

The Effect of Emigration on Unemployment in the Grand Duchy of Luxembourg

Project Outline

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Research question: what are you asking in the project & why that matters

- This paper aims to analyse the **relationship** between **emigration** and **unemployment rates** in **Luxembourg**.
- It examines whether **higher emigration levels** lead to **increased job vacancies** and **lower unemployment** or whether they destabilise the labour market.
- The study considers **sector-specific effects**, particularly in industries **reliant on foreign labour**.
- Findings will provide insights into **policy implications** for labour mobility and workforce planning in **small, high-income economies** like Luxembourg.

Positioning: what we already know & what we do not yet know

What We Know:

- Luxembourg has a **highly international workforce**, with many **cross-border workers** and **emigrants**.
- Previous research focuses primarily on **immigration's effects on employment**, not emigration. (Ajzenman et al. 2022. "Immigration and Labor Market (Mis)perceptions." & Raphael, S., & Ronconi, L. (2007). "The Effects of Labor Market Competition with Immigrants on the Wages and Employment of Natives: What Does Existing Research Tell Us?")
- **Labour shortages** can **increase wages**, but emigration can also lead to a **skills gap** in critical sectors.

What We Don't Know:

- The **causal relationship** between emigration and unemployment rates.
- Whether emigration creates **new job opportunities** or **worsens labour market conditions**.
- How different **industries** are affected by labour outflows.

Positioning: what we already know & what we do not yet know

Positive effects	Negative effects	Ambiguous effects
1. Higher wages for emigrant category of labour	1. Lower wages for complements of emigrant labour	1. Higher labour-force participation of emigrant families who stay behind
2. Higher wages for substitutes of emigrant labour	2. Higher unemployment among complements of emigrant labour	2. Lower labour-force participation of emigrant families who receive remittances
3. Lower unemployment among emigrant category of labour	3. Lower employment	3. Higher/lower employment/unemployment of substitutes of emigrant labour

Source: Asch, [1994](#), p. 9.

Figure: Asch, B.J. (ed.) (1994). Emigration and Its Effects on the Sending Country. Center for Research on Immigration.

Research methodology: how you will address the research question

Empirical Approach

- **Regression Analysis:** Testing the **statistical link** between emigration and unemployment.
- **Panel data:** Constructing a panel data on different **variables over time**: unemployment rates, emigration rates.
- **Difference-in-Differences (DiD):** Comparing unemployment trends **before and after** migration shifts.
- **Graph: Unemployment rate vs emigrants**, as a share of active population (over a period of time) & **Job vacancy rate (JVR) vs. emigrants**, as a share of active population
- **Sectoral Analysis:** Examining **which industries** are most affected.

Research methodology: how you will address the research question

Model Development

- Possible use of **time-series forecasting** to predict future labour market trends.

Data Collection

- **Sources:** STATEC (Luxembourg's Statistics Office), Eurostat, OECD, World Bank.
- **Data:** Unemployment rates, vacancy rates, emigration trends, sectoral employment statistics.

Overview of what you have so far: data, model, code & other ideas

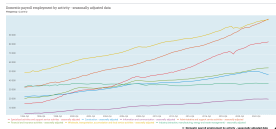
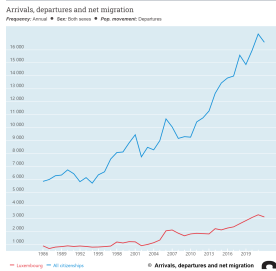
Data: Identified **key sources**, initiated **preliminary data collection**.

Model: Developing a **regression-based approach** to measure emigration's impact on unemployment.

Code: Writing scripts for **data cleaning** and **visualization** in **Python/R**.

Ideas: Exploring **qualitative insights** from policy reports alongside **quantitative analysis**.

Overview of what you have so far: data, model, code & other ideas



Conclusion: hurdles & next steps

Hurdles:

- **Data availability:** Emigration statistics might be **incomplete**.
- **Causality issue:** Need to determine whether **unemployment drives emigration** or vice versa.
- **Policy effects:** Government interventions may distort the **pure** economic relationship.
- **Coding:** Ensuring **robust** statistical controls & **avoiding omitted variable bias** in regression analysis.

Next Steps:

1. Finalize **data collection** and **processing**.
2. Test initial **model assumptions** and **refine methodology**.
3. Conduct **sectoral breakdown analysis** to understand the nuances of emigration's impact.
4. Draft **preliminary findings** for review and refinement.