## The Impact of Brexit on UK Firms

Bloom, Bunn, Chen, Mizen, Smietanka & Thwaites

Discussion by Thomas Drechsel (University of Maryland)

# CONFERENCE ON MACROECONOMIC IMPLICATIONS OF TRADE POLICIES AND TRADE SHOCKS

University of California Berkeley

13 February 2020

#### PLAN FOR THIS DISCUSSION

- General perspective on economic impact of Brexit vote
  - Draw on some insights from my own research
- Use this as point of departure for my comments on the paper
  - 1. Effect of the exchange rate depreciation
  - 2. Capital vs. labor
  - 3. Brexit preparation and productivity

### HOW DO ECONOMISTS THINK ABOUT BREXIT?

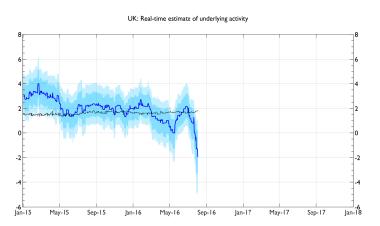
- Useful to broadly separate by frequency:
  - ► Short-run adjustments to Brexit news/uncertainty
  - Long-run effects, new 'steady state'

## WHAT HAVE WE LEARNED?

- Plenty of work on long-run consequences:
  - ► Typically static trade models with steady-state comparisons
  - ▶ It remains to be seen how long-run consequences play out
- In my view, initially rather poor track record in assessing short-run effects
  - ► Subsequent efforts to investigate short-run adjustments in more detail has given us a much better understanding
- ► I see the paper as a strong contribution to a better understanding of the economic adjustment to the referendum

#### THE SHORT RUN

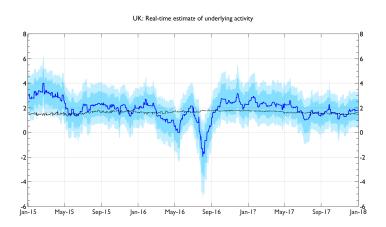
#### REAL-TIME ESTIMATE OF UK ACTIVITY AS OF AUGUST 2016



 Using nowcasting methodology of Antolin-Diaz, Drechsel, and Petrella (2017)

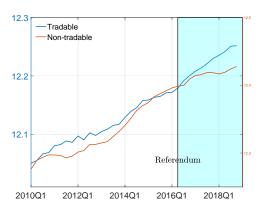
#### THE SHORT RUN

#### REAL-TIME ESTIMATE OF UK ACTIVITY THROUGH TO JAN 2018

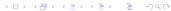


▶ Strong labor market data led nowcasts to bounce back

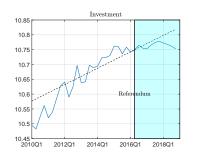
## SO WHAT HAPPENED? (1/2)

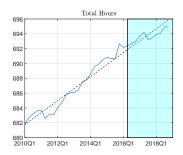


- "Sweet spot" in tradable sector, following a sharp sterling depreciation
- See detailed discussion in Broadbent, Di Pace, Drechsel, Harrison, and Tenreyro (2019)



## SO WHAT HAPPENED? (2/2)





- ► Flattening investment, but robust labor market
- ► See detailed discussion in Broadbent, Di Pace, Drechsel, Harrison, and Tenreyro (2019)

#### UNDERSTANDING THE ADJUSTMENTS

- ▶ In Broadbent et al. (2019), we show that the macroeconomic adjustments can be interpreted through the lens of a simple two-sector small open economy model
  - News about a future slowdown in productivity growth in the tradable sector
- This paper: provides extremely valuable microeconomic evidence of the adjustment to Brexit news/uncertainty!
  - ► The current results in the paper are highly insightful
- Overall theme of my comments: can the data be used to inform us more directly about the adjustment mechanism?

#### COMMENT 1: EXCHANGE RATE DEPRECIATION

- ► GBP fell by 20% vis-a-vis the USD in the six months following the referendum
  - As argued above, macro data indicates that this helped with a soft landing of UK activity in the short run
- I would be keen to know whether we can understand the degree to which the depreciation has alleviated the negative impact of Brexit uncertainty
  - ► Could be additional subsection + set of results in the paper

#### COMMENT 1: EXCHANGE RATE DEPRECIATION

- Authors generally use interaction of firm-level uncertainty with post-referendum year dummies (as well as time fixed effects), so any exchange rate variation is fully absorbed
- Could add the following triple interaction:

$$U_i \times Post_t \times s_i$$

where  $s_i$  is firm i's share of exports going to non-EU

► Idea is that Brexit uncertainty depreciates GBP against non-EU currencies more than against EU currencies (EUR)

#### COMMENT 1: EXCHANGE RATE DEPRECIATION

- ▶ I am not 100% sure whether  $s_i$  can be constructed from survey + FAME (also: it would not allow using the EU-sales share as an IV, but could use alternative instruments)
- If feasible, it is an intriguing interaction to include:
  - On LHS: investment, employment, TFP, etc.
  - Expect negative sign on the triple interaction
  - Would allow you to quantify the degree to which tradable "sweet spot" has muted the negative effects of uncertainty
  - Could compute counterfactual: how much larger would the effects be in the absence of the sterling depreciation?

## COMMENT 2: CAPITAL VS. LABOR

- Paper finds that Brexit uncertainty generates meaningful decline in investment but essentially no effect on employment
- ► At the same time, 'share of EU migrants in workforce' strongly associated with firm-level Brexit uncertainty in the first place
- Highly intriguing finding!
  - Also consistent with macro patters I showed above
- Currently almost no discussion of this in the paper
  - ► Can this result be opened up further?

#### COMMENT 2: CAPITAL VS. LABOR

First of all, some small concerns:

Dependent variable: All equations estimated 2011-2018	Investment growth			Employment growth		
	(1) OLS	(2) OLS	(3) IV	(4) OLS	(5) OLS	(6) IV
(0.896)		(2.937)	(0.207)		(0.678)	
Brexit exposure*2016 dummy		-2.993**			-0.166	
		(1.356)			(0.292)	
Brexit exposure*2017 dummy		-2.081*			-0.296	
		(1.194)			(0.267)	
Brexit exposure*2018 dummy		-3.215**			-0.226	
		(1.272)			(0.244)	
Time fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Firm fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Observations	21,537	21,537	21,537	35,499	35,499	35,499

- Looks like for investment lots of observations drop out
- My suspicion: as investment is lumpy and you compute growth rates, a lot of firms with zero initial investment that drop out
- ▶ It would be good to ensure we are looking at the same firms
- ► Even for the same firms, should also bear in mind that you are comparing growth rates of a flow vs. a stock variable

#### COMMENT 2: CAPITAL VS. LABOR

- Absent issues above, can you investigate further what drives investment and employment adjustments to Brexit vote?
  - ▶ Must be affected by input substitutability, irreversibility, ...
- ► Specifically, I would love to see regressions *without* firm-fixed effects, which would reveal the variation in the cross section
- When removing the fixed effects, you could again add triple interactions with relevant characteristics:
  - Size, capital intensity, industry dummies for industries with high/low substitutability, ...

### COMMENT 3: BREXIT PREP

- ▶ In principle, Brexit preparation could be pure resource cost, but also benefit other firms that sell 'preparation services'
- ► The latter interpretation could even imply that Brexit preparation leads to a booming economy
- ▶ The paper's results point to the former interpretation:
  - Firms (CFOs) spend significant work hours on preparing
  - Preparation is associated with lower firm-level TFP

#### COMMENT 3: BREXIT PREP

- Again, it should be possible to dig deeper:
  - ▶ Very speculative thought: is the Brexit preparation associated with the absence of the employment reduction?
  - lacktriangle Could interact  $U_i$  with CFO hours spent on preparation, in a regression with employment on LHS, without firm fixed effects
- ► In terms of framing, the paper could stress explicitly that the survey evidence contradicts a more benign view of preparation in the short run
  - ► See for example paper by Alessandria and Mix (2019)

#### BOTTOM LINE

- Very insightful paper: allows us to understand in detail how firms respond to Brexit uncertainty
- ► The suggestions above could help to further tease out the precise adjustment mechanisms that underlie UK macroeconomic dynamics since the June 2016 referendum

## A QUOTE TO TAKE TO LUNCH

"In economics, things take longer to happen than you think they will, and then they happen faster than you thought they could."

Rudi Dornbusch

#### **BIBLIOGRAPHY**

- ALESSANDRIA, G. AND C. MIX (2019): "Trade Policy is Real News: A quantitative analysis of past, current, and future changes in U.S. trade barriers," 2019 Meeting Papers 545, Society for Economic Dynamics.
- Antolin-Diaz, J., T. Drechsel, and I. Petrella (2017): "Tracking the Slowdown in Long-Run GDP Growth," *The Review of Economics and Statistics*, 99, 343–356.
- Broadbent, B., F. Di Pace, T. Drechsel, R. Harrison, and S. Tenreyro (2019): "The Brexit vote, productivity growth and macroeconomic adjustments in the United Kingdom," .