

The background image is a composite. On the left, there is a dark blue, semi-transparent overlay with a grid-like pattern. On the right, a photograph of St Paul's Cathedral in London is visible, framed by the glass facade of a modern building. The cathedral's large dome and classical architecture are prominent. The sky is blue with some white clouds. The overall image has a professional, urban feel.

PRO BONO ECONOMICS

# Cost Benefit Analysis of MyBnk's Money Twist programmes: A feasibility assessment

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# Introduction

MyBnk provides a range of financial education and enterprise workshops for 7-25 year olds in schools and youth organisations. These sessions help young people develop the skills to manage their finances effectively to live independent, debt-free lives by examining their attitude, behaviours and relationship with money.

MyBnk asked Pro Bono Economics (PBE) to consider whether it would be feasible to undertake a cost benefit analysis (CBA) of its Money Twist programmes. These programmes are part of MyBnk's preventative work with young people and are delivered in primary and secondary schools. MyBnk has a well-established process for monitoring the impact of these programmes on students' financial literacy, but has not previously carried out an economic evaluation.

This report summarises our analysis and key findings. It builds on an earlier phase of work by a team of PBE volunteers that assessed MyBnk's monitoring and evaluation procedures for Money Twist. The remainder of the report:

- Outlines the key features of the Money Twist programmes.
- Sets out a CBA framework for these programmes.
- Assesses the availability of the evidence needed to carry out a CBA.
- Considers the feasibility of undertaking a CBA, based on the above considerations.
- Sets out our recommendations for potential next steps.

# Background on the Money Twist programmes

MyBnk provides a range of financial education workshops in primary and secondary schools through its Money Twist programmes. These programmes, which are delivered by expert trainers, are designed to help schoolchildren develop the skills, knowledge and attitudes required to support good financial decision making later in life (we refer to these capabilities as 'financial literacy').

There are three Money Twist programmes aimed at different age groups:

- **Money Twist for Key Stage 2 (KS2):** aimed at 7-11 year olds in primary schools, the KS2 programme combines full year assemblies, workshops and teacher and family resources to build positive habits early, such as saving and budgeting, and improving financial confidence.
- **Money Twist for Key Stage 3 (KS3):** aimed at 11-14 year olds in secondary schools, the KS3 programme covers practical and relevant everyday financial matters including budgeting, needs versus wants, careers, tax, banking, interest, and saving.
- **Money Twist for Key Stage 4 (KS4):** aimed at 14-18 year olds in secondary schools, the KS4 programme covers practical and relevant everyday financial matters including budgeting, needs vs wants, tax, banking, interest, savings, pensions and investments.

The focus of the KS2 programme is to help children aged 7-11 develop three key 'executive' skills that underpin good financial decisions, namely: the ability to understand new knowledge, plan ahead and delay gratification. The two secondary school programme have a more practical focus on developing financial skills, as well as knowledge of and attitudes towards financial matters.

# What is needed to carry out a CBA in practice?

We understand that MyBnk collects data on programme delivery costs as part of its routine programme management. For this reason, we focus on the quantification of benefits.

A key challenge here (as with other childhood interventions) is that the MyBnk does not collect evidence on long-term financial and non-financial outcomes for Money Twist participants, and it is not practical to do so, not least because of the significant time and cost involved. A more practical approach that is commonly used in the absence of evidence on long term outcomes is to link together more readily available evidence to forecast the expected long-term impact of Money Twist. This involves three steps:

- **Step 1 - assess Money Twist's impact on financial literacy:** MyBnk monitors student progress against a range of financial literacy outcomes for each Money Twist programme. This includes a control group that will help to provide a more reliable indication of the extent to which improvements are causally attributable to Money Twist.
- **Step 2 - assess the expected impact on long-term outcomes:** this requires evidence from existing studies on the link between the outcomes monitored by MyBnk and long-term outcomes (both financial and non-financial). If available, this can be used to forecast the expected improvements in later life outcomes given the impact of Money Twist on students' financial literacy.
- **Step 3 - estimate the monetary value of improved later outcomes:** this requires evidence from existing studies on the monetary value of the financial and non-financial outcomes that Money Twist is expected to influence.

This approach is only feasible if there is reliable evidence for each element of the evidence chain that is in a form that can be readily linked together. We discuss this in the following slides.

# Step 1 - Impact of Money Twist on financial literacy

MyBnk has a comprehensive system for monitoring outcomes for each of the Money Twist programmes that is based on self-assessment questionnaires that are completed by students. In broad terms, these ask students a series of questions that are designed to test the different aspects of financial literacy targeted by each programme.

MyBnk has recently modified its monitoring framework to include a comparison group. This can be used as a benchmark to assess the extent to which observed improvements in student outcomes can be causally attributed to participation in Money Twist. Under this approach data is gathered from two groups as follows:

- **Participants:** assessment questionnaires are administered before the programme starts, upon completion, and at a 3 month follow up. Student progress is measured in terms of the difference between before and after responses, and the follow up questionnaire provides an indication of whether improvements are sustained. This gives a detailed picture of how each individual student has progressed on the various dimension of financial literacy.
- **Non-participants:** assessment questionnaires are also administered to a control group of students from the same school and year group who did not participate in the relevant Money Twist programme. This data is used to provide an indication of the progress that these students make without the support of Money Twist.

With this data, MyBnk can carry out a 'difference in difference' analysis whereby the improvement made by Money Twist participants is compared to that for non-participants. This will provide an indication of the extent to which the observed improvements are attributable to Money Twist.

**Key finding:** The data collected by MyBnk will allow it to estimate the impact of the specific outcomes that are targeted and monitored for each Money Twist programme.

# Step 2 - Link between childhood skills and adult outcomes

For the purpose of this study we have focused on the key findings of the 2017 study published by the Money Advice Service “*The journey from childhood skills to adult financial capability*”. This study is of particular interest since it is a detailed analysis of the link between childhood skills and adult financial outcomes that is based on data tracking 17,000 people born in Great Britain in 1970 over their lifetimes in the British Cohort Study 1970. The Money Advice Service study (referred to as BCS Study here) has several important aspects that are relevant for MyBnk:

- **Methodology:** The BCS Study uses a regression-based approach to assess the links between adult financial outcomes (regular saving, pension saving, debt-income ratio, and financial position) and cognitive, non-cognitive, and behavioural skills in childhood.
- **Use of composite measures of skill:** The BCS Study uses (separate) composite measures for the cognitive, non-cognitive and behavioural skills, each of which combines several indicators (e.g. the non-cognitive composite skill measure comprises indicators for social skills, self-esteem, and ambition). The composite skill measures are constructed empirically from the data as part of the statistical analysis, and there is no clear correspondence to the outcomes monitored for Money Twist programmes.
- **Key conclusions:** The BCS Study finds that childhood skills are linked to adult financial outcomes, and that skill development between the ages of 5 and 10 of particular importance. These findings are broadly in line with the wider literature on financial literacy in childhood. In addition, non-cognitive skills (such as self-control) play a key role in promoting behaviours such as regular saving and pension saving. Finally, the positive influence of non-cognitive skills on educational attainment and employment outcomes provides an important mechanism for channelling childhood skills into positive adult financial outcomes.

**Key finding:** Although the BCS Study provides useful evidence of the link between childhood skills and adult financial outcomes, we do not think that it is possible to readily link this to MyBnk’s outcome measures. This is because there is no direct correspondence between these and the composite skill measures used in the BCS Study.



# Step 3 - Estimates of the monetary value of adult financial outcomes

A useful source of monetary values for adult financial outcomes is the HACT's Social Value Bank (see [www.hact.org.uk/social-value-bank](http://www.hact.org.uk/social-value-bank)). This contains value estimates for a range of pre-determined outcomes. These are derived by estimating the impact of each outcome on life satisfaction and then translating this into an equivalent sum of money that gives the same change in life satisfaction. The Social Value Bank gives the following estimates for four adult financial outcomes (these are averages per person which must be adjusted to take account of age and location):

- Being able to save regularly: £2,155 per year;
- Being debt free: £1,593 per year;
- Not being heavily burdened by debt: £10,836 per year;
- Financial comfort: £8,917 per year.

To illustrate how these estimates could be used, suppose participating in Money Twist KS2 increases the probability of being able to save regularly by 10%. This implies that participating in Money Twist KS2 is worth  $10\% \times £2,155$  per year = £215 per year on average. Multiplication by the total number of students per annum gives the total annual benefit associated with this outcome. A similar logic applies to the other financial outcomes in the Social Value Bank.

**Key finding:** The Social Value Bank is a useful source of estimates of the monetary values for several adult financial outcomes which are similar to some of the outcomes in the BCS Study. However, the exact correspondence is unclear (with the possible exception of 'saving regularly') which means that it may not be reliable or valid to apply these value estimates to the outcomes in the BCS Study.

# Is a CBA feasible for the Money Twist programmes?

As explained above, since MyBnk does not collect follow up data on Money Twist students, it is necessary to forecast the expected benefits by linking data on the impact of the programs to existing evidence on the relationship between childhood skills and adult financial outcomes (such as regular saving, or pension saving) for which there are available estimates of monetary value. We have focused on whether this would be possible using the results of the BCS study and have identified two key problems.

## **Problem 1: It is not possible to combine the data on Money Twist outcomes with measures of childhood skills used in the BCS Study**

The BCS study shows that there is indeed a link between childhood skills and adult financial outcomes, in line with other research on financial literacy in childhood. However, there is no clear correspondence between the outcome measures that MyBnk uses for the Money Twist programmes and the skill measures used in the BCS study. Moreover, we do not think that this could be resolved by altering the outcomes that are monitored for the Money Twist programmes to match the skill measures used in the BCS study, since the latter are based on a composite of several indicators.

## **Problem 2: There are difficulties in matching estimates of the monetary value of adult financial outcomes to the outcomes in the BCS study**

Estimates of the monetary values for several adult financial outcomes are available in the Social Value Bank. However, whilst these outcomes are similar to some of the outcomes in the BCS Study, the exact correspondence is unclear (with the possible exception of 'saving regularly'). This means that it may not be reliable or valid to apply these value estimates to the outcomes in the BCS Study.

**Conclusion:** Our analysis suggests that there is evidence that directly links childhood skills, including self-control, to improved adult outcomes, and also some information regarding the societal value of certain adult financial outcomes. However, for the reasons set out above we conclude that it is not feasible to carry out a CBA using the available data in the BCS Study and Social Value Bank.

# Potential options for next steps

We suggest there are two potential options MyBnk may wish to consider that would support a future CBA for the Money Twist programmes.

## **Option 1: Collect long-term follow up data on financial outcomes**

This would involve re-contacting Money Twist students periodically in their adult lives to gather data on their financial outcomes. Ideally, the survey would use the questions used to derive the monetary value estimates for financial outcomes in the Social Value Bank to ensure that these can be used to value estimated impacts. Similar data would also need to be collected for a random sample of non-participants to provide an indication of the difference in financial outcomes for the two groups. We note that this option does have some significant drawbacks in terms of cost and required effort, and there is a risk it is undermined by low response rates.

## **Option 2: Collect follow up data on educational attainment**

Option 2 is based on the finding in the BCS Study that educational attainment provides an important mechanism for channelling childhood skills into positive adult financial outcomes. This suggests that it may be possible to link follow up data on academic attainment for Money Twist students to the BCS study to forecast expected adult financial outcomes. This would require MyBnk to re-contact students to obtain information on their academic attainment level (e.g. at GCSE or NVQ level), which in principle should be easier to collect than long term financial outcomes. However, this approach would still suffer from the misalignment between the financial outcomes in the BCS Study and the Social Value Bank (problem 2 on the previous slide).

**Recommendation:** Whilst both of these options have drawbacks, Option 2 is significantly less demanding in terms of data collection. However, if MyBnk is minded to pursue this option, we recommend that further more detailed work is carried out, both to ensure that it is possible to collect attainment data that can be combined with the links to later financial outcomes in the BCS Study, and also to determine whether it is possible to overcome the difficulties in using the Social Value Bank monetary values noted above.



# PRO BONO ECONOMICS

South Bank Technopark, 90 London Road, London, SE1 6LN

020 3632 2668

[www.probonoeconomics.com](http://www.probonoeconomics.com)

Twitter: @ProBonoEcon