Application Sheet

# Analyst - Public Funding (1344)

Scottish Government

## Experience:

1. **Lead Criterium:** Knowledge of public finances.
2. Experience as an analyst and an understanding of analytical techniques, gathering, analysing and presenting data.

## Behaviours:

* Changing and Improving - (Level 3)
* Delivering at Pace - (Level 3)
* Working Together - (Level 3)
* Communicating and Influencing - (Level 3)

## Supporting Statement (1000 words):

# Analyst – Economics (1214)

Scottish Government

## Experience:

1. **Lead Criterium:** Knowledge of economics and forecasting.
2. Experience as an analyst and an understanding of analytical techniques, gathering, analysing and presenting data.

## Behaviours:

* Changing and Improving - (Level 3)
* Delivering at Pace - (Level 3)
* Working Together - (Level 3)
* Communicating and Influencing - (Level 3)

## Supporting Statement (1000 words):

My experience of economic and forecasting tools stems from my Applied Econometrics and Advanced Micro- and Macroeconomics university modules, and the IMF’s Macroeconomic Forecasting course. I applied econometric techniques to analyse the determinants of inflation, the social benefit of green spaces, and to forecast unemployment with fan-charts. I independently added SVARs, VECMs, Hodrick-Prescott filtering, and principal component analysis to my repertoire. Due to my quantitative skills, I received a 1st on my Applied Econometrics coursework, a 1st on my Macroeconomics exam, I am predicted a 2:1 in Advanced Microeconomics, and I passed the IMF course with 78%.

Naturally, I decided to pursue further personal projects in macroeconometrics after achieving such good results. I set myself a task of gaining analytical experience, so used my fiscal knowledge of the UK to investigate topical issues, such as the decreased fiscal headroom and the Bank of England’s QT regime. I decided to regress a SVAR model, borrowing closely from Blanchard and Perotti (2002) to solve endogeneity problems between yields and debt-to-GDP ratio. The model was to be estimated across 3-30yr bond maturities.

Yields, debt-to-GDP, the base rate and inflation expectations were the endogenous variables, and I introduced dummy variables when r<g, drawing on Blanchard’s work on low interest rates. Identification was possible because of my structural understanding of the UK economy, for example, the fact that procedural limitations delay discretionary spending responses to contemporaneous fluctuations in bond yields. I calibrated the model by using coefficient estimates in the literature, for example the elasticity of the base rate or inflation on yields. Lags were selected to minimise information criterion.

A rising debt-to-GDP ratio under low interest rates was significantly negatively correlated with yields at most lags, and positively correlated at high interest rates. These results indicated policymakers could be underestimating fiscal space under low rates. I published a non-technical analysis in my blog and sent my report to my old macroeconomics professor to discuss it with him; he commended me on the analysis.

Moving onto my relevant behaviours profile; during my summer internship at the Department for Work and Pensions (DWP), I was on the Horizon Scanning and Insights team. My research topic was Data Regulation, Privacy and Ethics. My role required me to consider several perspectives, including economics.

My ability to change and improve on the current practice suggestions was evidence clearly when I conducted workshops to present my research to technical and non-technical stakeholders. The best practice guidelines, as explained by the HMRC’s Horizon Scanning division, suggested that workshops should consist of break-out rooms with specific documents given to the audience to encourage discussion and create confidence bands for forecasts, primarily using ‘axes of uncertainty’. I felt the layout of the document was unnecessarily ambiguous and confusing, which could compound into unsound policy suggestions. I discussed this with my colleagues, who agreed. So, I implemented some clarifying changes in my own workshops, such as changing the axes titles and adding new labels for a non-technical audience. The result was that all of my teammates felt they could express their ideas unambiguously, and my manager suggested that the team should use my layout from now on.

I have lots of experience delivering high impact analysis to tight deadlines. Besides my main DWP research project, I was tasked with writing policy explainers on recent publications. I handled these new priorities by adding flexibility into project deadlines, implementing a Kanban-style framework, and when different teams requested a specific paper analysis, I communicated closely with them to deliver concise and relevant summaries. I often drew on my economic expertise to highlight particular issues or inaccuracies in papers, but where necessary, I liaised with subject-matter experts to clarify technical terms and my interpretations. I made sure to proactively update these teams on my progress throughout the day. When multiple explainers were needed at the same time, I leveraged the Kanban framework to triage them based on time-sensitivity. My manager commended my ability to balance long-term research with short-term deliverables and my department responded positively to my explainers.

In the DWP, I used my ability to work together across a range of range of internal and external stakeholders to produce accurate horizon scans, including our in-house legal team, data analysts, colleagues, and cross-departmental teams working on related topics, such as the Smart Data team in the Department for Business and Trade (DBT). At first, I held internal informal meetings with colleagues on my team, to understand the existing state of research and their technical knowledge on related topics, such as Web3 and stablecoin innovations. I then expanded outward, communicating with departmental economists to understand the cost benefits associated with Third Party Data Gathering legislation. Finally, I held meetings with teams helping to rollout Smart Data in the Department for Business and Trade. I incorporated their insights into my own policy recommendations and invited groups to my final research workshops to ensure their findings were reflected accurately.

By combining expertise my research had broad relevance and accuracy. I learned how to engage a range of cross-department stakeholders and interpret their specific data streams, and as a result my technical presentations received strong praise for the clarity of argument and relevance to mainstream literature.

Finally, my ability to communicate and influence has also been strongly demonstrated in the DWP. As I said, I designed technical workshops to communicate my research to economists and other stakeholders. However, I also designed non-technical workshops to present to my teammates. During these presentations, I made sure to reach out to audience members if I felt they seemed to be struggling to understand and utilised relevant real-world examples, often related specifically to their current area of research. I also ensured that technical jargon was either fully cut-out or that definitions were readily available on relevant slides. Feedback was very positive – my manager and Grade 7 praised the clarity of my delivery in my non-technical workshops, and specifically noted that despite their initial doubts my apt use of analogies allowed them to follow along.

# Level 3 Behaviours

## Changing and Improving

* work with others to identify areas for improvement and simplify processes to use fewer resources
* use technology where possible to increase efficiency
* encourage ideas for change from a wide range of sources
* clearly explain the reasons for change to colleagues and how to implement them, supporting individuals with different needs to adapt to change
* encourage an environment where colleagues know that they can challenge decisions and issues safely
* take managed risks by fully considering the varied impacts changes could have on the diverse range of end users

## Delivering at Pace

* show a positive approach to keeping the whole team’s efforts focused on the top priorities
* promote a culture of following the appropriate procedures to ensure results are achieved on time whilst still enabling innovation
* ensure the most appropriate resources are available for colleagues to use to do their job effectively
* regularly monitor your own and team’s work against milestones ensuring individual needs are considered when setting tasks
* act promptly to reassess workloads and priorities when there are conflicting demands to maintain performance
* allow individuals the space and authority to meet objectives, providing additional support where necessary, whilst keeping overall responsibility

## Working Together

* encourage joined up team work within own team and across other groups
* establish professional relationships with a range of stakeholders
* collaborate with these to share information, resources and support
* invest time to develop a common focus and genuine positive team spirit where colleagues feel valued and respect one another
* put in place support for the wellbeing of individuals within the team, including consideration of your own needs
* make it clear to all team members that bullying, harassment and discrimination are unacceptable
* actively seek and consider input of people from diverse backgrounds and perspectives

## Communicating and Influencing

* communicate in a straightforward, honest and engaging manner, choosing appropriate styles to maximise understanding and impact
* encourage the use of different communication methods, including digital resources and highlight the benefits, including ensuring cost effectiveness
* ensure communication has a clear purpose and takes into account people’s individual needs
* share information as appropriate and check understanding
* show positivity and enthusiasm towards work, encouraging others to do the same
* ensure that important messages are communicated with colleagues and stakeholders respectfully, taking into consideration the diversity of interests