# IPAF 4900: Research Experience Opportunity

**Project Title:** Real Time Indicators of US Economic Activity, 1921 - 1946.

**Term:** Winter 2026

**Supervisor:** Pat Coe

**Unit:** Economics

**Description of project:**

The field of national income was still in its infancy during the Great Depression. Consequently, measurements of what we now refer to as GDP typically experienced significant delays and varied conceptually across releases. Therefore, policymakers did not have access to the same quality of information about the state of the aggregate economy that is available today.  However, other indicators, such as industrial production, department store sales and manufacturing employment, were available in a more timely manner.  This project compiles real-time measurements of these indicators and asks to what extent they could have predicted measurements of national income in pseudo real-time.  This IPAF course helps with the data collection part of the project.

**Number of students required:**  5.

**Research duties:**

65 hours of collecting data from historical issues of the Survey of Current Business (SCB), published by the US Department of Commerce. Students will compile data vintages for 3-5 indicators for 1909 to 1943 using data published in the SCB from 1921 to 1946. Each data vintage shows the available data for a single indicator at a point in time.

**Learning and reflection activities:**

Once data for each indicator has been collected, students will run tests to assess bias and efficiency in the data revisions. They will also examine the indicator's correlation with real-time national income data and how this correlation changes across data vintages.

Students are to write a report containing the following:
- What is meant by real-time data, data revisions, data vintages, etc
- Detailed description of data and sources for 3-5 indicators.
- Theory behind the tests used for bias and efficiency in data revisions.
- Presentation and interpretation of bias and efficiency tests.
- Presentation and interpretation of correlations with national income across data vintages.

**Learning outcomes:**

These are as follows:
- Gain an understanding of the concept of real-time data and why it matters for ex-post policy evaluation, evaluation of forecasting models, etc.
- Gain experience collecting and compiling data vintages from primary sources.
- Learn and implement tests of bias and efficiency in data revisions.
- Develop technical writing skills.

**Evaluation Criteria:**

Students to be evaluated as follows:
- Accuracy of data entry = 25%
- First draft of report = 25%
- Final draft of report = 50%

**Skills or knowledge required:**

The following are required:
- A basic knowledge of Excel or Google Sheets.
- Experience using a package such as Matlab (preferred), Stata or R.
- ECON 3210 (or ECON 2220) required. ECON 3706 or 4706 preferred

**Any required health and safety training:** No.

**Other considerations:** None.

**Application instructions:**
*Participants are selected on the basis of merit and fit with the research project. Please submit a CV, transcript, and cover letter indicating why you are interested in and qualified for this research experience to the undergraduate administrator of the unit listed above. The application deadline is September 5th. Only students with a GPA of 9.5 or higher and at least third year honours standing will be considered.*