

Swiss Centre

FAQ: Project Neo

General Questions

1. What is the primary goal of Project Neo?

Project Neo aims to assess the added value of granular and timely data from companies in monitoring economic activity. It evaluates how these data sources can generate new economic insights and enhance short-term forecasts of key macroeconomic statistics, such as inflation, GDP, and consumption.

2. What problems does it aim to address?

Official macroeconomic statistics are essential for conducting monetary policy as they provide key insights into economic trends and developments. However, these statistics are often published with substantial delays and are periodically revised. Project Neo leverages detailed and near real-time data from companies to provide a more up-to-date view of current economic development. For instance, using flight data enables us to monitor the tourism sector on a weekly basis and gain insights into the origins of tourists in a timely manner. Another example is using health insurance data to gain an understanding of current health consumption at high frequency and across different types of sociodemographic groups. Official health consumption is annual and delayed by more than 2.5 years.

3. How does this project fit within the broader mission of the Bank for International Settlements (BIS)?

Project Neo examines how emerging technologies, such as artificial intelligence (AI), can support central banks in their core functions. It innovates by providing insights and tools to assist central bank analysts and decision-makers in conducting monetary policy.

4. Why does the BIS Innovation Hub conduct this project?

The BIS Innovation Hub is well-positioned to lead Project Neo for three reasons. First, its insights can be shared with other central banks. Second, the Hub fosters cross-expertise collaboration by combining diverse IT, economics and data science skills within a single team. Third, its flexible IT environment enables rapid experimentation and innovation, offering capabilities that surpass those of many central banks.

5. How does the BIS Innovation Hub engage with central banks and public authorities on this project?

Project Neo is a collaboration between the BIS Innovation Hub Swiss Centre and the Swiss National Bank (SNB).

6. What is the outcome of Project Neo?

The aim is to create a prototype that utilises granular and timely data from novel sources, combined with advanced analytical technologies, to provide central banks with new economic insights and enhance short-term forecasting of key macroeconomic statistics.

7. Will the findings of Project Neo be made public?



Yes, Project Neo will publicly share its key findings through a detailed report and an informative video.

8. Is Project Neo limited to Switzerland?

For initial testing and prototyping, Project Neo will use data from Switzerland. However, the prototype and insights gained can be applied to other countries as well.

Data

1. What data does Project Neo use?

Project Neo utilises two main categories of data: public and from Swiss companies. Public data encompasses freely available information from statistical offices and commercially available datasets from data vendors that are accessible to anyone. Company data comprises granular, high-frequency information from bilateral agreements with Swiss companies.

2. Why use data from Swiss companies?

To be valuable, data must be detailed, up-to-date and highly frequent (ideally weekly or daily). Data from companies fits this description better than most public data.

3. From which companies does the data come?

The company data used in Project Neo offers valuable insights into key sectors of the Swiss economy, including health, retail, construction, real estate, and tourism.

4. Does Project Neo collect or use personal data or personally identifiable information?

The project does not use personal data or personally identifiable information. The project aims to strike a balance between the need for granular, high-frequency data and strict privacy protections. While detailed data is essential for improving economic monitoring and forecasting, all information is aggregated to prevent the identification of individuals. All socio-demographic information is only available at a grouped level. For example, a dataset might include insights on women within age and income groups living in a certain district but does not contain individual records or personally identifiable details. Project Neo adheres strictly to Swiss data protection regulations and confidentiality agreements to ensure the highest levels of privacy and security.

5. Where and how is the data used in Project Neo stored?

All data used in Project Neo is stored securely in Switzerland and remains within the country. Furthermore, all data processing is conducted exclusively within Switzerland, ensuring compliance with local data protection regulations and maintaining strict confidentiality standards. The project's underlying data will remain strictly confidential per agreements with data providers. Project Neo is committed to neither sharing nor monetising this data with third parties.



Artificial Intelligence (AI)

1. How are you using AI in Project Neo?

Project Neo trains supervised machine learning models to nowcast and forecast relevant macroeconomic variables, such as GDP, consumption, and inflation. Algorithms such as linear regressions, tree-based approaches or dimensionality reduction strategies will be implemented.

2. Does Project Neo train large language models (LLMs) or generative AI?

Project Neo neither uses nor trains large language models (LLMs) or generative Al. The data we work with is already structured, eliminating the need for Al-based text processing. Since the datasets are well-organized and can be directly analysed or converted into time-series formats, our approach does not require generative Al.

Implications

1. What could be the potential implications of Project Neo on the monetary policy work of central banks?

Project Neo will quantify the value of company data, i.e., timely and granular data, to better understand and forecast macroeconomic indicators. It will serve as a complement to the toolset traditionally employed by macroeconomists at central banks.

2. Does this project impact the work of public authorities responsible for managing official statistics?

The primary purpose of official statistical offices is to compile and publish the most accurate representation of various aspects of the economy. This crucial data is often available with a lag. Project Neo is focusing solely on data to provide more up-to-date information about the current state of the economy. This, however, comes at the cost of less precise statistics. Moreover, official statistics are the primary targets of central banks. Project Neo will thus not alter the relevance or work of official statistical offices but serve as a complementary tool for policymakers.