

Gender and Macroeconomics: An Introduction to Analysis and Policy

Elissa Braunstein

Professor of Economics

Associate Dean for Research and Graduate Programs

College of Liberal Arts | Colorado State University

Editor-in-Chief | *Feminist Economics*

Overview of Talk

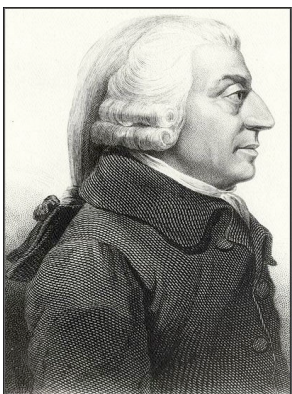
1. Some preliminaries on feminism, production & reproduction
 - ➔ What happens when we get economists to treat the care of others as productive work?
2. Overview of work on gender and macro
 - A. The impact of gender on macro outcomes
 - B. The impact of macro structure and policy on gendered economic outcomes
3. Incorporating care in macro
 - A. National income accounting
 - B. Sectoral disaggregation for care-aware policy analysis
 - C. Transforming macroeconomic modeling

Feminism, Production, and Reproduction

Preliminaries

Feminism, Production, and Reproduction

- Prior
 - Identity, particularly gender, substantially influences the production of knowledge and theory choice.
- Gender identity affects:
 - The sorts of questions one asks
 - An example: The invisibility of care and nonmarket work*



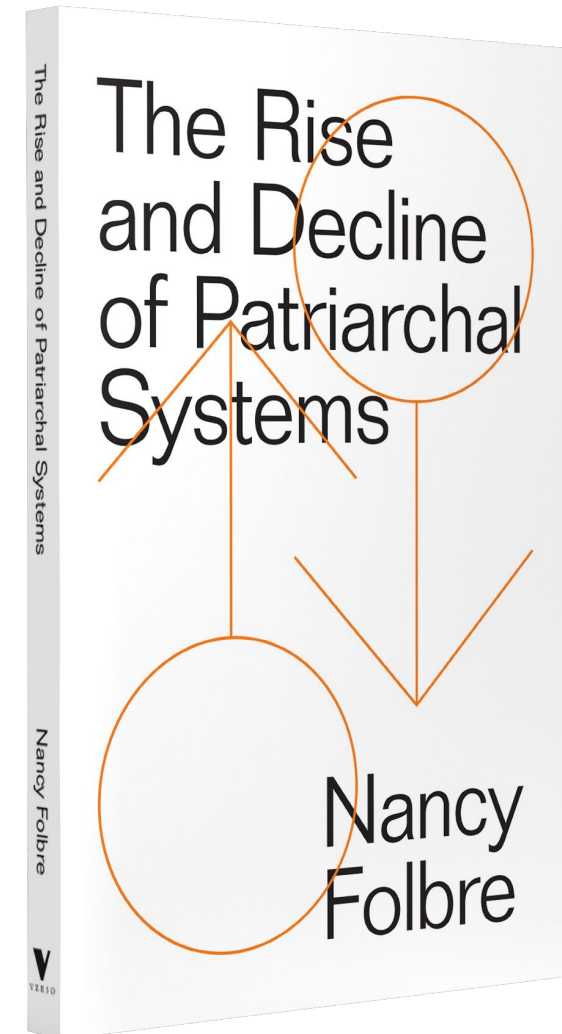
*Gender identity and the importance of nonmarket work: Adam Smith's Invisible Hand

“It is not from the benevolence of the butcher, the brewer, or the baker that we expect our dinner, but from regard to their **self-interest**.” (*Wealth of Nations*)



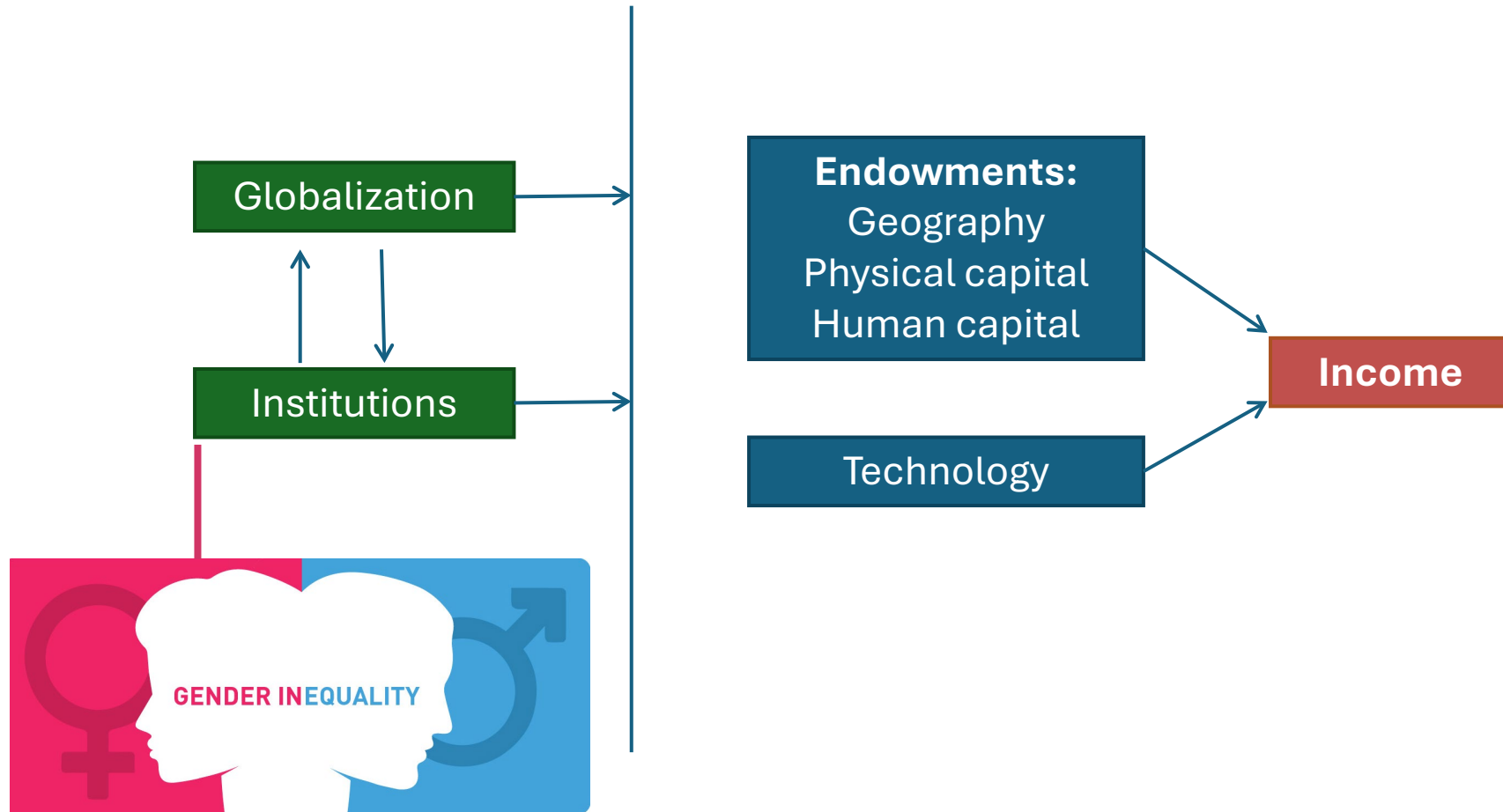
- Butchers, brewers and bakers weren't making Smith his dinner.....
- Smith of the opinion that labor which did not result in a commodity was “unproductive”
- Legacy that nonmarket work excluded in estimates of economic output (GDP)
 - SNA now includes production for own use (growing food, collecting water or fuel)
 - Unpaid care work still only “encouraged” in satellite accounts

Political economy of household production



Feminism, **Production**, and Reproduction

How (most) economists understand growth



Feminism, **Production**, and Reproduction

A short aside:

Why are we talking about economic growth?

1. It's important from a development perspective

- Increases in per capita incomes essential for sustained improvements in well-being
- Sustainable Development Goal 8: Decent Work and Economic Growth

2. Economists & policymakers care about growth

- The costs of ceding the conversation

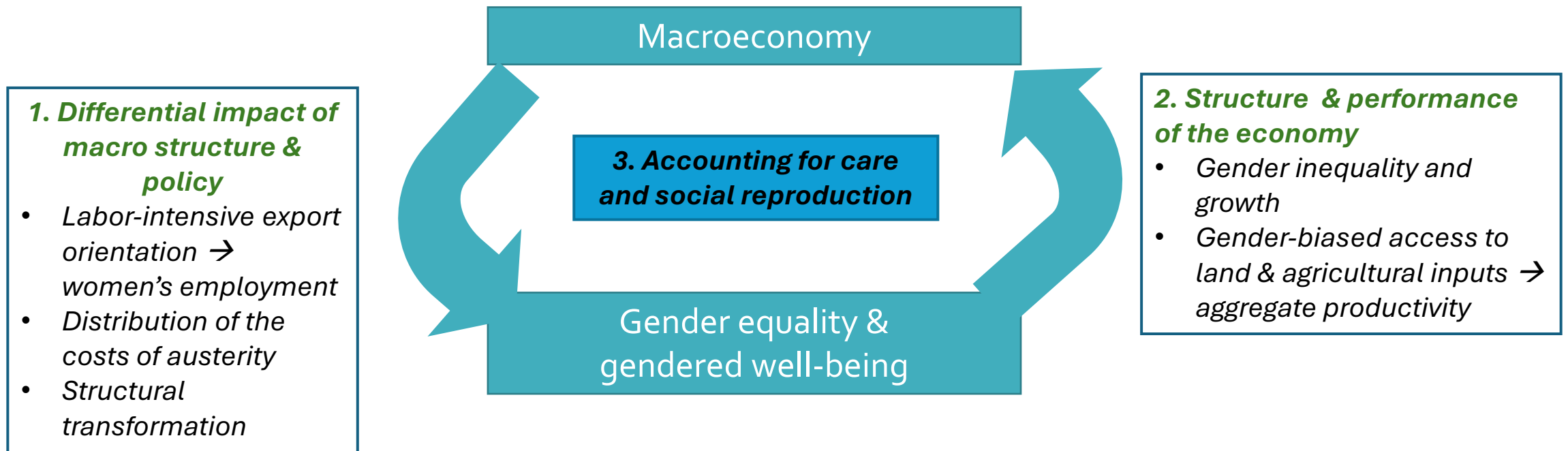


Feminism, Production, and **Reproduction**

- Social reproduction
 - The time and commodities it takes to reproduce the labor force
 - Economic growth models do not treat labor as produced or maintained
- The consequences of undervaluing care work
 - Children as pets vs. public goods
 - Market efficiencies generated by transfers to the nonmarket sector
 - Presumes unlimited supplies of caring labor
- Key question: How does allowing for social reproduction change our analysis of various public policies or strategies for growth and development?



Gender & Macroeconomics



Care and the macroeconomy: The early years

- Feminist economic critiques of SAPs in the 1980s
 - Economic models presumed virtually unlimited supplies of unpaid labor from women and girls
 - Negative consequences for well-being
 - Negative consequences for the goals of the programs themselves
- Diane Elson & Nilufer Cagatay: Social content of macroeconomic policy
 - Relations of production and exchange embedded in class as well as gender
 - Market economy fundamentally depends on unpaid work and care, much of it done by women and girls
- Diane Elson: “The Care Economy”

Major strands of feminist work that emerged from these early insights

1. National income accounting – Is GDP all we have?
2. Sectoral disaggregation for care-aware policy analysis
3. Transforming macromodeling: Care and social reproduction

A series of models and an estimation

The project

1. Theoretical macroeconomic model → “Social reproduction regimes” (Braunstein, van Staveren and Tavani 2011)
 - Demand and growth
 - Supply and the distribution of social reproduction
2. Application to country-specific cases (UN Women Discussion Paper 2014)
3. Empirically estimate the model (principal component analysis), Braunstein, Bouhia and Seguino (2020)
4. Growth regression analysis (Braunstein, Seguino, Altringer 2021)

Some foundational concepts: How social reproduction works

- **Site:** Household
- **Inputs:** Commodities & time (Care)
- **Outputs:** Human capacities
 - Whatever makes individuals more economically effective
 - E.g. emotional maturity, patience, state of being well-rested and well-fed, in addition to usual measures of education or training
 - Wider than “human capital,” narrower than “human capabilities”
- **Dynamics:** Two time horizons to production
 - Daily aspects of social reproduction
 - Long-term investments that raise future productive capacity (& contribute to current demand)

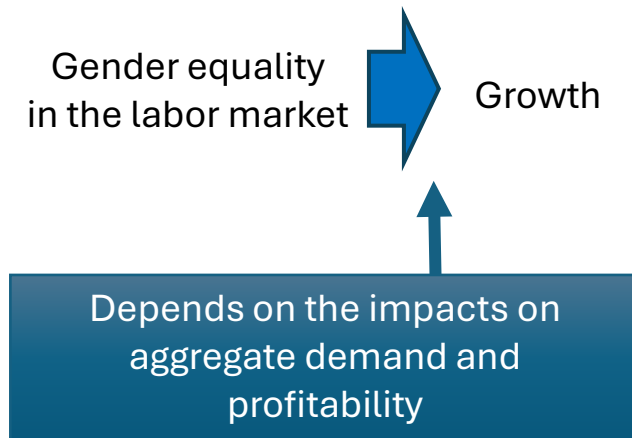
Some foundational
concepts:
How is this approach
gendered?

Gender division of labor

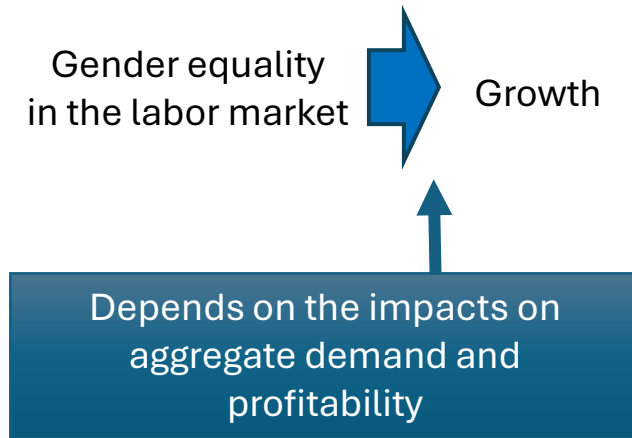
1. Distribution of time and money costs of social reproduction
2. Gender segregation in labor markets



The Demand Side: Economic Growth

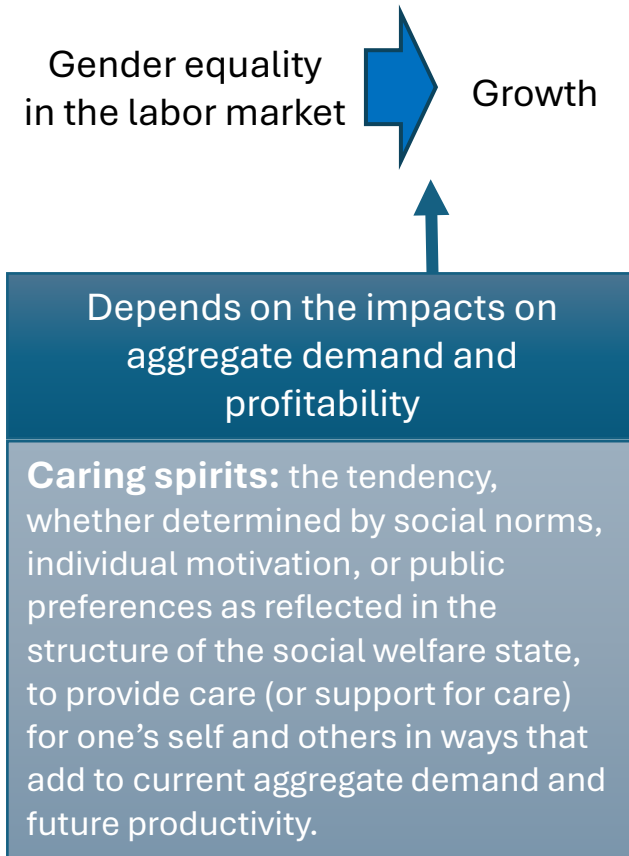


The Demand Side: Economic Growth



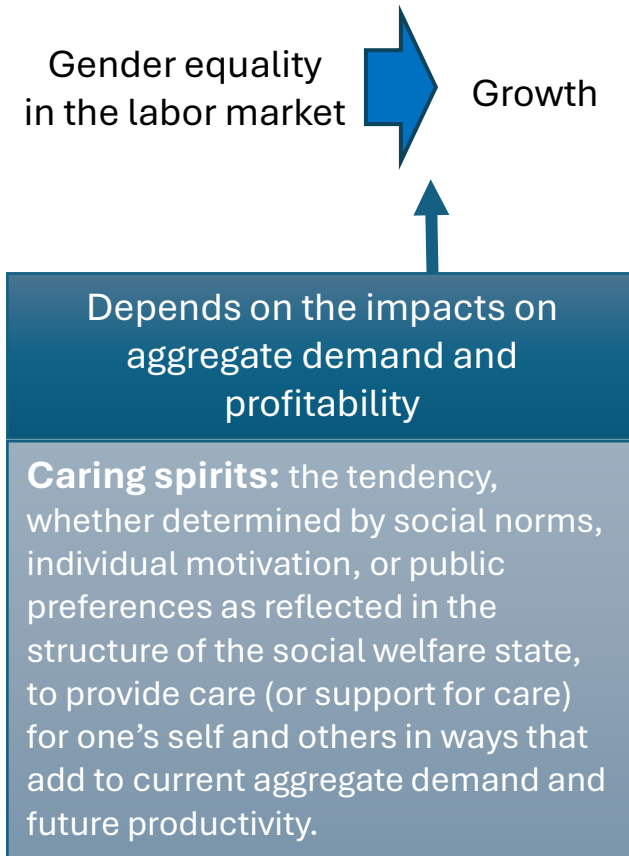
Stylized types of economies		
	Care-led	Inequality-led
<i>Relationship between gender equality in the labor market & growth</i>	Positive	Negative

The Demand Side: Economic Growth



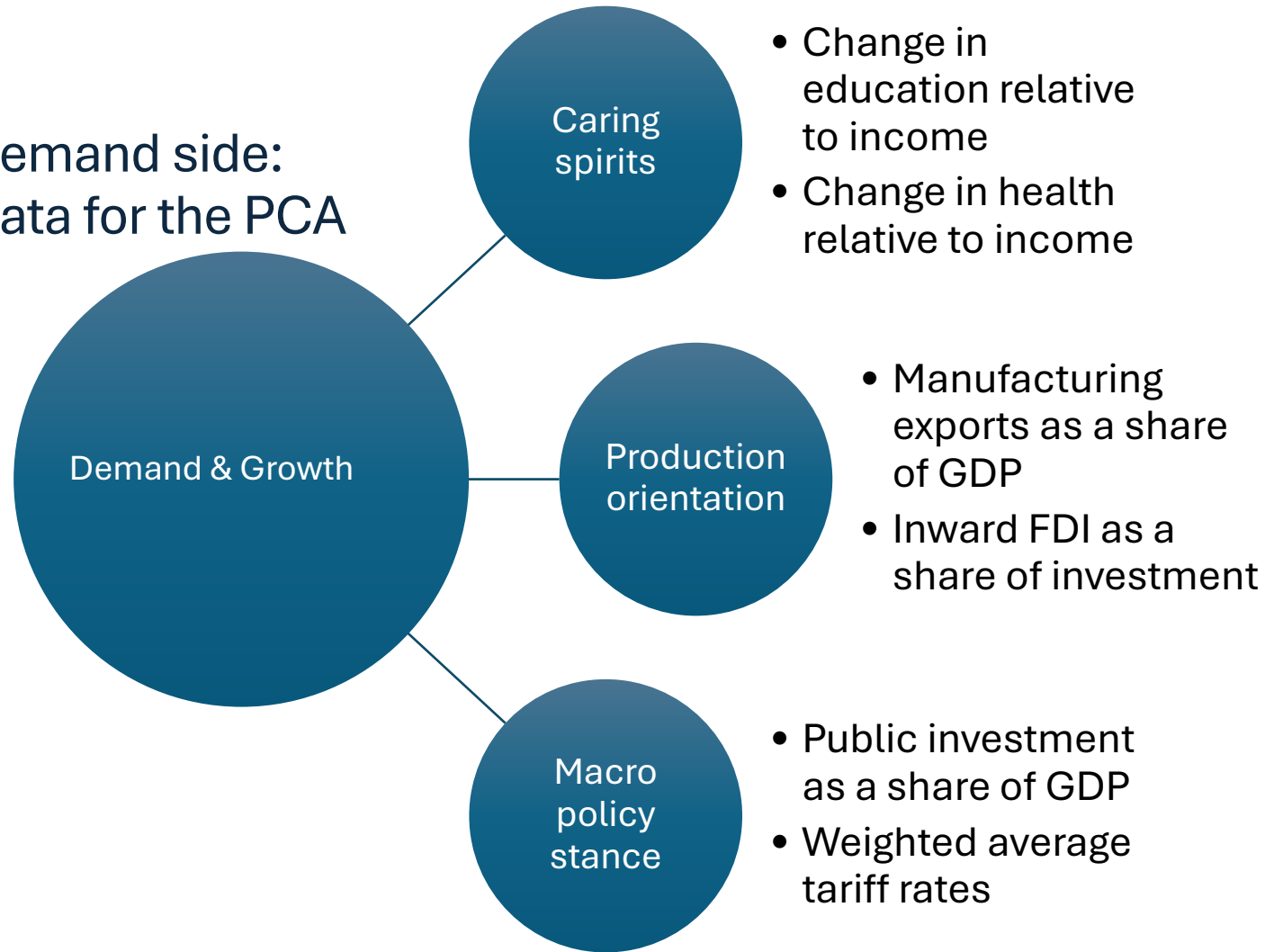
Stylized types of economies		
	Care-led	Inequality-led
<i>Relationship between gender equality in the labor market & growth</i>	Positive	Negative
Characteristics		
<i>Caring spirits</i>	Strong	Weak

The Demand Side: Economic Growth



Stylized types of economies		
	Care-led	Inequality-led
<i>Relationship between gender equality in the labor market & growth</i>	Positive	Negative
Characteristics		
<i>Caring spirits</i>	Strong	Weak
<i>Production orientation</i>	Domestic	Global
<i>Macro policy stance</i>	Development, employment oriented	Narrow focus on managing openness

Demand side:
Data for the PCA



Later add finance:

- Chinn-Ito index of capital account openness
- FIRE emp/total emp

The supply side: Distribution of social reproduction

1. Household sector

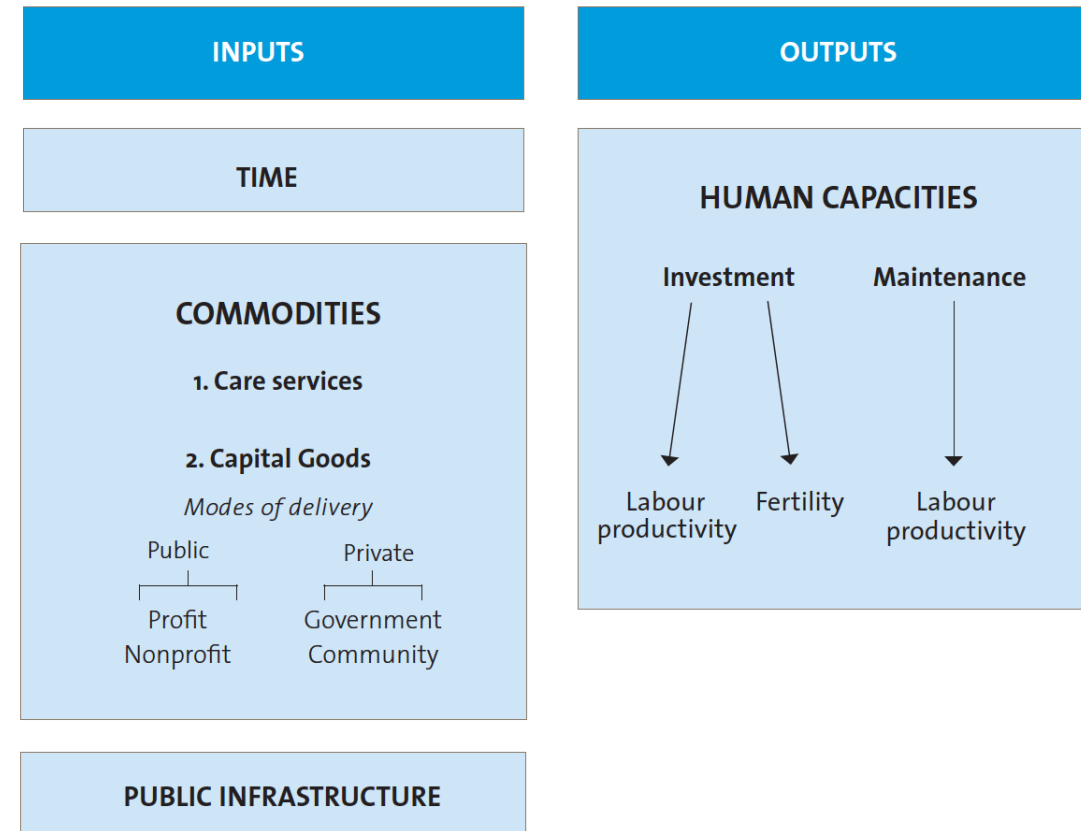
- Commodities and time combined to produce human capacities
- demand for care
- labor productivity

2. Labor market

- Gender segmentation in the labor market
 - Women work in market care services
 - Men work in durable goods
- Employment → labor's bargaining power

3. Product market

- Wages and labor productivity
- Flexible mark-up pricing
- Prices & profit share



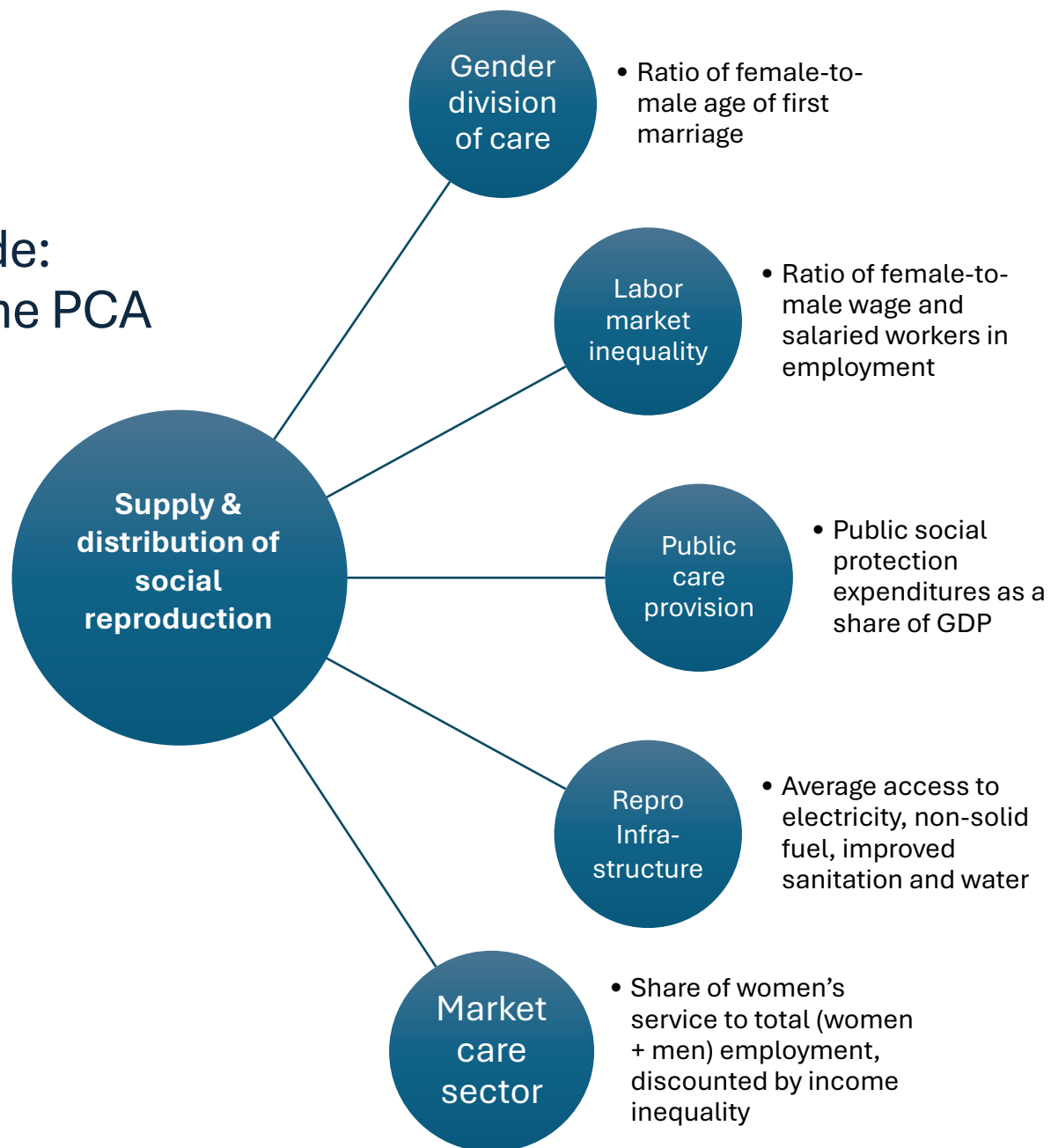
The supply side: Distribution of social reproduction

	High-road/gender egalitarian	Low-road/feminization of responsibility and obligation
<i>Time and financial costs of social reproduction</i>	Equitably distributed among women, men and the state	Women shoulder disproportionate share of the costs
<i>Effects of increased female labor force participation on human capacities production</i>	Increase	Decrease

The supply side: Distribution of social reproduction

	High-road/gender egalitarian	Low-road/feminization of responsibility and obligation
<i>Time and financial costs of social reproduction</i>	Equitably distributed among women, men and the state	Women shoulder disproportionate share of the costs
<i>Effects of increased female labor force participation on human capacities production</i>	Increase	Decrease
Characteristics		
<i>Unpaid care work</i>	Sharing between women & men	Low participation by men
<i>Public provision for care</i>	Strong	Weak
<i>Market care sector</i>	Extensive & high quality	Limited &/or low quality
<i>Labor market gender inequality</i>	Low	High
<i>Reproductive infrastructure</i>	Extensive	Limited

Supply side: Data for the PCA



Growth & Social Reproduction

Demand: Growth	Supply: Distribution of social reproduction	
	Low-road: Feminization of responsibility and obligation	High-road: Gender egalitarian
Care-led: Strong caring spirits	Time squeeze Higher wages for women are good for growth, but more market participation squeezes time and lowers human capacities production. <i>Growth is elusive or unstable.</i>	
Inequality-led: Weak caring spirits		

Growth & Social Reproduction

Demand: Growth	Supply: Distribution of social reproduction	
	Low-road: Feminization of responsibility and obligation	High-road: Gender egalitarian
Care-led: Strong caring spirits	Time squeeze Higher wages for women are good for growth, but more market participation squeezes time and lowers human capacities production. <i>Growth is elusive or unstable.</i>	Mutual Higher wages for women are good for growth, and more market participation increases human capacities production. <i>Growth and social reproduction reinforce one another.</i>
Inequality-led: Weak caring spirits		

Growth & Social Reproduction

Demand: Growth	Supply: Distribution of social reproduction	
	Low-road: Feminization of responsibility and obligation	High-road: Gender egalitarian
Care-led: Strong caring spirits	Time squeeze Higher wages for women are good for growth, but more market participation squeezes time and lowers human capacities production. <i>Growth is elusive or unstable.</i>	Mutual Higher wages for women are good for growth, and more market participation increases human capacities production. <i>Growth and social reproduction reinforce one another.</i>
Inequality-led: Weak caring spirits	Exploitation Higher wages for women lower growth, and more market participation squeezes time and lowers human capacities production. <i>Growth is partly based on exploiting women's labor and human resources.</i>	

Growth & Social Reproduction

Demand: Growth	Supply: Distribution of social reproduction	
	Low-road: Feminization of responsibility and obligation	High-road: Gender egalitarian
Care-led: Strong caring spirits	Time squeeze Higher wages for women are good for growth, but more market participation squeezes time and lowers human capacities production. <i>Growth is elusive or unstable.</i>	Mutual Higher wages for women are good for growth, and more market participation increases human capacities production. <i>Growth and social reproduction reinforce one another.</i>
Inequality-led: Weak caring spirits	Exploitation Higher wages for women lower growth, and more market participation squeezes time and lowers human capacities production. <i>Growth is partly based on exploiting women's labor and human resources.</i>	Wage squeeze Higher wages for women lower growth, but more market participation enhances human capacities production. <i>Growth is elusive or unstable.</i>

Empirical application

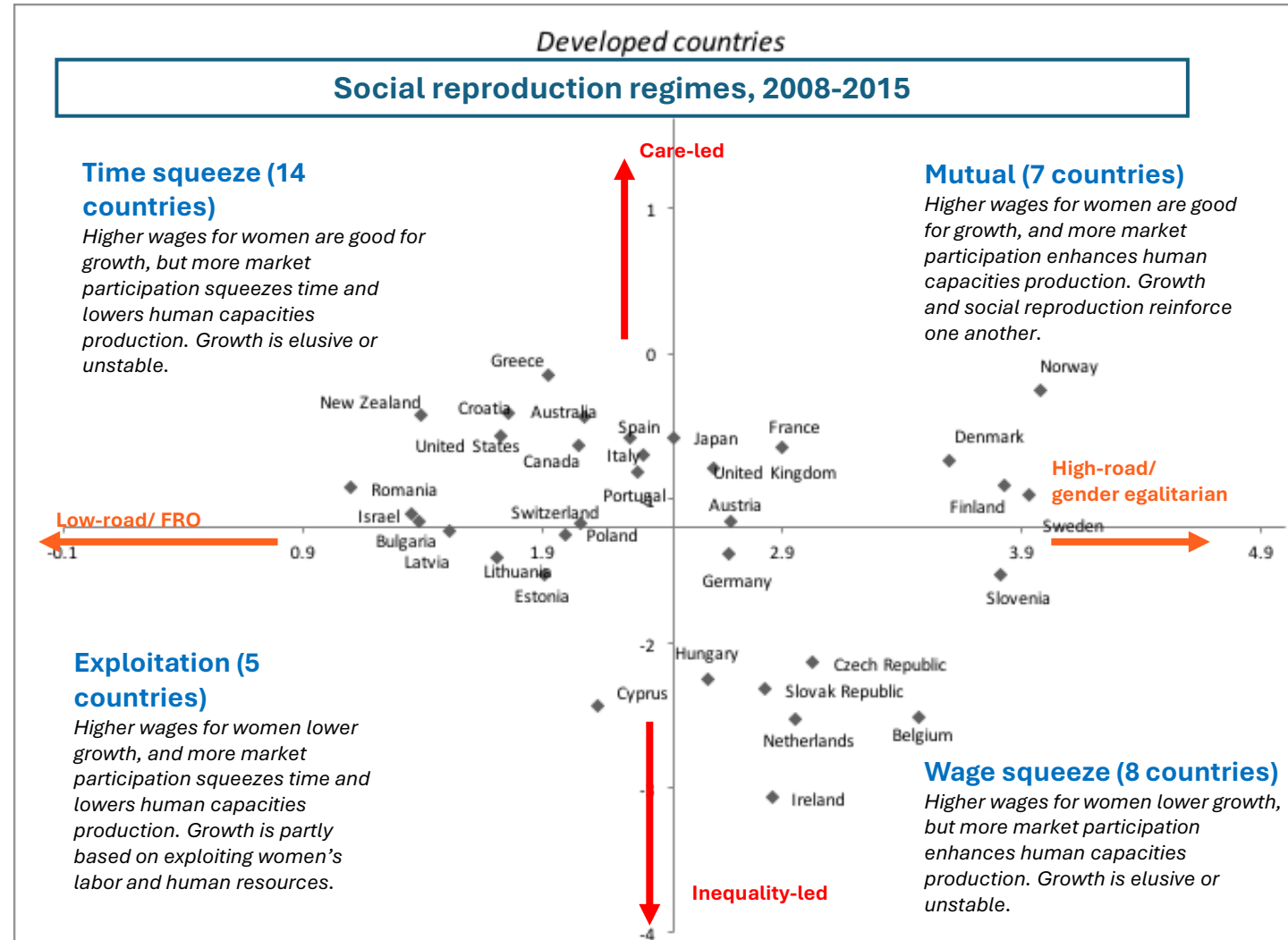
Principal component analysis →
time paths of social reproduction regimes
Growth regressions

Distribution of social reproduction regimes by region, 2008-2015

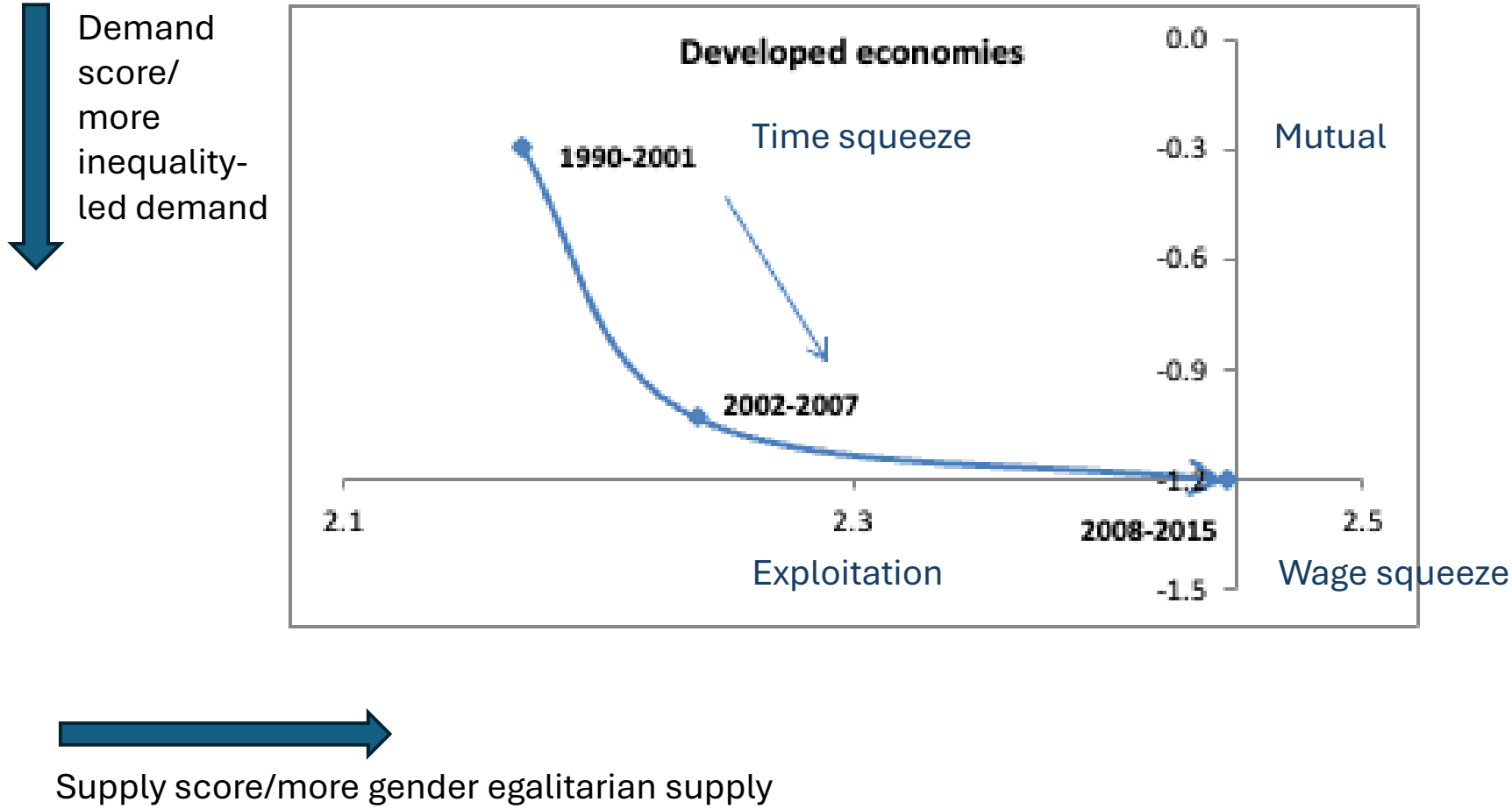
<i>Region</i>	<i>Exploitation</i>	<i>Mutual</i>	<i>Time squeeze</i>	<i>Wage squeeze</i>	<i>Number of countries</i>
Developed economies	21%	24%	32%	24%	33
Developing Africa	3%	9%	85%	3%	34
Developing America	19%	29%	19%	33%	21
Developing Asia	23%	15%	19%	42%	26
Transition economies	14%	14%	0%	71%	7
<i>World</i>	<i>16%</i>	<i>18%</i>	<i>40%</i>	<i>26%</i>	<i>121</i>

Note: Countries are grouped by United Nations classification.

PCA for developed economies



Time paths of social reproduction regimes, 1990-2015



Growth regressions

		Growth	Volatility
Weighted social reproduction regimes: $W_{it} = Supply_{it} \times Demand_{it} $			
Inequality-led + low-road	Exploitation	--**	--
Care-led + high-road	Mutual	++	+
Care-led + low-road	Time squeeze	--***	+
Inequality-led + high-road	Wage squeeze	-	++***

Model details: Pooled OLS for 122 countries and 3 time periods, 1990-2001, 2002-2007, 2008-2015. All regressions include real per capita GDP and the stock of human capital at the beginning of the period, average investment as a share of GDP, an index measuring the rule of law, and regional and time fixed effects.

Growth regressions II: Adding measures of financialization

		Growth (original)	Growth (+ finance)
Weighted social reproduction regimes: $W_{it} = Supply_{it} \times Demand_{it} $			
Inequality-led + low-road	Exploitation	--**	--***
Care-led + high-road	Mutual	+*	-
Care-led + low-road	Time squeeze	--***	--***
Inequality-led + high-road	Wage squeeze	-	--***

Model details: Pooled OLS for 122 countries and 3 time periods, 1990-2001, 2002-2007, 2008-2015. All regressions include real per capita GDP and the stock of human capital at the beginning of the period, average investment as a share of GDP, an index measuring the rule of law, and regional and time fixed effects.

Some takeaways & open questions

1. Including social reproduction as a source of current consumption and future productivity growth is essential to understanding how macro policy affects growth and development
 - *Gender systems that underlie the gender division of labor is then central to that potential*
2. Short- and long-term drivers of 'extended' investment
 - *Consumption and time as investment in human capacities*
3. Feminist perspectives can improve macro policy insights and effectiveness