Dual Labor Markets and Career Mobility

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ESEM 2022 Milan
VERY PRELIMINARY

Motivation

Contribute to the investigation of the notion that duality of labor markets

- does not only distort match formation with firms, human capital accumulation
- but also the career matches of workers...
- ... which also affect macroeconomic outcomes

Literature

Many papers, among them:

- Mortensen and Pissarides (1999), Cahuc and Postel-Vinay (2002), Garibaldi and Violante (2005), Pries and Rogerson (2005),...
- Güell and Petrongolo (2007), Bentolila et al. (2012), Cahuc et al. (2016), Boeri and Garibaldi (2019), Dolado et al. (2021),...
- Hospido et al. (2022), Cabrales et al. (2017), Garcio-Cabo (2018),...
- Zweimüller et al. (2017), Boeri et al. (2015), Jahn et al (2012),...

Here, model-wise, building on Neal (1999) model of career matches (and excess mobility across occupations) and Carrillo-Tudela and Visschers (2022)

Outline

1. some data
2. sketch of model
3. numerical illustration
4. welfare: some discussion

DATA

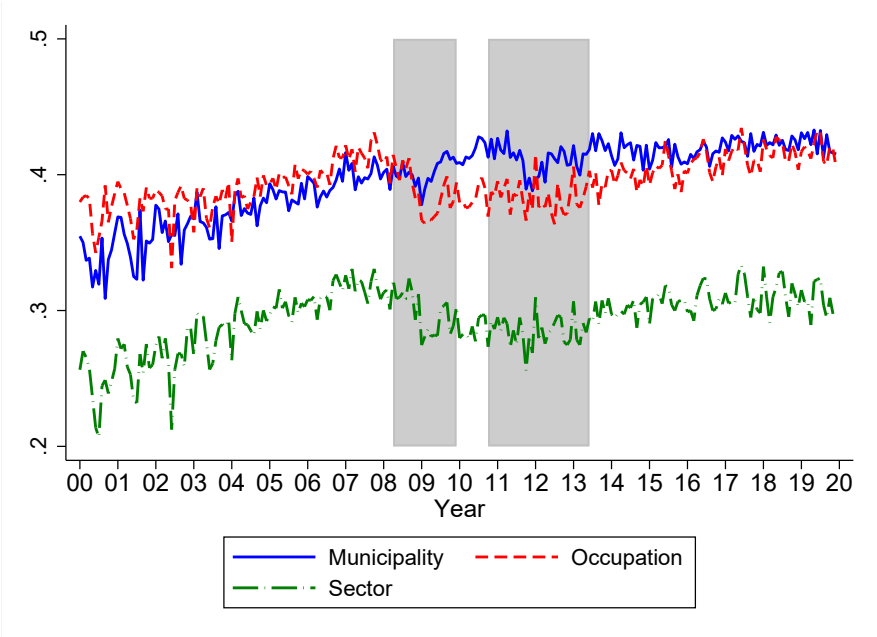
Spanish social security data (MCVL), main focus: 10 broad occupational groups

Table: MCVL Occupation Classification

Engineers, college graduates and senior managers
Technical engineers and graduate assistants
Administrative and technical managers
Non-graduate assistants
Administrative officers
Subordinates
Administrative assistants
First and second class officers
Third class officers and technicians
Labourers

Mobility of the Unemployed in Spain

- **High mobility, in line with other countries (US, UK, Canada,...)**



- importance of excess mobility: career matches...
- rather than story about shocks to entire occupations.

Mobility and Contracts

% of workers with contract c that re-entry with contract c				
	New contract			
	Non-movers		Movers	
Previous contract	Permanent	Temporary	Permanent	Temporary
Permanent	31,6%	21,8%	15,3%	31,3%
Temporary	4,0%	52,4%	5,9%	37,7%

- occupational mobility high after both permanent and temporary contracts
- previously permanent unemployed often return as temporary...
- ... more so when they switch occupations
- temporary workers most likely temporary (also after move)

Model Sketch

- Workers outcomes depend on
- ... employment status (employed, unemployed),
- ... occupation-specific human capital level (stoch. acquired and lost), x_i,
- ... idiosyncratic career match (AR(1)), z
- ... so that match productivity is $x_i z$
- ... and (in employment) on contract C

In absence of reallocation (x_i, z, C) defines an isolated Pissarides labour market (alternatively, directed search, equivalent)

Contracts

Contract is a vector (δ_C, f_C), δ_C exogenous separation rate, f_C firing cost. Two contracts $C = \{p, t\}$

1. Permanent: low δ_p, $f_p > 0$
2. Temporary: high δ_t, $f_p = 0$

Worker with (x_i, z) can choose whether to go to permanent or temporary labour market.

Important: in addition, **Endogenous Separation** when no longer a surplus to the match

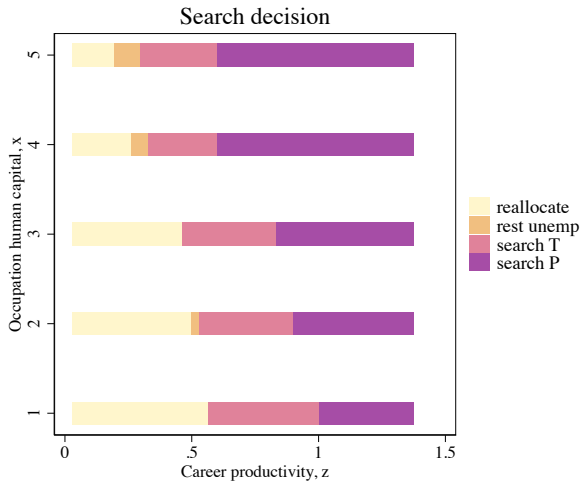
Reallocation

As in Carrillo-Tudela and Visschers (2022): Unemployed worker can choose to reallocate

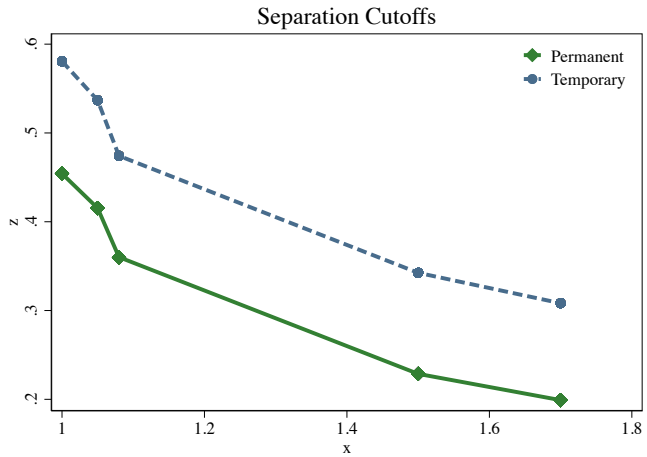
- pay reallocation cost c
- reset $x_i = x_1$: loss of occupation-specific human capital
- draw randomly from the stationary distribution of z

Decision Rules

(of our numerical illustration)



(a) Search



(b) Separation

Role of composition shift (along z of inflow into U)

Parameter Value

Table: Parameters of the model

Labor market			Productivity		
Posting vacancy cost	κ	90.0	Autocorrelation	ρ_z	0.996
Separation rate, Temporary	δ_T	0.0255	Std. deviation	σ_z	0.291
Separation rate, Permanent	δ_P	0.0021	Normalize parameter	$\overline{z}$	0.600
Firing cost, Permanent	f_P	35.0			
Unemployment benefits	b	0.68	Human capital		
Matching elasticity	η	0.40	Levels	x_i	{1,1.05,1.08,1.5,1.7}
Reallocation cost	c	7.00	Probability increase	π_{xi}	{0.02,0.02,0.004,0.004,0}
			Depreciation in unemp.	d_x	0.008

Moments

	Data	Model
Unemployment rate	0.167	0.158
Average productivity	1.000	1.001
% Temporary contracts	0.236	0.227
% Temporary contracts, young	0.475	0.402
Separation rate	0.023	0.022
Job finding rate	0.082	0.115
Occupational mobility	0.340	0.338
5-year return to tenure	0.120	0.061
10-year return to tenure	0.179	0.114
Unemp. duration movers/stayers	1.306	1.624

Moments II

	Young / Prime-aged		Temporary / Permanent	
	Data	Model	Data	Model
Unemployment rate	1.658	1.358		
Separation rate	2.222	1.758	2.679	11.488
Job finding rate	0.965	1.151	6.239	7.001
Occupational mobility	1.179	1.015	0.912	0.892

Model: Occupational Mobility and Contracts

	New contract			
	Non-movers		Movers	
Previous contract	P	T	P	T
Permanent	31.1%	28.7%	7.46%	32.7%
Temporary	11.6%	52.1%	6.81%	29.5%

Main pattern

- worker heterogeneity in a dynamically evolving career match can help understand occupational mobility patterns per contract type
- similar mobility across contracts:
- inexperienced workers in temporary contracts often become unemployed in better labor markets, but have little attachment
- those experienced workers in permanent contracts tend to become unemployed in a rather bad situation: mobile, and often followed by a temporary contract,even when staying

Policy?

Table: Policy counterfactuals

	Baseline	Decrease f_P	Decrease
Unemployment rate	0.158	0.129	0.143
Unemployment rate temporary / permanent	1.302	1.372	1.279
Average productivity	1.001	1.014	1.017
% Temporary contracts	0.227	0.145	0.243
% Temporary contracts, young	0.402	0.264	0.421
Separation rate	0.022	0.017	0.023
Job finding rate	0.115	0.116	0.135
Occupational mobility	0.338	0.407	0.371
Occupational mobility temporary / permanent	0.892	0.934	0.871
5-year return to tenure	0.061	0.053	0.059
10-year return to tenure	0.114	0.114	0.109