Mid-Career Fellowships Technical Report

June 2024

The British Academy

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1.1. Introduction

British Academy Mid-Career Fellowships (MCFs) provide funding to support individual researchers with excellent research proposals, and to promote public understanding and engagement with Social sciences, Humanities, the Arts for People and the Economy (SHAPE) subjects. The scheme enables successful applicants to focus on completing research by directly funding projects and relieving them from normal teaching and administrative commitments. Awards of up to £160,000 are available to cover a period of a minimum of 6 months and a maximum of 12 months.

Awards are open to individuals employed at UK universities or other UK institutions of higher education. MCFs provide opportunities for already well-established scholars (mid-career scholars in particular) to promote their proposed programmes and contribute to advancing (public) understanding in the field.

1.2. Impacts

There are various intended impacts of the MCF programme that create societal value for the UK. The MCF scheme is intended to facilitate the production of high-quality research, build valuable professional networks, and bolster MCFs' academic career progression. However, given the specificities of academic research, and research in SHAPE subjects, there are methodological difficulties associated with quantifying/monetising many of these impacts. Perhaps most notably, the outputs of SHAPE research do not always lead to patents or enhancement of the productivity of related industries in ways that have been observed in the analysis of other disciplines (and which have been shown to be amenable to monetisation in these other fields).[1]

In Phase 1 of this project, an economic theory of change (TOC) was developed, describing the channels through which the Academy's talent development activities, like the MCF programme, create societal value (see Appendix A for more detail). This analysis identified the leveraged funding impact channel as producing benefits that are monetisable given the Academy's current monitoring and evaluation data. Chapter 2 quantifies the catalytic effects of the MCF programme focusing on the value of follow-on research funding from non-governmental sources leveraged by, and attributable to, award holders. The value for money of the MCF programme is estimated using the present value of costs (Academy expenditure) and the present value of leveraged funding benefits to derive net present values and benefit-cost ratios for this programme.

[1] See, for example, a productivity-focused approach by Frontier Economics, Rate of Return to Investment in R&D, 2023: https://www.frontier-economics.com/media/015adtpq/rate-of-return.pdf

2. Leveraged Funding

2.1. Introduction

The MCF programme aims to produce high-quality SHAPE research and improve the research and grant-writing skills of its award holders. In this chapter, the ability to secure funding is taken as a proxy for MCFs' improved research and grant-writing skills. This chapter describes the approach to a net present value (NPV) analysis of the MCF programme costs, and in-scope leveraged funding benefits, before presenting the benefit-cost ratio (BCR) results.

2.2. Analysis

The cost-benefit calculation for leveraged funds depends on four components (see Appendix B on the Cost-Benefit Calculation):

- Costs: equal to the British Academy's expenditure on MCFs (incurred in the first year following the Fellowship award) (1)
- Benefits, consisting of:
  - the real-terms value (with 2023/24 as the base year) of subsequent (in-scope) leveraged funds (2)
  - the timing of those future funds, which determines the final NPV by applying the standard Green Book discount rate of 3.5% (3)
  - an adjustment for the additionality of those leveraged funds (4)

This section discusses the data available to inform the analysis, and how it feeds into the components above.

Data

Data were provided by the British Academy detailing the number and value of awards for the 2015/16-2022/23 MCF cohorts. There is one cohort of new MCF awards each financial year. These data were extracted from the Academy's database on 10/11/2023.

Leveraged funding data for the MCF programme were collected as part of an evaluation report completed in January 2019.[2] These data form the basis for the analysis in this chapter. The report includes a survey of MCFs who started their awards between 2012 and 2017, with a response rate of 43%. Among its questions, the survey invited respondents to provide details of up to four research grants secured following their awards.[3] As set out below, this information was used to inform an assessment of the average value of leveraged funding per MCF as a consequence of the Academy award.

[2] Cloud Chamber, *Mid-Career Fellowship Scheme – Final Evaluation Report,* January 2019.

[3] The survey does not, therefore, necessarily provide a full account of all research funding secured since the Fellowship.

Financial data on the Academy's expenditures and the funds leveraged by MCFs were provided as originally spent/received i.e. in nominal values of the time (current prices), rather than accounting for inflation. This report takes 2023/24 as the relevant base year and inflates or deflates these figures as needed, into real terms. All financial data are thus presented here in constant 2023/24 terms unless stated otherwise.

Costs

Each round of the MCF scheme provides one year of funding to around 40 mid-career researchers per cohort, with total funds distributed of £4.5-5.5m per cohort (see Table 2.1).

Table 2.1: British Academy MCF Awards by Cohort

	2022/23	2023/24	2024/25	2025/26
Total awards	39	43	44	44
Total award value (£m)	4.5	5.3	5.5	5.4

Note(s): Award values adjusted to constant 2023/24 pounds (£).
Source(s): The British Academy.

The MCF is a one-year fellowship scheme with the costs for each cohort incurred entirely within the first year following the award. In the analysis, the Academy's nominal expenditure is converted to constant (2023/24) prices. As all costs are incurred within the first year, they do not need to be discounted as a part of the NPV calculation.

Leveraged Funds

As part of the survey responses for the 2019 evaluation, 58 respondents (out of a sample of 109) provided information about further funding secured since the fellowship ended and the source(s) of that funding. However, the survey only asked respondents to report a maximum of four successful funding applications. The implication is that the benefits (leveraged funds) in this analysis are likely to be understated if award holders actually secured more than four grants.

This analysis focuses on additional leveraged funds (on the basis of the available data) that can be classified as supplementary to those provided by the UK government. These sources include:

- UK sources that are not ultimately resourced by UK government funds (see Table 2.2 for the breakdown given in the evaluation report).
- International sources, which would similarly not be ultimately financed by the UK government (or, at least, not financed in a way that leaves the funds specifically earmarked for UK research).

Funds from the above two sources (non-government/private and international sources) are considered to be in scope for the impact calculation. While MCFs do obtain additional funding from UK government sources, such as UKRI (see Table 2.2), these funds amount to a transfer in Green Book (2022) terms, and have not been included in the value for money analysis. Funds from international sources are in scope because these

represent funds not specifically committed by the UK to UK-based research.[4] As in Table 2.2, figures for leveraged funds are provided by funding source but not by time or with details of the year in which funds were secured.

The Academy's data show that the vast majority of MCF alumni stay in the UK after completing their fellowships. Over the five MCF cohorts between 2018 and 2022, an average of less than one MCF per year has left the UK to accept an academic position overseas. The generally low rate of relocation may reflect the fact that these researchers are more established and settled in the UK compared to, for example, younger post-doctoral fellowship award holders who are more likely to move abroad post-award. As such, this analysis assumes that no MCF leveraged funding benefits leak outside the UK.

Table 2.2: Survey-Reported Leveraged Funding by Source (£m)

	Funding Sources	Total
UK	Foundation / trust	7.2
	Learned societies	1.2
	Non-profit	0.5
	Wider funder	0.9
	Private industry	0.1
	Institutional research grant	0.0
	UKRI	12.1
	Government	8.6
International	European	10.8
	Foreign-national research funder	0.2
Leveraged funds in scope (£m)		20.9
Leveraged funds not in scope (£m)		20.8
TOTAL (£m)		40.7
Share of leveraged funds in scope (%)		50%
Average leveraged funds in scope per respondent (£m)		0.19

Note(s): Rows in grey mark funding sources considered to be in scope for the leveraged-funding calculation. The breakdown by years is only available at aggregate level, as shown in the 'TOTAL' row.
Survey was conducted in 2019 and so all leveraged funds are, conservatively, assumed to be in 2019/20 terms and rebased in subsequent analysis to constant 2023/24 terms.
Source(s): British Academy Mid-Career Fellowship Scheme Final Report January 2019.

In the absence of data that simultaneously report the source of funding and the time profile, the average leveraged funding per MCF is used on the assumption that award values are proportional to the number of

[4] As defined, in-scope funds would also include, for example, funding through Horizon Europe and its predecessors, even if the UK has contributed funding. This is because the funding is not guaranteed to support UK research: research consortia must apply (compete) for funding and, if successful, the funds support UK research (have been leveraged). If UK researchers are unsuccessful, then the funding supports research in other countries instead: UK research does not take place. In contrast, if MCF alumni are unsuccessful in receiving UK funding (e.g. from UKRI) then UK research still takes place, just by other UK researchers: no new funding has been leveraged.

award recipients in each award year (as in the final row of Table 2.2). Table 2.3 applies this average leveraged-funds-per-MCF figure to the number of award holders in each cohort to estimate the in-scope leveraged funds per award year.

Table 2.3: Estimated In-Scope Leveraged Funds by Cohort (£m)

	In-Scope Leveraged Funds Three Years After Award
2022/23	8.9
2023/24	9.8
2024/25	10.0
2025/26	10.0

Note(s): Leveraged funds by cohort are derived from the average leverage per respondent and the total number of awards (Table 2.1) in each cohort (Table 2.2).
Award values in constant 2023/24 pounds (£m).
Source(s): Estimated from British Academy and British Academy Postdoctoral Fellowship Scheme Final Report January 2019.

The estimates in Table 2.3 are based on an average that is assumed to remain constant over time. Put another way, the results from the survey are assumed to be representative of more recent and future MCF cohorts. This does, however, extend to any inflation on both the costs and benefits side. Any per-fellowship increase in costs over time is already embedded in British Academy expenditure figures (in Table 2.1). However, from the evaluation alone, it is not straightforward to identify (or assume) any uprating in research funding over time. The implication is that future benefits may be understated because costs (from British Academy expenditure data / award values) have increased over time, while the value of benefits is assumed unchanged. Without further adjustment, this implies a declining benefit-cost ratio over time but, as the results below show, the impact is not especially large over the period considered. This analysis found that Academy's real costs per MCF do not change significantly across the 2022/23-2025/26 cohorts and nor is there large variation year-on-year in the BCRs.

Timing

The timing of the leveraged funds is relevant because it affects the discount rates and, in turn, the present values of future costs and benefits that feature in the cost-benefit calculation. Because the MCF programme lasts six months to a year, the entirety of the Academy's expenditure on MCFs is assumed to occur within the award year. The Academy's programme costs, once expressed in constant 2023/24 terms, do not need any further adjustment.

This report assumes that, after completing the MCF programme, the leveraged funding benefits secured by MCFs and attributable to their awards from the Academy are secured in the second, third, and fourth years post-award. While the MCF is a substantial award, the length of the programme is relatively brief. As mid-career academics, MCFs are expected to be able to readily use the resources and network of the Academy to catalyse a substantial piece of research. The MCF award is likely to have an impact on funds secured in

the three years immediately following the programme.[5] While the distribution of leveraged funds across years 2-4 post-award is unknown, for the purposes of this analysis, it is assumed that funds are evenly spread across the period and discounted accordingly (to obtain the present value benefits).

Table 2.4 presents the present value (i.e. after discounting) of both costs and leveraged funding benefits by MCF cohort.

Table 2.4: Present Value of Costs and Benefits (£m)

	2022/23	2023/24	2024/25	2025/26
Present value of costs (£m)	4.5	5.3	5.5	5.4
Present value of benefits (£m)	8.3	9.1	9.3	9.3

Note(s): Values are discounted using a 3.5% discount rate, as recommended by the Green Book (2022).

Additionality

Even though the funds identified as in scope for this exercise may not be drawing in or displacing UK government resources from elsewhere, it is still possible that the aforementioned funds could have been secured in the absence of an MCF. This requires an assessment of the additionality of the MCFs: the extent to which award recipients are able to leverage funds that would not otherwise have been secured had they not received an MCF.

It is not straightforward to isolate any further funds that could have been secured with or without British Academy MCF schemes. This requires consideration of factors such as the availability of alternatives, whether researchers might have applied for further funding anyway (possibly from other sources), whether other (non-MCF) researchers might still have secured those funds from a UK perspective, and the extent to which MCFs enhance research skills and the ability to write successful grant applications.

As discussed later, the final calculation is relatively more sensitive to the additionality assumption and, given the uncertainty, a range of values is considered, with additionality of 75% taken to be the central/main assumption (see Table 2.5).

[5] As mentioned previously, the 2019 evaluation of the MCF programme included a survey that asked alumni to list four subsequent grants won since they participated in the MCF. The period of three years post-programme was chosen, as it presents the period in which the survey most likely captured relevant leveraged funds that can be likely attributable to the programme. In this case, the benefits are potentially larger if the benefits of the MCF programme continue to help alumni leverage funds beyond the three years post-award.

Table 2.5: Additionality Assumptions

Additionality		Description	Comments
High	100%	MCFs are entirely additional in effect: no further funding could have been leveraged without the original grants.	Considered to be quite possible.
Central	75%	Three-quarters of the leveraged funds are additional. (One-quarter could have been secured regardless.)	Main estimate.
Low	50%	Low additionality: half the leveraged funds are additional. (Half would have been secured regardless.)	-
Very Low	25%	Low additionality: only one-quarter of the leveraged funds is additional. (Three-quarters would have been secured regardless.)	Considered implausible but tested nevertheless.

Based on the 2019 evaluation of MCFs, a majority of respondents agreed that the MCF helped to attract more funding opportunities and provided them with the resources and time to deliver high-quality research outputs and follow-on grant applications. In particular, award holders emphasised the role of the programme in establishing a track record of grant winning and successful project management and delivery. The reputation of the programme, and competitive application process, are important signals to external funders. To this end MCFs were quoted as saying, 'Having a British Academy fellowship was massively helpful to this [getting a prestigious MRC grant]', and, 'I wouldn't be in a position to make further bids if I had not finished this piece of research'.

The MCF programme integrates award holders into a broader network of interdisciplinary research and funding opportunities. Networking events connect award holders to potential future funding sources and enhance their professional profiles. One MCF described the value of this network by saying: 'I would not have won the Leverhulme funding without it. The MCF expanded my horizons and touched on other disciplines. Leverhulme is interdisciplinary so I would not have been able to come up with the idea or work with people from other disciplines well enough to lead'. MCFs also emphasised the programme's role in improving their grant-writing skills both through the application process itself and the support of the programme. Consultations with the British Academy confirmed that reports from more recent cohorts align with these qualitative data collected during the 2019 evaluation. Broadly, award holders perceive the MCF as having a direct and positive impact on their ability to leverage future funding. These qualitative reports, and the aims of the MCF programme, support an argument for ruling out the lower additionality levels of 25% and 50%.

Additionally, without the British Academy fellowship, it is possible that some award recipients would have left academia, hence no further funding would have been leveraged. The MCF is targeted at mid-career academics that have the potential to make significant research contributions to their fields but, because of a lack of funding, time, or other career support, are unable to realise these outputs. In consultations with the Academy it has been raised that, were it not for the MCF catalysing a significant piece of research and ensuing career progression, some award recipients would otherwise have exited academia entirely. However, it is not straightforward to establish (or assume) that all researchers would definitely have left academia had they not received funds from the British Academy. It is also difficult to evidence that the reported additional funding could not have been secured otherwise. As such, while a figure of 100% is not implausible, it is not this report's main estimate.

2.3. Results

Table 2.6 presents the estimates of the benefit-cost ratios (BCRs) of the funding leveraged by Mid-Career

Fellows treating the costs and benefits principally in financial terms. Given the uncertainty of, and sensitivity to, the additionality assumption, four sets of BCRs are reported, testing the likely leveraged funding benefits secured as a result of MCF awards. The estimates are based on figures for costs and leveraged funds as above, discounted over time, spanning the three years following the MCF award.

In the central case, the overall leveraged funding BCRs are in the range 1.28-1.37. Every £1 of MCF funding thus generates a further £1.28-1.37 (in present value terms) of research funding over the four years following the MCF award from in-scope leveraged funds alone. This estimate does not include the returns to the research produced by MCFs following their awards. The BCR estimates in Table 2.6 only capture a narrowly-defined benefit of the MCF programme. Award holders leverage additional funds which exceed, by 28%-37%, the costs of MCF awards to the Academy. Even in the lowest case (very low additionality of the award, of 25%), the leveraged funding benefits of the MCF programme amount to between 43%-46% of programme costs i.e. generating research over and above that which the Academy has chosen to fund (see Table 2.6).

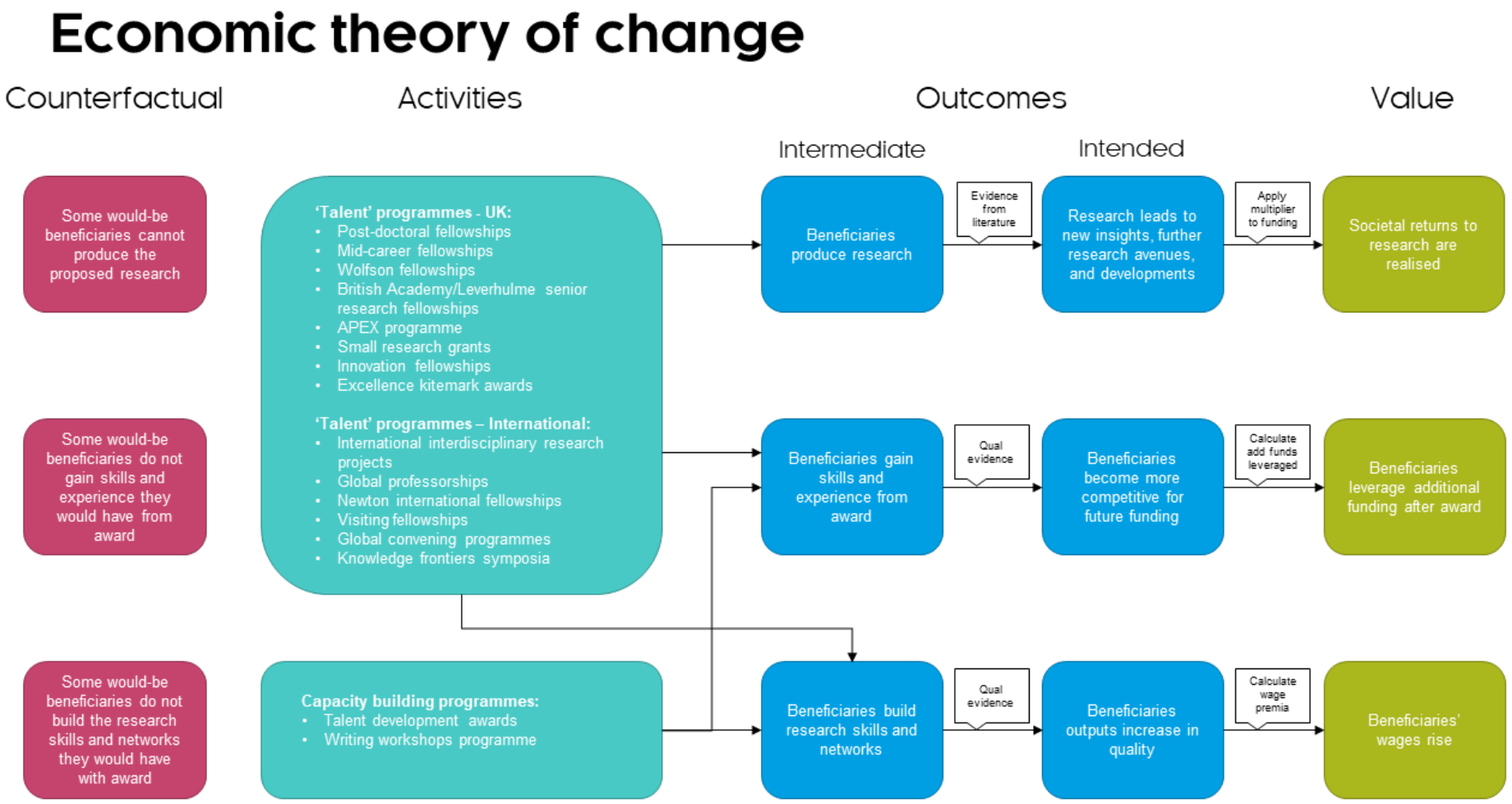
Table 2.6: Total Estimated Leveraged Funding Benefit-Cost Ratios (BCRs) by Cohort

Scenarios	Additionality	2022/23	2023/24	2024/25	2025/26
High	100%	1.83	1.72	1.71	1.74
Central	75%	1.37	1.29	1.28	1.30
Low	50%	0.92	0.86	0.85	0.87
Very Low	25%	0.46	0.43	0.43	0.43

Note(s): Leveraged funding figures are discounted over the course of the fellowship using the standard Green Book discount rate of 3.5%.
Source(s): Authors' calculations.

Appendices

Appendix A - Economic Theory of Change



Appendix B - Cost-Benefit Calculation

The benefit-cost ratio (BCR) is given by:

$$BCR = \frac{benefits_{NPV}}{costs_{NPV}}$$

That is, the BCR is the ratio of benefits to costs once *converted to a common unit* (most typically money) and *expressed in net present value* (NPV) terms.[6]

The BCR gives an indication as to whether an action (which carries a cost):

- generates a net cost, because the benefits are less than the costs (BCR < 1)
- breaks even, with the benefits equalling the costs (BCR = 1)
- generates a net benefit, because the benefits exceed the costs (BCR > 1)

The analytical challenge is that, while costs (past or planned British Academy expenditure) are usually known, benefits and, in turn, the BCR, must be estimated, and in NPV terms.

The approach is to estimate the BCR from the available historical data and then apply it to future costs to project the benefits of future expenditure. This rests on the assumption of a stable BCR i.e. that the historical BCR is a reasonable estimate of the future BCR. Given a(n estimated) BCR, the expected benefits of an action can be calculated from the costs as a rearranged version of the above:

$$benefits_{NPV} = costs_{NPV} \cdot BCR$$

And the net benefits can be calculated as:

$$net\ benefits_{NPV} = benefits_{NPV} - costs_{NPV}$$

Note, however, that it is challenging to fit all impacts of the British Academy's research funding into such a quantitative framework. Not everything is straightforward to quantify, let alone monetise, and estimates are subject to uncertainty. The impacts set out in this report are thus relatively narrow and concern the value of additional research funding leveraged by MCFs, as a result of British Academy activities.

[6] Net present value captures the idea that impacts further into the future are worth less than if they had occurred today. By the application of a discount rate, an impact in 2026 (say) can be expressed in equivalent 2023 terms.