availability and accessibility of data in Uganda. The Uganda Statistics Abstract (giving various data on Uganda) was revived in 1996 during my tenure as Head (Commissioner) of the CSO; the last abstract had been published in 1987! Similarly, my work has led to the enactment of the Uganda Statistics Act 1998 and the creation of a semi-autonomous Uganda Bureau of Statistics in 1999, where I served as Chairman of the Board of Directors from 2008 to 2014. I have also served as a consultant to several national and international organisations, including the World Bank and the United Nations Food and Agriculture Organization.

All of these activities can be directly attributed to my training at the University of East Anglia under the Commonwealth Scholarship between 1983-1987.

Dr Elijah Muwanga-Zake
University of East Anglia, 1983

Our survey data included extensive information on employment activities pre- and post-scholarship, perceived gains from a Commonwealth award and the application of these gains in the workplace, and on the current residency of Scholarship alumni. From these data we constructed analyses of employment trends and correlates of stronger (or weaker) perceived gains, both in general and specifically in application of knowledge and skills, and evaluated the tendency towards brain drain in the international movement of Commonwealth Scholars.

In this section we interpret some of the major trends in the data analysis. Our reflections focus on:

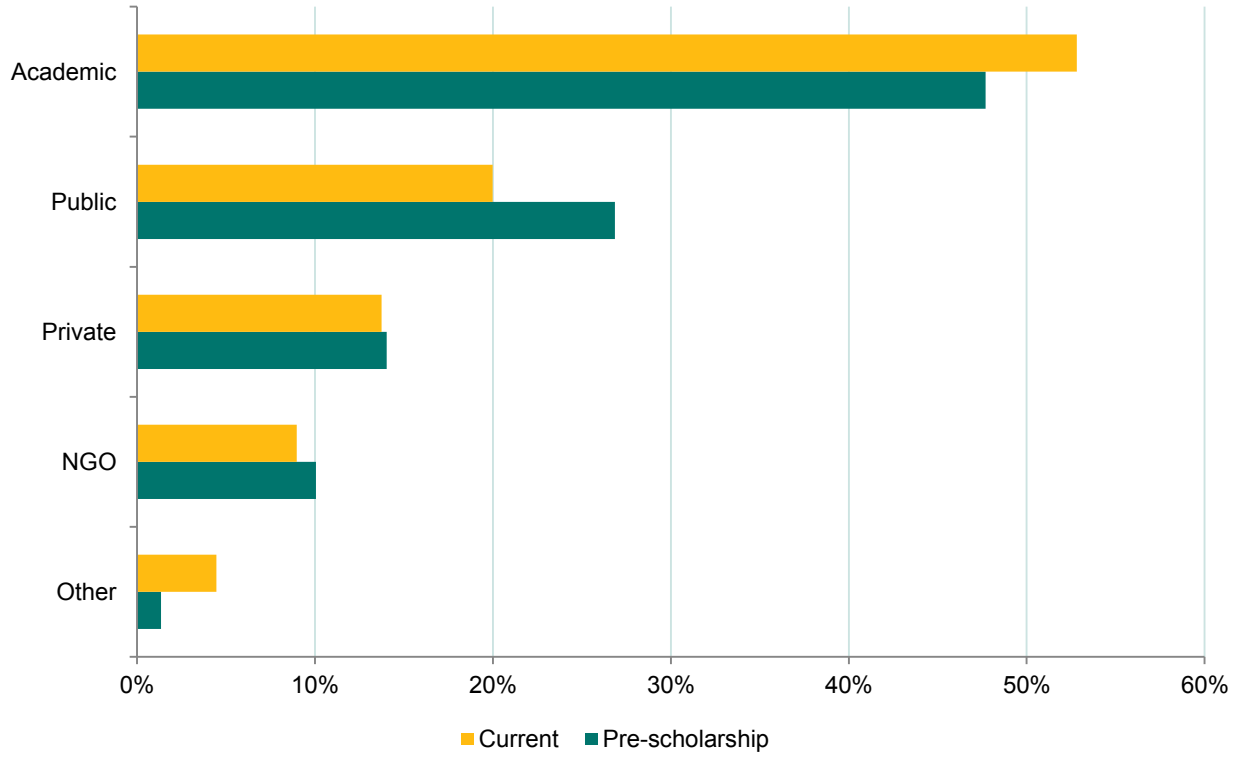
1. Interpreting patterns in employment sector participation
2. Trends in robust gains
3. The ebbs and flows of residency
4. The contours of employer support

At appropriate junctures we have indicated specific topics that may merit detailed examination in future evaluation activity.

2.1. Interpreting patterns in employment sector participation

The impacts of Commonwealth Scholarships are differentially felt across the public, private, academic, and NGO sectors. In broad terms, we have observed a movement of labour away from the public sector and towards the academic sector, with participation in other domains remaining relatively static.

Figure 1 Primary employment sector of survey respondents pre-scholarship and currently



A net effect of Commonwealth Scholarships across their duration has thus been to increase the supply of highly qualified academic personnel, both by providing an entry route into the academic sector and also by providing opportunities for professional development of those already within the academy. These activities are undoubtedly highly valuable. There has been increasing emphasis in recent years on strengthening the cadre of PhD-qualified staff within (in particular) the African academy (e.g. Tettey, 2010) and Commonwealth doctoral Scholarships provide one avenue through which doctorates can be studied in a timely manner, making use of the technical expertise and resources at world-class host research institutions, and at relatively little cost to home universities.[1] Our analysis of residency has also demonstrated that having studied a doctorate in the UK is, perhaps contrary to expectations, significantly associated with current residency in a Scholar's home region. Commonwealth doctoral Scholarships are thus less open to the critique of 'brain drain' sometimes directed towards scholarship programmes (e.g. Mouton, 2010; UNESCO, 2015). These findings should, however, be considered alongside the tendency for academic staff to pursue further periods of international study abroad: particularly if they *did not* undertake doctoral-level study during their Commonwealth Scholarship.

Commonwealth Fellowships offered to academic staff have also, in various guises, provided opportunities for international research collaboration, intensive training in new academic fields, and the cultivation of academic networks with institutions in the UK. The ways in which this support is deployed has been remoulded when required, such as the recent turn toward early career support in Commonwealth Academic Fellowships following commentaries on the need for more robust mechanisms to facilitate the career progress of junior researchers (e.g. Cage, 2015; Harle, 2011). The extent to which international networks have been formed and maintained through Commonwealth Scholarships is examined in more detail in chapter 3.

Impact on the private sector through increased post-scholarship employment participation is not evident in the survey findings; reported participation in the private sector is approximately the same pre- and post-scholarship. Generally, participation in the private sector was low across all groups of Scholars, both prior to their Commonwealth award and currently, emphasising the extent to which the programme is predominately engaged with the civic institutions and academic infrastructure of Commonwealth states. Lower participation in the private sector is not unexpected given that so many recipients enter into Commonwealth Scholarships and Fellowships through public or academic institutions: Academic Fellows and Academic Staff Scholars are nominated by universities; with the exceptions of several NGOs, the nominating agencies that recommend candidates for Agency: Developing and Agency: Developed scholarships are public institutions (often government bodies); and Medical Fellows tend to be employed at both medical institutions *and* academic

[1] Scholarships are not always cost neutral for home institutions. In some cases, institutions continue to provide salaries for sojourning staff, and they may find replacing a staff member for any period of absence challenging because of the limited academic labour force.

institutions in their home countries. Nonetheless, the data shows that some agency-nominated Scholars make the transition into the private sector after finishing their scholarship, indicated by the higher proportion of agency-nominated Scholars listing private sector as their current employment sector than their pre-scholarship employment sector.

The relationship between Commonwealth Scholarships and private sector participation is thus somewhat more complex than merely observing that aggregate levels of employment in that sector were constant pre- and post-scholarship. Nor do any of these trends imply there has been little or no impact on the private sector from Commonwealth Scholarships and Fellowships. Notwithstanding the direct impacts of those Scholars working in the private sector, Scholars' other activities can also be relevant to commercial outcomes; for example, through the catalytic effects of innovation in science and technology.[2]

Contrasting levels of pre- and post-scholarship employment highlight that the public sector is the domain from which talent is being, to some extent, redistributed as part of Commonwealth Scholarships, although it is important to note that our evidence is only a snapshot and not a measurement of particular individual trajectories. To a large extent, any movement from public sector to academic sector for doctorate-qualified individuals is a desirable outcome of Commonwealth Scholarships; the academic sector, particularly in the developing Commonwealth, requires a substantial influx of new academic staff in order to thrive (see, for instance, Tettey, 2010). However, the movement of talented individuals away from public sector posts can risk hollowing out governance and public administration capacity, and this can be particularly troublesome in contexts where creative and skilled public officials are required to overcome the notable challenges facing many Commonwealth states.

The phenomenon of institutional brain drain has not been widely investigated within analyses of scholarship outcomes, although some evaluations have reflected on the tendency of scholarship recipients to gravitate towards certain facets of the labour market (van der Aa, Willemson, & Warmerdam, 2012) and, particularly, away from public sector occupations (e.g. Webb, 2009). In the broader context of organisations, Rosenblatt and Sheaffer (2001) have noted that exit of skilled employees is a serious concern at all stages of an organisation's lifespan, but is particularly acute in crises, at exactly the time when skilled individuals are required to help in their resolution. The reduction in public sector employment noted in the survey results could hardly be considered an exodus, but, in the context of many scholarship programmes operating in similar geographical spaces, it is certainly conceivable that the 'compound drain rate' (see Mawer, 2014a) for the public sector could become problematic. Notwithstanding this, our analysis also suggests that those who do work in the public sector are more likely to do so within their own region and are more likely to be resident in their home region than, for instance, academic staff, for whom there is a trend toward further periods of international study.

More generally, it would be a mistake to interpret a reduction in public sector employment participation as inherently undesirable, as discussion of organisational brain drain might imply. Rather, it is important to monitor the extent to which any reduction in the number of skilled individuals working within the public sector is being offset by the contributions made by those (and other) individual Commonwealth Scholars from their positions within other sectors – particularly the academic sector. There is substantial evidence of contributions made by Commonwealth Scholars to a range of public administration activities from positions within government and academia. The quotation that opened this chapter – from Dr Elijah Muwanaga-Zake, a Ugandan Commonwealth doctoral Scholar in the 1980s – illustrates the form that some of these contributions might assume. It is also an aim of Commonwealth Scholarships and Fellowships to increase productivity and capacity, not merely to shift labour between sectors of employment. As is evident from our findings on perceived gains, there is good reason to suspect that Commonwealth awards are successful in achieving in this goal.

2.2. Trends in robust gains

To what extent have gains from scholarships been realised and subsequently applied within the employment sectors in which Scholars have made their careers? To assess this question, we examined perceived gains using a series of nine (5-point Likert-style) statements:

[1] I accessed equipment and expertise not available in my home country

[2] I gained knowledge in my field of expertise

[3] I increased my analytical/technical skills

[2] See, for instance, Weinburg et al. (2014) for a discussion of the (often hidden) short-term economic impacts of science research.

[4] I learned techniques for managing and organising people and projects

[5] I have been able to transfer or pass on to others the skills and knowledge gained during my award

[6] As a result of my Commonwealth award my ability and confidence to make changes in my workplace has increased

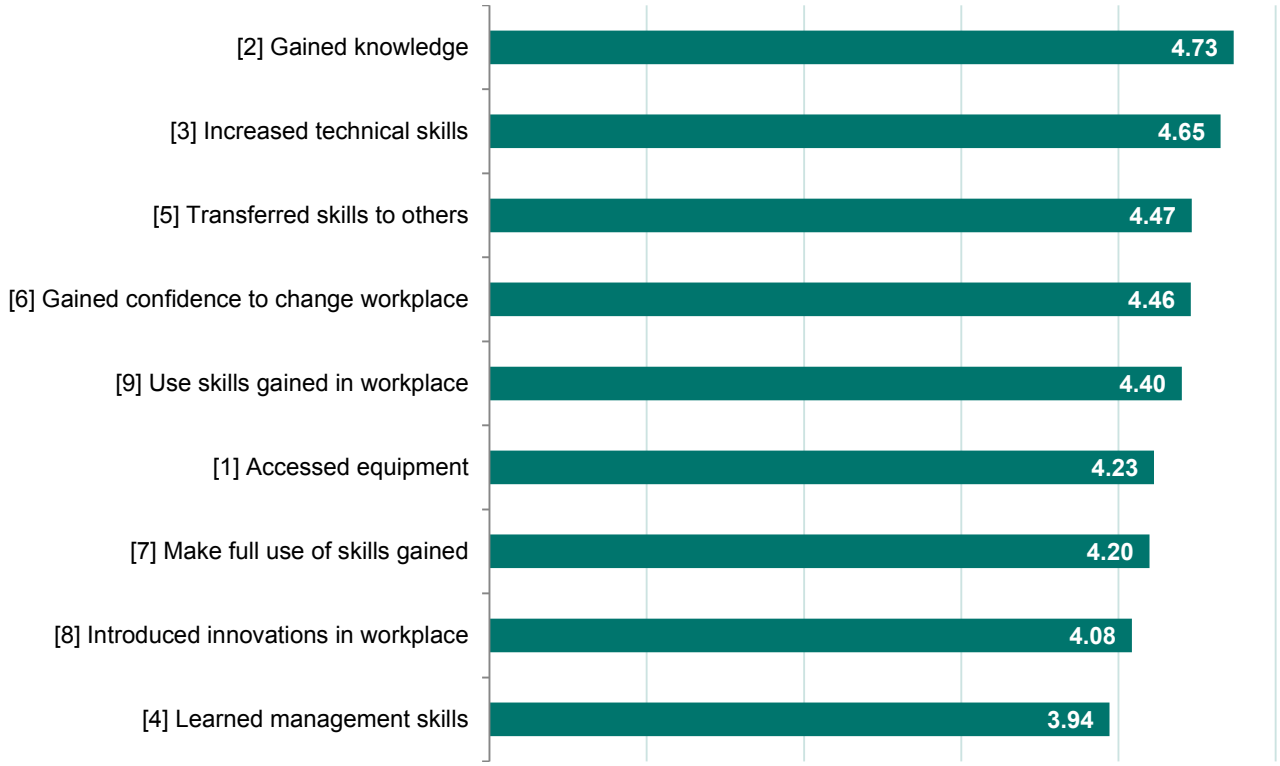
[7] My workplace enables me to make full use of my skills, knowledge and expertise

[8] As a result of the knowledge acquired through my Commonwealth award I have been able to introduce new practices/innovations to my workplace

[9] In my workplace I use the specific skills and knowledge gained during my award

The general trend from the survey data is clear: perceived gains are high in all areas and these results are robust across various demographic and employment cohorts. Outcomes are thus positive for Scholars both in having developed expertise from the scholarship experience, and in helping to shape their organisations through innovation and the application of their skills in the workplace.

Figure 2 Average ratings (out of five) for categories of perceived gains



At a more granular level, there are several trends identifiable in the data. The highest average ratings were in categories of perceived gains in knowledge and skills while on scholarship. Although these results are unsurprising, given that most Commonwealth Scholars are by definition undertaking study of new knowledge and skills, examining outcomes on seemingly obvious topics is useful to identify any trends in *lower* ratings. Exactly such a trend did arise from the findings: lower gains were consistently reported by Scholars from the higher income, developed Commonwealth regions.

An important nuance of this trend, however, is that the survey evidence tentatively suggests that the perceived effects of the Commonwealth Scholarship have been more profound for the personal knowledge and skills of Scholars from developed Commonwealth states than for their ability to influence institutional capacity. As we note later, the broader catalytic impact of individuals from these regions has been *lower*, but this must be interpreted within the context of the scholarships for which they applied focusing on leadership and public diplomacy, rather than development impact.

Scholars from the Agency: Developed scholarship route tend towards the highest ratings of fully using the skills from their scholarship, and this is a useful indicator that the programme has been relatively successful in selecting candidates who are well placed to benefit. Given the difficulties of access to time and resources for using, particularly, research skills in many lower income states, it is unsurprising that, by comparison,

Scholars from the higher income Commonwealth regions perceive their skills to be more fully utilised [7]. However, while Scholars from higher income, developed Commonwealth states reported higher ratings on this measure, the magnitude of the difference was marginal, particularly when set in the context of high ratings of perceived gains across all regions. Of all categories, the largest divergence between the higher-income and lower-income regions of the Commonwealth was in learning management skills [4], likely because the CSC's funding specifically for 'professional' awards (e.g. Professional Fellowships, Medical Fellowships) are open only to candidates from lower income regions.

Another series of patterns in the data concerned the systematic differences in perceived gains based on the post-scholarship employment of Scholars. Summarising the findings:

1. All Scholars gave high ratings in the categories of perceived gains related to applying the skills gained during their scholarship.

2. For three categories – transferring skills to others [5], using skills fully in the workplace [7], and using the skills gained on scholarship in the workplace [9] – there is evidence to indicate a difference in perceived gains based on the current employment sector of Scholars.

3. Those currently working in the academic sector tended give the highest ratings of perceived gains in these three categories, and especially in transferring skills to others [5].

4. Scholars working within the private sector tended towards reporting the lowest gains in these three categories.

Ratings of perceived gains thus begin to reinforce the sense that the academic sector is a major beneficiary of Commonwealth Scholarship outcomes. Scholars working within the academic sector have reported the highest average ratings of perceived gains in most cases, and particularly in comparison to those within the private and public sectors. In the case of the private sector especially, although employment participation has neither increased nor decreased among the respondents, there is a greater tendency for those currently working within the private sector to indicate that they are underemployed.

An important facet of understanding the application of perceived gains is to analyse the extent to which practice has actually changed. While there are some situations in which it is inherently desirable to help at least maintain the status quo – the training of academic staff to help build a sustainable academy, for instance – the majority of significant gains are expected to be derived from helping to change existing circumstances where they are dysfunctional (Collier, 2015), often through limited technical capacity to conduct services or champion social or technological innovation. Although the survey data has given clear evidence that most Scholars feel able to apply their skills within their employment, it is important to note that this is only one 'angle' through which to view the impact of those skills. While the survey contains self-report data on the introduction of innovations within the workplace, it does not offer any insight into the effectiveness or durability of those innovations. To assess that impact would require answering two questions:

1. Has practice changed as a result of the Scholar's activities?

2. Has the change been for the better? If not, to what extent (if any) does this reflect a facet of scholarship outcomes (e.g. reintegration difficulty)?

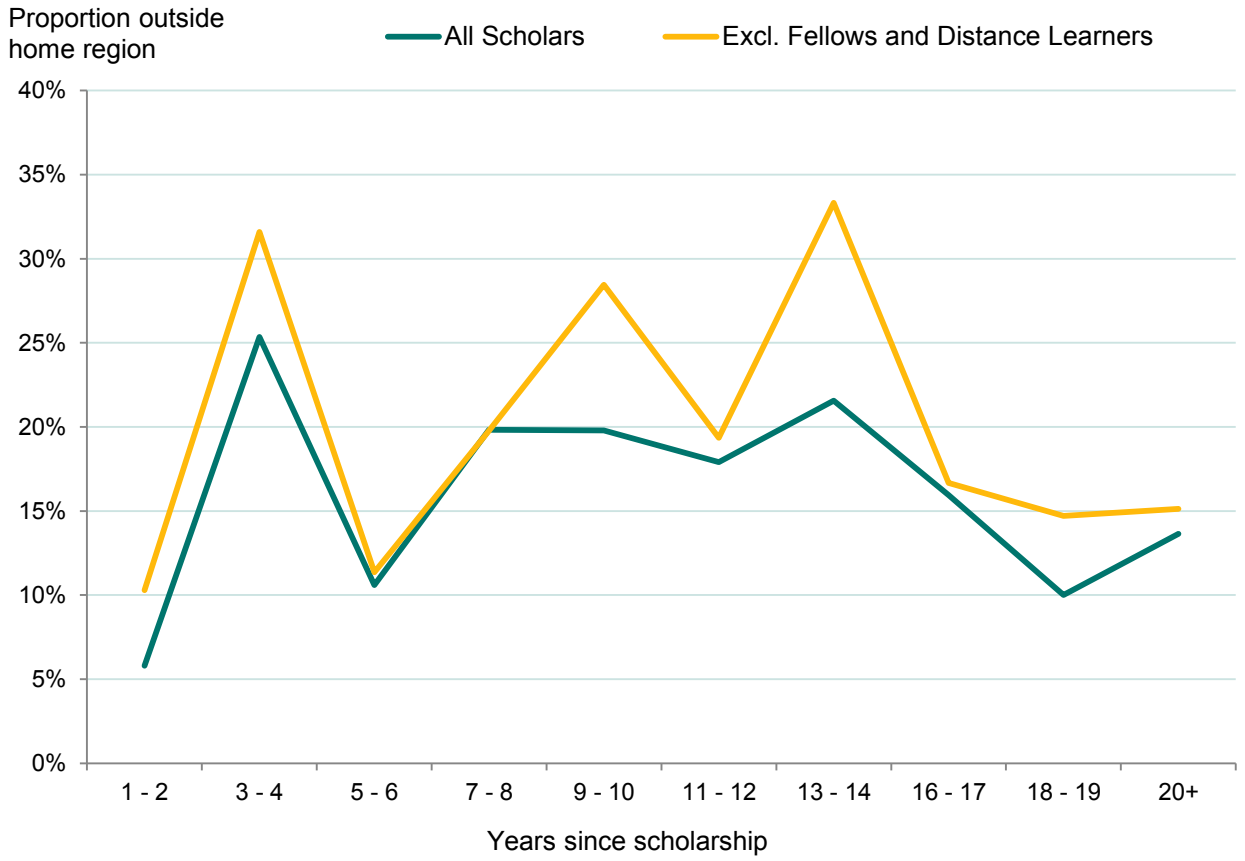
To some extent these questions are answered by the body of evidence on the catalytic impact of Scholars' activities, most usually through their formal employment. At the level of specific organisations, however, measuring institutional capacity development of this kind is often very difficult, particularly in the absence of counterfactual data or detailed information pre- and post-scholarship for the organisation involved. In cases where Scholars do not return to work for their pre-scholarship employers, for instance, anticipating the analysis by collecting baseline data is not possible, but rather would have to be conducted through specific case studies of organisations and retrospective reflection on the change in practice (see Ramboll, 2012, for an example of this kind of analysis).

What is evidently needed to supplement detailed survey data from individuals is thus a series of organisational case studies in which the general trends of perceived gains are examined in a more concrete setting. A useful example might be a university department that has received several Commonwealth Scholarships and in which it might be possible to examine how practices have changed as a result of the Scholars' return. Analysing outcomes in this way could facilitate a richer understanding of how the application of knowledge and skills gained on scholarship is manifest in an organisational context, and the extent to which Scholars' activities are catalytic and sustained.

2.3. The ebbs and flows of residency

At the macro level, our findings indicate that 18% of respondents were currently resident outside of their region of citizenship at the time of the survey. Yet this headline figure conceals a pattern of peaks and troughs in residency abroad at differing periods post-scholarship. We found that, while residency outside of the home region was at its lowest (5%) in the two years immediately post-scholarship, it was then at its peak (25%) in the following two years (these figures change to 9% and 31% respectively if Fellowships are excluded). Residency varied at different stages post-scholarship.

Figure 3 **Time series of residency in other region by time since completion,[3] for all survey respondents and survey respondents excluding Fellows and Distance Learners**



Putting any of these figures into the context of other literature is difficult, as our data falls between the common foci of current research, which largely concerns either 'emigration' rates *from* a country (e.g. Capuano & Marfouk, 2013; Collier, 2015) or 'stay' rates *within* a country (e.g. Sykes & Chaoimh, 2012), and not 'return' rates *to* a country. Broadly, the peak rate of non-return for Scholars (3-4 years post-scholarship) was comparable with the overall rate of non-return for those from developing countries in a programme such as the Norwegian Quota Scheme (Damvad, 2014) or the Ford Foundation International Fellowships Program (Enders & Köttman, 2013), while the minimum is well below what is usually reported. The figures for residency in other regions calculated from our survey data are somewhat higher than the high-skilled emigration rate cited elsewhere. Capuano and Marfouk (2013), for instance, calculated that, in the year 2000, high-skilled emigration rates from Africa were 10.6%, although this could be considerably higher in particular cases; Kenya, for instance, was calculated to have a 39% high-skilled emigration rate to OECD countries in 2000. It is important to note that Capuano and Marfouk's calculations include all high-skilled individuals, while the CSC's survey concerns only high-skilled individuals who have completed international education; we have good reason to suspect that propensity to *remain* abroad (or *return* abroad) is likely to be higher than propensity to emigrate generally (see Oosterbeek & Webbink, 2011).

What is most clearly highlighted by the findings, however, is that residency post-scholarship should not be treated as a static outcome, but rather as a fluid process with peaks and troughs. Analyses thus might usefully go beyond concepts of 'return' and 'non-return' and examine patterns of returning, sojourning, and migratory behaviour across time. We need to be mindful that what influences decisions to return, stay, or leave a particular country at different time periods varies (see Baruch, Budhwat, & Khatri, 2007). Just as the

[3] Due to the survey process there were no respondents who were exactly 15 years since the completion of their scholarship; this year was excluded in the time series.

effect of contractual bonds and visa stipulations strongly influences the very high 'return' residency within the initial years post-scholarship, drivers for transnational working, or temporary or permanent migration will likely vary at different stages in an alumnus' career and be influenced by their chosen professions. It was evident from our analysis of variables associated with residency, for instance, that Scholars currently employed in the academic sector had a greater tendency towards further international studies post-scholarship, particularly those who undertook postgraduate (Master's) awards through a Commonwealth Scholarship.

Against this backdrop, it is useful to revisit a policy question raised in our review of scholarship evaluation methodology:

> *'An ancillary strategic question for evaluation is how long is considered a reasonable "return" on the scholarship, before which movement out of the country or into another sector might be considered brain drain. Whilst the time period involved might be arbitrary it bears consideration: does it matter if, for instance, alumni leave their home country 10 years post-scholarship?'* (Mawer, 2014a, p. 15)

Our survey analysis suggests that following this line of thinking may potentially be misleading. We might expect to see, for instance, that some Scholars have indeed left their home country by ten years post-scholarship, yet they may also have returned again within that period or shortly thereafter, perhaps even repeating the pattern several times. A more relevant question may be: what are the consequences for the broader aims of Commonwealth Scholarships of ebbs and flows in home region residency at particular points post-scholarship? Similarly, we see that for some Scholars a Commonwealth award is part of an educational trajectory that continues over the following half-decade. Examining the impact of Commonwealth Scholarships in this context thus means not simply cataloguing what is achieved directly as a result of a particular (usually Master's) degree, but how compound effects are (or are not) realised from the access granted to future educational programmes. Similarly, understanding the impact of the future doctoral programme requires an appreciation of the contingent impact of the prior CSC Master's programme that facilitated access. These complexities highlight the importance of longitudinal analysis in order to unpick the periodic effects of Commonwealth Scholarships as they unfold and to understand the implications of subsequent residency or study decisions made following a Commonwealth Scholarship.

2.4. The contours of employer support

A fundamental finding of the survey analysis is that the perceived level of employer supportiveness for application to Commonwealth Scholarships and Fellowships is very high. Securing employer engagement, in both nominating candidates and recognising the value of undertaking a scholarship, is crucial to successfully operating a programme such as the Commonwealth Scholarships. The reputation of the scholarship programme must be sufficiently positive to overcome concerns about labour shortage during sojourns that have been noted elsewhere (e.g. AusAID, 2011) – and are likely to be particularly acute in the academic sector – and for employers to attach value to the successful completion of a Commonwealth Scholarship in their future employment of individual Scholars. The survey respondents reported not only a general level of passive acceptance, but also, in some cases, active support from employers through salaried leave for the period of stay in the UK. We should reflect that, inevitably, the perceptions being discussed are those of Scholars who successfully gained Commonwealth awards; the current survey data cannot, for instance, offer insight into how many *potential* applicants are unable to proceed due to unsupportive employers.

While the survey findings indicate a high level of perceived employer supportiveness, they do not explore conditionality in employer support, such as through bonds or contractual obligations by which organisations nominating potential Scholars guarantee a period of employment for the Scholar on their return. These arrangements have been documented widely elsewhere (e.g. Mondino, 2011; Perna et al., 2015), and from our baseline survey evidence for current (2015) scholarship holders we know that a significant minority (about one-third) of Commonwealth Scholars also undertake either financial or labour bonds in return for sponsorship by an agency or employer. The current survey did not collect data on the role of bonds in Scholars' decisions to return to employment, yet it is quite plausible that for some Scholars this has influenced their decision to return to their previous employer.

Estimating the influence of employment or financial bonds is difficult, but some indications can be gained by examining trends in residency outside of the Scholars' home regions. In particular, it is clear that almost all Scholars are resident in their home region immediately in the two years following their Commonwealth award; only 5% of those between 1-2 years post-scholarship were abroad at the time of the survey. By 3-4 years, however, the proportion resident outside of the home region had increased fivefold to 25%. This pattern is consistent with a situation in which Scholars were obliged to return home through a contractual arrangement but, since such arrangements typically last only a few years, were able to work internationally again by 3-4 years post-scholarship. It is important to note, however, that over half of those residing overseas by 3-4 years after completing their scholarship were studying, rather than working. Further analysis

may find, for instance, that the initial troughs and peaks in home residency are not defined solely by the tendencies of Scholars returning to their home country and emigrating after a short period, but also include Scholars who enjoy further periods of temporary sojourning and employer-supported study leave.

Certainly not all Scholars return due to contractual obligations; this is evident not least because, although most return to their previous employer, a sizeable minority do not (37%). Within some of the scholarship schemes, the majority do not return to their previous employer; Agency: Developed and Shared Scholars are two examples in which this is the case. The employment and residency trajectory of the latter group is particularly intriguing. Shared Scholars consistently rate the supportiveness of their employers towards applying for a Commonwealth Scholarship to be the lowest among all the scholarship schemes and, unsurprisingly given this lack of support, only a minority (about one-third) return to their pre-scholarship employer. Furthermore, from residency data we also know that, among all of the scholarship schemes, Shared Scholars reside outside of their home region in greatest proportion.

Because Shared Scholars make direct applications to universities and are not nominated by intermediaries – such as their employer – the trajectory of these Scholars is perhaps a reflection of the more limited anchoring effect of home country institutions. There are, for instance, fewer cases in which a bond arrangement might be entered into when the employer is not actively involved in sponsoring a candidate, both placing a lesser obligation on the Scholar but also removing the potential reintegration tool of guaranteed reemployment post-scholarship. Whilst findings on the utility of guaranteed reemployment of scholarship recipients as part of bonds have been mixed – Perna et al. (2015), for instance, cite cases of underemployment and talent wastage induced through this mechanism – the value of planned reintegration is a topic worthy of further exploration.

3. Catalytic effects

I was involved in setting up a number of NGOs dealing with torture (Amani Trust), human rights (Zimbabwe Human Rights NGO Forum), and governance (Research and Advocacy Unit).

The Amani Trust no longer functions, but was critical in bringing torture into the open and providing assistance to torture victims, both historical and those from the current human rights abuses of the Zimbabwe government. It assisted hundreds of victims of torture from the Liberation War of the 1970s, the violence of the 1980s, and many hundreds more since 2000. The Amani Trust was one of the very first community-based organisations offering assistance to torture victims, and was an influential member of the International Rehabilitation Council for Torture Victims (IRCT). I was a member of the Council of the IRCT from 1993 to 2003, and a member of the Executive Committee from 2000 to 2003. The Amani Trust itself was awarded the Eclipse Award for Human Rights by the Centre for Victims of Torture in 2002.

The Zimbabwe Human Rights NGO Forum was established in 1998 and continues to date. It is now a coalition of 22 human rights organisations working to prevent torture and human rights abuses. I was the founding Chair of the forum. The forum has provided consistent pressure on the Zimbabwe government for its poor human rights record, and is well respected internationally. It published a very influential monthly report on torture from July 2001 to July 2009, which became internationally recognised as the metric on human rights observance in Zimbabwe. The forum also published a large number of specialist reports, held the first international symposium on human rights abuses in Zimbabwe in 2003, and has now set up a National Transitional Justice Working Group to drive the processes of accountability and challenging impunity.

The Research and Advocacy Unit (RAU) is an independent think tank, providing high quality research, reports, and advocacy in a number of key areas: active citizenship, community security, and influencing policy, with particular emphasis on women and youth. RAU has had a material influence on both women's rights and good governance in the short time it has been operating. It was the first organisation to document politically motivated rape, and its documentation has been used as an amicus brief by the Tides Foundation in important litigation in South Africa. RAU has also had a serious contribution to better governance through its work on elections, the law, and other issues; for instance, it carried out the first independent audit of the voters' roll in 2009, and an even more influential audit in 2013. RAU is highly respected within Zimbabwe, and by international governments and agencies. RAU has published over 180 reports and opinion pieces since its establishment in 2006, including an authoritative report on Zimbabwe and the Commonwealth.

All these organisations have been very influential during the current crisis in Zimbabwe, and all have received high respect (and adverse government attention) from both local and international agencies and governments. It can be said in all due modesty that all three have had a definite effect on the human rights climate and have influenced the government to mitigate its violence. The reports of all three organisations are widely read by governments, both in the Southern African Development Community (SADC) region and in the West, and have helped to maintain pressure on the ZANU PF government for reform.

All the evidence for such politico-social work is, of course, difficult to demonstrate by empirical measures. However, it is fair to comment that thousands of torture victims have been helped since 1993, and that these organisations have provided strong pressure on a human rights-violating government, provided citizens with good role models of courageous and assertive civil society, and had a discernible influence on the foreign policy options of both regional and Western governments in respect of Zimbabwe.

Mr Tony Reeler
University of Leeds, 1976

In this section we discuss the catalytic effects reported by Commonwealth Scholars and Fellows. Our reflections focus on:

1. The broad development impact picture

2. Explanations for variations in reported impact

3. The value of understanding types of impact activity

4. Building persistent international networks

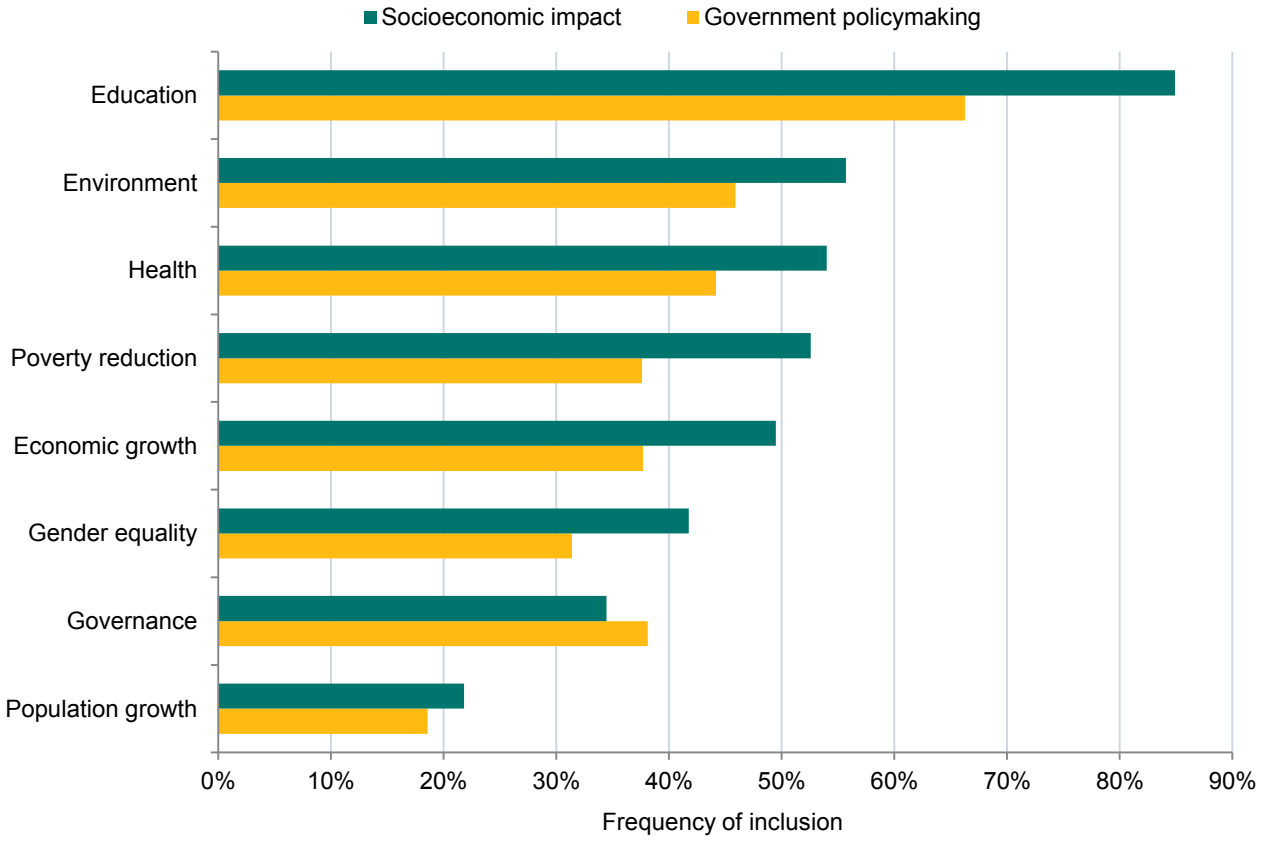
Across these sections, we build on both the conclusions of the previous chapter and of our interim analysis of survey data (Mawer, 2015b).

3.1. The broad picture

Involvement in developmentally-relevant activities was widespread among Commonwealth Scholars and Fellows. Two-thirds of survey respondents reported that their activities had socioeconomic impact, while just over one-third reported that they had influenced government policymaking. In the context of the CSFP, these proportions potentially translate into large absolute numbers of individuals; the programme in the UK alone has funded over 25,000 individuals. Support for the notion that Commonwealth awards exert an impact wider than upon individual recipients is thus relatively strong.

We have noted elsewhere (e.g. Mawer, 2014b) that definitions matter in examining concepts such as 'development impact', and it is clear that the categories 'socioeconomic impact' and 'government policymaking impact' encompass a broad range of activities. Socioeconomic impact, in particular, has been taken by survey respondents variously to mean commercial ventures and direct wealth creation, strengthening education, improving health outcomes, promoting civic institutions and opposing repressive policy, and scientific research and development. This breadth partly reflects the design of the measure to avoid eliding certain kinds of impact that may not have been initially obvious to the CSC but are nevertheless highly relevant to understanding the outcome of Commonwealth Scholarships. The consequence, however, is a certain level of ambiguity in which activities have, for instance, local or international breadth, and which could be better classified within finer-grained categories of impacts.

Figure 4 **Frequency of inclusion in reported socioeconomic or government policymaking impact for each sub-category**



The findings indicate that developmentally-relevant activities are being undertaken across a considerable spectrum of fields. In the survey, we specified eight sub-categories for which respondents might indicate their activities had generated wider impact. In all eight sub-categories, substantial proportions of respondents reported impact, but it was notable that in both socioeconomic impact and government policymaking impact education was the most frequent field of activity. In both cases, education was not only the sub-category in which the highest proportion of respondents reported impact, but also the field in which activities were

perceived to have the greatest intensity of impact. The profile of development impact in education echoes the widespread current employment of Commonwealth Scholars and Fellows in higher education and the high ratings for knowledge transfer through teaching and training.

As might be expected, a greater proportion of respondents reported impact at relatively lesser breadths: 71% at institutional, 58% at local, 45% at national, and 25% at international level. Yet the 25% of Scholars who did report international level impact is by no means insubstantial, particularly, as noted above, in the context of all Commonwealth Scholars and Fellows. It is also important to note that categorising impacts at institutional, local, national, and international levels is a hierarchy of breadth, not a hierarchy of value. For schemes such as Professional Fellowships or Medical Fellowships, for instance, knowledge transfer and institutional capacity building form the core rationale for providing funding. Institutional impacts are thus the primary outcomes of note in evaluating the success of these elements of the CSFP. The depth of institutional impact reported supports the positive findings on perceived knowledge transfer and workplace innovation. To analyse these trends in greater detail requires that research be conducted 'around' the Scholars and Fellows – e.g. through organisational case studies or direct engagement with employers – to examine institutional impacts in greater depth.

3.2. Explaining variation in reported impact

To explore possible explanations for variation in reported development impact, we conducted a series of regression analyses. By focusing on the Scholars' gender, degree type, and region of citizenship, we limited the analysis to those factors that fulfil the dual requirements of being within the ambit of policymakers to affect (through selection of candidates) and having a sufficient volume of data within our current survey to yield a meaningful analysis.

The results of exploring the data were considerably clearer for socioeconomic impact than government policymaking impact. The Scholar's region of citizenship emerged as an important factor in explaining reported socioeconomic impact: Sub-Saharan African citizenship, for instance, was associated with greater likelihood of reporting socioeconomic impact, while the converse was true of citizenship within North America & Australasia. One plausible interpretation of these findings is that they reflect the effects of priorities within the selection of Commonwealth Scholarship recipients. Potential development impact is a prominent criterion for all Scholars *except* those recruited from the high income Commonwealth (e.g. North America and Australasia), for whom leadership potential is the equivalent criterion. As such, the trends we observe in impact by citizenship region tend to follow the patterns predicted by those selection priorities; the reported development impact is higher for the regions in which anticipated development impact was an important criterion for choosing recipients. Notwithstanding the potential ambiguity in how 'socioeconomic impact' is defined by different Scholars, these findings reflect well on the effectiveness of the CSC's scholarship selection policy.

Interestingly, these regional effects were not nearly as pronounced for impact in government policymaking as in socioeconomic impact. Only South Asian citizenship was associated with lower propensity to report impact on government policymaking, but the size of this effect was only slight and certainly not of the same order observed for socioeconomic impact. Rather, there appeared to be little effect of region of citizenship and the hierarchy of regional effects – with Sub-Saharan Africa most positively associated and North America & Australasia most negatively associated with reporting impact – was no longer evident in the data. Exactly why region of citizenship may be less influential in government policymaking impact is not immediately clear, but one speculative explanation may be that involvement in relevant activities is sufficiently narrow across all regions that establishing specific trends *between* regions is very difficult. Another possible explanation is that involvement in government policymaking is largely unrelated to scholarship outcomes, and so is randomly distributed across the respondents in our survey.

For understanding government policymaking impact, the type of degree studied appeared to provide the most – although still limited – insight. In particular, we found that studying postgraduate degrees (i.e. Masters' degrees) was associated with lesser likelihood of reporting government policymaking impact, independent of any effect of region or gender. This finding both reflected and contradicted effects illustrated elsewhere within our analysis, and so it is clear that a more nuanced interpretation is required. For instance, Shared Scholars always study postgraduate degrees and have reported impact on government policymaking in lower than average proportion (23%), yet Distance Learners – who also always undertake postgraduate degrees – have reported impact on government policymaking in greater than average proportion (46%). That there are fewer Distance Learners represented in our survey data suggests that the negative association of postgraduate degrees with government policymaking impact may be smoothing over a rather more complex reality. There is insufficient data currently available on Distance Learners to run a detailed comparison of reported impact between postgraduate study modes, but this data will likely become available as more Scholars graduate from distance learning programmes.

Neither gender nor degree type, with the exception of postgraduate degrees discussed above, appeared to be robustly associated with greater likelihood of reporting socioeconomic or government policymaking impact. The lack of a gendered trend in reported impact provides some indication that gender-related priorities in other areas – e.g. prioritising selection of female candidates – are unlikely to be deleterious to the overall impact achieved by the programme, provided those candidates have at least as strong credentials for potential development impact as previous scholarship recipients. Similarly, because region of citizenship is much more strongly associated with variations in reported socioeconomic impact than either gender or degree type, we can tentatively conclude that being selected on the basis of potential development impact is generally a better 'predictor' of realising this potential than the gender of the applicant or the degree undertaken.

3.3. What do the types of impact tell us?

Constructing a typology of reported impact activities can tell us much about the nature of the work that Commonwealth Scholars and Fellows undertake and which they consider to have an impact on important areas of social and economic development. Our analysis found that Scholars primarily reported impact being generated through one or more of seven activities:

- Analytic research
- Teaching and training
- Design, invention, and development
- Implementation and coordination
- Policy development and technical assistance
- Advocacy
- Publication and dissemination

In the most general sense, the typology tells us that Scholars work in a remarkable range of fields, assuming varied roles and generating impact along diverse channels. As may be evident from the programme's outline, the Commonwealth Scholarship and Fellowship Plan is not a sector-specific training scheme with closely prescribed inputs and outputs, but a broad tool for national governments and individuals to pursue priority areas of study. In this context, it is important to recognise that impacts are generated in a substantial range of intellectual and practical spaces, diffused across geography, discipline, and sector. Yet the findings show that, although Scholars' occupations and disciplinary foci may differ, the types of activities in which they are involved coalesce and include activities both in implementation and to develop the state of the art.

The volume of examples relating to teaching and training and publication and dissemination demonstrate the ongoing relationship between Commonwealth Scholarships and Fellowships and the global academy. Survey respondents working within universities across the Commonwealth have highlighted how their work has helped to generate new knowledge and introduce new areas of speciality to their disciplines, an important aim of Commonwealth Scholarships and a crucial facet of thriving civic and industrial development. The perpetuation and development of knowledge and skills gained while studying in the UK is then consolidated through teaching and training.

Exploring the channels through which impacts are generated also highlights the aspects of Scholars' work about which we do not yet know enough. It is clear, for instance, that Scholars working in higher education produce often voluminous portfolios of academic articles and books, yet we do not yet have a robust basis to assess the impact of this work. Methodological developments in publication metrics and science funding have shown that scientific work often has diffuse, complex, and yet hugely generative outcomes (Weinberg et al., 2014). Capturing this impact within a single national system and with access to indexed and archived publication material is a complicated proposition (see Neylon & Wu, 2009); to do so across the Commonwealth for our Scholars remains, for the moment at least, an aspiration. Similarly, while we know that many Scholars are academically highly productive, understanding whether Commonwealth Scholarships themselves increase academic productivity requires further detailed analysis.

It is also difficult with the current data to garner insight into the relative importance of philanthropic or community activities and formal employment in wider development impact. Our broad assumption – based both on the examples given and match between respondents' current employment and their reported areas of impact – is that the majority of catalytic effects accrue through the paid employment of individual Scholars. This is not universally the case, as an example from one respondent illustrates:

Through the Rotary Club we look after a group of about 40 children in deprived areas of the country. They are aged between 3-15 years old. We meet them 1-2 times per month at a community centre. The main thrust of the interaction with the children is to inculcate a sense of belonging, teamwork, and discipline, and to encourage them to learn through play. A number of activities are held and they include reading sessions (using a 'mobile' library), storytelling, play-acting, dancing, singing, playing games, etc. On occasions, meals and snacks are served to the children.

The children respond very well to the activities and show a lot of enthusiasm and progress. Some of the introvert children become less shy and are able to express themselves more freely and clearly. The attendance is usually very high and this is some evidence that they enjoy what they do at the centre and that it is working out for them. Their writing, reading, and drawing skills are better and may be seen from works assessed over several months.

Dr Naraindra Kistamah
University of Leeds, 1996
University of Manchester, 2004

Around one-third of respondents reported involvement in voluntary activities in addition to their primary employment, although some Scholars may less readily view their voluntary activity through the lens of socioeconomic development. It could be useful to establish more specifically to what extent skills from the scholarship are being leveraged outside of formal employment to achieve impacts and, where this is the case, to determine whether the propensity to become involved in these activities can be traced to any facet of the scholarship experience.

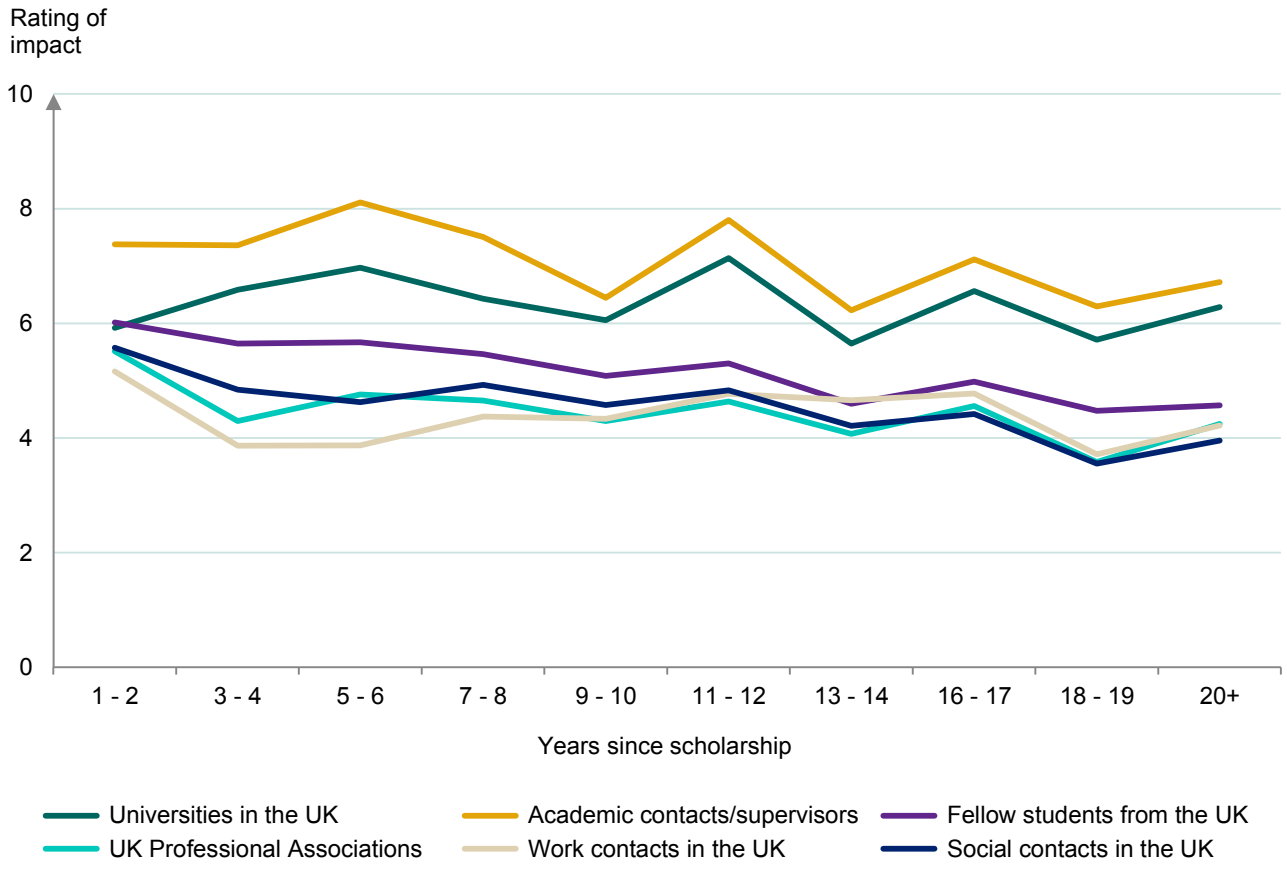
3.4. Building persistent international networks

Establishing enduring networks between a host country or institution and an international student is one domain in which scholarship programmes are presumed to excel. Yet often very limited data has been collected on this topic, leaving both the persistence of contacts made while on scholarship and the importance of these contacts for future career trajectories a matter of speculation. Although the importance of particular contacts in the UK may vary depending on an alumnus' career trajectory, the formation and promotion of inter-Commonwealth links between individuals and institutions was an important principle at the founding of the CSFP (Perraton, 2009) and this emphasis continues to the present day in the UK's Commonwealth awards.

Our analysis indicated that the level of continued contact was highest between Scholars and academic and student contacts from the UK, in most cases likely the connections made with tutors, supervisors, and immediate peers through study. As might be expected, social ties tended to degrade over time, with active contact between Scholars and their student cohort and other social contacts less prevalent for those having finished their scholarship many years previously. Professional contacts, conversely, did not tend to degrade over time, although fewer Scholars had established these networks while in the UK.

Data on the impact of UK contacts on post-scholarship professional development yielded several notable trends. The connections deemed most salient to Scholars' career development were the academic and university contacts made with UK institutions and institutional staff. The ongoing connection between UK academics and Scholars – manifest through, for example, collaborative projects, professional recommendations, or joint authorship of research papers – is an important professional outcome for programmes such as Academic Fellowships, for which building international research networks is a major driver. Social ties and contact with fellow students were deemed considerably less important for professional development, and thus the degradation of these connections over time is not necessarily a cause for concern in terms of facilitating Scholars' careers, although it may be considered detrimental to the maintenance of cultural ties. The importance to professional development of all UK contacts appeared to reduce over time, potentially indicating that the more important influences on Scholars' careers shift towards being grounded in their home country, and less in their experience in the UK, as their career progresses.

Figure 5 **Average rating of impact on professional development of each UK group by time since scholarship completion**



A trend showing slightly decreasing academic contact maintained over time was observed and raises important policy considerations for ongoing alumni contact with Commonwealth Scholars and Fellows. The maintenance of academic contacts and facilitation of international research collaboration is a noted aim of both doctoral Scholarships and Academic Fellowships, and thus any decline in such contacts over time, while perhaps understandable, is not desirable. Whether the CSC specifically is well placed to help maintain such connections is not entirely clear; CSC alumni activities and events may play some role in doing so, although their scope may be limited in comparison to the personal bonds formed between researchers.

Collecting even relatively limited data on international contacts has helped identify the difficulties in understanding the maintenance and relevance of networks using self-report surveys. It is evident, for instance, that Commonwealth Scholars and Fellows have authored many collaborative scientific papers as a result of their scholarships, yet tracking the authorship and impact of these papers requires a different tool to the self-report survey. In this respect, bibliometric and scientometric analysis of work associated with Commonwealth Scholarships and Fellowships could prove a useful additional approach to understanding the impacts achieved as a result of CSC funding. The value of such an analysis would be both to enrich the understanding of scientific outcomes from Commonwealth awards and to chart the persistent web of international connections that might exist between collaborating research and academic staff in the UK and in other Commonwealth countries.

4. Conclusions on persistent themes

My training at the Great Ormond Street Hospital for Children and the Institute of Child Health has enabled me to set up the first, state-of-the-art mass spectrometry-based screening facility for inborn errors of metabolism (IEMs) in a government-funded institute in India.

IEMs are a group of about 500 genetic disorders affecting metabolic pathways. Nearly three-quarters of these disorders affect the brain and may lead to mental retardation. Early diagnosis and appropriate therapy can prevent brain damage and mental retardation in many of these cases. Using the screening facility, we are able to screen and identify 30-50 IEMs in newborns, as well as in symptomatic children.

Our facility caters to patients from all over India and neighbouring countries. We have screened over 22,000 symptomatic or high risk subjects and identified 715 patients with an IEM. These patients are being given the appropriate therapy. Screening of asymptomatic newborns showed an incidence of 1 IEM in every 2,500 live births. Many patients have showed clinical and biochemical improvement after appropriate therapy during follow-up, so screening for IEMs is very important.

Professor Rita Christopher
Institute of Child Health, 2003

Our examination of this substantial survey dataset has focused on four major facets of outcomes and impact: 1) employment trajectory, 2) residency trajectory post-scholarship, 3) perceived gains from the scholarship, and 4) the wider catalytic impact of Scholars' activities. In this section we focus on the prominent cross-cutting themes in the data analysis:

1. The relationship between employers and Scholars

2. Complexity and contingency in 'return' trajectories

These topics are by no means a comprehensive coverage of all issues arising from the data analysis pertinent to either CSC policymaking or informing the work of other scholarship programmes. They do, however, address some of the most pressing concerns in understanding the outcomes of Commonwealth Scholarships and Fellowships.

4.1. Employers and Scholars

The relationship between Scholars and their employers – both before and after the scholarship – is a factor reflected in many facets of the current analysis. Engagement with employers has often proved challenging for scholarship programmes, particularly through the most practicable (cost-effective) method: self-report surveys (see, for instance, Nuffic, 2009). Nonetheless, the importance of understanding both employers' perspectives on scholarship outcomes and their influence on those outcomes should not be understated. Within the current analysis, there are several analytic threads that point to the need to explore the dimensions of Scholar-employer relationships.

Most directly, employers are key stakeholders in access and reintegration for Commonwealth Scholars and Fellows. At the pre-scholarship stage, employers have great influence over the capacity of individuals to apply for Commonwealth Scholarships, either through the necessity of a direct employer nomination or through control of sabbatical or leave provisions. While some applicants are willing to leave their previous employment to take up a Commonwealth award, many study with the support of their employer and return to that same employer upon completion. Perceived employer supportiveness varied between the schemes, but was broadly high. However, these ratings encompass only those successful in applying to Commonwealth Scholarships or Fellowships, not those who, whether lacking an employer endorsement or unwilling to resign their post, were unable to take up or even apply for a scholarship.

Scholars returning to their employer post-scholarship also require support for their reintegration, through adequate opportunities to deploy their skills and knowledge, encouragement to innovate, and sensitive handling of the tensions that can accompany the return of internationally mobile Scholars to their previous departments or communities. Although these issues have been framed within Scholars' individual perceived gains in our analysis, they could equally be viewed through the lens of enabling factors in reintegration and applying gains. Individual agency notwithstanding, a significant factor in the capacity to apply skills and

knowledge is the environmental conditions at home institutions: collegiate support, the availability of appropriate equipment or funding, management of time pressure, and so forth. These factors are subsumed within the broader measures of, for instance, 'introducing innovations in the workplace' that have been used in our analysis, but could potentially be broken down in a more fine-grained examination of employer support effects in post-scholarship reintegration.

Another dimension to employers' influence on outcomes is the potential effect on mobility and residency trajectories exerted by labour and financial bonds. Baseline data for more recent Commonwealth Scholars has highlighted that a significant minority of all Scholars are contracted to either financial or labour clauses that stipulate penalties for non-return and/or mandatory labour within (usually the nominating) organisations. For certain groups, such as Academic Staff Scholars, the *majority* of Scholars are contracted to some form of employment bond. While not all Scholars – even those with bonds – will make their return decisions based on these arrangements, the very high return rate in the first 1-2 years post-scholarship is likely to be influenced by such commitments. The overall return rate for employer-nominated Commonwealth awards – such as Academic Staff Scholarships and Commonwealth Academic Fellowships, for instance – was above average, although in the latter case the short duration of tenure (less than one year) is probably a more profound influence on return decisions.

Whether contracts of this kind shape trajectories in the ways anticipated by their designers is not always apparent. Perna et al (2015) have observed that the labour bond system for Kazakhstan's Bolashak programme sometimes produced deleterious 'talent waste' through post-scholarship *underemployment* in pre-scholarship roles, alongside the desired aim of organisational stability and a counter to institutional brain drain. Further, in an analysis of the financial penalty system (converting a grant to a loan) within the Norwegian Quota Scheme, the value of this relatively costly administrative process was questioned (Damvad, 2014). As the evaluators noted, *'For most former students, working in Norway is not an option. For those that have such opportunities, a student loan is a minor cost'* (2014, p. 89). The latter, in particular, has some resonance with Commonwealth Scholarships, for which employers may (without specific endorsement by the CSC) choose to stipulate some financial penalty for non-return. It is debatable whether individuals determined to remain abroad in high income countries will be dissuaded by penalties levied by home institutions in lower-income countries, unless these are sufficiently severe as to weigh on the calculus of higher future earnings abroad.

A final component of the Scholar-employer relationship is the broad institutional impact reported as part of Commonwealth Scholars' wider development activities. Beyond the institutional facets of perceived gains measures (e.g. transferring knowledge and skills), many Scholars have indicated their involvement in founding new university departments or institutes, developing and applying new work practices (e.g. clinical procedures), and building capacity among colleagues through mentorship, teaching, and training. As discussed above, these outcomes do not reflect just Scholars' achievements, but also an organisational environment in which such outcomes were possible: albeit often with a need for advocacy and determination. In the case of the fellowship programmes, institutional outcomes – such as the dissemination of new clinical procedures – are the primary aims of the scheme and thus understanding the nuances of enabling and obstructive factors to achieving these aims is crucial.

In sum, the outcomes of Commonwealth Scholarships are often achieved by the diffusion of impact through networks, and catalysed by Scholars capable of marshalling both their own talents and the cooperation of others at opportune moments. Employers, both pre- and post-scholarship, are undoubtedly a vital feature of this landscape, empowered to shape (consciously or otherwise) the propensity of their staff to apply to scholarships, return following them, reintegrate successfully, and, ultimately, contribute to organisational and national innovation and resilience. Measuring this influence is a considerable challenge, although efforts have been made within the current survey, for instance, in the assessment of employer supportiveness. To more comprehensively address the topic – and to determine the potential for CSC policymaking to aid or inhibit constructive employer relations – is likely beyond the purview of self-report instruments alone, even if they are completed by employers.

4.2. Complexities and contingency in 'return' trajectories

Another recurring feature in findings has been the complexity of understanding return home trajectories post-scholarship. The return rate for Commonwealth Scholarships and Fellowships is high when measured over the years immediately after completion. Even given that returns rates seem to vary across time periods post-scholarship, the average return rate we have measured tends to be comparable or better than available findings on return migration patterns for international students (Kim, Bankart & Isdell, 2011; Sykes & Chaoimh, 2012) or other international scholarship programmes (Enders & Köttman, 2013; Damvad, 2014). In the latter case, comparison is difficult because it has not been common for evaluators to construct time series data on residency.

Return rates have been a preoccupation of commentators and evaluators concerned with international scholarship programmes (Dassin, 2009), although in recent years there has been increasing readiness to dispense with the expectation that return is an unalloyed 'good' and non-return a universal metric of programme failure. Historically, the tendency has been to focus exclusively on those that return home as the 'success stories' of scholarship programmes, particularly in the face of potential criticism that these programmes exacerbate already deleterious outward migration (Mouton, 2010; UNESCO, 2015). While this remains the primary focus of most analyses – logically, as most recipients return home – there has been increased interest in the contribution of the diaspora,[4] beyond the frequent commentary on financial contributions through remittances (e.g. Beine, Docquier & Rapoport, 2008).

While diaspora studies offer some insight into the potential contributions of those who migrate permanently, our findings note a more fundamental point: that 'return' is better considered as a process of mobility across time, rather than a static construct. We have observed that some scholarship recipients in highly mobile positions will tend to move between periods of work at home and residency abroad, for instance, through international work placements (e.g. UN offices) or further advanced training. To cite an example from the survey evidence:

> *'I worked for a UN organisation where my main task was to undertake advisory work (based on research) in the area of employment and poverty reduction. During that period, I was able to make [a] direct contribution to the process of policymaking in a good number of developing countries of the world. Although it is not possible to say how many jobs were created as a result of such advisory and technical assistance work, I think one could claim without being immodest that such work did make a contribution to policymaking and through that to the process of employment creation and poverty reduction.'*

Similarly, the association between academic sector employment and further periods of study abroad is an illustration of mobile trajectories that are not easily described as 'brain drain' or 'migration'.

Additionally, and specifically in the case of doctoral funding, the understanding of 'return' has to take into account the effect of postdoctoral positions within the career trajectories of new academics. Johnson and Regets (1998), for instance, observed that the majority of foreign-born US doctoral graduates electing to remain in the United States did so to undertake postdoctoral study and, as might be expected, this trend was most prevalent in fields where postdocs were a common career path. Not only does the culture of postdoctoral work differ between disciplines, but so might the implications of immediate return. Academic staff in applied social science fields may find that their home country is an ideal environment to undertake postdoctoral research, whereas those in physical sciences that require a lot of technical infrastructure may suffer considerable disadvantage. For postgraduate scholarship recipients, further periods of mobility can often be for doctoral study – in some cases funded by the CSC – and so the residency trajectory of the Scholar becomes further complicated by additional 'deferred gains' from pursuing a second academic qualification.

Complexities in understanding return do not diminish the pressing concern of brain drain in many countries. Analyses of international data (e.g. Capuano & Marfouk, 2013) have shown how significantly migration, particularly of highly skilled individuals, is affecting many of the lower income states within the Commonwealth. It is not difficult to see how scholarship programmes might be implicated in this trend, given their design to overcome the major barrier to mobility abroad – financial constraints (see Collier, 2015) – for individuals in low income countries. However, in weighing the strength of concerns about scholarships it is necessary to consider the available evidence carefully. Independent analysis of foreign-born doctoral students in the US, for instance, has found that funding through government scholarships was associated with the *lowest* propensity to remain in the US after completing studies (Kim et al., 2011). Additionally, while foreign government scholarships have been criticised as potentially encouraging brain drain, domestic governments – including, for instance, Brazil, Mexico, Kazakhstan, and Saudi Arabia – have invested heavily in high profile international scholarship programmes for their own nationals (see, for instance, Ahmed, 2015; Perna et al., 2015). Similarly, leading institutions in 'scholarship recipient' countries have advocated strategic use of international scholarships to reach ambitious education targets at home (e.g. South Africa: ASSAf, 2010). Confidence in the capacity of scholarship programmes to act as useful developmental tools in higher education, without exacerbating outward migration, thus has support in both the academic literature and the actions of domestic governments.

The implications of return outcomes for scholarship policymaking are not altogether straightforward. International scholarship programmes that aspire to avoid encouraging permanent migration are unlikely to

[4] See, for instance, the African Diaspora Fellowships initiative funded by the Carnegie Corporation of New York (www.iie.org/Programs/Carnegie-African-Diaspora-Fellows-Program) or the Career and Life Trajectories of African Alumni of International Universities project (http://africanalumni.berkeley.edu) being undertaken by several universities in North and Central America in partnership with the MasterCard Foundation Scholars Program.

soften the historical default position that scholarship recipients should immediately return home. Fundamentally, the premise that scholarship recipients should return is affirmed by the evidence collected: they *do* return, or at least in overwhelming majority. Notwithstanding this, the concept of 'return' – both how it is measured and how ideal return trajectories are envisaged – needs to be carefully defined in future evaluations and policymaking. Emphasis on only whether scholarship recipients immediately return to their country of origin could be counterproductive in some situations, such as in considering the implications of postdoctoral positions. More broadly, the forces of globalisation have catalysed remarkable changes in connectivity, global labour market integration, and international transit since the inception of the CSFP over 50 years ago. The implications of 'return' and 'non-return' have thus changed considerably and, although the justification for strongly advocating return may remain as relevant, the CSC needs to be cognisant of how mobility trajectories that do not fit this mould may nonetheless yield the impacts sought in the programme aims.

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