

# Ensayos Económicos | 79

Mayo de 2022

**A Green Purple Red New Deal: Rebuilding an Economy  
for All in the Aftermath of the Pandemic**

Özlem Onaran



BANCO CENTRAL  
DE LA REPÚBLICA ARGENTINA

Ensayos Económicos es una revista editada por la Subgerencia General de Investigaciones Económicas

ISSN 1850-6046  
Edición electrónica

Banco Central de la República Argentina  
San Martín 235 / Edificio San Martín Piso 7, Oficina 701 (C1003ABF)  
Ciudad Autónoma de Buenos Aires / Argentina  
Tel.: (+5411) 4348-3582/3814  
Email: [ensayos.economicos@bcra.gob.ar](mailto:ensayos.economicos@bcra.gob.ar)  
Página Web: [http://www.bcra.gob.ar/PublicacionesEstadisticas/Ensayos\\_economicos.asp](http://www.bcra.gob.ar/PublicacionesEstadisticas/Ensayos_economicos.asp)

Fecha de publicación: Mayo de 2022

Diseño de tapa e interior | Gerencia Principal de Comunicación y Relaciones con la Comunidad, BCRA  
Diagramación | Subgerencia General de Investigaciones Económicas, BCRA

Ensayos Económicos está orientada a la publicación de artículos de economía de carácter teórico, empírico o de política aplicada, y busca propiciar el diálogo entre las distintas escuelas del pensamiento económico para contribuir a diseñar y evaluar las políticas adecuadas para sortear los desafíos que la economía argentina enfrenta en su proceso de desarrollo. Las opiniones vertidas son exclusiva responsabilidad de los autores y no se corresponden necesariamente con la visión institucional del BCRA o de sus autoridades.

Esta revista apoya el acceso abierto a su contenido bajo el principio de que la libre disponibilidad de la investigación para el público estimula un mayor desarrollo global del intercambio de conocimiento. Para facilitar una mayor difusión y utilización, los artículos se encuentran bajo la licencia Creative Commons Atribución-NoComercial-CompartirIgual 4.0 Internacional.



Esta licencia permite copiar y redistribuir el material en cualquier medio o formato, y transformar y construir a partir del material original, mientras no sea con fines comerciales, se mencione el origen del material de manera adecuada, brindando un enlace a la licencia e indicando si se han realizado cambios, y se distribuya bajo la misma licencia del original.

# A Green Purple Red New Deal: Rebuilding an Economy for All in the Aftermath of the Pandemic

**Özlem Onaran\***

University of Greenwich, United Kingdom

## **Abstract**

This paper discusses the building blocks of a paradigm shift for a needs-based approach to macroeconomic policy to tackle the multiple crises of inequalities, care and climate change in the aftermath of the pandemic, and outlines a “green, purple, red” policy mix of increasing public spending in the care and green economy, labor market policies and progressive taxation of both income and wealth.

*JEL Classification:* E1, E2, E62.

*Keywords:* care economy, employment, fiscal policy, functional income distribution, gender wage gap, green investment, physical infrastructure, productivity, purple investment, social infrastructure, wealth concentration, wealth tax.

---

\* Professor of Economics and Co-director of Institute of Political Economy, Governance, Finance and Accountability. The views expressed in this article are of the author and do not necessarily represent the ones of the BCRA or its authorities. Email: o.onaran@greenwich.ac.uk.

# Un *New Deal* verde, púrpura y rojo: reconstruyendo una economía para todos después de la pandemia

**Özlem Onaran\***

Universidad de Greenwich, Reino Unido

## Resumen

Este documento analiza los componentes principales de un cambio de paradigma hacia un enfoque de la política macroeconómica que se base en las necesidades de hacer frente a las múltiples crisis de desigualdad, cuidado y cambio climático tras la pandemia, y esboza una combinación de políticas "verdes, púrpuras, rojas" que consiste en aumentar el gasto público en la economía del cuidado y en la economía verde, en políticas del mercado laboral y en la tributación progresiva tanto de la renta como de la riqueza.

*Clasificación JEL:* E1, E2, E62.

*Palabras clave:* brecha salarial de género, concentración de la riqueza, distribución funcional de la renta, economía del cuidado, empleo, infraestructura física, infraestructura social, inversión púrpura, inversión verde, impuesto sobre la riqueza, política fiscal, productividad.

---

\* Professor of Economics and Co-director of Institute of Political Economy, Governance, Finance and Accountability. The views expressed in this article are of the author and do not necessarily represent the ones of the BCRA or its authorities. Email: o.onaran@greenwich.ac.uk.

## 1. Introduction

The Covid-19 crisis laid bare the intersecting crises in the world, with inequalities and ecological breakdown at their core. Public spending increased substantially in the countries with fiscal space to support the emergency measures to mitigate the effects of the crisis on household income and firms but fell short of linking the short-term emergency policy response to long-term rebuilding of the economies.

There are two important lessons from the pandemic for policy: first, the pandemic and inequalities with respect to class, race, gender and across countries exacerbate each other. As all crises, the pandemic has also left distributional scars. To tackle both the public health crisis and the economic fall out in the aftermath of the pandemic, we have to tackle inequalities which requires being bold about regulating labour markets, public investment, and international development.

The second lesson is to recognize the needs for public investment in both the green and care economy. On the one hand, the pandemic added to the vast evidence regarding the unsustainability of the way human activities interact with the nature. Reversing the ecological crisis requires a massive and urgent mobilization of large amounts of spending in renewable energy, public transport, housing, energy efficiency in the existing buildings, industry and the grid, sustainable agriculture, forestry, recycling, and repair. On the other hand, the effects of the pandemic became deeper due to the inadequate levels of public provision of health and social care. The pandemic also increased the unpaid domestic care requirements, which fell disproportionately on women, increasing their time poverty and reversing former gains made towards gender equality. The scale and the urgency of the spending needs to address both of these deficits in the green and care economy and the public good character of these services requires a large public spending program, which cannot be substituted by private investment based on profit motive.

There is widespread recognition of the care and ecological deficits and class, race and gender inequalities which are exacerbated by the crisis, but when it comes to policies to address these, the budget deficit is still conventionally seen as a binding constraint in the medium run. After an unprecedented rise in public debt during the pandemic, policy makers once again raise concerns that spending cuts in the future may be inevitable. The timing of this renewed fiscal conservatism is particularly unfortunate at a time when social and environmental needs require a more substantial urgent mobilization of fiscal policy.

The multiple crises of our time requires a paradigm shift towards a needs-based approach to macroeconomic policy, in particular fiscal policy, avoiding competition between urgent social and ecological requirements. The public provision of high quality universal free basic services in social care, health, childcare, and education from early childhood to university tackles both the care deficit and inequalities by both creating decent jobs and providing the much-needed services. Public spending in the green economy is the key policy to address both the scale and timing of the investment required for transition to a zero-carbon economy. While short-term responses such as furlough schemes and flexible short working time arrangements have helped to limit the rise in

unemployment in some countries, and further policies such as job guarantee schemes, education grants, retraining schemes, paid on the job training are very important, there has never been a better moment to make the case for creating permanent public sector jobs with decent wages.

Following this introductory section, section two of this paper discusses the building blocks of a theoretical framework for a needs-based approach to macroeconomic policy, informed by structuralist post-Keynesian/post-Kaleckian demand-led growth models, gender economics and ecological macroeconomics. Section three summarizes the findings of Onaran *et al.* (2019) on the effects of a “purple, green, red” policy mix of increasing public social and green infrastructure spending, labour market policies to increase real wages of both men and women with an upward convergence in wages closing gender gaps, and more progressive taxation of both income and wealth in the case of the UK. This section discusses the macroeconomic multiplier effects of public spending which helps to finance part of this spending as well as the effects of wealth taxation, compared with those of taxation of capital or labour income, and presents how wealth taxation can ease the budgetary constraints on fiscal spending. Finally, section four concludes with further policy implications.

## **2. A theoretical macroeconomic framework for a green, purple and red new deal**

This section presents a theoretical framework for macroeconomic analysis based on a gendered structuralist post-Keynesian/post-Kaleckian demand-led growth model building on Onaran *et al.* (2019a, b, 2022a, b) and Oyvat and Onaran (2020), incorporating explicit analysis of both the components of demand and supply side analysis, the government and employment.<sup>1</sup> Unlike standard neoclassical growth models that assume full employment, this theoretical framework recognizes: i) demand-side constraints in the economy, which lead to excess capacity and involuntary unemployment, ii) the effects of different types of public spending on demand, income distribution, and employment in both the short run and the medium run as well as on the supply side on productivity in the medium run, iii) the dual effects of wages on not just production costs but also aggregate demand, iv) the effects of distribution of wealth and income between wages and profits, as well as gender gaps in wages and employment on both demand and productivity, v) the effects of the structural features of the economy in terms of sectoral composition, oligopolistic price setting, import dependency, financialization, household debt, gender differences in the distribution of unpaid and paid labor in different sectors, and bargaining power between labor and capital and between different genders.

Addressing both the care and ecological needs, we analyze the effects of three different types of government spending: i) green public spending in renewable energy, energy efficiency and public transport, ii) purple current spending in the care economy including spending in education,

---

<sup>1</sup> Post-Kaleckian models within the post-Keynesian macroeconomics synthesize Keynesian and Marxist economic analysis of the dual role of wages on aggregate demand.

childcare, healthcare, and social care, and iii) other capital spending in infrastructure (e.g. housing or buildings for the care economy, hospitals or schools).<sup>2,3</sup>

The economy has three sectors: i) the social sector, which consists of the current expenditure of the government in the care economy, *i.e.*, provides the public services in education, childcare, healthcare, and social care, ii) the rest of the market economy, and iii) the unpaid care sector.

Wealth inequality is defined as wealth concentration, *i.e.*, the share of the private net wealth of the top 1% in total wealth. Changes in wage rates, gender pay gap and tax rates on wages, profits, and wealth impact both wealth distribution and functional income distribution between labor and capital.

On the demand side of the model, components of aggregate demand, *i.e.*, consumption, private investment, net exports are defined by behavioral equations. Therefore, differences in the marginal propensity to consume out of wages or profits, or out of the wealth of the top 1% vs. bottom 99%, or gendered differences between women and men in not just the marginal propensity to consume in aggregate but also in the composition of their consumption in the social sector vs. the rest of the economy have an impact on the macroeconomy. Similarly, the sensitivity of private firms' investment to profitability vs. demand matter for the effects of wage increases on aggregate output.

On the supply side, labor productivity (output per worker in the rest of the economy) is expected to increase in response to an increase in output, wages, private and public spending in the care economy, green economy, and other infrastructure.

All three types of public spending are expected to have direct positive effects on total output as well as further multiplier effects, as they generate more employment and aggregate income, which in turn increases household consumption as well as private investment due to demand effects. The magnitude of the multiplier effects of the three different types of spending will depend on i) the labor intensity of the sectors receiving the extra spending, ii) the marginal propensity to import out of the new spending, iii) the effects on household consumption by substituting private spending, iv) the effects on private investment by providing public infrastructure, and the v) the gender composition of new employment.

The effect of public spending on employment depends on the relative size of the increase in output and labor productivity. We expect the proportionate increase in output to be larger than that in productivity in response to all three public spending categories, and thereby a positive medium-run effect on employment, albeit with gender differences.

---

<sup>2</sup> See Onaran and Oyvat (2022) for an analysis of the macroeconomic effects of public spending in the green economy. See Dafermos and Nikolaidi (2019) for an ecological Post-Keynesian macroeconomic model; Pollin *et al.* (2015) for an input-output analysis of the employment effects of public spending in renewable energy and energy efficiency; and Batini *et al.* (2021) for an econometric analysis of the multiplier effects of public investment in renewable energy.

<sup>3</sup> İlkaracan (2013) coined the term "purple economy" to identify the care economy, indicating its effects on gender equality. Public spending in education, childcare, health, and social care are categorized as current spending (government consumption) in national accounts; however feminist economics literature emphasizes the investment character of this spending given the positive effects on productivity and the positive externalities due to their public good character and refers to it as social infrastructure investment (Elson, 2016, 2017; Women's Budget Group, 2015; Onaran *et al.*, 2019a, b, 2022a).



Higher public spending with constant tax rates could increase the public debt as a ratio to GDP, if multiplier effects are not very high. This, in turn, might lead to an increase in the interest rate under certain circumstances, in particular if monetary policy does not actively accommodate fiscal policy. Consequently, depending on the interest elasticity of investment, there may be negative crowding out effects on private investment. However, this effect might be small if investment is not very sensitive to interest rate and the effect of public borrowing on the interest rate is not very high.

### **3. A policy simulation for a green, purple and red new deal**

This section summarizes the findings of Onaran *et al.* (2019a, b) on the effects of a “purple, green, red” policy package based on econometric estimations for the case of the UK, which includes on the fiscal policy side increasing both public spending and taxation of both capital income and wealth, and on the labor market side policies to increase real wages of both men and women and close gender gaps.

In detail, the policy package includes:

i) an annual increase in government spending in both the purple and green economy by 1%-point as a ratio to GDP. Purple public spending includes creating decent public care jobs, *i.e.*, hiring more nurses, social care workers, teachers with decent wages, decent working conditions and adequate career prospects. Investing in the green economy and infrastructure includes public spending in renewable energy, energy efficiency, housing, or public transport. The public sector spending policies also target increasing the wage rates while at the same time closing gender wage gap via upward convergence, *i.e.*, increasing the wages at the bottom of the pay scale at a higher rate, and enforcing equal pay legislation. The policy simulation is based on the effects of an annual 2% increase in women’s hourly wage rate and 1% in men’s hourly wage rate in real terms, *i.e.* a combination of “red” and “purple” pay policies.

ii) an increase in the average tax rate on wealth by 1%-point (which corresponds to a doubling of the tax rate on wealth in the UK), and an increase in the progressivity of income taxation via an increase in the average effective tax rate on profit income by 1%-point and a decrease in the average tax rate on wage income by 1%-point.<sup>4</sup> These correspond to progressive “red” policies.

iii) a combination of “red” and “purple” labour market policies, targeting an increase in the hourly real wage rate of women in the private sector by 2% and that of men by 1%, again closing gender gaps via upward convergence in the rest of the economy.

In a nutshell, in the case of the UK, this policy mix leads to in the medium-run a 10.9% increase in GDP, an increase in the hours of paid employment of women by 9.6%, and that of men by 5.8% and

---

<sup>4</sup> Tippet, Wildauer, and Onaran (2021) presents the tax revenue potential of a progressive scheme of wealth taxation, aiming at the top 1% of the wealthiest households. This is particularly important after the pandemic which is likely to substantially increase wealth inequality.



a substantial improvement in public finance with a 10.3%-point decline in public debt as a ratio to GDP (Onaran *et al.*, 2019a, b).

In more detail, public social and green infrastructure spending has a very strong effect on output and employment of men and women. Public spending is partly self-financing (albeit not fully), as it increases national income and thereby tax revenues even without an increase in the tax rate. Public spending, in particular on education, childcare, health, and social care has a very high positive effect on productivity in the rest of the economy in the UK, directly and indirectly.

An increase in the progressivity of income taxation by increasing the tax rate on profits and decreasing the tax rate on labor income increases output, men's and women's employment, and decreases public debt/GDP. However, an increase in the tax rate on wealth has a much higher positive impact on output, and thereby employment and the budget. This is because it decreases wealth concentration, which in turn reduces the financialization of non-financial companies, market concentration, and barriers to entry, and thereby stimulates private investment. As such, taxation of wealth is a particularly effective policy to fund purple and green public spending, while tackling income, gender, and wealth inequalities.

Fiscal policies are crucial in reducing inequalities. Taxes on profits and wealth decrease wealth concentration. Public spending improves functional income distribution by increasing employment and wage income. Public spending in the purple care economy also plays a crucial role in closing the gender gaps in employment and income.

#### **4. Conclusions and policy implications for global development**

Building a caring and sustainable society based on a green, purple and red new deal in the aftermath of the pandemic is possible and public investment is the key to such a policy programme.

How to finance such a green, purple and red new deal? The answer is both simple and complex: the social and ecological needs, and the urgency of an effective response to the multiple crises of inequalities, care and climate change requires the use of all tools of policy.

Public spending even without any increases in the tax rates, is partially self-financing, thanks to the strong multiplier effects.

Public borrowing to fund some of this spending can be justified given the effects on productivity and sustainability, or to put it negatively, the expected damage to the ecology, society, and economy if investment needs are not delivered on time. On a related matter, from a long-term perspective, it would be beneficial if fiscal sustainability did not narrowly focus on public borrowing or public gross debt, but at least on net wealth. Also, in the case of public spending in the care economy, considering their long-term effects on productivity, such spending could be considered as public investment in social infrastructure rather than current expenditure, which justifies borrowing to fund spending if need be.

However, eventually the large scale of spending needs requires undeniably a combination of progressive taxation of both income and wealth.

National and regional investment banks working in cooperation with the government and central bank are also crucial for funding large scale public infrastructure projects.

Crucially, policy coordination should involve the coordination of fiscal and monetary policies. The strict separation between monetary and fiscal policy is becoming more difficult to justify. Effective monetary policy requires coordination with expansionary fiscal policy targeting long-term public investment in social and green infrastructure, building on a needs-based approach to policy considering long term needs to tackle inequalities, social, economic, and ecological sustainability. The lessons of the past decade show that the central banks' mandate should include a dual target of full/high employment and an inflation target high enough to be consistent with the former, moving within a band, with a higher weight for employment.

Although unconventional monetary policy (quantitative easing (QE)) carried the heavy lifting in terms of policy since the Great Recession and helped to stabilize financial markets and prevented a new Great Depression, monetary policy is less effective than fiscal policy, and one reason for this is that the elasticity (sensitivity) of private corporate investment to interest rate is low and its elasticity to demand is high. For example, in the UK, for £200bn early QE, which is about 10% of GDP, the growth effect on GDP in 2009 was about 1.5-2% according to the own forecast of the BoE (as recently cited by Bailey *et al.*, 2020). If we had fiscal spending of 10% of GDP at a time of recession, we might have achieved 15% growth effect, assuming cautiously a multiplier of 1.5. This multiplier is consistent with our econometric estimates (Onaran, Oyvatt, Fotopoulou 2019a, 2022; Obst, Onaran, Nikolaidi, 2019) and is at the lower end of the estimations of multipliers in recessions (Blanchard and Leigh, 2013, Stockhammer *et al.*, 2019). QE has further contributed to inequalities, financialization and higher wealth concentration at the top 1% via asset price inflation; both of these led to lower private corporate investment according to our research (Onaran, Oyvatt, Fotopoulou 2019, Tori and Onaran 2018, 2021). This in turn leads to low productivity and deepens a vicious circle of low paid precarious jobs despite low unemployment.

International policy coordination can make further difference, in particular for the emerging economies. The effects of public spending are stronger and negative effects on the current account balance are moderated, if policies are implemented simultaneously in all the countries (Onaran, 2016; Obst *et al.*, 2016). If the large high-income economies lead the way, this creates space for small import dependent balance of payments constrained emerging economies. From the perspective of the emerging economies, public investment as part of a well-designed industrial policy is also key to structural change and productivity gains.

Managing the short-run constraints on the balance of payments requires further policies in terms capital controls and FDI policies. Finally, to address global inequalities, which have further deepened with the pandemic, two policies stand out: firstly, cancellation or restructuring of parts of the debt of the developing countries needs to be part of the international development agenda.

Secondly, transfer of technology to support mass not-for-profit global production of key public goods from vaccines and medication to solar panels, turbines, or batteries for storing renewable energy is the only way to tackle global crises such as the pandemic or climate change.

The coordination of fiscal policies with the labor market policies also makes the effects of fiscal spending stronger and eases the funding pressures as higher wages lead to higher tax revenues (Onaran, 2016; Obst *et al.*, 2016). Strong pro-labor institutions –particularly, strong, well-coordinated trade unions, equal pay legislation, increased job security, permanent contracts, higher minimum wages, and an improved and equitable parental leave are good for an equality-led and sustainable development. Labor market regulation for a shorter working week can also promote a rise in gender equality in paid and unpaid work and income, while facilitating a green transition and higher productivity (Onaran and Calvert Jump, 2022).

Finally, The Covid-19 crisis opens space to rethink not just the role of fiscal policy and public spending but also public ownership in key sectors of the care and green economy. Health and social care, education, childcare, energy, water, transport, and social housing are at the top of these key sectors where private for-profit provision proved to lead to high prices, low quality, and inadequate level of supply. In the next phase of the economic crisis, when the rise in the debt of low-income households, small and medium enterprises and low and middle income countries trigger a new financial crisis, we will be reminded of the fact that we need publicly owned banks as well as financial regulation -a lesson, which was missed after the financial crisis in 2008. The chaotic management of the pandemic by governments relying on outsourced private services opens space to emphasize the need for a radical structural change including in decision making and ownership in key sectors towards national coordination in combination with collective, municipal, and cooperative ownership and democratic participatory decision making. The urgency of managing a transition to a zero-carbon economy also invites a more planned and participatory approach to the economy.

## References

- Batini, N., Di Serio, M., Fragetta, M., Melina, G. and Waldron A. (2021); "Building Back Better: How Big Are Green Spending Multipliers?", IMF Working Paper.
- Bailey A., Bridges J., Harrison R., Jones J., and Mankodi A. (2020); "The Central Bank Balance Sheet as a Policy Tool: Past, Present and Future", paper prepared for the Jackson Hole Economic Policy Symposium, August, Bank of England, pp. 27-28.
- Blanchard, O. J. and Leigh, D. (2013); "Growth Forecast Errors and Fiscal Multipliers", *American Economic Review*, Vol. 103, N° 3, pp. 117-120.
- Dafermos Y. and Nikolaidi M. (2019); "Fiscal Policy and Ecological Sustainability: A Post-Keynesian Perspective", *Greenwich Papers in Political Economy*, N° 74.
- Elson, D. (2016); "Gender Budgeting and Macroeconomic Policy", in *Feminist Economics and Public Policy: Reflections on the Work and Impact of Ailsa McKay*, J. Campbell and M. Gillespie (eds.), Routledge/Taylor & Francis, pp. 25-35.
- Elson, D. (2017); "A Gender-equitable Macroeconomic Framework for Europe", in *Economics and Austerity in Europe: Gendered Impacts and Sustainable Alternatives*, H. Bargawi, G. Cozzi and S. Himmelweit (eds.), Routledge, pp.15-26.
- İlkkaracan, İ. (2013); "The purple economy: A call for a new economic order beyond the green", in *Sustainable Economy and Green Growth: Who Cares?*, Röhr, U. and C. van Heemstra (eds.), Berlin: LIFE e.V./German Federal Ministry for the Environment, pp. 32-37.
- İlkkaracan, İ. and Kim, K. (2018); "The Employment Generation Impact of Meeting SDG Targets in Early Childhood Care, Education, Health and Long-term Care in 45 Countries", Geneva, ILO.
- Obst, T., Onaran, Ö. and Nikolaidi, M. (2020); "The Effects of Income Distribution and Fiscal Policy on Aggregate Demand, Investment and the Budget Balance: The Case of Europe", *Cambridge Journal of Economics*, 44(6), pp. 1221-1243.
- Onaran, Ö. (2016); "Wage- versus Profit- led Growth in the Context of Globalization and Public Spending: The Political Aspects of Wage-led Recovery", *Review of Keynesian Economics*, 4:4, pp. 458-474.
- Onaran, Ö. and Calvert Jump, R. (2022); "A Shorter Working Week as Part of a Green, Caring Economy", Women's Budget Group Feminist Green New Deal Policy Paper, Shorter-Working-Week-Report.pdf (wbg.org.uk), <https://wbg.org.uk/wp-content/uploads/2022/02/Shorter-Working-Week-Report.pdf>.

Onaran, Ö., Oyvatt, C. and Fotopoulou, E. (2019a); "The Effects of Income, Gender and Wealth Inequality and Economic Policies on Macroeconomic Performance in the UK", Greenwich Papers in Political Economy, N° 71, ESRC Project Report, [https://gala.gre.ac.uk/id/eprint/24018/19/24018%20ONARAN\\_The\\_Effects\\_of\\_Gender\\_Inequality\\_Wages\\_Wealth\\_Concentration\\_%28V.3%29\\_2019.pdf](https://gala.gre.ac.uk/id/eprint/24018/19/24018%20ONARAN_The_Effects_of_Gender_Inequality_Wages_Wealth_Concentration_%28V.3%29_2019.pdf).

Onaran, Ö., Oyvatt, C. and Fotopoulou, E. (2019b); "A Policy Mix for Equitable Sustainable Development in the UK: The Effects of Gender Equality, Wages, Wealth Concentration and Fiscal Policy", GPERC Policy Briefs, University of Greenwich, #PB25-2019, <https://gala.gre.ac.uk/id/eprint/24735/>.

Onaran, Ö., Oyvatt, C., and Fotopoulou, E. (2022a); "A Macroeconomic Analysis of the Effects of Gender Inequality, Wages, and Public Social Infrastructure: The Case of the UK", *Feminist Economics*, forthcoming.

Onaran, Ö., Oyvatt, C., and Fotopoulou, E. (2022b); "Gendering Macroeconomic Analysis and Development Policy: A Theoretical Model", *Feminist Economics*, Forthcoming.

Onaran, Ö., Oyvatt, C., and Fotopoulou, E. (2021); "A Purple, Green and Red New Deal after the Covid-19", Policy Brief for Women's Budget Group, <https://wbg.org.uk/wp-content/uploads/2021/05/A-purple-green-and-red-new-deal-for-equitable-sustainable-development-in-the-UK.pdf>.

Onaran, Ö. and Oyvatt, C. (2022); "The Employment Effects of Public Spending for a Green and Caring Economy: The Case of Emerging Economies", ITUC Report.

Oyvatt, C., and Onaran, Ö. (2022); "The Effect of Gender Equality and Fiscal Policy on Growth and Employment: The case of South Korea", forthcoming in *World Development* (earlier version CWEGAM Working Paper 20-01), <http://research.american.edu/careworkeconomy/wp-content/uploads/sites/2/2020/03/OzlemOnaranPDFTOPPOST-1.pdf>.

Oyvatt, C., and Onaran, Ö. (2021); "Tax Wealth and Profit Income to Fund Social Care and Healthcare", Policy Brief for Women's Budget Group, <https://wbg.org.uk/blog/tax-wealth-and-profit-income-to-fund-social-care-and-healthcare/>.

Pollin, R., Garrett-Peltier, H., Heintz, J., and Chakraborty, S. (2015); "Global Green Growth: Clean Energy Industrial Investments and Expanding Job Opportunities", United Nations Industrial Development Organization.

Stockhammer, E., Qazizada, W. and Gechert, S. (2019); "Demand Effects of Fiscal Policy since 2008", *Review of Keynesian Economics*, 7, 1, pp. 57-74.

Tippet, B. Wildauer, R. and Onaran, Ö. (2021); "The Case for a Progressive Annual Wealth Tax in the UK", *Greenwich Papers in Political Economy*, N° GPERC88, <https://gala.gre.ac.uk/id/eprint/33819/>.

Tori, D. and Onaran, Ö. (2020); "Financialisation, Financial Development, and Investment: Evidence from European Non-financial Corporations", *Socio-Economic Review*, 18(3), pp. 681-718.

Tori, D. and Onaran, Ö. (2018); "The Effects of Financialization on Investment: Evidence from Firm-level Data for the UK", *Cambridge Journal of Economics*, 42(5), pp. 1393-1416.

Women's Budget Group UK and Scottish Women's Budget Group (WBG) (2015); "Plan F. A Feminist Economic Strategy for a Caring and Sustainable Economy", <http://wbg.org.uk/wp-content/uploads/2015/02/PLAN-F-2015.pdf>.