

Open Research Online

The Open University's repository of research publications and other research outputs

A Care-Led Recovery From Covid-19: Investing in High-Quality Care to Stimulate And Rebalance the Economy

Journal Item

How to cite:

de Henau, Jérôme and Himmelweit, Susan (2021). A Care-Led Recovery From Covid-19: Investing in High-Quality Care to Stimulate And Rebalance the Economy. *Feminist Economics*, 27(1-2) pp. 453–469.

For guidance on citations see [FAQs](#).

© 2020 IAFFE



<https://creativecommons.org/licenses/by-nc-nd/4.0/>

Version: Accepted Manuscript

Link(s) to article on publisher's website:

<http://dx.doi.org/doi:10.1080/13545701.2020.1845390>

Copyright and Moral Rights for the articles on this site are retained by the individual authors and/or other copyright owners. For more information on Open Research Online's data [policy](#) on reuse of materials please consult the policies page.

A Care-Led Recovery from COVID-19: Investing in High Quality Care to Stimulate and Rebalance the Economy

Jerome De Henau and Susan Himmelweit

Final draft – September 2020

Abstract

The Covid-19 pandemic has both devastated employment prospects, particularly of women, and shown up the longstanding neglect of care systems and poor working conditions of care workers. Most recovery programs propose to stimulate employment by focusing on investment in construction, ignoring gender equality issues. This paper argues for public investment in high-quality care services and better conditions for care workers to build a more gender-equal caring economy. Using input-output analysis, across selected EU countries and the US, a care-led recovery is shown to have superior employment outcomes to investment in construction, even when wages and hours are matched. In particular, matching employment and wages in care to the high levels of Scandinavian countries, would raise employment rates by more than 5 percentage points and halve most gender employment gaps, while the net cost of investment in construction that achieved as much would generally be at least twice as high.

Keywords: care, social infrastructure, economic stimulus, investment, input-output analysis, gender equality

JEL codes: C67, H51, J16

Introduction

Covid-19 has caused not only a health crisis, but an economic one. Unemployment rates have climbed throughout the world or are expected to surge when job retention schemes end, and debate continues about how long high levels of unemployment will persist (OECD, 2020a). Many jobs, and perhaps some whole industries, are likely to be permanently lost. While in previous recessions men tended to lose their jobs faster than women, this may not be true this time. Women are more likely to be employed in the worst affected industries, such as retail, hospitality and personal services (ILO, 2020). Moreover, the bulk of increased unpaid childcare, home schooling and care for the frail elderly has fallen on women, making them more exposed to the risk of lay-off by employers (Mascherini & Bisello, 2020; OECD, 2020a). Further government spending, beyond that already made to cope with the immediate effects of the pandemic, will be needed over many years to create jobs and close the widening gender employment gap.

Many Covid-19 recovery proposals for new investments to generate employment have been made, including some that aim to rebalance the economy in a more desirable direction, such as the range of Green New Deals proposed in many countries. Nearly all focus on investing in the construction industry, even where it is to improve the carbon footprint of existing buildings (eg European Commission, 2020; HM Treasury, 2020). Few, however, look to the gender impacts of their proposals or even note that focusing investment on the construction industry will worsen the gender employment gap, unless efforts are made to employ a majority of women, and none is specifically designed to create a more gender-equal economy.

This paper argues that in order to build back better in a more gender-equal way, a feminist Covid-19 recovery program should include substantial investment in child and adult care services. This would

be necessary to reduce the many gender inequalities that turn on the unequal division of unpaid care responsibilities between women and men. Care systems that relieve some of that unpaid care would help tackle gender inequality, but only if the care provided is of good quality and its workers well treated; otherwise, that same gender inequality is likely simply to be transferred from the unpaid into the paid economy (Folbre, 1995).

Before the pandemic, after a decade of austerity in many countries, most European care systems were failing to prevent a resurgence of demand for unpaid and informal care due to limitations in the quality, affordability and availability of formal long-term care provision. High turnover rates and recruitment difficulties due to poor pay and working conditions compounded a situation in which care workers were given insufficient training to be able to provide high-quality, person-centred care (Coster et al., 2018). Among the sectors in urgent need of reform, long-term (social) care was a low priority for most governments. The failure of many high-income countries to protect vulnerable care home residents from infection and death can be seen as a symptom of the low level of attention given to the sector, as can the deaths through cross infection of clients of home care workers sent out without personal protection equipment (PPE) (Miller, 2020). In England and Wales, both residential and domiciliary care workers have experienced significantly higher death rates from Covid-19 than most other occupations, including front-line health care workers, who were more likely to have access to PPE (ONS, 2020).

There were also significant failings in childcare provision before the pandemic, with parents in many countries finding childcare too expensive, poor quality or simply unavailable, relying instead often on informal care by relatives, especially grandparents, and/or on mothers working part-time or not at all (Ferragina, 2017). The large-scale closure of childcare facilities and schools during the pandemic has exacerbated these gender inequalities, with mothers shown to be taking on a larger share of the

additional childcare than fathers (Mascherini & Bisello, 2020; OECD, 2020a). Public investment in childcare facilities will be especially needed in the recovery as many private sector childcare providers may be bankrupted by uncertain demand after the pandemic (Strauss, 2020), while informal childcare arrangements by vulnerable grandparents may no longer be considered safe (BMA, 2020).

The coronavirus pandemic has intensified the gender-equality case for investing in affordable, high-quality care. But is it also a route to recovery from the employment crisis? Such investment would generate jobs not only in care, but also in the industries supplying care, and stimulate the economy by the spending of newly employed workers. This paper investigates the employment generating aspects of such a care-led recovery program for a variety of OECD countries by extending the methods (based on input-output analysis) of an earlier cross-national study (De Henau et al., 2016) that compared the job-generating potential of spending on care versus construction, the usual focus of economic stimulus programs, even green ones. However, unlike that report or similar empirical analyses (Antonopoulos and Kim, 2011; Kim, Ilkkaraçan, and Kaya, 2019), we also model improving the conditions under which care workers are employed, as would be essential if the investment were to result in reducing gender inequality by delivering better quality care.

Any investment in care would not only be a short-run stimulus, but could also be the basis for a permanently more caring economy, rebalanced by having more of its paid workforce employed in good jobs providing high-quality care. Such a change should in the long-term reduce the need for future expenditure while raising more tax revenue. But, even in the short-term, any government stimulus to the economy will partially pay for itself by generating increased tax revenues, reducing the net cost of the stimulus. We therefore also compare the level of employment creation by investment in the two industries for the same net cost.

Finally, for the main results of this paper, we look at the level of additional employment that would be generated for women and men if sufficient investment were made in each country to have a well-functioning care system, adequately staffed by appropriately paid workers, and compare the net cost of this investment to that of producing the same level of overall employment from investment in construction.

Investing in Care

Our comparative analysis examines eight OECD countries, Denmark, Sweden, France, Germany, the UK, the USA, Spain, and Italy, (plus the EU-28 as a whole), chosen to cover a variety of welfare systems and differences in the level, quality and type of care provisioning (Coster et al., 2018; De Henau et al., 2016). Table 1 shows how the relative importance of care sector employment and wages varies across these economies and the consequent overall spending on the care industry. Here by care we mean both child daycare and adult long-term care, provided both in residential settings and at home.¹ Throughout this analysis we use wages as a proxy indicator for both care and employment quality, recognizing that other conditions including sufficient time, training and job continuity are required for workers to be able to provide high quality care.

While Sweden and Denmark rely on overwhelmingly publicly-funded care services, employing a relatively large proportion of their workforce, countries like the UK and the US, favoring market and quasi-market solutions, employ fewer in care with significantly lower wages; Italy and Spain have

¹ For EU countries, the two industries of the NACE-2digit classification 87 (Residential care) and 88 (Social work without accommodation), and for the US, the two industries of its NAICS classification 623 (Nursing and residential care) and 624 (Social assistance).

traditionally relied more on family care, with low levels of formal employment in care, while France and Germany have intermediate employment levels based on a more complex mix of social assistance and social insurance provision. Table 1 also shows that the headcount (HC) percentage employed in the care sector translates into different percentages of full-time equivalent (FTE) employees, because the countries vary in the average hours worked in their care sectors. Wage levels per FTE in care relative to each country's average earnings also vary, but in all countries remain below those of construction. All countries have a preponderance of women employees in the care sector and a significant but varying gender employment gap.

Table 1 Employment, relative wages, overall spending, and gender in care services and the gender employment gap (2015*)

	Care as % of all HC employees	Care as % of all FTE employees	FTE wage in care (relative to average)	FTE wage in care (relative to construction)	Total spending on care (% GDP)	% women in care employment (FTE)	Overall HC gender employment gap (% pt)
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Denmark	11.4%	11.2%	81%	88%	6.5%	83%	6.5
Sweden	10.4%	10.0%	86%	87%	6.1%	79%	3.0
France	8.0%	7.5%	69%	70%	3.6%	86%	6.5
Germany	6.0%	5.7%	62%	67%	2.7%	74%	8.0
UK	5.7%	5.4%	51%	42%	3.5%	76%	9.6
US†	4.6%	4.6%	50%	44%	2.2%	81%	8.7
Spain	3.0%	3.0%	72%	72%	1.9%	86%	10.2
Italy	2.5%	2.5%	56%	70%	1.2%	82%	18.3
EU-28	5.1%	4.7%	81%	91%	2.9%	81%	10.5

* 2013 for US

† HC (headcount) only for US, FTE data not available

EU-28 includes the 27 Member States of the European Union in 2015 i.e including the UK as well as Croatia.

Source: Authors' calculations based on OECD (2020b), Eurostat (2020) and Bureau of Economic Analysis (2015).

Investment in an industry increases the amount bought from that industry (its demand). The investment works as an economic stimulus by generating three types of employment effects. *Direct* employment effects capture the employment immediately created in that industry. Investment in any industry will also generate additional employment as demand is increased for the products of its suppliers. Such demand will ripple down the supply chain, generating *indirect* employment, possibly including within the same industry. There is also *induced* employment due to the additional household income generated by the additional employment, some of which will be spent and become a further source of increased demand within the economy, generating jobs in the sectors in which households spend their income.

There are differences between the care and the construction industries that might explain why total employment creation from investing the same amount in the two industries may vary:

- i) Labor and import intensity: the care industry is more labor intensive and uses fewer non-labor inputs, machinery and raw materials; this means the number of jobs directly generated is higher. The construction industry uses more inputs and so indirect employment should be higher than for care, unless those inputs are imported.
- ii) Working hours: as working hours are shorter in the care industry, more people can be directly employed for the same amount spent;
- iii) Wages: with lower wages in care, more people can be directly employed for the same amount spent. But the total wages paid to both directly and indirectly employed workers determine the induced employment effect, and the influence of care's low wage levels may be counterbalanced by a greater total number of workers employed.

Our simulations will estimate the net effects on total employment generation of these competing and complementary factors.

Both industries are also highly segregated by gender, construction more so than care (OECD, 2020b). Whether jobs generated are “men’s” or “women’s” depends on the gender breakdown of employment not only in the industry itself, but in its supplying industries and those supplying the induced demand for consumer goods. But who actually takes those jobs also depends on what else changes in society, including any specific gender-equality intentions of the investment programs; improving wages might also make employment in care more attractive to men.

Whilst investment in construction projects tends to be one-off, even if over a long period, the case for investing in care is to create a permanent shift in employment based on recurrent spending. Indeed, the benefits of having an economy more focused on care would remain after any post-pandemic recession is over, giving good reason for any investment in care to continue beyond its requirement as an economic stimulus. An improved care system that relieves unpaid caring labor will expand the labor supply, by enabling more people to take employment and, whether by taxation or user fees, contribute to the care system’s cost. Additionally, there would be long-term productivity gains from the increased capabilities of those receiving care, the key feature of such spending that justifies calling it an investment (De Henau et al., 2016).

Methods and data

This paper uses standard input-output (I-O) multiplier methods to investigate the effect of increasing the demand and thus output of a single industry. Input-output tables show (in price terms) how much each industry’s production process uses the output of every industry (including its own) as inputs.

The direct employment effect of an increase in the output of an industry is calculated from that industry's labor input per unit of its output. I-O tables can then be used to calculate total input requirements for each industry down the supply chain and thus the industry's *Type I employment multiplier* (directly and indirectly generated employment per additional worker directly employed). The vector of directly and indirectly generated employment effects is the product of the matrix of total input requirements, (the Leontief inverse of the direct requirement matrix), and the vector of the total number of jobs by industry per unit of output. The employment multiplier for an industry is calculated by multiplying the amount of investment needed to create one directly generated job in that industry by this vector.

We use a similar process to calculate the *Type II employment multiplier* that also includes the induced employment effect of the increased earnings of the newly employed. To do this, households are effectively treated as another industry, whose inputs are given by the spending of households on the outputs of every other industry. Augmented I-O tables can then be used to calculate total employment generated including induced employment.²

Standard input-output methods assume that in volume terms the input and employment requirements per unit of each industry's output remain unchanged, as do all prices and wages in all industries (except when we simulate different wage levels for care). This is a strong but usual assumption in such analysis (De Henau et al., 2016). However, the additional assumption required for calculating

² Because input-output tables make the income of the self-employed indistinguishable from profits, induced effects can only be measured for employees; therefore, for consistency, we simulate results for employees only. However, with relatively more self-employment in construction than care, ignoring any increased self-employment generated reduces estimated employment effects more for construction than for care.

induced employment effects, that a policy that increases demand in one industry does not change the pattern of household spending, needs justification. For construction, it is not unreasonable; public construction projects are typically different from those on which households spend their income.³ However, prior to the public investment in care, some households may spend money buying care that they may not need to once that public investment is made (eg if childcare becomes free). So, to justify assuming unchanged household spending patterns, we should see the investment being modelled as providing publicly funded care services, but with a financial contribution required from households equal to the household sector's prior spending on care.

As Table 1 shows, in all countries care is paid below average wages and below construction wages. We estimate the effect of improving wages (as a proxy for working conditions more generally) by calculating anew⁴:

- (i) direct employment effects, because higher wages will affect the price of care and hence how much can be purchased by a given sum of money; direct employment will be reduced by a factor that is less than proportional to the rise in wages.
- (ii) employment multipliers; the same inputs will be needed per worker in care, so the Type I multiplier will not change, but the rise in the earnings of care workers will raise the Type II multiplier.

³ Spending might change as a result of such construction, but typically not while the investment in construction is being made (railways, wind farms), which is what matters here.

⁴ Calculations are based on the reasonable assumption that care is not a significant input into any other industry's production process or into the household sector's spending overall (De Henau and Himmelweit, 2020).

We estimate gendered employment effects by assuming that current gender employment ratios by industry do not change⁵. We will return to this when discussing our results, especially on the effect of raising wages in the care industry.

For European countries, (augmented) input-output tables (64 industries) are derived from the national accounts and data for employment by industry, gender and working time from official national labor force surveys, both produced and harmonized by Eurostat. Data for the US is provided by the US Bureau of Economic Analysis which produces symmetric input-output tables for 70 industries. The reference year is 2015 for European countries and 2013 for the US.

Employment comparisons

To compare the employment effects of investing equivalent amounts in the care and construction industries, Table 2 shows ratios of: the increase in employment *within* the industry directly targeted (which may include some indirect effects if that industry's output is also used as an input); the increase in total employment across the economy; and the increases in total employment for men and women. Panel A shows these ratios for the numbers of jobs (headcount) at current wages. Panel B shows what those ratios would be if wages of the new workers were equalized in the two industries (at construction wages), expressing all jobs in FTEs - for every country except the US where data on FTEs is not available.

⁵ This is also implicit in studies using more refined job-matching methods, such as Antonopoulos and Kim (2011) and Kim, Ilkaraçan, and Kaya (2019).

Table 2 Ratios of employment effects: investment in care vs investment in construction

	A) Headcount employees at current wages				B) FTE employees* matching wages in the two industries			
	Within- industry effects (all)	Total effects (all)	Total effects (women)	Total effects (men)	Within- industry effects (all)	Total effects (all)	Total effects (women)	Total effects (men)
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Denmark	3.5	2.2	6.6	0.8	2.9	1.9	6.5	0.7
Sweden	3.0	1.9	6.0	0.7	2.4	1.6	5.4	0.6
France	3.9	2.3	6.6	0.6	2.6	1.7	5.0	0.5
Germany	4.0	2.6	6.1	1.0	2.5	1.8	4.9	0.8
UK	5.1	2.7	6.3	1.1	2.4	1.6	3.9	0.8
US	3.5	2.0	4.0	0.9	2.0	1.4	2.7	0.7
Spain	3.1	2.0	5.2	0.7	2.2	1.6	4.5	0.6
Italy	3.7	2.4	7.0	0.8	2.7	1.9	6.1	0.7
EU-28	3.3	1.8	4.2	0.8	2.6	1.6	4.0	0.7

Source: authors' calculations. *Headcount employees for the US

Looking at Panel A, across all countries, the within-industry employment created by investing in care at current wages and hours is consistently considerably larger, by a factor of three or more, than that of investing in construction (column 1).

One standard argument made for using construction to stimulate the economy is that it has a high employment multiplier, the ratio of indirectly to directly generated jobs, so that other industries are stimulated too. Consistent with this, column 2 shows that the ratio of total employment generated does not favor care as much as the ratio of within-industry employment generated. But it is not the ratio of indirect to direct employment that matters for a stimulus but the total direct, indirect and induced employment. Summing these (not shown separately) gives much greater total employment

creation by investment in care. And the total employment generated outside each industry is roughly the same because of greater induced effects from investment in care.

Comparing Panel B with Panel A, in all countries, jobs created in care are reduced by paying care workers higher wages, and by counting jobs in FTEs (comparing columns 1 and 5), but for overall employment this is partially offset by the higher wages generating additional induced employment (comparing columns 2 and 6). Investment in care continues to outperform investment in construction in total employment creation by at least 60% in all European countries, and by 40% in the US (column 6).

Table 2 (column 3) also shows that investing in care produces far larger employment increases for women than investing in construction. Because of its larger total employment effects, investment in care still produces employment gains for men (column 4) not far below those for construction: roughly equal (at going wages) in the UK and Germany, 90% in the US, and across the EU-28 overall 80%. This is on the assumption that nothing is done to reduce gender segregation in either industry, though higher wages in care might encourage more men to join the profession, making the relative gains in Panel B an overestimate for women (column 7) and an underestimate for men (column 8).

The additional employment effects of investing in care over those of construction are not simply the result of poorer wages and different hours worked in the two industries and those that supply them. Even when wages are equalized and FTEs counted, care outperforms construction in job creation and more so for women. Investing in a reformed care sector with good pay and conditions is therefore an excellent candidate to lead the employment recovery from Covid-19, while going some way to

redressing the gender imbalance in job losses, improving the working lives of a large number of women and laying the foundations of a more gender-equal economy.

Effects on fiscal revenue

Any well-planned investment in infrastructure, whether in care or construction, should bring long-term benefits that reduce the need for future expenditure and/or raise more tax revenue. But, even in the short-term, any government stimulus to an economy operating at less than full employment will partially pay for itself by generating increased revenues.

Tax and benefit systems are highly country-specific, but a rough estimate of the taxes paid on average wages and increased household expenditure can be calculated. For each country, the first column of Table 3 shows the *tax wedge*, the income tax and social security contributions paid by an average wage employee and their employer, divided by the total labor cost (gross earnings + employer's social security contributions) of employing that worker. The second column shows indirect (consumption) tax incidence on average incomes, which can be added to the tax wedge to estimate the additional tax revenue collected through the new jobs created (assuming they are net gains to employment, as would be expected for a stimulus program).

Such additional tax revenue reduces the net cost of any investment. Columns 3 and 4 show that net costs are consistently a smaller proportion of gross costs for investment in care than for investment in construction, because the former results in more being paid in wages on which tax is levied. These relatively lower net costs mean that between a third (in the UK) and almost three fifths (France and

Germany) of any gross spending in care is recouped in revenue from taxes and social security contributions.

This comparative ‘fiscal merit’ of care over construction means equalizing *net* spending gives investing in care a further advantage in total employment creation. As columns 5 and 6 show, equalizing net spending in this way raises substantially the ratio of total FTE jobs created.

Table 3 Short-term fiscal effects of investing in care and construction (FTE employees at matched wages)

	Tax wedge at average wages	Indirect tax incidence on average incomes	Net spending as percentage of gross spending		Ratio (Care/ Construction) of increase in FTE employees [†] , matching	
			constr.	care	gross spending	net spending
	(1)	(2)	(3)	(4)	(5)	(6)
Denmark	34%	12%	75%	54%	1.9	2.6
Sweden	41%	13%	70%	52%	1.6	2.2
France	46%	10%	65%	42%	1.7	2.6
Germany	47%	11%	67%	41%	1.8	3.0
UK	30%	11%	78%	64%	1.6	1.9
US	30%	8%	66%	52%	1.4	1.8
Spain	39%	15%	70%	52%	1.6	2.2
Italy	47%	11%	74%	54%	1.9	2.6
EU-28	40%	10%	64%	44%	1.6	2.4

Source: authors’ calculations using OECD (2020b) and Eurostat (2020) for tax data.

[†] Headcount employees for the US.

How much care is needed?

The aim of the stimulus is not just to generate employment, but to help restructure the economy to have a well-functioning care system that rewards its workers fairly. This requires investment in both increased wages for existing care workers and in additional employment in care at those increased wages, both of which generate employment and in turn change average wages and the total level of employment. To gauge how much of an investment is needed, we estimate by how much public spending would need to increase to generate proportions of the working population employed in care and paid at relative wage levels similar to those of the more generous public care systems of Denmark and Sweden (Table 1). The results in Table 4 were calculated by setting each country's employment in care to 10% of the total and wages in care to 81% of average wages, the lower of Denmark's or Sweden's on each measure.

Table 4 Matching Scandinavian employment and wages in care

	Additional care empl. needed	Wage rise needed in care industry	Resulting rise in overall empl. rate (% pt)	Resulting rise in women's empl. rate (% pt)	Resulting fall in gender empl. gap	Additional gross spending in care required (% GDP)	Additional net spending required (% GDP) to achieve total employment rate as in column (3) if investment is in:	
	(1)	(2)	(3)	(4)	(5)	(6)	care	construction
France	39%	18%	2.5	3.8	-41%	2.2%	0.9%	2.3%
Germany	88%	30%	5.3	7.6	-57%	3.5%	1.4%	4.4%
UK	101%	61%	5.6	7.5	-40%	4.9%	3.1%	6.8%
US	144%	62%	8.4	11.3	-65%	5.2%	2.7%	5.1%
Spain	277%	10%	6.3	9.5	-63%	5.8%	3.1%	7.7%
Italy	352%	43%	5.7	8.4	-30%	5.3%	2.8%	7.6%
EU-28	132%	0%	6.0	8.5	-48%	3.7%	1.6%	4.3%

Source: authors' calculations

The first two columns of Table 4 show the scale of the catch-up required which reflects the relative positions of each country illustrated in Table 1. In most countries, care employment would need to more than double, except for France whose child and adult care systems are already more developed (Table 1), and to a lesser extent, Germany. Spain and Italy would require their care workforce to more than treble. A similar increase in employment is required in the EU-28 and the US. Wages would need to rise particularly in the US, UK and Italy, and to a lesser extent, Germany, though not in the EU as a whole, as care workers are generally relatively better paid in the smaller EU countries.

As a result, except for in France, an increase of at least 5% points in the overall employment rate of these economies would be achieved (and up to 8.4 % points in the US). Women's employment rate would rise substantially everywhere (column 4). The gender employment gap in all these economies would also fall significantly, particularly in Spain, Germany and the US. The direction of change is clear, but the magnitude of the figures in columns 3 and 4 should be seen as an upper bound, due to the possible effect of increased wages on gender segregation in the care industry.

Most economies would require an increase in spending of 5% or more of GDP to make such an investment (column 6), which in net terms would be around 3% or less of GDP, and only about 1.5% in Germany and the EU as a whole (column 7). For comparison, column 8 of Table 4 shows that the additional net spending required to achieve the same total employment creation via investment in construction would be more than twice as large.

Conclusion

Economic recovery from Covid-19 will require stimulus through public expenditure. Unlike previous crises, women's jobs have been particularly vulnerable during the pandemic. This paper has shown that a greater employment stimulus could be made in any recovery plan by including investment in care rather than focusing just on construction, the conventional object of stimulus programs. Even allowing for the shorter hours and lower wages paid in the care industry, investment in it still produces more jobs overall and, at current gender ratios, more for women, though not substantially fewer for men. The gender employment gap would fall, whereas any investment in construction would increase it, unless the majority of new jobs went to women, requiring unprecedented attempts to change the industry's gender imbalance. Further, the fiscal returns from investing in care are higher, allowing greater investment for the same net cost.

The paper has also shown how employment might be restructured and how much it might cost if countries were to invest in having care systems equal to the best, by having a greater proportion of their workforce employed in the care industry, and raising its wages, providing a significant care-led component to any Covid-19 recovery plan in countries that currently employ too few care workers or treat them badly. But improving the quality of care provision is not just a matter of raising wages alone: more care jobs at higher pay need to reflect improved training, working conditions and career structures to be effective. This will be necessary, but not sufficient, if gender segregation in the industry is to be challenged (Block et al., 2019).

The case made in this paper for investing in high-quality care does not negate the desirability of gender-segregation challenging investment in construction as well. Indeed, improving many care

services will in itself require building more care compliant housing as well as specific daycare centers.

While the Covid-19 pandemic has shown that other aspects of social infrastructure also need investment and better treatment of its workers, notably the health systems of many countries, it has also exposed the neglect of and inadequacies in care systems throughout the world. This has been a longstanding concern of feminist economists. In many parts of the world, by bringing a recognition of the vital role of care work in sustaining the economy and the social fabric, Covid-19 may have created a political climate in which arguments for investing in a care-led recovery might get a better hearing.

References

- Antonopoulos, Rania and Kijong Kim. 2011. Public job-creation programs: The economic benefits of investing in social care? Case studies in South Africa and the United States, Levy Economics Institute, Working Paper, 671 http://www.levyinstitute.org/pubs/wp_671.pdf
- British Medical Association (BMA). 2020. Briefing on COVID-19 and childcare. <https://www.bma.org.uk/media/2446/bma-briefing-on-covid-19-and-childcare-may.pdf>
- Bureau of Economic Analysis (US). 2015. Input-Output Accounts Data. <https://www.bea.gov/industry/input-output-accounts-data>
- Block, Katharina, Alyssa Croft, Lucy De Souza, and Toni Schmader. 2019. Do people care if men don't care about caring? The asymmetry in support for changing gender roles. *Journal of Experimental Social Psychology*, Volume 83, July, Pages 112-131

- Coster, Stephanie, Bart Vanhercke, Ramón Peña-Casas, Rita Baeten, Dalila Ghailani, Slavina Spasova. 2018. Challenges in long-term care in Europe. A study of national policies. European Commission, Luxembourg.
- De Henau, Jerome, Susan Himmelweit, Zofia Lapniewska and Diane Perrons. 2016. 'Investing in the Care Economy. A gender analysis of employment stimulus in seven OECD countries', International Trade Union Confederation, Brussels.
- De Henau, Jerome and Susan Himmelweit. 2020. The gendered employment gains of investing in social vs. physical infrastructure: evidence from simulations across seven OECD countries. IKD working paper 84, April, <http://www.open.ac.uk/ikd/publications/working-papers/84>
- European Commission. 2020. The EU budget powering the Recovery Plan for Europe, 27 May, https://ec.europa.eu/info/files/eu-budget-powering-recovery-plan-europe_en
- Eurostat. 2020. Eurostat database. <https://ec.europa.eu/eurostat/data/database>
- Ferragina, Emmanuele. 2017. Does Family Policy Influence Women's Employment?: Reviewing the Evidence in the Field, *Political Studies Review*, 17(1), pp 65-80
- Folbre, Nancy. 1995. "Holding hands at midnight": The paradox of caring labor. *Feminist Economics*, 1(1), pp 73-92
- HM Treasury. 2020. A Plan for Jobs 2020, <https://www.gov.uk/government/topical-events/a-plan-for-jobs-2020>
- International Labour Organization (ILO). 2020. ILO Monitor: COVID-19 and the world of work. Fifth edition. Updated 30 June. https://www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/documents/briefingnote/wcms_749399.pdf
- Kim, Kijong, Ipek Ilkharacan, and Tolga Kaya. 2019. Public investment in care services in Turkey: Promoting employment & gender inclusive growth. *Journal of Policy Modeling*. 41(6), 1210-1229

Mascherini, Massimiliano, and Bisello, Martina, 2020. COVID-19 fallout takes a higher toll on women, economically and domestically, Eurofound, Dublin.

<https://www.eurofound.europa.eu/publications/blog/covid-19-fallout-takes-a-higher-toll-on-women-economically-and-domestically>

Miller, E. A. 2020. Protecting and Improving the Lives of Older Adults in the COVID-19 Era.

Journal of Aging & Social Policy, 32(4-5), pp 297-309

OECD. 2020a. *Employment Outlook 2020. Worker Security and the COVID-19 Crisis*. OECD: Paris.

OECD. 2020b. OECD statistical portal. <https://stats.oecd.org/>

Office for National Statistics (ONS). 2020. Coronavirus (COVID-19) related deaths by occupation, England and Wales: deaths registered between 9 March and 25 May 2020.

<https://www.ons.gov.uk/peoplepopulationandcommunity/healthandsocialcare/causesofdeath/bulletins/coronaviruscovid19relateddeathsbyoccupationenglandandwales/deathsregisteredbetween9marchand25may2020>

Strauss, Valerie. 2020. “America’s fragile child-care system reported at risk of collapse in covid-19 crisis”. *Washington Post*, May 27.