

Gendering Macroeconomics: Why?

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based on
Onaran & Oyvat 2025, 2024, 2023a, b; 2022
Onaran, Oyvat, Fotopoulou, 2019, 2022a,b, 2023
Onaran 2003, 2004, 2016, 2022



Inconvenient questions

Why feminist micro/labour economics is more widespread than feminist macroeconomics?

Why some PK economists think macro is about aggregate variables and gender doesn't fit in while think class disaggregation in macro models is relevant?

Why do heterodox macroeconomists rarely cite feminist macro papers even when they include issues they engage with, e.g. BoP constraints , wealth and income distribution, endogenous technological change, supply-demand interaction?

Why do most macroeconomists think of gendering macro as gender mainstreaming of the effects of macro policies on women, e.g. gender budgeting/fiscal policy effects?

Gendering macro > Gender budgeting

Not just effects on women but also effects of gender inequality and care deficit on the macroeconomy

Outline

- Taking stock: 30 years of **feminist** macroeconomic modelling
- Why and how to **gender** macroeconomic analysis?
- Moving forward and winning over policy making

Taking stock: 30 years of **feminist** macroeconomic modelling

- **Gendering** Macroeconomics: Nilüfer Çağatay, Diane Elson and Caren Grown, eds. 1995, 2000
- feminist structuralist/post-Kaleckian macro models: demand-led growth model & endogenous supply
 - Braunstein, van Staveren, Tavani 2011, Seguino 2010, 2012, Braunstein, Bouhia, Seguino 2020; Onaran & Oyvat 2025, 2024, 2023a, b, 2022, Onaran, Oyvat, Fotopoulou 2019, 2022a,b, 2023
- synthesizing feminist and ecological macroeconomics
 - Different types of public spending: **care**, **green**, other infrastructure
 - Grown et al 2024; Grown & Floro 2026; Onaran and Oyvat, 2025, 2023, Onaran, Oyvat Fotopoulou 2023; Lukasz, Nikolaidi, Onaran 2025
- Input-Output analysis
 - Antonopoulous et al, 2010; İlkaracan et al, 2015; İlkaracan & Kim, 2019/ILO2020; De Henaou et al 2016, 2017
- Macro-micro-time use integrated I-O; poverty and time poverty
 - İlkaracan, Kim, Zacharias, Memiş, Masterson, 2021; Antonopoulous et al 2010; İlkaracan et al 2015, 2019
- Finance and/or Balance of Payments integration
 - Zacharias, Zezza, Masterson, 2024; Grazini et al 2025, Seguino 2010
- Feminist CGE models
 - Fontana, 2007; Fontana et al 2020
- structural features of the economy matter
 - Gendered structure
 - Public infrastructure: both physical and social
 - Bargaining power in the household and market economy
 - Oligopoly power, sectoral structure, import dependency

Why do macroeconomics need **gendering**?

1. labour needs to be reproduced → the care economy as a key sector
 - both unpaid domestic work and paid work
2. gendered social norms → gendered division of labour → behavioural differences → macro outcomes
3. Effects of care on wellbeing, productivity, labour supply and demographic change/fertility
 - accurate analysis of the demand and supply side interactions
 - adequate fiscal and industrial policy design
 - Multiplier is gendered
4. gendered and racial profiling of jobs → distribution of income and wealth
5. Intersecting interrelated needs in care and climate action
 - gendering ecological macroeconomics → **ecofeminist post-Keynesian** macroeconomics

Omitting gender and care economy = Omitted variable bias → misleading policy analysis

1 **Care** regime for **gendering** growth regime analysis

- What is an optimum care regime?
 - Childcare and education
 - Health and social care, long term care for the elderly and health
- Who cares? Paid and unpaid, gendered
- Who pays?
 - Public provision vs private formal vs informal
 - Public provision vs baby bonuses
- Conditions of carer
- Conditions of the cared
- Labour market structure
 - Paid Working hours
 - Working from home or close to home or away
- Productivity implications of different care regimes
- Fertility –long term demographic implications
- Political implications: Authoritarian vs democratic, İlkaracan & Zuazu2025
 - Pronatalism
 - Handmaids tale, Margaret Atwood

2 Gendering macro behavioural analysis

Gendered social norms → gendered division of labour → behavioural differences

- Women's marginal propensity to consume in the care economy > men
- Men's marginal propensity to consume in the rest of the goods and services > women.
- more income in the hands of women → more spending in goods and services that improve the health and education outcomes

→ labour productivity ↑

- different types of government spending

→ gendered effects on employment → Different macro effects

3. **Gendering** infrastructure, supply side, and the multiplier:

What is public infrastructure investment?

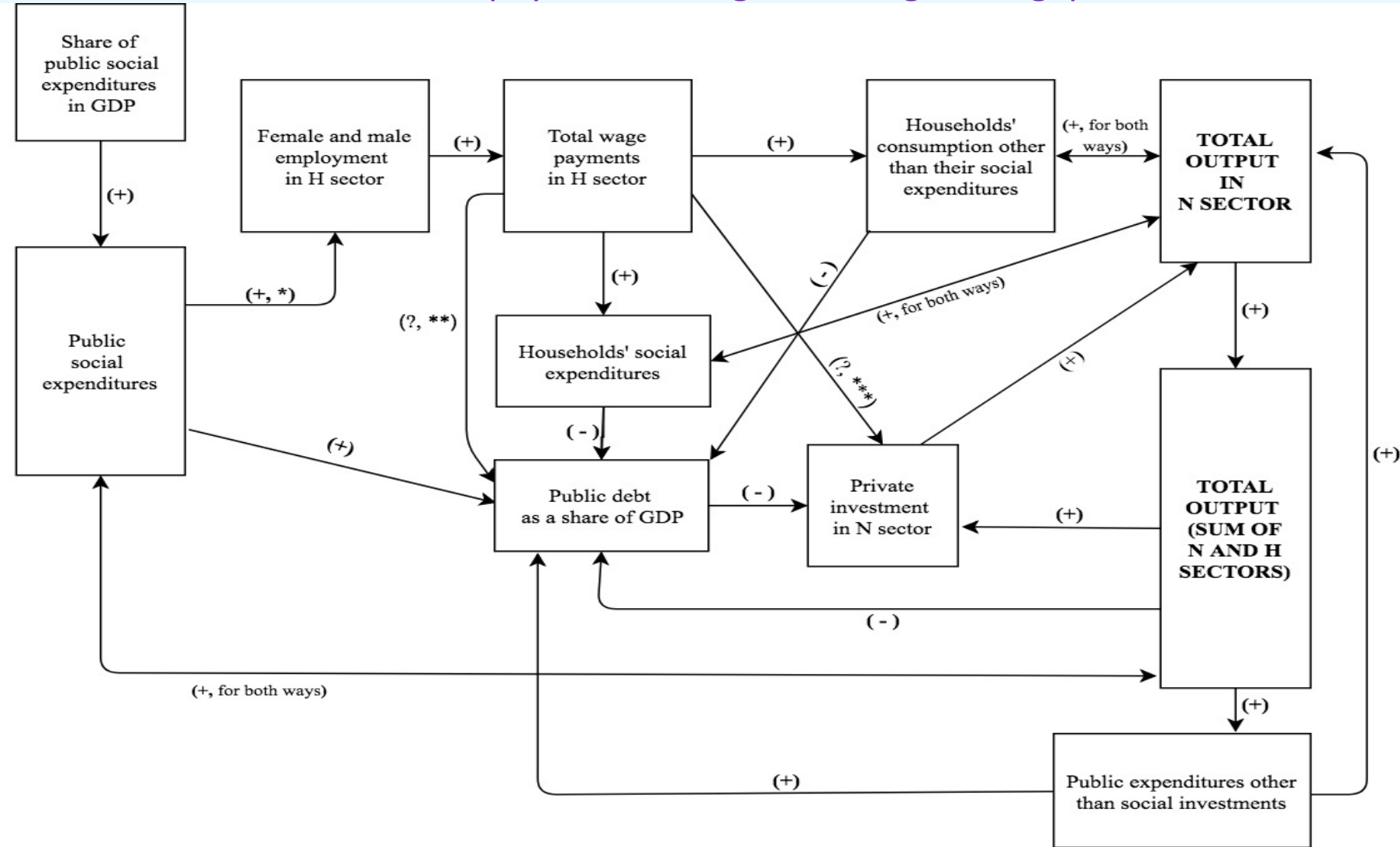
- public spending in education, childcare, health and social care are considered as current spending as opposed to infrastructure investment in national accounts
- Orthodox Marxist analysis still classifies nonprofit public paid care workers as “unproductive”
- **Feminist** economics: public care spending should be redefined as social infrastructure spending
 - Elson, UK Women’s Budget Group
- public investment is required where
 - benefits do not just accrue to individual users but have a public good character and accrue to society as a whole.
 - goods and services, access to which is seen as human right
 - private supply/profit motive leads to undersupply /privileged access
- Social infrastructure=care sectors
 - both direct and indirect impact on productivity
 - Educated and healthy workforce
 - Women’s labour force participation↑
 - socializing the invisible, unpaid domestic care work
 - Ilkkaracan : **Purple** investment
 - Social care and protection →social fabric, more innovative and productive

...3 Gendering supply side of macro modelling

- Onaran & Oyvat, Onaran et al
- Productivity (output/hours of labour in the non-care sectors)
 - endogenous in the medium run
 - function of
 - wages, output, public spending, private investment, household spending in care, unpaid care
 - Dynamic implications for unit labour costs, private investment, net exports, BoP constraint
- labour force participation of women & men depend on
 - wages, social infrastructure, unpaid care
- Population growth depends on social infrastructure
 - Both the supply and quality of labour
- Employment of men & women in hours
 - Determined by output and productivity
 - Subject to occupational segregation in different sectors
 - endogenous

The effects of an increase in public social infrastructure/care investment (H) on total output in the short run

Hire more care workers and pay decent wages, close gender gaps

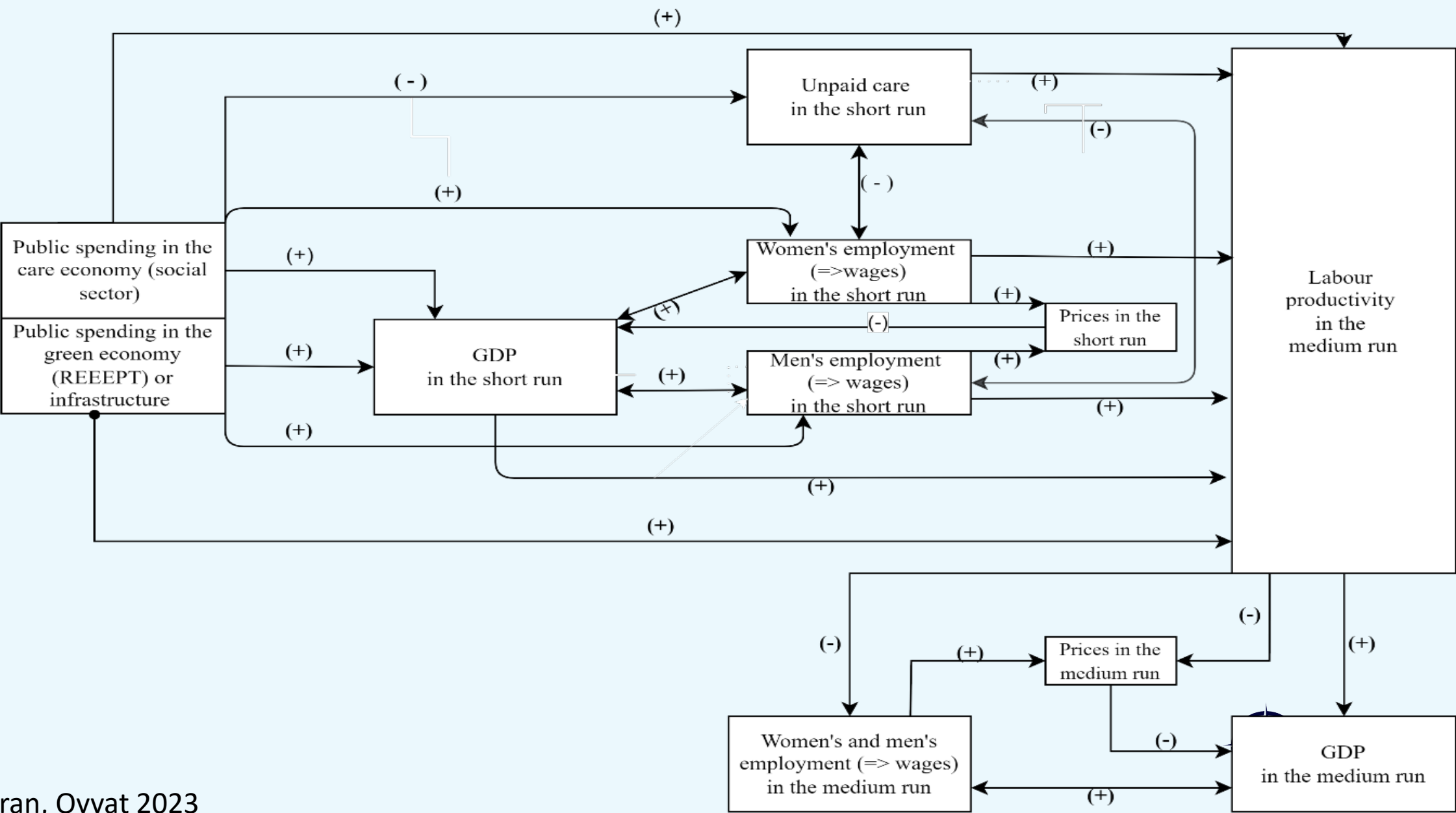


* Based on Figure 1, the positive partial impact of public social expenditures is expected to be relatively larger for female employment compared to the partial impact from expenditures in N sector.

** The impact of total wage payments in H sector is through their impact on wage and wealth taxes.

*** The impact of total wage payments in H sector is through their impact on the wealth of top 1% and bottom 99%.

The effect of public public social infrastructure/care investment on labour productivity, output, employment



...Gendering the multiplier: Empirical Feminist Post-Kaleckian Macroeconometric Model Findings on the impact of public investment in social infrastructure/care economy and the green economy

- Multipliers are large and gendered
- Very strong effects on the demand side on GDP and employment, emerging and high income economies
 - Chile, Columbia, India, Indonesia, Philippines, Turkey, South Africa, South Korea (Onaran and Oyvat 2023, 2025)
 - UK (Onaran, Oyvat, Fotopoulou 2022, 2023)
 - strong multiplier effects on both private investment and consumption and aggregate income
 - E.g. UK multiplier: **care 3.6**, public gross fixed capital 2.4 (GFC)
 - Care multiplier: Not just level but also composition of consumption changes –more income in the hands of women lead to more household spending in goods & services that improve health, education, nutrition outcomes as care econ hires more women
- strong effects on the supply side
 - productivity and labour supply → investment and net exports ↑
 - UK: 1%-point ↑ in public spending in care/GDP → productivity ↑ 4.6% (in the rest of the economy)
 - UK: 1%-point ↑ in public GFC/GDP → productivity ↑ 0.8% (in the rest of the economy)
 - Onaran and Oyvat 2023; Onaran, Oyvat, Fotopoulou, 2023, 2022,
 - The time period of the effects may be different
 - E.g. Childcare:
 - Immediate effect on women's LFPR and via this channel on labour productivity
 - Lagged effect on human capabilities development and high but lagged effect on productivity
 - Requires patient and long term thinking in policy making
- Employment of women & men ↑: UK E_{total} ↑ 1.5% with care vs 2% with GFC, medium run
 - output effect is very strong and more than offsets the productivity effect
 - Women's share of employment ↑ with care spending

...Gendering the multiplier

Fiscal policy is the biggest equalizer and most effective for employment creation

Effects of increasing wages and closing gender gaps vs fiscal policy

- General model: Dual role of wages
→demand & cost
- Wages & gender gap → Income distribution
→ demand → output
- Gender equality led if women’s wages ↑ + gender gap ↓
→output↑
- Equality-led = Wage-led + gender equality-led
 - UK case, Onaran et al 2023, 22
 - but output effects of wages or gender gaps are small
 - strong productivity effects
 - short run Employment↑, medium run employment ↓
- Full employment requires public investment
 - in particular in the medium run

	Wage-led	Profit-led
Gender equality-led	<div> Impact of w_t^{NF} & w_t^{NM}(constant α_t^N) on total consumption > Impact of w_t^{NF} & w_t^{NM}(constant α_t^N) on investment + net exports & Impact of w_t^{NF} on total consumption > Impact of w_t^{NF} on investment + net exports </div>	<div> Impact of w_t^{NF} & w_t^{NM}(constant α_t^N) on investment + net exports > Impact of w_t^{NF} & w_t^{NM}(constant α_t^N) on total consumption > Impact of w_t^{NF} on total consumption > Impact of w_t^{NF} on investment + net exports </div>
Gender inequality - led	<div> Impact of w_t^{NF} & w_t^{NM}(constant α_t^N) on total consumption > Impact of w_t^{NF} & w_t^{NM}(constant α_t^N) on investment + net exports > Impact of w_t^{NF} on investment + net exports > Impact of w_t^{NF} on total consumption </div>	<div> Impact of w_t^{NF} & w_t^{NM}(constant α_t^N) on total consumption < Impact of w_t^{NF} & w_t^{NM}(constant α_t^N) on investment + net exports & Impact of w_t^{NF} on total consumption < Impact of w_t^{NF} on investment + net exports </div>

... **Gendering** the multiplier

- public spending is partly self-financing
- - effect of public spending on primary budget balance/GDP ratio < 1
- **Care** infrastructure highest self financing
 - higher multiplier effects, lower import dependency, and/or higher productivity effects.
 - UK: fully self-financing, public debt/GDP ratio does not increase even with constant tax rates
 - 1%-point ↑ in public spending in care → 0.05%-point ↓ in public debt/GDP
 - 1%-point ↑ in public spending in physical infrastructure/GDP → 0.29%-point increase in public debt/GDP

The impact of a one-off increase in public spending on physical infrastructure, care, and green economies by one percentage point of GDP on the budget deficit-to-GDP ratio after five years

	physical infrastructure	Care	Green economy
Chile	0.92	0.65	0.97
Colombia	0.94	0.96	0.94
India	1.00	0.79	0.98
Indonesia	0.89	0.85	0.94
Philippines	0.96	1.00	0.97
South Africa	0.93	0.77	0.96
South Korea	0.79	0.32	0.90
Turkey	0.84	0.81	0.91

4 Gendering the analysis of distribution

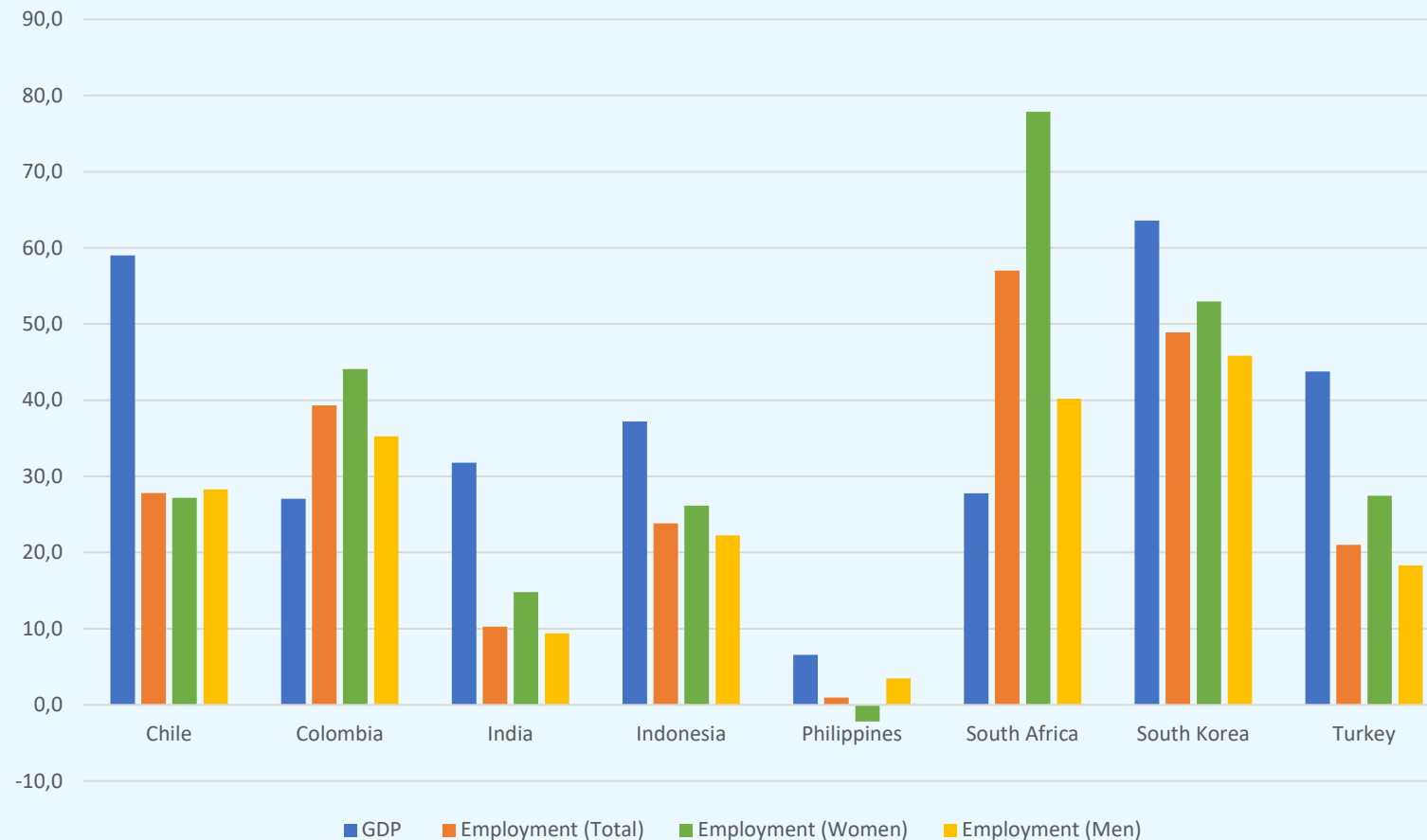
- Wage bargaining
 - function of employment/labour force of men & women and each other's wages
 - Different bargaining power coefficients
 - gendered and racial profiling of jobs
- Glass ceiling partly broken but sticky floor persists
 - more important for both gender gaps and class distribution
 - understanding class distribution needs a gender lense
- Wages, gender gaps. race gaps, taxes → functional income & wealth distribution
→ demand and supply side
- A higher share of women in a sector → lower wage share
 - Guschanski and Onaran 2021

5 Gendering ecological macroeconomics → ecofeminist post-Keynesian macro

- Need for public investment in the green and the care economy and other infrastructure
- for a green caring just transition to a zero-carbon economy with full employment with decent jobs
 - markets unable to coordinate the optimal supply for sustainable ecological and care systems
- needs-based fiscal policy
- sustainability of society depends jointly on the eco-system and care work
 - prioritizing people, nature, and sustainability
 - a green caring economy x “careless” economy
 - well-being before profit,
 - reorients the economy,
 - changes ownership and provision structures in key sectors
 - Degrowth/phasing out in fossil fuel sectors, large scale animal farming, the military industry
 - embedding global climate justice
- Purple and green are complementary
 - Care jobs: More jobs with lower Carbon emissions
 - labour intensive services –managing full employment with lower growth
 - changing how we eat, commute, heat, live easier when women are empowered –primary carers
 - investing in public transport would improve women’s lives as women use public transport more
 - Renewable energy investment is key to reduce not only emissions but also the cost of living
 - alleviate the challenges to women as carers, who struggle to decide between heating or eating.
- Addressing intersecting inequalities: class, gender, race
- addressing technological change, AI –this time it is different

Green caring **just** transition: Policy mix

- public spending in the **care** + **green** economy + other **infrastructure**
- repeated annual ↑ for 5 years, by 1%-point as a ratio to GDP



new jobs:
320k Philippines,
2.1m Chile
4.9m Turkey
7.9m Colombia
9m South Africa
12.6m South Korea
27.6m India
22.4m Indonesia

→Space for redeployment from fossil-fuels

Conclusions and policy implications

How to fund needs-based fiscal policy?

- partly self-financing; high multipliers; there is money!
- progressive taxation of not just income but also wealth
 - In particular top 1%
 - wealth concentration ↓ → financialization and market concentration ↓
→ Investment ↑
 - very strong + impact on output, employment of women and men and the budget balance
 - Key for a needs-based fiscal policy to tackle multiple challenges
 - Wealth dist is more unequal in terms of gender, race and class than income
- borrowing: Redefine infrastructure and fiscal credibility rule
 - Redefine public spending in the care econ as investment NOT current spending
- national investment bank (networked with public banks, cooperative banks),
- Accommodating monetary policy: target full employment & inflation;
 - monetary policy should accommodate fiscal policy
 - inflation target consistent with public Investment: eg 4-5% NOT as low as possible

...Conclusions and policy implications

- Fiscal policy effects are very strong even when applied in a single country
- Fiscal and labour market policies enhance each other, Obst, Onaran, Nikolaidi, 2020
 - Collective bargaining, regulation, minimum wages, equal pay legislation, formalization
 - Universal free child care and social care,
 - Equal incentives for both men and women regarding parental leave
 - Shorter hours with wage compensation for the lower wage earners→ gender equality in paid and unpaid work↑ Onaran & Calvert Jump 2021
- A strong productivity effect of public spending +green transition
 - relaxes balance of payments constraint
 - Energy and food self-sufficiency

...Conclusions and policy implications

- Embedded in a democratic participatory plan at least covering the key sectors
 - publicly owned enterprises (central, local, cooperatives)
- Fiscal space varies across countries → International policy coordination
 - Tax coordination
 - Close loop holes and multinationals' profit shifting
 - international financial transaction tax
 - Other international carbon taxes such as on airlines
 - Coordinate corporate tax rate and top marginal income tax
 - Global wealth tax
 - Capital controls
 - Debt audit, cancellation, reparations
 - development aid and technology transfer
 - Fiscal spending coordination
 - effects are stronger when coordinated across countries
 - Coordination of expansionary public investment in the care and green econ + equality-led labour market pol Minimizes the import leakage or export market loss in the DCs
 - Stop beggar thy neighbour; EU: Obst, Onaran, Nikolaidi, 2020; G20: Onaran 2018, Onaran and Galanis 2014

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