

# **“Job Churn – Productivity and Pay in Flux”**

## **Presentation based the OECD Compendium of Productivity Indicators 2019**

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**Statistisk sentralbyrå**  
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# Agenda

Closer look at some of the data in OECD Compendium of Productivity Indicators.

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Employment has recovered in most OECD countries since the financial crisis, but wages have not. The latter seems to be primarily an Inter-sectoral rather than intra-sectoral issue in the data.

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Possible factors. Labour share, has been falling since long before in many countries, while at the same time Industry concentration has increased.

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Oligopolistic Markets with Monosony power.



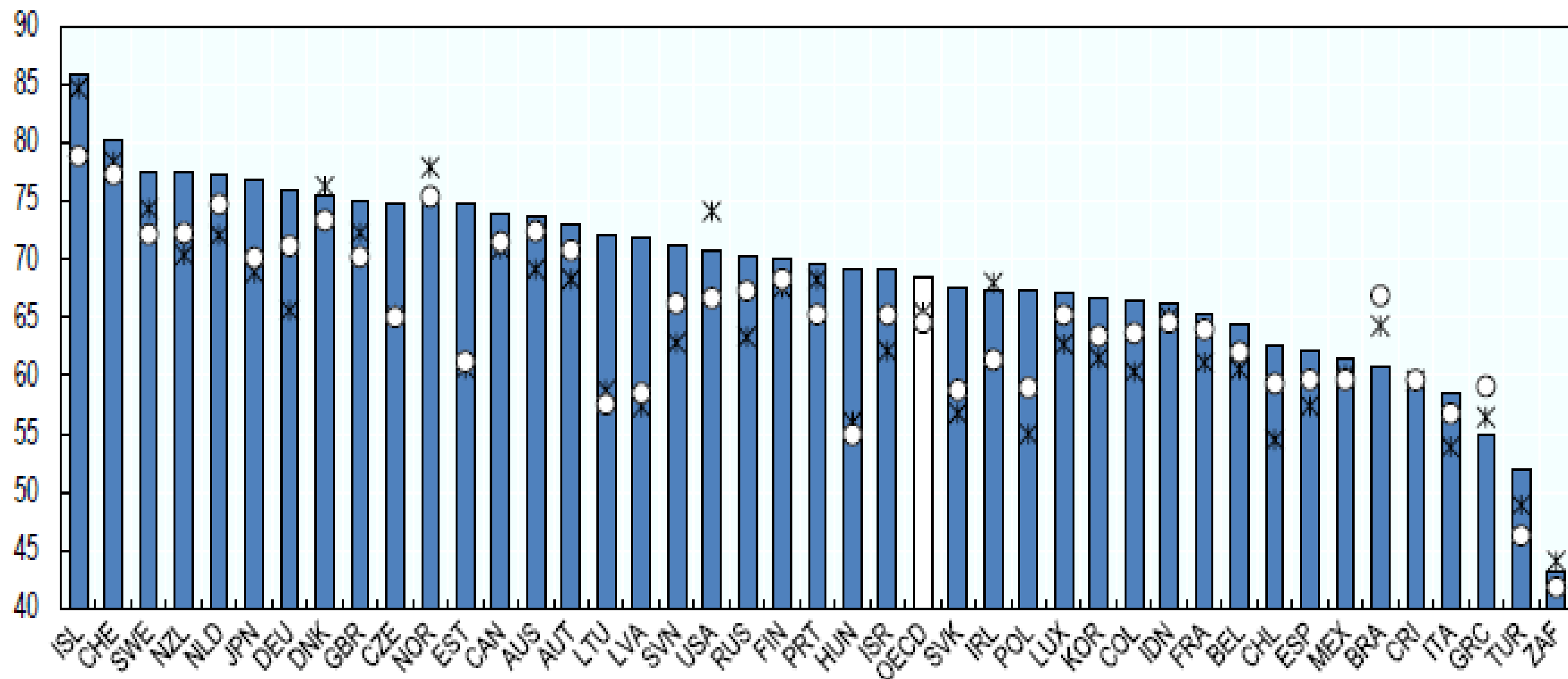
# Employment rates OECD

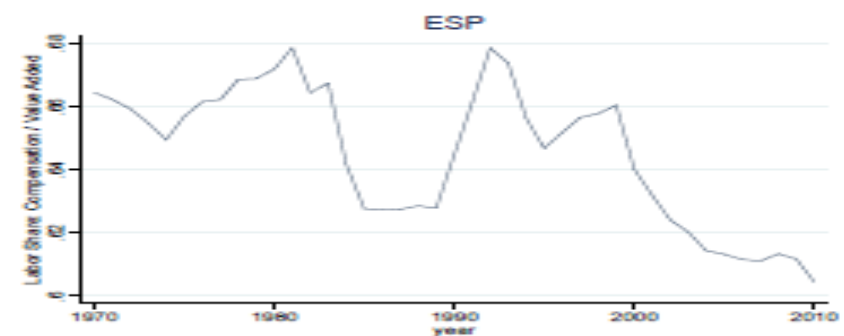
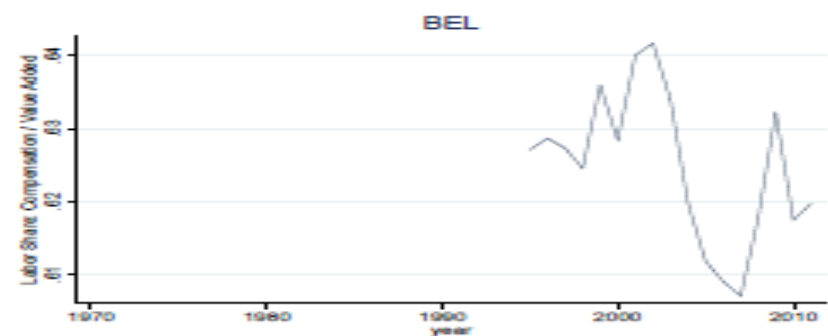
Employment to 15-64 aged population ratio, all persons, percentage

■ 2018 or latest available year

✱ 2000 or earliest available year

○ 2010

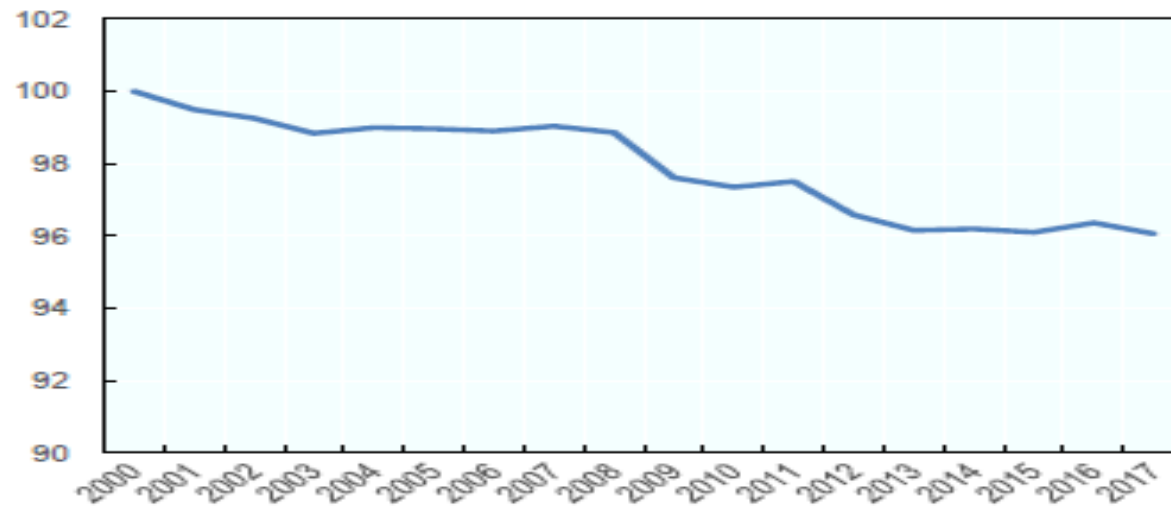




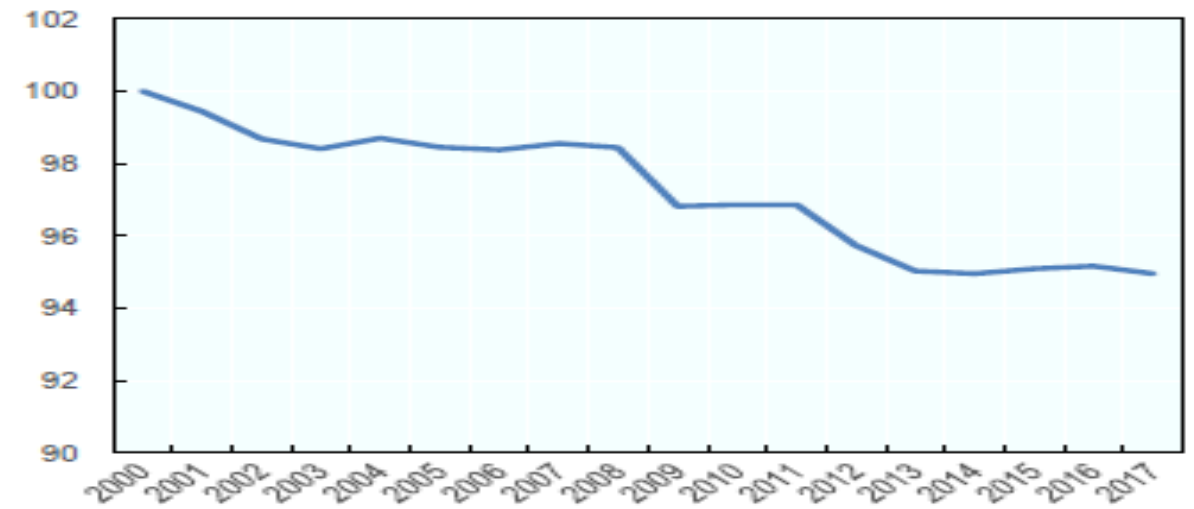
# Average hours worked per worker

Indices, 2000=100

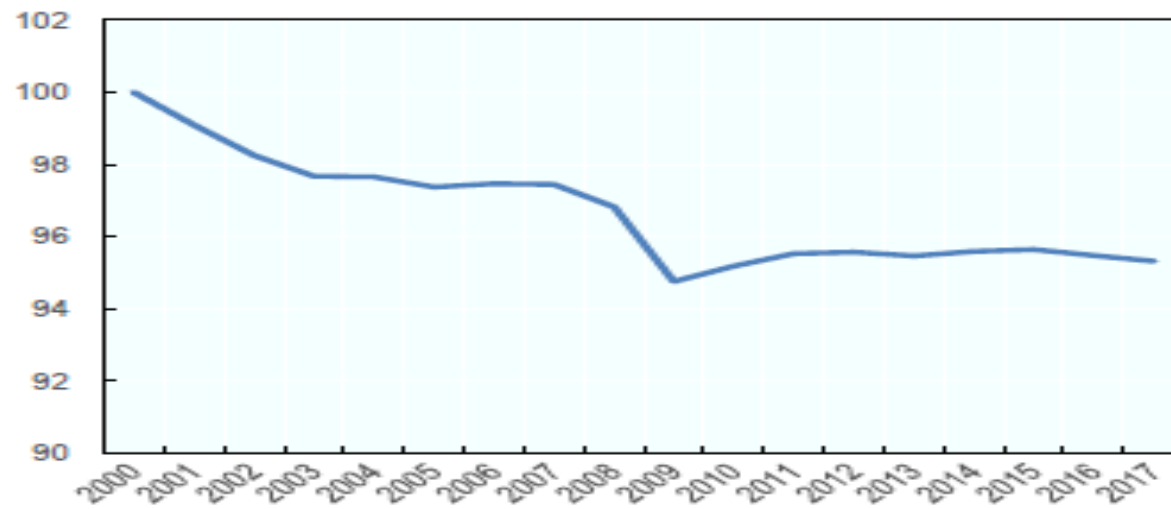
European Union



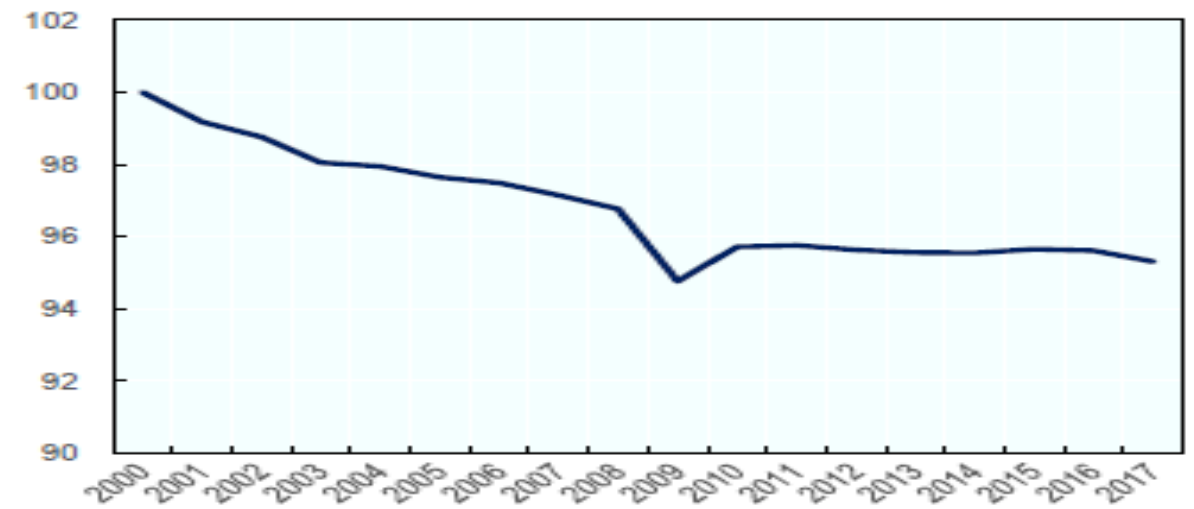
Euro area



Major Seven

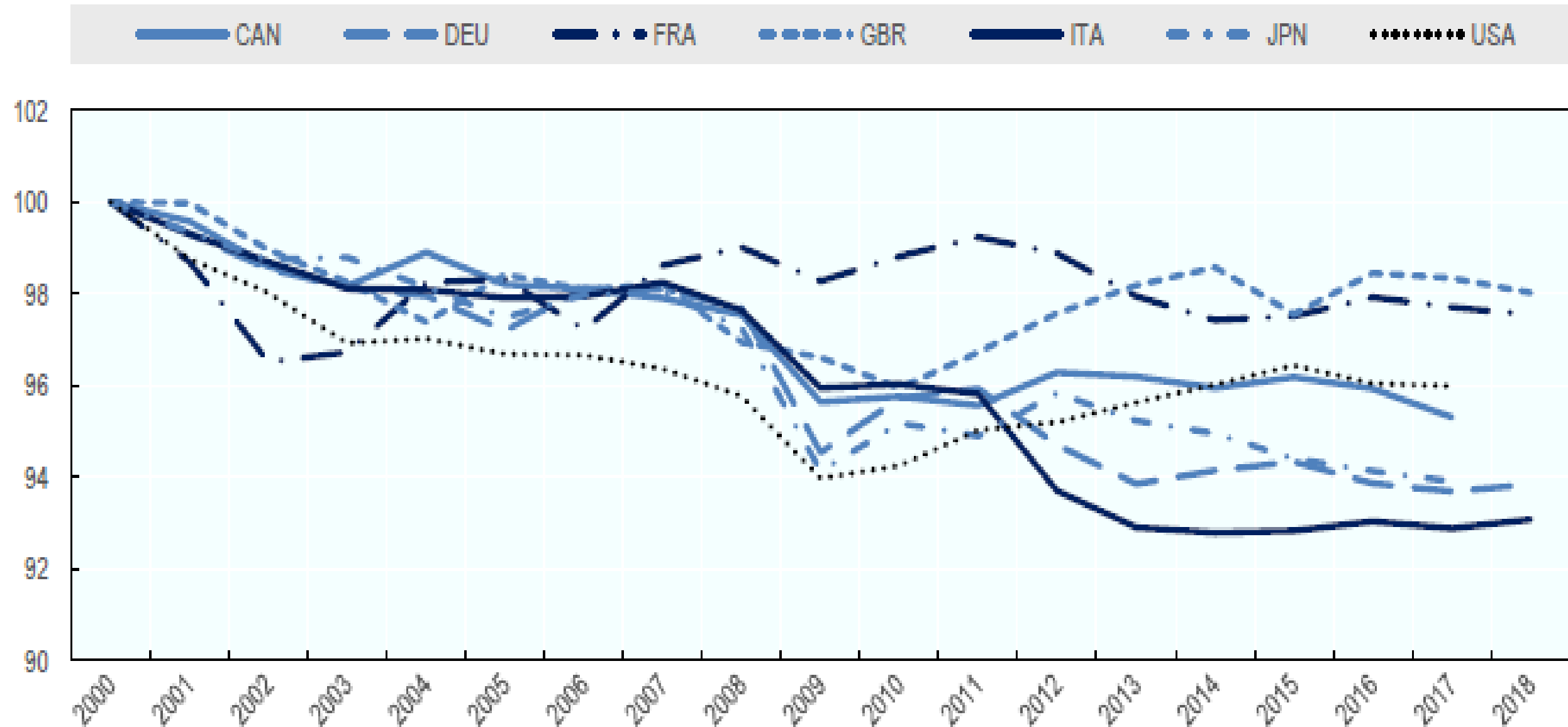


OECD area



— CAN — DEU — + FRA — + GBR — ITA — + JPN ..... USA

## Average hours worked per worker continued.



Source: OECD Productivity Statistics (database), <http://dx.doi.org/10.1787/pdtvy-data-en>, March 2019.

# Net employment creation 2010 to 2017

Country	Sectors with largest net job creation between 2010 and 2017	Jobs created (net), in number of persons	Net job creation in the sector, % of total net job creation between 2010 and 2017	Labour productivity of the sector in 2010, % of total economy labour productivity	Compensation per employee in the sector in 2010, % of compensation per employee in the economy
AUT	L_55_56 (Accommodation and food service activities)	38 600	10%	75%	66%
	P85 (Education)	36 200	9%	84%	117%
	Q_87_88 (Residential care activities; social work activities without accommodation)	33 400	9%	42%	69%
BEL	M_69_70 (Legal and account activities; activities of head offices; management consultancy activities)	55 300	16%	102%	178%
	N_80_82 (Security and investigation; services to buildings and landscape; office administrative and support)	51 200	15%	50%	79%
	Q_87_88 (Residential care activities; social work activities without accommodation)	48 400	14%	48%	86%
CAN	G47 (Retail trade, except of motor vehicles and motorcycles)	141 450	18%	43%	52%
	F_41_42_43 (Construction)	132 350	17%	97%	114%
	L_55_56 (Accommodation and food service activities)	56 200	7%	32%	42%
CZE	C29 (Manufacture of motor vehicles, trailers and semi-trailers)	53 900	12%	147%	115%
	P85 (Education)	37 400	8%	76%	105%
	C25 (Manufacture of fabricated metal products, except machinery and equipment)	33 900	8%	72%	89%
DEU	Q86 (Human health activities)	434 000	14%	77%	94%
	Q_87_88 (Residential care activities; social work activities without accommodation)	426 000	14%	37%	59%
	N_80_82 (Security and investigation; services to buildings and landscape; office administrative and support)	257 000	8%	39%	50%
ESP	L_55_56 (Accommodation and food service activities)	185 600	19%	93%	87%
	J_62_63 (Computer programming, consultancy and related activities; information service activities)	93 200	10%	114%	137%
	S96 (Other personal service activities)	74 700	8%	44%	53%
FRA	Q86 (Human health activities)	141 000	11%	86%	95%
	N78 (Employment activities)	137 000	11%	52%	79%
	Q_87_88 (Residential care activities; social work activities without accommodation)	135 000	11%	46%	66%
GBR	L_55_56 (Accommodation and food service activities)	379 800	12%	40%	47%
	N_80_82 (Security and investigation; services to buildings and landscape; office administrative and support)	282 400	9%	43%	49%
	M_69_70 (Legal and account activities; activities of head offices; management consultancy activities)	265 800	8%	94%	93%

# Net employment creation 2010 to 2017 continued:

Country	Sectors with largest net job creation between 2010 and 2017	Jobs created (net), in number of persons	Net job creation in the sector, % of total net job creation between 2010 and 2017	Labour productivity of the sector in 2010, % of total economy labour productivity	Compensation per employee in the sector in 2010, % of compensation per employee in the economy
HUN	O84 (Public administration and defence; compulsory social activity)	68 300	9%	102%	119%
	M_69_70 (Legal and account activities; activities of head offices; management consultancy activities)	64 300	9%	152%	205%
	G46 (Wholesale trade, except of motor vehicles and motorcycles)	62 000	9%	162%	176%
ITA	I_55_56 (Accommodation and food service activities)	218 400	20%	68%	76%
	T_97_98 (Activities of households as employers; production activities of private households for own use)	102 700	10%	21%	35%
	N78 (Employment activities)	97 900	9%	46%	75%
NLD	N78 (Employment activities)	208 000	35%	41%	61%
	I_55_56 (Accommodation and food service activities)	78 000	13%	39%	44%
	G47 (Retail trade, except of motor vehicles and motorcycles)	44 000	7%	43%	45%
POL	C29 (Manufacture of motor vehicles, trailers and semi-trailers)	90 000	7%	96%	86%
	O84 (Public administration and defence; compulsory social activity)	82 000	7%	93%	146%
	J_62_63 (Computer programming, consultancy and related activities; information service activities)	78 000	6%	156%	158%
PRT	Q_87_88 (Residential care activities; social work activities without accommodation)	26 300	14%	51%	70%
	I_55_56 (Accommodation and food service activities)	24 550	13%	85%	79%
	N_80_82 (Security and investigation; services to buildings and landscape; office administrative and support)	24 600	13%	50%	65%
SWE	Q_87_88 (Residential care activities; social work activities without accommodation)	85 000	19%	55%	82%
	P85 (Education)	55 000	12%	54%	75%
	I_55_56 (Accommodation and food service activities)	49 000	11%	44%	63%
USA	Q_86_87_88 (Human health and social work activities)	1 682 000	13%	55%	82%
	I_55_56 (Accommodation and food service activities)	1 388 000	11%	36%	44%
	M_69_to_75 (Professional, scientific and related activities)	1 286 000	10%	146%	196%



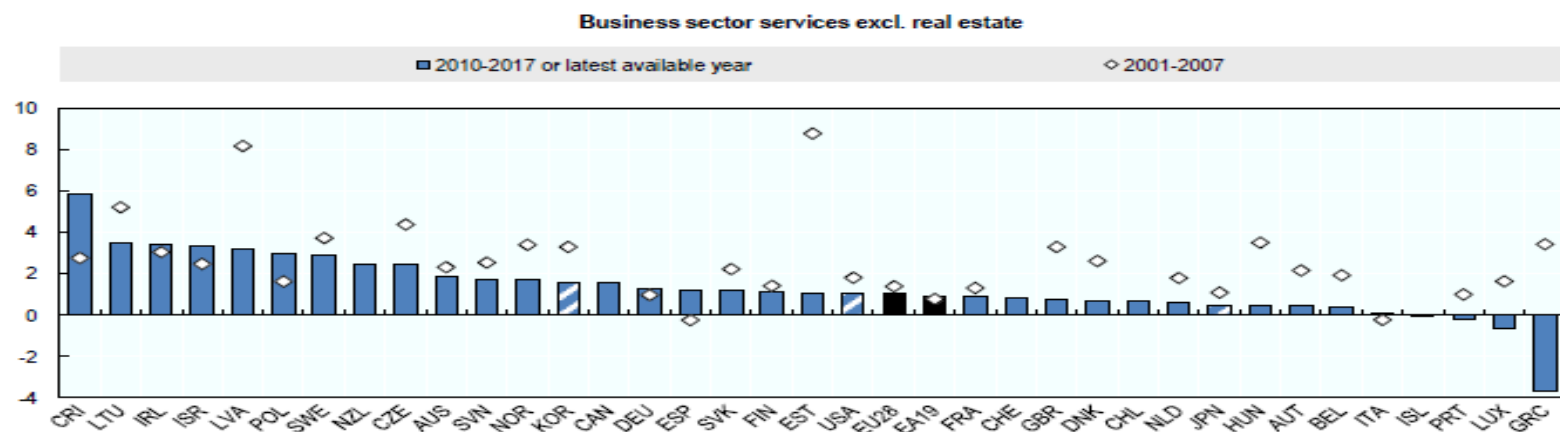
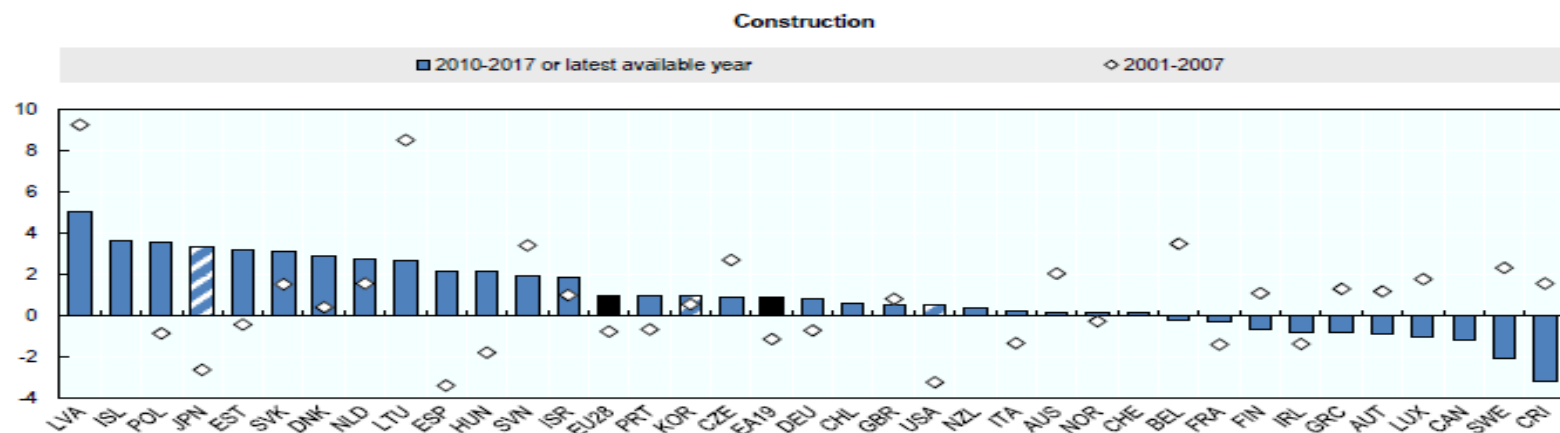
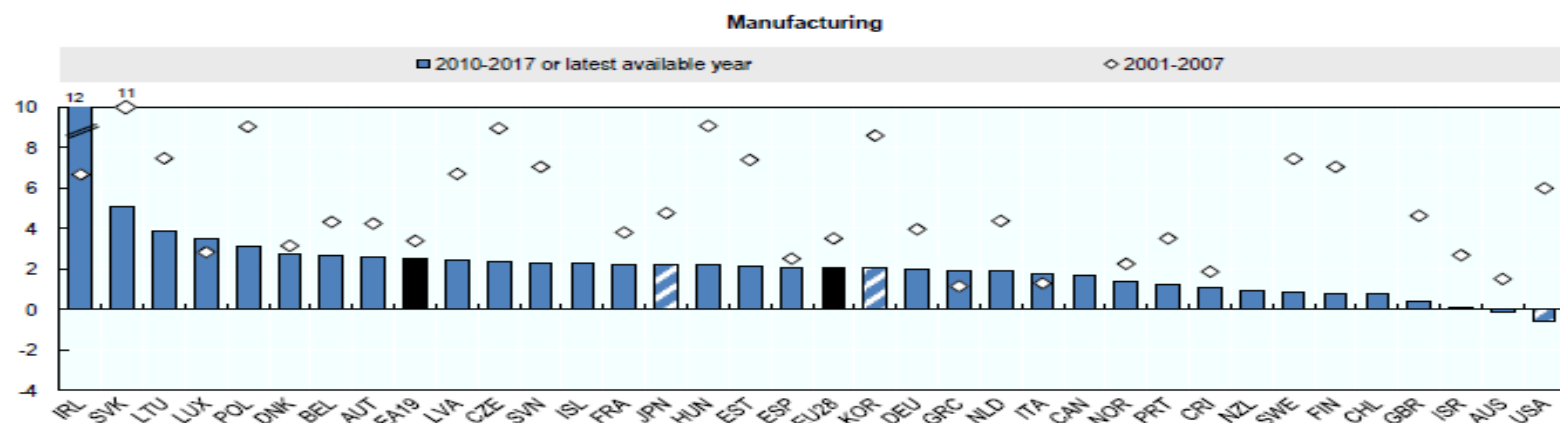
# Net employment destruction 2010 to 2017

Country	Sectors with largest net job destruction between 2010 and 2017	Jobs destroyed (net), in number of persons	Net job destruction in the sector, % of total net job destruction between 2010 and 2017	Labour productivity of the sector in 2010, % of total economy labour productivity	Compensation per employee in the sector in 2010, % of compensation per employee in the economy
AUT	A01 (Crop and animal production, hunting and related service activities)	-28 850	43%	24%	46%
	K64 (Financial service activities, except insurance and pension funding)	-9 500	14%	168%	169%
	C_31_32 (Manufacture of furniture, other manufacturing)	-4 600	7%	78%	84%
BEL	K64 (Financial service activities, except insurance and pension funding)	-8 800	9%	297%	212%
	C_13_15 (Manufacture of textiles, wearing apparel; leather and related products)	-7 600	8%	81%	99%
	C29 (Manufacture of motor vehicles, trailers and semi-trailers)	-6 800	7%	113%	142%
CAN	N_80_82 (Security and investigation; services to buildings and landscape; office administrative and support)	-21 750	19%	51%	73%
	O84 (Public administration and defence; compulsory social activity)	-12 350	11%	115%	141%
	C_13_15 (Manufacture of textiles, wearing apparel; leather and related products)	-7 560	7%	54%	75%
CZE	F_41_42_43 (Construction)	-69 150	46%	74%	86%
	G47 (Retail trade, except of motor vehicles and motorcycles)	-27 300	18%	55%	69%
	O84 (Public administration and defence; compulsory social activity)	-9 900	7%	109%	127%
DEU	O84 (Public administration and defence; compulsory social activity)	-173 000	36%	95%	124%
	J58 (Publishing activities)	-47 000	10%	99%	95%
	A01 (Crop and animal production, hunting and related service activities)	-41 000	8%	43%	54%
ESP	F_41_42_43 (Construction)	-512 300	46%	107%	104%
	T_97_98 (Activities of households as employers; production activities of private households for own use)	-76 400	7%	28%	44%
	K64 (Financial service activities, except insurance and pension funding)	-59 400	5%	235%	214%
FRA	F_41_42_43 (Construction)	-101 000	19%	88%	102%
	G45 (Wholesale and retail trade and repair of motor vehicles and motorcycles)	-44 000	8%	77%	91%
	T_97_98 (Activities of households as employers; production activities of private households for own use)	-42 000	8%	29%	58%
GBR	O84 (Public administration and defence; compulsory social activity)	-259 100	58%	99%	119%
	K64 (Financial service activities, except insurance and pension funding)	-61 200	14%	297%	231%
	C18 (Printing and reproduction of recorded media)	-31 200	7%	75%	92%

# Net employment destruction 2010 to 2017 continued

Country	Sectors with largest net job destruction between 2010 and 2017	Jobs destroyed (net), in number of persons	Net job destruction in the sector, % of total net job destruction between 2010 and 2017	Labour productivity of the sector in 2010, % of total economy labour productivity	Compensation per employee in the sector in 2010, % of compensation per employee in the economy
HUN	A01 (Crop and animal production, hunting and related service activities)	-29 250	19%	49%	63%
	H49 (Land transport and transport via pipelines)	-20 400	13%	64%	69%
	C13_15 (Manufacture of textiles, wearing apparel; leather and related products)	-17 460	11%	29%	41%
ITA	F_41_42_43 (Construction)	-354 400	35%	73%	91%
	O84 (Public administration and defence; compulsory social activity)	-131 100	13%	130%	148%
	C23 (Manufacture of other non-metallic mineral products)	-57 500	6%	87%	103%
NLD	F_41_42_43 (Construction)	-54 000	20%	90%	120%
	Q_87_88 (Residential care activities; social work activities without accommodation)	-38 000	14%	40%	68%
	O84 (Public administration and defence; compulsory social activity)	-36 000	13%	128%	137%
POL	A01 (Crop and animal production, hunting and related service activities)	-319 000	65%	20%	86%
	F_41_42_43 (Construction)	-50 000	10%	107%	89%
	C_13_15 (Manufacture of textiles, wearing apparel; leather and related products)	-32 000	7%	40%	48%
PRT	F_41_42_43 (Construction)	-159 900	39%	65%	75%
	A01 (Crop and animal production, hunting and related service activities)	-103 500	25%	15%	44%
	O84 (Public administration and defence; compulsory social activity)	-29 900	7%	129%	159%
SWE	C26 (Manufacture of computer, electronic and optical products)	-22 000	29%	276%	144%
	C28 (Manufacture of machinery and equipment n.e.c.)	-8 000	11%	125%	108%
	C17 (Manufacture of paper and paper products)	-5 000	7%	157%	128%
USA	O84 (Public administration and defence; compulsory social activity)	-296 000	80%	148%	184%
	C26 (Manufacture of computer, electronic and optical products)	-66 000	18%	384%	328%
	C19 (Manufacture of coke and refined petroleum products)	-10 000	3%	670%	144%

# Labour productivity by main economic activity. Real gross value added per hour worked, change at annual rate

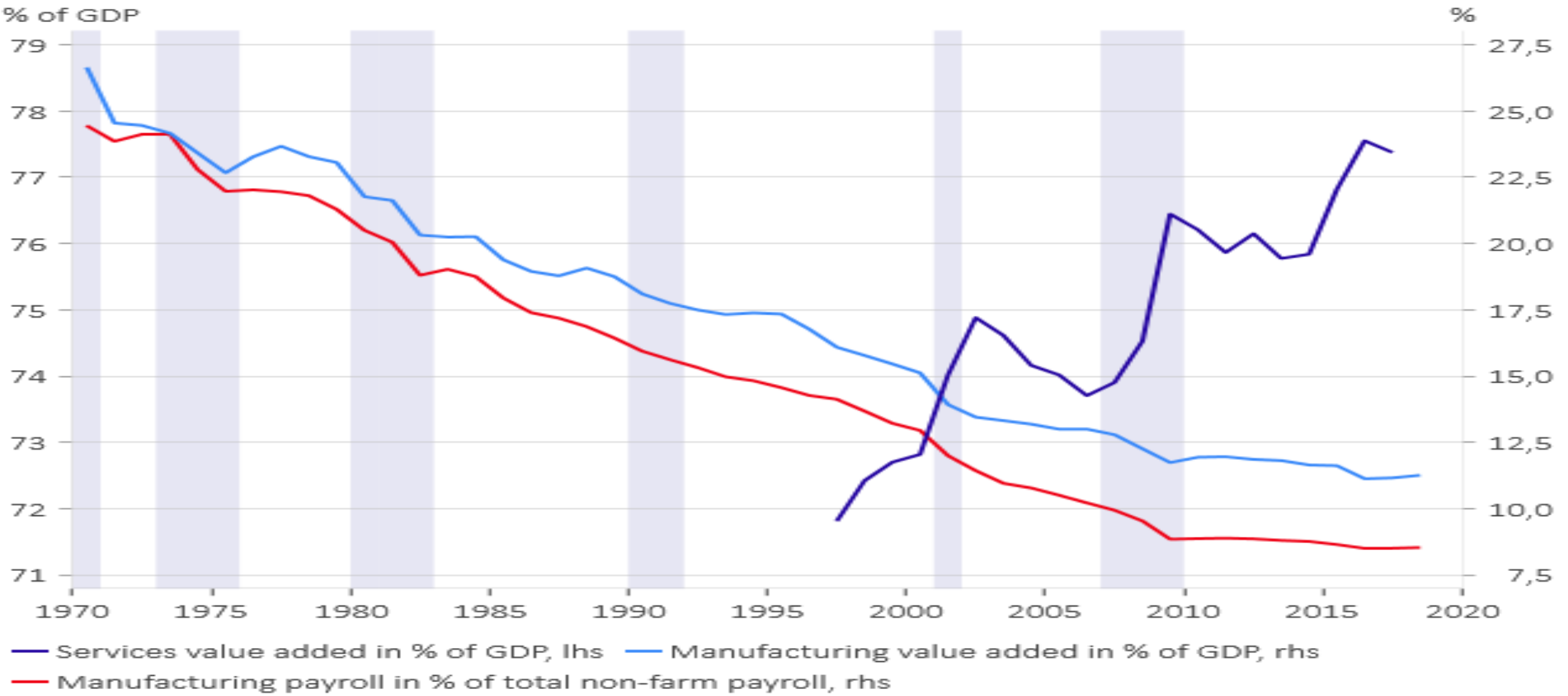


OECD labour productivity growth almost entirely driven by Manufacturing and Business sector services. For the prior it reflects typically higher productivity growth, for the latter also the strong increase in the share of the overall economy. Currently BSS is about 35-50% of total value added and employment (excl real estate.) across the OECD.

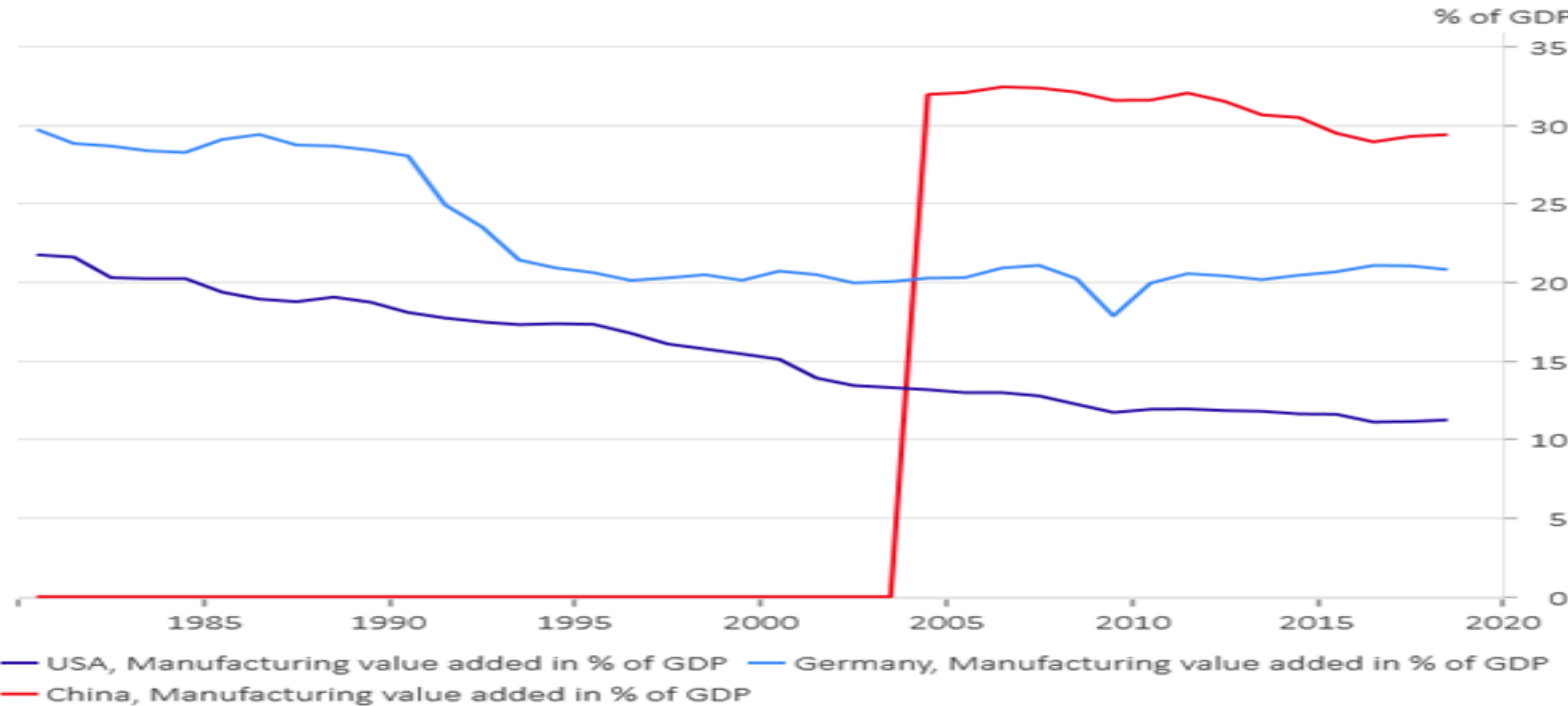


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# US Manufacturing is but a shadow of its former self

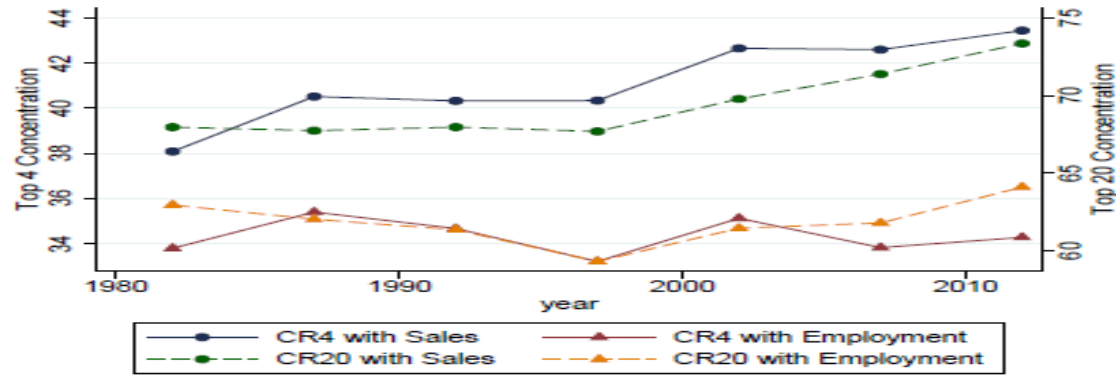


# Manufacturing remains important, but less so in the US

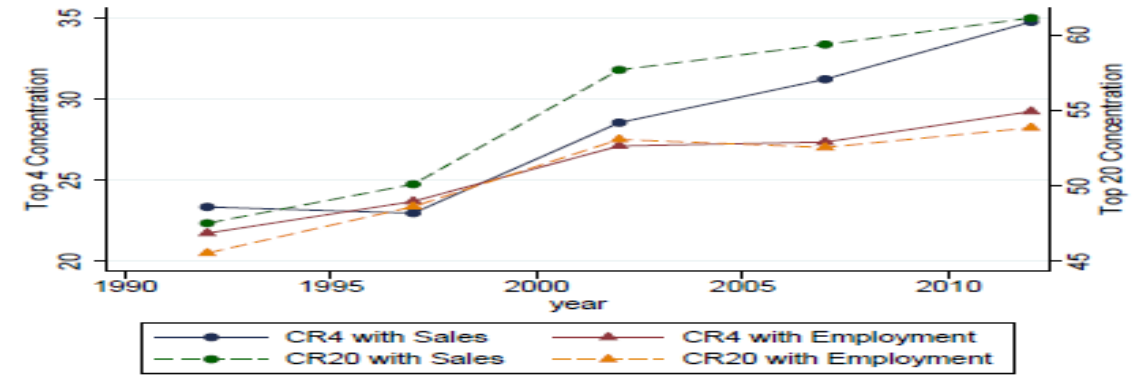


# Average Concentration across Industries by major sector (U.S. from Autor et al 2019)

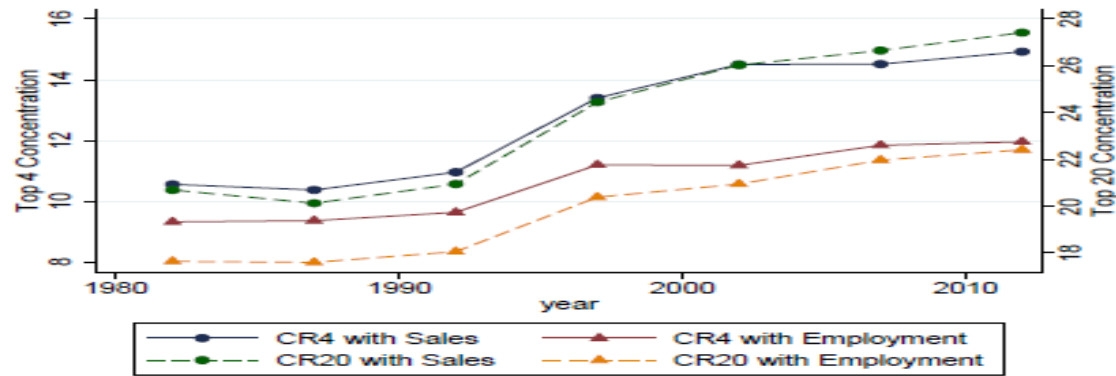
Panel A: Manufacturing



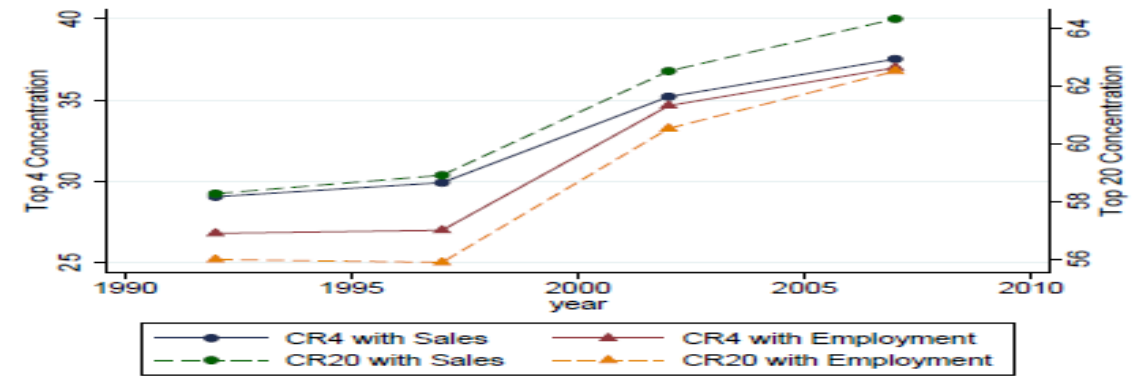
Panel B: Finance



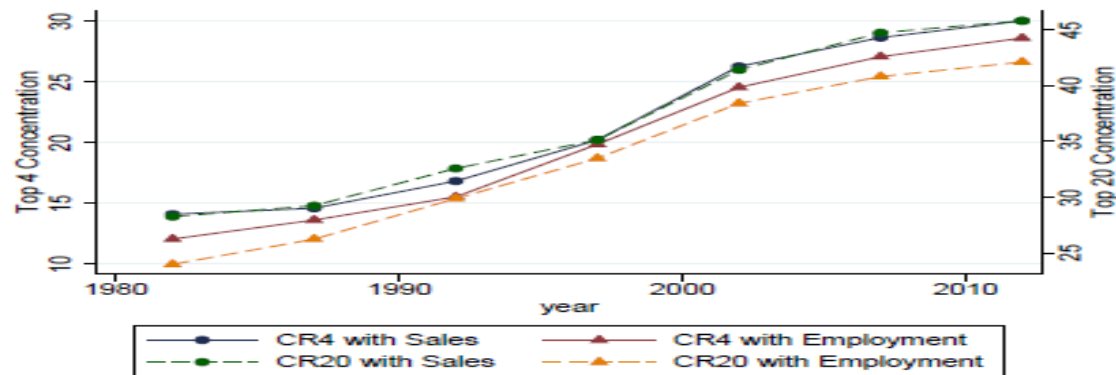
Panel C: Services



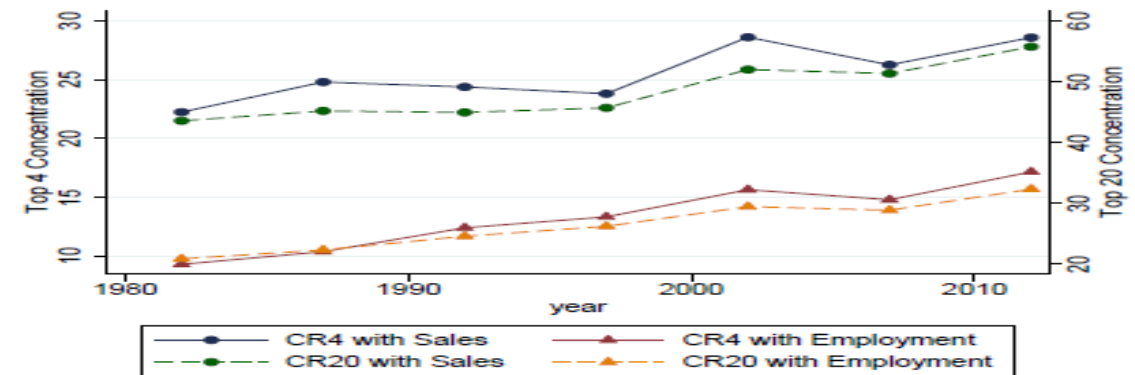
Panel D: Utilities and Transportation



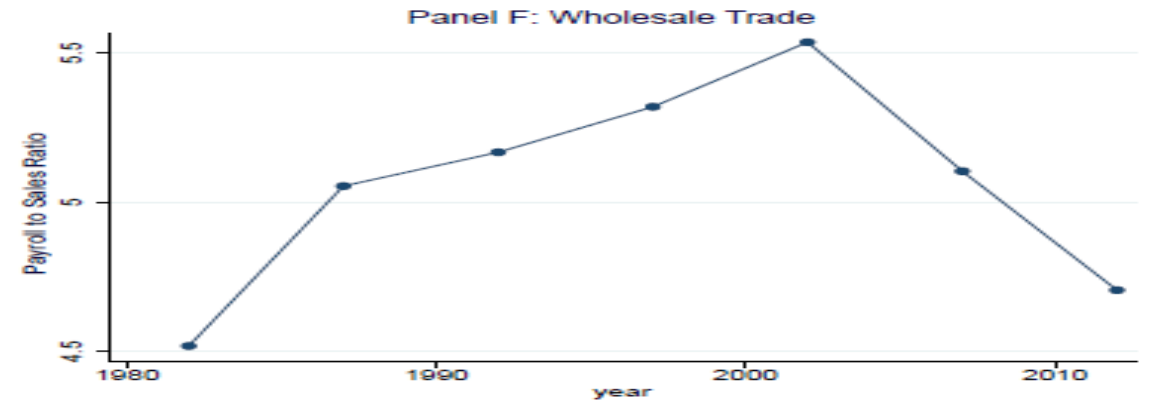
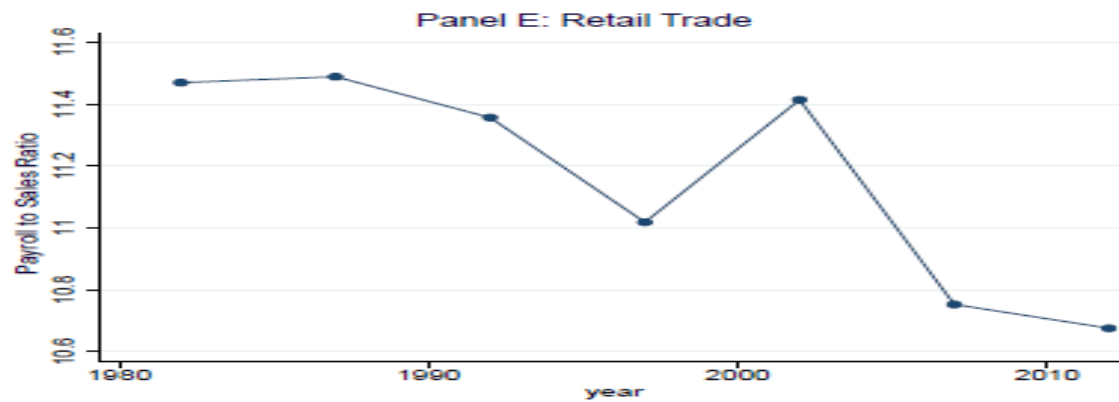
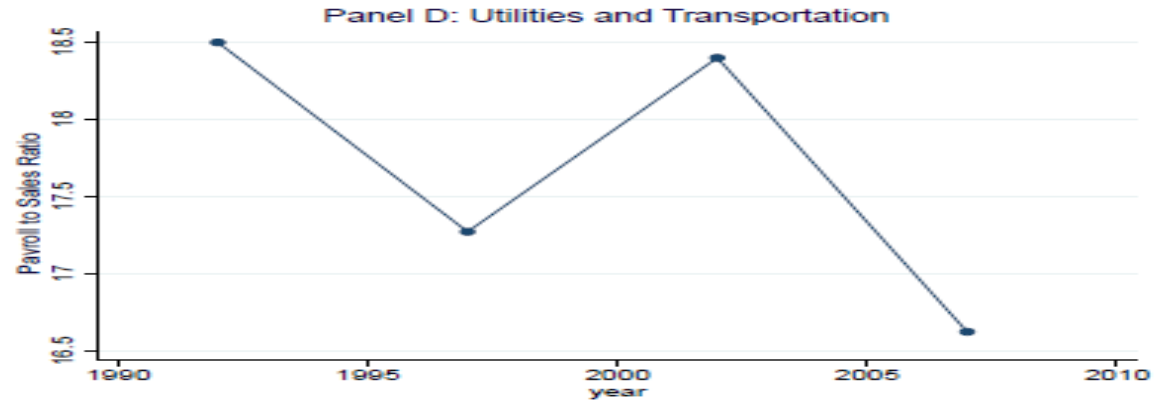
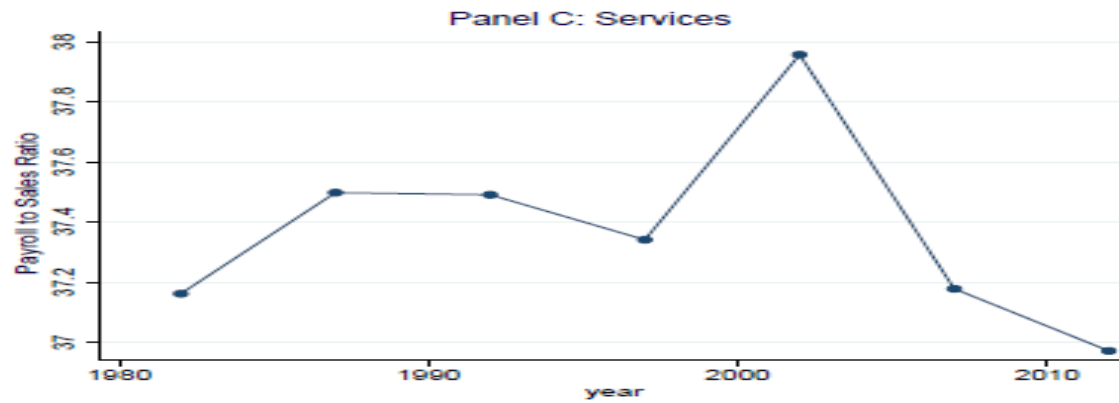
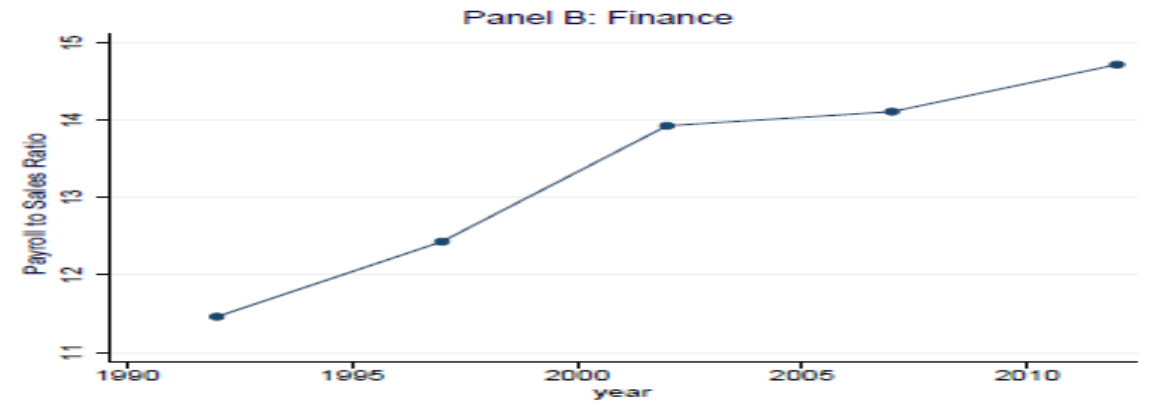
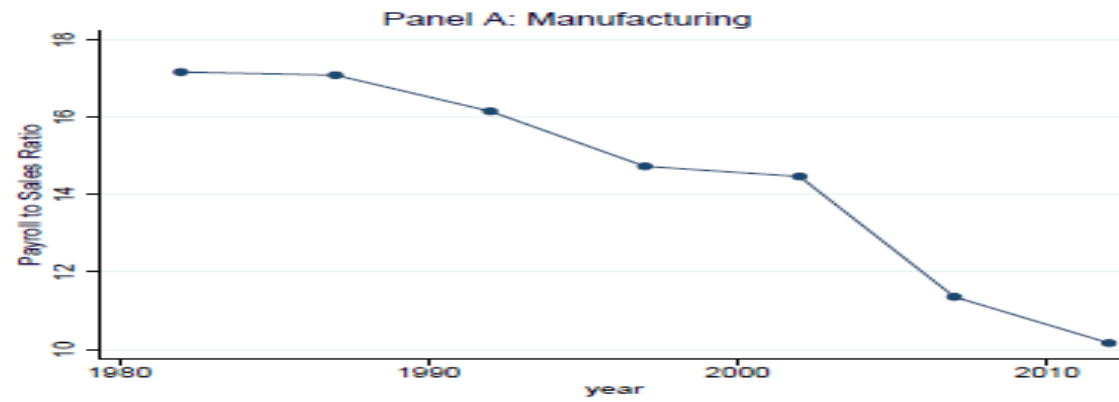
Panel E: Retail Trade



Panel F: Wholesale Trade



# Average Payroll to sales (U.S. from Autor et al 2019)



**Notes:** Each panel plots the overall payroll-to-sales ratio in one of the six major sectors covered by the U.S. Economic Census.

**Previous Tables from Autor et al 2019 are from:**

## THE FALL OF THE LABOR SHARE AND THE RISE OF SUPERSTAR FIRMS

David Autor  
David Dorn  
Lawrence F. Katz  
Christina Patterson  
John Van Reenen

Working Paper 23396

**Table 1 and 2 on the next page are from the paper below, and based on the U.S. Census Longitudinal survey (including all sectors except public, educational & mining).**

## The Industrial Revolution in Services \*

Chang-Tai Hsieh  
University of Chicago and NBER

Esteban Rossi-Hansberg  
Princeton University and NBER

June 11, 2019



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Statistics Norway



**Table 2: Employment Share of Top 10% Firms**

1977	1987	1997	2007	2013
67.0%	67.4%	69.2%	71.6%	72.4%

Note: Geometric average of employment share of top 10% firms in 450 industries, weighted by industry employment share.



ISO Codes for country names.			
AUS	Australia	IRL	Ireland
AUT	Austria	ISL	Iceland
BEL	Belgium	ISR	Israel
BRA	Brazil	ITA	Italy
CAN	Canada	JPN	Japan
CHE	Switzerland	KOR	Korea
CHL	Chile	LTU	Lithuania
CHN	China (People's Republic of)	LUX	Luxembourg
COL	Colombia	LVA	Latvia
CRI	Costa Rica	MEX	Mexico
CZE	Czech Republic	NLD	Netherlands
DEU	Germany	NOR	Norway
DNK	Denmark	NZL	New Zealand
ESP	Spain	POL	Poland
EST	Estonia	PRT	Portugal
FIN	Finland	RUS	Russian Federation
FRA	France	SVK	Slovak Republic
GBR	United Kingdom	SVN	Slovenia
GRC	Greece	SWE	Sweden
HUN	Hungary	TUR	Turkey
IDN	Indonesia	USA	United States
IND	India	ZAF	South Africa

Takk, dêkuji, kiitos, merci, danke, efharisto, dziekuje, gracias, thank you.

