Public credit and the international transmission of monetary policy

Victor Degorce[1]

[1]EHESS, victor.degorce@ehess.fr

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Public credit matters!

- ◇ Public credit is the credit extended by state-owned institutions with a public mandate.
- ◇ This article puts together the first long-run dataset on public credit. The dataset covers a sample of 6 countries (FRA, GER, ITA, JAP, NOR, and US), at quarterly frequency, over the 1950-2020 period.
- ◇ Three main results stand out:
  - Public credit generally accounts for a large share of total credit (26% of total credit between 1950 and 1995).
  - Public credit is not systematically associated with a repressed financial system (i.e.: public credit remains important outside periods of financial repression).
  - Local Projections reveal that public credit is not sensitive to foreign monetary shocks.

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- By looking through the lenses of the trilemma, I show that public credit is not sensitive to foreign monetary shocks. This result could also apply to other types of macroeconomic shocks. Overall, my results bear important insights for models featuring a strong pro-cyclical role for credit (Bernanke et al. 1999, Schularick & Taylor 2012, Richter & Zimmerman 2020).

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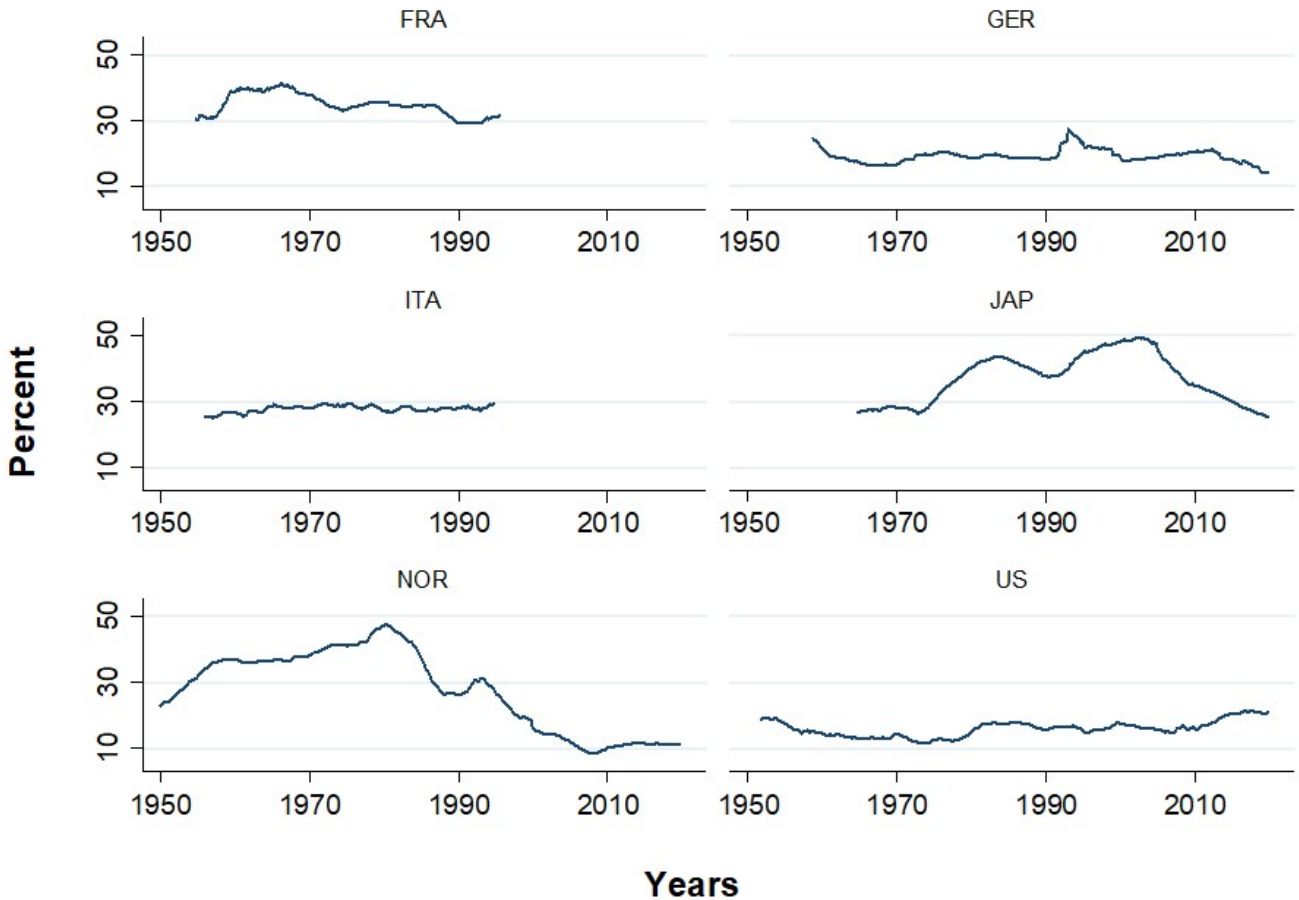
- ◇ To collect public credit data I relied on statistical reports by central banks, on central bank archives, and occasionally on central banks' internal databases. Importantly, public financial intermediaries are always clearly identified in these sources (i.e.: data on public credit is presented separately from private credit data), and *nationalized commercial banks are excluded!*

Figure 1: Public credit in % of total credit, 1950-2020



Note: Total credit is calculated as the sum of public and private credit. Private credit data are drawn from Monnet and Puy (2019).

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- e.g.: During the 1980s and 1990s in France and Italy, starting in the early 1960s in Germany, starting in the late 1980s in Japan...
- From a macroeconomic perspective, public credit is therefore particularly relevant in "intermediate" regimes (i.e. market economies where the state retains some control on the economy). This is the case in many developing countries today: Indonesia, Malaysia, Mexico, Korea...

Figure 2: Public credit and capital controls

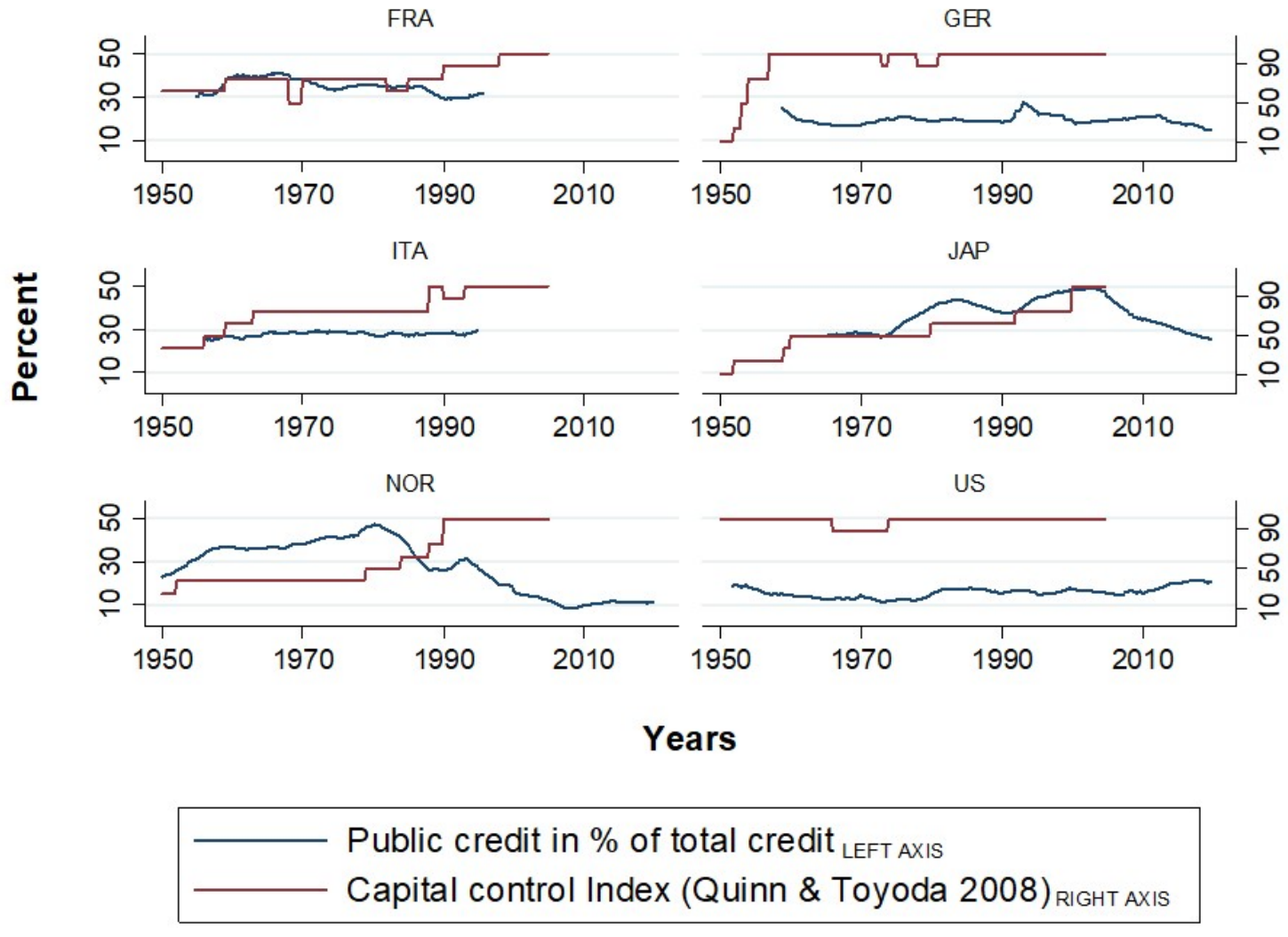
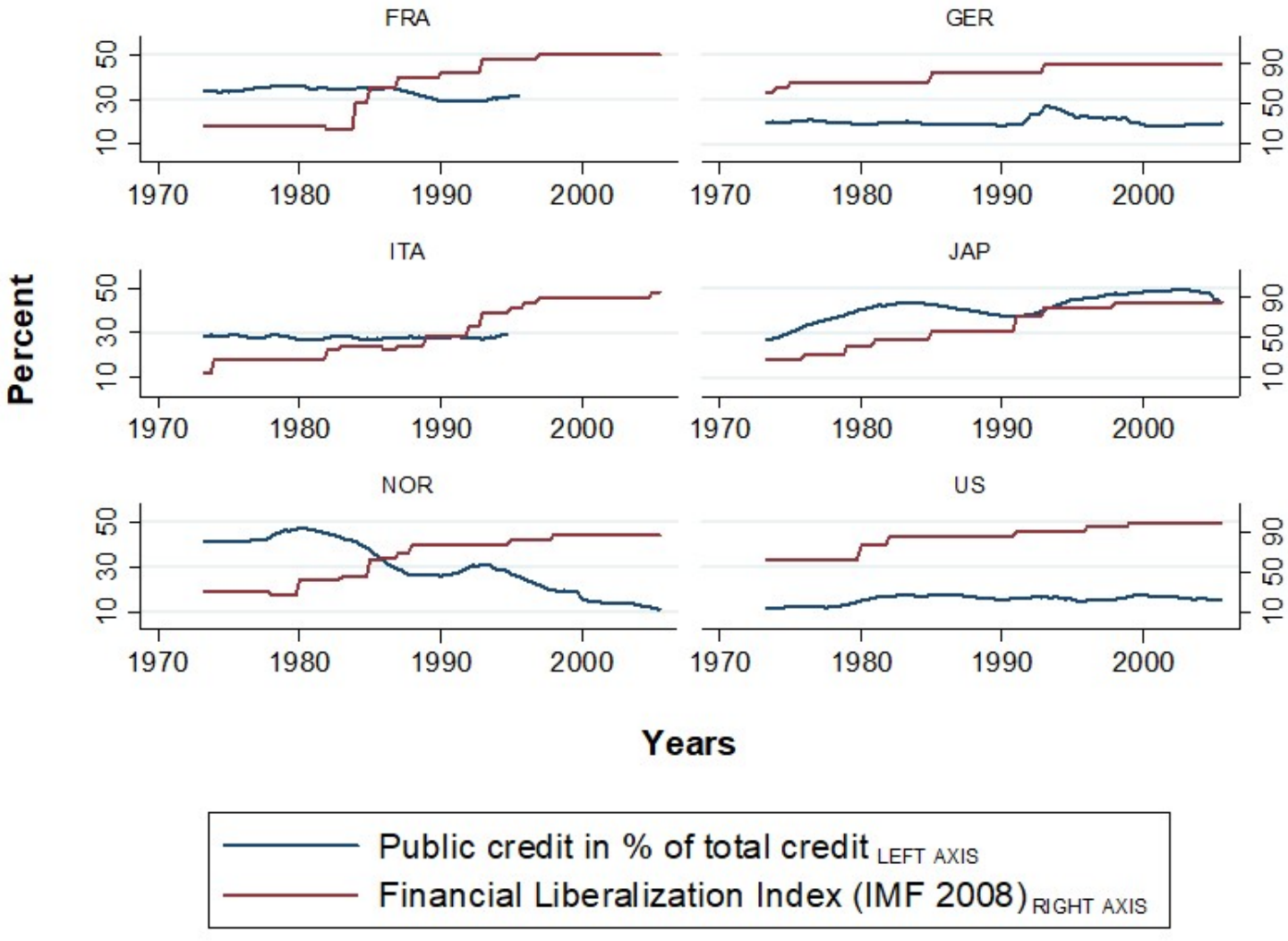


Figure 3: Public credit and financial liberalization



Public credit and foreign monetary shocks

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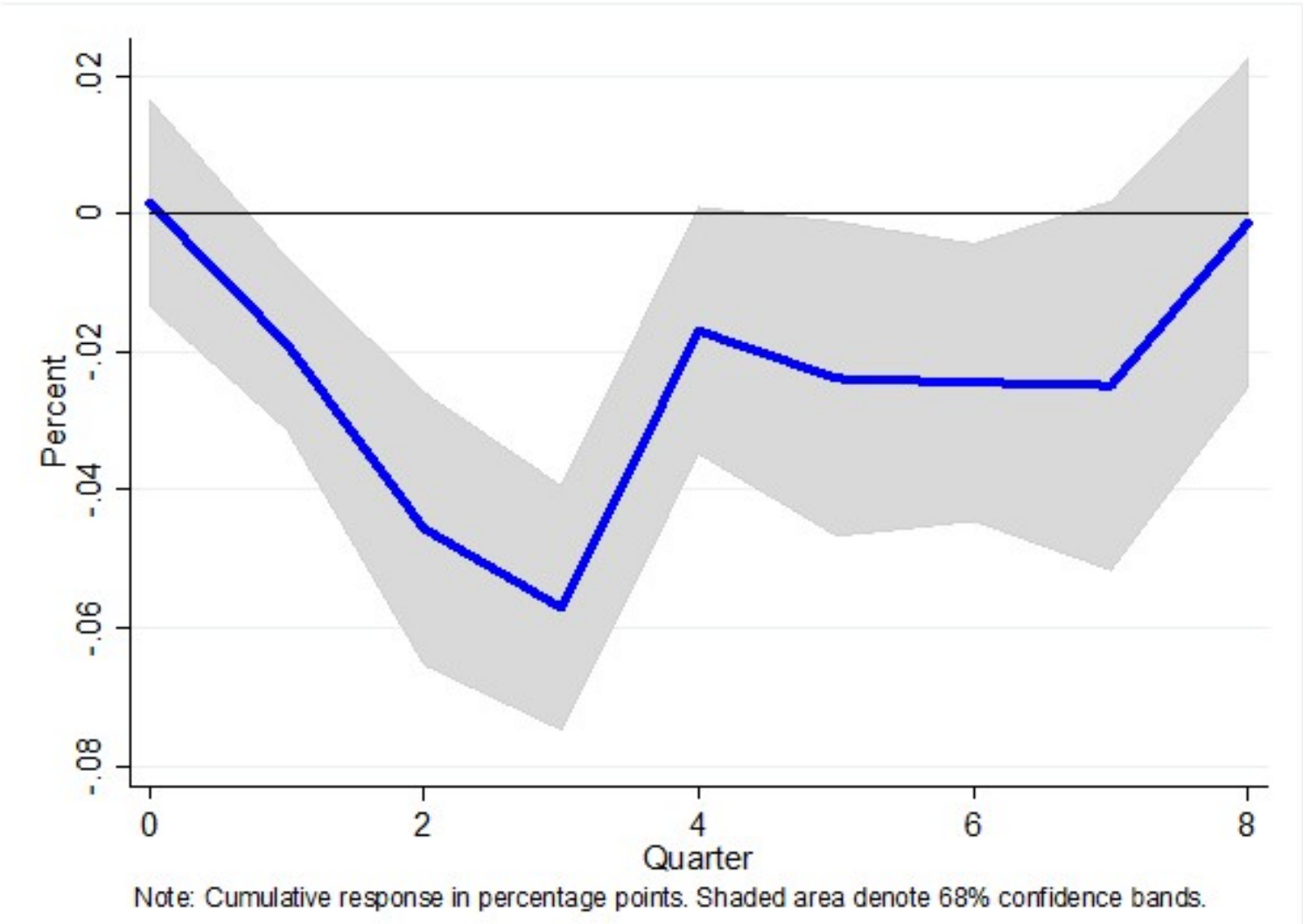
- ◇ I calculate the difference between the growth rate of private and public credit **R**, and I examine its response to US policy shocks **I**, using Local Projections (Jorda 2005).
- ◇ I estimate the following equation for h=0/8 (i country indicator, t time indicator, h horizon of the projection):

$$R_{i,t+h} = \beta_1 R_{i,t-1,t-2} + \beta_2 I_{t,t-1,t-2} + X_{i,t,t-1,t-2} + d_i + \varepsilon_{i,t} \quad (1)$$

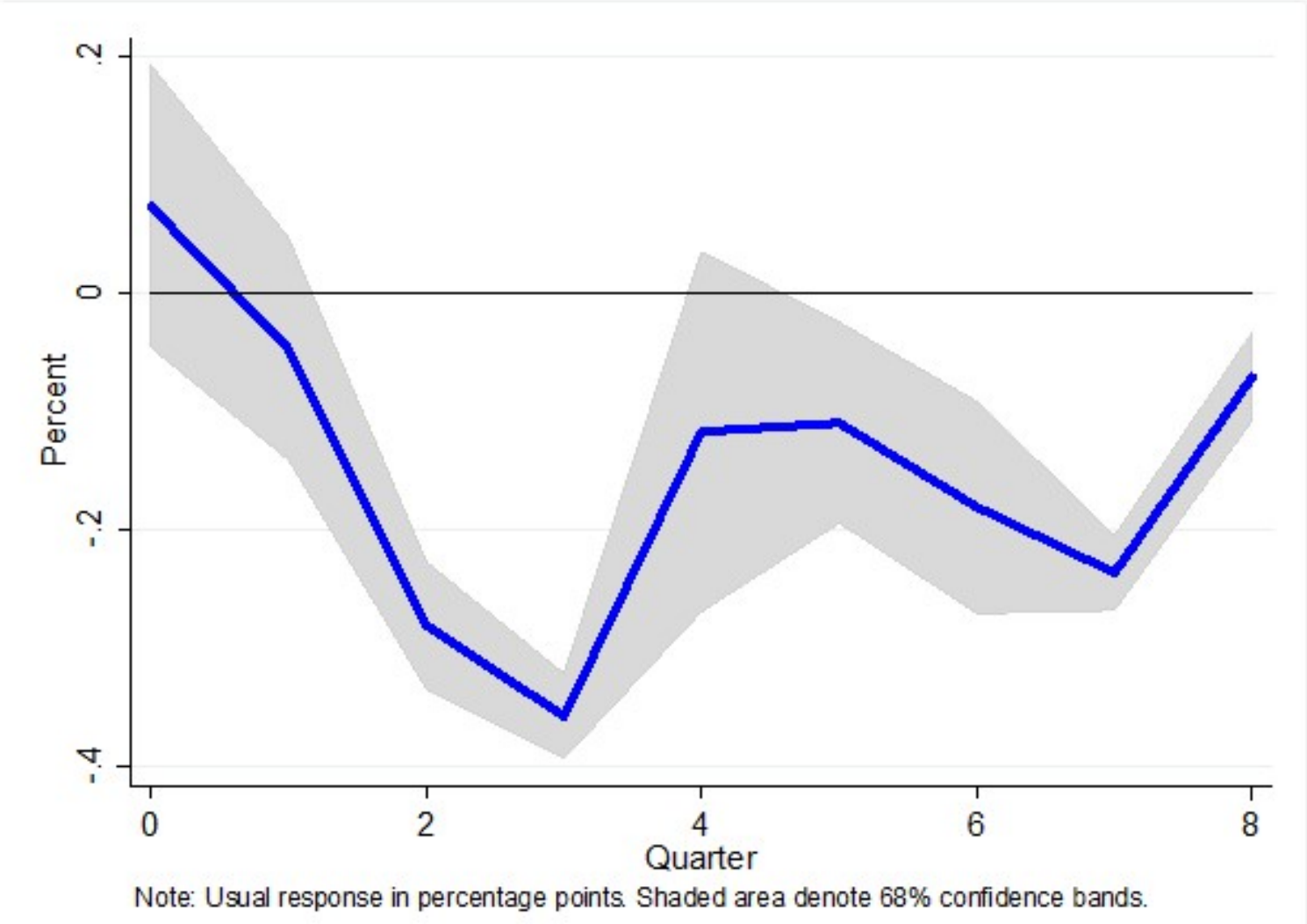
Results #1

Figure 4: US policy surprises $\rightarrow$ Difference between the growth rate of private and public credit (open pegs)



Results #2

Figure 5: US policy surprises $\rightarrow$ Ratio between private and public credit (open pegs)



Why is public credit immune to US policy shocks?

- ◇ The interest rate channel:
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  - An increase in the Fed's rate causes a deterioration of borrowers' financial position, and leads to a contraction of credit (Bernanke & Gertler 1989):
  - Public credit is **designed** to assist borrowers with inadequate collateral and low net worth (e.g., manufacturing industries, farmers, low-income households, students. . .).

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- The risk-taking channel:
  - Monetary policy affects the willingness of market participants to take on risk exposures (Borio & Zhu 2012).
  - Public intermediaries do not face the same set of **incentives** as private intermediaries. Their losses are absorbed by the state, and they are not rewarded for extending more loans.

Conclusion

- Three main results are put forward: (a) public credit generally accounts for a large share of total credit, (b) public credit is not systematically associated with a repressed financial system, and (c) public credit markets are relatively immune to US monetary shocks.

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- From a macroeconomic perspective, public credit is particularly important during the transition between financial repression and financial liberalization (e.g. developed countries between 1960 and 2000, or developing countries today).
- Policymakers should take into account the stabilizing properties of public credit!
- What next?
  - Include developing countries (Indonesia, Korea, Mexico, Malaysia...).
  - Consider other types of shocks: financial crises (Schularick & Taylor 2012), uncertainty shocks...

Appendix 1#: Data Sources

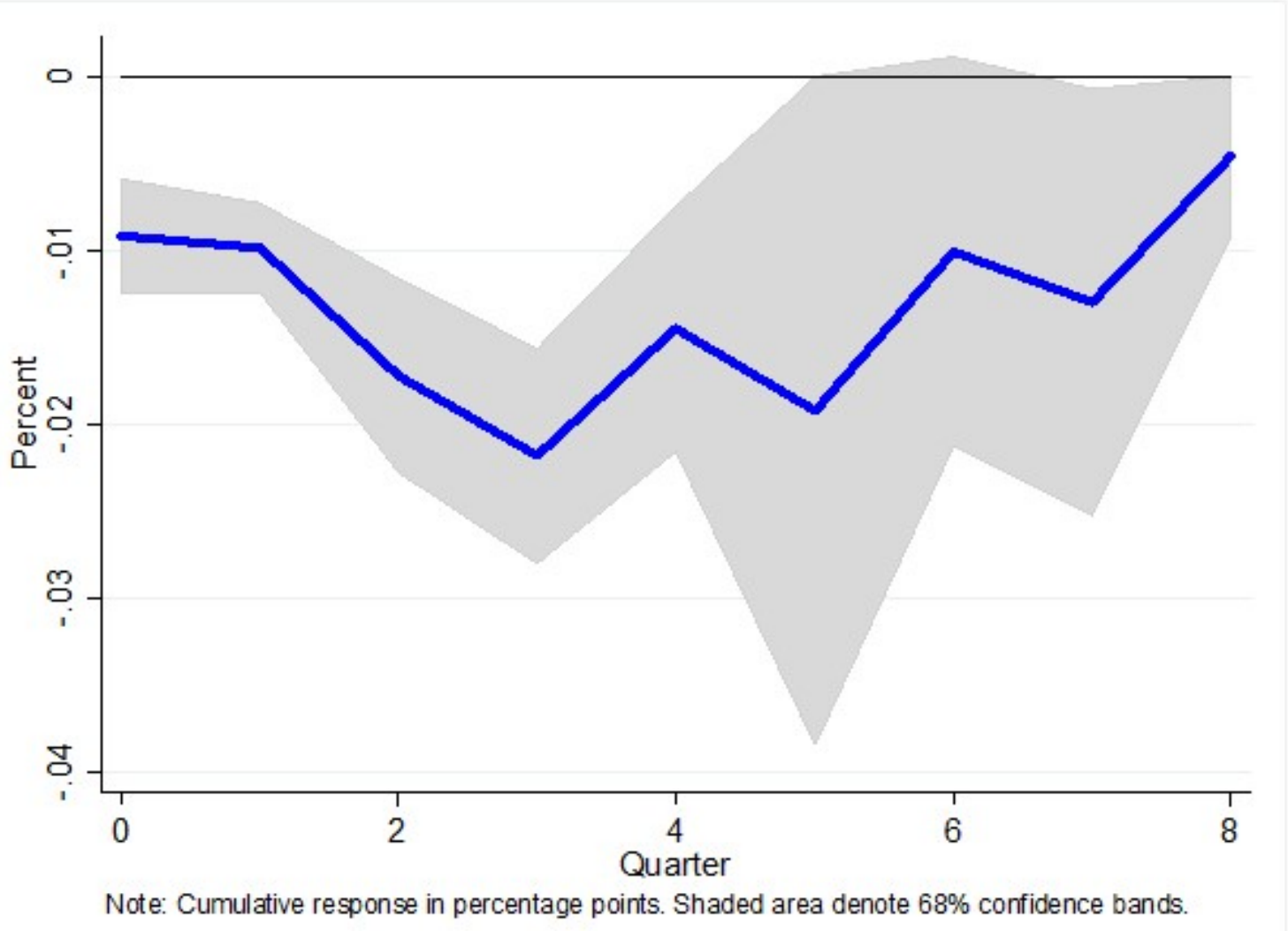
- France: Rapports du Conseil National du Crédit (1953-1984). Statistiques Monétaires Mensuelles of the Bank of France (1985-1995).
- Germany: time-series database of the Bundesbank.
- Italy: Bollettino Economico (Bank of Italy).
- Japan: Flow of Funds Statistics (Bank of Japan database).
- Norway: Statistisk Meddelelser (1950-1960), Statistisk Manedshefte (1961-1997), Bank og- Kredittstatistiskk (1998-2001) and StatBank (2002-2020).
- United States: Fed online database.

Appendix 2#: Public credit institutions

- France: loans by the Instituts Spécialisés du Crédit. Starting in 1984, loans by the Institutions Financières Spécialisées (IFS).
- Germany: loans by Banks with Special, Development and other Central Support tasks, and by the Landesbanks.
- Italy: loans by the Istituti Speciali di Credito.
- Japan: loans by the Government Financial Institutions, and direct loans from the Treasury (Fiscal Loan Fund).
- Norway: loans by State Banks.
- US: direct loans by the Federal Government, by the State and Local Governments, and by Government Sponsored Enterprises (GSE).

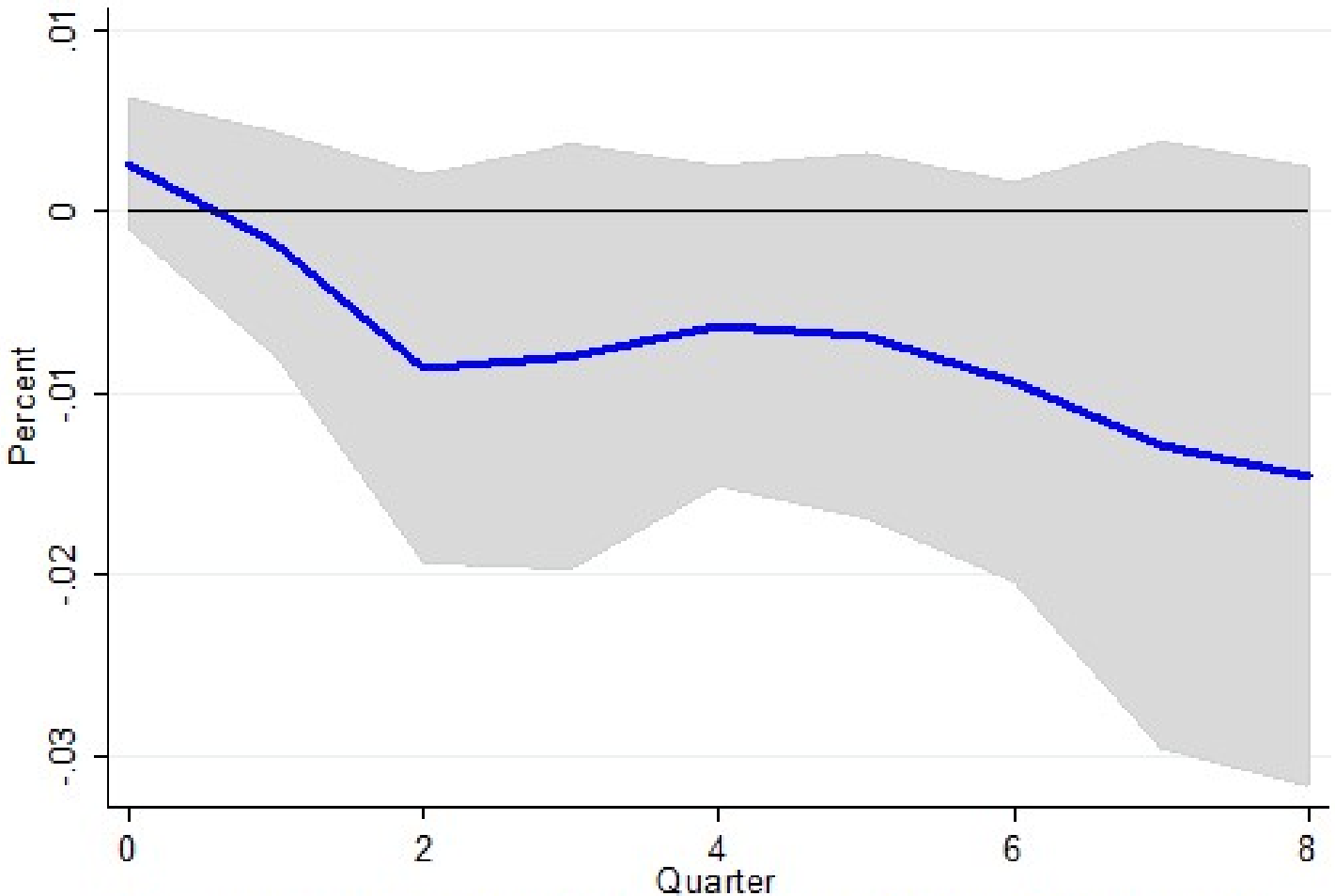
Robustness checks #1

Figure 6: US policy rate → Difference between the growth rate of private and public credit (open pegs)



Robustness checks #2

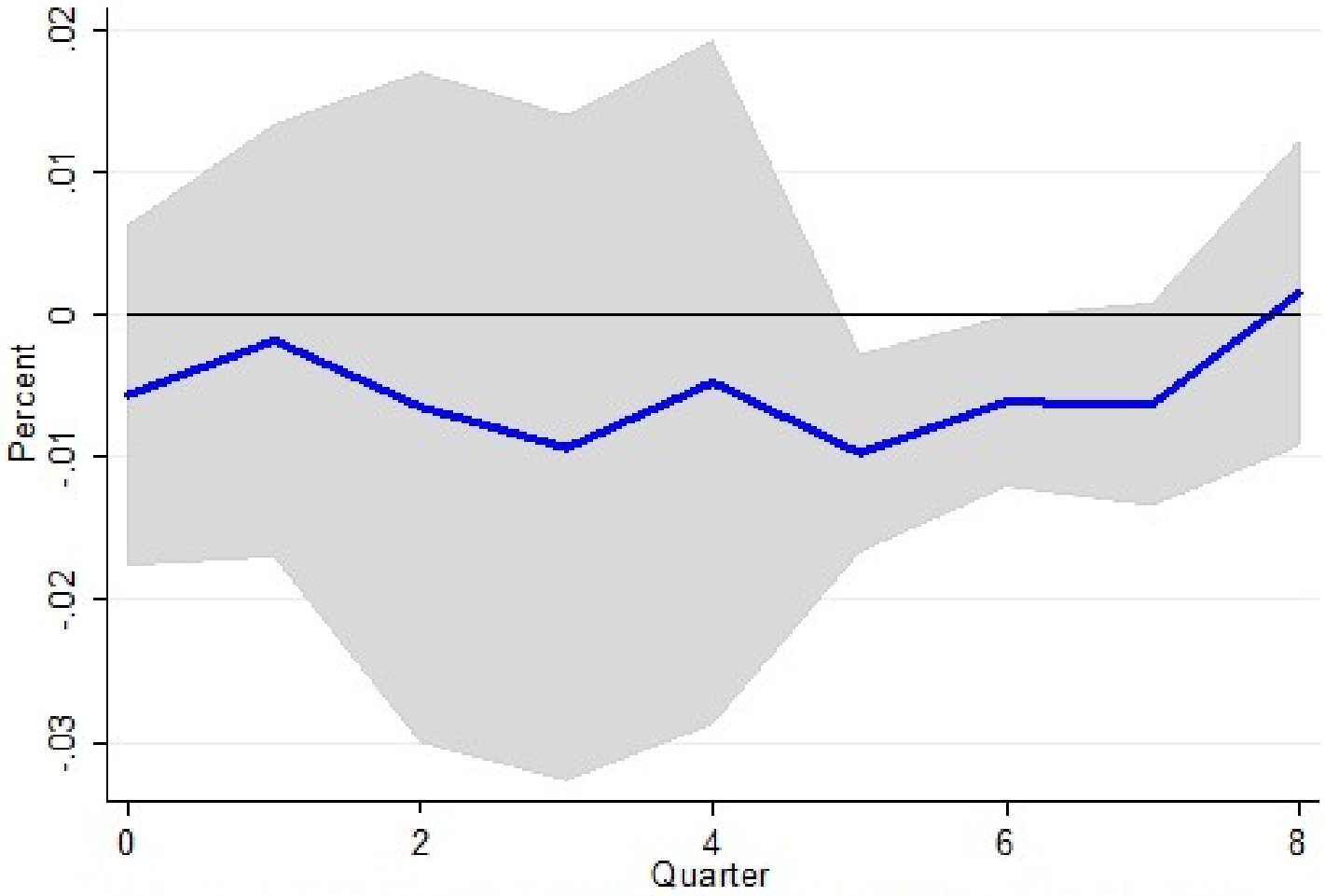
Figure 7: US policy surprises → Difference between the growth rate of private and public credit (pegs with "intermediate" capital mobility)



Note: Cumulative response in percentage points. Shaded area denote 68% confidence bands.

Robustness checks #3

Figure 8: US and German policy rates → Difference between the growth rate of private and public credit (open pegs)



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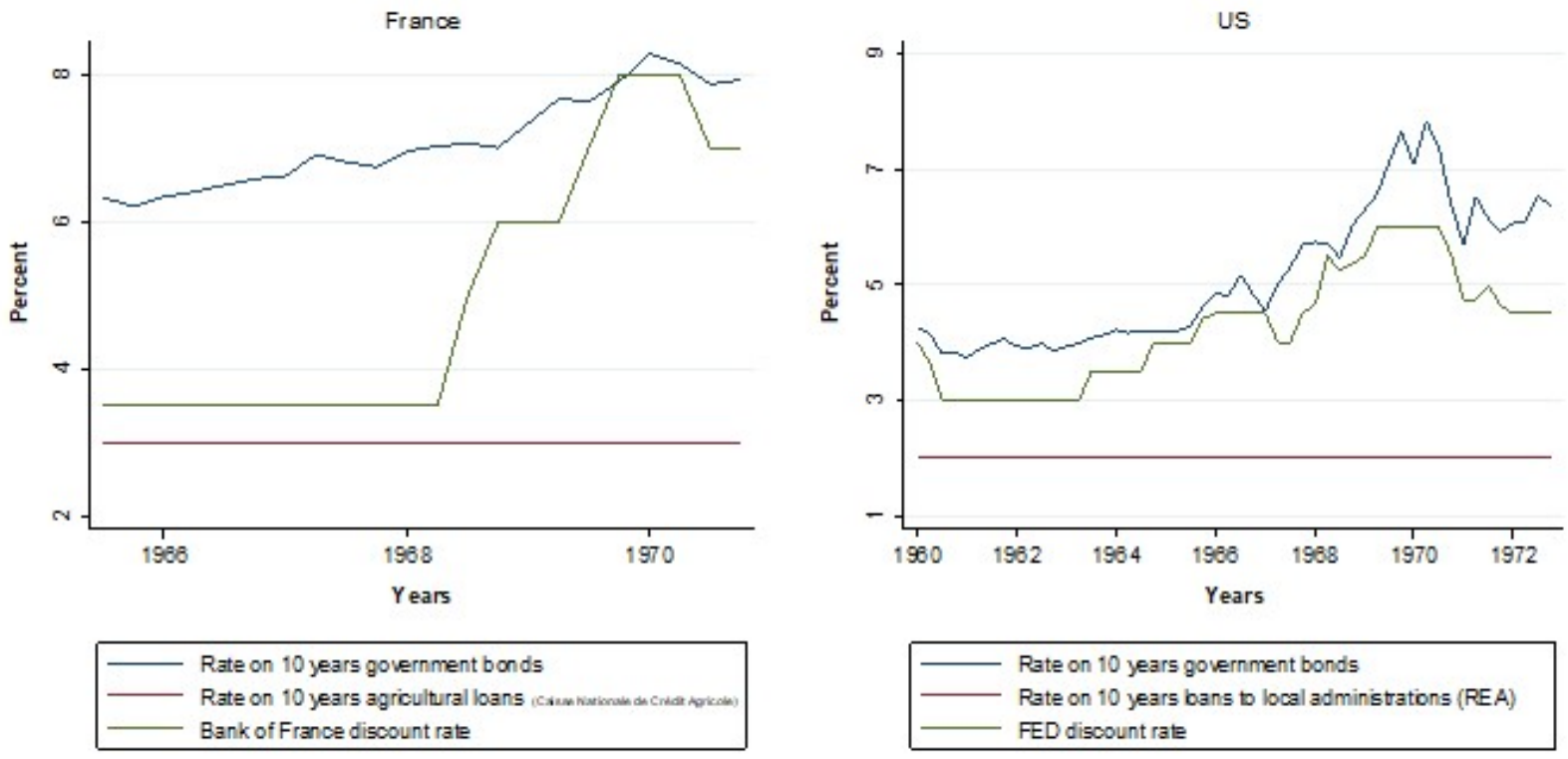
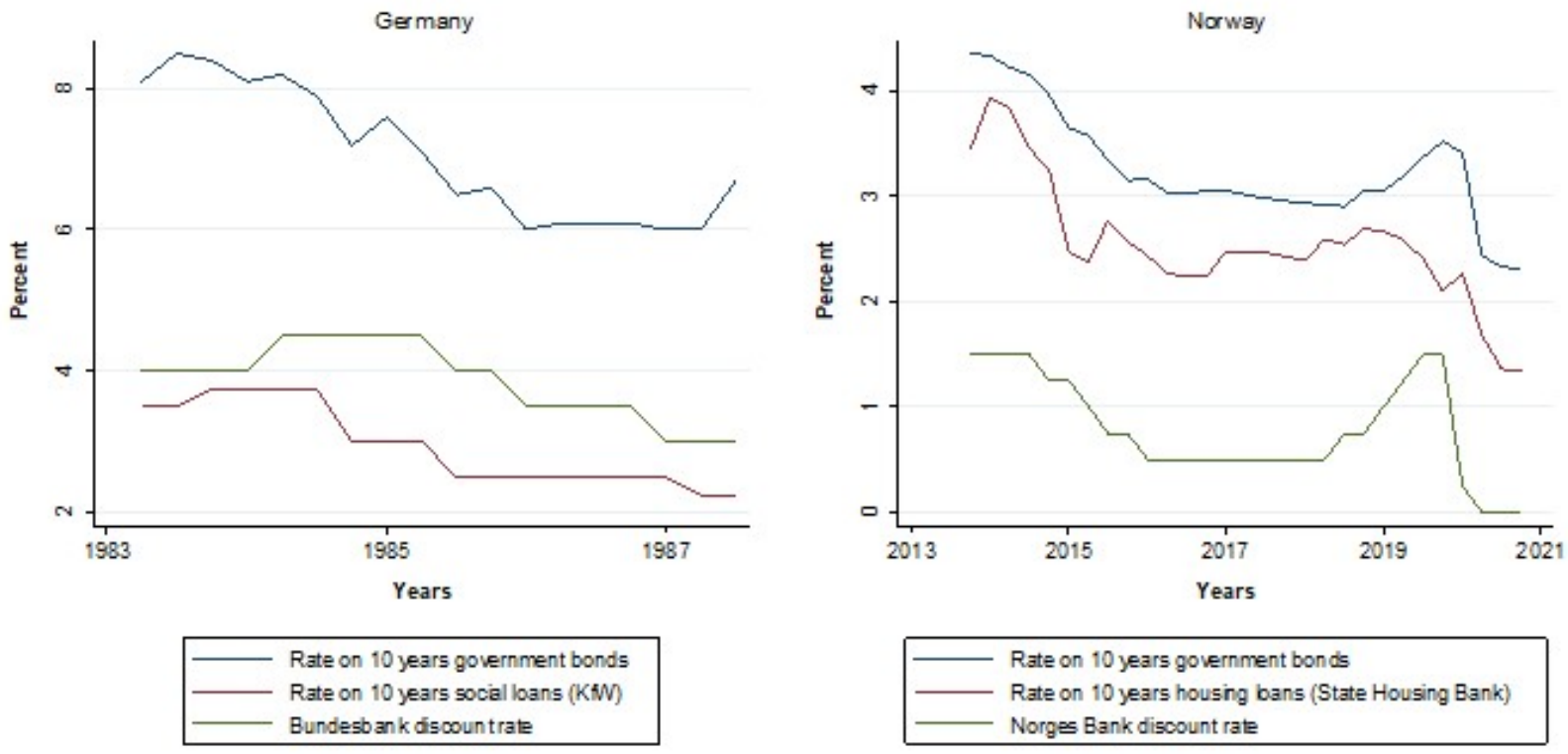
Public credit and the interest rate channel 1#

Figure 9: Full credit market segmentation



Public credit and the interest rate channel 2#

Figure 10: Partial credit market segmentation



The sample of open pegs

Country	**Dates**
France	1959-1967, 1970-1981, 1985-...
Germany	1956-1972
Italy	1963-1975, 1983-...
Japan	1992-...
Norway	1988-...
US	Excluded from the sample (Peg)