

Katharina Bohnenberger  
Martin Fritz

***Making welfare resilient –  
Creating stable & sustainable  
welfare systems in times of  
declining economic growth***

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### **Authors**

Katharina Bohnenberger<sup>a, b</sup> and Martin Fritz<sup>a, c</sup>

- a International Research and Policy Network for Sustainable Welfare
- b Institute for Socio-Economics, University of Duisburg-Essen, Germany, Katharina.Bohnenberger@uni-due.de, twitter: @k\_bohnenberger
- c BMBF junior research group 'Mentalities in Flux (flumen)', Institute of Sociology, Friedrich-Schiller-University Jena, Germany, martin.fritz@uni-jena.de, twitter: @greensociology

### **Editor**

Jonathan Barth

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# Making welfare resilient

## Creating stable & sustainable welfare systems in times of declining economic growth

Economic growth is no longer a sustainable solution for the challenges faced by the welfare state; here we explain alternatives and how they can align with a Green Deal and the Just Transition.

### Executive summary

Current welfare systems rely on economic growth to manage the mounting challenges of demographic change, digitalisation and ecological and economic crises. One consequence of this structural dependence on economic growth is that there are often negative social and economic outcomes in times of secular stagnation and recession.

Transforming welfare systems so that they flourish without economic growth is a pressing challenge that will have significant implications for the sustainability of our welfare systems and the economic and social resilience of our societies. Research on sustainable welfare identifies four main strategies to reduce the reliance of welfare systems on economic growth, and increase their resilience in an ecologically sustainable way:

- 1. Invest in preventive social policy**, from healthcare and education to urban planning.
- 2. Promote economic equality** through minimum & maximum income caps, time-banking and by shifting the tax base of welfare states towards capital, financial transactions & ecologically-damaging goods.
- 3. Meet citizens' basic needs** through universal basic services and universal basic voucher schemes.
- 4. Green employment** through sectoral shifts, sustainable workers' rights, and climate insurances.

The strategies above, which work to reduce the dependence of welfare systems on economic growth, also entail co-benefits like gender-equality, work-life balance, community building, and reductions in material footprint. In what follows, we list concrete steps the EU can take to promote resilient and Sustainable Welfare systems.

## Highlights

- Welfare systems depend on economic growth to manage a range of challenges, including health crises such as COVID-19, rising inequality, demographic change, and ecological degradation.
- The dependence of welfare systems on economic growth can inhibit crucial societal transformations, such as a Just Transition and Green Recovery from the COVID-19 crisis.
- Sustainable Welfare approaches can reduce this dependence on economic growth while also providing social and ecological benefits.
- This is achieved by focusing on preventive approaches to social risks, promoting equality, diversifying the income base of welfare systems, focussing on basic needs and greening employment

## Introduction

COVID-19 has again demonstrated the sensitivity of many European welfare systems to periods of low economic growth. The ongoing health crisis has combined with a reduction in economic demand to place significant pressures on social security, health and social care systems because welfare systems are dependent on economic growth. By ‘dependent’ we mean that welfare systems require the continuation of economic growth in order to avoid significant negative social and economic consequences.<sup>1</sup> For example, government budgets and social security contributions fluctuate with economic performance and employment levels<sup>2</sup>. While the exact composition of tax revenues (from profit, capital gains, goods, services, or social security contributions) differs

from country to country (see Box A), without economic growth all these major sources of revenue will experience losses. At the same time, technological progress that increases labour productivity requires ever more economic growth in order to avoid unemployment, creating a ‘productivity trap’<sup>3</sup>.

**This growth-dependence of our current welfare systems is problematic both for ecological and social reasons.** First, economic growth is coupled with a rise in greenhouse gas emissions, demand for energy and use of biotic and non-biotic material resources. There is little to no evidence of a decoupling of economic activity from ecological impacts that reaches far and fast enough to meet the goal of the Paris Agreement of limiting global warming to a 1.5 °C increase as compared to pre-industrial levels<sup>4</sup>. Second, the current secular stagnation of European economies is very likely a long-term trend with persisting low or even no-growth rates that make welfare and social protection systems unstable precisely in a situation when they are most needed<sup>5</sup>. Inequality and consequently poverty, unemployment and crime rates can be expected to rise under such conditions<sup>6</sup>. Policymakers should therefore focus on resilient and sustainable policy options that help building a Social Europe without economic growth.

## Research overview

**In the past, the political response for welfare states to declining economic growth rates has largely been either austerity measures, which lower government expenditure, or the social investment strategy, which channels social expenditure into fields that benefit the welfare state (e.g. education) and thereby increase the long-term return on the investment, mainly through high levels of employment.** Neither approach overcomes the core issue at play: That the welfare state is dependent on eco-

1 Corlet Walker *et al.*, (forthcoming)

2 Petschow *et. al.*, 2018

3 Jackson and Victor, 2011

4 Parrique *et. al.*, 2019

5 Jackson, 2019; Nyblom *et al.*, 2019

6 Pickett and Wilkinson 2015

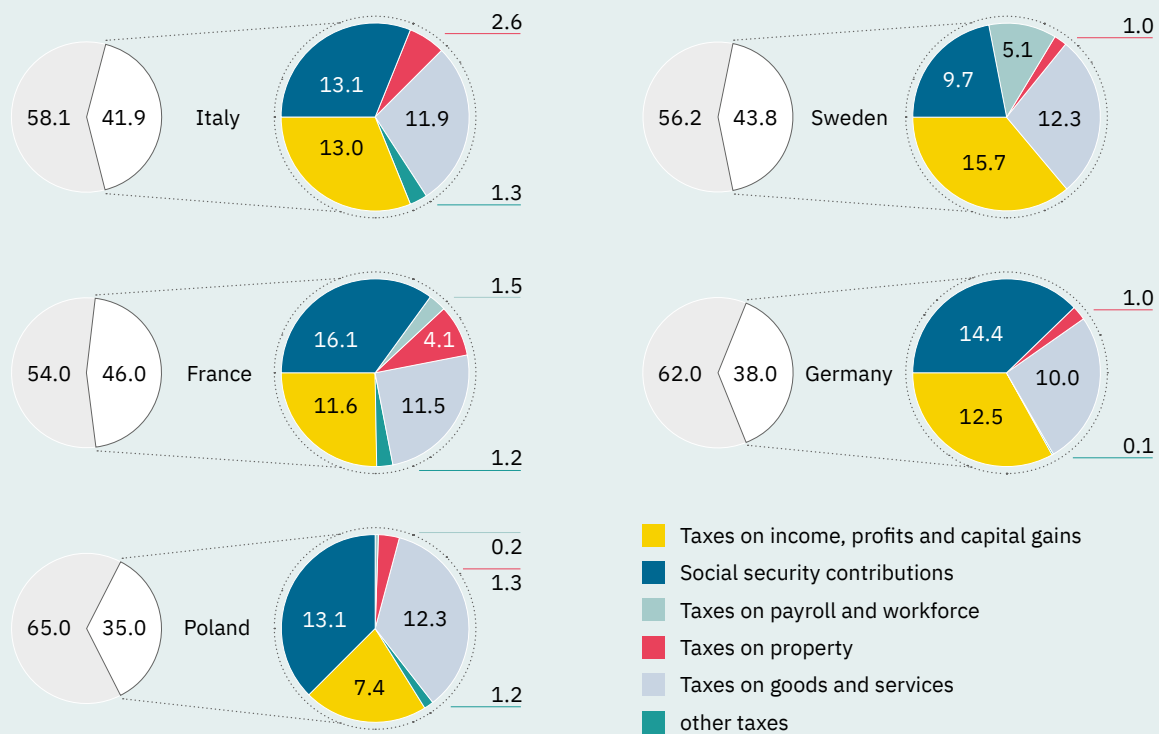
conomic growth and therefore suffers during periods of low growth. Instead, these approaches maintain the logic of growth, promoting economic growth as the sole solution for our social, economic and ecological problems.

**Sustainable Welfare** is a research field that has emerged in response to the shortcomings of these approaches, and in the context of other ongoing transformational processes such as digitalization, the Green Deal and the Just Transition<sup>7</sup>. It aims to

overcome the divide between the social and the ecological and forge an integrated eco-social policy that considers how to achieve social inclusion and ecological sustainability at the same time. That means respecting the ecological limits of the planet, using only a fair share of resources, and maintaining economic stability, independent of economic growth. Research from the field identifies four potential strategies for overcoming the dependence of welfare systems on economic growth and to achieve those goals.

### Composition of funding for welfare states in Europe

The funding for social security across Europe comes primarily from five sources: 1) taxes on income, profit and capital gains, 2) social security contributions, 3) taxes on payroll and workforce, 4) taxes on property, and 5) taxes on goods and services. Each of these sources of government revenue is related to economic growth in a different way. For example, social security contributions are directly dependent on employment rates and wages, whilst taxes on goods and services, are dependent on broader measures of economic performance. Different countries have different tax compositions, meaning that their welfare systems are dependent on economic growth in subtly different ways.



**Figure 1:** Government tax revenue as a percentage of GDP in selected EU countries, 2017–18. Left pie chart = total tax revenue as a percentage of GDP. Right pie chart = different taxes as a percentage of GDP. Source: OECD 2019

7 Büchs & Koch, 2017; Fritz & Koch, 2014; Gough, 2015; Hirvilammi, 2020.

## 1. Preventive social policy

**Sustainable Welfare takes a preventive approach to social policy, seeking to avoid the emergence of social risks and therefore the need for greater state expenditure<sup>8</sup>.** In contrast to a social investment approach, which limits the preventive perspective to employability, Sustainable Welfare considers a broader set of preventative intervention areas. For instance, many health care expenses (e.g. for burn-out and work accidents) are the result of unhealthy working conditions. Prioritizing employment as such (e.g. through workfare policies) might push employees into unsustainable lifestyles, e.g. work-spend-cycles<sup>9</sup> or uneconomic work, i.e. employment in exploitative and ecologically damaging business models that impose more costs than benefits on society.

**A preventive approach in social policies provides health counselling e.g. diets, physical activity, and prioritizes a reduction of working time.** Prevention can also be a guiding principle for further policy fields. For example, co-housing and multigenerational housing<sup>10</sup> not only create space-efficient housing, which reduces air pollution through more compact cities, but also promotes community care and prevents psychological problems resulting from loneliness and social exclusion. Similarly, establishing more bike lanes would improve citizens' health while also leading to cleaner air. By developing a more holistic approach to preventative social policy, citizens will be better supported to live healthier, longer lives, mitigating the impact of demographic change on rising welfare expenses. More generally, by reducing social and ecological risks now, long-term expenditure on welfare systems will be reduced.

**Using the European Semester's country specific recommendations and the social pillar, the EU can ask its member states for preventive social and**

**health care strategies.** Likewise, member states and the European Commission should pay more attention to prevention in the impact assessments of EU policies and regional development funds (e.g. ESF, EFRE, ELER).

## 2. Promoting economic equality

**Another way of reducing social risks – and therefore demand on welfare systems in the EU – is to increase economic equality. Economic equality can be promoted by classical means such as land taxation, wealth & inheritance tax or progressive income taxation.** European welfare systems are financed through a mix of taxes on employment and capital, while energy and resource use or VAT in general take a minor position (see Figure 1). However, these tax mixes incentivise the replacement of human labour by machines and energy, creating new unemployment and making the remaining jobs more energy intensive. A socio-ecological tax reform, which lowers the taxes on labour and increases taxes on energy and resource use, promotes equality and environmental progress<sup>11</sup>.

**Minimum and maximum income also promote equality while containing the expenditure of welfare systems.** A fair minimum income keeps people out of poverty and avoids them becoming dependent on state support to make a living. Maximum income reduces inequality, competition and status consumption. It slows down the spiral of rising prices including the cost of basic services, like rents for dwellings<sup>12</sup>. This allows welfare states to shift their budgets towards more and better welfare benefits.

**Equalising hourly wages using time-banking also reduces inequality.** Time-banks are exchange platforms that allow the swapping of services on an hourly basis, and are increasingly practiced in digital

8 Borowy and Ailon 2017; Gough, 2016

9 Schor, 1999

10 Ellsworth-Krebs, 2020

11 Bach, 2009; Beuermann & Santarius, 2006

12 Buch-Hansen, H. & Koch, M. 2019: Degrowth through income and wealth caps? In: Ecological Economics 160, p. 264–271.

environments<sup>13</sup>. A European Time Banking scheme could enable EU citizens to collect welfare credits on an hourly base in return for valuable work that is provided to society. This directly reduces inequality in hourly wages and would reduce the translation of inequalities of hourly wage into inequalities in pension and unemployment benefits later in life. It could even help closing the gender pension gap, taking into account unpaid care work, which is still predominantly provided by women. A European Time Bank could also establish a remuneration standard for cross-national benefit transfers of EU workers, a European job guarantee<sup>13</sup> and thereby strengthen a Social Europe.

### 3. Meeting citizens' basic needs

**Ensuring that all citizens have equal access to the goods and services that they need to meet their basic needs is the primary tasks of welfare systems.** Whether these needs are addressed through cash benefits or other means is relevant for the resilience and sustainability of welfare states.

**Universal Basic Services and Universal Basic Vouchers offer an opportunity to ensure access to those necessary goods and services in a way that is fair, efficient and ecologically sustainable.** Universal Basic Services encompass eco-social infrastructure and freely accessible, necessary services, such as health care, education, and local transport<sup>14</sup>. Universal Basic Vouchers are credits that are given to individuals and entitle them to free access to certain goods and services at the denominated amount, e. g. housing space or regional vegetables<sup>15</sup>.

**These measures would provide cost-effective systems for meeting basic needs and therefore lower the necessary expenditure of individuals for social**

**participation and reduce the costs of social security systems<sup>16</sup>.** Potential co-benefits of these schemes include strengthening local communities, supporting healthy nutrition of EU citizens, fostering regional supply chains and promoting local food security in times of disrupted transport networks.

**The EU could promote such approaches in their Regional Cohesion Policy by favouring investments in eco-social infrastructures (e. g. bike lanes, public spaces, repair cafes) or eco-social services.** Examples include free repair services of environmentally friendly transport means such as bikes as well as climate-friendly school meals, transition and community houses.

### 4. Greening employment

**Greening employment promotes the reconciliation of jobs and the environment and makes employment resilient to the industrial changes that are necessary within the course of climate action and to avoid the productivity trap<sup>17</sup>.** Jobs and income from employment remain the most important factors in determining balanced social security budgets for the current welfare state, so high levels of employment will continue to be a key goal.

**Sustainable jobs are not only work places in green sectors, e. g. renewable energy instalment, but also jobs that provide quality work while involving low resource use, e. g. culture, education.** A socio-ecological tax reform furthers employment in these energy-efficient and resource-light sectors and thereby improves remuneration and fair working conditions in work-intensive sectors. Promoting the labour-intensive service industry has the additional advantage of reducing dependence on economic growth by lessening the impact of the labour

13 WBGU, 2019, In the past, they have been mainly applied at local levels, like the Japanese Fureai Kippu system that allows for transferring elderly care services between regions (Hayashi, 2012).

14 D'Alessandro *et al.*, 2020; O'Neil, 2020

15 Gough, 2019; Institute for Global Prosperity, 2017

16 Bohnenberger, 2020

17 Gough, 2019, p. 6

18 United Nations Development Programme, 2016

productivity trap. A right to environmentally friendly working conditions could further workers' initiatives of greening their jobs (e.g. through replacing business travel through video conferences). The EU could promote this by a new 21<sup>st</sup> principle on 'sustainable working conditions' in the European Pillar of Social Rights.

**The fair phase-out of unsustainable jobs can be achieved with a 'climate insurance' as a new pillar within the social security systems**<sup>19</sup>. Climate change mitigation, adaptation, and climate change induced disasters will lead to new social risks and require public care of the welfare state. A European Climate Insurance, funded by taxation of greenhouse gas emissions and other environmental 'externalities', can provide income replacement for citizens negatively affected by climate change or its mitigation. It can compensate for climate-induced disasters or cover preventive measures, like energy efficiency measures in the household, or an Ecological Transformation Income<sup>20</sup> that workers can access when they decide to leave their jobs in so-called exnovation sectors which will need to be scaled down to fight climate change (e.g. coal, automotive, aviation). A European Climate Insurance provides a European answer to the increasing risks of climate change, while supporting a Just Transition.

## Conclusion

The proposed Green Deal represents a strong framework that has the potential to move Europe towards a climate neutral and prosperous future. Ongoing health and economic crises have demonstrated how essential solid and well-functioning welfare systems are, also for enabling a Just Transition. However, today Europe's welfare systems are designed to depend on economic growth, making them vulnerable during times of low or no economic growth. Research on Sustainable Welfare identifies four strategies for overcoming growth dependencies:

preventative approaches to social risks, promoting economic equality, meeting basic needs, and greening employment. The policies proposed reduce the vulnerability of the EU to economic shocks and reconcile short- and long-term social goals: the wellbeing of today's generation, and the protection of the environment to ensure the wellbeing of future generations. By implementing the policies at the EU or their member states' level, Europe can strengthen the resilience of its welfare systems in a future-proof way.

## Policy recommendations

Our main policy recommendation is to establish an **Executive Agency on Sustainable Welfare within the European Commission**. This could build on and learn from existing collaborations, such as the joint unit on 'Ecological and Social Transitions' within the DG R&I. The Executive Agency would be tasked with coordinating action in the different fields, promoting the implementation of eco-social policies, and establishing links with the Green Deal and European Climate Law. In particular, we recommend that the agency looks into the following proposals:

- 1. Shift towards sustainable ways of funding welfare systems, which make social security more growth-independent**<sup>21</sup>. Broaden the funding base of the welfare systems and shift it towards a more environmental-friendly tax base. These measures could include coordinating between member states for minimum standards on taxation of capital, financial transactions, energy, and resource use, and upper limits on taxation of labour and social security contributions, ensuring that by 2025 labour is not taxed more than resource and energy use.
- 2. Establish a new '21<sup>st</sup> principle' in the European Pillar of Social Rights that creates a right to sustainable working conditions.** Today, EU

19 Nullmeier, 2019; earlier proposals include climate risk insurances (Warner et al., 2013).

20 Swaton, 2019

21 Jackson, 2020



citizens still can be forced by their employer to engage in climate damaging activities such as business flights. A right to sustainable work would give employees the possibility to choose more environmentally friendly means of transport. This advances the European social agenda because ‘good work’ also means not having to do a job at the expense of future generations.

- 3. Implement a new European Climate Insurance that supports green employment and enables a just transition.** The European Climate Insurance is to be designed so that every European citizen has access to the funds and can receive benefits in case their income is reduced through a climate protection measure or as a consequence of climate change. The funding can be generated from environmental taxes on energy and resource-intensive activities (e. g. air travel and carbon border taxes). Shared risk-pooling strengthens the European identity and advances the social agenda of the EU while leaving established national welfare states full autonomy in existing domains of the welfare states.
- 4. Recalibrate the importance of employment and income for social cohesion by establishing European Time Banking.** The establishment of a common framework for different forms of work (e. g. employment, care work, civil service, voluntary work) into a time-denominated currency that can be translated into EU member states’ welfare institutions provides a minimum guarantee of social protection for all EU citizens, lowers inequality in welfare benefits and supports inclusion. This system could be connected to a European employment guarantee.

## References and recommended sources

Arts, W. and Gelissen, J., 2002. *Three worlds of welfare capitalism or more? A state-of-the-art report*. Journal of European social policy, 12(2), pp.137–158.

Bach, S. (2009): *Zehn Jahre ökologische Steuerreform: Finanzpolitisch erfolgreich, klimapolitisch halbherzig*. Wochenbericht des DIW Berlin Nr. 14/2009, S. 218–228.

Beuermann, C., Santarius, T. (2006): *Ecological Tax Reform in Germany: Handling Two Hot Potatoes at the Same Time*, in: Energy Policy, 34. Jg., Nr. 8, S. 917–929.

Bohnenberger, K. (2020). *Money, Vouchers, Public Infrastructures? A Framework for Sustainable Welfare Benefits*. Sustainability, 12(2), 596. <https://doi.org/10.3390/su12020596>

Büchs, M., & Koch, M. (2017). *Postgrowth and well-being: Challenges to Sustainable Welfare*. Palgrave Macmillan.

Corlet Walker, C., Druckman, A., and Jackson, T., forthcoming. *Welfare systems without economic growth: A review of the challenges and next steps for the field*.

D'Alessandro, S., Cieplinski, A., Distefano, T., & Dittmer, K. (2020). Feasible alternatives to green growth. Nature Sustainability, 1–7. <https://doi.org/10.1038/s41893-020-0484-y>

Druckman, A., and Mair, S., (2019). *Wellbeing, Care and Robots – Prospects for good work in the health and social care sector*. CUSP Working Paper Series | No 21. Centre for the Understanding of Sustainable Prosperity. Available at: <https://www.cusp.ac.uk/themes/s2/wellbeing-care-robots/#1475182667098-0328ae0f-4bcb3691-b07686d5-d83f5228-4386ff54-925d00b8-1655>

Esping-Anderson, G., (1990). *The three worlds of welfare capitalism*. Polity Press.

Fajnzylber, P., Lederman, D. and Loayza, N., (2002). *Inequality and violent crime*. The Journal of Law and Economics, 45(1), pp.1–39.

Fritz, M., & Koch, M. (2014). *Potentials for prosperity without growth: Ecological sustainability, social inclusion and the quality of life in 38 countries*. Ecological Economics, 108, 191–199. <https://doi.org/10.1016/j.ecolecon.2014.10.021>

Gough, I. (2015). *Climate change and Sustainable Welfare: The centrality of human needs*. Cambridge Journal of Economics, 39(5), 1191–1214. <https://doi.org/10.1093/cje/bev039>

Gough, I. (2019). *Universal Basic Services: A Theoretical and Moral Framework: Universal Basic Services*. The Political Quarterly. <https://doi.org/10.1111/1467-923X.12706>

Hayashi, M. (2012). *Japan's Fureai Kippu time-banking in elderly care: Origins, development, challenges and impact*. International Journal of Community Currency Research, 16(A), 30–44.

Hirvilammi, T. (2020). *The Virtuous Circle of Sustainable Welfare as a Transformative Policy Idea*. Sustainability, 12(1), 391. <https://doi.org/10.3390/su12010391>

Institute for Global Prosperity. (2017). *Social prosperity for the future: A proposal for Universal Basic Services* (An IGP Knowledge Network Report). [https://www.ucl.ac.uk/bartlett/igp/sites/bartlett/files/universal\\_basic\\_services\\_-\\_the\\_institute\\_for\\_global\\_prosperity\\_.pdf](https://www.ucl.ac.uk/bartlett/igp/sites/bartlett/files/universal_basic_services_-_the_institute_for_global_prosperity_.pdf)

Isham, A, Mair, S and T Jackson (2020). *Wellbeing and Productivity: A Review of the Literature*. CUSP Working Paper No 22. Guildford: Centre for the Understanding of Sustainable Prosperity. Available at: <https://www.cusp.ac.uk/themes/s1/wp22/>

- Jackson, T. (2020).** *Wellbeing Matters. Tackling growth dependency.* APPG on Limits to Growth: Briefing Paper No.3. Available at: <https://limits-2growth.org.uk/wp-content/uploads/AETW-Policy-Briefing-No-3-digital.pdf>
- Jackson, T. (2019).** *The post-growth challenge: secular stagnation, inequality and the limits to growth.* *Ecological Economics*, 156, pp.236–246.
- Jackson, T. and Victor, P. (2011).** *Productivity and work in the 'green economy': Some theoretical reflections and empirical tests.* *Environmental Innovation and Societal Transitions*, 1(1), pp.101–108.
- Jackson, T. and Victor, P.A., (2016).** *Does slow growth lead to rising inequality? Some theoretical reflections and numerical simulations.* *Ecological Economics*, 121, pp.206–219.
- Jackson, T. (2016).** *Prosperity Without Growth. Foundations for the Economy of Tomorrow.* London: Routledge.
- Karanikolos, M. et al. (2013).** *'Financial crisis, austerity, and health in Europe'*, *The Lancet*. Elsevier Ltd, 381(9874), pp. 1323–1331. doi: 10.1016/S0140-6736(13)60102-6.
- Koch, M. (2018).** *Sustainable Welfare, degrowth and eco-social policies in Europe.* *Social Policy in the European Union: State of Play 2018*, 16.
- Nullmeier, F. (2019, September 24).** *Eine sechste Sozialversicherung als Verbindung von Ökologie und Wohlfahrtsstaatlichkeit?* FGW SOCICIUM IAQ Conference 'Social and Environmental Sustainability as Preventive Social Policy', Bremen.
- Obinger, H. and Wagschal, U. (2010).** *'Social Expenditure and Revenues'*, in Castles, F. et al. (eds) *The Oxford Handbook of the Welfare State.* Oxford: Oxford University Press, pp. 333–352.
- O'Neill, D. W. (2020).** *Beyond green growth. Nature Sustainability.* <https://doi.org/10.1038/s41893-020-0499-4>
- Petschow, U. et al. (2018).** *Gesellschaftliches Wohlergehen innerhalb planetarer Grenzen: Der Ansatz einer vorsorgeorientierten Postwachstumsposition.* Dessau-Roßlau: Umweltbundesamt. Available at: <https://www.umweltbundesamt.de/publikationen/vorsorgeorientierte-postwachstumsposition>.
- Pickett, K.E. and Wilkinson, R.G. (2015).** *Income inequality and health: a causal review.* *Social science & medicine*, 128, pp.316–326.
- Piketty, T. (2014).** *Capital in the 21st Century.* Harvard University Press, Cambridge, Mass
- Schor, J. (1999).** *The overspent American: Why we want what we don't need.* HarperPerennial.
- Stichnoth, H. (2016).** *Verteilungswirkungen ehe- und familienbezogener Leistungen und Maßnahmen.* Heinrich-Böll-Stiftung. Kurzepertise.
- Stuckler, D. and Basu, S. (2013).** *The Body Economic: Eight experiments in economic recovery, from Iceland to Greece.* London: Penguin.
- Swaton, S. (2019, February 6).** *For an Ecological Transition Income.* *Green European Journal.* <https://www.greeneuropeanjournal.eu/for-an-ecological-transition-income/>
- United Nations Development Programme. (2016).** *Human Development Report 2015: Work for human development.* UN. <https://doi.org/10.18356/ea1ef3b1-en>
- Warner, K., Yuzva, K., Zissener, M., Gille, S., Voss, J., & Wanczeck, S. (2013).** *Innovative Insurance Solutions for Climate Change: How to integrate climate risk insurance into a comprehensive climate risk management approach.* (Report No. 12; p. 52). United Nations University Institute for Environment and Human Security (UNU-EHS).
- WBGU. (2019).** *Towards our Common Digital Future [Flagship Report].* German Advisory Council on Global Change. Berlin.



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**Institut für Sozioökonomie**  
Universität Duisburg-Essen

Lotharstr. 65  
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