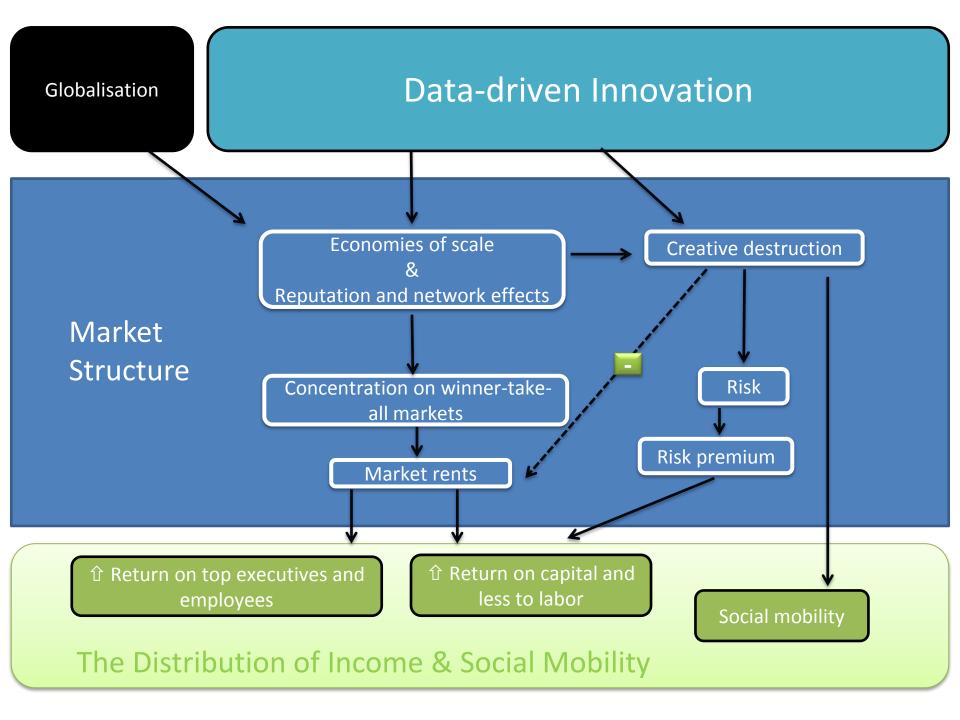# Market structure in the digital economy and opportunities for social mobility

Data-driven Innovation

Market Structures

The Distribution of Income & Social Mobility

Globalisation

Data-driven Innovation

Market Structure

Economies of scale
&
Reputation and network effects

Creative destruction

Concentration on winner-take-all markets

Risk

Market rents

-

Risk premium

⇧ Return on top executives and employees

⇧ Return on capital and less to labor

Social mobility

The Distribution of Income & Social Mobility

Regressions of industry market concentration and creative destruction on industry innovation characteristics

	Market concentration	Creative destruction
Intangibles to total assets$_{j,t-1}$	1.961***	0.028***
	(0.183)	(0.008)
R&D intensity$_{j,t-1}$	0.029*	-0.000
	(0.016)	(0.001)
Capital intensity$_{j,t-1}$	0.007	-0.002
	(0.034)	(0.002)
Industry controls	Yes	Yes
Industry fixed effects	Yes	Yes
Year fixed effects	Yes	Yes
Observations	6,427	6,427
R-squared	0.19	0.02

Source: Bas and Paunov (2016) based on CompuStat. Results are obtained for 294 4-digit SIC industries in 1979-2014. Market concentration is computed using the normalised Herfindahl index while creative destruction is computed using the probability of firms' exiting the top 10th percentile between t and t-5.

Greater importance of intangibles goes hand in hand with more market concentration and higher creative destruction

Regressions of on top executive compensation on industry market concentration and creative destruction

	Top executive compensation	
	OLS	IV
Market concentration$_{j, t-1}$ * Initial firm size$_i$	0.018***	0.264**
	(0.006)	(0.119)
Creative destruction$_{j, t-1}$ * Initial firm size$_i$	0.104**	3.144*
	(0.050)	(1.669)
Firm size$_{i,t-1}$	0.084***	0.104***
	(0.018)	(0.021)
Firm profit$_{i, t-1}$	0.070***	0.066***
	(0.014)	(0.016)
Final year CEO$_i$	-0.166***	-0.171***
	(0.009)	(0.010)
Other executive, firm and industry controls	Yes	Yes
Firm-executive fixed effects	Yes	Yes
Firm-size year fixed effects	Yes	Yes
Industry-year fixed effects	Yes	Yes
Observations	50,584	48,546
R-squared	0.79	0.77

Source: Bas and Paunov (2016) based on CompuStat. Results are obtained for 1992-2012. Market concentration is computed using the normalised Herfindahl index while creative destruction is computed using the probability of firms' exiting the top 10th percentile between t and t-5.

Top executives earn more in more concentrated markets and where creative destruction is more likely

Regressions of innovation and other market features on industry labor shares

Country variable * Industry variable	Industry labor shares			
	(1)	(2)	(3)	(4)
Patents * Patent intensity	-0.054***	-0.049**	-0.056***	-0.055***
	(0.019)	(0.019)	(0.019)	(0.020)
Graduates * Skill intensity		-0.211***	-0.202***	-0.175***
		(0.047)	(0.047)	(0.048)
Capital * Capital intensity			0.038	-0.001
			(0.164)	(0.165)
Finance * Intangible assets			-0.336***	-0.320***
			(0.076)	(0.077)
Trade * Transport equipment				0.151**
				(0.069)
Union * Unskilled intensity				0.606***
				(0.156)
GDP * Capital intensity				0.406***
				(0.140)
Country-year fixed effects	Yes	Yes	Yes	Yes
Industry-year fixed effects	Yes	Yes	Yes	Yes
Observations	4,070	4,070	4,070	4,070

Source: Barrufaldi and Paunov (2016) based on data are for 16 industries in 26 different countries and over a period of 17 years between 1995 and 2011 from the OECD MSTI and STAN databases.

Innovation correlates negatively with the industry labor shares