

# Central Bank Credit and Capital Market Integration: Evidence from the Austro-Hungarian Empire

**Kilian Rieder\*** (partly joint with Clemens Jobst)

Oesterreichische Nationalbank (Eurosystem) & CEPR

## **Monetary unions in history**

*Conference hosted by eabh and Balgarska Narodna Banka*

Sofia, 1 July 2022

\*This presentation does not necessarily reflect the views of the OeNB, the ECB or the Eurosystem.

## Capital market integration and central bank policies

*“[...] the euro area has a unique institutional set-up, built around 19 not yet fully integrated national financial markets and 19 national fiscal policies, with limited coordination. This presents the risk of our monetary policy stance being unevenly transmitted across the union.”*

– Christine Lagarde, speech at ECB Forum on Central Banking 2022, 28 June 2022

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### **Historically, central banks also concerned with capital market integration:**

1. Allocative efficiency in France (Bazot, 2014)
2. Financial development in Japan (Mitchener and Ohnuki, 2009)
3. State-building in Eastern Europe (Morys, 2009)
4. Political pressures in Austria-Hungary (Jobst and Kernbauer, 2016)

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Which role did the central bank play in integrating the Austro-Hungarian capital market?

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- ▶ Two national governments with autonomous budgets, independent Parliaments
- ▶ Small common, federal budget
- ▶ Common external affairs: single Monarch, army and diplomatic corps
- ▶ Common external tariff policy, i.e. single internal market
- ▶ Diverse ethnic and national composition
- ▶ Single currency and central bank (after 1878: Austro-Hungarian Bank, AHB)



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“De facto” monetary union due to fiscal divorce, not monetary marriage

# Literature

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## **Allegations of discrimination against central bank**

- ▶ Regular complaints by contemporaries (Jobst and Kernbauer, 2016)
- ▶ Contrarian qualitative evidence from contemporary surveys (Michel, 1876)
- ▶ Lack of quantitative evidence

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3. Post-1878: uniform rate schedule fo branches
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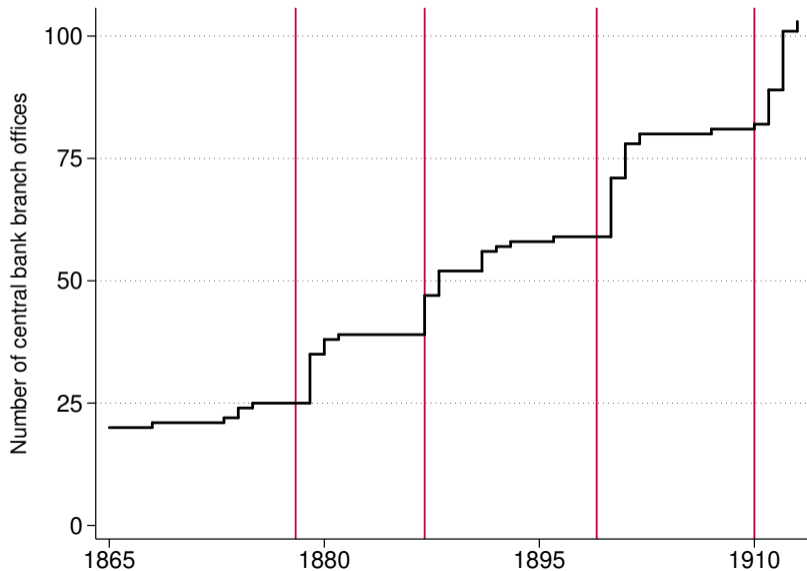
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$$Y_{i,t} = \delta B_{i,t} + \Psi' \mathbf{X}_{i,t} + \phi_b + \gamma_t + u_{i,t}$$

→ Two possible treatment-control DiD settings:  
across waves (early vs. later branches) and within waves (staggered opening)

## Renewal of AHB privilege and branch network



## Data for part I

### AHB branches and subsidiaries in 1912



1. Micro data for Austria and Hungary (1870-1914)
2. Bank-level interest rates, balance sheets and P & L
3. Time-varying, regional control variables
4. Dates (establishment, start of business) and credit volumes for AHB branches

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$$Y_{i,b,t} = \alpha + \beta_1 T(G > 0.5)_{b,t} + \gamma_1 G_{b,t} + \delta_1 (T_{b,t} \times G_{b,t}) + \epsilon NG_i + \beta_2 [NG_i \times T(G > 0.5)_{b,t}] + \gamma_2 [NG_i \times G_{b,t}] + \delta_2 [NG_i \times (T_{b,t} \times G_{b,t})] + u_{i,b,t}$$

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**Additional perk of setting:**

→ Head of branch (= Bank clerk) could dissent and directorates had decisive power



# Ethno-linguistic dividing lines in Austria-Hungary (1910)



# Outcome: credit limit assessments by AHB branches

ad F. W. N. 248 / 1912.

Zusammenstellung

37 Laibach

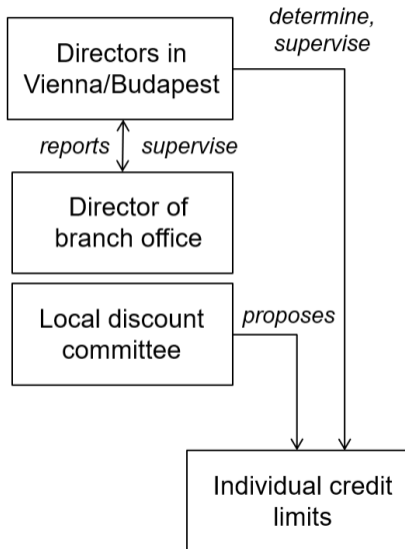
37 Laibach

Chträge des Zurechen-Kollegiums:

Kredit-Freiehungen:

Oberea Adolf	Landskronen, jährl. 100	gegen Firma-Ande's
Hayr Karol	Bierbräuerei Kugelnburg 20	gegen Rückgang des
Kaberné A. & E.	Kamillienmeyer Laibach 40	etc.
Kainihar F.	Frater 50	Mitglied des in

# Credit limits and discount committee composition



## Zensorenkollegien bei den Bankanstalten und Nebenplätzen,

*ferner*

### Vermittlungsfirmen bei den Nebenplätzen

in den im Reichsrat vertretenen Königreichen und Ländern.

### Laibach.

(Filiale.)

Herr **Bamberg Ottomar**, öffentlicher Gesellschafter der Firma: Ig. v. Kleinmayr & Fed. Bamberg (Buchdruckerei, Buch-, Kunst- und Musikalienhandlung).

- **Janesch Johann**, Privatier.
- **Knez Johann**, Landtags-Abgeordneter, Gemeinderat, Vizepräsident der k. k. Landwirtschafts-Gesellschaft für Krain, Handelskammerrat; Inhaber der Firma: J. Knez (Landesproduktenhandel, Walzmühle), Großgrund- und Ziegeleibesitzer.
- **Kollmann Robert**, Inhaber der Firma: F. Kollmann (Glas-, Porzellan- und Gemäldehandlung).
- **Kosler Peter**, Privatier.
- **Mathian Johann**, kaiserl. Rat, Architekt; Inhaber der Firma: Joh. Mathian (Möbelfabrik und Kunstschlerei).
- **Mayr Josef**, Privatier.
- **Mühleisen Arthur**, Privatier.
- **Petričič Vaso**, öffentlicher Gesellschafter der gleichnamigen Firma (Kurz- und Nürnbergerwarenhandlung).
- **Sošvan Ferdinand**, öffentlicher Gesellschafter der Firma: Franz Xav. Sošvan (Manufakturwarengeschäft).
- **Urbanc Felix**, Handelskammerrat; öffentlicher Gesellschafter der gleichnamigen Firma (Manufakturwarenhandel).

## Findings and conclusions

**Watch this space!**