Research Project: “More than words: the impact of White House press briefings”

## INTRODUCTION

In the age of AI tools able to write text messages and provide human-like communication, public authorities everywhere struggle to overcome misinformation and deliver their message to the wider public. Hence, understanding the impact of official language is key.

This project is intended to collect and employ daily White House (WH) press briefings in an empirical text analysis that studies their impact on some relevant U.S. (and perhaps global) economic/financial variables. The White House press briefings are used to communicate the official “narrative” about economic/social/political/international developments to the media, and through it to the wider public. Obviously, media might twist this narrative and distort the original message (e.g. depending on partisan affiliations), but on average it should “convey” the messages which then comes to influence people’s lives. Accordingly, the language (including syntax, tone) of the WH press briefings can be a useful indicator that anticipates (and leads) various others, thus shaping public attitudes, behaviours, and social mood, and through this channel affecting aggregate economic/financial variables.

Since the news media (not social media) is the first attentive listener to WH briefings, the most obvious output to analyse will be U.S. media coverage in general. Media coverage can take many forms and relate to many aspects of life, but what should be interesting are the economic/financial aspects since markets are fast in reaction to news. Baker, Bloom and Davis (2016 QJE) proposed an indicator called *economic policy uncertainty* (or EPU) derived from media coverage, which they showed it leads economic variables like industrial production among many others. Financial markets too pay attention to WH briefings, so (intraday) markets reactions to news from the WH can be a useful indicator in the analysis. An interesting idea in this context would be to see whether and how WH briefings are reflected in the U.S. EPU index, on a high frequency basis (like daily or weekly) and how this policy uncertainty index interacts with financial market developments: does it leads or lags them? Uncertainty is usually treated as an exogenous variable in models, so uncovering some of its potential determinants (e.g. official language and messages) can be a fruitful research avenue.

## PROJECT STEPS

The first step in this project consists in building the database, which will be a large corpus of text. This will require downloading, storing and organising the full text of each press briefing, by separating questions from answers. In principle, the time period under consideration would be ideally before and after the Russian’ invasion such as to be able to understand how and if there is an impact. Another topic might refer to the initial stages of the COVID-19 pandemic, when policy reactions in U.S. (and elsewhere) were subject to many U-turns due to the high uncertainty surrounding the propagation of the virus, medical

treatment options etc. Ideally, the database should be built in such a way such as to be able to accommodate a change in period/sample or a change in the topic being investigated.

The second step of the project will require organising the text data in a meaningful way. Based on syntax, frequency counts, length and other text elements, some more relevant variables must be constructed as time-series that summarise the WH briefings in a meaningful way. Some webtool can be used in this step or programming using the R/Python software – which is mandatory.

The third step will probably require some preliminary data/text analysis, including basic time-series modelling (correlations, variance analysis etc) and regressions. Some basic time-series econometrics/knowledge would be an advantage in this case. A bit of literature review might help to focus the preliminary empirical analysis but is not mandatory and will come in the late stages of the project.

BASIC REQUIREMENTS

Knowledge of R/Python software (including some programming skills). Examples of text manipulation can be found at https://utstat.toronto.edu/~nathan/teaching/sta4002/Class4/trumptweets-students.html

Fluency in English is required

Basic time-series econometrics – constitute an advantage

LEARNING OUTCOMES

Since this project is in a very preliminary stage, there will probably be many upsides and downsides, and the project might take unexpected turns. The student must be flexible and adapt, creative and forthcoming. Ideas will be highly encouraged and welcomed.

The student will be able to learn how to collect data, organise a database, and derive the most useful indicators that can serve the empirical analysis. Student is expected to organise his time, tools and computer resources such as to deliver the database and the relevant time-series (that will be built based on WH briefings) within the 9-weeks required to complete his/her traineeship. The student will be introduced to a fast-growing research field and become familiar with the specific literature and tools.

TUTOR

Catalin Dragomirescu-Gaina, Assistant Professor at the Faculty of Finance and Banking, Universita Cattolica del Sacro Cuore

Remote interactions are expected for most of the time, with some face-to-face meetings