# THE FUTURE OF WORK

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- Convergent factors of transformation, megatrends. Technological innovations, Globalization, demographic changes, geopolitical conflicts.
- Irreversible trends but effects not predetermined. Different reactions of different national systems.
- Unprecedented speed, intensity and diffusion.
- Technological innovations: digitalization of the economy. Artificial intelligence. I o T Growth of ICT capital services per hour worked:
- ▶ 1995 index 100 2014 index 500 Uk,400 Germany, 200 Italy France;
- Industrial robots worldwide annual supply: in 2004 100000 units, in 2015, 250000.

► Global Trade and competitive pressures

 Regulated, restrained by protectionism. Multilateral cooperation within open, rule based trade system necessary for expansion (world Ec. Forum, July 2018)

► More Jobs depend on demand from abroad: Germany 40%, Italy 30%, France 28%, USA 15%

- Rapid demographic changes.
- Aging of population and reduced birth rate. EU fertility rate 1,6 (2.1 substitution rate), Africa, 4,7.
- ► EU population 511,5 million:
  - over 60: 25% in 2016; in 2050 (35%)
  - over 65: 19% in 2017; Italy 22,3%, Germany 21,2 %
  - over 80: from 5.5% (2017) to 13% (2050)
- Working age population (2015-2050): divergent trends Italy -23%, Japan -28%, Germany -23%, France +1%, UK +6%, USA +10%, Australia +27%.
- Old age dependency ratio: EU (2015) 29,8%, Italy 33,6%, France, 29,2%, Ireland 34,8%.
  EU (2050) 50.3%..
- Total dependency ratio: EU (2010) 46,6%, (2030) 64,7%, (2050) 74,9%. Serious impact on welfare systems
- Implications of divergent trends in different geographic areas: migrations, geopolitical conflicts and turbulence, increased impact on growth and stability.

# 4 Migrations: a metaphor of global revolutions

- Drivers: polarization of resources. Yearly income: Qatar 1.300.000\$. Burundi 800\$, France 42.800, Germany 49.100.
- Population change: World 7,5 billions (2016); 9,8 (2050), 85% of growth in poor countries (India, Nigeria, Congo). Africa 2.5 billion in 2050.
- International Migrants (World):250 million U. N. estimates 469 mill.
  in 2050
- Mainly from Asia, 40% of total; Africa 20% growing
- Internal migrations: from countryside to large cities
- Potential migrants to Europe 200 mill. (Gallup)

- ▶ Immigrants to Europe (2015)4.7 mil, 2.7 from outside Europe, 1.9 within Europe
  - Men 56% Women 44%
- Median age 27.5 years (Europe 42.6)
- Immigrants to Germany (2015) 1.543.800 UK 631.500 France 363.900 Italy 280.100
- Residents in EU born outside EU 35,1 mill.; born in another EU State 19,3 -
- Foreign citizens in EU 20.7 mill.
  - Germany 8.7 mill. UK 5.6 mill. Italy 5.0 mill. France 4.4 mill. Spain 4.4 mill.
- New citizens recognized in EU (2015): total 841.200
- Asylum applications: (2014), 627.000 (2015) 1.300.000 (2016) 1.250.000 (2017) 705.000.
  - first time applicants (2016): 650.000; Germany 31% of total; Italy 20%; France 14%; Greece 9%.
- Asylum seekers applications accepted (2017): 538.000 (46% of applications).
- Migrations not handled with common strategy. Nationalistic reactions. Negative impact on economy and democratic politics.

- Intermittent and uneven growth. In OECD countries. In emerging countries fast but often unregulated growth often with scarce attention to social an environmental sustainability.
- Productivity slowdown, increased gap between globally most productive firms and other firms.
- ▶ Between 2001 and 2013 the former have increased productivity by over 30% in manufacturing and by 45% in services.
- Productivity of the laggard firms has stagnated.
- Young generations risk to be worse off than parents. Increasing generations divide

- In OECD countries peak of employment rates (68,2%), young people 41,9%.
- ▶ Unemployment back to precrisis level (5,2% average).
- Divergent trends. Average European activity rate 71,2%, Germany 78,6%, Italy 61,6%.
- Average European unemployment 7,7% Germany 4% -Italy 11,5%.
- ► High rates of unemployment of youth (15-24 years) average OECD 10,9%; Italy 31,9% Spain 33,8% Greece 43%.

#### 8 Labour market trends: selected OECD countries, 1995 to 2015

- Decline of labor share. Slow wage growth in spite of fall in unemployment.
- Low paid jobs and working poors.

United

Kingdom

France

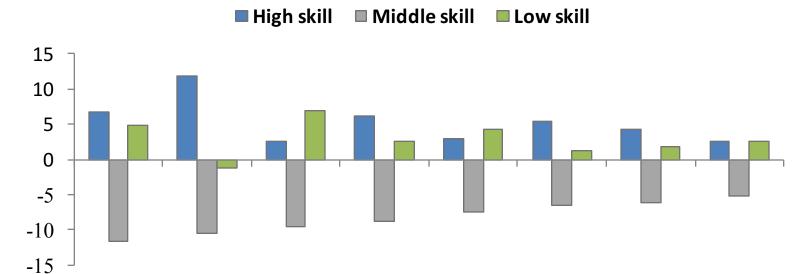
Income distribution gap between young and aged population.

Italy

Polarization

Percentage point change in share of total employment\*

(\*source S. Scarpetta)



• Middle skills mostly affected. In general reduced opportunities for middle class. Impact on political life and democracy

**OECD** 

Average

Germany

United

States

Canada

Japan

- Fragmentation of work patterns. Multiplication of contracts: fixed term, temporary agency work, part time, job sharing, occasional, on call (zero hours), platforms based works, crowdwork.
- Growth of non standard work.
- Full time permanent jobs still the majority
- Part time growing EU Average: 15.3% (2003),18.7% (2017), Men 5,4% (2003) 8,1% (2017)

Wom. 27,9% (2003) - 31,1% (2017)

Netherlands 41.5% (2003) 46.6% (2017) Men 17,2% (2003) - 22,6% (2017)

Wom. 72,5% (2003) - 74,1% (2017)

Germany 21.6% (2003) - 26.9% (2017)

France 16.6% (2003) - 18.00% (2017)

Italy 8.4% (2003)- 18.5% (2017)

- Share of involuntary part timers of total employment 2005—2015: France 3,5% to 5%; Italy 4% to 9,5%; Spain 3,5% to 9%; Germany 4% to 3%;
- Fixed term (growing): EU average 11.5% (2003) -13.3% (2017)

Spain 30.9% (2003) - 26.4% (2017)

Germany 9,6% - 11.1% (2017)

France 12.2% - 15.5% (2017)

Italy 9.5 % - 15.1 % (2017)

- ► <u>(Temporary) Agency work:</u> (uncertain estimates) EU average (approx 1,5%), France (2,4%), Netherlands (8%), Italy (1,8%), France (2,4%), Luxemburg (3,0%). Mainly younger workers and less skilled
- Self employment: 30,6 Mill. (2016), 14% of total. Greece 29.0% Italy 21%, Germany 9%, Denmark 8%, France 12%.
- False self employment economically dependent workers (dependent on single client; low income); special status and protection (Germany, UK, Spain, Italy)
- Apprenticeship (employment and education contract). In some countries (Germany) main entry og youngster into regular labor market.
- Zero hours contracts (or «on call work»): UK extimates 1 million, Italy, limited to youngsters and aged workers;
- Occasional workers. Different definitions: Italy, less than 5000 Euro a year
- Mini jobs: (Germany) different forms. Estimates 4.9 mill. max duration 15 h. weekly mostly used by youth, minimum wage 8.5 Euro. Basic social security
- Occasional non standard work temporary source of income or poverty trap.

- Impact of digitalization on employment.
- ▶ Divergent estimates. Some (M. Osborne, Oxford) forecast up to 50% of jobs at risk. World economic forum: 5 million jobs replaced by machines (2020) - mainly routine tasks
- ► OECD estimates only 9% but many jobs, (up to 40% in Germany and Italy) likely to experience significant changes; including white collars, intellectually intensive jobs.
- ► The platform economy is small (0,5% in EU) but growing fast.

- Major impact on skill requirements; 40% of adults lack problem solving skills and skills to fulfill simple task in technological advanced environments
- ► The least skilled benefit less from training. Risk of digital divide
- New skills required to meet continuos tranformations: critical thinking, problem solving, creativity, cognitive flexibility
- Skills developed through social and emotional learning (SEL)
- Challenge to traditional way of teaching and learning

International guidelines on the future regulations of work: ILO (decent work agenda), EU (social Pillars) OECD; 2030 Agenda for sustainable development;

Uneven implementation. Still major role of national states;

More divergence than convergence; different national reactions to economic and competitive pressures (growth, employment, income distribution, welfare)

- Quality and quantity of employment depend on rate, stability and quality of growth
- Decent work is an important element of sustainable growth.
- ► This link is denied by the decoupling of financial, economic and social policies
- Common practice, in spite of art. 9 social clause of the European treaty ("all economic decisions should consider impact on employment, social inclusion, health and safety")
- Financial stability priced over economic growth
- Short termina major impediment to effective policies which require medium term approach

- ► Factors and indicators of sustainable growth: (not only gdp), education, health and safety, life expectancy, equal opportunities, quality of services, etc.
- Some recognition of welfare indicators in legal systems.
  But indifference and resistance
- Indicators of sustainability should become guiding principles also for management strategies, good for business

- Major role of economic policies for inclusive and sustainable growth (n.8 of U.N. 2030 Agenda).
- Public private investments in innovative production systems, in infrastructures (in particular digital)
- Organizations in line with new technologies
- Support to creativity, to small-medium firms, to innovative start ups, access to financial services.
- Reconcile economic growth with safe environment (the case of steel mills in Taranto).
- Promotion of job rich growth: high value added and labor intensive sectors. High tech - high touch
- Green jobs, renewable energy, energy efficiency
- Job growth in environmental economy: 2000, 2.8 mill. full time equivalent; 2015,
   4.1 million (faster than average)
- ▶ OECD: 7 industries that produce up to 80% of pollution employ less than 10% of workforce
- ► Green jobs use more intensively high level and interpersonal skills (than non green)

- Inclusive quality education (n.4 of U.N. of 2030 Agenda). European targets: reduction of drop- outs, of number of NEET.
- Coping with new forms of illiteracy, not only lack of technical skills but of basic capacity of written and oral communication, impact on private and public life.
- Mix of basic skills and flexible specialization.
- Broad range of cognitive capacities, soft capital.
- Skills and trust needed to master a digital economy and society.

- Education and work: how to bridge school and business approach.
- ► Work-experiences during school years. Personal guidance to employment choices prevent skill mismatch, risk of over qualification.
- Make education pay. Reward skills. Retention policies.

- ► The role of regulation of work. Protective labor regulations accused of reducing growth and employment. Quality regulation a necessary response to the failure and imperfection of markets (World Bank).
- Regulation and stability encourage firms to invest in productivity -enhancing technologies.
- Diversification of work patterns requires change of traditional labor laws based on the blue collar workers model.
- More selective regulations according to characters of employment and needs of workers.

- ► Attempts to reduce precarious works:
- ► Legal limitations of fixed term contracts
- Regulated flexibility: internal (professional mobility, smart working), external (costs of dismissals)
- Not only fair regulations also quality and stability of growth

- ▶ Basic standards of treatment for all workers. New rights for the digital economy (privacy protection).
- The case of platform-based workers (Uber, riders): variety of forms.
- ► These workers defy legal categories.
- ► Taylor made approach needed
- Different legal solutions by judges and legislators.
- ▶ Real antidote to precariousness.

- ▶ Role for collective agreements. Organized decentralization
- ► How to revitalize collective action and solidarity
- New unions strategies. More transparency, internal democracy, less political patronage, alliance with other social movements, more services to facilitate access of workers to social services.
- State support to workers representatives

- ► Transitions and security on the labor markets. Protection of specific jobs insufficient
- National activation policies to support continuity of employment in different job positions
- Proactive strategies public services and enterprises to foster successful mobility among jobs
- Legal minimum wages and basic standards to prevent poverty among workers

- ► Recalibration not decline of public welfare: total social expenditures stable: average Europe 26-28% of GDP (influenced by GDP fall). Public welfare major investment for social cohesion and sustainable growth
- Extend social security safety net to all workers, including selfemployed. Basic pensions, unemployment benefits, health care
- ► The role of supplementary funds
- From insurance-based schemes to universal systems financed by general taxation

- Various forms of minimum income
- ► Targeting and conditionality
- Redistribution of working time: the case of German 28 hours work -week
- Part time, a general system of redistribution (the case of Netherlands)
- Less work more productivity

- Regulation of international employment relations: a network of rules in absence of supranational authorities
- Codes of practice by MN enterprises
- Transnational collective agreements
- Social clauses in international trade agreements
- Weak effectiveness: involvement of social organizations in enforcement procedures
- Commitments of national states necessary to enforce supranational rules
- New testing ground for the mission of social regulation and policies
- One century to build European national welfare states. Present challenge is to extend social policies to different countries of the world according to national identity and cultures