

Discussion
of **“The impact of macroprudential policies
on industrial growth”**
by **Carlos Madeira**
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Takeaways from the paper

- Using industry-level data in an unbalanced panel of 93 countries, the paper assesses the impact of macroprudential policies on industrial growth
- Broadly, this impact is negative, being particularly pronounced in case of industries with a higher dependence on external finance

Takeaways from the paper

- As regards time scale and income level, such effect appears stronger in the long run and for advanced economies
- Macroprudential policies also involve a decline in industrial growth volatility, suggesting a trade-off between higher growth and lower volatility, which is particularly relevant for advanced countries

Merits of the paper

- A novel and well-targeted research question within the literature exploring the effects of macroprudential policy:
 - this is a unique paper investigating meso-level effects of macroprudential policy, which yields the results largely consistent with comprehensive micro-level studies (e.g. Ayyagari et al., 2018) as well as meta-analyses (Araujo et al., 2020)
- Proper data and a multi-faceted methodology:
 - synergy between the iMaPP database and UNIDO industrial statistics;
 - panel regressions (OLS and Blundell-Bond GMM) and quantile regressions with FE

Merits of the paper

- Policy implications for the macroprudential policy conduct:
 - *based on the baseline estimations, i.e. the revealed growth-volatility trade-off;*
 - *based on the quantification of the Basel III measures' effects on growth in advanced, emerging and low-income economies*
- A well-structured paper with properly presented and discussed findings

Some points to think over

- **The RZ EFD index is a widespread measure of external financial dependence, but can it be extrapolated to many other countries, like in your sample?**
 - It would be worth at least mentioning the limitations of the RZ index and corresponding critical literature, e.g. von Furstenberg and von Kalckreuth (2006, 2007), Eppinger and Neugebauer (2021)
 - For some countries, adjustments seem feasible, e.g. based on survey data such as the EFIGE dataset for 7 European countries (Bruegel-UniCredit project “European firms in a global economy”, Altomonte and Aquilante, 2012) or adjusted RZ index for Brazil (Bouattour, 2020)

Some points to think over

Borrowed from Eppinger and Neugebauer (2021)

Table 1: Correlations of EFD rankings across countries

	AUT	DEU	ESP	FRA	GBR	HUN	ITA
U.S. (Compustat)	-0.2707	-0.0200	0.0889	-0.1680	-0.2087	-0.0652	0.1104
AUT (EFIGE)		-0.0767	0.5609**	0.2887	-0.3699	-0.3263	-0.5414**
DEU (EFIGE)			0.2739	0.4279**	-0.1174	0.2925	0.3600*
ESP (EFIGE)				0.5178**	-0.1196	0.2105	-0.1937
FRA (EFIGE)					0.0761	-0.0446	0.0247
GBR (EFIGE)						0.2826	0.3391
HUN (EFIGE)							0.3982*

The table shows Spearman rank correlation coefficients for pairwise comparisons between the rankings of EFD across countries listed in Table A.1. The EFD index for U.S. firms is computed from Compustat for 1990-2005, following RZ. The remaining measures are based on average values of reported EFD by industry and country from the EFIGE survey. Correlation coefficients exceeding 0.3 are marked in bold. Asterisks indicate significance levels based on a two-sided t-test: * $p < 0.10$, ** $p < 0.05$.

Some points to think over

- **Why not use alternative/additional controls?**
 - No variable gauging the quality of institutions (e.g. Economic Freedom Index): is it assumed to be captured through the FE? Then, why doesn't the same logic apply to inflation?
 - Industrial growth may depend not only on financial depth as such (proxied in the paper by the ratio of domestic credit to private sector relative to GDP), but also on financial structure, since the sample covers bank- and market-based countries. Thus, it may also be worth considering the ratio of total credit to the sum of total credit plus equity and bond market capitalisation (Gambacorta et al., 2014)

Some points to think over

- **Macroprudential policy measures in the paper are grouped into 3 broad categories: loan-targeted, supply-targeted and institutional. Why dividing just into borrower- and financial institution-targeted is not used?**
 - In the paper, LTV and DSTI ratios which are directly felt by borrowers belong in the same category as, for example, loan-to-deposit ratios which are imposed on banks as a liquidity regulation measure and are not directly perceived by borrowers

Some points to think over

- **It would make sense to indicate certain limitations of the study and, hence, avenues for future research, which arise from them**
 - For example, the paper does not take into account input-output (I-O) linkages among industries, which may affect the estimated effects of macroprudential policies. See, e.g. Lo Turco et al. (2019) who study the finance-growth nexus, using RZ EFD indices and OECD I-O database for downstream and upstream industries