

DISCUSSION OF “WHAT EXPLAINS UNEMPLOYMENT” BY MIAN AND SUFI

Discussion by Bob Hall

NBER EF&G Meeting
14 July 2012 Sonesta Ballroom A

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THE BASIC IDEA

Measure local financial demand shocks from the relation between household leverage in 2007 and subsequent declines in employment in non-tradable production

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Notwithstanding the title, no attempt to translate employment effects into unemployment effects

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THE FACTOR MODEL

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DEMAND SHOCKS

$$\delta_c = \kappa + \phi X_c + \epsilon_c$$

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THE MODEL WITH OBSERVABLES

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REGRESS NON-TRADABLES EMPLOYMENT DROP ON LEVERAGE

$$Y_c^{NT} = \gamma_{NT} + \beta\alpha\kappa + \beta\alpha\phi X_c + \nu_{NT,c}$$

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COUNTERFACTUAL

No net local financial demand shocks:

$$\bar{\delta} = 0$$

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To alter the specification to correspond to the counterfactual, we need to know κ

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IDENTIFYING κ

Assume that the smallest financial demand reduction is zero:

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Assume that the smallest financial demand reduction is zero:

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so

$$\kappa = -\phi X_1$$

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NON-TRADABLES

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Effect of financial demand shock on non-tradables is

$$\hat{Y}_c^{NT} = \beta\alpha\phi(X_c - X_1)$$

where $\beta\alpha\phi$ is the estimated compound coefficient in the earlier regression of non-tradable employment reductions on leverage across counties

TOTAL EMPLOYMENT REDUCTION FROM FINANCIAL DEMAND SHOCKS

$$\hat{Y} = \beta\phi(\bar{X} - X_1)$$

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$$\hat{Y} = \beta\phi(\bar{X} - X_1)$$
$$= \frac{1}{\alpha} \text{average of } \hat{Y}_c^{NT} \text{ over } c$$

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THE KEY ASSUMPTION

is that the coefficient β in

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The evidence suggests that the local multiplier may be somewhat higher than the national multiplier...

RECENT EVIDENCE ON LOCAL MULTIPLIERS

- ▶ Valerie A. Ramey, “Can Government Purchases Stimulate the Economy? *JEL*, 2011
- ▶ Daniel Shoag, “The Impact of Government Spending Shocks: Evidence on the Multiplier from State Pension Plan Returns”
- ▶ Emi Nakamura and Jón Steinsson, “Fiscal Stimulus in a Monetary Union: Evidence from U.S. Regions”
- ▶ Jeffrey Clemens and Stephen Miran, “Fiscal Policy Multipliers on Sub-National Government Spending”
- ▶ Sylvain Leduc and Daniel Wilson, “Roads to Prosperity or Bridges to Nowhere? Theory and Evidence on the Impact of Public Infrastructure Investment” *Macro Annual* 2012

RESULTS BY SECTOR

<i>Concept</i>	<i>Source</i>	<i>Non-tradables</i>	<i>Tradables</i>	<i>Construction</i>	<i>Services</i>	<i>Total</i>
Fraction of total employment	Table 2	0.196	0.107	0.112	0.585	1
Employment, 2007	Calculated	23,964	13,082	13,694	71,525	122,265
Decline in employment	From authors	858	1410	1993	1794	6055
Decline in employment attributable to local financial demand shocks	Calculated	769	420	439	2,295	3,923
Decline in employment from national shock and structural shifts	Calculated	89	990	1,554	-501	2,132

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COMPARED TO WHAT?

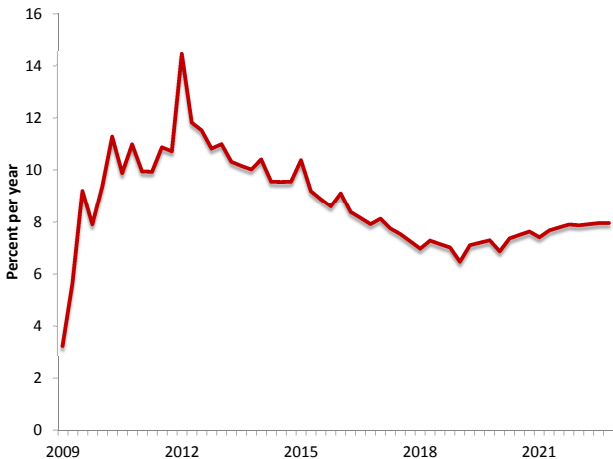
The more natural comparison of the estimated financial demand effects is to the shortfall of employment by trend, not to the absolute decline in employment

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FINANCIAL DEMAND EFFECTS RELATIVE TO TOTAL EMPLOYMENT SHORTFALLS

<i>Concept</i>	<i>Non-tradables</i>	<i>Tradables</i>	<i>Construction</i>	<i>Services</i>	<i>Total</i>
Decline in employment	858	1,410	1,993	1,794	6,055
Decline in employment attributable to local financial demand shocks	769	420	439	2,295	3,923
Ratio	0.90	0.30	0.22	1.28	0.65
Two-year trend rate, 1990-2007	0.029	-0.027	0.045	0.043	0.028
Total shortfall in employment relative to trend	1,544	1,054	2,608	4,850	9,495
Ratio of financial demand effect to total shortfall	0.50	0.40	0.17	0.47	0.41

“QUANTIFYING THE FORCES LEADING TO THE COLLAPSE OF GDP AFTER THE FINANCIAL CRISIS”—FINANCIAL FRICTION



EFFECTS

