



# Beyond Efficiency: Feminist Economics and the Reframing of Global Trade

Neha Rai\*, and Anwesha Aditya

Department of Humanities and Social Sciences, Indian Institute of Technology Kharagpur, India

## Abstract

This paper examines how feminist economics reshapes the analysis of international trade by foregrounding gender as a structural determinant of trade outcomes. Using a PRISMA-guided systematic literature review combined with reflexive thematic analysis, the study synthesizes empirical and theoretical research on the gendered effects of trade liberalization. The review demonstrates that conventional trade models, which assume homogeneous agents and frictionless adjustment, systematically overlook unpaid care work, labor market segmentation, and power asymmetries that shape women's participation in trade. The literature is organized into five thematic areas, revealing persistent gender-differentiated patterns across contexts. Integrating these findings, the paper develops a conceptual framework that treats gender relations as endogenous to trade processes rather than as peripheral outcomes. It further identifies key research gaps, including the need for intersectional empirical analysis, gender-aware trade modeling, and systematic evaluation of gender-responsive trade policies. The analysis underscores that trade policy can influence gender equality, but outcomes depend on institutional context and complementary interventions. Overall, the paper argues that incorporating feminist economics into trade theory enhances both analytical precision and policy relevance, reframing trade as a tool for inclusive and equitable development rather than solely for aggregate efficiency.

**Keywords:** gender; globalization; institutions; PRISMA systematic review; trade

## 1. Introduction

Gender equality and international trade are two critical drivers of economic development whose intersection has gained increasing attention in recent decades. Classical models from Ricardo's comparative advantage to modern trade models seldom acknowledge gender as a relevant factor, implicitly treating workers, entrepreneurs, and consumers as homogeneous agents. However, feminist economics, an approach that emerged to critique the androcentric biases in economic theory posits that economic processes, including trade, are deeply gendered. For example, women and men tend to work in different industries and occupations, own different types of businesses, and have unequal access to resources such as credit and technology. These differences mean that trade shocks whether positive (export growth) or negative (import competition) can impact female and male workers and entrepreneurs in distinct ways. Moreover, longstanding gender gaps in wages, labor force participation, and

social responsibilities (like childcare) can influence who benefits from new trade opportunities. As evidence has mounted that “trade is not gender-neutral”, policymakers have begun to explore how trade agreements and support programs might be designed to promote women’s empowerment.

Research on gender and trade has expanded rapidly, branching into multiple thematic areas. Early studies in the 1990s and 2000s often focused on women as factory workers in export sectors and on gender wage inequality in the context of globalization. Over time, new strands of inquiry have emerged, examining women as entrepreneurs and business owners participating in international markets, assessing the gender-differentiated impacts of tariffs and trade facilitation measures, and evaluating gender provisions in trade agreements. Simultaneously, international organizations and governments have placed gender equality on the trade agenda, especially since the mid-2010s. Several recent free trade agreements (FTAs), such as Canada-Chile and the African Continental FTA, have incorporated gender-related chapters or clauses. These developments underscore a timely need to integrate insights across disparate studies and identify how far the literature has come in informing gender-responsive trade policy.

This study aims to provide a comprehensive synthesis of the literature on gender and international trade. We seek to not only summarize findings but also connect themes, draw inferences across studies, and offer conceptual integration of the evidence. Key objectives include: (1) mapping out the thematic clusters of research on gender and trade using Braun and Clarke thematic analysis approach; (2) highlighting major findings and points of consensus or debate within each theme; (3) identifying gaps in the existing literature and emerging areas of interest; and (4) suggesting directions for future research that can deepen our understanding of gender dynamics in trade and better support policy innovation. By following a rigorous methodology and organizing the discussion around themes and trends, this review aspires to serve as a reference for scholars and policymakers interested in how trade liberalization and globalization intersect with gender equality.

The remainder of the paper is organized as follows. Section 2 outlines the conceptual framework, tracing the historical evolution of trade theory alongside the emergence of feminist economic thought, and discussing key theoretical intersections. Section 3 discusses methodology section. Section 4 provides a descriptive overview of the sources to characterize the scope of research in this area. The core of the paper is the thematic analysis (Section 5), which clusters findings into coherent themes. Section 6 discusses critical insights and Section 7 gives future directions, synthesizing cross-cutting lessons and outlining where further investigation is needed.

## **2. Conceptual Framework: Feminist Economics and Trade Theory**

### **2.1. Evolution of Trade Theory**

**Proposition 1:** *Classical and neoclassical trade theories conceptualize labor as homogeneous, thereby implicitly assuming that trade-induced gains are uniformly distributed across workers.*

The intellectual history of trade theory spans classical political economy, neoclassical refinements, and modern extensions. Classical trade theories (Adam Smith’s absolute advantage and David Ricardo’s comparative advantage) established that international trade can be mutually beneficial, focusing on labor productivity differences and the specialization of nations. These models assumed labor as a homogeneous factor and were silent on social hierarchies such as class or gender. Neoclassical trade models, including the Heckscher-Ohlin model and Stolper-Samuelson theorem, introduced factor endowments and distributional effects of trade (predicting winners and losers among factors like labor and capital), but again treated labor as an abstract category, implicitly male or ungendered. The paradigm assumed

that if labor is abundant, trade in labor-intensive goods benefits all workers uniformly, an assumption that ignores gender segregation in occupations and industries. New Trade Theory (e.g. Krugman's models of increasing returns and monopolistic competition) and New New Trade Theory (firm heterogeneity models) shifted focus to economies of scale and firm-level dynamics, but similarly lacked any gender-differentiated analysis, being concerned primarily with productivity and preference diversity.

## 2.2. Emergence of Feminist Economics

**Proposition 2:** *Economic outcomes are gendered because individuals participate in markets from unequal social and institutional positions.*

Feminist economics arose in the late 20th century as a critique of the biases in traditional economics that overlooked women's contributions and the role of gender relations in shaping economic outcomes. Feminist economics emphasizes that economic outcomes are not gender-neutral because men and women occupy different positions in both the paid economy and the unpaid care economy. Elson (1991) argued that male bias and gender-aware macroeconomics reveal how macroeconomic and development policies often shift adjustment costs onto women through unpaid work and limited access to resources. The economics of care highlights the dependence of market systems on unpaid and underpaid care labor (Folbre, 2001), while the care-diamond framework situates care provision across households, markets, states, and communities (Razavi, 2007). Key tenets of feminist economics relevant to trade include: (1) Recognition of unpaid work, activities like childcare and subsistence farming, largely done by women, are vital yet excluded from economic metrics; (2) Power and bargaining: Within households, workplaces, and states, power imbalances (often gendered) influence who can take advantage of new opportunities (like those from trade) and who bears the costs. (3) Gender segregation and discrimination: Labor markets are segmented by gender, with women often in lower-paid, less secure jobs and facing barriers to entry in higher-paying occupations or leadership positions. Thus, opening to trade can have different impacts on male and female workers or entrepreneurs because they are in different starting positions. (4) Intersectionality: Feminist economics also acknowledges that gender intersects with class, race, and other identities, meaning that simplistic binaries of "women vs men" are further stratified, for instance, the experience of trade liberalization for a low-income woman in a developing country can be very different from that of a high-skilled woman in a developed economy.

## 2.3. Intersection of Feminist Economics and Trade Theory

**Proposition 3:** *Trade liberalization reallocates labor along existing gendered occupational structures rather than neutral market allocation.*

Applying feminist economics to trade involves examining how liberalization affects men and women differently, and whether it reduces or deepens gender inequalities. Early studies from the 1990s highlighted the "feminization" of labor in export sectors like garments and electronics, where women were hired for being "cheap" and compliant, boosting competitiveness but reinforcing occupational segregation. While women gained jobs, these were often low-wage, unstable, and based on traditional skills. As sectors upgraded, many women were displaced, a trend termed the "defeminization" of manufacturing.

Feminist scholars also argue that gender inequality can itself generate trade advantage: persistent gender wage gaps function as de facto subsidies for exports. This reframes comparative advantage to include social institutions, not just technology or factor endowments. Çagatay (2001) showed how liberalization affects gender equity, and how gaps in land, credit, and education limit women's trade participation.

Theoretically, feminist economists adapted heterodox and neoclassical models to include gender. Dual labor force models, gender-aware Computational General Equilibrium models (CGEs), and structuralist simulations explored how trade shocks affect employment by gender. For example, Berik et al. (2004) modeled a gender-segregated economy to examine uneven trade effects, while others simulated how narrowing wage gaps might improve development at the cost of short-term competitiveness.

Feminist engagement with trade gained traction during the 2000s amid WTO-led reforms. Scholars documented how liberalization increased unpaid care burdens and informalization. By the mid-2000s, proposals such as gender impact assessments, labor rights clauses, and social protections gained traction, first seen as heterodox, but now influencing global discourse. However, feminist critiques extend beyond “adding women” to questioning the very foundations of trade orthodoxy, growth-driven, technocratic, and abstract. Fig. 1 provides the conceptual map integrating feminist economics with trade theory by specifying the principal transmission channels through which trade policy shocks affect gender-differentiated outcomes. These channels are filtered by gendered constraints, producing heterogeneous outcomes in female employment, wage gaps, entrepreneurship, unpaid work, and export participation. Outcomes can feed back to institutions and norms, making gender endogenous to future trade dynamics. Hannah et al. (2021) argue that most current initiatives operate within these limits and a genuinely feminist approach would reimagine trade goals around equity, care, and well-being.

In sum, feminist economics reconceptualizes trade theory by asking: who benefits from trade, what are its goals, and how do gendered roles shape outcomes?

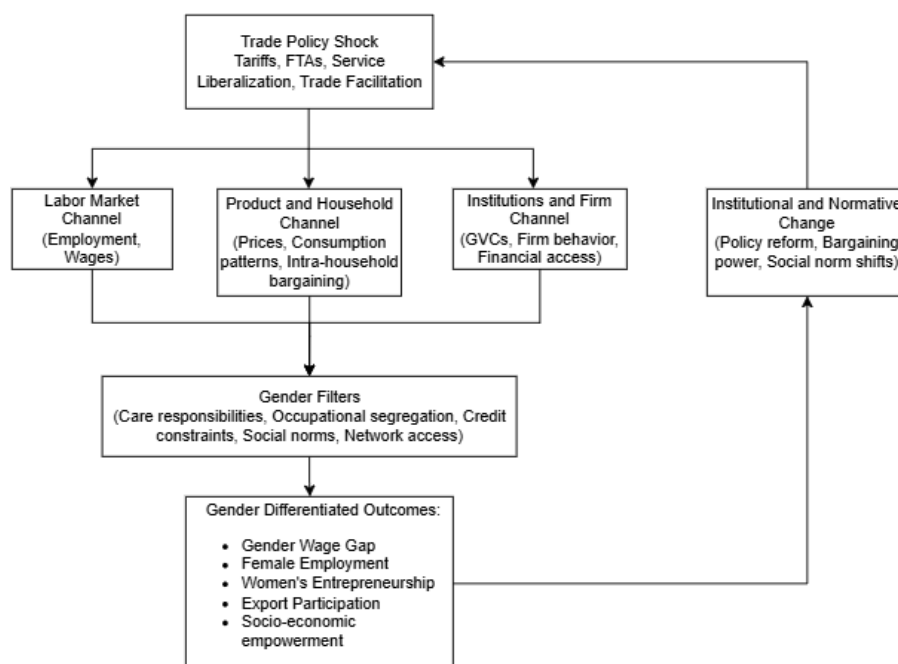


Figure 1: Conceptual map linking trade policy shocks, gender-mediated transmission channels, and gender-differentiated outcomes.

### 3. Methodology

This study adopts a systematic literature review approach, guided by the PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) framework to ensure transparency and replicability.

### **3.1. Search Strategy**

The literature search was conducted exclusively using the Scopus database on November 16, 2025 and was updated on December 3, 2025. The protocol was not prospectively registered because the review was initially designed as a thematic synthesis rather than an effect-size systematic review. Scopus was considered due to its extensive coverage of peer-reviewed journals in economics and social sciences. Empirical comparisons of bibliographic databases indicate a very high degree of overlap between Scopus and Web of Science (WoS). For instance, Singh et al. (2021) show that approximately 99.11% of journals indexed in WoS are also included in Scopus, while Mongeon and Paul-Hus (2016) similarly document substantial overlap between the two databases. Notably, Scopus demonstrates comparatively stronger coverage in the social sciences than WoS, which aligns well with the interdisciplinary nature of the trade–gender literature. Relying on a single, broad database ensured consistency and minimized duplication.

The review focused on publications between 2000 and 2025. The year 2000 marks a meaningful starting point because systematic academic engagement explicitly integrating international trade and gender analysis accelerated in the late 1990s and early 2000s, following intensified globalization debates and improved availability of gender-disaggregated labor data.

The search was restricted to English-language publications, Peer-reviewed journal articles and Subject areas of Economics, Econometrics, and Finance and Social Sciences. Grey literature, was consulted for contextual understanding but was not included in the formal review dataset. This decision was made to ensure methodological consistency and maintain quality control through peer-review standards. Backward snowballing from reference lists of highly cited articles was conducted to ensure inclusion of seminal contributions that met the eligibility criteria, following which three working papers were consulted where they provided important insights. The search string used for Scopus database search is following:

TITLE-ABS-KEY ((“international trade” OR trade OR globalization OR export\* OR import\* OR “global value chain” OR GVC\* OR “free trade agreement\*” OR “regional trade agreement\*” OR “digital trade” OR “cross-border trade”) AND (gender OR women OR female OR “gender inequality” OR “gender gap”))

To assess whether reliance on Scopus materially affected the structure of the review, a bibliometric sensitivity check was conducted using Web of Science (WoS). The same search string, time period, language restriction, and document-type restrictions were applied to WoS as closely as database syntax allowed. EconLit could not be used because institutional access was unavailable, while SSRN was not included in the formal sensitivity check because the core review was restricted to peer-reviewed journal articles. The WoS results were compared with the Scopus dataset on two dimensions: the ten most globally cited documents and the ten most relevant publication sources. The comparison showed that the leading cited documents and dominant journals identified through WoS were substantively consistent with those obtained from Scopus. No WoS-unique key study was identified among the most-cited and source-dominant records that altered the eligibility decisions, thematic structure, or substantive interpretation of the review.

As part of the WoS sensitivity check, records not appearing in the Scopus-based core dataset were examined to assess whether they introduced a distinct thematic strand. Only two such WoS records were found. Keller and Utar (2022), which analyzes the gendered labor-market and family consequences of globalization, was thematically adjacent to the review because it links trade-related shocks to household adjustment, fertility, and long-run gender inequality. However, it mapped onto the existing labor-market and household/care-related channels rather

than generating a separate thematic cluster. Walters et al. (2024), which examines the relationship between historical slave trades, kinship structures, and women's political participation in Africa, was not incorporated into the formal review because its primary focus is historical/colonial trade and political participation rather than contemporary international trade liberalization, export/import exposure, GVC participation, or trade-policy design. Overall, the WoS sensitivity check did not alter the five-theme structure or the final Scopus-based analytical sample of 334 studies; instead, it confirmed that potentially relevant WoS-identified records either reinforced existing themes or fell outside the formal eligibility criteria.

### **3.2. Inclusion and Exclusion Criteria**

Studies were included if they (a) explicitly examined international trade (e.g., exports, liberalization, trade policy, GVCs), and (b) analyzed gendered impacts, including inequality, wage gaps, labor participation, or empowerment. Both empirical and theoretical work, including qualitative case studies, were considered. Studies were excluded if gender was mentioned only as a control variable without analytical engagement, or lacked direct relevance to trade.

In line with PRISMA guidelines, a qualitative assessment of study quality and risk of bias was conducted. Given the methodological heterogeneity of the literature, study quality was assessed using a structured appraisal matrix rather than a single universal checklist. For empirical studies, the criteria were adapted from mixed-methods appraisal principles, including transparency of data sources, appropriateness of identification strategy, treatment of confounding, robustness checks, and clarity of measurement. For qualitative, theoretical, policy/legal, and review-based studies, appraisal focused on research design transparency, analytical coherence, source adequacy, and relevance to the trade–gender nexus. Each study was classified as high-, moderate-, or low-confidence evidence.

The appraisal did not mechanically exclude studies from the review because the objective was thematic synthesis rather than meta-analysis. However, it shaped the weight assigned to findings. High-confidence empirical and theoretical studies were used to support central claims; moderate-confidence studies were used as corroborating evidence; and low-confidence studies were retained mainly for descriptive mapping or to identify emerging themes. The appraisal criteria, scoring rules and the distribution of study by theme and confidence levels are reported in Appendix Tab A1, A2 and A3 respectively.

### **3.3. Screening and Selection**

The initial search yielded 2,942 records. After duplicate removal and screening of titles/abstracts, 422 full texts were assessed. Studies without substantive trade-gender focus were excluded, resulting in a final sample of 334 publications. The PRISMA diagram (Fig. 2) summarizes this process. The full 2020 PRISMA checklist is provided in Appendix Tab A4. To reduce the risk of single-screener bias, the second author independently reviewed a stratified 10 percent sample of the included studies,  $n = 34$ , across the five thematic clusters and methodological categories. Differences in inclusion, thematic assignment, and confidence classification were resolved through discussion. Because the study uses reflexive thematic analysis, the purpose of the dual check was not to produce a positivist inter-coder reliability statistic, but to strengthen transparency, consistency, and consensus in screening and coding decisions.

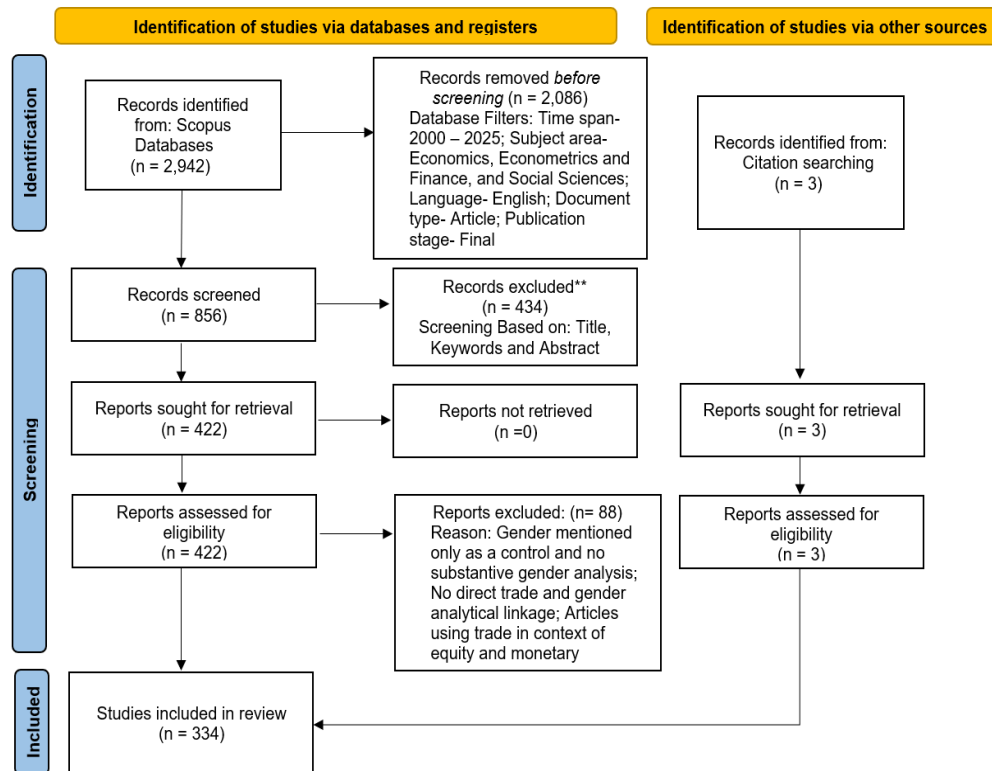


Figure 2: PRISMA flow diagram illustrating the literature search and selection process

### 3.4. Data Extraction and Synthesis

We extracted details on context, methodology, and key findings. Thematic clustering was carried out using Braun and Clarke (2006) six-phase approach to reflexive thematic analysis: (a) familiarization with the dataset, (b) generation of initial codes across abstracts and findings, (c) identification of patterns, (d) review of emergent themes, (e) defining and naming themes, and (f) producing a structured synthesis.

A structured codebook was developed iteratively during the coding process (see Tab. A5). In line with reflexive thematic analysis, themes were not treated as pre-existing categories but were generated through repeated engagement with the data and refinement for internal coherence and conceptual distinctiveness. Because reflexive thematic analysis conceptualizes coding as an interpretive and theoretically informed process rather than a positivist reliability exercise, formal inter-coder reliability statistics (e.g., Cohen’s kappa) were not calculated. To enhance transparency and rigor, coding decisions were documented systematically, and a subset of studies was re-reviewed at later stages to ensure consistency in classification.

This iterative process yielded five major themes as depicted in Fig. 3.

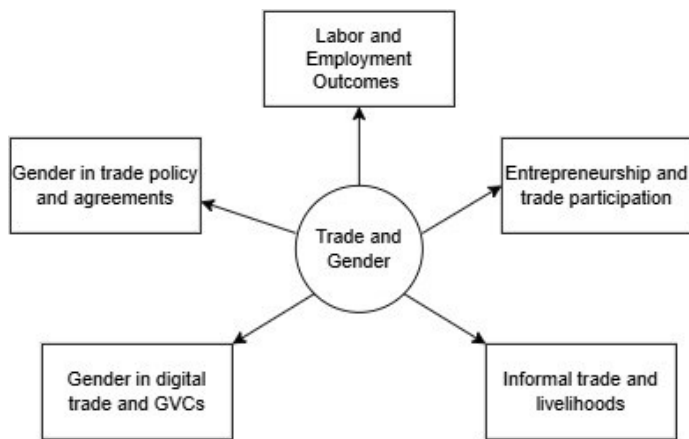


Figure 3: Thematic clusters of literatures on trade and gender using Braun and Clarke (2006) thematic analysis

Within each cluster, we analyzed convergences, divergences, and temporal shifts in findings, allowing for a robust qualitative synthesis grounded in feminist economic inquiry.

#### 4. Descriptive Overview of the Literature

The literature on gender and trade spans multiple disciplines, methodologies, and geographic contexts. Scholarly attention has intensified over the past three decades. Early foundational contributions emerged in the late 1990s and early 2000s, alongside broader debates on globalization and the growing availability of trade and labor market data in developing countries.

Fig. 4 shows a clear and sustained rise in scholarly attention to gender and international trade over time. Publications were relatively sparse and stable during the early 2000s, with annual counts generally remaining below ten. A gradual increase is visible from the early 2010s, followed by a marked acceleration after 2018. The most pronounced growth occurs in the post-2020 period, with publication numbers peaking in 2024.

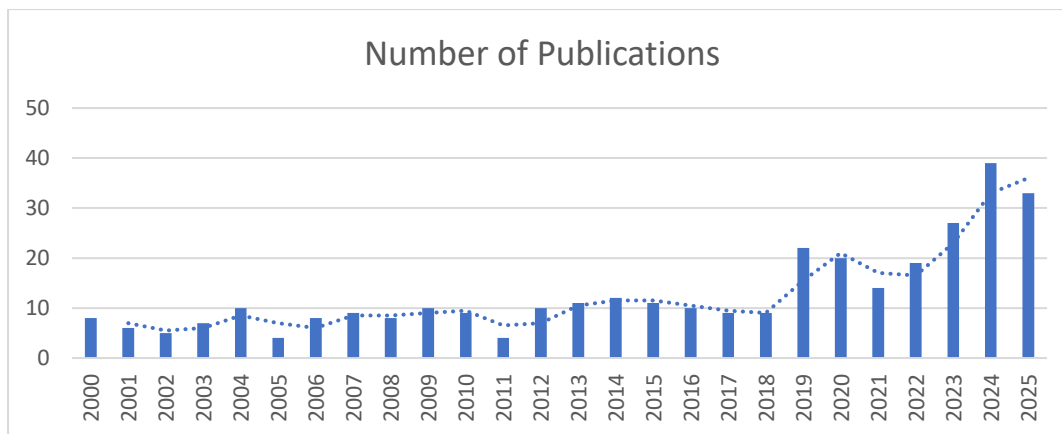


Figure 4: Number of publications on gender and international trade by year, indicating growing research attention in the 2010s

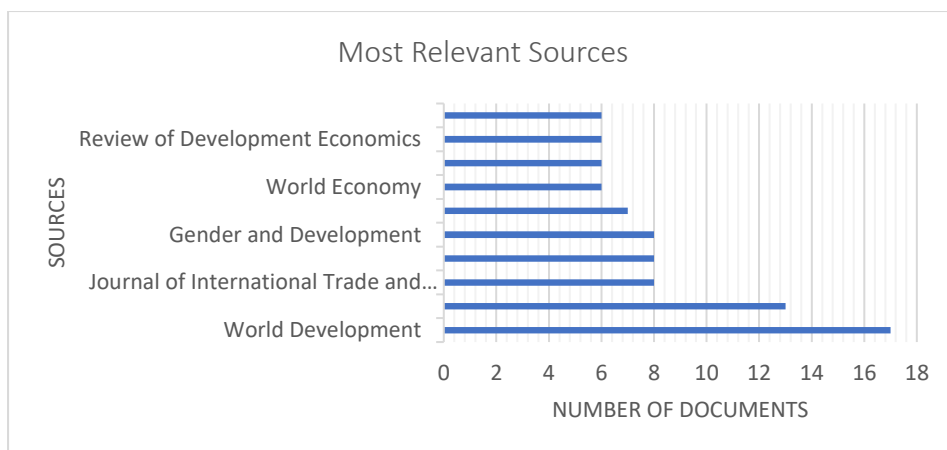


Figure 5: Most relevant publication sources in the gender and trade literature

To provide a systematic overview of the studies included in this review, Appendix Tab. A6 summarizes the distribution of publications by region, period, methodological approach, and sectoral focus. The empirical literature is concentrated in regions where trade, labor-market, and enterprise-level datasets are relatively accessible, particularly South Asia, East Asia, Latin America, and OECD economies. By contrast, evidence remains comparatively thinner for parts of Sub-Saharan Africa, the Middle East and North Africa, small island economies, fragile states, and landlocked economies. Methodologically, the literature is dominated by quantitative and empirical studies, especially those exploiting trade shocks, tariff reforms, and quasi-natural experiments to identify gender-differentiated labor market effects. A smaller but important subset comprises theoretical and qualitative contributions. A smaller residual category, consists of mixed, theoretical-empirical, or policy-oriented studies that could not be assigned exclusively to one methodological type. These include papers combining formal modelling with empirical illustration, as well as studies focused primarily on trade policy design, and gender provisions in trade agreements. Appendix Tab A7 provides theme wise quantitative summaries.

At sectoral level, much of the research focuses on manufacturing and global value chains, though recent work increasingly examines services trade, and firm-level export participation. Fig. 5 reflects the disciplinary and methodological concentration in economics, particularly development, labor, and international trade, while Fig. 6 highlights the most influential and highly cited contributions that have shaped this research agenda.

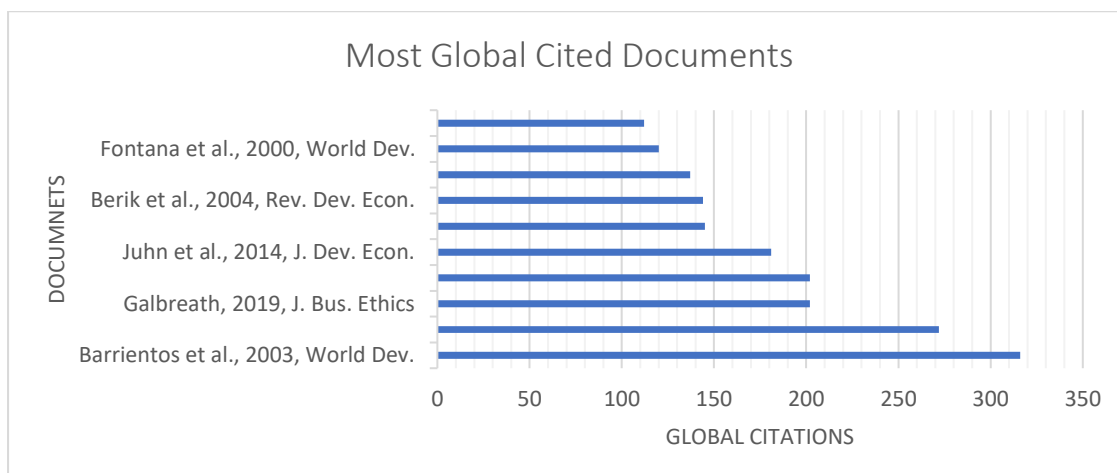


Figure 6: Most globally cited documents in the gender and trade literature

## 5. Thematic Analysis and Clustering of Findings

This section presents the thematic synthesis of the gender and international trade literature using Braun and Clarke (2006) reflexive thematic analysis. Fig. 7 provides a visual representation of keyword co-occurrence patterns across the reviewed studies and is used as a supporting interpretive aid. The network highlights the centrality of concepts such as gender, women, globalization, and employment, alongside related clusters on labor markets, global value chains, informal trade, and trade policy. The temporal overlay further indicates a shift in research emphasis from early concerns with employment and wage gaps toward more recent work on supply chains, inclusion, and resilience. Consistent with the reflexive thematic approach, this visualization informed the final thematic structure.

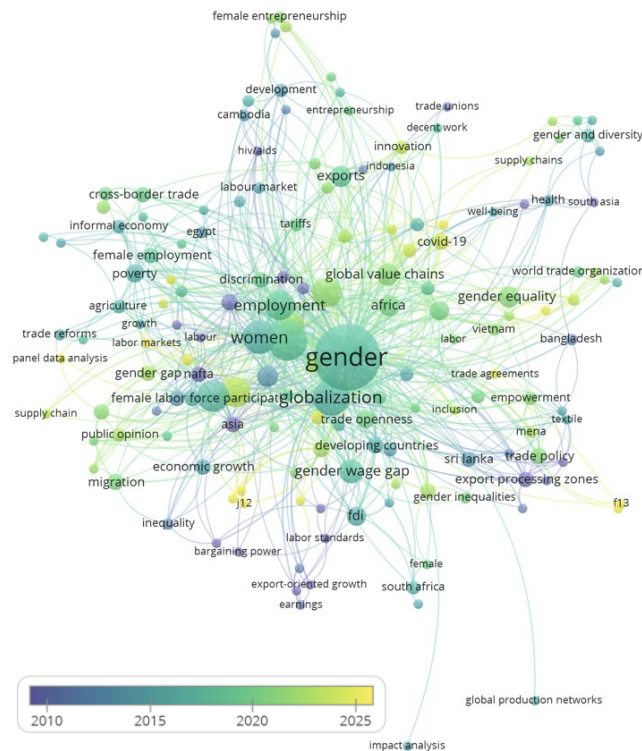


Figure 7: Keyword co-occurrence network in the gender and trade literature.

### 5.1. Trade Liberalization, Labor Markets, and Women as Workers

A central strand of the trade–gender literature examines how trade liberalization affects women as workers, focusing on employment, sectoral allocation, job quality, and gender wage gaps. The core question is whether trade openness narrows gender inequalities or reproduces them through new forms of segmentation. Overall, evidence suggests that trade reforms frequently expand women’s employment, particularly in export-oriented sectors, though outcomes vary across contexts.

Numerous studies document the feminization of labor accompanying export expansion in developing countries. Bangladesh’s garment boom is emblematic: Heath and Mobarak (2015) show that factory growth increased employment among young women and produced broader social effects, including delayed marriage and higher female schooling. In Mexico, Atkin (2016) finds that export growth under NAFTA raised returns to education for women, encouraging schooling and later entry into formal manufacturing. Similarly, Kis-Katos et al. (2018) demonstrate that Indonesia’s tariff reductions increased women’s manufacturing employment relative to men, though many positions were concentrated in low-wage segments.

However, employment gains depend critically on sectoral shifts. Trade liberalization expands some industries while contracting others, and gender outcomes reflect women's initial sectoral location. Gaddis and Pieters (2017) show that Brazil's liberalization generated female job gains in export-competitive industries such as textiles but losses in import-competing sectors, yielding mixed net effects. Brussevich (2018) finds that gender wage gaps narrowed more in industries where women could transition into expanding export sectors. Trade can thus raise female participation, but only where women access growing segments of the economy (Juhn et al., 2014).

Another line of inquiry focuses on wage inequality. Drawing on Becker's (1957) theory of discrimination, scholars argue that increased competition from trade should reduce employers' scope for discrimination. Black and Brainerd (2004) provide evidence from U.S. manufacturing, showing larger declines in gender wage gaps in industries more exposed to import competition. In East Asia, Berik et al. (2004) document wage convergence in certain export industries, while Oostendorp (2009), using cross-country data, finds that greater openness is associated with smaller gender wage gaps in richer economies, particularly outside agriculture.

Yet convergence is neither universal nor uniformly beneficial. Seguino (2000) shows that in South Korea and Taiwan, early export-led growth narrowed wage gaps, but subsequent upgrading stalled or reversed progress as production became more skill-intensive. Sauré and Zoabi (2014) theoretically demonstrate that trade-induced increases in female labor supply may initially depress women's relative wages. Moreover, narrowing gaps can reflect adverse adjustment: Kongar (2006) finds that import competition in the United States reduced wage gaps largely through declines in men's wages rather than improvements for women.

Concerns about job quality further complicate the picture. Ben et al. (2020) show that Mexico's liberalization increased informality among women, while Ederington et al. (2009) document reinforced occupational segregation in Colombia. In India, Gupta (2021) finds that post-1991 reforms expanded female employment in export sectors but did not produce commensurate wage gains due to persistent segmentation and informality.

In sum, trade liberalization can expand women's employment and reduce wage gaps under certain conditions, but gains are often concentrated in low-wage or insecure segments. Institutional context, labor regulation, education, and complementary social policies, remains decisive in shaping gender-equitable outcomes.

## **5.2. Women as Entrepreneurs and Business Owners in International Trade**

A second major cluster of the literature examines women as entrepreneurs, firm owners, and business leaders, focusing on their participation in international trade and the constraints limiting their integration into export markets and global value chains. A consistent finding is a structural paradox: women-owned firms represent substantial untapped potential in global markets, yet face systematic barriers that restrict scaling and export participation.

Contrary to stereotypes regarding entrepreneurial capability, evidence suggests that women-owned firms perform comparably to male-owned firms when operating under similar conditions. Welch et al. (2008) show that differences in export behavior between women- and men-owned enterprises are largely explained by firm characteristics and structural conditions rather than gender per se. Similarly, Marques (2015) finds that observed performance gaps stem primarily from unequal access to finance, networks, and market information rather than differences in managerial competence. These studies indicate that gender disparities in exporting reflect structural constraints rather than lower productive capacity.

Access to finance is the most consistently documented barrier. Using enterprise data from Sub-Saharan Africa, Aterido et al. (2013) show that women-owned firms are significantly less likely to obtain formal credit than comparable male-owned firms. Muravyev et al. (2009) report similar gaps in Eastern Europe and Central Asia, linking financial constraints to slower growth and limited market expansion. Even in microfinance markets, Beck et al. (2017) find that women receive smaller loans and face higher effective borrowing costs. Given the upfront investment and scale requirements of exporting, such constraints directly limit women's internationalization prospects.

Beyond finance, social and informational barriers matter. Professional networks are central to exporting, as they provide access to partners, market intelligence, and mentorship. Rosenbaum (2017) shows that women entrepreneurs with broader networks are significantly more likely to export, while exclusion from male-dominated networks reduces exposure to trade opportunities. Knowledge gaps regarding foreign standards, certification, and logistics further constrain export readiness.

Bias within investment ecosystems reinforces these patterns. Kanze et al. (2018) find that venture capitalists frame questions to female founders in risk-oriented terms, leading to systematically lower funding outcomes compared to male counterparts. Such implicit biases shape capital allocation and restrict women's entry into high-growth, trade-intensive sectors.

Digital platforms offer partial mitigation. Martin and Wright (2005) argue that online markets may reduce gender bias by obscuring identity, facilitating participation in international business. However, digital divides in skills, finance, and platform visibility continue to disadvantage women-led firms.

Overall, the literature suggests that women entrepreneurs possess strong export potential, but structural barriers in finance, networks, and market access constrain their participation in international trade.

### **5.3. Tariffs, Trade Costs, and Informal Trade: Gendered Impacts**

A further cluster of literature examines how trade policies, particularly tariffs and trade costs, affect women and men differently at the micro level, especially as consumers and small-scale traders. This body of work demonstrates that seemingly gender-neutral trade instruments can generate gendered outcomes because of differences in consumption patterns, sectoral participation, and exposure to informal markets.

Several studies show that tariffs operate as a regressive tax with disproportionate effects on women. Amity et al. (2019) document near-complete pass-through of tariffs to consumer prices, implying that tariffs directly raise the cost of consumption. Because women are more likely to manage household purchases and allocate spending toward basic goods, tariffs on items such as food, clothing, and household products impose a higher effective burden on women. Using household-level data from South Africa, Casale (2012) finds that female-headed households devote a larger share of income to taxed consumption goods, suggesting that trade taxes can reinforce existing gender inequalities. Extending this argument, Gaijes et al. (2018) show that female-headed households in the United States face higher effective tariff rates because their consumption baskets are more concentrated in highly protected tradable goods, particularly apparel.

The literature also identifies structural gender bias embedded in tariff schedules. Duesterhaus et al. (2011) highlight systematic differences in tariff rates applied to women's versus men's products, often referred to as "pink tariffs", with women's apparel historically facing higher duties. Such disparities reflect outdated classifications rather than economic rationale, yet they raise costs for women both as consumers and workers. At a broader level, Artuc et al. (2023)

provide cross-country evidence that women are disproportionately affected by tariffs through both production and consumption channels. Women tend to work in sectors facing higher export barriers and rely on imported inputs subject to duties, creating a “double burden” that constrains income generation.

A related strand focuses on women’s participation in informal cross-border trade, particularly in developing regions. Women are overrepresented among small-scale traders who operate outside formal regulatory frameworks, often due to high trade costs, complex procedures, and limited access to capital. High tariffs and cumbersome border regulations increase incentives for informality, exposing women traders to heightened risks and transaction costs relative to men.

Overall, this literature underscores that tariffs and trade costs are not gender-neutral. Gender-blind trade policies can inadvertently reinforce inequality by increasing costs in sectors and consumption categories central to women’s livelihoods, highlighting the importance of incorporating gender analysis into trade policy design.

#### **5.4. The Digital Economy, Services Trade, and Gender**

As global trade increasingly shifts toward services and digital platforms, a growing literature examines how these transformations intersect with gender inequality. This research highlights both new opportunities for women and the risk that existing disparities may be reproduced in emerging sectors if inclusion is not actively addressed.

At a macro level, Ngai and Petrongolo (2017) show that structural change from manufacturing to services has contributed to declining gender gaps in labor force participation, as women are historically overrepresented in service occupations. Since many services are tradable, such as tourism, business services, and remote outsourcing liberalization of services trade can disproportionately benefit women. However, women remain underrepresented in high-skill, high-wage tradable services such as information technology and finance, largely due to persistent skill gaps and occupational segregation.

Firm-level evidence suggests that engagement in international markets may be associated with improved gender outcomes. Gurevich and Riker (2018) find that exporting firms in the United States exhibit smaller gender pay gaps than non-exporters, potentially reflecting more formalized employment practices or exposure to international norms. Nevertheless, such outcomes may also reflect selection effects, as more productive or progressive firms are more likely to export.

Within global value chains (GVCs), the literature consistently shows that women are disproportionately concentrated in lower-skilled and lower-paid segments, with limited access to upgrading opportunities. Firm- and sector-level studies indicate that GVC integration often expands female employment in labor-intensive tasks but does not automatically lead to advancement. Pham and Jinjark (2023) find that women in GVC-linked firms are more likely to be employed in routine and non-core tasks, while technological upgrading and task reallocation tend to favor male workers unless accompanied by targeted skill development. Similarly, Nikulin et al. (2022) show that GVC participation can narrow gender wage gaps only in contexts where women transition into higher-value tasks; otherwise, occupational segregation persists. Evidence from manufacturing-intensive economies further points to a feminization-defeminization trajectory. Veeramani and Banerjee (2022) demonstrate that labor regulations and exchange rate dynamics mediate gendered employment responses to GVC shocks, while cross-country analysis by Bataka (2024) shows that GVC participation can either reduce or exacerbate gender inequality depending on sectoral composition and human capital endowments.

Overall, the literature suggests that services and digital trade can expand women's participation in global markets, but gains are contingent on addressing skill gaps, technological exclusion, and new forms of bias embedded in digital systems.

### **5.5. Gender in Trade Policy and Agreements**

A growing academic literature examines whether trade policy and trade agreements can actively influence gender equality, marking a shift from earlier approaches that treated trade as socially neutral. This work analyzes how the design and implementation of trade agreements shape labor market outcomes, firm behavior, and women's economic participation.

Mapping studies document the increasing presence of gender-related provisions in trade agreements. Monteiro (2021) shows that by the late 2010s, approximately one-fifth of regional trade agreements included references to gender equality or women's economic empowerment. However, legal and political economy scholars caution that many of these provisions are non-binding and largely cooperative in nature. Karam and Zaki (2024) argue that stand-alone gender chapters risk remaining symbolic unless gender considerations are integrated across the agreement. Bahri (2020) similarly emphasizes a "whole-of-agreement" approach, whereby gender is mainstreamed into areas such as services, government procurement, and competition policy.

Beyond the design of gender clauses, recent empirical work provides causal evidence that trade agreements themselves can alter gender outcomes even in the absence of explicit gender provisions. Banerjee et al. (2025) analyze the Chile-Mexico Free Trade Agreement as a quasi-natural experiment using matched firm-level employment and customs data. They find that Chilean manufacturing firms that began exporting to Mexico increased the share of female white-collar workers by around 10 percent. This change was driven by demand-side mechanisms, including greater adoption of technology, increased reliance on high-skilled non-production tasks, and reduced discrimination, demonstrating that trade policy can reshape firms' internal gender composition.

Scholarship further identifies concrete entry points through which trade rules can support gender equality. Acharya et al. (2019) argue that existing trade disciplines, such as services liberalization and procurement rules, can be leveraged to expand opportunities for women without departing from core trade principles.

Overall, the literature suggests that trade policy can influence gender equality both directly, through firm-level adjustments to trade exposure, and indirectly, through the structure of agreements. However, meaningful impacts depend on specificity, integration across policy domains, and mechanisms that translate trade exposure into inclusive outcomes.

## **6. Critical Insights and Policy Recommendations**

### **6.1. Critical Insights**

Synthesizing the thematic findings yields several cross-cutting insights that clarify how feminist economics fundamentally reframes trade theory, while also extending it analytically.

First, trade outcomes are systematically mediated by gendered labor markets, household dynamics, and institutional arrangements. Because these structures shape access to employment, mobility, and resources, the effects of trade liberalization are uneven across men and women. Incorporating gender-specific constraints into analysis reveals frictions in adjustment processes and underscores the need for complementary policies to achieve equitable outcomes.

Second, the literature highlights a two-way causality between gender and trade. Gender inequality influences patterns of comparative advantage and export specialization, while trade exposure reshapes labor demand, firm organization, and intra-household bargaining. This reciprocal relationship suggests that gender should be treated as endogenous within trade frameworks, with feedback effects operating over time. Third, feminist scholarship challenges narrow notions of efficiency by demonstrating that aggregate gains may mask socially inefficient outcomes when they rely on undervalued female labor or increased unpaid care burdens. A broader evaluative framework incorporating equity, well-being, and sustainability, provides a more comprehensive basis for assessing trade outcomes.

Fourth, the literature underscores the importance of intersectionality. In the reviewed evidence, intersectionality is operationalized in uneven but identifiable ways. Quantitative studies most commonly capture intersectional variation through subgroup analysis or interaction terms, particularly by examining how gendered trade outcomes differ across education, skill level, income group, sector, formality status, rural–urban location, and firm size. Labor-market studies frequently distinguish women by sector, occupation, skill level, or formal versus informal employment, while firm-level studies tend to differentiate women-owned enterprises by size, access to finance, export status, and sectoral location. Dimensions such as caste, ethnicity, race, disability, marital status, and intra-household position remain underexplored. This calls for more disaggregated and context-sensitive analytical approaches.

Fifth, markets are better understood as socially embedded institutions rather than neutral mechanisms. Gender norms shape participation, bargaining power, and access to opportunities in labor, credit, and product markets. This insight motivates analytical frameworks that incorporate intra-household dynamics, discrimination, and power asymmetries, aligning trade analysis more closely with institutional and political economy perspectives.

Finally, feminist approaches shift the focus of trade analysis from aggregate gains to distributional outcomes specifically, who benefits, who bears the costs, and through which channels. Together, these insights point toward a feminist-informed trade framework that treats gender relations as central, integrates social reproduction and power structures, and evaluates trade through broader measures of human capability and equity.

## **6.2. Policy Implication for Gender Responsive Trade Design**

The evidence synthesized in this review underscores that trade liberalization does not inherently generate gender-equitable outcomes; its distributive effects are mediated by labor market structures, institutional arrangements, and social norms. Consequently, gender considerations must be embedded directly into the design and implementation of trade policy. A foundational step is the institutionalization of mandatory ex-ante Gender Impact Assessments for major trade agreements and tariff reforms. Such assessments should evaluate sector-specific employment, wage, and firm-level effects, and be complemented by transparent stakeholder consultation. To ensure accountability, these ex-ante analyses must be paired with ex-post monitoring frameworks, including gender-disaggregated indicators on employment in trade-exposed sectors, wage gaps, and the participation of women-owned firms in export markets.

Beyond assessment mechanisms, policy instruments must actively address structural barriers. Gender-responsive public procurement, including certification-based preferences or measurable target shares for women-owned enterprises, can leverage state purchasing power to expand women's market access. Similarly, tailored trade finance and export credit facilities, featuring collateral flexibility, technical advisory services, and SME-focused credit lines can mitigate persistent credit constraints that limit women's export participation.

Within global value chains (GVCs), where upgrading often risks reinforcing occupational segregation, trade cooperation provisions should prioritize skills development, certification support, and leadership training targeted at women. Such measures are critical to ensure that technological upgrading translates into social upgrading. Parallel reforms in trade facilitation, such as simplified customs procedures and enforceable anti-harassment protocols can further reduce transaction costs faced by women engaged in small-scale cross-border trade.

Finally, as commerce increasingly shifts toward services and digital platforms, trade policy must incorporate digital inclusion strategies, including broadband access, e-commerce training, and algorithmic transparency measures to prevent bias. Together, these design features move trade governance beyond formal neutrality toward deliberate gender responsiveness, aligning trade liberalization with broader goals of inclusive and equitable development.

## **7. Concluding Remarks and Future Research Direction**

This paper has demonstrated that integrating feminist economics into trade theory provides a more accurate and socially grounded understanding of how trade policies operate and whom they benefit. The literature reviewed shows that trade is not gender-neutral: its outcomes are shaped by gendered labor markets, unequal access to resources, unpaid care responsibilities, and institutional power relations. Feminist scholarship challenges conventional trade models by revealing how assumptions of homogeneous agents and frictionless adjustment obscure persistent inequalities. By foregrounding equity, social reproduction, and well-being, feminist economics broadens the evaluative criteria of trade beyond aggregate growth and efficiency.

While this body of work has significantly advanced the field, it also highlights several important directions for future research. A first priority is the development of formal trade models that explicitly incorporate gender dynamics. This includes computable general equilibrium models that account for unpaid care work and gender-differentiated labor supply, as well as theoretical frameworks that integrate intra-household bargaining, discrimination, and power asymmetries. Such models would allow more accurate prediction of trade's distributional effects and improve policy design.

Second, greater emphasis is needed on intersectional empirical analysis. Future research should move beyond gender as a single axis of inequality and examine how trade interacts with class, race, ethnicity, migration status, and geography. Combining household- and firm-level datasets with qualitative fieldwork can uncover heterogeneous effects of trade liberalization, particularly for marginalized groups such as migrant workers, informal traders, and rural women.

Third, despite the proliferation of gender-related provisions in trade agreements, systematic evidence on their effectiveness remains scarce. Comparative studies across agreements and countries are needed to assess whether such provisions translate into measurable improvements in women's employment, wages, entrepreneurship, or access to markets. Longitudinal evaluations using gender-disaggregated data would be especially valuable in identifying best practices and design features that produce meaningful outcomes.

Fourth, the rapid expansion of digital trade and global value chains presents both opportunities and risks that require deeper investigation. Future work should assess whether digital platforms, remote services, and technological upgrading enable women's economic mobility or reinforce new forms of exclusion. In particular, research linking trade shocks to changes in unpaid care work, using time-use surveys and care-economy modeling represents an important conceptual frontier.

These conclusions should be interpreted in light of certain limitations. The review relies exclusively on the Scopus database and is restricted to English language, peer-reviewed journal articles, which may introduce publication and language bias. Moreover, the sectoral distribution of the literature reflects data availability: manufacturing and tariff-based analyses dominate, while services and digital trade remain comparatively under-studied. This imbalance may bias assessments of the overall gendered impact of trade liberalization, particularly in emerging service-oriented economies. A further limitation concerns the treatment of unpaid care and social reproduction. Although the review discusses feminist economic critiques of trade theory and includes studies that consider gender-aware modelling, it does not systematically synthesize the specialized literature on care-economy modelling or time-use evidence unless such studies were explicitly linked to international trade. This matters because trade liberalization may affect women not only through wages, employment, and firm participation, but also through changes in unpaid work, leisure, household bargaining, and social reproduction. Foundational trade-related modelling work, such as Fontana and Wood (2000) analysis of women “at work and at home,” shows how trade shocks can be examined jointly with market work, household work, and leisure. However, time-use evidence remains less systematically integrated into the trade–gender literature. As a result, the unpaid-care channel may be underrepresented relative to labor-market, firm-level, and policy-agreement outcomes in the present synthesis. Future research should link trade exposure with time-use surveys, care-economy modelling, and gender-disaggregated household data to better capture the full welfare consequences of trade.

**Disclosure:** Authors declare no competing interest.

**Funding:** Authors did not receive any funding or grant to support the research.

**Data Availability:** Data were sourced from Scopus and can be made available on reasonable request from the corresponding author

## References

- Acharya, R., Falgueras Alamo, O., Al-Battashi, S. M. T., der Boghossian, A., Ghei, N., Parco Herrera, T., and Wolff, C. (2019). Trade and women – Opportunities for women in the framework of the World Trade Organization, *Journal of International Economic Law*, vol. 22, no. 3, pp. 323–354. <https://doi.org/10.1093/jiel/jgz023>
- Amiti, M., Redding, S. J., and Weinstein, D. E. (2019). The impact of the 2018 tariffs on prices and welfare, *Journal of Economic Perspectives*, vol. 33, no. 4, pp. 187–210. <https://doi.org/10.1257/jep.33.4.187>
- Artuc, E., Depetris Chauvin, N., Porto, G. & Rijkers, B. (2023). Protectionism and Gender Inequality in Developing Countries. *Journal of Globalization and Development*, vol 14, no. 2, pp. 177-222. <https://doi.org/10.1515/jgd-2022-0023>
- Atkin, D. (2016). Endogenous skill acquisition and export manufacturing in Mexico, *American Economic Review*, vol. 106, no. 8, pp. 2046–2085. <https://doi.org/10.1257/aer.20120901>
- Aterido, R., Beck, T., and Iacovone, L. (2013). Access to finance in Sub-Saharan Africa: Is there a gender gap?, *World Development*, vol. 47, pp. 102–120. <https://doi.org/10.1016/j.worlddev.2013.02.013>
- Bahri, A. (2020). Women at the frontline of COVID-19: Can gender mainstreaming in free trade agreements help?, *Journal of International Economic Law*, vol. 23, no. 3, pp. 563–582. <https://doi.org/10.1093/jiel/jgaa023>

- Banerjee, U., Castro Peñarrieta, L., and Chakraborty, P. (2025). Can trade policy change gender equality? Evidence from Chile, *Journal of International Economics*, vol. 157, article 104143. <https://doi.org/10.1016/j.jinteco.2025.104143>
- Bataka, H. (2024). Global value chains participation and gender inequalities in Sub-Saharan Africa: Importance of women education, *International Economics*, vol. 178, article 100483. <https://doi.org/10.1016/j.inteco.2024.100483>
- Beck, E., Aguilera, M., & Schintz, J. (2017). Who Benefits? The Interactional Determinants of Microfinance's Varied Effects. *The Journal of Development Studies*, vol. 54, pp. 235–255. <https://doi.org/10.1080/00220388.2017.1296570>
- Ben Yahmed, S., and Bombarda, P. (2020). Gender, informal employment and trade liberalization in Mexico, *The World Bank Economic Review*, vol. 34, no. 2, pp. 259–283. <https://doi.org/10.1093/wber/lhy020>
- Berik, G., Rodgers, Y. V. D. M., and Zveglic, J. E. (2004). International trade and gender wage discrimination: Evidence from East Asia, *Review of Development Economics*, vol. 8, no. 2, pp. 237–254. <https://doi.org/10.1111/j.1467-9361.2004.00230.x>
- Black, S. E., and Brainerd, E. (2004). Importing equality? The impact of globalization on gender discrimination, *ILR Review*, vol. 57, no. 4, pp. 540–559. <https://doi.org/10.1177/001979390405700404>
- Braun, V., and Clarke, V. (2006). Using thematic analysis in psychology, *Qualitative Research in Psychology*, vol. 3, no. 2, pp. 77–101. <https://doi.org/10.1191/1478088706qp063oa>
- Brussevich, M. (2018). Does trade liberalization narrow the gender wage gap? The role of sectoral mobility, *European Economic Review*, vol. 109, pp. 305–333. <https://doi.org/10.1016/j.euroecorev.2018.02.007>
- Cagatay, N. (2001). *Trade, Gender and Poverty*, New York: UNDP.
- Casale, D. M. (2012). Indirect taxation and gender equity: Evidence from South Africa, *Feminist Economics*, vol. 18, no. 3, pp. 25–54. <https://doi.org/10.1080/13545701.2012.716907>
- Duesterhaus, M., Grauerholz, L., Weichsel, R., & Guittar, N. A. (2011). The cost of doing femininity: Gendered disparities in pricing of personal care products and services. *Gender Issues*, vol. 28, no. 4, pp. 175–191. <https://doi.org/10.1007/s12147-011-9106-3>
- Ederington, J., Minier, J., & Troske, K. R. (2009). *Where the girls are: trade and labor market segregation in Colombia* (No. 4131). IZA Discussion Papers. <https://doi.org/10.2139/ssrn.1395078>
- Elson, D. (Ed.). (1991). *Male Bias in the Development Process*. Manchester University Press. [https://doi.org/10.1016/S0305-750X\(00\)00033-4](https://doi.org/10.1016/S0305-750X(00)00033-4)
- Fontana, M., and Wood, A. (2000). Modeling the effects of trade on women, at work and at home. *World Development*, vol. 28, no. 7, pp. 1173–1190.
- Gaddis, I., and Pieters, J. (2017). The gendered labor market impacts of trade liberalization: Evidence from Brazil, *Journal of Human Resources*, vol. 52, no. 2, pp. 457–490. <https://doi.org/10.3368/jhr.52.2.1014-6690R1>
- Gailes, A., Gurevich, T., Shikher, S., & Tsigas, M. (2018). Gender and income inequality in United States tariff burden. *US International Trade Commission Working Paper*, 8.

- Gupta, A. (2021). Effect of trade liberalization on gender inequality: The case of India, *IMF Economic Review*, vol. 69, no. 4, pp. 682–720. <https://doi.org/10.1057/s41308-021-00143-7>
- Gurevich, T., and Riker, D. (2018). Exporting and gender earnings differentials in the US manufacturing sector, *USITC Economics Working Paper Series*, Working Paper 2018–11–A.
- Folbre, N. (2001). *The Invisible Heart: Economics and Family Values*. New Press.
- Hannah, E., Roberts, A., and Trommer, S. (2021). Gender in global trade: Transforming or reproducing trade orthodoxy?, *Review of International Political Economy*, vol. 29, no. 4, pp. 1368–1393. <https://doi.org/10.1080/09692290.2021.1915846>
- Heath, R., and Mobarak, A. M. (2015). Manufacturing growth and the lives of Bangladeshi women, *Journal of Development Economics*, vol. 115, pp. 1–15. <https://doi.org/10.1016/j.jdeveco.2015.01.006>
- Juhn, C., Ujhelyi, G., and Villegas-Sanchez, C. (2014). Men, women, and machines: How trade impacts gender inequality, *Journal of Development Economics*, vol. 106, pp. 179–193. <https://doi.org/10.1016/j.jdeveco.2013.09.009>
- Kanze, D., Huang, L., Conley, M. A., & Higgins, E. T. (2018). We ask men to win and women not to lose: Closing the gender gap in startup funding. *Academy of management journal*, vol 61, pp. 586-614. <https://doi.org/10.5465/amj.2016.1215>
- Karam, F., & Zaki, C. (2024). When Trade Agreements Are Gender-Friendly. *Journal of Economic Integration*, vol 39, no. 4, pp. 875-898. <https://doi.org/10.11130/jei.2024036>
- Keller, W., & Utar, H. (2022). Globalization, gender, and the family. *The Review of Economic Studies*, vol 89, no. 6, pp. 3381–3409. <https://doi.org/10.1093/restud/rdac012>
- Kis-Katos, K., Pieters, J., and Sparrow, R. (2018). Globalization and social change: Gender-specific effects of trade liberalization in Indonesia, *IMF Economic Review*, vol. 66, no. 4, pp. 763–793. <https://doi.org/10.1057/s41308-018-0065-5>
- Kongar, E. (2006). Is deindustrialization good for women? Evidence from the United States. *Feminist Economics*, vol. 14, no. 1, pp. 73-92. <https://doi.org/10.1080/13545700701716680>
- Marques, H. (2015). Does the gender of top managers and owners' matter for firm exports?, *Feminist Economics*, vol. 21, no. 4, pp. 89–117. <https://doi.org/10.1080/13545701.2015.1029958>
- Martin, L. M., and Tiu Wright, L. (2005). No gender in cyberspace? Empowering entrepreneurship and innovation in female-run ICT small firms, *International Journal of Entrepreneurial Behavior & Research*, vol. 11, no. 2, pp. 162–178. <https://doi.org/10.1108/13552550510590563>
- Mongeon, Philippe, and Adèle Paul-Hus. "The journal coverage of Web of Science and Scopus: a comparative analysis." *Scientometrics* 106.1 (2016): 213-228. <https://doi.org/10.1007/s11192-015-1765-5>
- Monteiro, J. A. (2021). The evolution of gender-related provisions in regional trade agreements, *WTO Staff Working Paper*, No. ERSD-2021-8.
- Muravyev, A., Talavera, O., and Schäfer, D. (2009). Entrepreneurs' gender and financial constraints: Evidence from international data, *Journal of Comparative Economics*, vol. 37, no. 2, pp. 270–286. <https://doi.org/10.1016/j.jce.2008.12.001>

- Ngai, L. R., and Petrongolo, B. (2017). Gender gaps and the rise of the service economy, *American Economic Journal: Macroeconomics*, vol. 9, no. 4, pp. 1–44. <https://doi.org/10.1257/mac.20150253>
- Nikulin, D., & Wolszczak-Derlacz, J. (2022). GVC involvement and the gender wage gap: Micro-evidence on European countries. *Structural Change and Economic Dynamics*, 63, 268–282. <https://doi.org/10.1016/j.strueco.2022.10.002>
- Oostendorp, R. H. (2009). Globalization and the gender wage gap, *The World Bank Economic Review*, vol. 23, no. 1, pp. 141–161. <https://doi.org/10.1093/wber/lhn022>
- Pham, L. T., and Jinjarak, Y. (2023). Global value chains and female employment: The evidence from Vietnam, *The World Economy*, vol. 46, no. 3, pp. 726–757. <https://doi.org/10.1111/twec.13320>
- Razavi, S. (2007). *The Political and Social Economy of Care in a Development Context*. UNRISD Gender and Development Programme Paper No. 3.
- Rosenbaum, G. O. (2017). Female entrepreneurial networks and foreign market entry. *Journal of Small Business and Enterprise Development*, vol. 24, pp. 119–135. <https://doi.org/10.1108/JSBED-07-2016-0113>
- Sauré, P., and Zoabi, H. (2014). International trade, the gender wage gap and female labor force participation, *Journal of Development Economics*, vol. 111, pp. 17–33. <https://doi.org/10.1016/j.jdeveco.2014.07.003>
- Singh, V. K., Singh, P., Karmakar, M., Leta, J., & Mayr, P. (2021). The journal coverage of Web of Science, Scopus and Dimensions: A comparative analysis. *Scientometrics*, vol. 126, no. 6, pp. 5113–5142. <https://doi.org/10.1007/s11192-021-03948-5>
- Seguino, S. (2000). Gender inequality and economic growth: A cross-country analysis, *World Development*, vol. 28, no. 7, pp. 1211–1230. [https://doi.org/10.1016/S0305-750X\(00\)00018-8](https://doi.org/10.1016/S0305-750X(00)00018-8)
- Veeramani, C., and Banerjee, P. (2022). Exchange rate fluctuations, labour laws, and gender differences in job flows: Analysis of manufacturing industries across Indian states, *World Development*, vol. 152, article 105802. <https://doi.org/10.1016/j.worlddev.2021.105802>
- Walters, L., Chisadza, C., & Clance, M. (2024). Slave trades, kinship structures and women’s political participation in Africa. *Kyklos*, vol. 77, no. 3, pp. 734–758. <https://doi.org/10.1111/kykl.12384>
- Welch, C. L., Welch, D. E., and Hewerdine, L. (2008). Gender and export behaviour: Evidence from women-owned enterprises, *Journal of Business Ethics*, vol. 83, no. 1, pp. 113–126 <https://doi.org/10.1007/s10551-007-9652-5>

## Appendix

Table A1: *Quality appraisal matrix*

Study Type	Appraisal Criteria	Scoring (0 = weak, 1= moderate, 2= strong)
Quantitative/Empirical	Data transparency; appropriateness of identification strategy; control of confounders; robustness checks; clarity of outcome measurement	0-2
Qualitative/Case Study	Clarity of research question; case-selection rationale; data-source transparency; analytical rigor; evidence-to-claim consistency	0-2

Theoretical/Conceptual	Conceptual clarity; engagement with feminist economics/trade theory; internal coherence; contribution to framework building	0-2
Policy/Institutional	Source transparency; legal/policy specificity; institutional relevance; clarity of causal/policy mechanisms	0-2
Review/Bibliometric	Search transparency; inclusion criteria; reproducibility; synthesis logic	0-2

Table A2: Scoring based on appraisal

Quality Category	Score Range	Use in Synthesis
High confidence	8-10	Central evidence in thematic claims
Moderate confidence	5-7	Supporting evidence
Low confidence	0-4	Used only for mapping/context, not for strong claims

Table A3: Distribution of study confidence levels by thematic cluster

Themes	Total Studies	High Confidence n(%)	Moderate Confidence n(%)	Low Confidence n(%)
Trade liberalization and labor markets	140	79 (56.4%)	38 (27.14%)	23 (16.42%)
Women as entrepreneurs and exporters	50	28 (56%)	13 (26%)	9 (18%)
Tariffs, Trade Costs, and Informal Cross-Border Trade	45	20 (44.44%)	15 (33.33%)	10 (22.22%)
Global value chains and digital trade	55	32 (58.18%)	14 (25.45%)	9 (16.36%)
Gender in Trade Policy and Agreements	44	18 (40.91%)	16 (36.36%)	10 (22.72%)

Table A4: PRISMA Checklist

Section and Topics	Item No.	PRISMA 2020 Checklist Item	Location in Manuscript	Reported Details
Title	1	Identify the report as a systematic review.	Title page; Abstract	The title identifies the conceptual focus of the paper. The abstract identifies the study as a “PRISMA-guided systematic literature review.”
Abstract	2	Abstracts checklist	Abstract	The abstract reports the review objective, broad methodological approach, thematic synthesis, key findings, and research gaps. Since this is not a meta-analysis, effect estimates are not reported.
Introduction: Rationale	3	Describe the rationale for the review in the context of existing knowledge.	Section 1: Introduction	The introduction explains why the gender–trade literature requires synthesis, highlighting the limits of conventional trade theory and the need to integrate feminist economics.
Introduction: Objectives	4	Provide an explicit statement of the objective(s) or question(s) the review addresses.	Section 1: Introduction	The paper states four objectives: mapping thematic clusters, summarizing findings and debates, identifying gaps, and suggesting future research directions.
Methods: Eligibility criteria	5	Specify inclusion and exclusion criteria and how studies were grouped for synthesis.	Section 3.2; Section 3.3, Appendix Table A1	Studies were included if they explicitly examined international trade and analyzed gendered impacts. Studies were excluded if gender appeared only as a control variable or if there was no direct trade–gender relevance. Thematic grouping is reported in Appendix

				Table A1.
Methods: Information sources	6	Specify all databases, registers, websites, organizations, reference lists, and other sources searched or consulted; specify the date when each source was last searched.	Section 3.1	Scopus was used as the main database. The search was conducted on 16 November 2025 and updated on 3 December 2025. Grey literature and three working papers were consulted for contextual understanding, while citation searching/backward snowballing was used to identify relevant additional sources. A Web of Science sensitivity check was conducted to assess the robustness of the Scopus-based review structure. EconLit was not used because institutional access was unavailable, and SSRN was excluded from the formal sensitivity check because the core review was restricted to peer-reviewed journal articles.
Methods: Search strategy	7	Present the full search strategies for all databases, registers, and websites, including filters and limits.	Section 3.1	The Scopus search string is reported: TITLE-ABS-KEY ((“international trade” OR trade OR globalization OR export* OR import* OR “global value chain” OR GVC* OR “free trade agreement*” OR “regional trade agreement*” OR “digital trade” OR “cross-border trade”) AND (gender OR women OR female OR “gender inequality” OR “gender gap”). Filters include 2000–2025, English, peer-reviewed journal articles, final publication stage, and selected subject areas.
Methods: Selection process	8	Specify the methods used to decide whether a study met inclusion criteria, including number of reviewers and whether reviewers worked independently.	Section 3.3	The manuscript reports title/abstract screening, full-text assessment, exclusion of studies without substantive trade–gender focus, and final inclusion of 334 studies. The revised PRISMA flow diagram reports records identified, records removed before screening, records screened, reports sought for retrieval, reports assessed for eligibility, exclusions, and included studies. The data collection, screening, analysis framework was done by first author. Second author reviewed a stratified sample of records across the themes and supervised the work.
Methods: Data collection process	9	Specify methods used to collect data from reports, including number of reviewers, piloting of forms, and confirmation from investigators if applicable.	Section 3.4, Appendix Table A4	The manuscript reports that details on context, methodology, and key findings were extracted. A structured codebook was developed iteratively during the coding process. Coding decisions were documented systematically, and a subset of studies was re-reviewed at later stages to ensure consistency in classification.
Methods: Data items	10	a) List and define all outcomes for which data were sought.	a) Section 3.4; Sections 5.1–5.5 b) Section 3.4;	a) Outcomes include female employment, wage gaps, labor-market segmentation, export

		b) List and define all other variables for which data were sought.	Appendix Tables A1–A3	participation, entrepreneurship, tariff burden, informality, services/digital trade participation, GVC participation, and gender provisions in trade agreements. b) Variables extracted include region, period, methodology, sectoral focus, thematic category, trade channel, and gender-related mechanism.
Methods: Study risk of bias assessment	11	Specify methods used to assess risk of bias or quality of included studies, including number of reviewers.	Section 3.2; Appendix Tables A1–A2	The manuscript now reports a structured quality-appraisal approach. Empirical studies were assessed using criteria such as data transparency, appropriateness of identification strategy, treatment of confounding, robustness checks, and measurement clarity. Qualitative, theoretical, policy/legal, and review-based studies were assessed using criteria such as analytical coherence, source adequacy, research design transparency, and relevance to the trade–gender nexus. Studies were classified as high-, moderate-, or low-confidence evidence, and the appraisal shaped the weight assigned to findings.
Methods: Effect measures	12	Specify effect measures used for each outcome.	Not applicable	Not applicable because the paper does not estimate pooled effect sizes or conduct meta-analysis. The synthesis is qualitative/thematic rather than statistical.
Methods: Synthesis methods	13	a) Describe the processes used to decide which studies were eligible for each synthesis. b) Describe any methods required to prepare data for presentation or synthesis. c) Describe any methods used to tabulate or visually display results of individual studies and syntheses. d) Describe methods used to synthesize results and provide rationale. e) Describe any methods used to explore causes of heterogeneity among study results. f) Describe any sensitivity analyses conducted to assess robustness of synthesized results.	a) Section 3.4; Appendix Table A1 b) Section 3.4; Appendix Tables A1–A3 c) Section 4; Figures 3–7; Appendix Tables A2–A3 d) Section 3.4 e) Sections 5 and 6 f) Section 3.1	a) Studies were allocated to five thematic clusters through reflexive thematic analysis. Inclusion within themes was based on substantive fit with trade–gender mechanisms. b) Data were coded by context, methodology, sector, and key findings. Descriptive tables summarize publication period, method, sector, and theme. c) The manuscript uses descriptive tables, thematic clusters, publication trends, source distribution, citation patterns, and keyword co-occurrence visualization. d) The manuscript uses Braun and Clarke’s six-phase reflexive thematic analysis: familiarization, coding, pattern identification, theme review, theme definition, and structured synthesis. e) Heterogeneity is explored narratively across region, sector, labor-market position, firm ownership, trade channel, and institutional context. f) A bibliometric sensitivity check was conducted using Web of Science. The WoS results were compared with the Scopus dataset using the ten most globally cited

				documents and the ten most relevant publication sources. The comparison showed high convergence, and a thematic scan of the most-cited WoS records did not reveal any major theme outside the five Scopus-derived clusters.
Methods: Reporting bias assessment	14	Describe methods used to assess risk of bias due to missing results in a synthesis.	Limitations section	Formal reporting-bias assessment is not applicable because no statistical synthesis is conducted. The manuscript acknowledges publication, language, and database bias due to restriction to Scopus, English-language, peer-reviewed journal articles.
Methods: Certainty assessment	15	Describe methods used to assess certainty or confidence in the body of evidence.	Section 3.2; Appendix Tables A1–A2	Certainty was assessed through a confidence-based appraisal approach. Studies were categorized as high-, moderate-, or low-confidence based on methodological rigor, transparency, relevance, and analytical coherence. High-confidence studies were used to support central claims, moderate-confidence studies as corroborating evidence, and low-confidence studies mainly for mapping or identifying emerging themes.
Results: Study selection	16	a) Describe results of search and selection process, from number of records identified to studies included. b) Cite studies that appeared to meet inclusion criteria but were excluded, and explain why.	a) Section 3.3; Figure 2 b) Figure 2; Section 3.3	a) The PRISMA flow diagram reports 2,942 records identified through Scopus, 2,086 removed before screening by database filters, 856 records screened, 434 records excluded after title/keyword/abstract screening, 422 reports sought and assessed for eligibility, 88 full-text reports excluded, and 334 studies included in the final review. b) The manuscript reports categories of exclusion rather than citing each excluded study individually. Exclusion reasons include gender mentioned only as a control variable, absence of substantive gender analysis, lack of direct trade–gender analytical linkage, and use of trade only in the context of equity and monetary analysis.
Results: Study characteristics	17	Cite each included study and present its characteristics.	Section 4; Appendix Tables A2–A3; References	The manuscript summarizes included studies by publication period, methodology, sectoral focus, region, and theme. Full references are included.
Results: Risk of bias in studies	18	Present assessments of risk of bias or quality for each included study.	Section 3.2; Appendix Tables A1–A2	The manuscript reports the quality-appraisal criteria and confidence categories used to weigh evidence in the synthesis. A study-by-study risk-of-bias table is not provided because the review is a heterogeneous thematic synthesis rather than an intervention meta-analysis.
Results: Results of individual studies	19	Present results for all outcomes for each study,	Sections 5.1–5.5	The manuscript reports major findings narratively by theme.

		including summary statistics and effect estimates where applicable.		Since this is not a meta-analysis, effect estimates are not systematically tabulated for all studies.
Results: Results of syntheses	20	a) For each synthesis, briefly summarize characteristics and risk of bias among contributing studies. b) Present results of all statistical syntheses conducted. c) Present results of investigations of possible causes of heterogeneity. d) Present results of sensitivity analyses.	a) Sections 5.1–5.5; Appendix Table A3 b) Not Applicable c) Sections 5 and 6 d) Section 3.1	a) Thematic syntheses summarize major findings across five clusters. b) Not applicable because no meta-analysis or statistical pooling was conducted. c) Heterogeneity is discussed narratively through sector, region, employment type, firm ownership, GVC position, and institutional context. d) The Web of Science sensitivity check showed strong convergence with the Scopus results in terms of leading cited documents and dominant publication sources. The thematic scan of WoS records did not identify a major theme outside the five clusters generated from the Scopus-based review.
Results: Reporting biases	21	Present assessments of risk of bias due to missing results.	Limitations section	Formal reporting-bias analysis is not applicable. The manuscript acknowledges database, language, publication, and sectoral coverage limitations.
Results: Certainty of evidence	22	Present assessments of certainty or confidence in the body of evidence.	Section 3.2; Appendix Tables A1–A2	The manuscript reports high-, moderate-, and low-confidence evidence categories. These categories indicate how strongly different studies inform the thematic claims.
Discussion: Interpretation, Limitation and Implications	23	a) Provide a general interpretation of results in the context of other evidence. b) Discuss limitations of the evidence included in the review. c) Discuss limitations of the review process. d) Discuss implications for practice, policy, and future research.	a) Sections 6 and 7 b) Section 7 c) Section 7 d) Sections 6.2 and 7	a) The manuscript interprets findings through feminist economics and trade theory, arguing that trade outcomes are gendered through labor markets, unpaid care, institutions, and power relations. b) The manuscript discusses limitations related to Scopus-only search, English-language restriction, peer-reviewed article restriction, and sectoral imbalance. c) The manuscript acknowledges database, language, and publication bias. d) The manuscript provides policy recommendations for gender-responsive trade design and identifies future research directions, including gender-aware modeling, intersectional empirical analysis, and evaluation of gender provisions.
Other information: Registration and protocol	24	a) Provide registration information for the review, including register name and registration number, or state that the review was not registered. b) Indicate where the review protocol can be accessed or state that no protocol was prepared.	a) Section 3.1 b) Sections 3.1–3.4; Appendix Tables A1–A4 c) Section 3.1	a) The manuscript states that the protocol was not prospectively registered because the review was initially designed as a thematic synthesis rather than an effect-size systematic review. b) No prospectively registered protocol exists. The final methodological protocol is reported within the manuscript

		c) Describe and explain amendments to information provided at registration or in the protocol.		through the search strategy, eligibility criteria, screening and selection process, quality-appraisal matrix, coding framework, and synthesis method. c) Not Applicable
Other information: Support	25	Describe sources of financial or non-financial support and the role of funders or sponsors.	Disclosure / Funding statement	The manuscript currently declares no competing interest and a funding statement.
Other information: Competing interests	26	Declare competing interests of review authors.	Disclosure statement	The manuscript states that the authors declare no competing interest.
Other information: Availability of data, code, and other materials	27	Report which data, code, and materials are publicly available and where they can be accessed.	Appendix / Data availability statement	The manuscript currently declares a data-availability statement

Table A5: Thematic Coding Framework

Code	Label	Definition	Inclusion Criteria	Exclusion Criteria
T1	Trade liberalization and labor markets	Studies examining gender-differentiated labor market outcomes of trade.	Empirical or theoretical analysis of trade shocks, tariffs, or openness affecting female employment, wage gaps	Studies mentioning gender only as a control variable.
T2	Women as entrepreneurs and exporters	Research on women-owned firms, export participation, access to finance, firm performance, and structural barriers to internationalization.	Analysis of women-owned SMEs, export behavior, trade finance, networks, or firm-level gender disparities.	General entrepreneurship studies without explicit trade linkage.
T3	Tariffs, Trade Costs, and Informal Cross-Border Trade	Studies analyzing gendered incidence of tariffs, consumption effects, informal trade participation	Research on tariff burden, price pass-through, informal traders or cross-border women traders.	General tax or consumption studies
T4	Global value chains and digital trade	Research examining women's participation in GVCs, structural upgrading, digital platforms, and technological change.	Studies linking GVC participation, technological upgrading, or digital trade to gender employment or wage outcomes.	Purely technological studies without trade linkage.
T5	Gender in Trade Policy and Agreements	Analyses of gender provisions in FTAs, trade governance, WTO frameworks, and institutional gender mainstreaming.	Research on gender clauses, gender impact assessments, trade governance reforms, or institutional design.	Broader gender-development studies without trade-policy component.

Table A6: Summary characteristics of the studies included in the systematic review.

Theme	By Count		By Region			By Period	
	Count	% of Total	Asia	Africa, Latin America	OECD	2000-2019	2020-2025
Trade Liberalization, Labor Markets, Women as Workers	140	42	85	35	20	65	75
Women as Entrepreneurs/Business Owners	50	15	30	12	8	18	32
Tariffs, Trade Costs, Informal Trade	45	13	28	15	2	17	28
Digital Economy, Services Trade, Gender	55	16	35	10	10	15	40
Gender in Trade Policy/Agreements	44	13	15	5	24	14	30

*Table A7: Theme wise quantitative summary of literatures*

Category	Classification	Number of studies	Percentage of studies
Publication Period	2000-2004	36	10.8
	2005-2009	39	11.7
	2010-2014	46	13.8
	2015-2019	61	18.3
	2020-2025	152	45.5
Methodological Approach	Quantitative	146	43.7
	Theoretical	49	14.7
	Qualitative	98	31.1
	Mixed method, Theoretical-empirical	41	12.3
Sector Focus	Mixed/General	216	64.7
	Manufacturing	62	18.6
	Agriculture	31	9.3
	Services	25	7.5