

Gründler, Klaus; Potrafke, Niklas; Schmid, Ramona; Sturm, Jan-Egbert

Working Paper

Globalization and Gender Equality

CESifo Working Paper, No. 12138

Provided in Cooperation with:

Ifo Institute – Leibniz Institute for Economic Research at the University of Munich

Suggested Citation: Gründler, Klaus; Potrafke, Niklas; Schmid, Ramona; Sturm, Jan-Egbert (2025) : Globalization and Gender Equality, CESifo Working Paper, No. 12138, Munich Society for the Promotion of Economic Research - CESifo GmbH, Munich

This Version is available at:

<https://hdl.handle.net/10419/331604>

Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

Terms of use:

Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.

CES ifo

**12138
2025**

September 2025

Working Papers

Globalization and Gender Equality

Klaus Gründler, Niklas Potrafke, Ramona Schmid,
Jan-Egbert Sturm

CES ifo

Imprint:

CESifo Working Papers

ISSN 2364-1428 (digital)

Publisher and distributor: Munich Society for the Promotion
of Economic Research - CESifo GmbH

Poschingerstr. 5, 81679 Munich, Germany
Telephone +49 (0)89 2180-2740

Email office@cesifo.de
<https://www.cesifo.org>

Editor: Clemens Fuest

An electronic version of the paper may be downloaded free of charge

- from the CESifo website: www.ifo.de/en/cesifo/publications/cesifo-working-papers
- from the SSRN website: www.ssrn.com/index.cfm/en/cesifo/
- from the RePEc website: <https://ideas.repec.org/s/ces/ceswps.html>

Globalization and Gender Equality*

Klaus Gründler^{a,b,e}, Niklas Potrafke^{b,c,e}, Ramona Schmid^{†b,c,e}, and
Jan-Egbert Sturm^{d,e}

^aUniversity of Kassel

^bifo Institute, Munich

^cUniversity of Munich (LMU)

^dKOF Swiss Economic Institute, ETH Zurich

^eCESifo, Munich

September 14, 2025

This paper has been accepted for publication in World Development.

Abstract

Legal rights continue to differ between women and men, particularly in developing countries. In this paper, we examine whether economic integration can improve gender equality by law. We design a novel instrumental variable strategy based on regional waves of globalization, which serve as strong exogenous predictors of national globalization trends. Our main estimate suggests that an increase of one-third in the globalization index, equivalent to a permanent transition from Indonesia to the United States, is associated with a 12.1% increase in gender equality, measured by the extent to which men and women are treated equally by law. We also find that this effect is almost entirely driven by *de facto* globalization. Linking globalization to more than 300,000 individuals from about 100 countries, we provide evidence for a microfoundation of the macroeconomic effects.

JEL-Classification: F68; F61; O11; O57; K38

Keywords: Gender equality; globalization; economic integration; culture.

*We are grateful for constructive comments and feedback from Daniel Meierrieks, Timo Wochner, the participants of the 2024 European Public Choice Society Meetings in Vienna, the 2024 Silvaplana Political Economy Workshop, and from two anonymous reviewers.

†Corresponding author. Ludwig-Maximilian University of Munich (LMU) ifo Institute for Economic Research, Munich, and CESifo, Munich. Poschingerstraße 5, 81679 Munich, Germany. E-Mail: ramona.schmid@ifo.de.

1 Introduction

Since the end of World War II, the world has seen a remarkable increase in international economic integration (“globalization”). A large and growing literature has examined the consequences of this globalization process (e.g., [Potrafke, 2015](#) and [Potrafke and Sturm, 2025](#)). While the *economic* effects of globalization—e.g., on economic efficiency, income distribution, or the size of government—are increasingly well understood, the evidence on *cultural* effects is much scarcer (e.g., [Robertson, 1992](#); [Jensen et al., 2011](#)). The dominant question in this strand of literature is whether exposure to other cultures through economic interaction affects national values and norms. Such a mechanism would be particularly important for developing countries. Previous studies have raised the question of whether economic integration can promote the spread of gender equality norms and values. Despite progress over the past years, women in many developing countries are still severely disadvantaged in access to human rights, economic opportunities, and political voice ([Eastin, 2018](#)). Given the prevailing discrimination of women under the law, promoting gender equality is an integral part of the Sustainable Development Goals established by the United Nations.

While the empirical evidence to date generally suggests a positive correlation between globalization and gender equality (e.g., [Potrafke and Ursprung, 2012](#)), the findings are mixed and context-dependent. There is also little evidence on the anatomy and economic mechanisms underlying this relationship. In this paper, we provide the most comprehensive evidence to date that globalization promotes gender equality. We establish this result using rich longitudinal data for nearly 190 countries observed over the past five decades. Our study goes beyond the previous literature in three important ways. First, we design an instrumental variable approach that uses regional waves of globalization as a source of exogenous variation that affects a country’s globalization trends. This design allows us to isolate the narrow path from globalization to gender equality from potential endogeneity caused by reverse causation and unobserved confounders. We estimate that a permanent increase in globalization by one relative standard deviation (32.6% of our globalization index), equivalent to a transition from Indonesia to the United States or from Thailand to Sweden, is associated with an increase in gender equality of 12.1%. Examining potential mechanisms underlying this effect, we find that globalization is positively related to female labor force participation and the share of women working in the formal sector. These results imply that increased employment opportunities of women might increase their bargaining power to advocate for improved legal rights. Also, we find that globalization is positively associated with a number of proxies for increased inter-national and inter-cultural exchange,

providing support for the argument that globalization can lead to the import of gender-progressive norms and values (e.g. [Black and Brainerd, 2004](#)). Second, we show that the effect of globalization on gender equality is mainly driven by *de facto* globalization via actual flows and activities rather than *de jure* globalization trends initiated by trade policies and institutions. The strong impact of *de facto* globalization is in line with the argument that the shift in cultural norms and values is driven by repeated cross-border interactions. We also show that the impact of globalization on gender equality is largest in countries with lower incomes, underscoring the potential of greater cultural exchange via economic integration to boost gender equality in developing countries. Finally, we use micro-level data from more than 300,000 individuals and about 100 countries between 1980 and 2021 to examine the impact of globalization on individual-level attitudes toward gender equality. This analysis yields results that are strongly consistent with the effects identified at the macro level. The microfoundation of the link between globalization and gender equality alleviates previous concerns about an ecological fallacy when macroeconomic results obtained through group averages are projected onto the behavior of individuals.

Our results have important policy implications. The substantial impact of globalization on gender equality suggests that increasing cross-national integration may be a useful policy tool to promote equality rights. These findings are particularly important for developing countries, where gender equality still lags behind. Importantly, our results suggest that only those parts of globalization that are materialized through realized flows are crucial for greater gender equality rights. These findings suggest that actual cross-national integration, which leads to repeated cross-cultural interaction, contributes to gender equality. Means of *de jure* globalization, such as free trade agreements or monetary unions, may be fertile ground for eventual improvements in gender equality but are not sufficient in themselves to promote gender equality.

Contribution to the literature: Our study is related to the literature on the relationship between globalization and gender equality (e.g., [Richards and Gelleny, 2007](#), [Neumayer and De Soysa, 2011](#), [Potrafke and Ursprung, 2012](#), [Cho, 2013](#)). While many empirical studies have uncovered a generally positive relationship between globalization and gender equality, some studies also find that increased international competition can deteriorate women’s labor conditions, ultimately leading to the reinforcement of patriarchal norms and gendered stereotypes. Common to all of these studies is that there is little evidence on the mechanisms underlying a correlation between globalization and gender equality. In particular, the evidence so far provides little indication as to whether the observed correlations reflect a

causal effect and whether globalization actually shapes social attitudes toward gender equality at the individual level. Moreover, while previous studies have shown that it is important to distinguish between de facto and de jure elements of institutions, policies, and their outcomes (e.g., [Feld and Voigt, 2003](#), [Voigt *et al.*, 2015](#), [Bjørnskov and Voigt, 2021](#), [Berggren and Bjørnskov, 2022](#), [Bjørnskov *et al.*, 2022](#), and [Gutmann *et al.*, 2023](#)), only a few studies have examined differences in de facto versus de jure globalization (e.g., [Gygli *et al.*, 2019](#), [Jha and Gozgor, 2019](#), [Fang *et al.*, 2021](#), [Haelg *et al.*, 2022](#), [Berggren and Bjørnskov, 2023](#), and [Berdiev *et al.*, 2023](#)). We contribute to the literature by showing that the positive relationship between globalization and gender equality is robust to endogeneity designing an instrumental variable approach. Using data on more than 300,000 individuals living in nearly 100 countries, we find that the individual-level results are consistent with the macro-level results. Taken together, the results provide strong evidence for a positive effect of globalization on gender equality. Our findings offer a counterpoint to earlier studies emphasizing the adverse effects of globalization on women’s rights, while lending support to more recent research that highlights its potential to foster gender equality. Our results show that such an effect may set in particularly when international integration increases exposure to gender-progressive norms and values that may promote more equitable attitudes and institutions. Examining the anatomy of this effect, we also find that de facto trends in globalization are more important than de jure trends.

We also examine the role of women in society and contribute new insights to the scarce literature on the cultural consequences of globalization. To date, the literature has focused mainly on the economic consequences of globalization. Regarding the cultural consequences, [Berggren and Bjørnskov \(2023\)](#) investigate whether globalization has suppressed social trust. Using an epidemiological model in which the social trust of first- and second-generation immigrants is related to the level of the KOF Globalisation Index of their countries of origin several decades earlier, they guarantee geographical and temporal separation and can thus rule out reverse causality. Overall, they conclude that globalization has not suppressed social trust. Similarly, [Berggren and Nilsson \(2015\)](#) examine whether economic, social, and political globalization affects parents’ willingness to teach tolerance to their children. In this context, social globalization is identified as the most important factor in teaching tolerance and cultural proximity.

We also contribute to the literature that examines the determinants of gender equality (e.g., [Cooray and Potrafke, 2011](#), [Davis and Williamson, 2022](#)). An important part of gender inequalities is reflected in the labor market. For example, [Joslin and Nordvik \(2021\)](#) provide evidence on the impact of an economic boom

on female labor force participation. Labor market literature also provides evidence on substantial differences in pay between men and women influenced for example by gender-specific occupational choices and technological progress (e.g., Keller, 2019, Barth *et al.*, 2021, and Aksoy *et al.*, 2021). In the United States, decreases in pathogen prevalence were associated with reductions in gender inequality as measured by an encompassing indicator including: political representation, wage inequality, linguistic representation in cultural products, and sexist work attitudes (Varnum and Grossmann, 2016).

Scholars also examine whether female political leaders are more active in promoting gender-sensitive policies than male political leaders (e.g., Carozzi and Gago, 2023). Jung (2023) describes how female leaders influence gender equality in the legal system, showing that female leadership promotes equal laws for men and women. In this context, Reuben and Timko (2018) examine differences in the effectiveness of male and female leaders. They show that, overall, democratically elected leaders are more effective than randomly selected leaders. However, the initial advantage of being elected applies only to male leaders. This gender difference disappears over time, as unsuccessful male leaders are reelected at higher rates than unsuccessful female leaders.

Our study is also related to the literature that examines globalization as a driver of human rights. For example, Dreher *et al.* (2012) use the KOF Index along with two indices of economic freedom to empirically test whether economic globalization and liberalization affect human rights. The results show that economic freedom and political globalization increase the right to physical integrity.

2 Theoretical Background: Globalization and Gender Equality

Globalization—defined as the growing interconnectedness of economies, societies, and cultures—can affect gender equality through several channels. We next briefly discuss mechanisms via which globalization can promote or undermine gender equality. Most of these theories describe that globalization leads to greater demand for female labor, but they differ in the implications of increased female labor force participation for women’s rights and gender equality. More thorough overviews of the globalization literature are provided in Goldberg and Pavcnik (2007), Docquier and Rapoport (2012), Potrafke (2015) and Potrafke and Sturm (2025).

2.1 Adverse effects of globalization

Many studies have shown that globalization fosters female labor market participation through increasing demand (e.g. [Fontana and Wood, 2000](#); [Ozler, 2000](#); [Jensen, 2012](#)). Prior work, particularly in the fields of feminist economics and development economics, suggests, however, that the rise in female labor market participation does not necessarily translate into improved labor conditions or greater bargaining power for women. Increased global competition may lead firms to disproportionately employ women as low-cost labor under precarious working conditions ([Berik et al., 2009](#); [Standing, 1999](#)). In developing countries, working conditions in export-oriented industries such as textiles and electronics are often particularly poor, and legal protections in these sectors tend to be weak or inadequately enforced ([Gray et al., 2006](#)). There is also evidence of a “race to the bottom” in labor standards within industries that compete for foreign direct investment, which has been shown to disproportionately harm women workers ([Ozler, 2000](#)).

Women’s growing participation in low-wage sectors has been associated with the reinforcement of patriarchal norms and gendered stereotypes, both within households and across broader societal structures (e.g. [Gray et al., 2006](#)). Occupation-related gender roles can also be reinforced through social network. For instance, [Munshi and Rosenzweig \(2006\)](#) show that community networks in India help women find jobs, but also lock them into lower-paid occupations, thereby preventing mobility and preserving inequality over time.

On the political front, globalization can provoke cultural and economic backlash. [Walter \(2021\)](#) shows how international economic integration can generate discontent that manifests in support for populist or conservative movements, which may oppose progressive gender policies. Similarly, [Mansfield et al. \(2021\)](#) demonstrate that while trade openness can empower some groups, it can also trigger redistributive conflicts that undermine support for gender equality initiatives.

2.2 Beneficial effects of globalization

The increased demand for female labor may also give rise to advancements in gender equality. As women gain access to income, they may acquire greater intra-household bargaining power and improved autonomy, particularly when employment occurs in the formal sector ([Becker, 2010](#)). Similarly, globalization might also contribute to improvements in educational opportunities for girls and women, when the integration into global markets raises the demand for skilled labor. Several studies find that global labor market linkages can enhance educational attainment for girls,

which contributes to long-run improvements in gender equality (e.g. [Heath and Mobarak, 2015](#)).

Growing international integration may also facilitate the diffusion of gender norms and legal standards through multinational companies, international institutions, and transnational networks. [Black and Brainerd \(2004\)](#) show that multinational corporations lead to the import of gender-equal employment practices. Moreover, international organizations often promote gender equality reforms ([Moghadam, 1999](#)). These include legal reforms related to anti-discrimination, equal pay, and maternity protection. Through advocacy, networking, and pressure on governments and institutions, these actors help spread new ideas about gender roles and challenge traditional practices ([Zhang and Huang, 2023](#); [Bexell, 2012](#)). Countries are also more likely to adopt quotas when neighboring or culturally similar countries do so, which indicates diffusion through peer influence ([Krook, 2006](#); [Hughes *et al.*, 2015](#)).

The expansion of information and communication technologies (ICT) associated with globalization has also enhanced women’s access to education, financial services, and political mobilization opportunities. These mechanisms support broader empowerment outcomes, particularly when complemented by institutional reforms (e.g. [Mansfield *et al.*, 2021](#)).

Finally, prior research also suggests that globalization can indirectly strengthen women’s rights by fostering elite incentives to liberalize in response to global norms and economic pressures ([Gray *et al.*, 2006](#)). This aligns with the broader literature on modernization and rights diffusion, in which trade and openness are associated with progressive changes in social policy ([Becker, 2010](#); [Berik *et al.*, 2009](#)).

2.3 *De jure* versus *de facto* globalization

Previous work predominantly explored globalization as such, often treating it as a unified concept. More recent studies, however, highlight the importance of distinguishing between *de jure* and *de facto* globalization, as only the latter captures the realized intensity of cross-border interactions and their potential social and economic impacts (e.g. [Gygli *et al.*, 2019](#); [Berdiev *et al.*, 2023](#)). *De jure* globalization, which typically refers to the formal adoption of international trade agreements, legal frameworks, or institutional reforms, can be seen as a necessary but not sufficient condition for economic and societal change. In contrast, *de facto* globalization captures the realized flows of goods, capital, information, and people across borders.

While *de jure* openness creates the legal infrastructure for exchange, it is *de facto* globalization that measures the extent to which the potential created by an increased legal openness has been realized. Previous research has shown that for-

mal policy adoption often fails to translate into actual change (Simmons and Elkins, 2004; Simmons *et al.*, 2006; Börzel and Risse, 2010). By contrast, prior work suggests that exposure to global markets and ideas through *de facto* channels can shift cultural attitudes and institutional behavior (Giavazzi and Tabellini, 2005; Spilimbergo, 2009).

3 Data

3.1 Gender equality

We measure gender equality by the World Bank’s Women, Business and Law (WBL) index (Hyland *et al.*, 2020). The WBL index measures gender discrimination by the law in a panel of 190 countries over the period 1970-2022. The main goal of the dataset is to provide information on possible inequality in legislation during a woman’s working life. Thereby, the considered topics are chosen on the basis of associations with measures of women’s economic empowerment and evidence from economic literature (see for example Roy, 2019).

The information about gender discrimination by law is collected by legal experts, including local experts (e.g., lawyers, judges, civil society representatives, and public officials) and experts working at the World Bank. Overall, around 10,000 experts collaborate on the WBL project. The dataset is based on a total of 35 legislative issues which are, in turn, aggregated into eight sub-indicators. Those eight sub-indicators relate to *Mobility, Workplace, Pay, Marriage, Parenthood, Entrepreneurship, Assets* and *Pensions*.¹

The data is collected in the form of expert assessments on each of the 35 topics covered by the WBL project. The respondents are experts in different fields of law (e.g., family law, labor law, and criminal law) and include lawyers, judges, academics, and members of civil society organizations across all observed countries. The legal experts within the World Bank receive the expert assessments, refer to the text of the legislation, and guarantee consistency between the responses to the questionnaire with legislative texts.

There are four to five binary questions for each of the eight topics on which the eight sub-indicators are based. The unweighted average of these questions results in the indicator-level score, which is then scaled between 1 and 100. For instance, an index score of 100 would indicate that women are not discriminated against by law regarding any of the included attributes. The unweighted average of all eight

¹A detailed description of the eight sub-indicators and a full list of all 35 legislative issues underlying them is provided in Hyland *et al.* (2020).

indicators reflects the overall index scores of gender equality identified by the WBL project.²

In 2020, the global average of the overall WBL index was 75.97, indicating that women enjoyed around 76% of the rights (covered by the index) that men enjoyed. In 2020, full gender equality by law was present in eight countries, in which the WBL index takes on the value 100. These countries were Belgium, Canada, Denmark, France, Iceland, Latvia, Luxembourg, and Sweden. On the other end of the spectrum, gender discrimination was especially pronounced in Oman, Afghanistan, the Syrian Arab Republic, Kuwait, Qatar, Sudan, Yemen, and in West Bank and Gaza. In these countries, the WBL index reached values of less than 40. Regarding the disparities between men and women within the eight sub-indicators, the highest gaps are identified internationally in the areas of *Parenthood* (53.9) and *Pay* (66.1). The highest values of the WBL sub-indicators can be found in the fields of *Assets* (81.8), *Entrepreneurship* (82.2), and *Mobility* (87.2) (World Bank, 2020).

3.2 Globalization

We measure globalization by the new KOF Globalisation Index (Dreher, 2006; Gygli *et al.*, 2019). The 2023 version of the KOF index provides indices of globalization for 203 countries between 1970 and 2021. A particular feature of the KOF index is that it distinguishes between *de facto* and *de jure* globalization. It also provides fine-grained measures for specific dimensions of globalization, including economic, social, and political globalization.

Constructing composite measures in the social sciences is essentially a three-step process, including the definition of the object that should be classified, the search for relevant data reflecting this definition, and the use of an aggregation scheme that transfers the individual attributes to a uni-dimensional index of the object (e.g., Gründler and Krieger, 2022). When the definition is broad, the estimated parameter in empirical studies might capture many things and are difficult to interpret. In contrast, when the concept is narrow, it might lack discrimination power. The KOF Globalisation Index tackles these methodological issues by providing a series of sub-dimensions covering specific facets of globalization. For each of these sub-dimensions, the KOF database distinguishes between *de facto* and *de jure* measures of globalization.

²More information on the WBL methodology with corresponding strengths and limitations is outlined in the WBL 2020 report (World Bank, 2020).

3.2.1 De jure and de facto globalization

De facto globalization: Globalization in *de facto* terms is measured via realized flows and activities. The KOF index includes two main pillars of de facto globalization, distinguishing between de facto trade and de facto financial globalization. De facto trade globalization covers, for example, the exchange of goods and services over long distances (import and exports as a share of GDP). It also considers trading partner diversity. De facto financial globalization covers capital flows and stocks and foreign assets and liabilities. *De facto social globalization* distinguishes between de facto interpersonal globalization, de facto informational globalization and de facto cultural globalization. De facto interpersonal globalization captures direct interactions among citizens living in different countries. An example is personal calls across borders which we measure by international voice traffic in minutes per capita using fixed or mobile phones. We also consider migration, tourism and foreign students and international transfers paid and received. De facto informational globalization captures the actual flows of ideas knowledge and images. We use three measures: internet bandwidth, international patents and high technology exports. De facto cultural globalization is measured by the stock of trademarks applications by non-residents, trade in cultural goods, and trade in personal, cultural and recreational services. *De facto political globalization* is measured by participation in UN Peacekeeping missions, the number of embassies and international NGOs in a country.

De jure globalization: Globalization in *de jure* terms includes factors and policies that measure, in principle, *enabled* flows and activities. The KOF index distinguishes between de jure trade and de jure financial globalization. De jure trade globalization is measured by variables on trade regulation, trade taxes, tariff rates and free trade agreements. De jure financial globalization measures the openness of a country to international financial flows and investments. It includes the Chinn-Ito index (Chinn and Ito, 2006, 2008) which measures the openness of the capital account of a country. The second variable is the number of investment agreements. *De jure social globalization* distinguishes between de jure interpersonal globalization, de jure informational globalization and de jure cultural globalization. De jure interpersonal globalization includes the number of mobile phone and telephone subscriptions per capita, the percentage of countries for which a country requires a visa from foreign visitors, and the number of airports hosting international flights. De jure informational globalization includes the number of television sets per capita, the number of people having access to the internet and the press freedom index. De jure cultural globalization includes the gender parity index on gross primary school

enrollment, the human capital index calculated in the Penn World Tables and the civil freedom index. *De jure political globalization* is measured by three variables: the number of multilateral treaties signed since 1945, the number of memberships in international organizations and treaty partner diversity.

3.2.2 Method of calculation

The KOF index is based on a total of 43 variables. For our baseline measure, we aggregate those variables into an overall index of globalization and two separate measures gauging *de facto* and *de jure* globalization. In complementary analyses, we also examine the role of more fine-grained definitions of globalization, distinguishing between *de facto* and *de jure* indices along five sub-dimensions (trade, financial, interpersonal, informational, and cultural), and three broader dimensions (economic, social, and political).

3.3 Other variables

The rest of the variables included in our analyses stem from standard sources often used in empirical macroeconomic analyses. Specifically, we take life expectancy at birth, fertility rates, the share of the population living in urban areas, as well as real per capita GDP from the World Bank’s World Development Indicators ([World Bank, 2023](#)). We also take figures on net migration from the World Population Prospects compiled by the United Nations Population Division. Measures of education are taken from the updated educational attainment database from [Barro and Lee \(2013\)](#). Classifications of political institutions are collected from the Machine Learning Democracy indicator of [Gründler and Krieger \(2016, 2021\)](#).

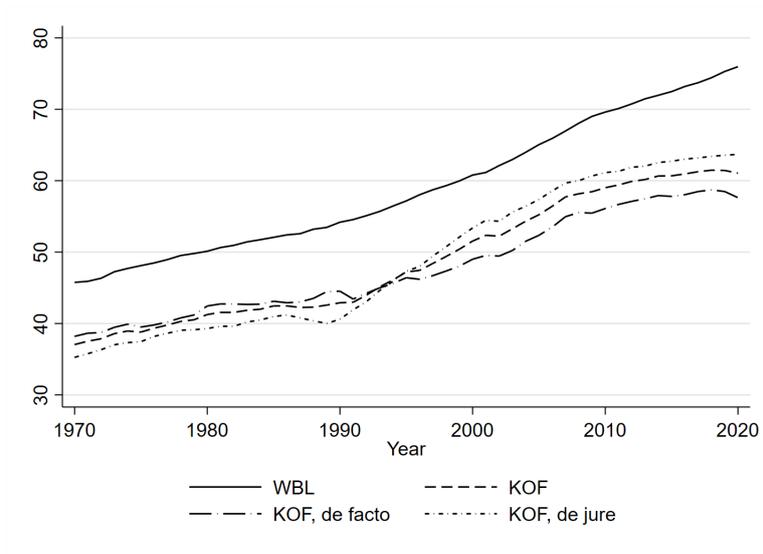
We also manually compile a dummy variable that reflects whether a country has a female leader in place at a given point in time. The underlying data stems from multiple sources, including books, scholarly articles, and online resources.

4 Descriptive statistics

4.1 Trends in gender equality and globalization over time

Global development, 1970–2020: Figure 1 shows the development of globalization and gender equality, measured via unweighted averages over all countries, between 1970 and 2020. The figure shows tremendous progress in gender equality over the past five decades. Over the time span of 50 years, the WBL index shows a steady increase by around 30 points or by 66%. A similar development is present for the overall KOF Globalisation Index, which increased by 24 points or by 65%

Figure 1 Global Trends in Gender Equality and Globalization, 1970-2020



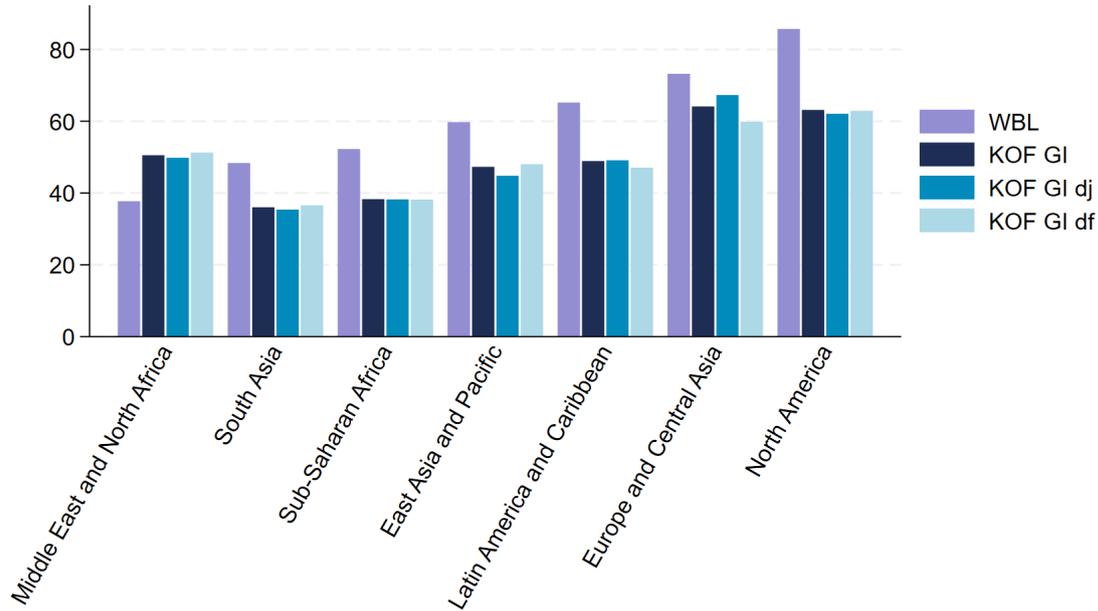
Notes: The figure shows the global development of gender equality (WBL) and globalization (overall, de jure, and de facto) over the past five decades (1970–2020). Data on gender equality comes from the database of the [World Bank \(2023\)](#). Data on overall, de jure, and de facto globalization is taken from the KOF Globalisation Index database, compiled by [Gygli et al. \(2019\)](#).

between 1970 and the early 2020s. However, in contrast to the steady improvement of gender equality, the development of globalization proceeded in *waves*. While the strong increase in globalization during the 1970s and 1980s came to a halt during the early 1990s, we observe a stark and renewed increase in globalization between the mid-1990s and the Financial Crisis of 2007-08. Thereafter, there is only a moderate increase, which even declines slightly towards the end of the observation period. The development of globalization over time suggested by the KOF index is consistent with the theory of *globalization waves* (e.g., [Chase-Dunn et al., 2000](#); [Collier et al., 2002](#)).

Distinguishing between the two sub-indices of de facto and de jure globalization, we observe heterogeneity in the development of both types of globalization over time. While higher values of de facto globalization occurred until the early 1990s, increases in de jure globalization dominated since the start of the new millennium, with the highest total value reached at the end of the observation period in 2020. The differentials in the development of de facto and de jure globalization underline the importance of distinguishing between both concepts.

Regional disparities: Despite pronounced trends on a global scale, we observe strong heterogeneity in the development of both gender equality and globalization across geographic regions (Figure 2). For the WBL index, the figure shows that

Figure 2 Mean of WBL and KOF Indices by Region, 1970-2020



Notes: The figure shows the mean values of gender equality (WBL) and globalization (overall, de jure, and de facto) over the past five decades (1970–2020) in regional comparison. Data on gender equality comes from the database of the [World Bank \(2023\)](#). Data on overall, de jure, and de facto globalization is taken from the KOF Globalisation Index database, compiled by [Gygli et al. \(2019\)](#).

gender equality is lowest in the Middle East and North Africa as well as in South Asia. The highest values can be found in North America as well as Europe and Central Asia. Regional differentials are similarly prevalent regarding globalization. Countries in North America, Europe, and Central Asia are particularly globalized, whereas globalization is much less pronounced in South Asia as well as Latin America and the Caribbean. Importantly, there are also distinct differences in the development of globalization over time (see Figure B-1 in the appendix).

Complementary sub-indices on globalization: The KOF Globalisation Index database also provides complementary indices that differentiate between economic, trade, financial, social, political, cultural, informational, and interpersonal globalization between 1970 and 2020. In Figure B-2 in the appendix, we show how globalization along these dimensions has developed over time. Similar to the patterns found for the overall globalization index, the data shows that on average, there has been an increasing trend in globalization also for other aspects of globalization. Again, we find strong regional heterogeneity in globalization patterns across the globe.

4.2 Unconditional correlations

Figure 3 presents graphical correlational evidence on the relationship between globalization and gender equality. The figure shows correlations separately for each decade covered in the data.

Overall, the descriptive statistics point to a strong positive correlation between globalization and gender equality, which is visible for each decade in our sample. While this general correlation has intensified over time, we again observe pronounced regional heterogeneity in the relationship between globalization and gender equality. For instance, the coefficient of correlation is relatively small in the Middle East and North Africa (0.40). In contrast, the correlation is twice as large in Northern America (0.80). In Figures (B-3) and (B-4) in the appendix, similar patterns can be seen for the correlations between gender equality and de facto globalization as well as de jure globalization.

4.3 Case studies

The overall correlation between globalization and gender equality is also reflected at the country level. In Appendix A, we describe some case studies that show a close relationship between increases in globalization and progress in gender equality for individual countries. These case studies provide complementary evidence for a close correlation between both variables.

5 Empirical strategy

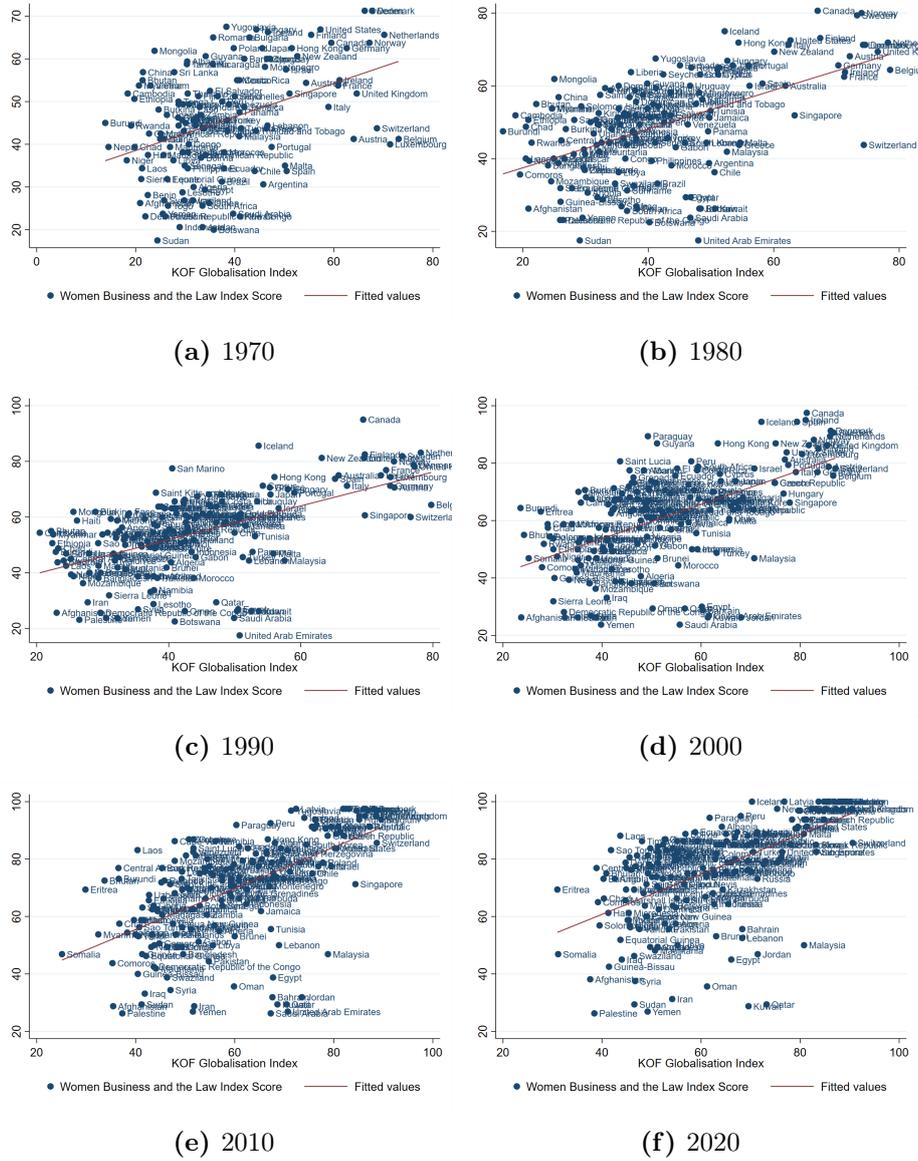
The descriptive evidence points to a positive correlation between globalization and gender equality. However, we also uncovered cross-national heterogeneity in the development of gender equality and globalization and the strength of the unconditional correlation between the variables. In the next step, we design an empirical model to account for unobserved country-specific factors and potential confounding factors.

5.1 The baseline OLS model

Our baseline approach to estimating the relationship between globalization and gender equality is a dynamic model for gender equality

$$\text{Gender Equality}_{it} = \alpha_j G_{ijt-1} + \sum_{\tau=1}^p \gamma_{\tau} \text{Gender Equality}_{it-\tau} + \mathbf{X}_{it} \boldsymbol{\beta}_j + \eta_i + \zeta_t + \varepsilon_{it} \quad (1)$$

Figure 3 Correlation between Gender Equality and Globalization, 1970-2020



Notes: The figure shows the unconditional correlation between the global development of gender equality (WBL) and globalization (overall) over the past five decades (1970–2020). Data on gender equality comes from the database of the [World Bank \(2023\)](#). Data on overall, de jure, and de facto globalization is taken from the KOF Globalisation Index database, compiled by [Gygli et al. \(2019\)](#).

where Gender Equality_{*it*} is our main gender equality measure (WBL index) for country $i = 1, \dots, 190$ at time $t = 1, \dots, 51$. Our key variables of interest are the individual indices of globalization provided by the KOF database, denoted by G_{ijt-1} , where $j = 1, \dots, 18$ refers to the j th sub-indicator. Our empirical specification uses lagged levels of globalization to estimate the response of gender norms to changes in openness that occurred one year before the observation period. The rationale of this strategy is that we expect the mechanisms underlying an effect of globalization (e.g. increased inter-cultural exchange) to materialize only after a certain amount of time. The parameter α_j estimates the correlation between globalization and gender equality conditional on a set of confounding factors that we include in the model.

5.2 Identification

Our main specifications include p lags of gender equality to account for the dynamics in gender equality prior to the observation year. The motivation for the inclusion of gender equality dynamics is the standard assumption of *sequential exogeneity* underlying linear dynamic panel data models, requiring that globalization and past gender equality are orthogonal to contemporaneous and future shocks to gender equality and that the error term ε_{it} is serially uncorrelated. It requires sufficiently many lags of our gender equality measure to be included in the model, both to eliminate the residual serial correlation and to eliminate the positive trend observable in the time series of gender equality (e.g., [Hamilton, 2018](#); [Acemoglu et al., 2019](#); [Gründler and Potrafke, 2019](#)). The results of our model are consistent if T is large and the process of the dependent variable is stationary. To ensure this requirement, our preferred specification includes four lags ($p = 4$) of gender equality (as suggested by, for example, [Hamilton, 2018](#)), but we also present variants of our model estimations for other lag structures in our set of robustness tests.

Our baseline model in Equation (1) encounters several additional threats to the validity of our estimates. First, as we have seen in the descriptive analysis, there is heterogeneity across countries in both the development of gender equality and the relationship between globalization and gender equality. Part of these differences seem to be country-specific, potentially rooted in differential cultural norms and values, historical and geographic factors, as well as fundamental differentials in institutions and the level of development. To the extent that these factors are time-invariant over the period of observation covered by our data, we absorb these factors by a full set of country-level fixed effects η_i . These effects also account for the substantially lower levels of gender equality in traditional oil-producing countries (e.g., [Ross, 2008](#); [Awoa et al., 2022](#)) and the important role of religion

(e.g., [Becker and Woessmann, 2008](#); [Norton and Tomal, 2009](#); [Cooray and Potrafke, 2011](#); [Potrafke and Ursprung, 2012](#)).

Another potential source of bias might be posed by global shocks and trends that impact the development of both globalization and gender equality. Prime examples are global economic crises (e.g., the Financial Crisis of 2007-08), health crises (e.g., the COVID-19 pandemic), and military conflicts that affect a large number of countries and regions. We account for such cross-national shocks and trends via a set of period fixed period effects ζ_t .

We also account for a set of time-variant factors that might correlate simultaneously with globalization and gender equality and which might drive the positive unconditional correlation between the variables reported in the descriptive analysis. These potential sources of confounding are stacked in the matrix \mathbf{X}_{it} . For instance, previous work has shown that on average, democracies promote gender equality more than autocracies (e.g., [Beer, 2009](#); [Cooray and Potrafke, 2011](#); [Andersen, 2023](#)), and that democracy also correlates with globalization (e.g., [Li and Reuveny, 2003](#)). To account for this relationship, our set of controls includes the ML Democracy Index compiled by [Gründler and Krieger \(2016, 2021, 2022\)](#).

Our set of controls also accounts for the entanglement of female leaders and gender equality. On the one hand, it has been shown that female leaders, on average, engage more than male leaders in enhancing gender equality in the legal system ([Jung, 2023](#)). On the other hand, female leadership might be an outcome of greater gender equality.

We also control for economic and population dynamics over our sample period, including the logarithmic level of per capita GDP, the fraction of the population living in urban areas, net migration, as well as the logarithm of the fertility rate and of life expectancy at birth. All of these variables have been shown to be related to the development of gender equality (e.g., [Norton and Tomal, 2009](#); [Jung, 2023](#)).

Any shock not covered by fixed country and fixed period effects, as well as by time-varying controls is absorbed by the idiosyncratic error ε_{ijt} . We estimate the model with Ordinary Least Squares (OLS) and standard errors robust to heteroskedasticity.

5.3 Instrumental variable approach

Our OLS estimates control for dynamics in gender equality and the influence of observable characteristics, as well as time-invariant unobserved characteristics. A remaining threat to identification comes from unobserved time-varying factors. Relatedly, the direction of impact underlying a potential correlation between the variables is unclear. In principle, a more open-minded society might also open its

economy and intensify trade relations with other nations. Also, countries with good human rights records and small gender disparities might have an advantage in attracting foreign direct investments (e.g., [Harms and Ursprung, 2002](#), [Busse and Hefeker, 2007](#), [Busse and Nunnenkamp, 2009](#)), in which case the direction of influence would (also) run from greater gender equality to globalization.

To estimate the narrow path from globalization to gender equality and to deal with time-varying omitted variables, we develop an instrumental variable strategy that uses waves of globalization in nearby countries as a source of external variation in national globalization. Our IV approach also accounts for possible measurement errors in globalization. The fundamental building block underlying our approach is that throughout the past 2.5 decades, global tendencies and reversals of integration mostly came in waves ([Chase-Dunn *et al.*, 2000](#)).

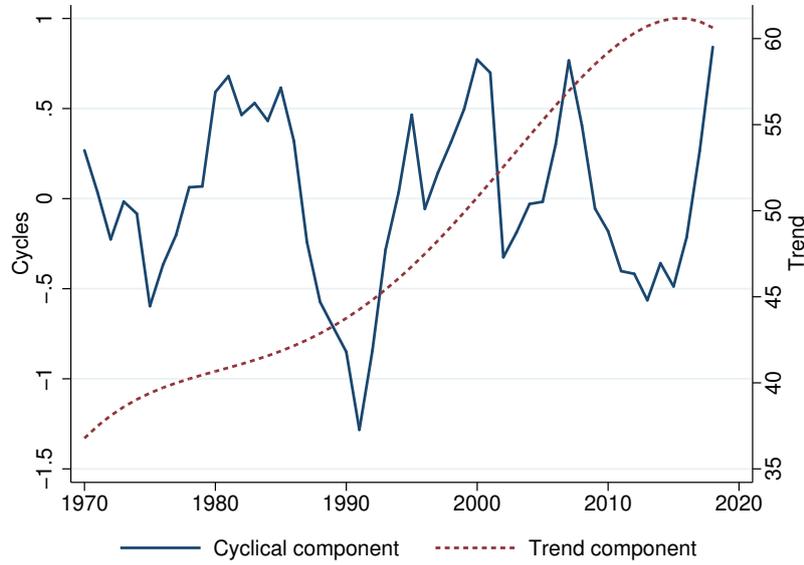
As discussed by many observers, e.g. from the World Bank ([Collier *et al.*, 2002](#)), the emergence of the “new globalizers” during the early 1980s, when many developing countries broke into the world markets, has highlighted that globalization often occurs in regional waves. The strong increase in the share of exporting manufacturing firms in the developing world, which rose from about one quarter in early 1980 to more than 80% in early 2000, is said to be the third wave of globalization ([Collier *et al.*, 2002](#)), with the first (roughly 1870–1914) and second (roughly 1945–1980) waves sharing some similarities but being driven by different fundamentals (e.g., [Baldwin and Martin, 1999](#)). In 2019, the Annual Meeting of the World Economic Forum in Davos focused on “Globalization 4.0”, discussing a potential fourth wave that centers around digital foods and services.

Figure 4 shows the existence of globalization waves in our data. Panel (a) shows trends and cyclical movements of globalization across countries. The identified patterns are consistent with the theories of globalization waves *globally*. In Panel (b), we inspect regional disparities, computing the standard deviation between the mean level of globalization per region on the globe. The regional classification, which is taken from [Gründler and Krieger \(2022\)](#), distinguishes each continent into four homogeneous sub-regions. We find that the standard deviation between regions changes substantially over time, suggesting that the waves of globalization proceed differently across regions.

The main argument underlying our instrumental variable approach is that regional waves of globalization can serve as exogenous variations impacting national globalization trends, and hence can serve as instrumental variables for national globalization. The important assumption underlying this strategy is that conditional on lags of gender equality, year and country fixed effects, as well as a number of observed time-varying confounding factors, the regional level of globalization (G_{it}^{reg})

Figure 4 Trends in Globalization and Cross-Regional Disparities, 1970-2020

(a) Global waves in globalization



(b) Cross-regional differences



Notes: The figure shows the global development of globalization and regional disparities. Panel (a) shows trends in globalization and globalization waves across countries. Panel (b) shows disparities in the development of globalization across regions. Data on globalization is taken from the KOF Globalisation Index database, compiled by Gygli *et al.* (2019). Trends are obtained using a de-trending approach that is based on a polynomial function of globalization of degree four. Cross-regional disparities are computed based on the standard deviation across mean levels for regions. The regional classification is taken from Gründler and Krieger (2022).

has no direct effect on gender equality of country i at time t (“*exclusion restriction*”). Economically, this means that regional waves are significant determinants of national globalization, but are not themselves caused by national changes in gender equality.

One important element of the exclusion restriction is that our instrument for country i of region r excludes i ’s globalization level and uses trends only from other countries that are located in r . To operationalize this design, we compute jack-knife regional averages of globalization via

$$G_{it}^{\text{reg}} = \frac{1}{|\mathcal{R}|} \sum_{w \in \mathcal{R}} G_{w,t} \quad \text{and} \quad \mathcal{R} = \{w : w \neq i, r_w = r_i\} \quad (2)$$

and G_{it-2}^{reg} as an instrumental variable for G_{ijt-1} in Equation (1). The remaining threat to the validity of our IV approach is a potential correlation between regional gender equality and regional globalization, which does not work through the effect of a country’s own globalization on its level of gender equality. To verify that our results are not driven by such correlated regional trends, all estimates are presented both with and without controlling for a range of other factors that may also spread across countries in the same region. Another threat to the validity of the exclusion restriction might be that gender reforms and globalization evolve simultaneously as parts of a broader national policy shift. We take several steps to rule out and address this concern. First, we account for broader national reform trends by controlling for changes in political institutions and democratization in our baseline model. Second, we use lags of globalization to further reduce simultaneity concerns. Third, we design an event study approach inspecting whether there are distinct patterns in gender rights in the years leading to major globalization episodes, measured by WTO accession. The results, presented in Figure B-5 in the appendix, show no distinct trends in female rights prior to major globalization events, but reveal a significant improvement in women’s rights some time after such events took place.

6 Results

6.1 Baseline

Table (1) reports our baseline OLS results on the relationship between globalization and gender equality. In Panel A, we present estimates obtained from a parsimonious model that only accounts for globalization and dynamics in gender equality before the observation year. Panel B reports results from comprehensive models that augment the parsimonious specifications of Panel A with a set of control variables (see section 5).

The main result, which appears similarly in the parsimonious and the full model specifications, is that globalization is positively associated with gender equality. The results also suggest that this relationship is driven primarily by *de facto* globalization rather than by *de jure* globalization. Column (I) shows estimates for the overall globalization index, uncovering a significant relationship between globalization and gender equality, both in statistical and economic terms ($t = 5.23$).

In Columns (II)–(IV), we inspect whether *de facto* or *de jure* globalization is the main driver behind the substantial relationship between globalization and gender equality. While both variables are positively correlated with gender equality, the parameter estimates for *de facto* globalization are larger than for *de jure* globalization, both in the parsimonious and the full model specification. Column (IV) presents results from a horse race between both types of globalization, accounting for the fact that the *de jure* sub-index correlates with elements of *de facto* globalization and vice versa. When we include both types of globalization in the same model, we find that *de facto* globalization is the stronger correlate with gender equality, while the coefficient on *de jure* globalization becomes close to zero. Using a Wald test, we verify that the parameter estimate for *de facto* globalization is statistically different from the parameter estimate obtained for *de jure* globalization (p-value 0.007).

6.2 Robustness

We conduct sensitivity checks to examine the robustness of our baseline results to changes in the model specification. Tables (C-1)–(C-5) show the results of different specifications regarding the lag structure variable. Thereby the number of lags ranges between $p = 1$ and $p = 6$. Compared to our baseline model, in which the preferred specification $p = 4$ is applied, there are no major changes. In all specifications, overall globalization has a positive effect on gender equality. Further, the impact of *de facto* globalization is larger than *de jure* globalization in both the parsimonious and the full model.

6.3 Evidence for dimensions of globalization

In Tables (C-6)–(C-13) in the appendix, we provide evidence for the individual dimensions of globalization covered by the KOF Globalisation Index. The patterns identified in the baseline models reappear similarly for most of the individual dimensions of globalization. In particular, we find that *de facto* globalization dominates *de jure* trends regarding economic globalization, trade globalization, social globalization, cultural globalization, and political globalization. The strong effect of cultural globalization suggests that repeated interaction with other cultures, which

Table 1 Globalization and Gender Equality—Baseline Results

Dependent variable: Gender equality index				
	(I)	(II)	(III)	(IV)
<i>Panel A: Parsimonious model specifications</i>				
Globalization Index ($t - 1$)	0.0373*** (0.007)			
Globalization Index <i>de jure</i> ($t - 1$)		0.0176*** (0.006)		0.00378 (0.006)
Globalization Index <i>de facto</i> ($t - 1$)			0.0321*** (0.006)	0.0309*** (0.006)
Observations	8468	8540	8468	8468
Units (# of countries)	186	186	186	186
R-Squared (overall)	0.986	0.986	0.986	0.986
Country-Level Fixed Effects	Yes	Yes	Yes	Yes
Period Fixed Effects	Yes	Yes	Yes	Yes
<i>Panel B: Full model specifications</i>				
Globalization Index ($t - 1$)	0.0325*** (0.010)			
Globalization Index <i>de jure</i> ($t - 1$)		0.0137 (0.008)		0.00546 (0.009)
Globalization Index <i>de facto</i> ($t - 1$)			0.0255*** (0.007)	0.0242*** (0.007)
Observations	6213	6213	6213	6213
Units (# of countries)	157	157	157	157
R-Squared (overall)	0.985	0.985	0.985	0.985
Country-Level Fixed Effects	Yes	Yes	Yes	Yes
Period Fixed Effects	Yes	Yes	Yes	Yes
Controls	Yes	Yes	Yes	Yes

Notes: The table shows the baseline results of our estimations on the relationship between globalization and gender equality (Equation 1), with robust standard errors (clustered on the country level) reported in parentheses. Panel A reports the results from a parsimonious model in which we only account for globalization and dynamics in gender equality. Panel B augments the parsimonious model with a set of control variables that include net migration, per capita GDP, life expectancy, fertility rates, the share of population living in urban areas, the level of democracy, a dummy variable that measures whether a female leader has been in office, and the share of the population that completed at least secondary education. All estimations include fixed effects for countries and years. Data on gender equality comes from the database of the [World Bank \(2023\)](#). Data on overall, de jure, and de facto globalization is taken from the KOF Globalisation Index database, compiled by [Gygli et al. \(2019\)](#).

*** Significant at the 1 percent level

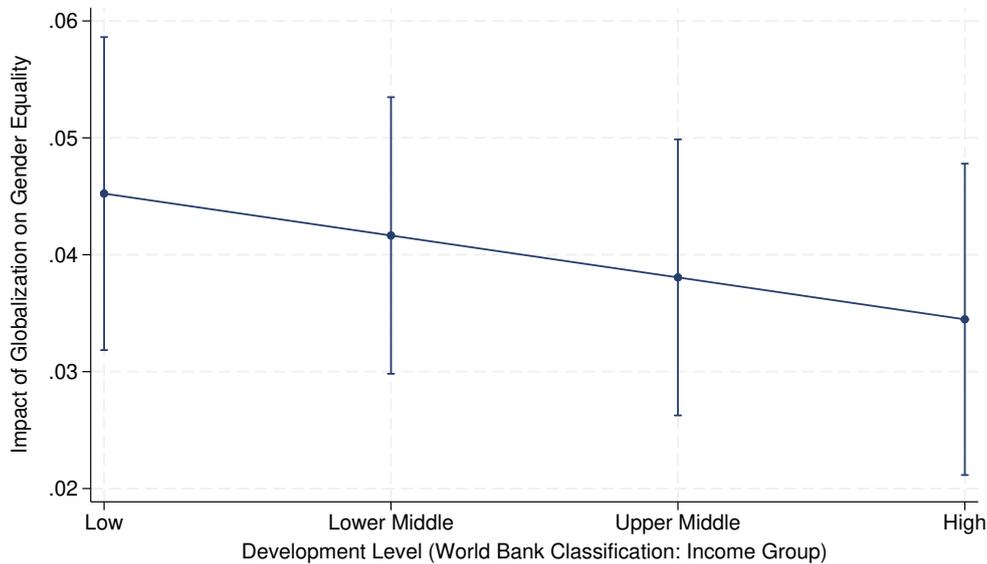
potentially put greater emphasis on equality questions, might be a transmission channel via which globalization contributes to gender equality.

6.4 Heterogeneity across development levels

Our data on gender equality shows that disparities between women and men are particularly strong in developing countries. Applying the income level classification by the World Bank, we found that the average level of gender equality for countries with low-income levels is 48.5, while it is 55.0 for lower-middle-income countries, 59.7 for upper-middle-income countries, and 68.7 for high-income countries. Given these differentials, we examine whether the impact of globalization differs across development levels.

We augment our baseline model with an interaction term between globalization and the income level classified by the World Bank. The results are shown in Figure 5. We find that globalization has a positive impact on gender equality in all country groups, but also uncover that this impact is largest in countries with lower income levels. These results suggest that increased cultural exchange via economic integration can be a boost for gender equality particularly in developing countries.

Figure 5 Impact of Globalization on Gender Equality Across Development Levels



Notes: The figure shows estimates of our baseline model, where globalization is interacted with the development level, classified using the World Bank classification of income levels (“Low income”, “Lower middle income”; “Upper middle income”; “High income”). Results refer to the overall index of globalization. Data on gender equality comes from the database of the [World Bank \(2023\)](#). Data on overall globalization is taken from the KOF Globalisation Index database, compiled by [Gygli et al. \(2019\)](#).

6.5 Mechanisms

In this section, we explore potential mechanisms through which globalization may influence gender equality as discussed in Section (2), even though we cannot definitely differentiate between these channels or exclude the presence of other mediating factors.

Globalization and female labor market outcomes: We start by investigating the relation between globalization and two main female labor market outcomes: Female labor force participation as well as wage and salaried female workers (Table 2).³ The utilized empirical model replicates our benchmark design of Equation (1), where we replace gender equality with female labor market outcomes. The results in Column (I) show that globalization is positively associated with female labor force participation, measured as the employment-to-population ratio for women aged 15 to 64. A central question is whether rising female labor force participation translates into greater employment in the formal sector, or whether it primarily reflects an expansion of precarious work in the informal economy. Column (II) explores this question, relating globalization to the share of wage and salaried female workers as a percentage of total female employment. A higher percentage suggests that more women are engaged in formal and stable employment. We find that globalization is positively associated with the share of wage and salaried workers, although this relationship is less precisely estimated. Taken together, our result regarding female labor conditions suggests that globalization increases labor market opportunities for women, particularly also in the formal sector. Appendix A provides further case study evidence on this channel for South Korea.

Globalization and international exchange: While rising female labor force participation in the formal sector may enhance women’s bargaining power to advocate for improved legal rights, a second key mechanism discussed in Section (2) concerns the role of increased intercultural exchange resulting from deeper international integration. In Table (3), we examine the relationship between globalization and six indicators of cultural exchange, each capturing distinct aspects of international exchange discussed in Section (2).⁴ Columns (I) and (II) present results for the relationship between globalization and ICT technologies, including mobile phones and broadband internet. This technological infrastructure enables cultural exchange through digital communication, media, and information sharing across borders. It also enhances access to education and financial services. In Column

³Data is taken from the [World Bank \(2025\)](#).

⁴Data is taken from the [World Bank \(2025\)](#), [Our World in Data \(2025\)](#), [UN Comtrade \(2021\)](#) and [McDonald’s \(2025\)](#).

Table 2 Globalization and Gender Equality—Female Labor Market Outcomes

	Dependent variable:	
	(I) Female labor force participation	(II) Wage and salaried workers, female (% of female employment)
Globalization Index ($t - 1$)	0.0094** (0.005)	0.0105* (0.006)
Observations	4220	4097
R-Squared (overall)	0.997	0.999
Country-Level Fixed Effects	Yes	Yes
Period Fixed Effects	Yes	Yes
Controls	Yes	Yes

Notes: The table shows the results on the relationship between globalization and two female labor market outcomes, with robust standard errors (clustered on the country level) reported in parentheses. The results show how globalization is associated with (I) female labor force participation and on (II) women being wage and salaried workers as share of female employment. We control for a set of variables that includes net migration, per capita GDP, life expectancy, fertility rates, the share of population living in urban areas, the level of democracy, a dummy variable that measures whether a female leader has been in office, and the share of the population that completed at least secondary education. All estimations include fixed effects for countries and years. Data on overall globalization is taken from the KOF Globalisation Index database, compiled by [Gygli *et al.* \(2019\)](#). Data on female labor force participation as well as data on wage and salaried female workers is taken from the [World Bank \(2025\)](#).

** Significant at the 5 percent level,

* Significant at the 10 percent level

(III), we examine net exports of cultural goods, which reflect a country’s cultural interconnectedness abroad. Column (IV) presents results for the number of McDonald’s restaurants, proxying an increased presence of multinational corporations that may lead to the import of gender-equal employment practices and values. Columns (V) and (VI) account for a direct increase in inter-personal exchange and exposure to other cultures and values, exploring the relation between globalization and immigration (Column V) as well as the number of international business trips (Column VI). Across the board, we find that globalization is positively related to our proxies of international exchange and exposure to other values and norms.

Overall, our results on mechanisms suggest that globalization might be working through several channels. In particular, globalization seems to foster female labor outcomes and several aspects of international exchange an exposure to other cultures and norms.

Table 3 Globalization and Gender Equality—Cultural Exchange

	Dependent variable:	
	(I) Number of mobile phone subscriptions	(II) Fixed broadband subscriptions
Globalization Index ($t - 1$)	0.0967*** (0.028)	0.0688*** (0.017)
Observations	5828	2351
R-Squared (overall)	0.987	0.986
Country-Level Fixed Effects	Yes	Yes
Period Fixed Effects	Yes	Yes
Controls	Yes	Yes
	(III) Net export of cultural goods	(IV) Number of McDonald's restaurants
Globalization Index ($t - 1$)	0.538** (0.224)	0.0015*** (0.000)
Observations	3144	5276
R-Squared (overall)	0.793	0.994
Country-Level Fixed Effects	Yes	Yes
Period Fixed Effects	Yes	Yes
Controls	Yes	Yes
	(V) International migrant stock, total	(VI) Number of international trips for business and professional reasons
Globalization Index ($t - 1$)	1577.6*** (205.09)	0.676*** (0.228)
Observations	6461	2423
R-Squared (overall)	0.999	0.957
Country-Level Fixed Effects	Yes	Yes
Period Fixed Effects	Yes	Yes
Controls	Yes	Yes

Notes: The table shows the results on the relationship between globalization and various outcome variables related to cultural exchange, with robust standard errors (clustered on the country level) reported in parentheses. The results show how globalization is associated with (I) the number of mobile phone subscriptions, (II) the number of broadband subscriptions (per 100 people), (III) the net exports of cultural goods and (IV) the number of McDonald's restaurants (per capita) (V) the migrant stock and (VI) the number of international trips for business and professional reasons (per 1000 inhabitants). We control for a set of variables that includes net migration (except for (V)), per capita GDP, life expectancy, fertility rates, the share of population living in urban areas, the level of democracy, a dummy variable that measures whether a female leader has been in office, and the share of the population that completed at least secondary education. All estimations include fixed effects for countries and years. Data on gender equality comes from the database of the [World Bank \(2023\)](#). Data on overall globalization is taken from the KOF Globalisation Index database, compiled by [Gygli *et al.* \(2019\)](#). Data on the cultural outcome variables is taken from the [World Bank \(2025\)](#), [Our World in Data \(2025\)](#), [UN Comtrade \(2021\)](#) and [McDonald's \(2025\)](#).

*** Significant at the 1 percent level,

** Significant at the 5 percent level

6.6 Instrumental variable results

Our estimation strategy so far has controlled for dynamics of gender equality prior to the observation year, a range of variables that correlate simultaneously with globalization and gender equality, as well as a full set of country and year fixed effects. In this section, we account for the remaining threat of unobserved time-varying confounders and reverse causation via our instrumental variable approach that rests on globalization *waves*. Table (4) presents the results of our instrumental variable regressions. The table follows the similar logic as the presentation of our OLS results, with estimates for the parsimonious model reported in Panel A and results for a comprehensive model that includes control variables reported in Panel B.

First-stage results and instrument diagnostics: The first-stage relations that underlie our instrumental variable results uncover a strong impact of regional globalization waves on national levels of globalization. Regarding our overall index of globalization, the first stage coefficient on regional globalization waves is 0.4173 ($t = 19.72$). The first-stage results are similarly strong for de jure globalization (0.4758, $t = 23.01$) and de facto globalization (0.3719, $t = 16.66$). The sizable F-statistics for the excluded instruments, which are reported in the lower parts of Panels A and B (labeled “Kleibergen-Paap F-Stat”) provide further indication that regional waves of globalization have a strong influence on globalization trends in countries located in that region.

Second-stage results: Panel A reports the results of our main instrumental variable approach for the parsimonious model that replicates the OLS specification of our baseline table. The panel reveals the identical pattern that we found in our OLS models, suggesting that (i) globalization is, in general, positively related to gender equality, and that (ii) this relation is driven by trends in de facto globalization. Numerically, the parameter estimates are somewhat larger compared to our OLS specification. In Panel B, we present estimates of our full model specification that includes a set of control variables. Most importantly, this set includes factors such as GDP and migration patterns, which might correlate with regional globalization waves. Accounting for such effects has very little impact on the results.

Our second-stage results allow us to compute the cumulative long-run effect of a permanent change in globalization by one relative standard deviation ($\sigma_{\text{de facto}}$) on gender equality via (see [Acemoglu et al., 2019](#))

$$\frac{\alpha_{\text{de facto}} \times \sigma_{\text{de facto}}}{1 - \sum_{\tau=1}^p \gamma_{\tau}}. \quad (3)$$

Table 4 Globalization and Gender Equality—Instrumental Variable Results

Dependent variable: Gender equality index				
	(I)	(II)	(III)	(IV)
<i>Panel A: Parsimonious model specifications</i>				
Globalization Index ($t - 1$)	0.0776*** (0.019)			
Globalization Index <i>de jure</i> ($t - 1$)		0.0568*** (0.015)		0.0263 (0.019)
Globalization Index <i>de facto</i> ($t - 1$)			0.0813*** (0.021)	0.0597** (0.027)
Observations	8418	8492	8418	8418
Units (# of countries)	186	186	186	186
R-Squared (overall)	0.874	0.875	0.873	0.873
Kleibergen-Paap F-Stat	350.7	502.1	202.4	137.8
Anderson-Rubin p-val.	0.002	0.005	0.001	0.004
Country-Level Fixed Effects	Yes	Yes	Yes	Yes
Period Fixed Effects	Yes	Yes	Yes	Yes
<i>Panel B: Full model specifications</i>				
Globalization Index ($t - 1$)	0.0536* (0.028)			
Globalization Index <i>de jure</i> ($t - 1$)		0.0314 (0.022)		0.00285 (0.031)
Globalization Index <i>de facto</i> ($t - 1$)			0.0580* (0.030)	0.0562 (0.040)
Observations	6190	6190	6190	6190
Units (# of countries)	157	157	157	157
R-Squared (overall)	0.855	0.855	0.855	0.854
Kleibergen-Paap F-Stat	588.4	782.2	302.7	102.5
Country-Level Fixed Effects	Yes	Yes	Yes	Yes
Period Fixed Effects	Yes	Yes	Yes	Yes
Controls	Yes	Yes	Yes	Yes

Notes: The table shows the baseline results of our estimations on the relationship between globalization and gender equality (Equation 1), with robust standard errors (clustered on the country level) reported in parentheses. Panel A reports the results from a parsimonious model in which we only account for globalization and dynamics in gender equality. Panel B augments the parsimonious model with a set of control variables that include net migration, per capita GDP, life expectancy, fertility rates, the share of population living in urban areas, the level of democracy, a dummy variable that measures whether a female leader has been in office, and the share of the population that completed at least secondary education. All estimations include fixed effects for countries and years. The row labeled “Kleibergen-Paap F-Stat” reports the first-stage F statistic under robust standard errors (Kleibergen-Paap Wald rk test).

- *** Significant at the 1 percent level,
- ** Significant at the 5 percent level,
- * Significant at the 10 percent level

We estimate that a permanent change of one relative standard deviation (32.6% of our globalization index), equivalent to a change in the most recent globalization index from Thailand to Sweden or from Indonesia to the United States, increases gender equality by 12.1%. This long-run effect is numerically equivalent between the parsimonious model and the comprehensive model specification.

7 Micro-foundation of the main results

Our macroeconomic results provide evidence for a positive effect of globalization on gender equality that is driven by *de facto* trends in globalization rather than by *de jure* developments. For globalization to impact gender-related attitudes, possible effects of globalization should materialize at the level of individuals. We next inspect whether the macro-level patterns are visible also on the micro-level. Examining the micro-foundation of our main results also alleviates possible concerns about an *ecological fallacy*, which may occur when inferences about the behavior of individuals are deduced from inferences about the group to which the individuals belong.

7.1 Data

The data for our micro-level analysis is taken from the World Value Survey (WVS). The WVS is the most extensive cross-country collection of individual-level data intended to measure individuals' beliefs, values, and well-being. After the collection of its most recent wave (wave 7), the WVS covers data for a total of 120 countries, which are representative of 94.5% of the world population. We use data on all available waves of the WVS, which allows us to construct a repeated cross-sectional dataset that spans the period 1981 to 2021. The available data allow us to estimate the relationship between globalization and gender equality based on 312,078 individuals from 93 countries.

Gender equality: The WVS includes measures for cultural values towards gender equality according to [Welzel \(2013\)](#), who provides both a theoretical explanation and empirical tests for their cross-cultural reliability and validity. The measures are based on answers to subjective questions asking for respondents' agreement to three dimensions of gender equality:

1. **Gender equality: job** is based on answers to the question “*if jobs are scarce, men should have more of a right to a job than women*”.

2. **Gender equality: politics** is based on the degree to which respondents agree that “*men make better political leaders than women do*”.
3. **Gender equality: education** is based on the degree to which respondents agree that “*university is more important for a boy than for a girl*”.

We use the mean over all three dimensions of gender equality to obtain the main variable of interest for our micro-level analysis.

Socio-economic characteristics: The WVS also measures a wide range of socio-economic and demographic characteristics of its participants. These characteristics include a range of observable factors (such as employment status, income, age, level of education, year of birth, and migratory status) as well as measures for subjective norms and values (such as religiosity and cultural attitudes).

7.2 Estimation strategy

Our micro-economic framework combines individual-level data from the WVS with the KOF Globalisation Index in the respondents’ country of residence at the time the survey was conducted. We then relate these globalization scores to attitudes towards gender equality, conditional on a wide range of economic and demographic factors via

$$\text{Gender Equality}_{it} = \delta G_{it} + \mathbf{X}_{it}\boldsymbol{\beta} + \eta_j + \varphi_t + \mu_e + \omega_m + \varepsilon_{it}, \quad (4)$$

where $\text{Gender Equality}_{it}$ is our measure for cultural values towards gender equality of individual i at time t . Our main variable of interest, G_{it} , is the level of globalization in i ’s country of residence at time t , with the parameter δ estimating the impact of globalization on gender equality values of i . As the WVS is collected in seven waves between 1981 and 2022, relating globalization levels of previous waves to gender norms in the observation period would eliminate a large portion of the available sample. We instead rely on contemporaneous correlations to explore mechanisms underlying the effects found on the macro level.

On the micro-level, the relationship between globalization and gender equality might be confounded by a set of variables that correlate simultaneously with globalization and i ’s attitudes towards gender equality. We account for observable economic and demographic characteristics of i via the matrix \mathbf{X}_{it} , which includes gender, age, income, and the highest education level. We also include i ’s self-reported level of religiosity to address gender roles shaped by religious beliefs. Our estimation framework also includes fixed effects for countries (η_j) and years (φ_t),

Table 5 Globalization and Gender Equality—Micro-Levels Results

Dependent variable: Attitudes towards gender equality				
	(I)	(II)	(III)	(IV)
Globalization Index	0.0745*** (0.021)			
Globalization Index <i>de jure</i>		0.0180 (0.017)		-0.00296 (0.020)
Globalization Index <i>de facto</i>			0.0853*** (0.019)	0.0872*** (0.022)
Observations	312,078	312,078	312,078	312,078
Units (# of countries)	93	93	93	93
R-Squared (overall)	0.287	0.289	0.287	0.287
Country-Level Fixed Effects	Yes	Yes	Yes	Yes
Period Fixed Effects	Yes	Yes	Yes	Yes
Employment Status Fixed effects	Yes	Yes	Yes	Yes
Migration Status Fixed Effects	Yes	Yes	Yes	Yes
Individual-level controls	Yes	Yes	Yes	Yes

Notes: The table shows the results of our estimations on the relationship between globalization and gender equality on the micro level (Equation 4), with robust standard errors reported in parentheses. All estimations include fixed effects for countries and years, as well as fixed effects for migratory status and employment status. Individual-level data is taken from the World Value Survey. Gender equality values are measured based on the definition of Welzel (2013). Globalization is measured using the KOF Globalisation Index, developed by Gygli *et al.* (2019).

*** Significant at the 1 percent level

as well as a full set of fixed effects μ_e for the employment status e of i (full-time, part-time, self-employed, student, unemployed, retired, or widowed). An important threat to the validity of our estimates is that respondents originally migrated to the resident country j , in which case the globalization level for j might be less decisive for i 's gender-related values. Our model hence also accounts for migratory status ω_m .

The fundamental assumption underlying the validity of the estimated parameter $\hat{\delta}$ is that conditional on the set of controls and fixed effects included in our model, globalization does not correlate with other unobserved factors that impact gender equality values of i . This is a strong assumption, but it is not implausible. Most importantly, globalization in i 's country of residence should be exogenous to her individual attitudes towards gender equality.

7.3 Results

Table (5) reports our micro-level results. The structure of the table is analogous to the models presented for the macro-level relationship. Column (I) shows estimates for the overall globalization index, Columns (II) and (III) specifically report results for the de facto and the de jure sub-indices. Column (IV), our preferred model, presents the results of a horse race between de jure and de facto globalization.

Consistent with the evidence found for the macro level, the results in Table (5) uncover a strong relationship between globalization and gender equality values also at the level of individuals. Most importantly, the results again suggest that the economically and statistically significant correlation between the overall index of globalization and values towards gender equality is driven by de facto globalization rather than by de jure globalization.

Taken together, the consistency between the micro-level evidence and the evidence found on the country level provides strong evidence that our main results are indeed driven by globalization shifting individuals' norms and values towards more pro-female attitudes.

8 Conclusion

In recent decades, the pace of globalization has been tremendous. An important question is whether the observed trends toward greater integration also shape the norms and cultural values of a society. In this paper, we examine the impact of globalization on an important cultural dimension—*gender equality*. Our main contribution is to show that globalization is generally positively associated with gender equality, but that this relationship is driven by *de facto* developments rather than *de jure* trends in globalization.

Our main estimates are obtained at the macroeconomic level, where we account for endogeneity in the form of unobserved confounding and reverse causality through a novel instrumental variable strategy that uses waves of globalization as an exogenous source of variation driving national globalization trends. We also show that the patterns obtained at the macro level are consistent with the evidence at the micro level, suggesting that there is a plausible micro basis for the macroeconomic results.

Our results have important policy implications. While much of the public debate on the effects of globalization focuses on the pros and cons of trade agreements, we show that such de jure changes affect gender equality to a lesser extent than actual developments in de facto globalization. More broadly, our results provide the most comprehensive evidence to date that globalization promotes gender equality. These

results imply that while globalization trends lead to redistributive effects that may be unfavorable for some individuals, they also induce more pro-emancipative values in society as a whole. From a societal perspective, therefore, globalization may be more beneficial than its critics often emphasize.

References

- ACEMOGLU, D., NAIDU, S., RESTREPO, P. and ROBINSON, J. A. (2019). Democracy does cause growth. *Journal of Political Economy*, **127** (1), 47–100.
- AKSOY, C. G., ÖZCAN, B. and PHILIPP, J. (2021). Robots and the gender pay gap in europe. *European Economic Review*, **134**, 103693.
- ANDERSEN, T. B. (2023). Does democracy cause gender equality? *Journal of Institutional Economics*, **19** (2), 210–228.
- AWOA, P. A., ONDOA, H. A. and TABI, H. N. (2022). Women’s political empowerment and natural resource curse in developing countries. *Resources Policy*, **75**, 102442.
- BALDWIN, R. and MARTIN, P. (1999). Two waves of globalisation: superficial similarities, fundamental differences. *NBER Working Paper No.6904*.
- BARRO, R. J. and LEE, J. W. (2013). A new data set of educational attainment in the world, 1950–2010. *Journal of Development Economics*, **104**, 184–198.
- BARTH, E., KERR, S. P. and OLIVETTI, C. (2021). The dynamics of gender earnings differentials: Evidence from establishment data. *European Economic Review*, **134**, 103713.
- BECKER, G. S. (2010). *The economics of discrimination*. University of Chicago press.
- BECKER, S. O. and WOESSMANN, L. (2008). Luther and the girls: Religious denomination and the female education gap in nineteenth-century Prussia. *Scandinavian Journal of Economics*, **110** (4), 777–805.
- BEER, C. (2009). Democracy and gender equality. *Studies in Comparative International Development*, **44**, 212–227.
- BERDIEV, A. N., GOMES, B. and SAUNORIS, J. W. (2023). Revisiting the nexus between globalisation and the shadow economy: Untying the influences of de jure versus de facto globalisation. *World Economy*, **46** (1), 27–54.
- BERGGREN, N. and BJØRNSKOV, C. (2022). Academic freedom, institutions, and productivity. *Southern Economic Journal*, **88** (4), 1313–1342.
- and BJØRNSKOV, C. (2023). Does globalization suppress social trust? *Journal of Economic Behavior & Organization*, **214**, 443–458.

- and NILSSON, T. (2015). Globalization and the transmission of social values: The case of tolerance. *Journal of Comparative Economics*, **43** (2), 371–389.
- BERIK, G., RODGERS, Y. V. D. M. and SEGUINO, S. (2009). Feminist economics of inequality, development, and growth. *Feminist Economics*, **15** (3), 1–33.
- BEXELL, M. (2012). Global governance, gains and gender: Un-business partnerships for women’s empowerment. *International Feminist Journal of Politics*, **14** (3), 389–407.
- BHALOTRA, S. and FERNÁNDEZ, M. (2024). The rise in women’s labor-force participation in mexico—supply vs. demand factors. *World Bank Economic Review*, **38** (2), 319–350.
- BJØRNSKOV, C. and VOIGT, S. (2021). Is constitutionalized media freedom only window dressing? Evidence from terrorist attacks. *Public Choice*, **187** (3-4), 321–348.
- , VOIGT, S. and KHESALI, M. (2022). Unconstitutional states of emergency. *Journal of Legal Studies*, **51** (2), 455–481.
- BLACK, S. E. and BRAINERD, E. (2004). Importing equality? the impact of globalization on gender discrimination. *ILR Review*, **57** (4), 540–559.
- BUSSE, M. and HEFEKER, C. (2007). Political risk, institutions and foreign direct investment. *European Journal of Political Economy*, **23** (2), 397–415.
- and NUNNENKAMP, P. (2009). Gender disparity in education and the international competition for foreign direct investment. *Feminist Economics*, **15** (3), 61–90.
- BÖRZEL, T. A. and RISSE, T. (2010). Governance without a state: Can it work? *Regulation & Governance*, **4** (2), 113–134.
- CALLAWAY, B. and SANT’ANNA, P. H. (2021). Difference-in-differences with multiple time periods. *Journal of Econometrics*, **225** (2), 200–230.
- CAROZZI, F. and GAGO, A. (2023). Who promotes gender-sensitive policies? *Journal of Economic Behavior & Organization*, **206**, 371–405.
- CHASE-DUNN, C., KAWANO, Y. and BREWER, B. D. (2000). Trade globalization since 1795: Waves of integration in the world-system. *American Sociological Review*, pp. 77–95.

- CHINN, M. D. and ITO, H. (2006). What matters for financial development? capital controls, institutions, and interactions. *Journal of Development Economics*, **81** (1), 163–192.
- and — (2008). A new measure of financial openness. *Journal of Comparative Policy Analysis*, **10** (3), 309–322.
- CHO, S.-Y. (2013). Integrating equality: Globalization, women’s rights, and human trafficking. *International Studies Quarterly*, **57** (4), 683–697.
- COLLIER, P., DOLLAR, D. *et al.* (2002). *Globalization, Growth, and Poverty: Building an inclusive World Economy*. World Bank Policy Research Report. Washington, D.C.: World Bank.
- COORAY, A. and POTRAFKE, N. (2011). Gender inequality in education: Political institutions or culture and religion? *European Journal of Political Economy*, **27** (2), 268–280.
- DAVIS, L. S. and WILLIAMSON, C. R. (2022). Individualism and women’s economic rights. *Journal of Economic Behavior & Organization*, **198**, 579–597.
- DOCQUIER, F. and RAPOPORT, H. (2012). Globalization, brain drain, and development. *Journal of Economic Literature*, **50** (3), 681–730.
- DOMÍNGUEZ, E. *et al.* (2002). Continental transnational activism and women workers’ networks within nafta. *International Feminist Journal of Politics*, **4** (2), 216–239.
- DREHER, A. (2006). Does globalization affect growth? Evidence from a new index of globalization. *Applied Economics*, **38** (10), 1091–1110.
- , GASSEBNER, M. and SIEMERS, L.-H. (2012). Globalization, economic freedom, and human rights. *Journal of Conflict Resolution*, **56** (3), 516–546.
- EASTIN, J. (2018). Climate change and gender equality in developing states. *World Development*, **107**, 289–305.
- FANG, J., GOZGOR, G. and YAN, C. (2021). Does globalisation alleviate polarisation? *World Economy*, **44** (4), 1031–1052.
- FELD, L. P. and VOIGT, S. (2003). Economic growth and judicial independence: Cross-country evidence using a new set of indicators. *European Journal of Political Economy*, **19** (3), 497–527.

- FONTANA, M. and WOOD, A. (2000). Modeling the effects of trade on women, at work and at home. *World Development*, **28** (7), 1173–1190.
- FOX, J. W., MOURTADA-SABBAH, N. and AL-MUTAWA, M. (2006). *Globalization and the Gulf*. Routledge London.
- GALLANT, M. and POUNDER, J. S. (2008). The employment of female nationals in the united arab emirates (uae): An analysis of opportunities and barriers. *Education, Business and Society: Contemporary Middle Eastern Issues*, **1** (1), 26–33.
- GIAVAZZI, F. and TABELLINI, G. (2005). Economic and political liberalizations. *Journal of Monetary Economics*, **52** (7), 1297–1330.
- GOLDBERG, P. K. and PAVCNIK, N. (2007). Distributional effects of globalization in developing countries. *Journal of Economic Literature*, **45** (1), 39–82.
- GRAY, M. M., KITTELSON, M. C. and SANDHOLTZ, W. (2006). Women and globalization: A study of 180 countries, 1975–2000. *International Organization*, **60** (2), 293–333.
- GRÜNDLER, K. and KRIEGER, T. (2016). Democracy and growth: Evidence from a machine learning indicator. *European Journal of Political Economy*, **45**, 85–107.
- and KRIEGER, T. (2021). Using Machine Learning for measuring democracy: A practitioners guide and a new updated dataset for 186 countries from 1919 to 2019. *European Journal of Political Economy*, **70**, 102047.
- and KRIEGER, T. (2022). Should we care (more) about data aggregation? *European Economic Review*, **142**, 104010.
- and POTRAFKE, N. (2019). Corruption and economic growth: New empirical evidence. *European Journal of Political Economy*, **60**, 101810.
- GUTMANN, J., METELSKA-SZANIAWSKA, K. and VOIGT, S. (2023). The comparative constitutional compliance database. *Review of International Organizations*, pp. 1–21.
- GYGLI, S., HAELG, F., POTRAFKE, N. and STURM, J.-E. (2019). The KOF globalisation index—revisited. *Review of International Organizations*, **14**, 543–574.
- HAELG, F., POTRAFKE, N. and STURM, J.-E. (2022). The determinants of social expenditures in OECD countries. *Public Choice*, **193** (3-4), 233–261.

- HAMILTON, J. D. (2018). Why you should never use the hodrick-prescott filter. *Review of Economics and Statistics*, **100** (5), 831–843.
- HARMS, P. and URSPRUNG, H. W. (2002). Do civil and political repression really boost foreign direct investments? *Economic Inquiry*, **40** (4), 651–663.
- HARRIS, J. (2009). Statist globalization in china, russia and the gulf states. *Science & Society*, **73** (1), 6–33.
- HEATH, R. and MOBARAK, A. M. (2015). Manufacturing growth and the lives of bangladeshi women. *Journal of Development Economics*, **115**, 1–15.
- HUGHES, M. M., KROOK, M. L. and PAXTON, P. (2015). Transnational women’s activism and the global diffusion of gender quotas. *International Studies Quarterly*, **59** (2), 357–372.
- HYLAND, M., DJANKOV, S. and GOLDBERG, P. K. (2020). Gendered laws and women in the workforce. *American Economic Review: Insights*, **2** (4), 475–490.
- JENSEN, L. A., ARNETT, J. J. and MCKENZIE, J. (2011). *Globalization and cultural identity*. Springer.
- JENSEN, R. (2012). Do labor market opportunities affect young women’s work and family decisions? experimental evidence from india. *Quarterly Journal of Economics*, **127** (2), 753–792.
- JHA, P. and GOZGOR, G. (2019). Globalization and taxation: Theory and evidence. *European Journal of Political Economy*, **59**, 296–315.
- JOSLIN, K.-E. and NORDVIK, F. M. (2021). Does religion curtail women during booms? Evidence from resource discoveries. *Journal of Economic Behavior & Organization*, **187**, 205–224.
- JUHN, C., UJHELYI, G. and VILLEGAS-SANCHEZ, C. (2014). Men, women, and machines: How trade impacts gender inequality. *Journal of Development Economics*, **106**, 179–193.
- JUNG, H. (2023). Female leaders and gendered laws: A long-term global perspective. *International Political Science Review*, **44**, 710–728.
- KELLER, E. (2019). Labor supply and gender differences in occupational choice. *European Economic Review*, **115**, 221–241.
- KROOK, M. L. (2006). Reforming representation: The diffusion of candidate gender quotas worldwide. *Politics & Gender*, **2** (3), 303–327.

- LI, Q. and REUVENY, R. (2003). Economic globalization and democracy: An empirical analysis. *British Journal of Political Science*, **33** (1), 29–54.
- MANSFIELD, E. D., MILNER, H. V. and RUDRA, N. (2021). The globalization backlash: Exploring new perspectives. *Comparative Political Studies*, **54** (13), 2267–2285.
- MCDONALD’S (2025). Number of mcdonald’s restaurants by market. <https://corporate.mcdonalds.com/corpmcd/home.html>.
- MOGHADAM, V. (1999). Gender and globalization: Female labor and women’s mobilization. *Journal of World-Systems Research*, pp. 366–389.
- MOMANI, R. (2025). Higher education and workforce participation in qatar: Unravelling the disparity. In E. Zaidan, E. Tok, A. Al-Fadala and L. Cochrane (eds.), *The Future of Education Policy in the State of Qatar*, Singapore: Springer Nature Singapore, pp. 445–462.
- MUNSHI, K. and ROSENZWEIG, M. (2006). Traditional institutions meet the modern world: Caste, gender, and schooling choice in a globalizing economy. *American Economic Review*, **96** (4), 1225–1252.
- NAGUIB, R. and MADEEHA, M. (2023). “making visible the invisible”: Exploring the role of gender biases on the glass ceiling in qatar’s public sector. *Women’s Studies International Forum*, **98**, 102723.
- NEUMAYER, E. and DE SOYSA, I. (2011). Globalization and the empowerment of women: an analysis of spatial dependence via trade and foreign direct investment. *World Development*, **39** (7), 1065–1075.
- NORTON, S. W. and TOMAL, A. (2009). Religion and female educational attainment. *Journal of Money, Credit and Banking*, **41** (5), 961–986.
- OUR WORLD IN DATA (2025). Our world in data: “data page: International trips for business and professional reasons”, part of the following publication: Bastian herre and veronika samborska (2023) - “tourism”. data adapted from unwto. retrieved from <https://ourworldindata.org/grapher/international-trips-for-business-and-professional-reasons>. <https://ourworldindata.org/>, accessed: 2025-05-20.
- OZLER, S. (2000). Export orientation and female share of employment: Evidence from turkey. *World Development*, **28** (7), 1239–1248.

- POTRAFKE, N. (2015). The evidence on globalisation. *World Economy*, **38** (3), 509–552.
- and STURM, J.-E. (2025). The consequences of globalization. In C. Bjørnskov and R. Jong-A-Pin (eds.), *Elgar Encyclopedia of Public Choice*, Cheltenham: Edward Elgar, p. forthcoming.
- and URSPRUNG, H. W. (2012). Globalization and gender equality in the course of development. *European Journal of Political Economy*, **28** (4), 399–413.
- REUBEN, E. and TIMKO, K. (2018). On the effectiveness of elected male and female leaders and team coordination. *Journal of the Economic Science Association*, **4** (2), 123–135.
- RICHARDS, D. L. and GELLENY, R. (2007). Women’s status and economic globalization. *International Studies Quarterly*, **51** (4), 855–876.
- ROBERTSON, R. (1992). Globalization: Social theory and global culture. *Globalization*, pp. 1–224.
- ROSS, M. L. (2008). Oil, islam, and women. *American Political Science Review*, **102** (1), 107–123.
- ROY, S. (2019). *Discriminatory Laws Against Women: A Survey of the Literature*. World Bank Policy Research Working Paper 8719, World Bank.
- SIMMONS, B. A., DOBBIN, F. and GARRETT, G. (2006). Introduction: The diffusion of liberalization. *International Organization*, **60** (4), 781–810.
- and ELKINS, Z. (2004). The globalization of liberalization: Policy diffusion in the international political economy. *American Political Science Review*, **98** (1), 171–189.
- SPIILIMBERGO, A. (2009). Democracy and foreign education. *American Economic Review*, **99** (1), 528–543.
- STANDING, G. (1999). Global feminization through flexible labor: A theme revisited. *World Development*, **27** (3), 583–602.
- UN COMTRADE (2021). Exports and imports of cultural goods defined as in unesco (2009) (
- UNITED NATIONS CONFERENCE ON TRADE AND DEVELOPMENT (2020). *Trade and Gender Linkages: an Analysis of Central America*, vol. 1. UN.

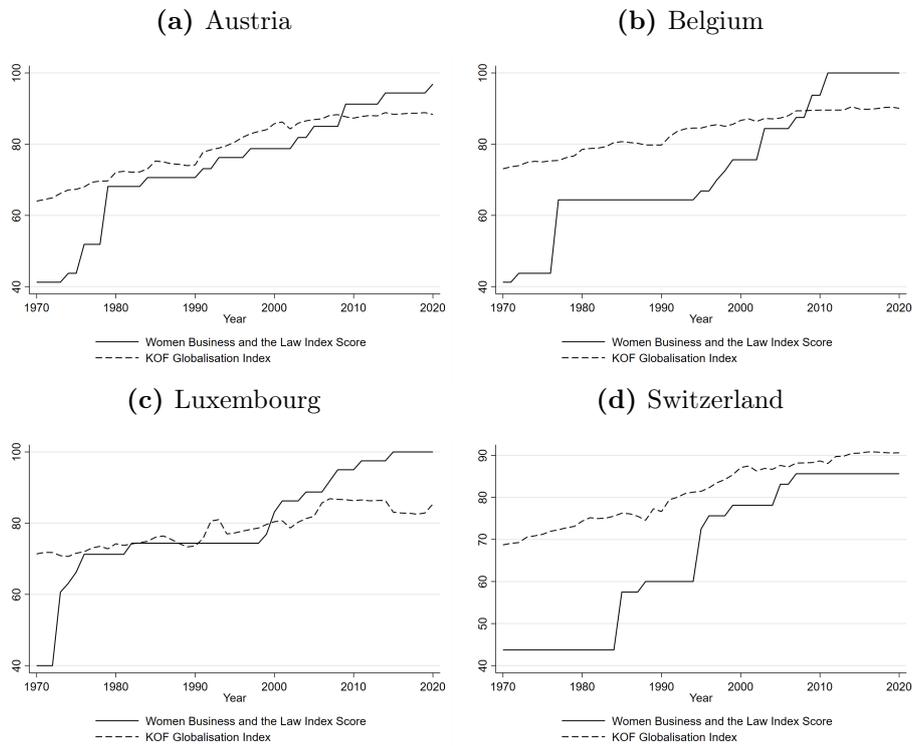
- VARNUM, M. E. and GROSSMANN, I. (2016). Pathogen prevalence is associated with cultural changes in gender equality. *Nature Human Behaviour*, **1** (1), 0003.
- VOIGT, S., GUTMANN, J. and FELD, L. P. (2015). Economic growth and judicial independence, a dozen years on: Cross-country evidence using an updated set of indicators. *European Journal of Political Economy*, **38**, 197–211.
- WALTER, S. (2021). The backlash against globalization. *Annual Review of Political Science*, **24** (1), 421–442.
- WELZEL, C. (2013). *Freedom rising*. Cambridge University Press.
- WORLD BANK (2020). Women, Business and the Law 2020. *Washington, DC: World Bank*. <http://hdl.handle.net/10986/32639> License: CC BY 3.0 IGO.
- WORLD BANK (2023). *World Development Indicators*. Database, The World Bank, Washington, D.C.
- WORLD BANK (2025). World development indicators. Accessed: 2025-05-20.
- YANG, H. (2021). Gender equality: Korea has come a long way, but there is more work to do. *OECD Reports*, accessed December 29, 2023.
- ZHANG, C. and HUANG, Z. (2023). Foreign aid, norm diffusion, and local support for gender equality: comparing evidence from the world bank and china’s aid projects in africa. *Studies in Comparative International Development*, **58** (4), 584–615.

Appendix A: Case Studies

To complement the main empirical findings, which show a positive average effect of globalization on gender equality and women’s rights, this appendix presents illustrative case studies. These cases serve two purposes: first, to provide concrete examples of countries where globalization was associated with significant improvements in female rights; and second, to highlight outliers, i.e. contexts in which the expected relationship does not hold. By examining both patterns and exceptions, this qualitative analysis substantiates the average effects found in the main analysis and helps to explore contextual factors shaping the globalization–gender nexus.

Globalization and gender equality in Europe: Figure A-1 presents the development of globalization and gender equality for four selected European countries. With substantial reforms in family law in many European countries during the mid-1970s, we observe a stark increase in the WBL index in Europe. A prime example of this development is Austria. Between 1975 and 1978, Austria undertook significant family law reforms that modernized the legal status of women and aimed to establish gender equality within marriage and the family. The most important reforms occurred with the 1975 *Familienrechtsreform* (Family Law Reform), which came into force on July 1, 1976. As a response, the WBL index increased substantially. Similar developments can be seen in Belgium, Luxembourg, and Switzerland. During the 1970s, Belgium implemented major family law reforms that abolished the husband’s legal authority as head of the household and granted women equal rights in marriage, employment, and parental responsibilities. In the mid-1970s, Luxembourg reformed its family law to establish legal equality between spouses, including equal rights in employment and household decision-making, and introduced legislation to enforce equal pay for equal work. Women in Switzerland were granted the right to vote at the federal level only in 1971. This was followed by the constitutional enshrinement of gender equality in 1981, which included the principle of equal pay for equal work. Since 1988, a revised marriage law has guaranteed women equal rights within marriage, marking a significant step toward legal gender parity.

Figure A-1 Case Study Evidence: Development of Globalization and Gender Equality in Selected Countries

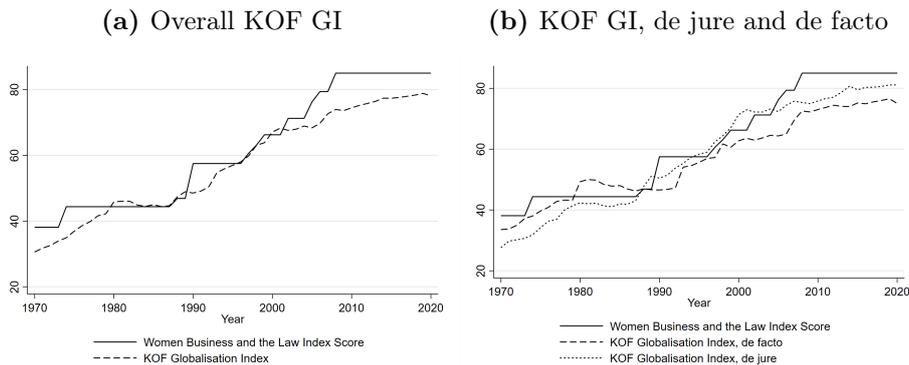


Notes: The figure shows the unconditional correlation between the global development of gender equality (WBL) and globalization (overall) over the past five decades (1970–2020) for selected countries. Data on gender equality comes from the database of the [World Bank \(2023\)](#). Data on overall globalization is taken from the KOF Globalisation Index database, compiled by [Gygli et al. \(2019\)](#).

Globalization and gender equality in South Korea: The 1980s brought about a wave of globalization that particularly affected developing countries, ultimately also impacting female rights in many countries. A prime example of this development is South Korea, which is shown in Figure A-2. Given the country’s rapid integration into the global economy, South Korea warrants closer examination. Beginning with the Five-Year Economic and Social Development Plans initiated in the 1960s, the Korean government pursued export-led growth to enhance national wealth and political stability. While this strategy initially increased demand for male labor in the manufacturing sector, female labor force participation remained relatively low through the mid-1980s (43.9%). However, accelerated industrialization, combined with state-led birth control policies, gradually expanded educational and occupational opportunities for young women.

South Korea’s accession to the OECD further deepened its integration into global value chains (Yang, 2021). A series of legal reforms followed, including the Equal Employment Act (1987), the Act on the Prevention of Domestic Violence and Protection of Victims (1997), and the Act on Gender Discrimination and Victim Assistance (1999), all of which contributed to significant improvements in women’s rights and labor market outcomes.

Figure A-2 Case Study Evidence: Development of Globalization and Gender Equality in South Korea

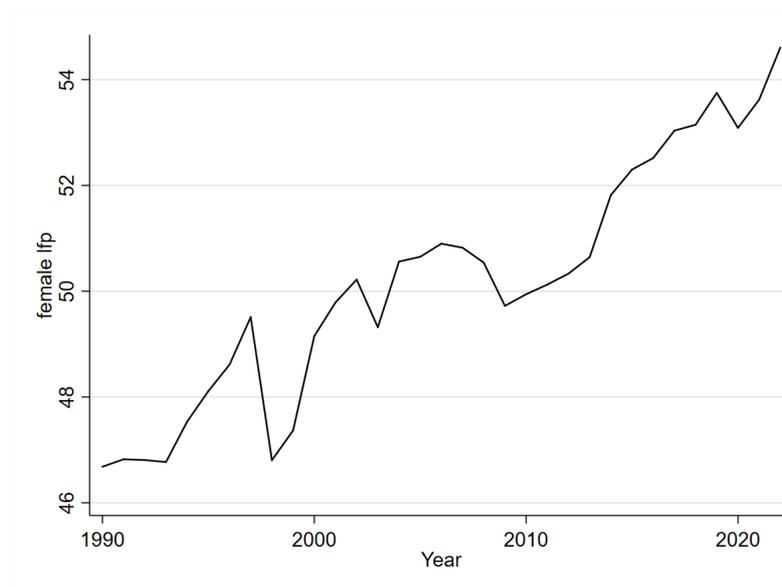


Notes: The figure shows the unconditional correlation between the global development of gender equality (WBL) and globalization (overall, de jure and de facto) over the past five decades (1970–2020) for South Korea. Data on gender equality comes from the database of the World Bank (2023). Data on overall, de jure, and de facto globalization is taken from the KOF Globalisation Index database, compiled by Gygli *et al.* (2019).

The globalization process in South Korea was ultimately accompanied by an average increase in the labor force participation of Korean women, which gained substantial pace in the early 1990s (see Figure A-3).

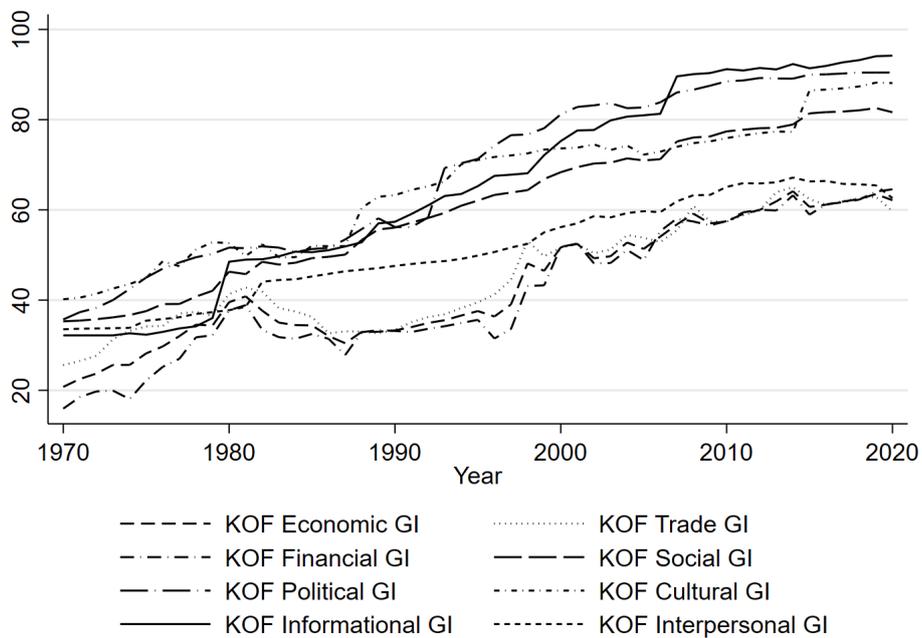
Scholars have argued that the globalization of the Korean economy largely contributed to improving gender equality in Korean society and led to a significant change in social awareness of the role played by women (Yang, 2021). Further evidence in this direction can be drawn from the sub-indices of the KOF overall index. Figure A-4 shows the development of additional sub-fields in relation to globalization. Especially political, cultural, and social globalization increased in the corresponding period and remained at a high value until the end of the sample period.

Figure A-3 Female Labor Force Participation, 1990-2020



Notes: The figure shows the development of female labor force participation (1990–2020) in South Korea. The data is taken from the World Bank database.

Figure A-4 KOF Sub-Indices South Korea, 1970-2020

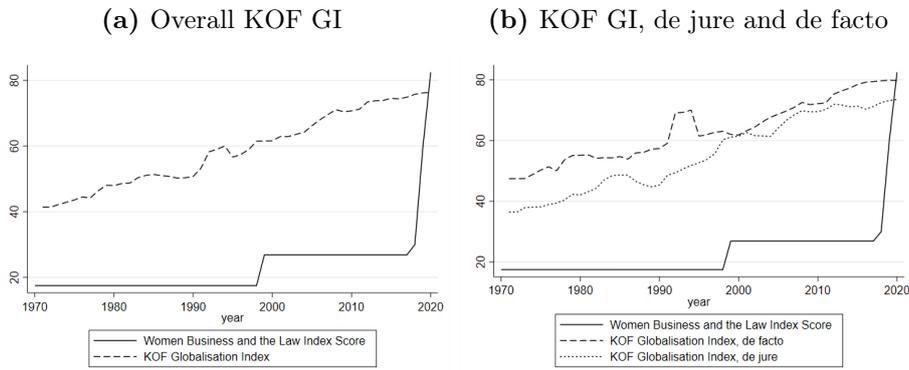


Notes: The figure shows the eight sub-indices of globalization over the past five decades (1970–2020) for South Korea. The Data is taken from the KOF Globalisation Index database, compiled by Gygli *et al.* (2019).

Globalization and gender equality in the UAE and Qatar: The previous examples provide an illustration of the anatomy of the main empirical results presented in this paper. However, there are notable exceptions to this overall pattern. Countries in the Middle East and North Africa (MENA) region exhibit, on average, the third-highest levels of globalization, yet remain the least equal in terms of gender rights (see Figure 2). In this context, we examine the cases of the United Arab Emirates and Qatar in greater detail (Figures A-5 and A-6). Since the 1970s, both countries have undergone rapid transformation into highly globalized economies, with their KOF Globalisation Index values nearly doubling by 2019. Their prominence as key oil producers has driven strong economic growth, poverty reduction, and large-scale investments in infrastructure, while also attracting significant inflows of migrant labor and foreign capital and becoming more open to tourism (Fox *et al.*, 2006; Harris, 2009).

Despite this intense exposure to global economic and cultural exchange, gender equality has remained persistently low. This paradox reflects a complex interplay of factors: conservative social norms, patriarchal legal systems, and limited political participation of women continue to constrain women’s rights, restrict access to economic and educational opportunities, and limit representation in both public and private spheres (Gallant and Pounder, 2008; Naguib and Madeeha, 2023; Momani, 2025).

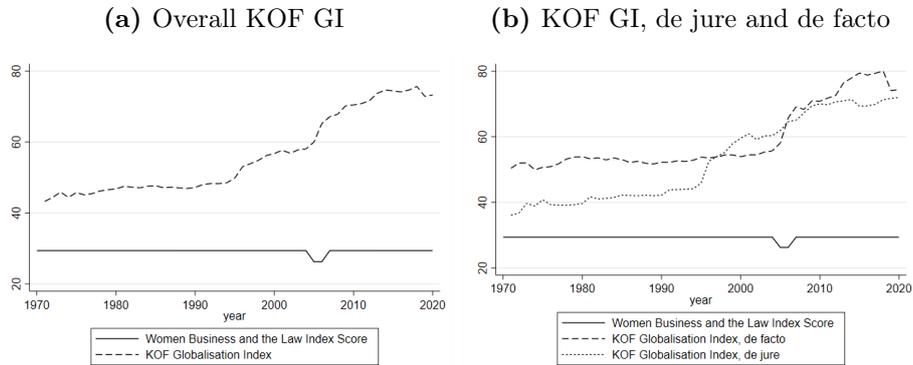
Figure A-5 Case Study Evidence: Development of Globalization and Gender Equality in the United Arab Emirates



Notes: The figure shows the unconditional correlation between the global development of gender equality (WBL) and globalization (overall, de jure and de facto) over the past five decades (1970–2020) for the United Arab Emirates. Data on gender equality comes from the database of the World Bank (2023). Data on overall, de jure, and de facto globalization is taken from the KOF Globalisation Index database, compiled by Gygli *et al.* (2019).

While the Women, Business and the Law (WBL) Index remains largely unchanged in Qatar, hovering around a score of 30 between 1970 and 2020, the United Arab Emirates exhibits a marked improvement in 2019–2020. This abrupt increase in gender equality can be attributed to a series of legal reforms, including the introduction of equal pay for equal work, the partial removal of male guardianship requirements, and the criminalization of domestic violence.

Figure A-6 Case Study Evidence: Development of Globalization and Gender Equality in Qatar



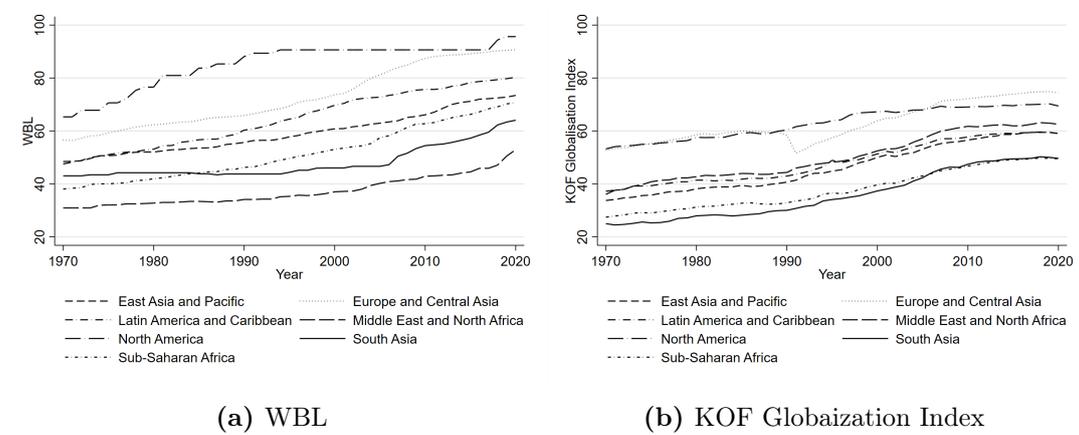
Notes: The figure shows the unconditional correlation between the global development of gender equality (WBL) and globalization (overall, de jure and de facto) over the past five decades (1970–2020) for Qatar. Data on gender equality comes from the database of the [World Bank \(2023\)](#). Data on overall, de jure, and de facto globalization is taken from the KOF Globalisation Index database, compiled by [Gygli *et al.* \(2019\)](#).

Regional waves of globalization: A distinct pattern observable in the data is that globalization often occurs in waves. Waves of globalization frequently emerge through regional diffusion, whereby integration in one country generates spillovers or competitive pressures that catalyze globalization in neighboring states. A prime example is the introduction of the North American Free Trade Agreement (NAFTA) in 1994, which significantly deepened Mexico’s integration into the global economy, particularly through the expansion of export-oriented industries. This economic transformation led to a substantial increase in female labor force participation, particularly in manufacturing, prompting greater public and institutional attention to gender-based labor rights and legal protections ([Juhn *et al.*, 2014](#); [Bhalotra and Fernández, 2024](#); [Domínguez *et al.*, 2002](#)). The positive effects of NAFTA in Mexico inspired a wave of trade liberalization in Central America, including agreements like CAFTA-DR (2004) involving countries such as El Salvador, Guatemala, and the Dominican Republic. These agreements encouraged similar export-driven economic models, where female labor played a central role. Drawing from Mexico’s experience, women’s movements and trade unions in these countries pushed for better labor standards and gender equity policies, leading to improvements in legal frameworks, wage protections, and women’s economic participation across the region. However, despite this progress, significant gaps remain in the enforcement of labor rights, wage equality, and protections against gender-based violence in Central America ([United Nations Conference on Trade and Development, 2020](#)).

Another prominent example of regional globalization waves is the “flying geese” pattern in East and Southeast Asia, where Japan’s postwar export-led growth model triggered successive waves of industrialization and trade integration in South Korea, Taiwan, and later ASEAN economies such as Thailand, Malaysia, and Vietnam. This regional cascade was facilitated by trade liberalization. Similarly, in Central and Eastern Europe, early market reforms and trade openness in countries like Poland and Hungary following the collapse of communism encouraged similar trajectories in neighboring states. EU accession prospects and institutional convergence further reinforced this regional globalization dynamic. More recently, in Sub-Saharan Africa, the rapid integration of economies such as Kenya and Ethiopia into global value chains, driven in part by Chinese infrastructure investment and export-oriented reforms, has spurred neighboring countries to follow suit, particularly within the framework of regional trade blocs like the East African Community. These episodes illustrate that globalization often proceeds not in isolation, but through geographically and politically interconnected waves.

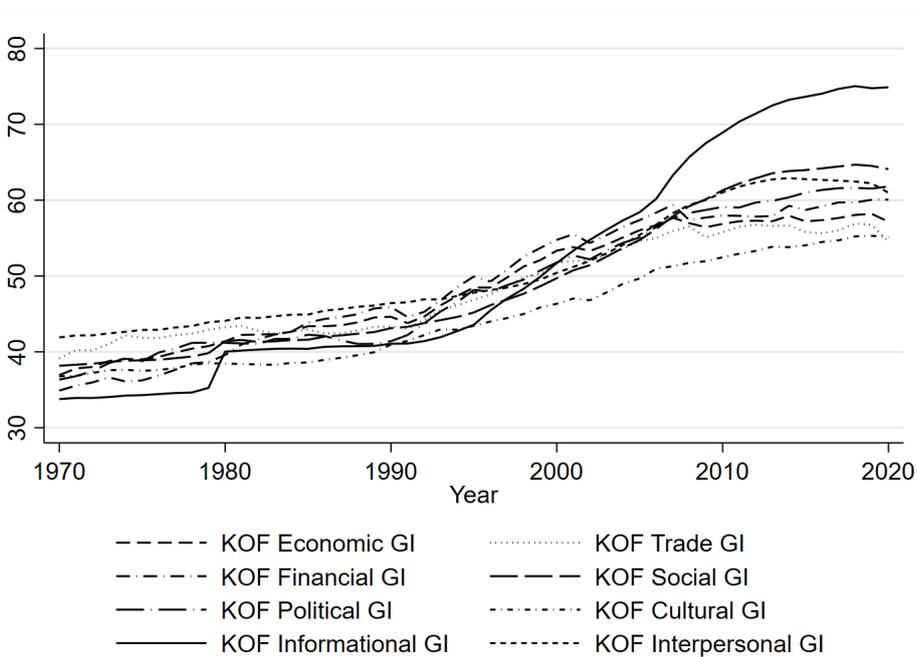
Appendix B: Supplementary Figures

Figure B-1 Regional Trends in Globalization and Gender Equality over Time



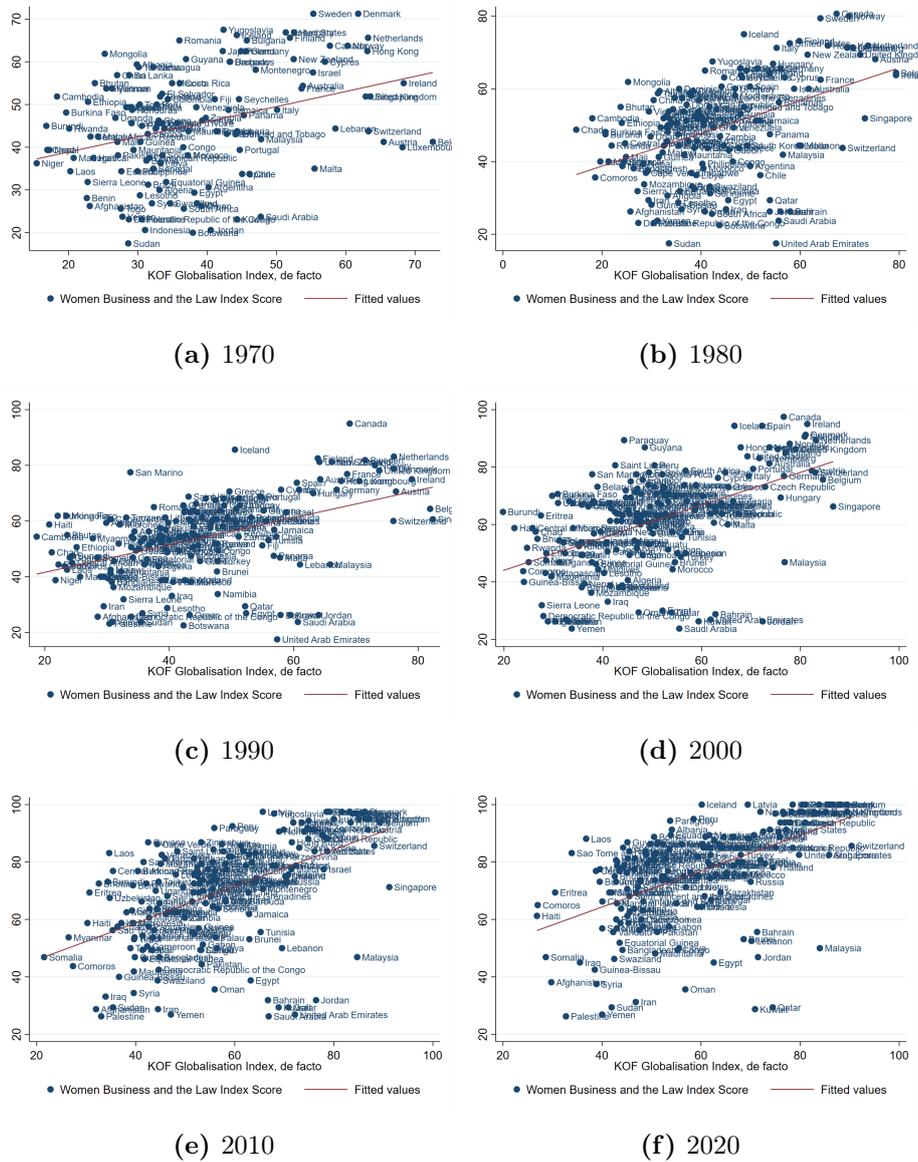
Notes: The figure shows development of gender equality (WBL) and globalization (overall) over the past five decades (1970–2020) for different regions worldwide. Data on gender equality comes from the database of the [World Bank \(2023\)](#). Data on overall globalization is taken from the KOF Globalisation Index database, compiled by [Gygli *et al.* \(2019\)](#).

Figure B-2 Development of the individual Dimensions of Globalization measured by the KOF Globalisation Index over Time, 1970-2020



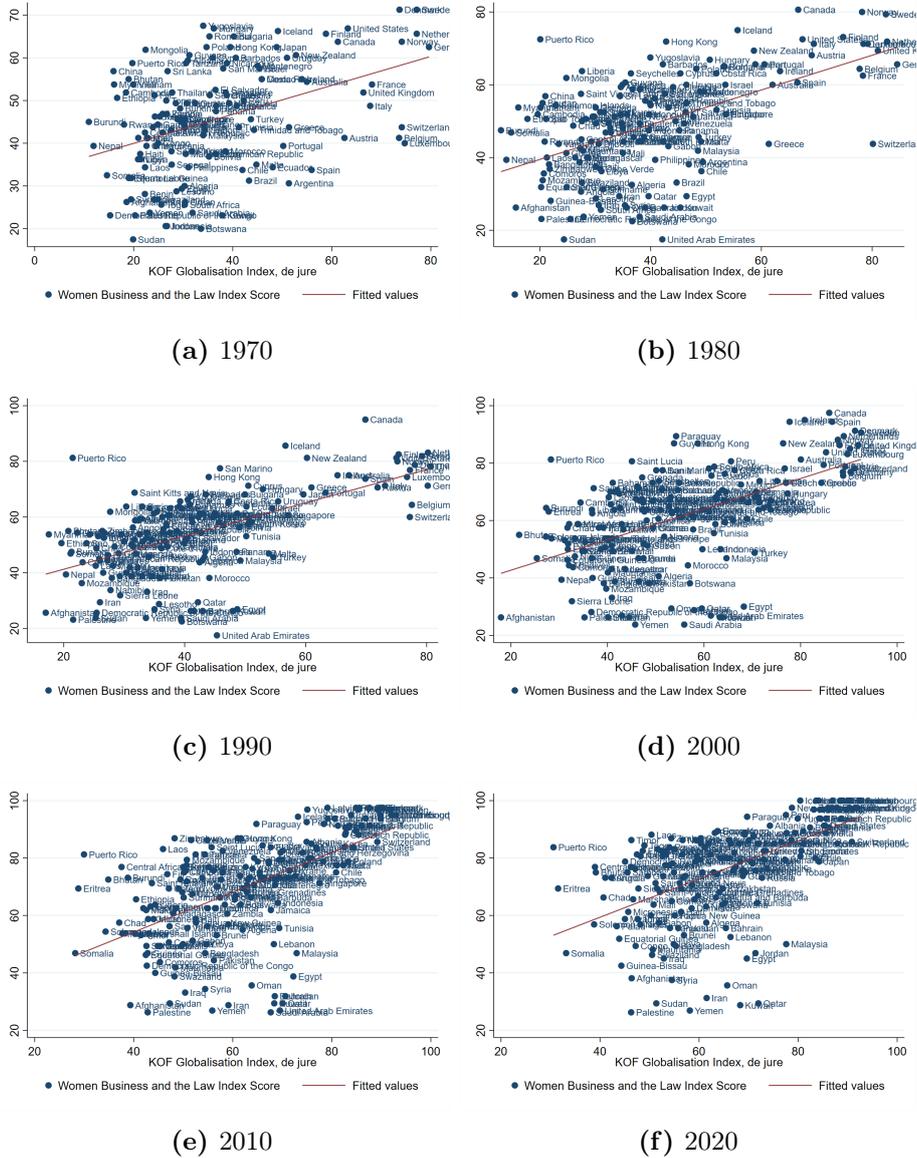
Notes: The figure shows the development of the eight sub-indices of globalization over the past five decades (1970–2020). The data is taken from the KOF Globalisation Index database, compiled by [Gygli et al. \(2019\)](#).

Figure B-3 Relationship between gender equality and de facto globalization, 1970-2020



Notes: The figure shows the unconditional correlation between the global development of gender equality (WBL) and de facto globalization over the past five decades (1970–2020). Data on gender equality comes from the database of the World Bank (2023). Data on overall, de jure, and de facto globalization is taken from the KOF Globalisation Index database, compiled by Gygli *et al.* (2019).

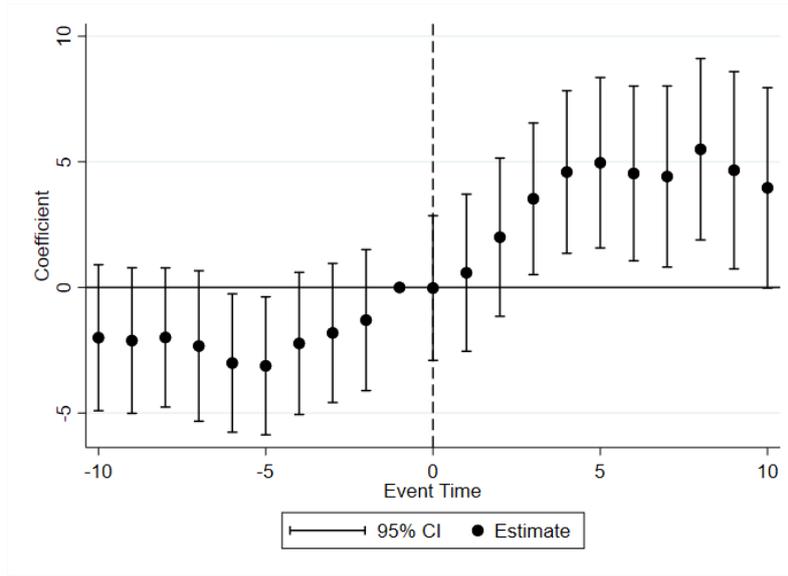
Figure B-4 Relationship between Gender Equality and de jure Globalization, 1970-2020



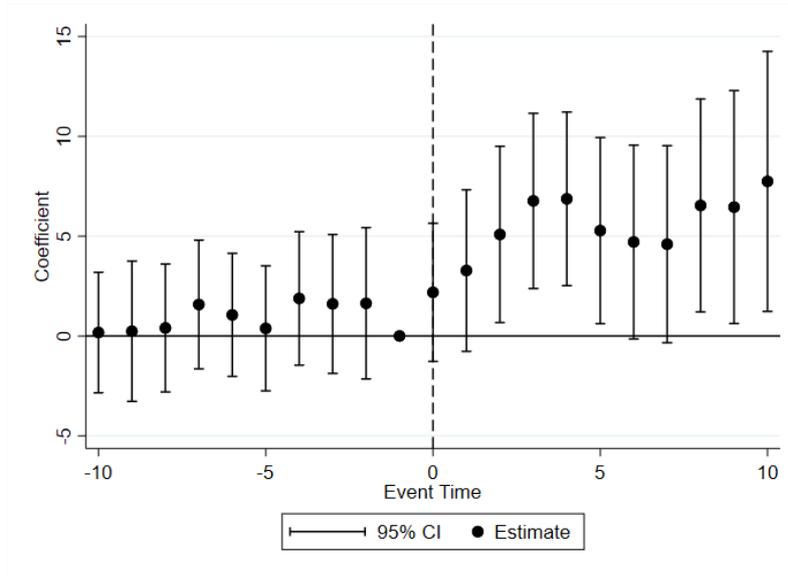
Notes: The figure shows the unconditional correlation between the global development of gender equality (WBL) and de jure globalization over the past five decades (1970–2020). Data on gender equality comes from the database of the World Bank (2023). Data on overall, de jure, and de facto globalization is taken from the KOF Globalisation Index database, compiled by Gygli *et al.* (2019).

Figure B-5 WTO Accession and Gender Equality, Event Study Analysis

(a) Conventional event study



(b) Callaway & Sant'Anna (2021) estimator



Notes: The figure shows the results of an event study, which relates a country's WTO accession as a binary treatment indicator, proxying major globalization episodes, to gender equality as implied by the WBL index. specified via

$$\text{Gender Equality}_{it} = \eta_i + \zeta_t + \sum_{\substack{k=k_0 \\ k \neq -1}}^{k_1} \beta_k \cdot \mathbf{1}\{\text{WTO}_{it} = k\} + \mathbf{X}_{it}\beta_j + \varepsilon_{it}. \quad (5)$$

Panel (a) presents results from a conventional event study design, Panel (b) offers the results when accounting for heterogeneous treatment effects using the estimator proposed by Callaway and Sant'Anna (2021).

Appendix C: Supplementary Tables

Table C-1 Globalization and Gender Equality – Robustness, Alternative Specification of Dynamics (one Lag)

Dependent variable: Gender equality index				
	(I)	(II)	(III)	(IV)
<i>Panel A: Parsimonious model specifications</i>				
Globalization Index ($t - 1$)	0.0353*** (0.007)			
Globalization Index <i>de jure</i> ($t - 1$)		0.0173*** (0.006)		0.00353 (0.006)
Globalization Index <i>de facto</i> ($t - 1$)			0.0307*** (0.006)	0.0295*** (0.006)
Observations	8736	8814	8736	8736
Units (# of countries)	186	186	186	186
R-Squared (overall)	0.986	0.986	0.986	0.986
Country-Level Fixed Effects	Yes	Yes	Yes	Yes
Period Fixed Effects	Yes	Yes	Yes	Yes
<i>Panel B: Full model specifications</i>				
Globalization Index ($t - 1$)	0.0272*** (0.010)			
Globalization Index <i>de jure</i> ($t - 1$)		0.00936 (0.008)		0.00180 (0.008)
Globalization Index <i>de facto</i> ($t - 1$)			0.0228*** (0.007)	0.0224*** (0.007)
Observations	6386	6386	6386	6386
Units (# of countries)	157	157	157	157
R-Squared (overall)	0.985	0.985	0.985	0.985
Country-Level Fixed Effects	Yes	Yes	Yes	Yes
Period Fixed Effects	Yes	Yes	Yes	Yes
Controls	Yes	Yes	Yes	Yes

Notes: The table shows the results of our estimations on the relationship between gender equality and overall globalization (Equation 1) using a lag specification of $p = 1$, with robust standard errors (clustered on the country level) reported in parentheses. Panel A reports the results from a parsimonious model in which we only account for globalization and dynamics in gender equality. Panel B augments the parsimonious model with a set of control variables that include net migration, per capita GDP, life expectancy, fertility rates, the share of population living in urban areas, the level of democracy, a dummy variable that measures whether a female leader has been in office, and the share of the population that completed at least secondary education. All estimations include fixed effects for countries and years.

*** Significant at the 1 percent level

Table C-2 Globalization and Gender Equality – Robustness, Alternative Specification of Dynamics (2 Lags)

Dependent variable: Gender equality index				
	(I)	(II)	(III)	(IV)
<i>Panel A: Parsimonious model specifications</i>				
Globalization Index ($t - 1$)	0.0374*** (0.007)			
Globalization Index <i>de jure</i> ($t - 1$)		0.0181*** (0.006)		0.00374 (0.006)
Globalization Index <i>de facto</i> ($t - 1$)			0.0325*** (0.006)	0.0313*** (0.006)
Observations	8736	8814	8736	8736
Units (# of countries)	186	186	186	186
R-Squared (overall)	0.986	0.986	0.986	0.986
Country-Level Fixed Effects	Yes	Yes	Yes	Yes
Period Fixed Effects	Yes	Yes	Yes	Yes
<i>Panel B: Full model specifications</i>				
Globalization Index ($t - 1$)	0.0294*** (0.010)			
Globalization Index <i>de jure</i> ($t - 1$)		0.0106 (0.008)		0.00261 (0.008)
Globalization Index <i>de facto</i> ($t - 1$)			0.0243*** (0.007)	0.0237*** (0.007)
Observations	6386	6386	6386	6386
Units (# of countries)	157	157	157	157
R-Squared (overall)	0.985	0.985	0.985	0.985
Country-Level Fixed Effects	Yes	Yes	Yes	Yes
Period Fixed Effects	Yes	Yes	Yes	Yes
Controls	Yes	Yes	Yes	Yes

Notes: The table shows the results of our estimations on the relationship between gender equality and overall globalization (Equation 1) using a lag specification of $p = 2$, with robust standard errors (clustered on the country level) reported in parentheses. Panel A reports the results from a parsimonious model in which we only account for globalization and dynamics in gender equality. Panel B augments the parsimonious model with a set of control variables that include net migration, per capita GDP, life expectancy, fertility rates, the share of population living in urban areas, the level of democracy, a dummy variable that measures whether a female leader has been in office, and the share of the population that completed at least secondary education. All estimations include fixed effects for countries and years.

*** Significant at the 1 percent level

Table C-3 Globalization and Gender Equality – Robustness, Alternative Specification of Dynamics (3 Lags)

Dependent variable: Gender equality index				
	(I)	(II)	(III)	(IV)
<i>Panel A: Parsimonious model specifications</i>				
Globalization Index ($t - 1$)	0.0392*** (0.007)			
Globalization Index <i>de jure</i> ($t - 1$)		0.0189*** (0.006)		0.00383 (0.006)
Globalization Index <i>de facto</i> ($t - 1$)			0.0340*** (0.006)	0.0328*** (0.006)
Observations	8604	8679	8604	8604
Units (# of countries)	186	186	186	186
R-Squared (overall)	0.986	0.986	0.986	0.986
Country-Level Fixed Effects	Yes	Yes	Yes	Yes
Period Fixed Effects	Yes	Yes	Yes	Yes
<i>Panel B: Full model specifications</i>				
Globalization Index ($t - 1$)	0.0317*** (0.010)			
Globalization Index <i>de jure</i> ($t - 1$)		0.0121 (0.008)		0.00372 (0.009)
Globalization Index <i>de facto</i> ($t - 1$)			0.0258*** (0.007)	0.0249*** (0.008)
Observations	6300	6300	6300	6300
Units (# of countries)	157	157	157	157
R-Squared (overall)	0.985	0.985	0.985	0.985
Country-Level Fixed Effects	Yes	Yes	Yes	Yes
Period Fixed Effects	Yes	Yes	Yes	Yes
Controls	Yes	Yes	Yes	Yes

Notes: The table shows the results of our estimations on the relationship between gender equality and overall globalization (Equation 1) using a lag specification of $p = 3$, with robust standard errors (clustered on the country level) reported in parentheses. Panel A reports the results from a parsimonious model in which we only account for globalization and dynamics in gender equality. Panel B augments the parsimonious model with a set of control variables that include net migration, per capita GDP, life expectancy, fertility rates, the share of population living in urban areas, the level of democracy, a dummy variable that measures whether a female leader has been in office, and the share of the population that completed at least secondary education. All estimations include fixed effects for countries and years.

*** Significant at the 1 percent level

Table C-4 Globalization and Gender Equality – Robustness, Alternative Specification of Dynamics (5 Lags)

Dependent variable: Gender equality index				
	(I)	(II)	(III)	(IV)
<i>Panel A: Parsimonious model specifications</i>				
Globalization Index ($t - 1$)	0.0398*** (0.007)			
Globalization Index <i>de jure</i> ($t - 1$)		0.0206*** (0.006)		0.00686 (0.006)
Globalization Index <i>de facto</i> ($t - 1$)			0.0327*** (0.006)	0.0306*** (0.006)
Observations	8332	8401	8332	8332
Units (# of countries)	186	186	186	186
R-Squared (overall)	0.986	0.986	0.986	0.986
Country-Level Fixed Effects	Yes	Yes	Yes	Yes
Period Fixed Effects	Yes	Yes	Yes	Yes
<i>Panel B: Full model specifications</i>				
Globalization Index ($t - 1$)	0.0324*** (0.010)			
Globalization Index <i>de jure</i> ($t - 1$)		0.0158* (0.008)		0.00819 (0.009)
Globalization Index <i>de facto</i> ($t - 1$)			0.0241*** (0.007)	0.0221*** (0.008)
Observations	6126	6126	6126	6126
Units (# of countries)	157	157	157	157
R-Squared (overall)	0.985	0.985	0.985	0.985
Country-Level Fixed Effects	Yes	Yes	Yes	Yes
Period Fixed Effects	Yes	Yes	Yes	Yes
Controls	Yes	Yes	Yes	Yes

Notes: The table shows the results of our estimations on the relationship between gender equality and overall globalization (Equation 1) using a lag specification of $p = 5$, with robust standard errors (clustered on the country level) reported in parentheses. Panel A reports the results from a parsimonious model in which we only account for globalization and dynamics in gender equality. Panel B augments the parsimonious model with a set of control variables that include net migration, per capita GDP, life expectancy, fertility rates, the share of population living in urban areas, the level of democracy, a dummy variable that measures whether a female leader has been in office, and the share of the population that completed at least secondary education. All estimations include fixed effects for countries and years.

- *** Significant at the 1 percent level,
- * Significant at the 10 percent level

Table C-5 Globalization and Gender Equality – Robustness, Alternative Specification of Dynamics (6 Lags)

Dependent variable: Gender equality index				
	(I)	(II)	(III)	(IV)
<i>Panel A: Parsimonious model specifications</i>				
Globalization Index ($t - 1$)	0.0408*** (0.007)			
Globalization Index <i>de jure</i> ($t - 1$)		0.0205*** (0.006)		0.00629 (0.006)
Globalization Index <i>de facto</i> ($t - 1$)			0.0339*** (0.006)	0.0319*** (0.006)
Observations	8195	8261	8195	8195
Units (# of countries)	186	186	186	186
R-Squared (overall)	0.986	0.986	0.986	0.986
Country-Level Fixed Effects	Yes	Yes	Yes	Yes
Period Fixed Effects	Yes	Yes	Yes	Yes
<i>Panel B: Full model specifications</i>				
Globalization Index ($t - 1$)	0.0325*** (0.010)			
Globalization Index <i>de jure</i> ($t - 1$)		0.0147* (0.009)		0.00649 (0.009)
Globalization Index <i>de facto</i> ($t - 1$)			0.0250*** (0.007)	0.0234*** (0.008)
Observations	6037	6037	6037	6037
Units (# of countries)	157	157	157	157
R-Squared (overall)	0.985	0.985	0.985	0.985
Country-Level Fixed Effects	Yes	Yes	Yes	Yes
Period Fixed Effects	Yes	Yes	Yes	Yes
Controls	Yes	Yes	Yes	Yes

Notes: The table shows the results of our estimations on the relationship between gender equality and overall globalization (Equation 1) using a lag specification of $p = 6$, with robust standard errors (clustered on the country level) reported in parentheses. Panel A reports the results from a parsimonious model in which we only account for globalization and dynamics in gender equality. Panel B augments the parsimonious model with a set of control variables that include net migration, per capita GDP, life expectancy, fertility rates, the share of population living in urban areas, the level of democracy, a dummy variable that measures whether a female leader has been in office, and the share of the population that completed at least secondary education. All estimations include fixed effects for countries and years.

- *** Significant at the 1 percent level,
- * Significant at the 10 percent level

Table C-6 Gender Equality and Economic Globalization

Dependent variable: Gender equality index				
	(I)	(II)	(III)	(IV)
<i>Panel A: Parsimonious model specifications</i>				
Globalization Index ($t - 1$)	0.0130** (0.005)			
Globalization Index <i>de jure</i> ($t - 1$)		0.00220 (0.004)		0.000243 (0.004)
Globalization Index <i>de facto</i> ($t - 1$)			0.0110*** (0.004)	0.0102*** (0.004)
Observations	8397	8252	8393	8199
Units (# of countries)	186		186	186
R-Squared (overall)	0.986		0.986	0.986
Country-Level Fixed Effects	Yes		Yes	Yes
Period Fixed Effects	Yes		Yes	Yes
<i>Panel B: Full model specifications</i>				
Globalization Index ($t - 1$)	0.0147** (0.007)			
Globalization Index <i>de jure</i> ($t - 1$)		0.00653 (0.006)		0.00492 (0.006)
Globalization Index <i>de facto</i> ($t - 1$)			0.00970** (0.004)	0.00918** (0.004)
Observations	6213		6213	6213
Units (# of countries)	157		157	157
R-Squared (overall)	0.985		0.985	0.985
Country-Level Fixed Effects	Yes		Yes	Yes
Period Fixed Effects	Yes		Yes	Yes
Controls	Yes		Yes	Yes

Notes: The table shows the results of our estimations on the relationship between gender equality and economic globalization (Equation 1), with robust standard errors (clustered on the country level) reported in parentheses. Panel A reports the results from a parsimonious model in which we only account for globalization and dynamics in gender equality. Panel B augments the parsimonious model with a set of control variables that include net migration, per capita GDP, life expectancy, fertility rates, the share of population living in urban areas, the level of democracy, a dummy variable that measures whether a female leader has been in office, and the share of the population that completed at least secondary education. All estimations include fixed effects for countries and years.

*** Significant at the 1 percent level,

** Significant at the 5 percent level

Table C-7 Gender Equality and Trade Globalization

Dependent variable: Gender equality index				
	(I)	(II)	(III)	(IV)
<i>Panel A: Parsimonious model specifications</i>				
Globalization Index ($t - 1$)	0.00864** (0.004)			
Globalization Index <i>de jure</i> ($t - 1$)		-0.00179 (0.004)		-0.00274 (0.004)
Globalization Index <i>de facto</i> ($t - 1$)			0.00847*** (0.003)	0.00719** (0.003)
Observations 8393	7960	8393	7926	
Units (# of countries)	186	186	186	186
R-Squared (overall)	0.986	0.986	0.986	0.986
Country-Level Fixed Effects	Yes	Yes	Yes	Yes
Period Fixed Effects	Yes	Yes	Yes	Yes
<i>Panel B: Full model specifications</i>				
Globalization Index ($t - 1$)	0.00633 (0.005)			
Globalization Index <i>de jure</i> ($t - 1$)		-0.00202 (0.004)		-0.00252 (0.005)
Globalization Index <i>de facto</i> ($t - 1$)			0.00529 (0.003)	0.00492 (0.003)
Observations	6213	6081	6213	6081
Units (# of countries)	157	157	157	157
R-Squared (overall)	0.985	0.985	0.985	0.985
Country-Level Fixed Effects	Yes	Yes	Yes	Yes
Period Fixed Effects	Yes	Yes	Yes	Yes
Controls	Yes	Yes	Yes	Yes

Notes: The table shows the results of our estimations on the relationship between gender equality and trade globalization (Equation 1), with robust standard errors (clustered on the country level) reported in parentheses. Panel A reports the results from a parsimonious model in which we only account for globalization and dynamics in gender equality. Panel B augments the parsimonious model with a set of control variables that include net migration, per capita GDP, life expectancy, fertility rates, the share of population living in urban areas, the level of democracy, a dummy variable that measures whether a female leader has been in office, and the share of the population that completed at least secondary education. All estimations include fixed effects for countries and years.

*** Significant at the 1 percent level,

** Significant at the 5 percent level

Table C-8 Gender Equality and Financial Globalization

Dependent variable: Gender equality index				
	(I)	(II)	(III)	(IV)
<i>Panel A: Parsimonious model specifications</i>				
Globalization Index ($t - 1$)	0.00891** (0.004)			
Globalization Index <i>de jure</i> ($t - 1$)		0.00334 (0.003)		0.00232 (0.003)
Globalization Index <i>de facto</i> ($t - 1$)			0.00680** (0.003)	0.00610** (0.003)
Observations	8451	8415	8442	8366
Units (# of countries)	186	186	186	186
R-Squared (overall)	0.986	0.986	0.986	0.986
Country-Level Fixed Effects	Yes	Yes	Yes	Yes
Period Fixed Effects	Yes	Yes	Yes	Yes
<i>Panel B: Full model specifications</i>				
Globalization Index ($t - 1$)	0.0119** (0.005)			
Globalization Index <i>de jure</i> ($t - 1$)		0.00582 (0.004)		0.00441 (0.004)
Globalization Index <i>de facto</i> ($t - 1$)			0.00797** (0.004)	0.00727** (0.003)
Observations	6213	6213	6213	6213
Units (# of countries)	157	157	157	157
R-Squared (overall)	0.985	0.985	0.985	0.985
Country-Level Fixed Effects	Yes	Yes	Yes	Yes
Period Fixed Effects	Yes	Yes	Yes	Yes
Controls	Yes	Yes	Yes	Yes

Notes: The table shows the results of our estimations on the relationship between gender equality and financial globalization (Equation 1), with robust standard errors (clustered on the country level) reported in parentheses. Panel A reports the results from a parsimonious model in which we only account for globalization and dynamics in gender equality. Panel B augments the parsimonious model with a set of control variables that include net migration, per capita GDP, life expectancy, fertility rates, the share of population living in urban areas, the level of democracy, a dummy variable that measures whether a female leader has been in office, and the share of the population that completed at least secondary education. All estimations include fixed effects for countries and years.

** Significant at the 5 percent level,

Table C-9 Gender Equality and Social Globalization

Dependent variable: Gender equality index				
	(I)	(II)	(III)	(IV)
<i>Panel A: Parsimonious model specifications</i>				
Globalization Index ($t - 1$)	0.0335*** (0.006)			
Globalization Index <i>de jure</i> ($t - 1$)		0.0225*** (0.006)		0.0164*** (0.006)
Globalization Index <i>de facto</i> ($t - 1$)			0.0206*** (0.005)	0.0160*** (0.006)
Observations	8540	8540	8418	8418
Units (# of countries)	186	186	186	186
R-Squared (overall)	0.986	0.986	0.986	0.986
Country-Level Fixed Effects	Yes	Yes	Yes	Yes
Period Fixed Effects	Yes	Yes	Yes	Yes
<i>Panel B: Full model specifications</i>				
Globalization Index ($t - 1$)	0.0309*** (0.010)			
Globalization Index <i>de jure</i> ($t - 1$)		0.0133 (0.009)		0.00727 (0.009)
Globalization Index <i>de facto</i> ($t - 1$)			0.0230*** (0.007)	0.0216*** (0.008)
Observations	6213	6213	6213	6213
Units (# of countries)	157	157	157	157
R-Squared (overall)	0.985	0.985	0.985	0.985
Country-Level Fixed Effects	Yes	Yes	Yes	Yes
Period Fixed Effects	Yes	Yes	Yes	Yes
Controls	Yes	Yes	Yes	Yes

Notes: The table shows the results of our estimations on the relationship between gender equality and social globalization (Equation 1), with robust standard errors (clustered on the country level) reported in parentheses. Panel A reports the results from a parsimonious model in which we only account for globalization and dynamics in gender equality. Panel B augments the parsimonious model with a set of control variables that include net migration, per capita GDP, life expectancy, fertility rates, the share of population living in urban areas, the level of democracy, a dummy variable that measures whether a female leader has been in office, and the share of the population that completed at least secondary education. All estimations include fixed effects for countries and years.

*** Significant at the 1 percent level

Table C-10 Gender Equality and Interpersonal Globalization

Dependent variable: Gender equality index				
	(I)	(II)	(III)	(IV)
<i>Panel A: Parsimonious model specifications</i>				
Globalization Index ($t - 1$)	0.0213*** (0.007)			
Globalization Index <i>de jure</i> ($t - 1$)		0.0137*** (0.005)		0.0129*** (0.005)
Globalization Index <i>de facto</i> ($t - 1$)			0.00940 (0.006)	0.00582 (0.006)
Observations	8540	8491	8491	8442
Units (# of countries)	186	186	186	186
R-Squared (overall)	0.986	0.986	0.986	0.986
Country-Level Fixed Effects	Yes	Yes	Yes	Yes
Period Fixed Effects	Yes	Yes	Yes	Yes
<i>Panel B: Full model specifications</i>				
Globalization Index ($t - 1$)	0.0176* (0.009)			
Globalization Index <i>de jure</i> ($t - 1$)		0.0122* (0.007)		0.0115* (0.007)
Globalization Index <i>de facto</i> ($t - 1$)			0.00758 (0.008)	0.00544 (0.009)
Observations	6213	6213	6213	6213
Units (# of countries)	157	157	157	157
R-Squared (overall)	0.985	0.985	0.985	0.985
Country-Level Fixed Effects	Yes	Yes	Yes	Yes
Period Fixed Effects	Yes	Yes	Yes	Yes
Controls	Yes	Yes	Yes	Yes

Notes: The table shows the results of our estimations on the relationship between gender equality and interpersonal globalization (Equation 1), with robust standard errors (clustered on the country level) reported in parentheses. Panel A reports the results from a parsimonious model in which we only account for globalization and dynamics in gender equality. Panel B augments the parsimonious model with a set of control variables that include net migration, per capita GDP, life expectancy, fertility rates, the share of population living in urban areas, the level of democracy, a dummy variable that measures whether a female leader has been in office, and the share of the population that completed at least secondary education. All estimations include fixed effects for countries and years.

*** Significant at the 1 percent level,

* Significant at the 10 percent level

Table C-11 Gender Equality and Informational Globalization

Dependent variable: Gender equality index				
	(I)	(II)	(III)	(IV)
<i>Panel A: Parsimonious model specifications</i>				
Globalization Index ($t - 1$)	0.0194*** (0.004)			
Globalization Index <i>de jure</i> ($t - 1$)		0.0162*** (0.004)		0.0153*** (0.005)
Globalization Index <i>de facto</i> ($t - 1$)			0.0101*** (0.003)	0.00719** (0.003)
Observations	8530	8540	8274	8274
Units (# of countries)	186	186	186	186
R-Squared (overall)	0.986	0.986	0.986	0.986
Country-Level Fixed Effects	Yes	Yes	Yes	Yes
Period Fixed Effects	Yes	Yes	Yes	Yes
<i>Panel B: Full model specifications</i>				
Globalization Index ($t - 1$)	0.0221*** (0.006)			
Globalization Index <i>de jure</i> ($t - 1$)		0.0172*** (0.006)		0.0159** (0.006)
Globalization Index <i>de facto</i> ($t - 1$)			0.00896** (0.004)	0.00798* (0.004)
Observations	6213	6213	6150	6150
Units (# of countries)	157	157	157	157
R-Squared (overall)	0.985	0.985	0.985	0.985
Country-Level Fixed Effects	Yes	Yes	Yes	Yes
Period Fixed Effects	Yes	Yes	Yes	Yes
Controls	Yes	Yes	Yes	Yes

Notes: The table shows the results of our estimations on the relationship between gender equality and informational globalization (Equation 1), with robust standard errors (clustered on the country level) reported in parentheses. Panel A reports the results from a parsimonious model in which we only account for globalization and dynamics in gender equality. Panel B augments the parsimonious model with a set of control variables that include net migration, per capita GDP, life expectancy, fertility rates, the share of population living in urban areas, the level of democracy, a dummy variable that measures whether a female leader has been in office, and the share of the population that completed at least secondary education. All estimations include fixed effects for countries and years.

- *** Significant at the 1 percent level,
- ** Significant at the 5 percent level,
- * Significant at the 10 percent level

Table C-12 Gender Equality and Cultural Globalization

Dependent variable: Gender equality index				
	(I)	(II)	(III)	(IV)
<i>Panel A: Parsimonious model specifications</i>				
Globalization Index ($t - 1$)	0.0159*** (0.004)			
Globalization Index <i>de jure</i> ($t - 1$)		0.00479* (0.003)		0.00319 (0.003)
Globalization Index <i>de facto</i> ($t - 1$)			0.0102*** (0.003)	0.00993*** (0.003)
Observations	8444	8413	8309	8231
Units (# of countries)	186	186	186	186
R-Squared (overall)	0.986	0.986	0.986	0.986
Country-Level Fixed Effects	Yes	Yes	Yes	Yes
Period Fixed Effects	Yes	Yes	Yes	Yes
<i>Panel B: Full model specifications</i>				
Globalization Index ($t - 1$)	0.00758 (0.006)			
Globalization Index <i>de jure</i> ($t - 1$)		-0.00582 (0.004)		-0.00656 (0.004)
Globalization Index <i>de facto</i> ($t - 1$)			0.0112*** (0.004)	0.0119*** (0.004)
Observations	6213	6188	6213	6188
Units (# of countries)	157	157	157	157
R-Squared (overall)	0.985	0.985	0.985	0.985
Country-Level Fixed Effects	Yes	Yes	Yes	Yes
Period Fixed Effects	Yes	Yes	Yes	Yes
Controls	Yes	Yes	Yes	Yes

Notes: The table shows the results of our estimations on the relationship between gender equality and cultural globalization (Equation 1), with robust standard errors (clustered on the country level) reported in parentheses. Panel A reports the results from a parsimonious model in which we only account for globalization and dynamics in gender equality. Panel B augments the parsimonious model with a set of control variables that include net migration, per capita GDP, life expectancy, fertility rates, the share of population living in urban areas, the level of democracy, a dummy variable that measures whether a female leader has been in office, and the share of the population that completed at least secondary education. All estimations include fixed effects for countries and years.

- *** Significant at the 1 percent level,
 * Significant at the 10 percent level

Table C-13 Gender Equality and Political Globalization

Dependent variable: Gender equality index				
	(I)	(II)	(III)	(IV)
<i>Panel A: Parsimonious model specifications</i>				
Globalization Index ($t - 1$)	0.0195*** (0.004)			
Globalization Index <i>de jure</i> ($t - 1$)		0.0103*** (0.004)		0.00535 (0.004)
Globalization Index <i>de facto</i> ($t - 1$)			0.0150*** (0.004)	0.0135*** (0.004)
Observations	8540	8540	8540	8540
Units (# of countries)	186	186	186	186
R-Squared (overall)	0.986	0.986	0.986	0.986
Country-Level Fixed Effects	Yes	Yes	Yes	Yes
Period Fixed Effects	Yes	Yes	Yes	Yes
<i>Panel B: Full model specifications</i>				
Globalization Index ($t - 1$)	0.00969* (0.006)			
Globalization Index <i>de jure</i> ($t - 1$)		0.00459 (0.005)		0.00219 (0.005)
Globalization Index <i>de facto</i> ($t - 1$)			0.00736* (0.004)	0.00684 (0.005)
Observations	6213	6213	6213	6213
Units (# of countries)	157	157	157	157
R-Squared (overall)	0.985	0.985	0.985	0.985
Country-Level Fixed Effects	Yes	Yes	Yes	Yes
Period Fixed Effects	Yes	Yes	Yes	Yes
Controls	Yes	Yes	Yes	Yes

Notes: The table shows the results of our estimations on the relationship between gender equality and political globalization (Equation 1), with robust standard errors (clustered on the country level) reported in parentheses. Panel A reports the results from a parsimonious model in which we only account for globalization and dynamics in gender equality. Panel B augments the parsimonious model with a set of control variables that include net migration, per capita GDP, life expectancy, fertility rates, the share of population living in urban areas, the level of democracy, a dummy variable that measures whether a female leader has been in office, and the share of the population that completed at least secondary education. All estimations include fixed effects for countries and years.

*** Significant at the 1 percent level,

* Significant at the 10 percent level