

Investing in the Digital Future

The Comparative Political Economy of Digital Investment Policies

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Overview

- Motivation & Puzzle
- Theory & Argument
- Data & Empirical Strategy
- Findings & Discussion

Motivation & Puzzle

An economy "designed by geniuses to be operated by other geniuses"?



New Sources of Growth:
Knowledge-Based Capital

Key Analyses and
Policy Conclusions

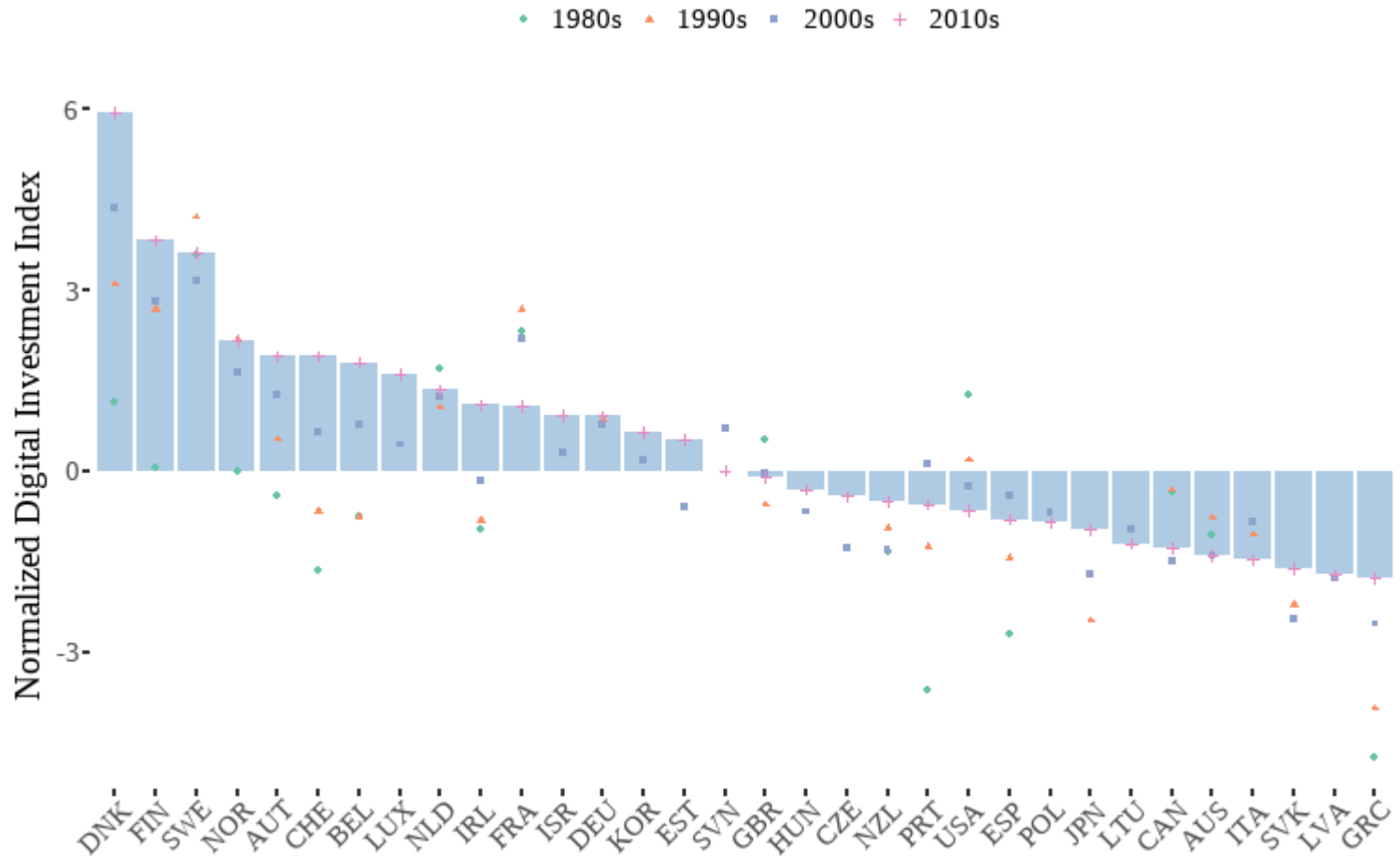
SYNTHESIS REPORT



Market Failures, Government Failures

- Markets underprovide knowledge-based capital because private actors cannot fully monetize its benefits
- But while often called upon, governments also often fail to make these investments as well because of redistributive and intertemporal tradeoffs
 - Redistributive tradeoffs: conflictual (re-)allocation of resources between groups
 - Intertemporal tradeoffs: conflictual (re-)allocation of resources from present to future consumption

Variation in digital investment policies



Theory & Argument

The Existing Literature

- Partisan approaches have mainly emphasized redistributive tradeoffs and focused on the composition of government (e.g. Boix 1997, Busemeyer 2009)
- Structural approaches have taken intertemporal tradeoffs more seriously and focused on exogenous constraints to partisan agency (e.g. Jensen 2011, Gupta et al. 2016)
- Institutional approaches have looked at how institutions supersede or moderate partisan or structural effects (e.g. Garritzmann & Send 2016, Jacques 2020)

The Argument I: Taking Corporatism Seriously

- Central argument: corporatism can mitigate the redistributive and intertemporal tradeoffs inherent in investment policymaking by necessitating and facilitating bargaining and collaboration between winners and losers
 - Corporatist institutions can foster credible commitments, reduce the risk of policy reversals and diffuse the blame for short-run costs (Lindvall 2017, Jacques 2020)
 - Corporatist institutions can promote cooperation among actors, credibly compensate losers, and foster a "sense of common ownership of policy problems" (Hemerijck & Schludi 2001, Ornston 2012, Katzenstein 1985)

The Argument II: Taking Discourse Seriously

- Ideational factors have been neglected so far despite a growing literature arguing that the perception of policy problems matters for how they are responded to
- Novel ways of collecting and analyzing textual data open up new ways of incorporating ideational data

⇒ How do state identities and politico-economic cultures influence the ability and willingness of countries to invest in the digital future?

⇒ Assuming that such ideational factors are reflected in public discourse, we can tap into this information by analyzing the tone and content of newspaper articles on these topics

Data & Empirical Strategy

Mixed-Effects Modeling of Time-Series-Cross-Sectional Data I

- Dependent variable: **Digital Investment Index**
 - Education spending (human capital)
 - R&D spending (innovational capital)
 - ALMP spending (human + innovational capital)
- Independent variables:
 - **Partisan**: composition of government (direct and indirect measures) of government investment priorities
 - **Institutional**: corporatism index based on Jahn 2016, institutional constraints index based on Henisz 2002
 - **Structural**: deindustrialization, deficit, small stateness, trade openness, unemployment, share elderly

Mixed-Effects Modeling of Time-Series-Cross-Sectional Data II

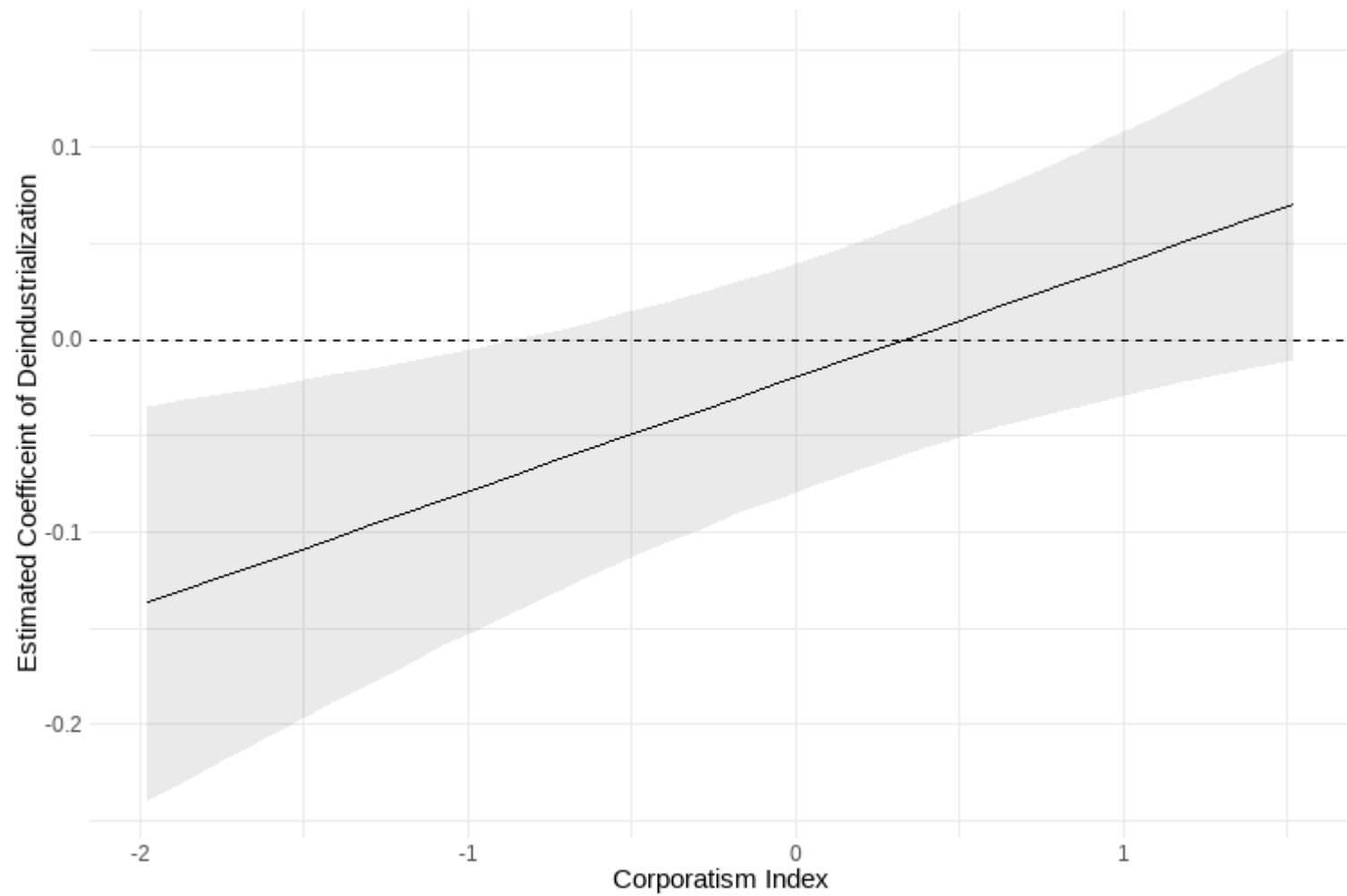
- Two main advantages of mixed-effects models over standard country fixed-effects models:
 - More accurate modeling of the nested structure of the data (Garritzmann & Seng 2019)
 - Allows us to separate within and between effects (Bell & Jones 2015, Bell et al. 2019)
- I estimate the following model:

$$y_{tgc} = \beta_0 + \beta_{1W}(x_{tgc} - \bar{x}_c) + \beta_{2B}\bar{x}_c + \beta_3w_{gc} + \beta_4z_c + \nu_{00c} + \nu_{10c}(x_{tc} - \bar{x}_c) + u_{0gc} + \epsilon_{tgc}$$

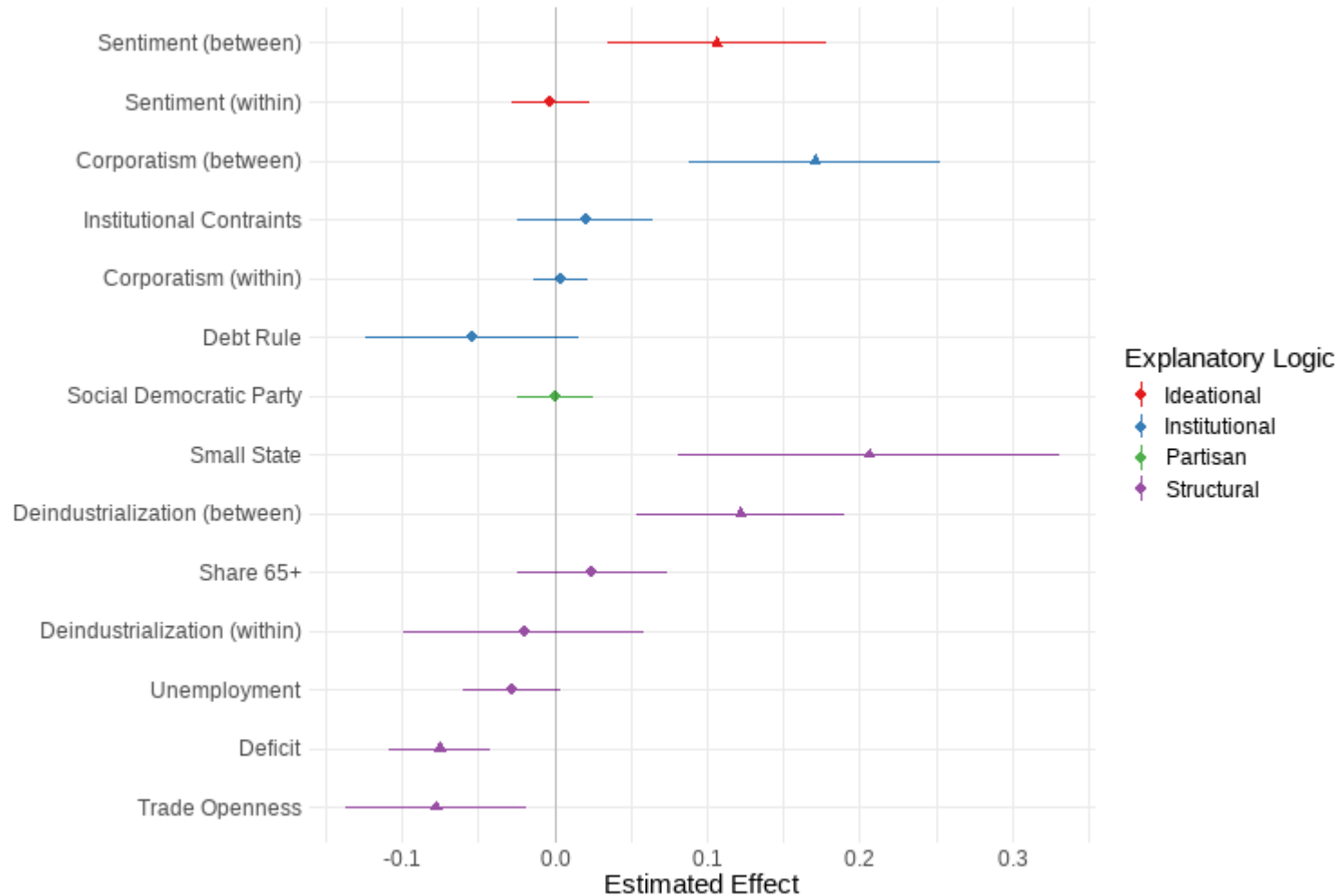
Findings & Discussion

	Model 1	Model 2	Model 3
Social Democratic Party	−0.006 (0.010)	−0.005 (0.010)	−0.003 (0.011)
Corporatism	0.027 (0.020)		
Corporatism (within)		0.002 (0.009)	0.000 (0.010)
Corporatism (between)		0.100 (0.026)***	0.211 (0.057)***
Institutional Constraints	0.006 (0.017)	0.009 (0.017)	0.009 (0.024)
Deindustrialization	0.030 (0.028)		
Deindustrialization (within)		−0.015 (0.029)	−0.020 (0.041)
Deindustrialization (between)		0.070 (0.022)**	0.149 (0.044)***
Sentiment	−0.008 (0.012)		
Sentiment (between)		0.066 (0.024)**	0.130 (0.046)**
Sentiment (within)		−0.009 (0.010)	−0.002 (0.010)
Unemployment	− 0.043 (0.014)**	− 0.036 (0.014)*	− 0.038 (0.017)*
Small State	0.133 (0.055)*	0.135 (0.046)**	0.221 (0.075)**
Debt Rule	− 0.085 (0.031)**	− 0.077 (0.030)**	− 0.094 (0.032)**
Corporatism*Deindustrialization			0.065 (0.024)**
Other Controls	YES	YES	YES
Lagged Dependent Variable	YES	YES	YES
AIC	265.756	267.357	213.315
N (Government)	439	439	439
N (Country)	32	32	32
N (Total)	1157	1157	1157
Variance Government Level	0.000	0.000	0.005
Variance Country Level	0.018	0.010	0.050
Residual Variance	0.062	0.062	0.050
Variance Random Slope			0.012
Covariance Random Slope/Intercept			−0.006

*** $p < 0.001$; ** $p < 0.01$; * $p < 0.05$



Regression Results (Visual)



Topics I: Ascetic State

Bond Spreads/Debt Refinancing



Deficit Reduction



EMU Deficit Rules



Fiscal Deficits



Foreign Debt



Pension Reform



Topics II: Inclusive State

Child Poverty Reduction

schools
poor young
welfare child
poverty families
family school
education people
class society

Construction Projects

building
investments
infrastructure
built
roads
projects
contracts
completed
center

Green Investments

technology
plants
environment
fuel
power
green
electricity
environmental
alternative

Health Care

waiting
healthy
costs
system
services
emergency
insurance
life
claims
heart

Infrastructure

cities
transport
road
water
speed
urban
roads
train
network

Investment Incentives

opportunities
start
businesses
investments
invest
large
small
size
entrepreneurs

Labor Market Policies

competitiveness
employees
model
security
social
employers
flexible
working

Research & Higher Education

schools
innovation
science
education
knowledge
university
students
funding

Unemployment Protection

created
create
employed
unemployed
people
creation
employment
fewer
number

Thanks for listening!