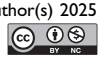
Original Article

Science, Technology, & Human Values
2026, Vol. 51(2) 400-434



DOI: 10.1177/01622439251336630
journals.sagepub.com/home/sth


Regulation and Altruism as Valuation Mechanisms: A Political Economy of Ova Markets in Ukraine and Spain

Polina Vlasenko[1] **and Vincenzo Pavone**[2]

Abstract

Recent science and technology studies (STS) debates on valuation mechanisms have highlighted how social, ethical, and political values are embedded in scientific and technological practices—particularly through regulation and market design. In this context, scholars working on assisted reproductive technologies (ART) have examined how bodies, tissues, and reproductive labor are integrated into market economies structured by transnational inequalities and postcolonial legacies. Using a feminist political economy lens, this article advances STS discussions by analyzing how state-enforced quality standards and altruistic narratives function as valuation mechanisms in the reproductive bioeconomies of

[1] Medical Anthropology, Indiana University Bloomington, Centre on Migration, Policy and Society (COMPAS), University of Oxford, Oxford, UK
[2] Social and Political Science, European University Institute, Institute for Public Goods and Policies (IPP), the Consejo Superior Investigaciones Científicas (CSIC), Madrid, Spain

Corresponding Author:
Polina Vlasenko, Medical Anthropology, Indiana University Bloomington, Centre on Migration, Policy and Society (COMPAS), University of Oxford, Oxford, UK.
Email: polina.vlasenko@compas.ox.ac.uk

Ukraine and Spain. These mechanisms not only shape the valuation of ova but also reproduce economic hierarchies, gendered and racialized labor stratification, and core–periphery dependencies within global reproductive value chains. Drawing on qualitative data, we examine how regulatory differences influence each country's role in European ART markets. Ukraine's permissive regulatory environment and lack of EU alignment allow for competitive pricing but raise concerns about quality standards, reinforcing its position as a peripheral, low-cost supplier. In contrast, Spain's regulated ART sector, aligned with EU standards, generates higher ova value through trust and credibility, solidifying its position within the "core." This article argues that valuation processes are co-constructed through regulation, technologies, and market economies, legitimizing reproductive markets while obscuring underlying structural inequalities.

Keywords
Egg donation, value, state, regulation, market, altruism, Ukraine, Spain

Introduction

The demand for donated ova in Europe continues to rise, with over 80,000 egg donation treatment cycles performed annually (Wyns 2022). Yet the supply remains constrained, as European Union policy permits only altruistic egg donation—with no financial compensation beyond reimbursement for the donor's expenses and inconvenience—offering limited incentives for participation (European Parliament and the Council 2004). This model is interpreted unevenly across countries, resulting in significant variation in donor availability and prompting patients to seek cross-border reproductive care in settings with more liberal legislation, better access, and lower costs (Hudson et al. 2011; Hudson and Culley 2011; Gunnarsson Payne 2015; Homanen 2018). Countries like Spain and Ukraine have become popular destinations for such arrangements due to their less restrictive assisted reproductive technologies (ART) laws and compensation levels considered attractive by local donors, contributing to a steady supply of ova from individuals with desirable phenotypes (Shenfield et al. 2010; Bergmann 2011; Kroløkke 2014*a*; Lafuente-Funes 2017; Degli Esposti and Pavone 2019; Alkorta 2021; Molas and Whittaker 2022).

Both Spanish and Ukrainian fertility clinics have increasingly relied on the banking and transport of donor eggs (Tober and Pavone 2018; Tober

et al. 2023).[1] This practice is especially prominent in Ukraine where cross-border egg donation depends heavily on shipping vitrified eggs abroad, allowing foreign patients to undergo treatment in their home countries or other preferred locations (Vlasenko 2023). Although the Russian full-scale invasion has disrupted parts of Ukraine's ART industry (König 2023), major players have adapted by increasingly relocating operations abroad and prioritizing the shipment of biomaterials to mitigate safety concerns associated with travel to Ukraine.

In this article, we ask how the valuation of donor ova is shaped by state regulation and market design in Spain and Ukraine, in relation to each country's position within the European market, its quality standards, and prevailing narratives of altruism. The theoretical framework of core–periphery dynamics and global value chains provides the basis for understanding how countries such as Ukraine and Spain generate value in the global ART market. The regulatory disparities and compliance with European quality standards are central to this analysis. We argue that being situated within the EU, along with the presence of state legislation ensuring European quality standards and the altruistic framing of donation, provides a pathway to accessing and gaining a competitive advantage in the European ART market. In the following, we explore how discourses and practices surrounding the regulation of (a) quality standards and (b) donor altruism act as valuation mechanisms that directly shape the market dynamics of oocyte economies in both countries.

In this respect, a comparison between Spain and Ukraine offers valuable insights. Both countries have developed distinct norms and practices for performing and governing ova donation. While both are successful in export-oriented ova commodity chains, their valuation dynamics differ due to contrasting regulatory regimes and unequal positions within the core–periphery hierarchy. As an EU member, Spain has a clearly but liberally regulated egg donation industry and access to the EU market, whereas Ukraine, a non-EU country, operates under more fragmented legislation and faces challenges in navigating European market restrictions, a situation further aggravated by the ongoing war. Additionally, Spain and Ukraine have implemented different market designs. The Spanish market has been described as quasi-social, combining relatively attractive compensation with the effective framing of ova provision as altruistic donation (Degli Esposti and Pavone 2019). In contrast, Ukraine has adopted a more explicit, business-like approach, which effectively works according to more traditional market mechanisms (Vlasenko 2015; 2024). While this grants Ukrainian fertility clinics greater operational freedom, it may also pose risks to their credibility.

In the following section, we discuss how discourses surrounding state regulation of quality standards and altruism act as valuation mechanisms, with a particular focus on how these are shaped by core–periphery dynamics within global reproductive value chains.

ARTs, State Regulation, and Global Value Chains

The theoretical foundation for this article draws on insights from science and technology studies (STS), feminist political economy, and global value chain analysis. These approaches allow for an examination of how regulatory frameworks, market design, and narratives of quality and altruism influence the value assigned to donor eggs within transnational ART markets, while also reproducing economic inequalities, gender power dynamics, and postcolonial relations embedded within their operational and institutional structures. Central to this discussion is the concept of core–periphery dynamics, which highlights that countries like Spain and Ukraine occupy different positions within global reproductive value chains based on their regulatory environments and market practices.

Valuation Mechanisms

In STS literature, valuation mechanisms refer to the processes and structures through which social, ethical, economic, and political values are produced and expressed within scientific and technological practices. These mechanisms shape and are shaped by the development, implementation, and reception of scientific knowledge and technological artifacts (Winner 1980; Jasanoff 2005). Such values are not only inscribed in the design and operation of scientific and technological systems (Flanagan and Nissenbaum 2014; Beaulieu and Leonelli 2021), but are also articulated through discourses, standards, and norms that steer research agendas, funding priorities, and regulatory frameworks (Miller and Edwards 2001; Jasanoff 2011). Their meanings are continuously negotiated and contested by a range of actors, including researchers, policymakers, industry representatives, activists, and members of the public (Hess 1997). Crucially, values are also embedded in the organization and functioning of markets, informing the emergence of distinct market regimes (Callon 1998; 2021; Callon, Millo and Muniesa 2007; Zelizer 2010).

Recent contributions from valuation studies (Kjellberg et al. 2013) have extended these debates by examining the practices and devices through which value(s) are generated in markets, particularly in the context of

bodies and tissues. For instance, Sunder Rajan's (2006) work on post-genomic life highlights how biotechnologies must be understood in relation to the markets in which they emerge. Waldby's (2002) concept of *biovalue* —the economic, social, and cultural value derived from biological materials and processes—has been pivotal in studying how life as surplus is extracted, manipulated, and commercialized through specific biomedical technologies. Subsequent studies have emphasized the centrality of databanks (Mitchell and Waldby 2010), clinical labor (Cooper and Waldby 2014), tissue and cell donation (Waldby 2019), as well as normative frameworks and assetization dynamics (Birch and Tyfield 2013; Hoeyer 2013; Beltrame and Hauskeller 2018) in the production and appropriation of biovalue within capitalist economies.

Applying these insights to assisted reproduction, scholars argue that oocyte provision constitutes an extension of women's underpaid or unpaid labor, essential for biovalue accumulation yet largely rendered invisible (Cattapan 2016; Nahman 2018; Vertommen and Barbagallo 2021). Building on their pioneering research in reproductive markets (Inhorn 2015; Rudrappa 2015; Deomampo 2019), this article employs a feminist political economy lens to explore how reproductive technologies are shaped by global institutions, interconnections, and inequalities, while highlighting their distinctive value and exchange dynamics (Namberger 2019; Vlasenko 2021; Vertommen, Pavone and Nahman 2022). Specifically, it advances STS discussions by analyzing how state-enforced quality standards and altruistic narratives are mobilized as valuation mechanisms in the reproductive bioeconomies of Ukraine and Spain, driving ova value creation while perpetuating postcolonial and gendered stratifications.

Core–Periphery and Global Value Chains

Postcolonial and feminist STS scholars emphasize that colonial histories continue to shape contemporary reproductive practices and policies, reinforcing racial hierarchies and exacerbating global inequalities through technology use (Briggs 2002; Pande 2014; Benjamin 2019). A central debate focuses on cross-border reproductive care and its implications for reproductive justice, capitalist accumulation, and the postcolonial logics underpinning "global fertility chains" (Vertommen, Pavone and Nahman 2022). While global ART markets appear increasingly expansive and fluid—where a single treatment cycle can span multiple countries (Parry 2015; Müller and Schurr 2016; Schurr 2018)—national borders continue to structure the geography and success of egg donation industries. This apparent

"fluidity" is not fully captured by the concept of reproductive tourism; rather, it reflects many countries' failure to meet their citizens' reproductive needs (Inhorn 2011; 2015) and sustains entrenched North–South asymmetries of market entanglements, racial imaginaries, and extractive legacies (Deomampo 2016). We propose that the expanding global connections within egg donation markets are better understood through the lens of core–periphery dynamics, which illuminate economic dependencies and gendered and racialized labor circuits (Hopkins and Wallerstein 1977).

In STS literature, the concept of core–periphery highlights the unequal distribution of technological resources, knowledge production, and innovation across regions, emphasizing global disparities and power imbalances in science (Jasanoff 2005). Drawing from world-systems theory and global value chains analysis (Gereffi and Korzeniewicz 1994; Hopkins and Wallerstein 1994; Gereffi et al. 2001; Bair 2005), we examine how ART markets reflect core–periphery dynamics and maintain postcolonial hierarchies through an uneven flow of resources, technology, and labor. Core countries—typically higher-income with robust regulatory systems—set dominant quality and ethical standards. Peripheral regions, often characterized by weaker regulations and lower costs, must adapt to externally imposed norms that may not align with local priorities. While these regions supply lower-cost materials and labor, they capture a disproportionately small share of the profits. These stratified global relations embed European values as markers of legitimacy in ART markets, reinforcing civilizational and geopolitical hierarchies within increasingly entangled transnational bioeconomies (Van Wichelen 2019).

This disparity is evident in how Ukraine and Spain generate value in global value chains: due to its peripheral status, Ukraine generates value by offering low-cost, high-demand reproductive materials within a flexible regulatory environment, while Spain's value is rooted in its adherence to European regulation, capitalizing on credibility, quality, and altruism. In the remainder of this section, we explore two key topics in recent debates and integral to this article's contributions: The role of (a) state-enforced regulation of quality standards and (b) altruism as valuation mechanisms in reproductive markets, and how both are shaped by core–periphery dynamics within global value chains.

Regulation

The role of state regulation in shaping reproductive markets has long been debated, with scholars arguing that increasing regulation drives clients,

opportunities, and business actors to less regulated countries (Rudrappa 2015; Schurr and Perler 2015; Whittaker and Chee 2015; Mitra 2018). In this view, countries with minimal regulation often become hot spots for reproductive travel, offering advantageous conditions for businesses to thrive (Schurr 2018). Thus, a government's inaction can be as impactful as its actions in giving countries a competitive edge in the global ART market (Pavone and Goven 2017; Degli Esposti and Pavone 2019; Vlasenko 2021; Vertommen, Pavone and Nahman 2022). At the same time, clear and enforceable regulatory frameworks are recognized as essential in morally significant areas like human embryology and reproduction, as they establish boundaries that do not merely restrict but actively enable the functioning of these fields by balancing scientific innovation with rigorous oversight, ultimately fostering public trust and upholding ethical principles (Franklin and Jackson 2024).

Building on these debates, we argue that the reproductive market's reliance on regulation is emblematic of broader patterns in modern economies, reinforcing neoliberal trends toward state-supported capitalism as the norm rather than the exception (Davies 2018). Contrary to popular belief that "free markets" naturally emerge from human profit-seeking behavior, modern economies depend on government regulation to sustain operations and underpin growth, which relies on state-established institutions like legal contracts and property rights (Polanyi 1944; Block 2008; Fligstein 2018; 2005). Sunder Rajan (2006) further shows the constitutive role of policymakers, regulation, market designs, and political institutions in shaping "biocapital." Similarly, Mazzuccato (2013) underscores the entrepreneurial state's pivotal role in creating and sustaining markets, as well as supporting knowledge- and innovation-based economies. Contributing to these STS discussions, this article examines regulatory frameworks that not only enable the functioning of ART markets but also actively embed moral, social, and political values into market practices. This dual role positions the state not merely as a regulator but as an architect of markets, shaping valuation and global flows of reproductive biomaterials and labor, and influencing hierarchies and the distribution of risks and rewards within global value chains.

State regulation acts as a vital valuation mechanism, establishing competitive advantages that differentiate countries like Ukraine and Spain, whose contrasting regulatory environments and EU alignment influence their positioning within global value chains. Ukraine's minimal state intervention and lack of alignment with EU standards initially allowed it to profit from supplying lower-cost biomaterials within the global reproductive bioeconomy.

However, the absence of robust legal oversight has raised credibility concerns, prompting Western clients to question quality standards and donor motivations. In contrast, Spain's regulated market—balancing mild European regulations with financial incentives—has fostered a reliable egg supply, strengthened the fertility industry, and increased market value while allowing unrestricted exports. This regulatory alignment has established Spain as a core player, setting standards and generating greater value through perceived credibility and quality, while Ukraine serves as a peripheral supplier to core countries by adapting to these standards. Although we do not directly compare the quality and ethical standards in both countries, we acknowledge that core–periphery dynamics shape the perceived value of donor eggs—like viewing Ukrainian eggs as less desirable due to concerns about quality and ethics—reflecting how core countries establish and use regulations and standards to protect their markets from lower-priced competition from peripheral regions.

Compliance with European quality standards serves as a gatekeeping mechanism while creating opportunities for some countries to become key players in global value chains. Studies show that it provides a competitive advantage, as seen when Hungarian farmers struggled to meet EU quality standards (Gille 2016) or when the Polish meat industry faced specific EU audit requirements, limiting their market access and profitability. These regulations represent a new mode of governmentality in post-socialist Eastern Europe, facilitating flows of capital and goods (Dunn 2005, 175). In the ART market, only vitrified egg cells assigned a Single European Code (SEC) by authorized European clinics included in the Registry of Tissue Entities can be used in treatments (The European Commission 2015). While this process is straightforward for Spanish egg banks, non-EU countries like Ukraine face significant regulatory barriers. Ukrainian egg banks must partner with EU clinics to assign an SEC, proving compliance with EU standards and demonstrating donor altruism, as required by the EU Tissue and Cells Directive (European Parliament and the Council 2004). Compliance with such regulations could enable peripheral markets, like Ukraine's, to move toward the core and increase their market value.

Altruism

Another contested debate centers on the altruistic nature of egg provision. Exchanges of biological materials have sparked fierce scholarly discussion over whether they circulate as gifts or commodities, represent choice or exploitation, or if they exist on a continuum between the two (Parry 2008;

2015; Hoeyer 2013; Nahman 2013; Waldby et al. 2013; Waldby 2015; Kroløkke 2018). Traditional perspectives often posit that market participation—where donors are paid—is opposed to altruistic donation, which is perceived as having higher moral and social value (Kimbrell 1997; Nelkin and Andrews 2001; Kenney and McGowan 2014). Hannah Gibson's work on traditional surrogacy challenges this altruistic/nonaltruistic dichotomy, revealing the complexity of altruistic motivations. Her research shows how traditional surrogates are driven by both the desire to help others create kin, and the pursuit of personal fulfillment (Gibson 2021).

Existing studies have primarily addressed altruism as a motivational mechanism that mobilizes egg providers (Fielding et al. 1998; Braverman and Corson 2002; Byrd, Sidebotham and Lieberman 2002; Almeling 2006; Purewal and Van den Akker 2009; Pennings et al. 2014; Jadva et al. 2015; Graham et al. 2016; Thaldar 2020). However, we propose that altruism can function as a valuation mechanism or a "market device" (Callon, Millo and Muniesa 2007), emphasizing how certain regulations or narratives can function strategically within markets to shape perceptions, behaviors, and ultimately the value assigned to goods and services. Following Hoeyer's (2013, 110) encouragement to examine "what the moral ideal does to the mode of exchange" and Rudrappa's (2021) critique of altruistic exchanges as seemingly egalitarian but ultimately rooted in domination, we suggest that the moral framing of body part transfers as altruistic may be "an essential part of commercial research conditions on positive terms" (Hoeyer 2013, 108).

To develop a care-centered narrative as an alternative to neoliberal capitalism, Lynch (2022) emphasizes how neoliberal framings of altruism are integral to the accumulation process of capitalism, functioning as gendered disciplinary devices. Similarly, Panitch (2016) highlights how the construction of egg providers as "altruistic donors" plays a highly gendered and constitutive role in egg donation markets. Less attention, however, has been paid to the role of altruism in the design and operation of markets and in the commodification regimes of ova procurement, where a delicate balance between altruism and compensation exists (Degli Esposti and Pavone 2019; Lafuente-Funes 2020; Molas and Whittaker 2022). In this article, we question whether altruism facilitates the extension of capitalist logic into the reproductive domain, serving both as a powerful mobilizing incentive and an effective valuation mechanism in reproductive markets.

The comparison between Spain and Ukraine is illuminating. Both countries frame egg provision as a donation to avoid overt commercialization, but they differ in execution. In Spain, compensation is capped and unrelated to

the number of eggs or donor characteristics, while in Ukraine, it fluctuates with market prices and can vary based on these factors. Although financial motivation exists in both contexts, it draws criticism of exploitation in lower-income Ukraine, whereas Spain's higher-income context shields it from similar accusations. As a result, the altruistic narrative enhances the value of "Spanish" eggs, while "Ukrainian" eggs' value is diminished due to donors' financial motives. This narrative, operating within core–periphery dynamics, may also be used by core countries to undermine peripheral industries by labeling them as commercializing the practice. Ultimately, altruism functions as a market device that controls costs by preventing compensation from rising to match market prices, while simultaneously enhancing the perceived value of eggs by appealing to ethical donation standards.

In the rest of the paper, we compare how the complex interplay of regulation, market mechanisms, and emerging technologies within the core–periphery dynamics of Spain and Ukraine co-produces distinct economic regimes of egg provision. Specifically, we examine whether a liberal yet robust regulatory framework, which establishes fixed compensation and ethical guidelines, offers a competitive advantage over a market-dominated system, where supply, demand, and fluctuating compensation determine who can participate and how prices are set, within the limits of state-enforced health and age criteria; and whether altruism, rather than opposing commercialization, serves as a central valuation mechanism in the commercial dynamics of egg donation in Ukraine and Spain.

Methods

This article draws on independent qualitative data gathered through fieldwork in Spain and Ukraine. All names of individuals and organizations have been changed to protect confidentiality. The Ukraine fieldwork, conducted for 18 months between 2015 and 2018, included 47 semistructured interviews with medical professionals and agents in eight private fertility clinics in Kyiv, L'viv, Kharkiv, and Odesa, and 15 months of participant observation at a Ukrainian ova bank "Cryova," which retrieves, stores and exports donor eggs to meet global demand.[2] These data collected prior to Russia's full-scale invasion of Ukraine primarily reflect the preinvasion context. However, a small number of follow-up interviews with medical professionals conducted in 2022 and 2024 provide additional insight into the current situation. Permission to conduct participant observation and interviews was secured by directly contacting the clinics/agencies, and participants. The sample included clinics and agency directors (often medical

Table 1. Sample of Professionals Interviewed in Ukraine.

Profession	Interviewees
Embryologists/Biologists	3
Gynaecologists/Doctors	14
Coordinators/Psychologists/Marketing/ Accountants/Couriers/Recruiting agents	18
Directors (reproductologists)	12
Total	47

Table 2. Samples of Professionals Interviewed in Spain.

Profession	Interviewees
Embryologists/Biologists	5
Gynecologists/Doctors	12
Psychologists/Marketing/Coordinators	3
Total	20

professionals themselves), embryologists, gynecologists or ART specialists, medical coordinators (often nurses) and international coordinators, psychologists, accountants, marketing and PR specialists, couriers, and donor/surrogacy recruitment agents (Table 1). The project received IRB approval from Indiana University.

The Spanish data proceed from two years of fieldwork between 2013 and 2015, through semi-structured interviews with 20 professionals (8 men and 12 women) across 10 different centers (Table 2), mostly private clinics located in the top five regions (Table 3). One public IVF hospital offering egg donation was also included in the sample. This fieldwork sought to capture a broad range of views on the practices adopted in clinics located in tourist areas, such as the Mediterranean coast, as well as in less touristy regions. The sample included gynecologists, embryologists, psychologists, marketing directors, and fertility program coordinators. The fieldwork was conducted by the PI and a PhD student, who conducted 20 face-to-face, semi-structured interviews, lasting between 45 and 90 min. The project was formally approved in 2012 by the ethics committee of the Ministerio de Economía y Competitividad, Secretaría de Innovación.

In both fieldwork studies, informed consent was obtained from all participants. Semi-structured interviews with open-ended questions were audio recorded when permitted by the interviewee. Although the questionnaires

Table 3. The Regional Distribution of the Assisted Reproductive Technology (ART) Clinics in Spain.

	Autonomic region	IVF (percent)	Private (percent)	Public (percent)	Total
1.	Andalucía	61	48	52	141
2.	Cataluña	30	48	5	75
3.	Comunidad de Madrid	28	35	9	62
4.	Comunitat Valencian	18	23	9	46
5.	País Vasco	11	13	4	24
6.	Castilla—La Mancha	6	11	6	24
7.	Galicia	9	9	4	19
8.	Castilla y León	6	9	4	18
9.	Región de Murcia	8	11	1	17
10.	Illes Balears	6	6	4	15
11.	Canarias	6	6	2	12
12.	Aragón	5	5	2	10
13.	Comunidad de Navarra	3	5	1	8
14.	Extremadura	2	1	3	6
15.	Principado de Asturias	4	3	1	5
16.	Cantabria	2	2	1	5
17.	La Rioja	3	3	1	5
18.	Melilla	1	1	0	2
	Total	294	314	153	494

differed between the two case studies, both focused on the following topics: (a) Socio-economic background and motivation of donors; (b) donor recruitment; (c) donor–recipient matching; (d) recipient preferences for donor traits (Ukraine only); (e) medical examination of donors, stimulation protocols, and egg retrieval; (f) medical and health risks; (g) the role of regulation and the state; (h) altruistic donation vs. commercialization; (i) the formation of egg banks; (j) international cooperation; (k) transportation of biomaterials (Ukraine only).

Interviews were conducted until saturation was reached in both case studies, after which they were transcribed, coded, and analyzed using thematic analysis (Marshall and Rossman 2014). The goal was to systematically develop analytic categories and concepts (Silverman 2015). Initial analyses of interview transcripts were performed independently by the researchers. In a subsequent phase, differences between coding systems were discussed, and a common set of codes was developed to re-analyze the interviews until consensus was reached. Open coding was employed to identify common categories and recurrent themes, allowing the coding categories

and theoretical concepts to emerge from the data, according to grounded theory (Corbin and Strauss 1990; Glaser and Strauss 1999). Interview data were cross-referenced with information from secondary sources, including clinic websites, as well as national and regional laws and reports.

Findings

Legal Regulation and Quality Standards as a Valuation Mechanism

This section analyzes how state regulation, core–periphery dynamics, and global value chains shape oocyte markets through a comparison of the regulatory frameworks in Ukraine and Spain. Ukraine's regulatory freedom and lower costs position it as a peripheral supplier, offering more affordable services but facing unique challenges in demonstrating quality and compliance. In contrast, Spain's alignment with EU norms and state-enforced quality standards reinforces its status as a core player, fostering international trust and enhancing market value.

In Ukraine, reproductive technologies evolved from a niche scientific field in Soviet-era public universities and hospitals into a thriving private industry by the 2000s. Free from the constraints of the bureaucratically burdened state-run healthcare system, the private sector's control over the ART industry played a pivotal role in driving its development, rapid growth, and global relevance. Since 2001, more than 70 licensed private fertility clinics have been established,[3] making access to donated eggs relatively easy, and positioning egg donation as one of the most profitable treatments.

The shift to a market economy, coupled with the state's withdrawal from critical social support structures, created economic pressures that led many Ukrainian women to donate eggs as an income strategy. Marketed by local clinics as "Slavic" and "beautiful," these donors often possessed "European" traits highly sought after by international clients. With technology and infrastructure comparable to that of higher-income countries, Ukraine's significantly lower labor costs allowed clinics to price their services competitively on the global market. Petro, the director of Kyiv's clinic "Lida," explained how international partnerships capitalized on these conditions. His comments highlight how Ukraine's distinctive phenotype, economic hardships, and lack of state intervention have fueled the export of reproductive materials to higher-income countries (referred to as "civilized"), where restrictive legal environments and limited financial incentives, given the higher quality of life, make it difficult to recruit donors:

> For ten to twelve years, we have been working with Western medical professionals who didn't have access to donor material, which we, in Ukraine, always had in abundance. Our girls are very beautiful….Ukraine is Slavic, and people here have "anthropological features" desired by those seeking genetic material. Moreover, there has always been a social problem in Ukraine—the low quality of life….Many things that are connected to the advancement of reproductive technologies are allowed here and forbidden in other countries…So we have formed certain flows to "civilized" countries like the UK, Italy, Israel….where high income levels make it nearly impossible to find donors, especially since donation is mostly altruistic there. (Petro, Kyiv)

Ukraine's permissive ART regulatory framework—allowing remunerated egg donation, gestational surrogacy, and cross-border biomaterials transport—has been instrumental in generating value, positioning the country as a peripheral supplier of low-cost reproductive labor and materials to core countries within global value chains. While Ukraine does not have a stand-alone law governing ART, Decree #787 from the Ministry of Health (2013) provides clinical guidelines, with additional norms spread across various legal documents.[4] Although donation attempts are limited to eight over the course of the donor's life, the absence of a national egg donor registry makes enforcement challenging. Egg donation is considered "voluntary" (out of free will), with women receiving variable compensation typically ranging between USD700–1,200. Ukrainian clinics permit couples to select donors from online catalogs featuring personal profiles, photos, and videos. Although donor anonymity is generally required, donors can sign a non-anonymity agreement when requested by the recipient country.

Ukraine's flexible regulatory environment outside the EU framework grants clinics more operational freedom but can result in fewer quality assurance mechanisms, ethical oversight, and standardized medical practices. This has led some European IVF partners to increasingly question Ukrainian quality and ethical standards. Nikolas, the director of a clinic in Alicante, Spain, expressed these concerns:

> Ukraine, unfortunately, does not belong to the European Union, which has specific quality standards, and this leaves Ukraine behind. I think you should make a big effort in your country to convince the rest of the scientific landscape that you are working properly, in the sense of the highest European standards. Doctors probably have good technical skills, but are economically too hardline. What they miss is emotional empathy and an ethical legal environment. (Nikolas, Alicante)

These concerns are echoed by Ukrainian medical professionals facing a paradox: while they appreciate the flexibility afforded by minimal regulation, they also recognize the risk of poor practice in the absence of stronger state oversight.[5] The director of fertility clinic "Sono" described how these conditions damage Ukraine's international reputation:

> There are negative things on the market. Some clinics offer donors more money to boost volumes, but fall short in following the standards….There are no defined criteria for medical care. Because of that, we have real moral and quality-related failures in positioning Ukraine in the world….I do not want state regulation to obstruct our work. But let's set the rules of the game. Not every gynecological office should run an egg bank—it requires meeting specific criteria such as number of cycles, safety, and quality standards. This is how a normal, civilized market functions globally, but we won't have it in Ukraine anytime soon. I am for the open, free market without limitations—but a civilized one. (Alex, Lviv)

In this context, regulation acts as a valuation mechanism, influencing the value assigned to Ukraine's reproductive services in global ART markets. Ukrainian professionals aspire to a market that balances their decision-making autonomy with state regulation to uphold norms of good practice. Aware that market-driven logics can compromise care standards, they oppose unchecked commercialization and emphasize the state's role in enforcing the "rules of the game" to distinguish reputable clinics from those that prioritize profit over safety and quality or lack adequate infrastructure. As part of their collective strategy to improve Ukraine's standing in global value chains and overcome its peripheral status, ART specialists emphasize their European values and reassure clients and partners of their adherence to European standards. Alex, for example, highlights this point:

> They [European partners] worry whether we meet certain quality standards. They don't completely understand that Ukraine is a European country. In their [European] imagination, we do it in the cave with dirty hands. But we are extremely European! We look much better than clinics of the old Europe, Austrian or Swiss. (Alex, Lviv)

Eggs play a central role in a complex value creation process, where not only economic and social values are generated, but national identity is also constructed and reinforced through association with European culture and norms. For Ukrainian professionals, Europe serves as an idealized

model of "normal" and "civilized" markets, characterized by state-enforced quality and safety standards. As perceived industry standards—rather than merely transmissible traits—determine the value of donor eggs in transnational markets, further value generation in Ukraine is contingent on alignment with European ART frameworks, which many believe requires the introduction of state regulation and controls.

Moreover, compliance with stringent EU quality and safety standards is essential for market access, but poses significant challenges for peripheral players due to variations in regulatory oversight and quality control, effectively serving as a gatekeeping mechanism. Ukrainian fertility clinics, such as the egg bank "Cryova," which supplies vitrified donor eggs to foreign clinics, must navigate EU restrictions to import donated tissues and cells into Europe. Consequently, "Cryova" first transports eggs to a clinic within Europe authorized to assign a SEC, enabling their distribution across Europe and beyond as "European" eggs.

Despite complex regulatory burdens, disrupted transportation routes, and security risks during wartime, Ukrainian fertility clinics have sustained their global market presence by further transitioning to a model that relies on egg vitrification and transportation, setting up overseas representation and facilities—the only viable way to ensure the industry's survival and profitability, according to professionals. During the early months of the Russian invasion in spring 2022, when traffic on roads leading out of Ukraine came to a standstill, egg bank director Solomiia made five trips to Bratislava, transporting six large tanks of liquid nitrogen containing approximately 1,000 frozen reproductive material samples.[6] Today, some of the bank's staff remain in Ukraine, handling initial consultations with egg donors, overseeing stimulation protocols, and vitrifying eggs, while others are based in Europe and beyond, managing new egg retrieval sites in Slovakia, Albania, and Georgia, and coordinating the sales and global shipping of vitrified ova. This model links cost-efficient retrieval locations to high-demand markets in Western Europe and North America, while navigating complex regulatory import restrictions.

Spain's adherence to European regulation and structured yet liberal ART market positions it as a credible core participant in global value chains, with state-enforced quality standards functioning as a valuation mechanism that generates greater value through alignment with EU policies. Spain's ART sector, initially developed in the private sector, has benefited from state-enforced quality standards that have earned international trust. Spain's law *Ley 35/1988 sobre Técnicas de Reproducción Asistida*, updated in 2006, regulates egg donation with key restrictions: donor anonymity, capped altruistic compensation at EUR1,100 (USD1,154), and clinic-determined donor–

recipient matching based on phenotypic resemblance (Spain 1988; 2006). The National Assisted Reproduction Committee (CNRHA) oversees compliance with these regulations.[7] The CNRHA includes representatives from various societal sectors, but is strongly influenced by professional associations like the Spanish Society for Fertility (SEF). While no limits are set on the number of times women can "donate" eggs, only six children can be born from a single egg donor. A National Registry of Gamete Donors was meant to reach full operational status in 2023 (SIRHA, https://sirha.mscbs.es/sirha/login.do). Maria, a gynecologist in Madrid, praised the framework for supporting their work: "Let's see, the legislation, I think, is very well suited to what we are doing." A clinic director also commended the 2006 Spanish ART law for its balanced approach:

> It is kind of smart, brilliant. It is oriented toward couples' real needs in a way that allows us to develop and implement innovations. On the other hand, it restricts behaviors that are dangerous from an ethical point of view, the commercialization of childbearing itself. (Nikolas, Alicante)

Spanish professionals, like their Ukrainian counterparts, recognize that the reliability of the regulatory framework and the responsible conduct of medical staff are essential for attracting customers. A gynecologist in Andalusia emphasized the importance of quality and trust in the industry:

> We are going to brand positioning, eh, that we were the first to do an egg donation. It is a matter of trust and that we have the strictest donor selection procedure in the market….We care about our quality policy. It's not about something else, it really is a question of quality. (Antonio, Sevilla)

The comparison between Ukraine and Spain illustrates how core–periphery dynamics shaped by EU regulation, influence each country's regulatory approach, market strategies, and capacity to generate value within global reproductive value chains. In both cases, regulation functions as a valuation mechanism. Ukraine's market freedoms and competitive pricing underscore its peripheral position, yet professionals increasingly acknowledge the need to align with European quality standards to play a more central role in global value chains. While minimal state intervention initially fueled the growth of Ukraine's ART industry, there is now a growing recognition that stronger regulation is necessary to safeguard its reputation and weed out irresponsible players. Conversely, Spain's EU-aligned, regulated industry generates greater value through established credibility, built on state-enforced

quality and ethical standards. Both industries seek selective state involvement to balance market freedom with quality assurance, with the state playing a crucial role in enhancing industry credibility and facilitating value generation.

Altruism as a Valuation Mechanism

In both Ukraine and Spain, donors regard compensation as crucial, even when altruistic reasons may also be present. Ukrainian medical professionals acknowledge the material pressures behind donation and often prefer donors who are transparent about their financial motivations, believing that this drives them to perform more reliably. A fertility specialist at a Kharkiv clinic viewed economic insecurity as a key motivator, giving women a practical incentive to engage in the work:

> Of course, it is their work. They receive financial compensation for it. I have never seen an altruistic donor or surrogate mother, none. The woman needs to have a motive. If everything is great in her life—she has a husband, house, work—she doesn't need this work. (Taras, Kharkiv)

The director of egg bank "Cryova" confirms that financial compensation is the primary recruitment tool, shaped by market expectations:

> Donor recruitment is a matter of having a market wage. We probably are the only clinic that still survives with such small payment to donors, but on the market, they are paid more and they start to be capricious (вередливі). (Solomiia, Lviv)

Nevertheless, Ukrainian clinics employ altruistic narratives to enhance the market value of eggs, because portraying them as altruistically donated improves the clinic's international image in markets where commercial transactions are viewed as exploitative (Vlasenko 2021). This valuation mechanism helps Ukrainian clinics comply with foreign rules mandating altruism and appeals to Western clients, who are more likely to purchase eggs if they believe donors were motivated by altruism or "free will" rather than financial necessity (Kroløkke 2014*b*; Gunnarsson Payne 2015). A representative of a Swedish partner of "Cryova" emphasized the importance of presenting donors as making a "free choice:"

> We are very interested, but we need to sort out the question about compensation to the women. In Sweden egg donors are compensated for the medication

> and for the time they are away from work. The legislation is to prevent women from being used or put in a position where they get so much money for selling their body parts that they cannot resist. It has to be a free choice. It is therefore important for our further cooperation that we know how the women are compensated. (Robert, Lviv)

This reflects how altruism is selectively interpreted across economic contexts, reflecting core–periphery dynamics. Donors from core and peripheral countries are viewed differently despite receiving similar financial incentives: Spanish donors, though economically motivated, are viewed as "freely choosing," while Ukrainian donors receiving comparable compensation are often portrayed as "victims of exploitation," "coerced," or driven by desperation. This framing also acts as a valuation and gatekeeping mechanism, it upholds the ethical perception of core countries while devaluing peripheral industries by questioning their ethics and standards, thereby preventing them from competing in higher-revenue Western markets.[8] To align with a core rather than a peripheral context, Ukrainian egg banks must ensure donors are not perceived as primarily driven by compensation.

Compliance with altruistic donation is also a crucial standardization mechanism for exporting eggs to countries that require evidence of altruistic motivation. Ukrainian egg banks must demonstrate this proof of altruism to ship oocytes to certain European countries, as well as Australia and Canada. For instance, after providing eggs for 244 egg donation cycles with UK partners since 2015, cooperation was frozen in 2018 when the egg bank "Cryova" exceeded British compensation limits for donors from overseas. To resume collaboration, the bank had to prove that donors were reimbursed in line with the Human Fertilisation and Embryology Authority Code of Practice (HFEA 2019), ensuring compensation stayed below GBP250 per cycle, with all receipts provided. As an accountant from "Cryova" explained:

> Compensation to the donors did not match their regulations. I was trying to understand what kind of documents they wanted us to prepare for them. Their donors are altruists, or so they say, and all the documentation has to be formed around that. Even if they order eggs, all the documents will go through HFEA and be under their vigilant control—who those donors are, what their motivation is, and whether they received less than 250 pounds. (Diana, Lviv).

Beyond export legal requirements, clinics must manage the commercial aspects of egg donation, which increases pressure to raise compensation.

Local donors often gravitate toward clinics offering higher payments, prompting medical professionals to advocate for compensation caps at the state level to prevent continuously rising rates. The discourse of altruism is employed not only to maintain commercial ties with Western countries, but to control national market prices. However, clinics admit that controlling compensation remains a challenge. As the bank director explains:

> When we had a monopoly on the market, compensation was lower. Now, with the growing commercialization of the process, donor compensation increases almost every month. This is one of the major cost factors. And clinics manipulate compensation, it's true. There's no point in banning it, but it does need regulation. (Solomiia, Lviv)

Similarly, in Spain, while altruistic motivations may be present, economic compensation is crucial to maintaining a steady supply of eggs. The dominant narrative among doctors in private clinics is that donors have mixed motivations—women-to-women solidarity combined with the importance of compensation. A gynecologist at a private clinic explained:

> There may be a motivation…a more or less attractive economic compensation, which, if we look at how the issue of supplying eggs is [handled] in other countries, we are talking about nothing here, eh? Here, the donation is a donation because the cost of the eggs is not what it should be; it is a compensation established by law for the inconvenience. But for some families, this may be what they need to feed their children. This is a fact. (Pilar, Barcelona).

The altruistic narrative makes egg donation more appealing to donors while discouraging an overtly commercial approach, preventing them from questioning the value of their contribution or demanding a fair share of the profits. By framing compensation as merely covering the inconvenience of the procedure, the actual market cost of the eggs is obscured. Private clinics often reject donors who are too explicit about their financial motivations. As a gynecologist at a private clinic in Malaga, noted:

> Even if they don't say it openly, it's clear that many come because the economic aspect will help them. But I'll tell you, if we know someone comes only for the money, that donor will be rejected. It doesn't mean they don't want their economic compensation—they do. But if someone says…"I am here for 900 euros," that one will be rejected. (Cristina, Malaga)

In public hospitals, where egg donation cycles are low, the importance of compensation is more openly acknowledged, as demonstrated by another gynecologist's concerns about the lack of financial incentive negatively affecting donor supply:

> In private centers…in the words of the law, it is "compensatory"…The law does not allow payment but establishes compensation. That makes supply offset demand. On the other hand, in our hospital, we do not have financial compensation of any kind, and that means that there is a huge imbalance between candidates to receive eggs and those who actually access egg donation treatment. (Alberto, Bilbao)

Some public hospitals have recently secured funds to compensate donors, making treatments more accessible, while others are now outsourcing egg procurement to private egg banks, a practice also adopted by small IVF clinics. Ukrainian doctors' concerns about the higher market value of altruistically retrieved eggs are echoed by Spanish doctors, who use the altruistic narrative to legitimize their operations and emphasize the ethical nature of their eggs. Kroløkke's (2014*a*, 2014*b*) observations of Spanish clinics marketing altruistic donations to Danish clients align with some of our interviewees' experiences. In Spain, presenting egg donation as fundamentally altruistic is central to a self-legitimizing marketing strategy. Two gynecologists from Barcelona private clinics emphasized:

> We must also consider the mentality here—donation is very well established. They [the Spanish people] donate a lot—organs, blood—we rank among the top in Europe…Here, the girls talk about donations, and most come to us by word of mouth, because a friend or sister has done it. While in Italy, they don't talk about egg donation, nor do they even think about it. (Laura, Barcelona)

> Despite all the misfortunes, Spaniards are ultimately generous and altruistic. (Pilar, Barcelona)

The altruistic narrative is crucial for maintaining the perceived ethical status of eggs, particularly in marketing campaigns targeting Western clients. Clinics use altruism as a valuation mechanism to enhance the social and economic value of eggs, boosting their market appeal and access. This mandate of altruism acts as a façade, masking the economic constraints that render commercial egg donation a form of informal labor and diminishing the agency of women who choose this work. Discourses

in core countries that frame altruism as a safeguard against the exploitation of less wealthy women serve as a competitive market strategy—raising the value of eggs from the core while devaluing those from the periphery, where economic need is often more pronounced or openly acknowledged. The altruistic narrative keeps compensation low, discouraging egg providers from questioning their working conditions. Far from countering exploitation, altruism operates as a gendered disciplinary device, further fueling biomarkets by extending capital accumulation to women's bodies while suppressing wages.

Conclusions

Recent STS debates have extensively examined valuation mechanisms in shaping scientific and technological practices (Callon 1998; Helgesson and Muniesa 2013; Kjellberg et al. 2013; Dussauge et al. 2015). These studies show how social, ethical, and political values are embedded in technology development, regulation, and market design, informing the co-production of science, technology, and society (Jasanoff 2005). A growing body of STS scholarship has focused on ARTs and their associated bioeconomies (Cooper and Waldby 2014; Waldby 2019), offering critical insights into how bodies, tissues and reproductive labor are mobilized within market economies (Inhorn 2015; Cattapan 2016; Deomampo 2019). Postcolonial and feminist scholars have further demonstrated how global economic inequalities, patriarchal and colonial dynamics structure reproductive markets, challenging conventional views on altruism and commercialization (Pande 2014; Schurr 2018; Vertommen and Barbagallo 2021; Vlasenko 2021).

By highlighting the role of regional quality standards and regulatory credibility in the valuation of ova within a stratified transnational fertility industry, our analysis expands current STS discussions on how national and international regulations, core–periphery dynamics, and global value chains shape ART markets (Vertommen, Pavone and Nahman 2022). Moreover, by revealing the importance of altruistic narratives in mobilizing biological resources and shaping value-setting mechanisms, our work advances research on the multifaceted role of altruism in the co-production of medical technologies and market economies (Degli Esposti and Pavone 2019).

This article advances STS debates by examining how regulatory frameworks and market design shape value creation and appropriation in global reproductive bioeconomies. Drawing on qualitative comparative analysis

of data from Ukraine and Spain, we argue that state-enforced quality standards and altruistic narratives act as key valuation mechanisms driving capitalist accumulation in ART markets. These mechanisms enable reproductive markets to function effectively by relying on state regulation to implement quality standards and manage donors' motivations, suggesting that the solution to market dysfunction lies not in greater market freedom but in a liberal yet effective regulatory framework. By applying a feminist political economy lens, we demonstrate how valuation mechanisms not only enhance the market value of eggs but also perpetuate gendered and racialized divisions of labor and extractive postcolonial hierarchies within the core–periphery dynamics of transnational reproductive markets.

The comparison of Spain and Ukraine highlights three main empirical conclusions. First, Spain's regulated, quasi-social market gives private businesses a competitive edge over Ukraine's commercial approach and laxer rules. Eggs donated in Spain, an EU member state with clear quality standards, are more desirable and hold higher market value. In contrast, Ukraine's lack of state-enforced standards and position outside the EU, along with import restrictions requiring proof of quality and donor altruism, diminishes the value of its eggs. Here, EU quality standards function both as a valuation mechanism and a gatekeeping tool, determining access to the market.

Second, altruism and commercialization are not at odds; altruism functions not only as a motivational factor but as a key valuation mechanism that drives commercialization, challenging the notion that it solely shields biomaterial exchanges from market forces or obscures their commercial nature (Hoeyer 2013). Clinics strategically frame donations as altruistic to enhance the market value of eggs, as this narrative is widely supported and highly desirable in the EU and beyond. By emphasizing altruism, the industry can encourage participation while downplaying the financial aspects, which in turn justifies relatively low compensation for donors and prevents them from viewing their eggs as valuable commodities in a market-driven system. Especially in Spain, this combination of economic compensation and altruism ensures a stable egg supply and raises the value of eggs by reducing the perceived costs of harvesting and increasing their appeal to recipients. In addition, medical professionals use ethical claims of altruism to counter critiques of exploitation and to improve their country's position within global reproductive value chains.

Third, pre-existing imaginaries of Spain as a European core and Ukraine as peripheral underpin the uneven global flows of reproductive labor, biomaterials, and value. Europeanness is associated with state-regulated markets, high-quality standards, and altruistic donation, while the absence

of regulation and uncapped compensation is perceived as unreliable and exploitative, lowering the value of eggs. In response, the Ukrainian ART industry seeks to align with European values and standards, lobbying for regulation that ensures quality and altruism to enhance the value of Ukrainian eggs and reposition the country closer to the core.

Building on these results, we offer a conceptual contribution to STS studies on reproductive bioeconomies from a feminist political economy perspective. We demonstrate that biomedical valuation mechanisms are deeply shaped by normative and policy dynamics grounded in moral, social, and economic considerations. These processes emerge through the co-construction of regulatory frameworks, egg freezing technologies, and market logics, sustained by highly gendered narratives of donation. Such narratives obscure the strategic role of altruism as a market device and conceal the postcolonial core-periphery relations embedded in reproductive value chains, where Spain and Ukraine serve as key nodal points. In this context, regulation and market design do more than facilitate or constrain medical and financial transactions within reproductive bioeconomies: they actively construct assisted reproduction as a legitimate and socially valuable practice, define egg providers as altruistic donors, and position the market economy as the appropriate framework for governing these exchanges.

Acknowledgments

First and foremost, we want to thank the most important contributors to this project—our research participants: Egg donors and fertility specialists in Ukraine and Spain, who shared with us their aspirations and concerns. Polina Vlasenko would like to thank Estonian Research Council for supporting this research under Grant MOBJD1077, The School of Humanities and her supervisor Eeva Kesküla at Tallinn University, the Department of Anthropology and her advisor Sarah D. Phillips at Indiana University. Vincenzo Pavone would like to thank Sara Lafuente for her collaboration in the data gathering and analysis during the BIOARREME research project, from 2012 to 2015.

Declaration of Conflicting Interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The authors disclosed receipt of the following financial support for the research, authorship, and/or publication of this article: This work was supported by the Eesti Teadusagentuur (grant number MOBJD1077).

ORCID iDs

Polina Vlasenko https://orcid.org/0000-0001-7901-746X
Vincenzo Pavone https://orcid.org/0000-0002-2326-0118

Notes

1. Vitrification techniques create new commercial possibilities by allowing donor eggs to be used independently of the time and place of their retrieval (Waldby 2019; Hudson et al. 2020; Lafuente-Funes et al. 2022).
2. The clinics included in the study reported the following number of cycles in 2017: 3,752 (Maty), 2,000 (Lida), 1,987 (Embryo), 1,878 (Hope), 1,667 (RMI), 806 (Sana), 785 (Cryova and Sono), 547 (Fertility). Pseudonyms are used for all clinics.
3. Based on statistics reported by 46 private clinics, there were 34,646 cycles and 11,648 children born from ART in Ukraine in 2022, including 2,632 cycles involving egg donation (Center for Health Statistics of the Ministry of Health of Ukraine 2022). These figures are likely underreported and may primarily reflect the internal market, as no official statistics are available for eggs exported abroad or surrogacy. The egg bank where Vlasenko conducted observations performed around 1,000 egg donation cycles annually (averaging five egg retrievals per day). Since 2004, state-provided ART services have been available in four public fertility centers, though access to state-funded cycles has remained limited (Ministry of Health of Ukraine 2004). For 2024, the Medical Guarantees Program (Ukraine 2018) includes a new service package—"Infertility treatment using assisted reproductive technologies (in vitro fertilization)"—with an estimated 30,400 cycles per year. In 2024, approximately 1,000 Ukrainian couples received treatment in 18 medical institutions across the country, including 13 private clinics, 3 municipal hospitals, and 2 state hospitals, through contracts with the National Health Service of Ukraine (NHSU) (https://moz.gov.ua/uk/977-ukrayinok-skoristalisya-bezoplatnoyu-derzhavnoyu-poslugoyu-likuvannya-bezpliddya)
4. To qualify as an egg donor, a woman must be aged 18-36, have given birth to a healthy child, and be in "satisfactory" health, with no medical contraindications, hereditary diseases, substance abuse issues, or "negative phenotypic traits." Recipients are eligible based on medical indications alone, regardless of relationship status, orientation, or age (Ministry of Health of Ukraine 2013).
5. Solomiia, the director of the Lviv egg bank "Cryova," emphasizes: "The fact that our field is largely self-organized is both an advantage and a disadvantage: it offers the freedom to make decisions regarding protocols, but also allows some clinics to prioritize profit and volume over safety and quality. This makes external regulation necessary."

6. To address the legal barriers to transferring genetic material across borders, in early March 2022, the European Society of Human Reproduction and Embryology granted paperwork to ensure frozen gametes could be safely transported across borders.
7. https://cnrha.sanidad.gob.es
8. For example, in a recent publication, the director of a US egg bank criticizes the Ukrainian industry for exporting vitrified donor eggs to the US, framing the practice as "human trafficking" due to the involvement of financially motivated donors who undergo multiple cycles in the context of Ukraine's impoverished economy and weak regulatory oversight. Yet, although egg donation is commercially driven in both Ukraine and the US, similar practices are labeled "unethical" only when they occur in so-called "developing" countries like Ukraine—revealing a hypocritical double standard often used to delegitimize lower-cost competition.

References

Alkorta, Itziar. 2021. "Spanish Legal Reproscape: The Making of a Bio-Industry." *Law, Technology and Humans* 3 (1): 123–32. https://doi.org/10.5204/lthj.1489.

Almeling, Rene. 2006. "'Why Do You Want to Be a Donor?': Gender and the Production of Altruism in Egg and Sperm Donation." *New Genetics and Society* 25 (2): 143–57. https://doi.org/10.1080/14636770600855184.'".

Bair, Jennifer. 2005. "Global Capitalism and Commodity Chains: Looking Back, Going Forward." *Competition & Change* 9 (2): 153–80. https://doi.org/10.1179/102452905X45382.

Beaulieu, Anne and Sabina Leonelli. 2021. *Data and Society: A Critical Introduction*. London: Sage Publications Ltd.

Beltrame, Lorenzo and Christine Hauskeller. 2018. "Assets, Commodities, and Biosocialities: Multiple Biovalues in Hybrid Biobanking Practices." *Tecnoscienza: Italian Journal of Science & Technology Studies* 9 (2): 5–31. https://doi.org/10.6092/issn.2038-3460/17406.

Benjamin, Ruha. 2019. *Race After Technology: Abolitionist Tools for the New Jim Code*. Medford: Polity Press.

Bergmann, Sven. 2011. "Reproductive Agency and Projects: Germans Searching for Egg Donation in Spain and the Czech Republic." *Reproductive Biomedicine Online* 23: 600–8. https://doi.org/10.1016/j.rbmo.2011.06.014.

Birch, Kean and David Tyfield. 2013. "Theorizing the Bioeconomy: Biovalue, Biocapital, Bioeconomics or… What?" *Science, Technology, & Human Values* 38 (3): 299–327. https://doi.org/10.1177/0162243912442398.

Block, Fred. 2008. "Swimming Against the Current: The Rise of a Hidden Developmental State in the United States." *Politics & Society* 36 (2): 169–206. https://doi.org/10.1177/0032329208318731.

Braverman, Andrea M. and Stephen L. Corson. 2002. "A Comparison of Oocyte Donors' and Gestational Carriers/Surrogates' Attitudes Towards Third Party Reproduction." *Journal of Assisted Reproduction and Genetics* 19: 462–9. https://doi.org/10.1023/A:1020306402235.

Briggs, Laura. 2002. *Reproducing Empire: Race, Sex, Science, and US Imperialism in Puerto Rico*. Berkeley, Los Angeles, London: University of California Press.

Byrd, Louise. M., Mary Sidebotham, and Brian Lieberman. 2002. "Egg Donation—The Donor's View: An Aid to Future Recruitment." *Human Fertility* 5 (4): 175–82. https://doi.org/10.1080/1464727022000199082.

Callon, Michel. ed. 1998. *The Laws of the Markets*. Oxford: Blackwell Publishing Ltd.

Callon, Michel. 2021. *Markets in the Making: Rethinking Competition, Goods, and Innovation*. Princeton: Princeton University Press.

Callon, Michel, Yuval Millo, and Fabian Muniesa. eds. 2007. *Market Devices*. Oxford: Blackwell Publishing/The Sociological Review.

Cattapan, Alana. 2016. "Precarious Labour: On Egg Donation as Work." *Studies in Political Economy* 97 (2): 234–52. https://doi.org/10.1080/07078552.2016.1249125.

Centre For Health Statistics of The Ministry of Health of Ukraine. 2022. *Zvit pro Dopomizhni Reproduktyvni Texnolohiyi za 2022 rik (Report on Assisted Reproductive Technologies in 2022)*. http://medstat.gov.ua/ukr/statdanMMXIX.html.

Cooper, Melinda and Catherine Waldby. 2014. *Clinical Labor: Tissue Donors and Research Subjects in the Global Bioeconomy*. Durham and London: Duke University Press.

Corbin, Juliet M. and Anselm Strauss. 1990. "Grounded Theory Research: Procedures, Canons, and Evaluative Criteria." *Qualitative Sociology* 13 (1): 3–21. https://doi.org/10.1007/BF00988593.

Davies, William. 2018. "The Neoliberal State: Power Against 'Politics'." In *The SAGE Handbook of Neoliberalism*, edited by Damien Cahill, David Primrose, Martijn Konings, and Melinda Cooper, 273–283. London: Sage Publications.

Degli Esposti, Sara and Vincenzo Pavone. 2019. "Oocyte Provision as a (Quasi) Social Market: Insights from Spain." *Social Science & Medicine* 234: 1–10. https://doi.org/10.1016/j.socscimed.2019.112381.

Deomampo, Daisy. 2016. *Transnational Reproduction: Race, Kinship, and Commercial Surrogacy in India*. New York: NYU Press.

Deomampo, Daisy. 2019. "Racialized Commodities: Race and Value in Human Egg Donation." *Medical Anthropology* 38 (7): 620–33. https://doi.org/10.1080/01459740.2019.1570188.

Dunn, Elizabeth C. 2005. "Standards and Person-Making in East Central Europe." In *Global Assemblages: Technology, Politics and Ethics as Anthropological Problems*, edited by Aihwa Ong and Stephen J. Collier, 173–93. Malden, MA: Blackwell Publishing.

Dussauge, Isabelle, Claes-Fredrik Helgesson, Francis Lee, and Steve Woolgar. 2015. "On the Omnipresence, Diversity, and Elusiveness of Values in the Life Sciences and Medicine." In *Value Practices in the Life Sciences and Medicine*, edited by Isabelle Dussauge, Claes-Fredrik Helgesson, and Francis Lee, 1–28. Oxford: Oxford University Press.

European Commission. 2015. Commission Directive (EU) 2015/565 of 8 April 2015 Amending Directive 2006/86/EC as Regards Certain Technical Requirements for the Coding of Human Tissues and Cells. *Official Journal of the European Union*, L 93/43, April 9, 2015. https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32015L0565&qid=1741045706145.

European Parliament and the Council. 2004. Directive 2004/23/EC of the European Parliament and of the Council of 31 March 2004 on Setting Standards of Quality and Safety for the Donation, Procurement, Testing, Processing, Preservation, Storage, and Distribution of Human Tissues and Cells. *Official Journal of the European Union*, L 102/48, April 7, 2004. https://eur-lex.europa.eu/eli/dir/2004/23/oj.

Fielding, Dorothy, Sarah Handley, Lindsay Duqueno, Sue Weaver, and Steve Lui. 1998. "Motivation, Attitudes and Experience of Donation: A Follow-up of Women Donating Eggs in Assisted Conception Treatment." *Journal of Community & Applied Social Psychology* 8 (4): 273–87. https://doi.org/<273::AID-CASP496>3.0.CO;2-Q.

Flanagan, Mary and Helen Nissenbaum. 2014. *Values at Play in Digital Games*. Cambridge and London: The MIT Press.

Fligstein, Neil. 2005. "States, Markets and Economic Growth." In *In The Economic Sociology of Capitalism*, edited by Victor Nee and Richard Swedberg, 119–43. Princeton: Princeton University Press.

Fligstein, Neil. 2018. *The Architecture of Markets: An Economic Sociology of Twenty-First-Century Capitalist Societies*. Princeton: Princeton University Press.

Franklin, Sarah and Emily Jackson. 2024. *The 14 Day Rule and Human Embryo Research: A Sociology of Biological Translation*. London: Routledge.

Gereffi, Gary, John Humphrey, Raphael Kaplinsky, and Timothy J. Sturgeon. 2001. "Introduction: Globalisation, Value Chains and Development." *IDS Bulletin* 32 (3): 1–8. https://doi.org/10.1111/j.1759-5436.2001.mp32003001.x.

Gereffi, Gary and Miguel Korzeniewicz. eds. 1994. *Commodity Chains and Global Capitalism*. Westport, CT: Praeger.

Gibson, Hannah G. 2021. ""Doing It Our Way:' Participation and Kinship in Traditional Surrogacy Narratives in Aotearoa New Zealand."

Medicine Anthropology Theory 8 (3): 1–26. https://doi.org/10.17157/mat.8.3.5093.

Gille, Zsuzsa. 2016. *Paprika, Foie Gras, and Red Mud: The Politics of Materiality in the European Union*. Bloomington and Indianapolis: Indiana University Press.

Glaser, Barney and Anselm Strauss. 1999. *The Discovery of Grounded Theory: Strategies for Qualitative Research*. New York: Routledge.

Graham, Susanna, Vasanti Jadva, Tabitha Freeman, Kamil Ahuja, and Susan Golombok. 2016. "Being an Identity-Release Donor: A Qualitative Study Exploring the Motivations, Experiences and Future Expectations of Current UK Egg Donors." *Human Fertility* 19 (4): 230–41. https://doi.org/10.1080/14647273.2016.1221148.

Gunnarsson Payne, Jenny. 2015. "Reproduction in Transition: Cross-Border Egg Donation, Biodesirability and New Reproductive Subjectivities on the European Fertility Market." *Gender, Place & Culture* 22: 107–22. https://doi.org/ttps://doi.org/10.1080/0966369X.2013.832656.

Helgesson, Claes-Fredrik and Fabian Muniesa. 2013. "For What It's Worth: An Introduction to Valuation Studies." *Valuation Studies* 1 (1): 1–10. https://doi.org/10.3384/vs.2001-5992.13111.

Hess, David J. 1997. *Science Studies: An Advanced Introduction*. New York, London: New York University Press.

Hoeyer, Klaus. 2013. *Exchanging Human Bodily Material: Rethinking Bodies and Markets*. New York, London: Springer Science & Business Media.

Homanen, Rikka. 2018. "Reproducing Whiteness and Enacting Kin in the Nordic Context of Transnational Egg Donation: Matching Donors with Cross-Border Traveler Recipients in Finland." *Social Science & Medicine* 203: 28–34. https://doi.org/10.1016/j.socscimed.2018.03.012.

Hopkins, Terence K. and Immanuel Wallerstein. 1977. "Patterns of Development of the Modern World-System." *Review (Fernand Braudel Center)* 1 (2): 111–145. https://www.jstor.org/stable/40240765.

Hopkins, Terence K. and Immanuel Wallerstein. 1994. "Commodity Chains: Construct and Research." In *In Commodity Chains and Global Capitalism*, edited by Gary Gereffi and Miguel Korzeniewicz, 17–50. Westport, CT: Praeger.

Hudson, Nicky and Lorraine Culley. 2011. "Assisted Reproductive Travel: UK Patient Trajectories." *Reproductive Biomedicine Online* 23: 573–81. https://doi.org/10.1016/j.rbmo.2011.07.004.

Hudson, Nicky, Lorraine Culley, Eric Blyth, Wendy Norton, Frances Rapport, and Allan Pacey. 2011. "Cross-Border Reproductive Care: A Review of The Literature." *Reproductive Biomedicine Online* 22 (7): 673–85. https://doi.org/10.1016/j.rbmo.2011.03.010.

Hudson, Nicky, Lorraine Culley, Cathy Herbrand, Vincenzo Pavone, Guido Pennings, Veerle Provoost, Catherine Coveney, and Sara Lafuente Funes. 2020. "Reframing Egg Donation in Europe: New Regulatory Challenges for a Shifting Landscape." *Health Policy and Technology* 9 (3): 308–13. https://doi.org/10.1016/j.hlpt.2020.04.007.

Human Fertilisation and Embryology Authority. 2019. *Code of Practice*. 9th ed. London: Human Fertilisation and Embryology Authority. https://portal.hfea.gov.uk/media/yrkn55xa/2024-10-01-hfea-code-of-practice-v9-4.pdf.

Inhorn, Marcia C. 2011. "Globalization and Gametes: Reproductive 'Tourism,' Islamic Bioethics, and Middle Eastern Modernity." *Anthropology & Medicine* 18 (1): 87–103. https://doi.org/10.1080/13648470.2010.525876.

Inhorn, Marcia C. 2015. *Cosmopolitan Conceptions: IVF Sojourns in Global Dubai*. Durham, NC: Duke University Press.

Jadva, Vasanti, Nishtha Lamba, K. Kadam, and Susan Golombok. 2015. "Indian Egg Donors' Characteristics, Motivations and Feelings Towards the Recipient and Resultant Child." *Reproductive Biomedicine & Society Online* 1 (2): 98–103. https://doi.org/10.1016/j.rbms.2016.04.003.

Jasanoff, Sheila. 2005. "Technologies of Humility: Citizen Participation in Governing Science." In *Wozu Experten? Ambivalenzen der Beziehung von Wissenschaft und Politik*, edited by Alexander Bogner and Helge Torgersen, 370–89. Wiesbaden: VS Verlag für Sozialwissenschaften.

Jasanoff, Sheila. ed. 2011. *Reframing Rights: Bioconstitutionalism in the Genetic Age*. Cambridge, MA and London: MIT Press.

Kenney, Nancy J. and Michelle L. McGowan. 2014. "Egg Donation Compensation: Ethical and Legal Challenges." *Medicolegal and Bioethics* 4 (September): 15–24. https://doi.org/10.2147/MB.S51328.

Kimbrell, Andrew. 1997. *The Human Body Shop: The Cloning, Engineering, and Marketing of Life*. Washington, DC: Regnery Publishing.

Kjellberg, Hans, Alexander Mallard, Diane-Laure Arjaliès, et al. 2013. "Valuation Studies? Our Collective Two Cents." *Valuation Studies* 1 (1): 11–30. https://doi.org/10.3384/vs.2001-5992.131111.

König, Anika. 2023. "Reproductive Entanglements in Times of War: Transnational Gestational Surrogacy in Ukraine and Beyond." *Medical Anthropology* 42 (5): 479–492. http://dx.doi.org/10.1080/01459740.2023.2201682.

Kroløkke, Charlotte H. 2014a. "West is Best: Affective Assemblages and Spanish Oöcytes." *European Journal of Women's Studies* 21 (1): 57–71. https://doi.org/10.1177/1350506813510422.

Kroløkke, Charlotte H. 2014b. "Eggs and Euros: A Feminist Perspective on Reproductive Travel from Denmark to Spain." *IJFAB: International Journal of Feminist Approaches to Bioethics* 7 (2): 144–63. https://doi.org/10.3138/ijfab.7.2.0144.

Kroløkke, Charlotte. 2018. *Global Fluids: The Cultural Politics of Reproductive Waste and Value*. New York, Oxford: Berghahn Books.

Lafuente-Funes, Sara. 2017. "Egg Donation in the Making: Gender, Selection and (In)Visibilities in the Spanish Bioeconomy of Reproduction." In *Bioeconomies*, edited by Vincenzo Pavone and Joanna Goven, 253–77. Cham, Switzerland: Palgrave Macmillan.

Lafuente-Funes, Sara. 2020. "Shall We Stop Talking About Egg Donation? Transference of Reproductive Capacity in the Spanish Bioeconomy." *BioSocieties* 15 (2): 207–25. https://doi.org/10.1057/s41292-019-00149-5.

Lafuente-Funes, Sara, Christina Weis, Nicky Hudson, and Veerle Provoost. 2022. "Egg Donation in the Age of Vitrification: A Study of Egg Providers' Perceptions and Experiences in the UK, Belgium, and Spain." *Sociology of Health & Illness* 45 (2): 259–78. https://doi.org/10.1111/1467-9566.13590.

Lynch, Kathleen. 2022. *Care and Capitalism: Why Affective Equality Matters for Social Justice*. Cambridge, UK: Polity Press.

Marshall, Catherine and Gretchen B. Rossman. 2014. *Designing Qualitative Research*. New York: Sage Publications.

Mazzucato, Mariana. 2013. *The Entrepreneurial State: Debunking Public vs. Private Sector Myths*. London: Anthem Press.

Miller, Clark A. and Paul N. Edwards. eds. 2001. *Changing the Atmosphere: Expert Knowledge and Environmental Governance*. Cambridge, MA and London: The MIT Press.

Ministry of Health of Ukraine. 2004. *Nakaz 579 Pro Zatverdzhennia Poriadku Napravlennia Zhinok dlia Provedennia Pershoho Kursu Likuvannia Bezplidnosti Metodamy Dopomizhnykh Reproduktyvnykh Tekhnolohii za Absoliutnymy Pokaznykamy za Biudzhetni Koshty* (Decree No. 579 On the Approval of the Procedure of the Referral of Women with Absolute Indications for the First Cycle of Infertility Treatment with Assisted Reproductive Technologies). Issued September 9, 2004. https://zakon.rada.gov.ua/laws/show/z0224-05#Text.

Ministry of Health of Ukraine. 2013. *Nakaz 787 Pro Zatverdzhennia Poriadku Zastosuvannia Dopomizhnykh Reproduktyvnykh Tekhnolohij v Ukraini* (Decree No. 787 On Instructions on the Use of Assisted Reproductive Technologies in Ukraine). Issued September 9, 2013. https://zakon.rada.gov.ua/laws/show/z1697-13#Text.

Mitchell, Robert and Catherine Waldby. 2010. "National Biobanks: Clinical Labor, Risk Production, and the Creation of Biovalue." *Science, Technology, & Human Values* 35 (3): 330–55. https://doi.org/10.1177/0162243909340267.

Mitra, Sayani. 2018. "Cross-Border Reproflows: Comparing the Cases of India, Germany, and Israel." In *Cross-Cultural Comparisons on Surrogacy and egg*

Donation: Interdisciplinary Perspectives from India, Germany and Israel, edited by Sayani Mitra, Silke Schicktanz, and Tulsi Patel, 83–102. Cham, Switzerland: Palgrave Macmillan.

Molas, Anna and Andrea Whittaker. 2022. "Beyond the Making of Altruism: Branding and Identity in Egg Donation Websites in Spain." *BioSocieties* 17 (2): 320–34. https://doi.org/10.1057/s41292-020-00218-0.

Müller, Martin and Carolin Schurr. 2016. "Assemblage Thinking and Actor-Network Theory: Conjunctions, Disjunctions, Cross-Fertilisations." *Transactions of the Institute of British Geographers* 41 (3): 217–29. https://doi.org/10.1111/tran.12117.

Nahman, Michal. 2013. *Extractions: An Ethnography of Reproductive Tourism*. London: Palgrave Macmillan.

Nahman, Michal. 2018. "Migrant Extractability: Centring the Voices of Egg Providers in Cross-Border Reproduction." *Reproductive Biomedicine & Society Online* 7 (November 2018): 82–90. https://doi.org/10.1016/j.rbms.2018.10.020.

Namberger, Verena. 2019. *The Reproductive Body at Work: The South African Bioeconomy of Egg Donation*. Milton Park: Routledge.

Nelkin, Dorothy and Lori Andrews. 2001. *Body Bazaar: The Market for Human Tissue in the Biotechnology Age*. New York: Crown.

Pande, Amrita. 2014. *Wombs in Labor: Transnational Commercial Surrogacy in India*. New York: Columbia University Press.

Panitch, Vida. 2016. "Commodification and Exploitation in Reproductive Markets: Introduction to the Symposium on Reproductive Markets." *Journal of Applied Philosophy* 33 (2): 117–24. https://doi.org/10.1111/japp.12146.

Parry, Bronwyn. 2008. "Entangled Exchange: Reconceptualising the Characterisation and Practice of Bodily Commodification." *Geoforum* 39: 1133–44. https://doi.org/10.1016/j.geoforum.2007.02.001.

Parry, Bronwyn. 2015. "Narratives of Neoliberalism: 'Clinical Labour' in Context." *Medical Humanities* 41: 32–7. https://doi.org/10.1136/medhum-2014-010606.

Pavone, Vincenzo and Joanna Goven. eds. 2017. *Bioeconomies*. Cham, Switzerland: Palgrave Macmillan.

Pennings, Guido, Jacques De Mouzon, Francoise Shenfield, Anna Pia Ferraretti, Tonko Mardesic, Amparo Ruiz, and Veerle Goossens. 2014. "Socio-Demographic and Fertility-Related Characteristics and Motivations of Oocyte Donors in Eleven European Countries." *Human Reproduction* 29 (5): 1076–89. https://doi.org/10.1093/humrep/deu048.

Polanyi, Karl. 1944. *The Great Transformation*. New York and Toronto: Farrar & Rinehart.

Purewal, Satvinder and Olga B.A. van den Akker. 2009. "Systematic Review of Oocyte Donation: Investigating Attitudes, Motivations and Experiences."

Human Reproduction Update 15 (5): 499–515. https://doi.org/10.1093/humupd/dmp018.

Rajan, Kaushik S. 2006. *Biocapital: The Constitution of Postgenomic Life*. Durham, NC: Duke University Press.

Rudrappa, Sharmila. 2015. *Discounted Life: The Price of Global Surrogacy in India*. New York: New York University Press.

Rudrappa, Sharmila. 2021. "The Impossibility of Gendered Justice Through Surrogacy Bans." *Current Sociology* 69 (2): 286–99. https://doi.org/10.1177/0011392120972419.

Schurr, Carolin. 2018. "The Baby Business Booms: Economic Geographies of Assisted Reproduction." *Geography Compass* 12 (8): e12395. https://doi.org/10.1111/gec3.12395.

Schurr, Carolin and Laura Perler. 2015. "'Trafficked' into a Better Future? Why Mexico Needs to Regulate its Surrogacy Industry (and Not Ban It)." *Open Democracy (17 December 2015)*. https://boris.unibe.ch/119207/1/opendemocracy.net-Trafficked%20into%20a%20better%20future%20Why%20Mexico%20needs%20to%20regulate%20its%20surrogacy%20industry%20and%20not%20ban%20it.pdf.

Shenfield, Françoise, Jacques De Mouzon, Guido Pennings, Anna Pia Ferraretti, Anders Nyboe Andersen, Guido De Wert, and Veerle Goossens. 2010. "Cross-Border Reproductive Care in Six European Countries." *Human Reproduction* 25 (6): 1361–8. https://doi.org/10.1093/humrep/deq057.

Silverman, David. 2015. *Interpreting Qualitative Data*. London: Sage Publications.

Spain. 1988. "Ley 35/1988, de 22 de noviembre, sobre Técnicas de Reproducción Asistida (Repealed)." *Boletín Oficial del Estado* 282 (November 24, 1988): 33373–8. https://www.boe.es/eli/es/l/1988/11/22/35.

Spain. 2006. "Ley 14/2006, de 26 de mayo, sobre Técnicas de Reproducción Humana Asistida." *Boletín Oficial del Estado* 126 (May 27, 2006): 19947–56. https://www.boe.es/eli/es/l/2006/05/26/14/con.

Thaldar, Donrich. 2020. "Egg Donors' Motivations, Experiences, and Opinions: A Survey of Egg Donors in South Africa." *PLoS One* 15 (1): e0226603. https://doi.org/10.1371/journal.pone.0226603.

Tober, Diane and Vincenzo Pavone. 2018. "Las Bioeconomías de la Provision de Óvulos en Estados Unidos y en España: Una Comparación de los Mercados Médicos y las Implicaciones en la Atención a las Donantes." *Revista de Antropología Social* 27 (2): 261–86. https://doi.org/10.5209/RASO.61852.

Tober, Diane, Vincenzo Pavone, Sara Lafuente-Funes, and Nancy Konvalinka. 2023. "Eggonomics: Vitrification and Bioeconomies of Egg Donation in the United States and Spain." *Medical Anthropology Quarterly* 37 (3): 248–63. https://doi.org/10.1111/maq.12767.

Ukraine. 2018. "Zakon Ukrainy pro derzhavni finansovi harantii medychnoho obsluhovuvannia naselennia (Law of Ukraine on State Financial Guarantees for Public Healthcare Services)." *Vidomosti Verkhovnoi Rady (VVR)* 5: Article 31. https://zakon.rada.gov.ua/laws/show/2168-19#Text.

Van Wichelen, Sonja. 2019. *Legitimating Life: Adoption in the Age of Globalization and Biotechnology*. New Brunswick, NJ: Rutgers University Press.

Vertommen, Sigrid and Camille Barbagallo. 2021. "The In/Visible Wombs of the Market: The Dialectics of Waged and Unwaged Reproductive Labour in the Global Surrogacy Industry." *Review of International Political Economy* 29 (6): 1945–66. https://doi.org/10.1080/09692290.2020.1866642.

Vertommen, Sigrid, Vincenzo Pavone, and Michal Nahman. 2022. "Global Fertility Chains: An Integrative Political Economy Approach to Understanding the Reproductive Bioeconomy." *Science, Technology, & Human Values* 47 (1): 112–45. https://doi.org/10.1177/0162243921996460.

Vlasenko, Polina. 2015. "Desirable Bodies/Precarious Laborers: Ukrainian Egg Donors in Context of Transnational Fertility." In *In (In)Fertile Citizens: Anthropological and Legal Challenges of Assisted Reproduction Technologies*, edited by Venetia Kantsa, Lina Papadopoulou, and Giulia Zanini, 197–216. Mytilene: INFERCIT.

Vlasenko, Polina. 2021. "Global circuits of fertility: The political economy of the Ukrainian ova market." PhD diss, Indiana University. ProQuest (28718089). https://www.proquest.com/openview/a2c5b83804a6086bc1a43a9196d1294e/1?pq-origsite=gscholar&cbl=18750&diss=y.

Vlasenko, Polina. 2023. "Uncertain Commodities: Egg Banking and Value in Ukraine." *BioSocieties* 19: 378–401. https://doi.org/10.1057/s41292-023-00307-w.

Vlasenko, Polina. 2024. "Worker-Mothers Between Legitimation and Discipline: Ambiguities in Egg Donation and Surrogacy in Ukraine." *Medical Anthropology* 43 (8): 714–33. https://doi.org/10.1080/01459740.2024.2439965.

Waldby, Catherine. 2002. "Stem Cells, Tissue Cultures, and the Production of Biovalue." *Health* 6 (3): 305–23. https://doi.org/10.1177/136345930200600304.

Waldby, Catherine. 2015. "The Oocyte Market and Social Egg Freezing: From Scarcity to Singularity." *Journal of Cultural Economy* 8 (3): 275–91. https://doi.org/10.1080/17530350.2015.1039457.

Waldby, Catherine. 2019. *The Oocyte Economy: The Changing Meaning of Human Eggs*. Durham, NC: Duke University Press.

Waldby, Catherine, Ian Kerridge, Margaret Boulos, and Katherine Carroll. 2013. "From Altruism to Monetisation: Australian Women's Ideas About Money, Ethics and Research Eggs." *Social Science & Medicine* 94: 34–42. https://doi.org/10.1016/j.socscimed.2013.05.034.

Whittaker, Andrea and Heng Leng Chee. 2015. "Perceptions of an "International Hospital" in Thailand by Medical Travel Patients: Cross-Cultural Tensions in

the Transnational Space." *Social Science & Medicine* 124: 290–7. https://doi.org/10.1016/j.socscimed.2014.10.002.

Winner, Langdon. 1980. "Do Artifacts Have Politics?" *Daedalus* 109 (1): 121–36. https://www.jstor.org/stable/20024652.

Wyns, Christine, Christian de Geyter, Carlos Calhaz-Jorge, et al. 2022. "ART in Europe, 2018: Results Generated from European Registries by ESHRE." *Human Reproduction Open* 2022 (3): hoac022. https://doi.org/10.1093/hropen/hoac022.

Zelizer, Viviana A. 2010. *Economic Lives: How Culture Shapes the Economy*. Princeton, NJ: Princeton University Press.

Author Biographies

Polina Vlasenko is a cultural and medical anthropologist who received her Ph.D. from Indiana University Bloomington in 2021. Her dissertation examines the political economy of the Ukrainian ova market, analyzing how export-oriented egg banks construct donor eggs as racialized commodities for global circulation and how women navigate ova donation and surrogacy as labor in the context of post-socialist transformations. Dr. Vlasenko is a postdoctoral researcher at the University of Oxford, where she studies the transnational movement of surrogates, ova, and reproductive technologies between Central Asia and the surrogacy hub of Georgia. She is also an MSCA Fellow at the Autonomous University of Barcelona (UAB) in Spain, where she researches how the ongoing war in Ukraine has reshaped the supply of donor eggs from Ukrainian commercial banks to European fertility clinics.

Vincenzo Pavone With a PhD from the European University Institute (EUI) Vincenzo Pavone joined the Institute of Public Policies of the CSIC in 2006. At the IPP he has developed a research line in critical science and technology studies, with a special focus on the social and political implications of emerging technologies, especially assisted reproductive technologies. Always working on the complex relationship between science, technology and politics, Vincenzo has recently opened a new research line on the global bioeconomy, value chains and related markets formation. In these past twenty years, he has been principal investigator of several nationally and internationally funded research projects. He has also published in the most relevant STS journals and related disciplines. Since 2019, he is the scientific director of the IPP.