

Remote working, housing inequality and social mobility

Francesco Armillei, Tito Boeri and Thomas Le Barbanchon

Venice - 1/07/2021

The T20 contribution to the G20

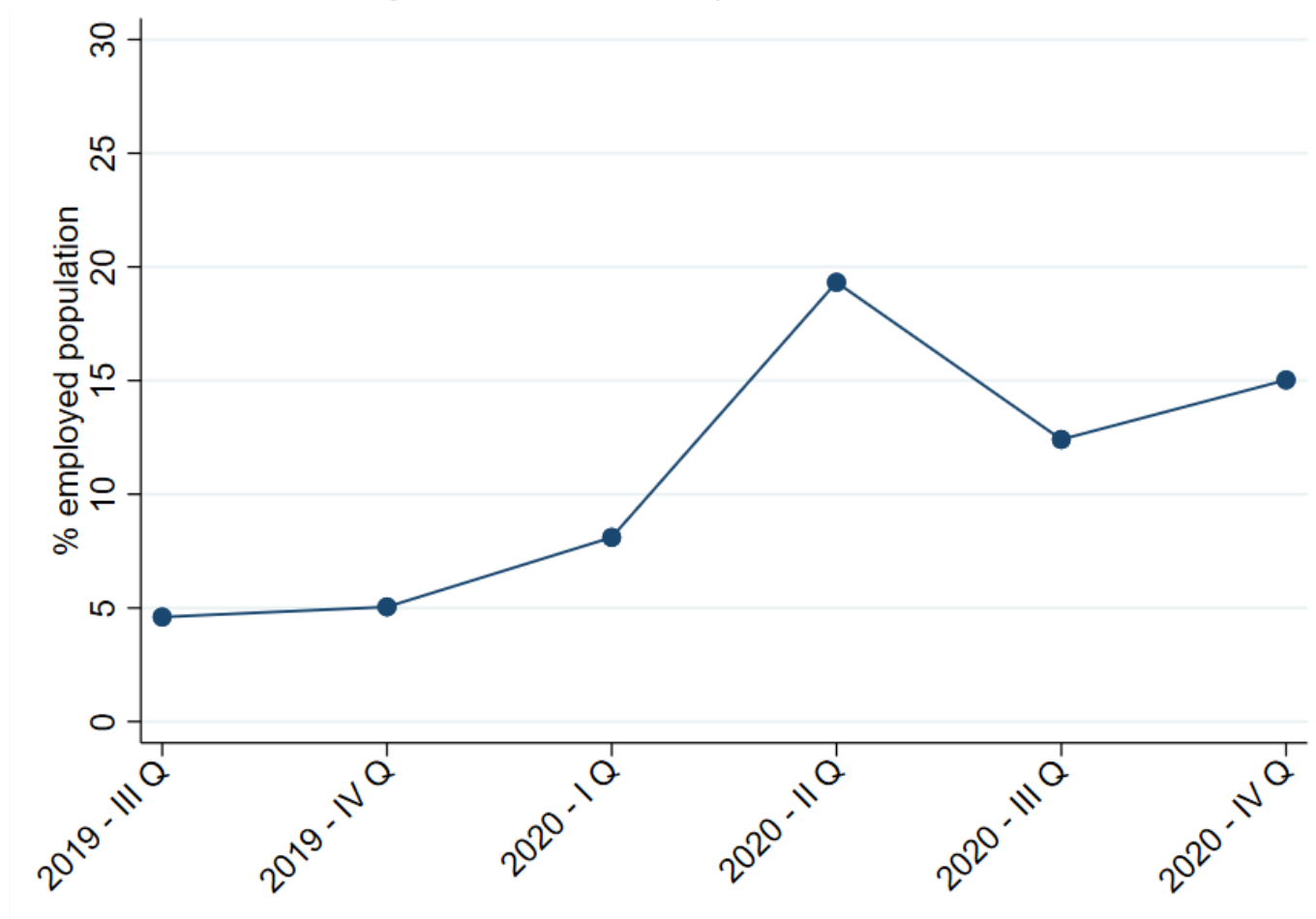
- The T20 is an engagement group of the G20 countries, which brings together think-tanks, universities and other research centres to produce practical policy-proposal for G20 decision makers.
- Work is organized in task-forces, ranging from climate change to digital transformation, from international finance to migration and more.
- This work has been produced within the activities of the task force on the Social Cohesion and the Future of Welfare States

For further information: <https://www.t20italy.org/>

The spread of remote-working

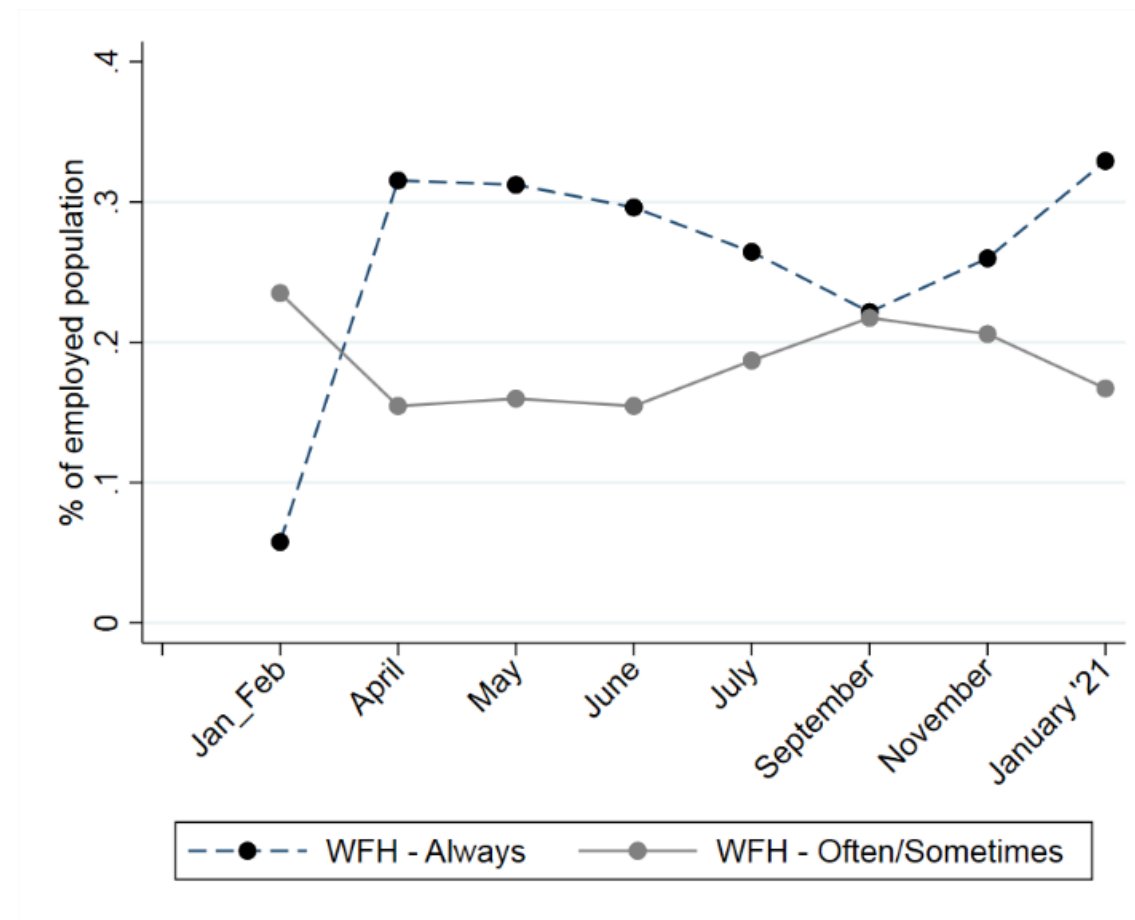
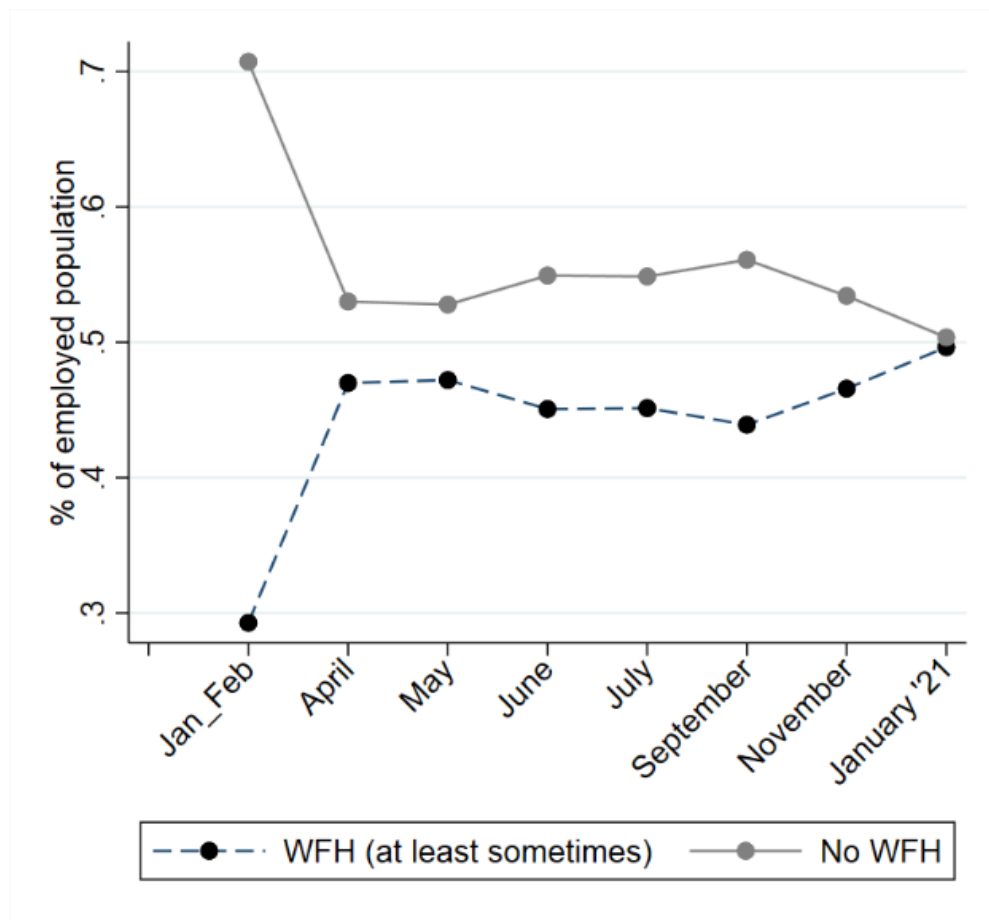
- During the pandemic, the share of jobs carried out in remote increased by a factor of three to four in most developed countries, going **from around 10% to 30-40% of the workforce** (Morikawa 2020).
- The spread of remote working was **unequally distributed**, as workers' ability and possibility to work from home greatly differs depending on their socio-economic status (Basso et al. 2020).
- The labour market after Covid-19 will **continue to display a significant portion of jobs organized remotely**, as highly indebted firms are likely to cut on fixed costs, such as office space rentals (Baldwin 2020).
- Surveys on employers and on employees carried out during the pandemic are consistent with **an irreversible shift to a hybrid system** with significant working from home arrangements (Bartik et al. 2020; Bloom et al. 2021).

Remote-working in Italy



Note: the graph plots the evolution in Italy of the share of employed worker who declare to work at least sometimes from home. IT-LFS data.

Remote-working in the UK



Note: the graph on the left-hand panel plots the evolution of the share of employed workers who declare to work at least sometimes from home and that of those who do not. The graph on the right-hand panel plots the evolution of the share of employed worker who declare to work always from home and that of those who do so often or sometimes. Understanding Society Covid-19 data.

A new form of inequality: housing inequality

- Productivity of home working depends on home-workplace characteristics
- Inequality may increase not only along the extensive margin of jobs that can or cannot be carried out from home, but also from the intensive margin related to the conditions under which this takes place.
- **As residential-spaces become workplaces, some workers will be penalized. In other words, the spread of remote working will create a new and relevant obstacle to social mobility: housing inequality.**

Issues

- Housing conditions often perceived as problematic by remote workers.
- **Poor working-from-home setup and poor telecommunication environment at home** relative to the workplace explain the decrease in productivity at home in Japan (Morikawa 2020; Kitagawa et al. 2021).
- Management and psychology literatures: workers' isolation may have **negative effects on their productivity due to interference between work and family responsibilities** (Taskin and Bridou, 2010; Rockmann and Pratt, 2015).
- Relevant gender dimension: women particularly penalized in occupations that have to be carried out in a batch sequence
- Double burden (family and work) contributes to explain why it has been a she-cession.

Measuring workplace-housing inequality

Need for multidimensional approach:

- **Structural conditions:** e.g., the number of rooms available, convertibility of bedrooms or living rooms into office spaces, soundproofing insulation from neighbours, lighting, etc.;
- **Working tools conditions:** e.g., the availability of digital devices, an internet connection, a comfortable desk and an ergonomic chair;
- **Family conditions:** e.g., the presence of dependent people (small children, elderly or disable people) to be taken care of.

Size of the dwelling matters

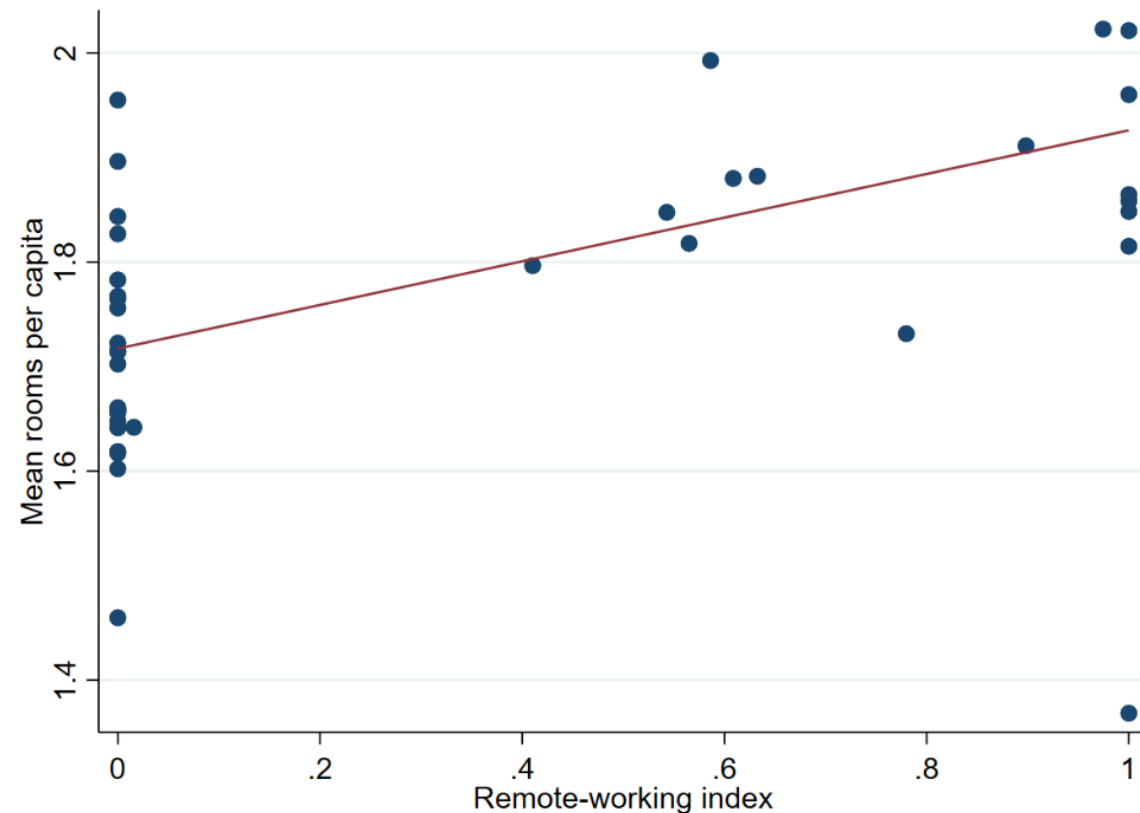
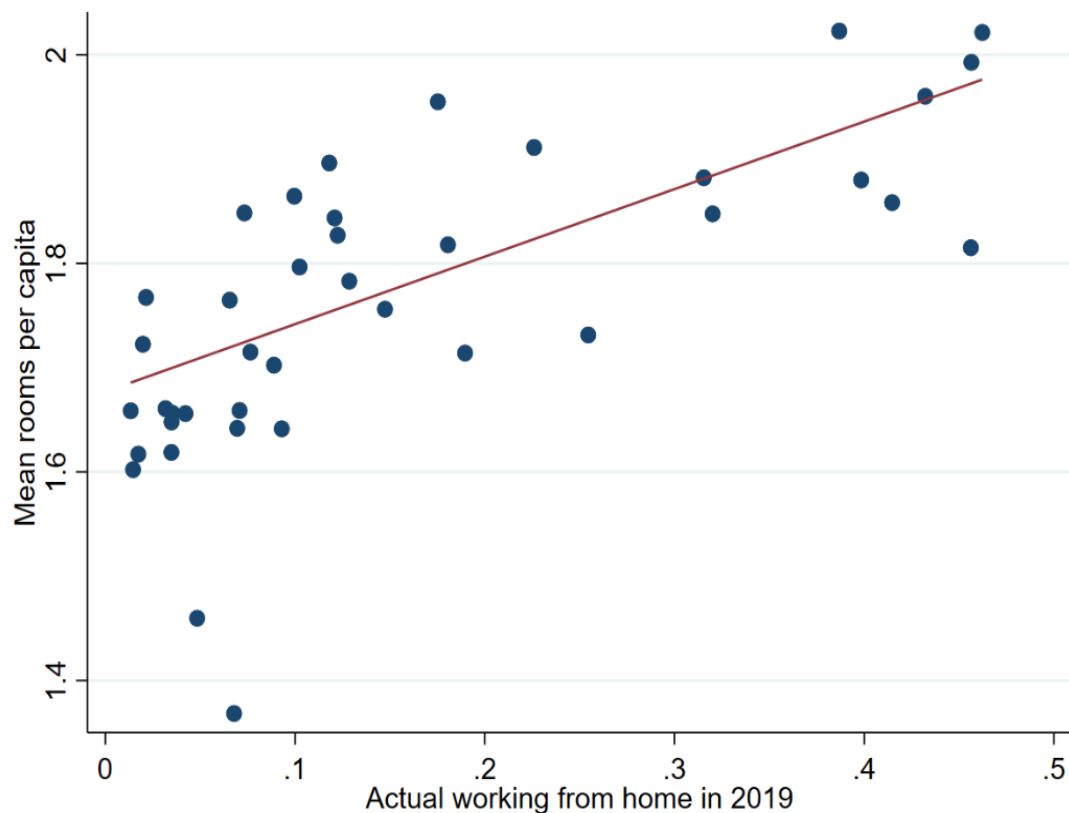
Unsurprisingly before the Covid-19 pandemic, remote workers had, on average, a larger number of rooms per capita than workers operating at the workplace only.

Explanations:

- i) remote workers invest more resources in housing conditions;
- ii) self-selection into remote working of individuals who benefit from a relatively good house-work environment.

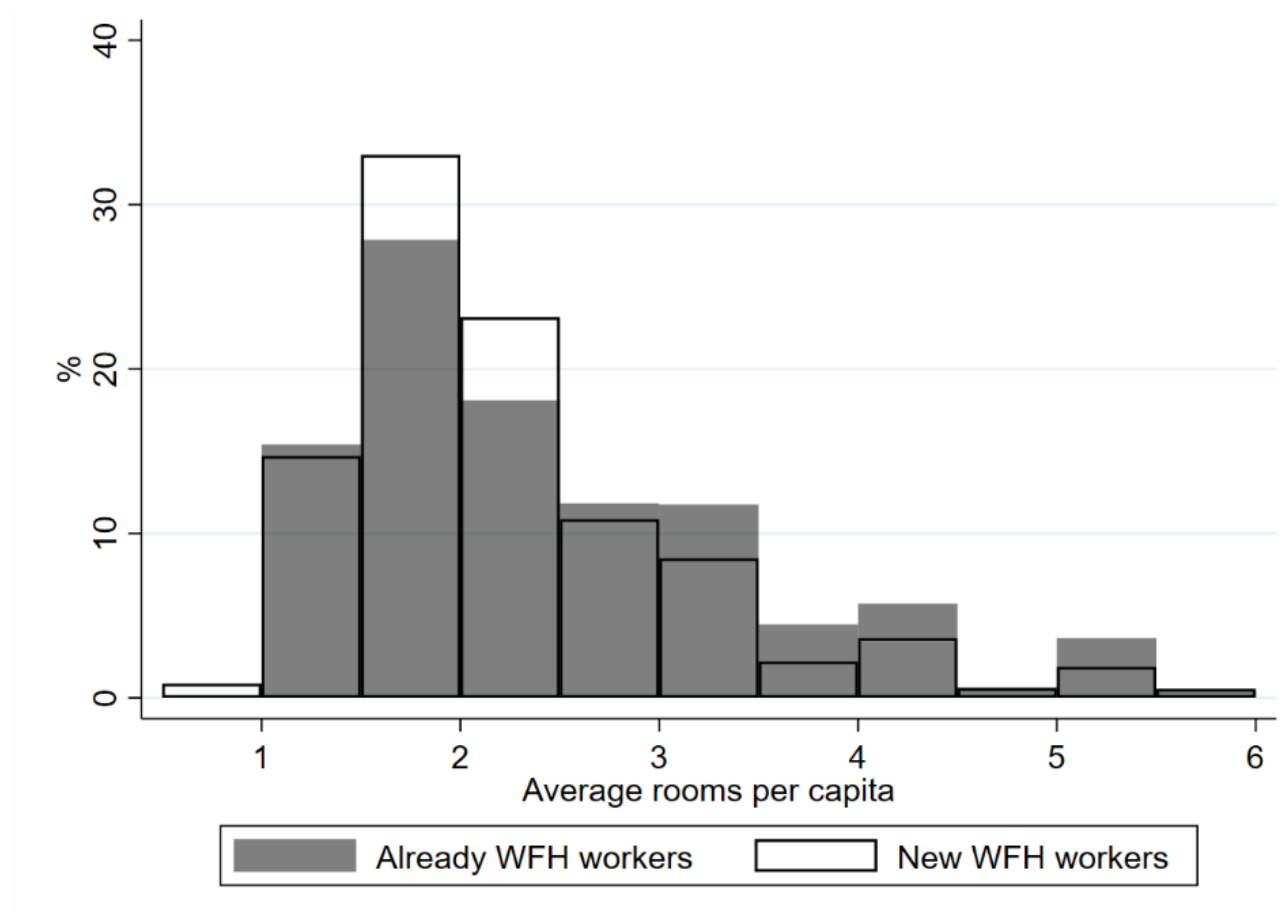
Stanton and Tiwari (2021) the average renting household in the US with at least an adult working remotely spent between 6.5 and 7.4 percent more of their income on housing compared to similar non-remote working households. Among owners, mortgage payments and property taxes as a share of household income were between 8.4 and 9.8 percent greater for remote-working households. Remote-working households consumed 0.3 to 0.4 more rooms per dwelling.

House dimension matters



Note: the figure on the left displays the relationship between the average number of rooms per capita available to each worker and the share of employees declaring to work from home at least sometimes in the EU at 2-digits ISCO occupational codes . Each dot corresponds to one of the 2-digit level ISCO occupations. The linear fit is weighted by the number of workers in each occupation. Rooms per capita data are from EU-SILC (2018). Working from home shares from EU-LFS (2019). The figure on the right displays the relationship between the average number of rooms per capita available to each worker and the share of employees who can work from according to the potential remote working index of Basso et al. (2021) in the EU countries. Each dot corresponds to one of the 2-digit level ISCO occupations.

New home-workers in smaller dwellings



Note: the figure shows the distribution of the average rooms available per capita in the UK for workers who declare to always work from home in April 2020. The grey bars refers to workers who were already working remotely in January and February, while the empty bars those who started doing so in April. Source: Understanding Society Covid-19 data.

Policy proposals: a 7-action strategy

1) Investments in hybrid housing-working spaces

Fiscal incentives to housing renovations and broadband connections, notably in peripheral areas and in urban disadvantaged neighbourhood. National plans for recovery and resilience being developed in the EU, for instance, could interpret the emphasis put on the digital transformation by the European Commission as an investment in improving the organisation of work from home.

2) Good Internet connections for all

Governments should make sure that all persons in working age have access to good internet connections. Due to the importance that these connections have in current working conditions, differences in access to Internet may give rise to forms of discrimination among workers and reduce even more the equality of opportunity.

3) Cross-country coordination in enforcing legislation

Remote working makes it possible, in principle, to carry out activities everywhere, just like in call centers. Need for a co-ordinated approach to the enforcement of national legislations as in the case of the EC posted workers directive.

Policy proposals: a 7-action strategy

4) Regulations of remote working and decentralization of collective bargaining

Cost sharing between firms and workers in adapting home-working environments is key. Useful soft legislations providing significant scope for bargaining over the specific details of the organization of work in the different conditions.

5) Remote working and the sharing of care responsibilities

Important to accompany the remote-working development with equal opportunity policies promoting a fair sharing of family responsibilities between members of a couple. For example, governments may encourage family policies that do not require the family home to be available to care for children during business hours.

Policy proposals: a 7-action strategy

6) Urban planning and co-ordination in the supply of decentralized co-work sites

The creation of decentralized co-working facilities can contribute to make remote working more sustainable both socially and environmentally. Local governments can play a very important role in this co-ordination. The reduction of commuting due to the increased use of remote working (combined with the spread of decentralized co-work sites) can also contribute to a reduction of work injuries and of commuting reduces also CO2 emissions.

7) Prevent possible new forms of discrimination

Housing conditions allowing to reconcile residential and working conditions are bound to become a major asset in the future. There is a high risk, in this context, that employers may use housing as a way to discriminate among job applicants, just as the ownership of a motorcycle is often used as a requirement in the hiring of food delivery workers. Anti-discrimination and privacy regulations should address this issue, for instance not allowing employers to elicit information on housing conditions of potential and actual job applicants.