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Comments on Bi & Zubairy: “Public pension reforms and fiscal foresight: narrative evidence and aggregate implications”

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Overall assessment

- Interesting paper
- Reads well
- Major contributions:
 - New dataset on pension reforms in tradition of narrative shock identification: previously applied to monetary and fiscal policy, now also to pension reform.
 - Investigation of effect on pension reform on macro variables, in particular labour market participation of marginal groups and pension spending
 - Role of distinction between immediate and delayed implementation
- Results: clear and robust differences between immediate and delayed implementation, which adds to credibility of identification

Data collection – summary

- OECD Economic Surveys
- Covering 10 OECD countries over the period 1962 – 2017
- Changes in pension policy – 4 dimensions:
 - Policy tools: benefit size, coverage, indexation, retirement age
 - Type: increased or decreased generosity
 - Motivation: cyclical, purchasing, structural
 - Implementation: immediate versus delayed

Comments – data

- Comparison with other datasets and panel studies:
 - Leibrecht and Fong (2017):
 - Intro of 2nd-pillar DC schemes in sample of 100 countries over period 1980-2012
 - Political, economic and social determinants of retirement income privatization
 - Verbic and Spruk (2019):
 - Reforms in 36 countries: year of intro first old-age & disability law, year/number of subsequent old-age legislation, year/number of occupational pension legislation, year/number of supplementary pension legislation
 - Relate political indicators to the transition from unfunded to funded pensions
- Beetsma et al. (2019):
 - OECD countries 1970 – 2019, different sources: NATLEX (ILO), ISSA, OECD, LABREF (EC), ad hoc sources.
 - Expansionary versus contractionary, “many” versus “not many”



Comments – data

- Reform intensity is measured by the number of measures
 - Impact on public budget difficult to estimate
 - Effects at individual level difficult to quantify
- Are we sure that all reforms are covered by the OECD publications?

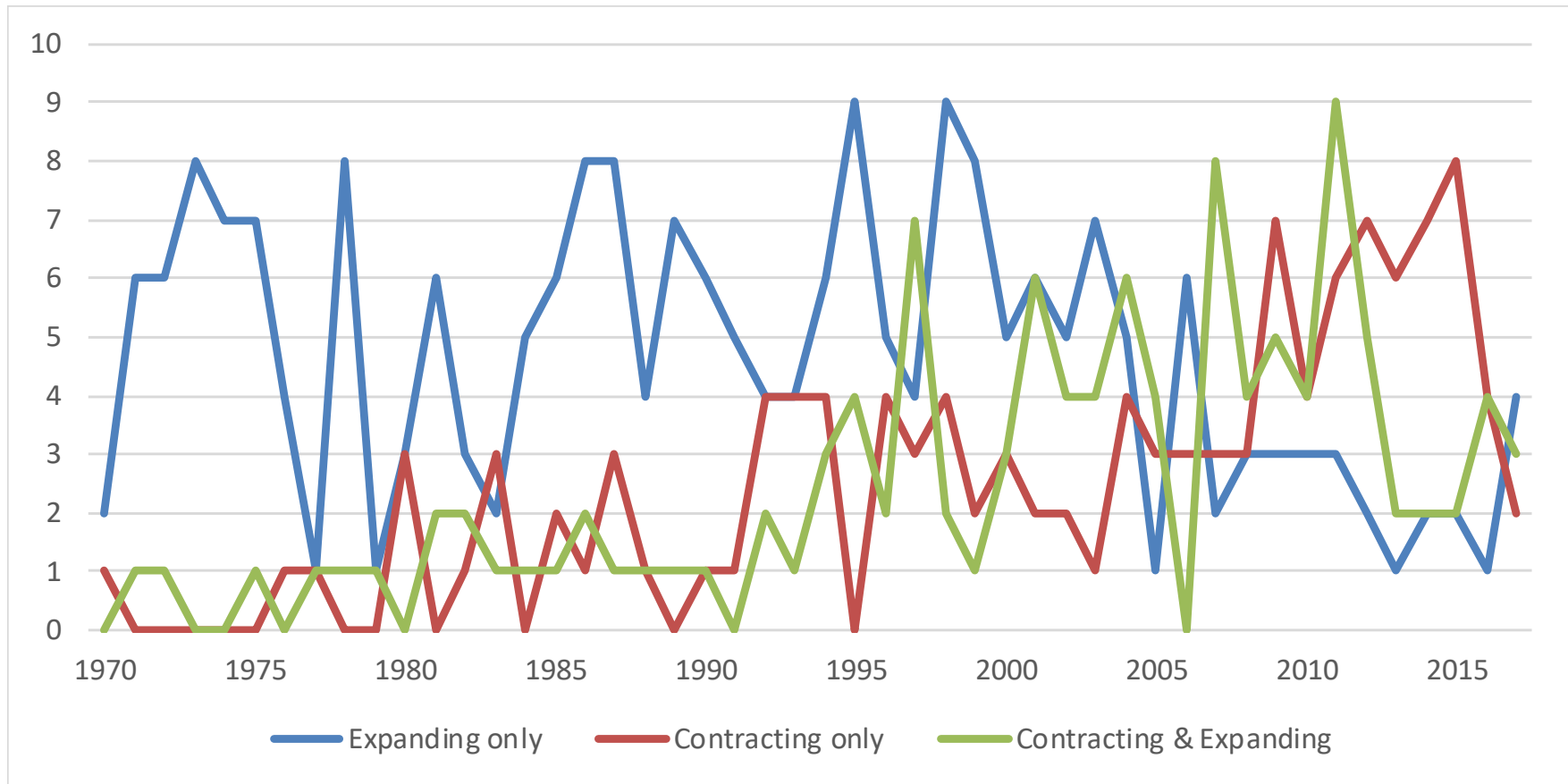
Comments -- data

- What is criterion for distinction between major and marginal reform?
- Immediate versus delayed implementation:
 - How do you deal with implementation that takes place in steps, e.g. gradual increase in retirement age?
 - some reforms take immediate effect (e.g. increase in retirement age), but make exceptions for certain groups – how does classification deal with this category?

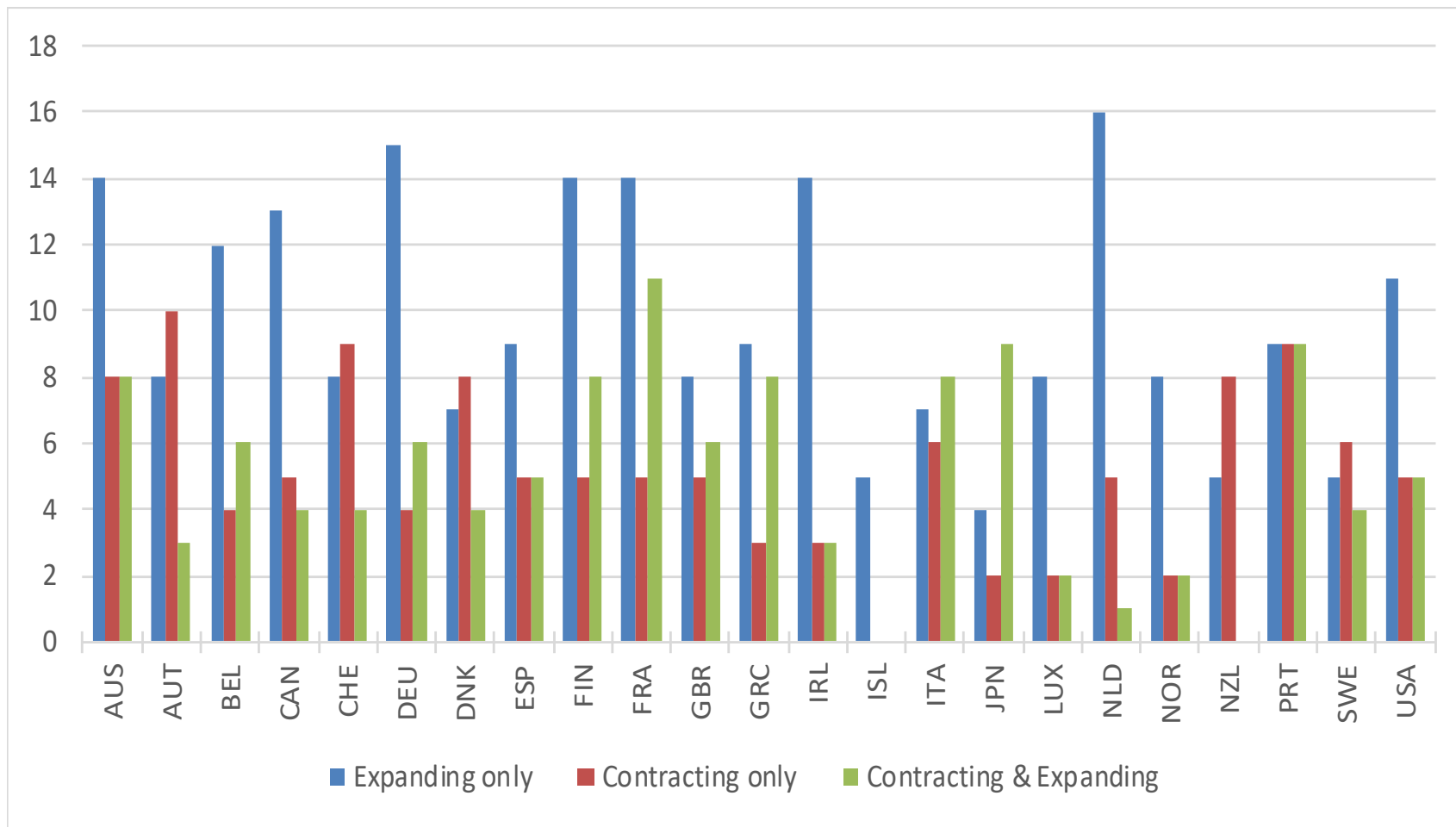
Comments -- data

- Motivation and timing of reforms:
 - No predictive power of macro variable on reform (Table 1)
 - Is consistent with reform based on structural motivation
 - Robustness: regress on lag of macro variable (implementation lag)
 - Do Granger causality test on *projection* of old-age dependency ratio or *projected increase* in old-age dependency ratio: based on “structural motivation”, should we not expect an effect?
 - Beetsma et al. find a strong link between business cycle and reform: idea is that projection of old-age dependency ratio is driving trend in reform, but cyclical state of economy drives precise timing – how does current identification deal with these?

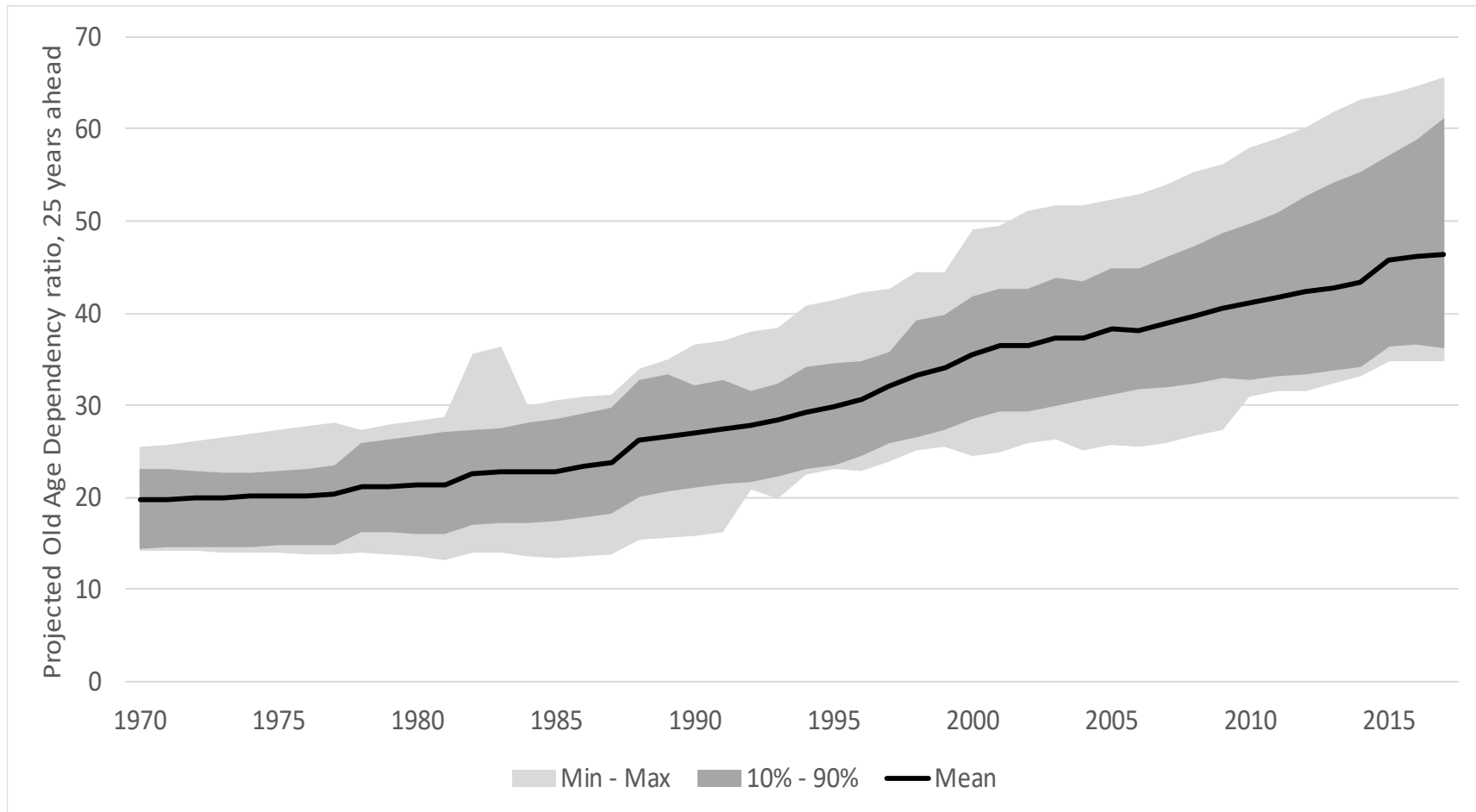
Frequencies of reform regimes in each year



Frequencies of the different reform regimes in each country



Twenty-five year ahead forecast of old-age dependency ratio



Regression:

- Logistic specification:

$$p_{it,r} = \frac{\exp(z_{it,r})}{1 + \exp(z_{it,r})}$$

$$z_{it,r} = \alpha_{0i,r} + \alpha_r' \text{BASEVAR}_{it} + \delta_r' \text{ADD}_{it}$$

$$\text{BASEVAR}_{it} =$$

$$(\overline{\text{OAD25}}_t, \text{OADDEV25}_{it}, \Delta \text{OAD25}_{it}, \text{GROWTH}_{it}, \text{DEF}_{it}, \text{UNEMPL}_{it}, \text{MAASTRICHT}_{it})'$$

Logit estimations for the baseline regressions

Independent variables	(1)	(2)	(3)	(4)	(5)	(6)
	Expanding only		Contracting only		Contracting and Expanding	
	Coeff.	Marg. eff.	Coeff.	Marg. eff.	Coeff.	Marg. eff.
$\overline{OAD25}_t$	-6.49 ^{***} (1.65)	-1.02 ^{***} (0.26)	4.77 ^{***} (1.72)	0.42 ^{***} (0.15)	4.66 ^{***} (1.75)	0.43 ^{***} (0.16)
$OADDEV25_{it}$	2.04 (2.95)	0.32 (0.46)	0.091 (3.54)	0.0080 (0.31)	-0.68 (3.17)	-0.063 (0.30)
$\Delta OAD25_{it}$	-2.51 (6.93)	-0.39 (1.09)	5.11 (7.86)	0.45 (0.69)	8.08 (8.35)	0.75 (0.78)
$GROWTH_{it}$	15.7 ^{***} (4.38)	2.47 ^{***} (0.67)	-13.5 ^{***} (4.78)	-1.19 ^{***} (0.42)	-3.91 (4.63)	-0.37 (0.43)
$70s \times GROWTH_{it}$	-3.68 (5.94)	-0.48 (0.79)				
DEF_{it}	-2.12 (3.08)	-0.33 (0.48)	1.86 (3.82)	0.16 (0.34)	8.79 ^{**} (3.64)	0.82 ^{**} (0.34)
$UNEMPL_{it}$	-4.38 (3.73)	-0.69 (0.59)	17.3 ^{***} (4.98)	1.52 ^{***} (0.44)	1.06 (4.16)	0.099 (0.39)
$MAASTRICHT_{it}$	0.84 ^{***} (0.28)	0.13 ^{***} (0.044)	0.91 ^{**} (0.44)	0.080 ^{**} (0.039)	0.91 ^{**} (0.41)	0.085 ^{**} (0.038)
N	1081	1081	1034	1034	987	987
McFadden R2	0.076		0.17		0.13	

Comments -- empirics

- Empirics focuses on retrenchments, but one can do more with the data
- Why not also study expansions – is this because these are endogenous to the macro-economy?
- Would be interesting to have panel VAR with major macro-variables, projected old-age dependency ratio and pension reform.
- Are responses to expansions asymmetric compared to retrenchments?
- Are macroeconomic effects plausible, i.e. are the effects of reforms large enough to have an effect on macroeconomic aggregates like consumption and GDP?
 - Effects of reform on disposable incomes are likely rather small
 - Would it somehow be possible to get information on consumption by age group and see whether most immediately affected groups reacts most strongly?

Comments

- Pension reform may come as part of a broader package: control for fiscal consolidation
- Paper would benefit from some theoretical framework (if only laid out in words): e.g., different forms of retrenchment would have different effects on private savings:
 - Reduced benefits would raise private savings
 - Rise in retirement age lowers savings, as period in retirement will be shorter.
 - Can you split retrenchment according to type?
- Paper mentions credibility of reforms:
 - We would not expect non-credible reforms to elicit a behavioural response.
 - How to measure credibility?
 - Ideally, distinguish between credible and non-credible reforms, or weighs observations with credibility

Policy implications

- Paper says little about the policy implications of the results
- One might conclude that retrenchment should be implemented immediately their adoption, to avoid adverse behavioural responses leading to deterioration of the public budget.
- This conclusion is too easy:
 - The implementation lag may be dictated by political feasibility: immediate implementation means that marginal group loses “rights” and resists
 - Discounting and myopia makes future implementation easier
 - Individuals need to have time to prepare
 - Some implementations can only be done gradually, such as increasing retirement age when linked to life expectancy
 - It would be good to determine overall intertemporal budgetary impact of delayed implementation, i.e. short-run increase in costs versus long-run reduction in costs



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Thank you for your attention!