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THE LIBERTY DIVIDEND

Why prosperity follows the freedom of women

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I. The Pattern

Across about 180 economies, the places where women have equal legal rights are, on average, the places that are richer. This paper asks why, and how much of that pattern is cause.

> *The gap between what the law says and what women can do is the gap this paper is about.*
>
> Raj Jobalia

Start with one chart. Take every economy for which the World Bank has scored the legal position of women, and set that score against income per head. Figure I.1 is the result. The dots slope upward. The richer the country, the more equal the law.

This is my thesis in a sentence. Where women are free, to learn, to own, to move, to earn and to speak, economies are richer and tend to become richer faster. Where women are suppressed, countries lag. The association is overwhelming. The evidence that one thing causes the other is strong for some freedoms and thin for others, and I will say which is which.

I am going to argue this case with conviction. I also want to win it by being right. That means I will not claim more than the data allow, and it means the exceptions come first, not last.

The thesis, and how far it goes

Here is what I claim.

First, legal equality for women *tracks* prosperity. Across about 180 economies the correlation between the World Bank's 2026 legal-equality index and the log of income per head is $r = 0.52$. Set aside the 19 economies whose oil rents are at least ten percent of GDP and it rises to $r = 0.68$.[1]

Second, for specific freedoms the causal evidence is strong. Randomised and quasi-experimental studies find that when girls gain schooling, women gain jobs, property rights or a seat in local government, children survive, girls stay in school and villages get more of the public goods women ask for. Those are the chapters that follow.

[1] World Bank, *Women, Business and the Law* 2026 (published 24 February 2026), legal-frameworks index; GDP per head, PPP, constant 2021 international dollars, WDI release of 13 July 2026. n=180 economies, and 161 without oil rents of 10% of GDP or more. Own calculation; descriptive.

Third, and this is what I do not claim. I do not claim that prosperity can be read off the liberty of a country's women. An r of 0.52 means legal equality accounts for about 27 percent of the variation in log income across countries, or about 46 percent without the oil states. The rest is something else. Nor do I claim that equal rights *cause* national GDP to rise. No study has identified that at the level of a country. The national-level numbers you will see in this paper are correlations and simulations, and I label them as such.

What the evidence supports is stronger than a slogan and more useful. Women's freedom is a leading indicator of broad-based prosperity, and a precondition for it. The costs of restriction fall on the whole economy and compound for decades. The costs of freedom fall on institutions that were built around its absence. That is a case I can defend to a hostile economist, and I intend to.

Four exceptions, up front

A reader should not have to find these in the footnotes.

The Gulf. Qatar scores 26.3 on the legal index and is among the richest places on earth, at about $111,000 of income per head. Kuwait scores 27.2, Oman 36.7, Saudi Arabia 56.2.[2] They are the red dots in the lower right of Figure I.1. Their wealth is a rent from under the ground, not the product of broad productivity growth, and that is why removing them sharpens the line. But I do not argue that oil causes inequality either. That claim is contested, and the raw data do not settle it.

[2] WBL 2026 legal-frameworks index; GDP per head, PPP 2024, from the same data. Gulf economies as listed in the research dossier, item 0.5.

East Asia. Korea grew from about $1,000 of income per head in 1960 to about $37,000 in 2024 with a large gender wage gap.[3] Its girls were in school and its young women worked in export factories, so women were inputs to that growth. But Korea is the best counterexample to a strong version of my thesis, and the honest line is that it grew despite its gaps and is now constrained by them. A fertility rate of 0.75 is one cost.

[3] World Bank WDI, Korea GDP per head; Korea TFR 0.75 in 2024, Japan 1.15. Chapter VI returns to Korea.

Vietnam and China. Both combine high female participation, about 69 and 59 percent in 2024, with fast growth under limited political freedom.[4] Participation, then, is not the whole of liberty. My subject is choice, property and voice, not a quota of women at work.

[4] ILO modelled estimates via World Bank WDI, 2024. WBL 2026 legal-frameworks scores: Vietnam 86.7, China 70.0.

The socialist states. East Germany had female employment near 89 percent in 1989 against 56 percent in the West, and its economy stagnated.[5] Mandated work is not freedom. I argue for rights, schools and markets, not for orders.

[5] Research dossier P5; figures as read from the part file, not independently re-derived.

None of these breaks the pattern in the figure. Each tells me what the pattern is a pattern of.

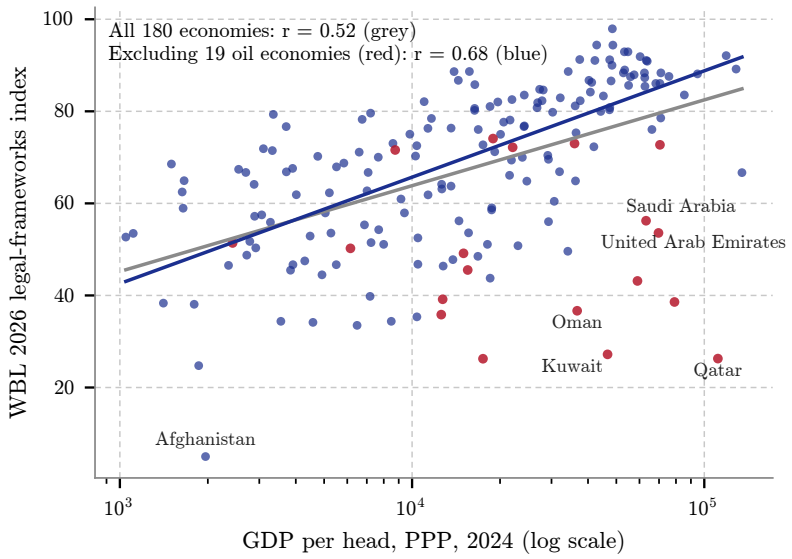


Figure I.1. Legal equality for women goes with income per head. Each dot is an economy (n=180); red dots have oil rents of 10% of GDP or more. Grey line: fit to all economies, $r = 0.52$. Blue line: fit excluding oil economies, $r = 0.68$. A correlation, not a causal estimate. Source: World Bank WBL 2026 and WDI; own calculation (measured data, descriptive fit).

Laws are not practice

The legal index measures what is written down. The World Bank also scores two other things. One is whether supporting frameworks exist, such as childcare, safety services and the machinery to claim a right (the report calls this implementation). The other is how well experts think the rules are enforced.

Averaged over 190 economies, the three scores are 67, 47 and 53.[6] In other words women have, on paper, two thirds of the legal rights the index looks for. They have less than half of the machinery that makes those rights usable, and the experts rate enforcement a little over half. The World Bank's own headline is that only 4 percent of women live in economies that provide nearly full legal equality.

Figure I.2 plots all three against income. All three go with income, and the other two more closely than the law does (r about 0.62 and 0.64, against 0.52). This is partly because state capacity and wealth help to enforce any rule. I do not want to over-read it. But it makes one point strongly. The distance from a law to a lived right is long, and it is shorter in richer places. Legislating is the cheapest step on the list and, for that reason, the one most often taken first.

[6] World Bank, WBL 2026 press release, 24 February 2026, and dataset sheet "Regions and Income Groups": legal frameworks 67.0, supportive frameworks 46.8, enforcement perceptions 53.3. Enforcement is a survey of legal experts, so it measures perception.

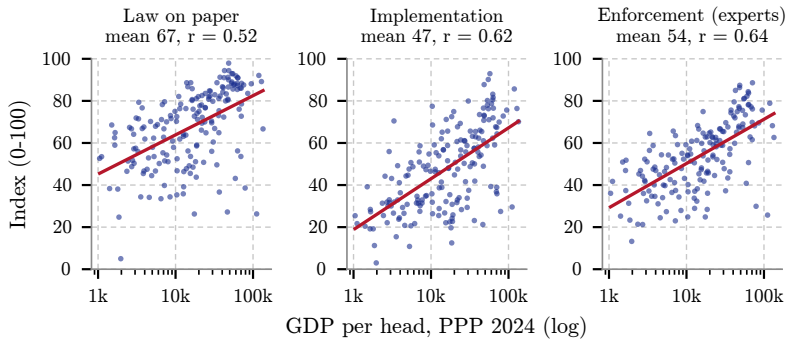


Figure I.2. Law on paper, implementation and expert-rated enforcement, each against income per head. Panel means are over the 180 (169 for enforcement) economies with data, close to the 190-economy official averages of 67, 47 and 53. Enforcement is a perception score. Source: World Bank WBL 2026 and WDI; own calculation (measured, descriptive).

Fifty years of legislating toward equality

The pattern is not only a snapshot. Look at the legacy version of the World Bank index, which covers 190 economies back to 1971. Its unweighted average was 45.7 in 1971. It was 53.4 in 1990, 59.9 in 2000, 68.9 in 2010 and 77.9 in 2024.[7]

Every income group moved. High-income economies went from 51.3 to 87.4, low-income economies from 36.7 to 67.8, a rise of roughly 30 points each (Figure I.3). No region of the world ran the other way. Progress was slow in the 1970s and quicker after 1990.

Two things follow. One is that the movement towards equal rights is a worldwide movement, not a Western one, and it has been steady for half a century. The other is that the rich-poor gap in legal equality has not closed. Low-income economies in 2024 sit where high-income economies were in about 1990. So a snapshot like Figure I.1 is partly a picture of who has finished a long journey and who has not.

There is a caution, too. The World Bank changed its method in 2026 to a new 2.0 framework, so the two indices must not be spliced. Bangladesh, for example, scores 49.4 on the old index in 2024 and 34.4 on the new one in 2026. I name the version each time.

[7] World Bank, WBL 2024 Historical Panel Data 1971–2024 (WBL 1.0 index; unweighted mean of 190 economies). Not comparable with the WBL 2.0 index used in Figures I.1 and I.2.

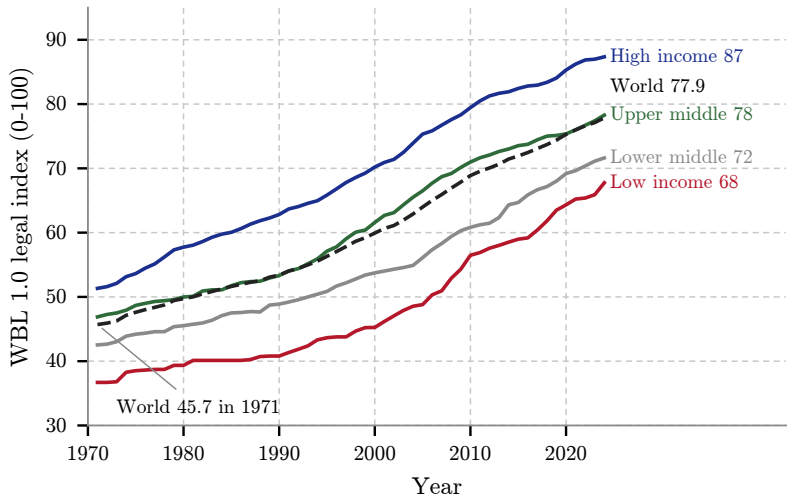


Figure I.3. Average legal equality, WBL 1.0 index, 1971–2024, by income group, with the 190-economy world average (dashed). Unweighted means. Source: World Bank WBL 2024 Historical Panel Data (measured; legacy index).

Other yardsticks, the same direction

An index built by lawyers might be an artefact. So I checked three other measures, built by other institutions with other methods (Figure I.4).

The World Economic Forum's Global Gender Gap Index measures female-to-male ratios in health, education, the economy and politics. In 2026 it puts the world at 69.2 percent of the way to parity, with health at 96.2 and education at 96.9 but economic participation at 61.7 and political empowerment at 22.1.[8] It correlates with log income at about 0.43 in 2026 (0.47 in 2025), modestly, because it counts gaps and not levels.

The UNDP Gender Inequality Index for 2023 correlates with log income at $r = -0.88$ across 169 countries.[9] That is the strongest of the four, and also the least informative. The index includes maternal mortality and adolescent births, which fall with development almost by construction. I note it and do not lean on it.

The OECD's Social Institutions and Gender Index, which scores discriminatory laws, norms and practices, correlates at $r = -0.54$ across 136 countries.[10]

Four institutions, four methods, one direction. The weakest and the strongest of these correlations differ by a factor of two, and I will not pretend that the strongest is the most telling.

[8] World Economic Forum, *Global Gender Gap Report 2026*. It measures gaps within countries, not levels, and is volatile: Bangladesh ranked 24th in 2025 and 79th in 2026, so I never use a single-year rank as evidence.

[9] UNDP, *Human Development Report 2025*, composite-indices time series (GII 2023), with WDI income. Own calculation.

[10] OECD Development Centre, *SIGI 2023* (data via OECD SDMX API) with WDI income. Own calculation. The OECD reports that 40% of women and girls live in countries where discrimination in social institutions is high or very high.

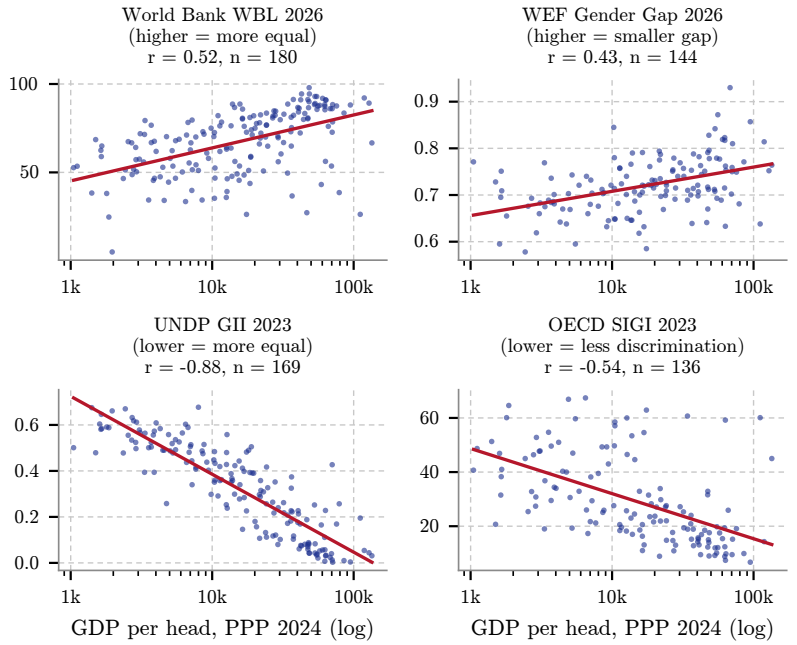


Figure I.4. Four measures of gender equality against income per head. Higher is more equal for the first two panels, lower is more equal for the second two. GII and SIGI partly embed development outcomes. Source: World Bank WBL 2026; WEF Global Gender Gap Report 2026; UNDP HDR 2025; OECD SIGI 2023; WDI income; own calculation (measured, descriptive).

Which way does the arrow point?

A hostile economist will say the arrow runs the other way. Rich countries can afford to give women equal rights. That is a serious objection and it has evidence behind it: Dollar and Gatti found that income drives gender equality in education, and Duflo has argued that the two forces alone are too weak to be self-sustaining.[11]

I have three answers, and none is a proof.

The first is that the designs that identify effects of particular freedoms cannot be explained by prior income. They compare places and times at the same level of development. Women's suffrage in US states, randomised seat reservations in Indian village councils, schooling reforms in poor countries and family-law reform in Ethiopia are the examples I will use. The second is that reviews of the cross-country literature find the link from women's education and employment to growth more consistent than the reverse link, though they warn that growth alone will not deliver equality.[12] The third is my own illustrative check. Conditional on initial income, a higher WBL 1.0 score in 1990

[11] Dollar and Gatti (1999), cited in the research dossier; Duflo (2012), "Women Empowerment and Economic Development", *Journal of Economic Literature*. Cited as characterised in the dossier's rigor check.

[12] Kabeer and Natali (2013), IDS Working Paper 417. The review notes that studies vary in rigour and reverse causality is a problem.

or 2000 goes with faster growth up to 2023, by about 0.3 percentage points a year per 10 points of the index. But the unconditional correlation is weak, about 0.12 to 0.17.[13] I offer it as suggestive and no more.

So I concede what must be conceded. Cross-country regressions cannot rule out reverse causality or a third factor such as institutions or culture. That is why this paper leans on the within-country designs, and why its causal claims are confined to the freedoms those designs test.

[13] Own calculation from the WBL 2024 Historical Panel and WDI GDP per head; simple OLS without robust standard errors or region effects; illustrative, not peer reviewed, not causal.

What the gap might cost

Many organisations have put a price on the gender gap. Those numbers are simulations, not observed losses, and they are not additive. World Bank researchers estimate that if women earned as much as men, lifetime earnings wealth in 141 countries would rise by $160 trillion.[14] McKinsey's 2015 scenarios add $12 trillion to annual 2025 GDP in a realistic case and $28 trillion at full parity.[15] World Bank simulations suggest that if female employment matched male employment, long-run GDP per head could be on the order of a fifth higher on average and about half higher in the Middle East and North Africa.[16]

I give these as orders of magnitude, in the direction of the thesis, but not as results. The peer-reviewed figures are more modest, and I put them first when they matter (Chapter IV).

[14] World Bank, *Unrealized Potential: The High Cost of Gender Inequality in Earnings* (2018). A wealth stock built on an accounting assumption, not annual GDP.

[15] McKinsey Global Institute, *The Power of Parity* (2015), 95 countries. Industry research, not peer reviewed; the $28 trillion is a ceiling.

[16] WBL 2026, citing Pennings (2022) and Fiuratti et al. (2024). An upper-bound counterfactual that holds other things equal.

How this paper is built

The rest of the paper takes the freedoms one at a time. It asks of each what the strongest evidence is, how large the effect is, and where it fails.

Chapter II is about schooling: what happened when girls went to school, and where reforms of schooling lowered early births and child deaths. Chapter III is about legal rights to own, inherit, move and work, including India's two-edged inheritance reforms. Chapter IV is about work and the misallocation of talent. Chapter V is about political voice, from the US suffrage experience to Indian village councils. Chapter VI takes country cases, and Chapter VII the places where women have been restricted, Afghanistan above all. Chapter VIII answers the strongest objections one by one.

My claim is not that every freedom pays off for every country in every decade. It is that across 180 economies, the places that grant their

women the most freedom are the places that are richest, and that for the freedoms we can test, the evidence points the same way.

II. The Girl in School

Of all the freedoms in this paper, the freedom to go to school has the best evidence behind it. Where governments opened classrooms to girls, women married later, had fewer children, and more of those children lived. Where schooling was already near-universal, the effect shrinks. That pattern is what a real effect looks like.

> *It may well be the highest return investment available in the developing world.*
>
> Lawrence Summers, on educating girls, 1992 (hedged by its author)

Start with a number that surprises people. In 1970, South Asia enrolled 42 girls in secondary school for every 100 boys. By 2020 it enrolled 99.[1] A gap that looked like a fixture of the region closed inside two generations.

This is the first of the channels through which freedom could turn into prosperity, and it is the one where I can say the most with the fewest caveats. I will say it in this order: what has happened to girls in school, what schooling pays, what it did to fertility and child survival, what the cleanest experiments show, and where they show nothing. Then I will put the best objection on the table, because it is a good one.

[1] World Bank, World Development Indicators, SE.ENR.SECO.FM.ZS (UNESCO Institute for Statistics), gross enrolment parity index, South Asia 0.418 in 1970 and 0.992 in 2020. Data release 2026-07-13. Measured.

The gap that closed

Look at Figure II.1. In 1990 the world enrolled 85 girls in secondary school for every 100 boys. By 2020 the figure was 99.[2] Sub-Saharan Africa went from 0.76 to 0.90. The Middle East and North Africa went from 0.75 to 0.97. East Asia passed parity.

[2] World Bank WDI, SE.ENR.SECO.FM.ZS, world 0.845 (1990) and 0.989 (2020). Gross enrolment, so it can exceed 100 per cent in a grade range. Measured.

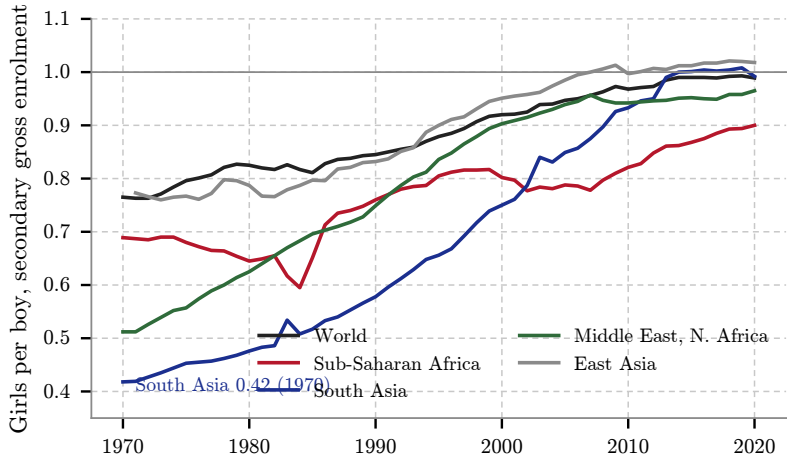


Figure II.1. Girls per boy in secondary school, 1970 to 2020. Source: World Bank WDI (UNESCO UIS), SE.ENR.SECO.FM.ZS, release 2026-07-13 (measured). Gross enrolment ratios; the series ends in 2020 in the data used here.

The story at the top end is bigger. Women now outnumber men in tertiary education. Across the world the ratio of female to male tertiary enrolment is 1.14 (2023), up from 0.89 in 1990 (Figure II.2).[3] In Latin America it is 1.41. South Asia, which sat at 0.64 in 2000, reached 1.02. Sub-Saharan Africa remains the laggard at 0.79 in 2020.

[3] World Bank WDI, SE.TER.ENRR.FE divided by SE.TER.ENRR.MA (UNESCO UIS); my calculation. World 1.144 (2023), 0.892 (1990). Latin America 1.41 (2023), South Asia 1.02 (2023), Sub-Saharan Africa 0.79 (2020, the latest year in the series). Measured, ratio computed by me.

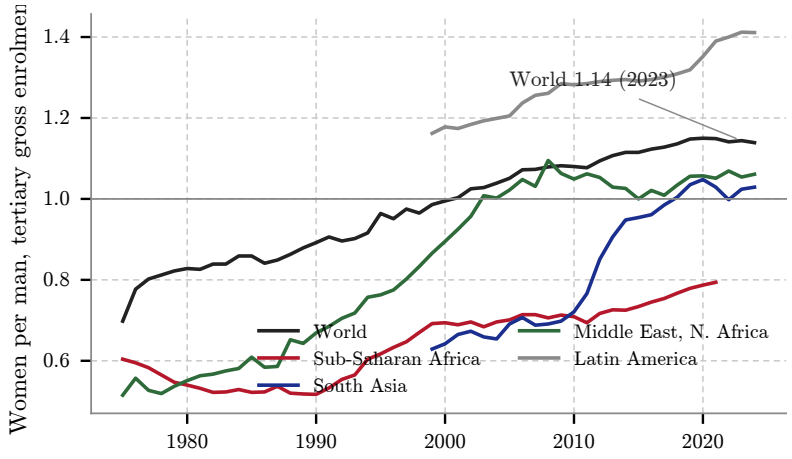


Figure II.2. Women per man in tertiary education, 1975 to 2024. Source: World Bank WDI (UNESCO UIS), SE.TER.ENRR.FE and .MA; ratio is my own calculation from public data (measured).

Two things follow. First, the remaining deficit is no longer a global fact about girls. It is a poverty and crisis fact. UNESCO counts 133 million girls and 140 million boys out of school, and in the lowest-income countries girls complete lower secondary less often than boys

(36.5 against 40.7 per cent, 2023).[4] Second, where the deficit remains it sits exactly where laws, income and security are weakest. That is the thesis of this paper in miniature.

[4] UNESCO, Gender equality and education page, accessed 2026-10-07 (273 million children and youth out of school: 133 million girls, 140 million boys); World Bank WDI, SE.SEC.CMPT.LO.FE.ZS and .MA.ZS, low-income group, 2023. Measured.

What a year of school pays

Economists have measured the private return to schooling for decades. The World Bank's latest decennial review pools 1,120 estimates from 139 countries between 1950 and 2014.[5] An extra year of schooling raises earnings by about 9 per cent. The return to women exceeds the return to men by about two percentage points. Regional averages run from 11.0 per cent in Latin America and 10.5 in Sub-Saharan Africa down to 5.7 in the Middle East and North Africa.

[5] Psacharopoulos and Patrinos, "Returns to Investment in Education: A Decennial Review of the Global Literature", World Bank Policy Research Working Paper 8402, 2018. Mostly OLS (Mincerian) estimates; ability bias is not removed.

Read that with care, and so will I. The authors themselves say it does not mean women earn more than men: it means a year of school lifts a woman further above her own starting point. These are wage returns among women who work, and where few women work the sample is selected. Mostly they are not causal estimates. But they are corroborated by the natural-experiment literature below, and they explain why a parent with one place to fill might send the daughter.

In 1992 Lawrence Summers said that educating girls "may well be the highest return investment available in the developing world."[6] The line is quoted as a finding. It was an argument, and a hedged one. I think it holds up, and I will not claim more for it than its author did.

[6] Summers, "Investing in All the People", World Bank Policy Research Working Paper 905, May 1992. He hedged the claim ("may", "quite possibly") and it was a policy argument based on correlational estimates.

Dollar-sized claims need the same discipline. World Bank researchers estimate that missing secondary schooling for girls represents US$15 to 30 trillion in lifetime earnings.[7] This is a scenario ceiling, a stock of wealth built from regression coefficients, not a loss anyone has observed. I cite it for scale and no more.

[7] Wodon, Montenegro, Nguyen and Onagoruwa, "Missed Opportunities: The High Cost of Not Educating Girls", World Bank, 2018; 141 countries. The authors call these associations and orders of magnitude. Modelled.

Fewer births, more survivors

Every country that has educated its girls has seen fertility fall. In the cross-section the pattern is steep. Across 191 economies, female secondary enrolment and the total fertility rate have a correlation of -0.72 (Figure II.3).[8] Niger enrols 19.5 girls in a hundred and has 5.9 births per woman. Korea enrols 96 and has 0.75.

[8] World Bank WDI, SE.SEC.ENRR.FE and SP.DYN.TFRT.IN, latest year 2015–24 for enrolment and 2023–24 for fertility, n = 191, Pearson r = -0.72; research-team calculation, descriptive, not causal. On Barro-Lee years of schooling (144 countries, 2010) the correlation is -0.79; mean births per woman fall from 5.99 for countries with under three years to 1.78 for those with eleven or more.

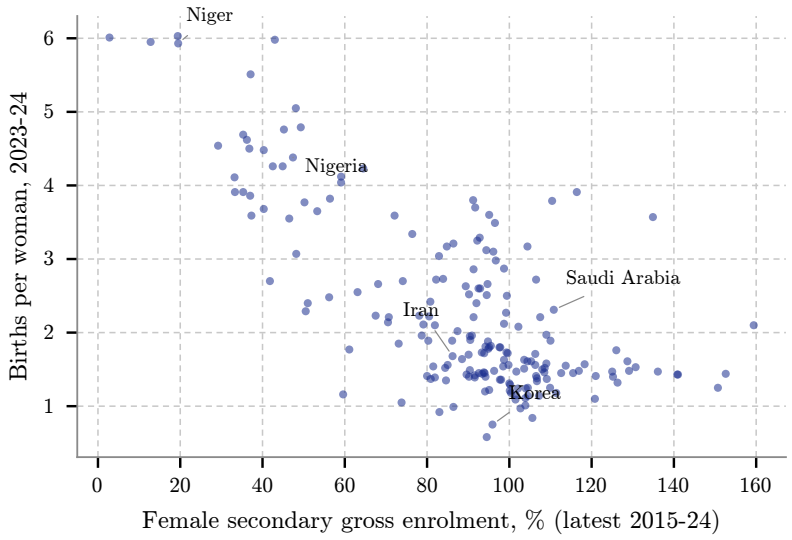


Figure II.3. Fertility against female secondary enrolment, 191 economies, r = −0.72. Source: World Bank WDI, own calculation (correlation, not causal).

Be careful what this shows. Fertility fell almost everywhere in the past half-century (Figure II.3 is a snapshot, not a trajectory), and when I correlate the change in schooling with the change in fertility from 1990 to 2010 the relationship is weak ($r = -0.10$).[9] The cross-section overstates what a country's own schooling gains explain. That is why I put the weight on the experiments, not the scatter.

The world's fertility transition is nonetheless one of the largest changes in human life. The world's average fell from 4.7 births per woman in 1960 to 2.2 in 2024. South Asia fell from 6.0 to 2.0 and East Asia from 4.6 to 1.3.[10] Sub-Saharan Africa, where girls' schooling is scarcest, is still at 4.3.

A transition this fast has a cost on the other side. Korea's rate is 0.75 and Japan's 1.15, and both countries school their women to a high level.[11] Educated women with no room to combine work and family choose not to have children. A paper arguing for women's freedom should not wave that away. It is a demographic cost of getting the other half of the freedom package wrong, and I return to it in the chapters on work.

Child survival is the other half. Observational estimates are consistent: a pooled review of about 300 studies in 92 countries finds that twelve years of maternal schooling go with 31 per cent lower under-five mortality than none.[12] Observational means just that. Mothers who go to school are also richer, and live where clinics are.

[9] Own calculation from World Bank EdStats (BAR.SCHL.15UP.FE) and WDI (SP.DYN.TFRT.IN), 144 countries; change-on-change $r = -0.10$ for 1990–2010 and −0.34 for 1970–2010. Descriptive.

[10] World Bank WDI, SP.DYN.TFRT.IN (UN World Population Prospects-based). World 4.69 (1960) and 2.19 (2024); South Asia 6.00 and 1.98; East Asia 4.55 and 1.34; Sub-Saharan Africa 6.57 and 4.26. Measured.

[11] World Bank WDI, SP.DYN.TFRT.IN, Korea 0.75 (2024); Japan 1.15 (research dossier, part P3).

[12] Balaj et al., Lancet 2021, meta-regression of observational studies, abstract; the authors describe an association. Paternal schooling, 12 years: 17.3 per cent lower.

The quasi-experiments

So look at the experiments. The best of them exploit a reform that opened classrooms to girls in some places or cohorts and not others. If the reform, not income, moved the outcome, we are closer to a cause.

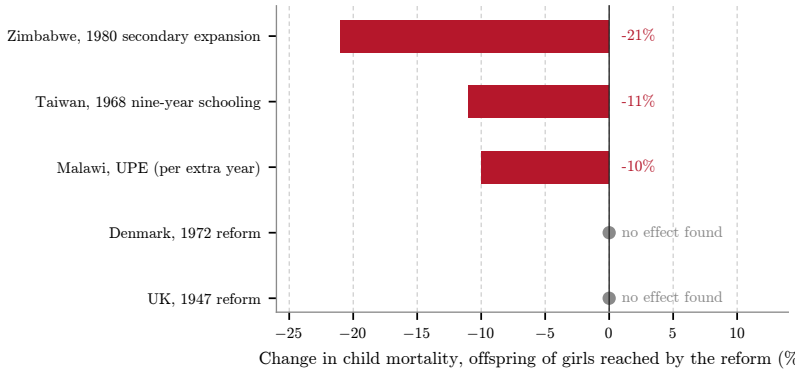


Figure II.4. Effects of schooling reforms on the next generation's survival and health. Units differ across studies (cohort exposure, an extra year, a reform): read as direction and rough size only. Source: Grepin and Bharadwaj 2015; Chou et al. 2007; Andriano and Monden 2019; Arendt et al. 2021; Lindeboom et al. 2009 (quasi-experimental; figures from abstracts).

In Zimbabwe, children of mothers exposed to the 1980 expansion of secondary schooling were about 21 per cent less likely to die, and the mothers married and had a first birth later.[13] In Taiwan, a 1968 reform extending compulsory schooling to nine years cut infant mortality by about 11 per cent, close to one life saved per 1,000 births.[14] In Malawi, each extra year of maternal schooling, driven by the free-primary reform, lowered the probability of child death by about 10 per cent. A companion Uganda estimate put the fall at 16.6 per cent in the odds.[15]

On fertility the results line up. In Nigeria, one extra year of schooling cut births by about 0.26.[16] In Malawi the figure is 0.39 children per year of schooling.[17] A review finds that primary schooling against none goes with up to 30 per cent fewer children, and secondary against primary with 10 to 50 per cent fewer.[18] In Indonesia, school construction in the 1970s delayed marriage, and for child mortality female and male schooling were about equally important, so I do not claim mothers matter more than fathers.[19]

These are the studies behind the sentence I am prepared to defend: where girls' schooling was expanded by policy in poor countries, studies find lower fertility and child mortality, and the gains are largest where schooling was scarcest.

[13] Grepin and Bharadwaj, Journal of Health Economics 2015; cohort-exposure natural experiment; abstract read.

[14] Chou, Liu, Grossman and Joyce, NBER Working Paper 13466 (2007), instrumental variables from junior-high openings; abstract read. Earlier versions had data errors that the authors corrected.

[15] Andriano and Monden, Demography 2019, natural experiment on universal primary education; abstract read.

[16] Osili and Long, Journal of Development Economics 2008, difference-in-differences with instruments; abstract read.

[17] Wang, Journal of Demographic Economics 2024, natural experiment; abstract read.

[18] Kim, "Female education and its impact on fertility", IZA World of Labor 228 (updated 2023), survey.

[19] Breierova and Duflo, NBER Working Paper 10513 (2004), instrumental variables from the INPRES school-building programme; abstract read.

Where it does nothing

Now the nulls, and I would rather show them than have them found. When Denmark raised compulsory schooling from seven to nine years in 1972, researchers found no systematic causal effect on child health, though women had their first child later.[20] The 1947 reform in the United Kingdom had little effect on the health of the next generation.[21] School-entry rules in the United States have small effects on fertility and infant health,[22] and for fertility the schooling effect found in England cannot be confirmed for continental Europe.[23] Sierra Leone gives a partial null: schooling lowered desired family size and raised contraception, but not the age at marriage or first birth.[24]

The pattern is the argument. Effects are large where baseline schooling was low and health systems thin, and small or absent where almost every child already stayed in school and the clinic was nearby. That is what a catching-up effect looks like. A spurious correlation would have no reason to fade exactly where schooling saturates.

I will also not push the headline claim past the data. A widely quoted study attributes 4.2 million of 8.2 million averted child deaths between 1970 and 2009 to women's rising education.[25] That is a regression counterfactual. Do not read it as "schooling caused half of the decline."

[20] Arendt, Christensen and Hjorth-Trolle, Journal of Health Economics 2021; abstract read.

[21] Lindeboom, Llena-Nozal and van der Klaauw, Journal of Health Economics 2009; abstract read.

[22] McCrary and Royer, American Economic Review 2011, regression discontinuity; abstract read.

[23] Fort, Schneeweis and Winter-Ebmer, Economic Journal 2016; abstract read.

[24] Mocan and Cannonier, Journal of Demographic Economics 2018; abstract read.

[25] Gakidou, Cowling, Lozano and Murray, Lancet 2010; panel regression on 915 censuses and surveys with income and HIV controlled. The attribution is a regression counterfactual.

Does income drive equality, or the reverse?

Here is the objection. The richer a country, the more girls it puts in school, so schooling may be a symptom of income. Dollar and Gatti made exactly this argument: income causes more equality in education, and the gender gap in secondary schooling hurts growth only from lower-middle-income status upward.[26] The Barro-Lee growth regressions even returned a negative coefficient on female secondary attainment. Pritchett found no positive effect of education growth on growth of output per worker, with explanations including stagnant demand for skills and poor institutions.[27] And quality, not years, is what predicts growth.[28]

I concede all of it for the macro question. The direction of causation between a country's income and its girls' schooling runs both ways, and no study identifies how much of national growth comes from girls' schooling alone. Klasen's estimates that education gaps cost 0.4 to 0.9 percentage points of annual growth between East Asia and the other regions are regional accounting, not a forecast.[29]

But three things survive. First, the quasi-experiments do not depend on income: a reform that reached some cohorts and not others cannot be explained by a country being rich. Second, the review literature

[26] Dollar and Gatti, World Bank Policy Research Report on Gender and Development Working Paper 1, 1999; panel with instruments.

[27] Pritchett, "Where Has All the Education Gone?", World Bank Policy Research Working Paper 1581 (1996); World Bank Economic Review 2001.

[28] Hanushek and Woessmann, Journal of Economic Literature 2008, test scores in cross-country regressions.

[29] Klasen, World Bank Economic Review 2002, abstract read; panel with instruments. Combined education and employment gaps: Klasen and Lamanna, Feminist Economics 2009.

finds the arrow from women's education and employment to growth the more consistent of the two.[30] Third, even sceptics warn that growth will not deliver equality on its own, so policy has to supply the schooling.[31]

Interventions work. In Bihar, a bicycle programme raised girls' age-appropriate secondary enrolment by 30 per cent and cut the gender gap by 40 per cent.[32] In Kenya, free uniforms cut dropout, pregnancy and marriage in a randomised trial lasting seven years.[33] In Bangladesh, the arrival of garment jobs had a much larger effect on girls' schooling than the stipend scheme (a quasi-experimental result).[34] That last one matters for the next chapter: a girl stays in school when the world offers her something to do afterwards.

[30] Kabeer and Natali 2013, as summarised in the research dossier (rigor check, section 1F).

[31] Duflo, Journal of Economic Literature 2012, as summarised in the research dossier.

[32] Muralidharan and Prakash, American Economic Journal: Applied Economics 2017; triple-difference design; abstract read.

[33] Duflo, Dupas and Kremer, American Economic Review 2015, randomised trial.

[34] Heath and Mobarak, NBER Working Paper 20383, 2014, abstract read.

The limit: schooling is not freedom

I will close on a limit. Schooling does not turn itself into participation. Iran enrols women in tertiary education at about the same rate as men (59.1 against 58.3 per cent) and has female labour participation near 14 per cent.[35] Afghanistan is the only country that bars girls from secondary school.[36] Schooling that is not matched by the freedom to work, own and move runs into a wall.

So I do not offer the girl in school as the whole story. She is where it starts. The next chapter is about what happens to her at the front door of the bank and the registry office.

[35] Research dossier (rigor check, section 5, item 8); the labour figure is approximate and the tertiary figures are gross enrolment.

[36] UNDP projection cited in the research dossier: about US$920 million (5.8 per cent of GDP) over 2024–26, on top of the shock from lost aid; a projection, not an observed loss.

III. The Right to Own

A woman who cannot own, inherit, travel or borrow in her own name cannot invest in herself. The cheapest reform on the list is to change the law. The evidence says that the change works, but that it works best when norms move with it, and that in one famous case it also did harm.

> *A married woman could not make contracts, buy and sell property, sue or be sued, or draft wills.*
>
> Geddes and Lueck, on coverture

Every other freedom in this paper depends on this one. A girl can be sent to school, a woman can be offered a job, a village can elect her to its council. But if the law says her wages belong to her husband, her father's land goes to her brother, and she needs a man's signature to cross a border or open an account, then each of those freedoms is rented, not owned.

This chapter is about the legal floor. I look at property, inheritance, mobility and credit. I will not claim that law reform makes a country rich. No study identifies that at the national level, and I will not pretend otherwise. The claim is narrower and, I think, harder to dodge. Where the law has been changed for women, the studies that can separate the reform from everything else find that women got more schooling, more work, more say at home, and more savings. They also find costs. I will show both, because the costs are what make the argument precise.

Coverture, and the men who ended it

For most of the nineteenth century, a wife in England and America had no separate legal identity. Under the doctrine of coverture she could not contract, sue, hold property or write a will, and her husband owned her wages.[1]

Then it was undone, state by state and statute by statute, decades before women could vote. Figure III.1 gives the sequence. Iowa gave mothers sole custody in 1838. Mississippi granted limited property rights to married women in 1839, and Maine passed a separate-property law in 1844 and an earnings law in 1857. In England the

[1] Geddes and Lueck, "The Gains from Self-Ownership and the Expansion of Women's Rights," *American Economic Review* 92(4), 2002.

Married Women's Property Acts of 1870 and 1874 gave limited control of earnings, and the 1882 Act let a wife hold separate property and contract over it. By the end of the century every American married woman had some protection of her property and earnings. The US vote came in 1920.[2]

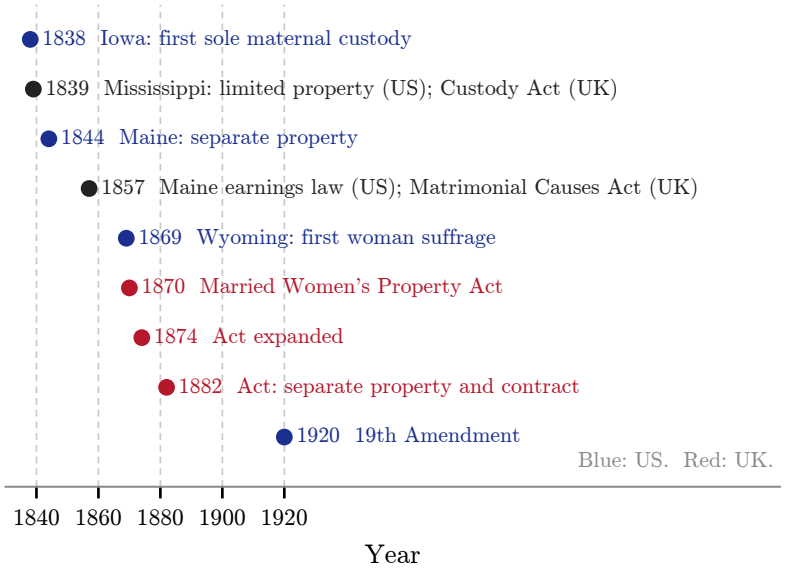


Figure III.1. Married women's legal milestones in the US and the UK, 1838 to 1920. Source: Doepke, Tertilt and Voena (2012), Tables 2 and 3 (measured; dates as coded by the authors).

What did the property acts do? Two studies identify effects. Using staggered adoption across US states between 1850 and 1920, Geddes, Lueck and Tennyson found that expanding women's economic rights raised girls' school attendance, with the largest effect at ages 15 to 19.[3] Khan, using patent records from 1790 to 1895, found that women's patenting jumped in states that reformed and stayed low in states that did not.[4]

Now the honest part. The effect on women's total wealth was small. When England passed its 1870 Act, women shifted their portfolios from land towards personal property, but no difference was observed in their total assets.[5] Few married women worked, so there was little to protect. And the causation runs both ways. Several leading accounts argue that rising returns to human capital and falling fertility made fathers and legislators want rights for daughters.[6] So the word I will use is reinforcing. Development opened the door. The reforms kept it open, and girls walked through.

That is a pattern worth keeping in mind. Rights do not fall from the sky, and they do not by themselves create a prosperous economy. But they lock in the gains of the moment, and they decide who gets to share in them.

[2] Doepke, Tertilt and Voena, "The Economics and Politics of Women's Rights," *Annual Review of Economics* 4, 2012 (NBER WP 17672, Tables 2 and 3). Sources differ on which US state was first; I give the definition each time.

[3] Geddes, Lueck and Tennyson, "Human Capital Accumulation and the Expansion of Women's Economic Rights," *Journal of Law and Economics* 55(4), 2012. I read the abstract; I quote no coefficient.

[4] Khan, "Married Women's Property Laws and Female Commercial Activity," *Journal of Economic History* 56(2), 1996. Patents are a thin proxy for commerce. The 4,198 women's patents in the study are concentrated in metropolitan areas.

[5] Combs, *Journal of Economic History* 65(4), 2005, as summarised in Doepke, Tertilt and Voena (2012). I read it through that summary.

[6] Doepke and Tertilt, "Women's Liberation: What's in It for Men?," *Quarterly Journal of Economics* 124(4), 2009; Fernandez, "Women's Rights and Development," *Journal of Economic Growth* 19(1), 2014. Both are models with historical timing evidence, not identified estimates of the reforms' effects.

Ethiopia: a family law that changed who worked

The cleanest modern case is Ethiopia. In 2000 the country revised its family law. Both spouses now had to consent to the use of marital property, a husband lost his veto over his wife's decision to work, and the minimum age at marriage went up. The reform was rolled out region by region, which lets researchers compare reform areas with those that had not yet adopted it.

Hallward-Driemeier and Gajigo used household surveys taken five years apart and found that women's participation in work outside the home, in paid work, in full-time work and in jobs requiring more education was 15 to 24 per cent higher in the reform areas.[7] That is a credible natural experiment, single-study and with details I could not check beyond the abstract. I label it moderate evidence. But it points the way the other designs do. Take away a spouse's veto, and women work more.

[7] Hallward-Driemeier and Gajigo, "Strengthening Economic Rights and Women's Occupational Choice: The Impact of Reforming Ethiopia's Family Law," *World Development* 70, 2015. Difference-in-differences on a staggered regional rollout. I read the abstract.

India: the two-edged reform

India is the hardest case for this chapter, and I have placed it in the middle of the chapter on purpose. The Hindu Succession Act of 1956 gave sons birth rights in joint family property and left daughters out. Between 1976 and 1994, five states amended it to give unmarried daughters equal rights: Kerala in 1976, Andhra Pradesh in 1986, Tamil Nadu in 1989, Maharashtra and Karnataka in 1994. A national amendment extended equal rights to every Hindu daughter in 2005.[8]

[8] Roy, "Empowering Women? Inheritance Rights, Female Education and Dowry Payments in India," *Journal of Development Economics* 114, 2015, section 1.2; Hossain and Nikolov (2021) for the national date. The laws cover Hindu, Buddhist, Jain and Sikh families; Muslims and Christians fall under other personal law.

The gains

Roy compared daughters in reform states, before and after, with those in states that had not yet reformed. Women most exposed to the reform had between 1.2 and 1.7 more years of schooling.[9] Heath and Tan, using exposure to the Act as variation in a woman's unearned income, estimated that it raised women's labour supply by 3.8 to 6.1 percentage points, particularly into higher-paying jobs, and raised an index of autonomy by 0.17 standard deviations.[10] Deininger and co-authors found a robust rise in daughters' schooling, and Harari found something similar in Kenya, where women exposed to an equal-inheritance reform were more educated, married and had children later, and took a larger part in household decisions even where enforcement was poor.[11]

[9] Roy (2015). An earlier working-paper abstract reports a smaller figure; the published text gives 1.2 to 1.7 years, so I say "over a year."

[10] Heath and Tan, "Intrahousehold Bargaining, Female Autonomy, and Labor Supply," *Journal of the European Economic Association* 18(4), 2020. I read the abstract only.

[11] Deininger, Goyal and Nagarajan, *Journal of Human Resources* 48(1), 2013 (abstract only; no effect sizes quoted); Harari, *Economic Development and Cultural Change* 68(1), 2019 (abstract only).

The costs

Here the story turns, and a paper that skipped this part would deserve to be dismissed.

First, the target of the law was not reached. Roy found that the state reforms did not raise the chance that a daughter inherited land. They failed, in the abstract's words, to increase the actual likelihood of women inheriting property. Parents instead gifted land to sons in advance: land gifts to the treated women's brothers rose by 13 percentage points in the most exposed group.[12] Parents compensated daughters with schooling, or with dowry. That is the mechanism behind the schooling gain, and it is a long way from the outcome the law intended.

Second, the reform raised the price of a daughter. Bhalotra, Brule and Roy found that children born after the reform to families whose first child was a girl were 3.8 to 4.3 percentage points less likely to be girls, with higher excess female infant mortality.[13] More sex selection followed an act whose aim was to value daughters more.

Third, there was more conflict. Anderson and Genicot found that where women's property rights were stronger, the gap between female and male suicide rates narrowed, but suicides rose among both sexes, and so did wife-beating.[14]

Figure III.2 puts both columns in one place.



Figure III.2. India's inheritance reforms: estimated effects, gains and adverse results side by side. Units differ by row. Source: Roy (2015); Heath and Tan (2020); Bhalotra, Brule and Roy (2020); Anderson and Genicot (2015). Difference-in-differences estimates; some read at abstract level (measured).

One more caveat belongs here. The effects are not uniform. Suteau

[12] Roy (2015). Deininger et al. report a land effect with "substantial bias" remaining, so the literature is not unanimous; different papers study different reforms. I do not claim that India's reform raised women's land ownership.

[13] Bhalotra, Brule and Roy, "Women's Inheritance Rights Reform and the Preference for Sons in India," *Journal of Development Economics* 146, 2020. Abstract only. The authors conclude that the legal reform was frustrated by the persistence of cultural norms.

[14] Anderson and Genicot, "Suicide and Property Rights in India," *Journal of Development Economics* 114, 2015. Abstract level.

finds that more educated women in landowning households moved into better-paid jobs, while less educated rural women either left the workforce or moved to less demanding work.[15]

[15] Suteau, *Review of Economics of the Household*, 2025. Abstract only.

What do I draw from this? Not that the reform was a mistake. A law that cuts a daughter out of the family estate is not neutral, and the answer to circumvention is better enforcement and a change in norms, not retreat. But the lesson is sharp. Rights without norm change can backfire in the short run, and the dividend arrives through education and work, not through the headline asset. That is a result about how to reform, not an argument against it. It also explains something I return to when I take up objections: legislation matters most where it is paired with a change in what people believe.

Saudi Arabia: the largest reform, and its limits

No country has moved faster on paper. The World Bank's Women, Business and the Law index (the older 1.0 version, 0 to 100) put Saudi Arabia at 31.9 in 2017 and 70.6 in 2020, a rise of 38.8 points, the largest of any country. The reforms covered six of eight indicators. Women no longer needed a guardian's permission to travel abroad or obtain a passport. They could choose where to live. Sexual harassment at work became a crime. Discrimination in hiring and in financial services was outlawed, and women were allowed to be heads of household.[16]

[16] World Bank, *Women, Business and the Law 2020*, chapter 1 (data to 1 October 2019). I give legal changes as described by the report; I do not rely on exact decree dates.

Participation moved with it. Among Saudi nationals, the female labour-force participation rate was 17.7 per cent in the second quarter of 2016, 33.2 per cent at the end of 2020, and 36.0 per cent at the end of 2024.[17] Figure III.3 shows both lines.

[17] GASTAT Labour Market Statistics; primary pages for Q4 2017 and Q2 2025, other quarters via secondary reports (MEI, SPA), accessed October 2026. The 2019 point (about 26 per cent) comes from a secondary source.

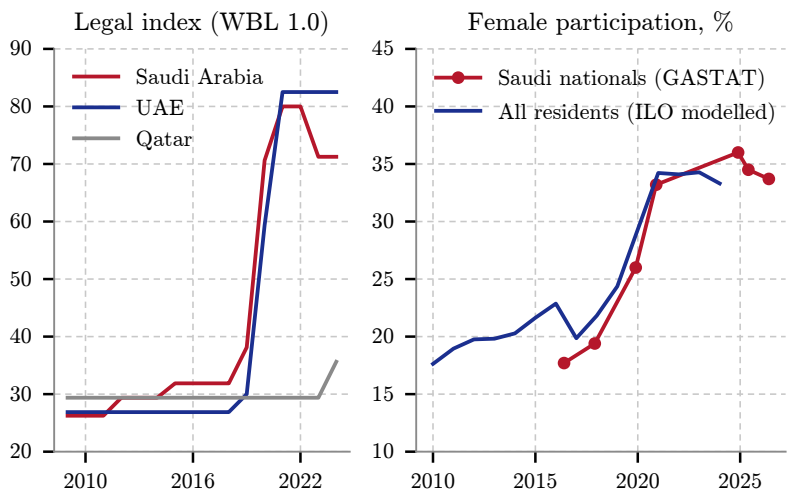


Figure III.3. Left: legal index (WBL 1.0), Saudi Arabia, UAE and Qatar.

The Saudi dip in 2023 is a recoding in the panel. Right: female participation, Saudi nationals (GASTAT) and the ILO-modelled all-resident series. Source: World Bank WBL 2024 panel; GASTAT; World Bank WDI (measured and modelled, as labelled).

I want to be careful about what this shows. Participation roughly doubled as the Kingdom ended the driving ban, loosened travel guardianship, outlawed hiring discrimination and taxed expatriate hiring. That list is the problem. From July 2017 a monthly levy fell on the dependents of foreign workers and rose over the following years, narrowing the cost gap between expatriates and nationals. There were also quotas for hiring Saudis, childcare and transport subsidies, and the churn of the pandemic. This is an oil economy, and many of the new jobs were funded from rents. There is no clean causal estimate, and I do not write that lifting the driving ban raised participation.[18] No study I found attributes a GDP effect to the reforms, and I will not invent one.

Two further facts keep the account honest. The reform is incomplete. Under the World Bank's new 2.0 coding, Saudi Arabia scores 56.2 in 2026, with 25 on marriage, 37.5 on mobility and 31.25 on safety, because the marriage law still requires obedience, divorce rights are unequal, and a woman cannot confer nationality on her spouse or children as a man can.[19] And the growth has stalled. Participation among nationals slipped from 36.0 per cent to 34.5 per cent in the second quarter of 2025 and 33.7 per cent in the second quarter of 2026, while women's unemployment, 9.6 per cent in 2026, remains more than twice the male rate.[20]

What does Saudi Arabia teach? That a legal reform can be large and fast, and that participation can respond within a few years. It does not show that these laws made the country richer. And it shows that a reform that stops halfway stops the gains halfway.

[18] MEI, "Exploring the Rising Workforce Participation among Saudi Women" (secondary source, read via proxy), argues that the expatriate levy contributed. IMF Article IV pages could not be accessed and are not cited.

[19] World Bank WBL 2026 dataset (23 February 2026). The 2.0 index is not comparable with the 1.0 scores in Figure III.3. The WBL 2020 report said the obedience requirement had been repealed; the 2026 coding says a 2022 law restored it. I read that as an inference from the dataset.

[20] GASTAT, as above; the second quarter of 2026 figure is from a secondary report. Saudi male unemployment ranged from 4.3 to 4.8 per cent in the series.

Norms, and the Riyadh experiment

The most telling Saudi evidence comes from before the reforms. Bursztyn, Gonzalez and Yanagizawa-Drott surveyed 500 married Saudi men in Riyadh in 2016 and 2017. Some 87 per cent privately agreed that women should be allowed to work outside the home. About three quarters of them underestimated how many other men agreed.[21]

So they told a random half the truth. Men who learned that others supported women working were 9 percentage points more likely to sign up their wives for a job-matching service, against 23 per cent in the control group. Three to five months later their wives were 10 points more likely to have applied for a job (from a base of 6 per cent) and 5 points more likely to have interviewed (from a base of 1 per cent). The study had no power to detect an effect on actual

[21] Bursztyn, Gonzalez and Yanagizawa-Drott, "Misperceived Social Norms: Women Working Outside the Home in Saudi Arabia," *American Economic Review* 110(10), 2020 (NBER WP 24736); full text read.

employment, and I do not claim one.

This is a randomised trial, the strongest design in the chapter. It tells us that part of what held Saudi women back was not the men's wishes but their guess about other men's wishes. That is cheap to correct, and it explains why a law that changes what is visibly permitted can matter beyond its text.

Credit and the account in her name

The last piece of the legal floor is money. In 91 of the 190 economies the World Bank covers, the law does not prohibit discrimination against women in access to credit.[22] The gap shows up in the numbers. In 2024, 81 per cent of men and 77 per cent of women worldwide had an account, a 4-point gap. In low- and middle-income economies it was 5 points, down from 10 in 2011 but unchanged since 2021, and it was 15 points in the Middle East and North Africa, 12 in Sub-Saharan Africa, 30 in Pakistan and 20 in Bangladesh.[23] Among women in those economies, ownership rose from 50 per cent in 2014 to 66 per cent in 2021 and 73 per cent in 2024.

An account matters when the woman controls it, and field experiments show what happens when she does. In the Philippines, a commitment savings product raised decision-making power for women who began with little.[24] In Kenya, market women who were given accounts saved more and increased their business investment, while male bicycle-taxi drivers showed no effect.[25] In India, depositing wages directly into women's own accounts raised their labour supply, and over time raised acceptance of women working.[26] These are randomised trials of accounts, not of laws. None shows that a law on opening a bank account raised national output. They show that a woman with control of money does more with it, and that 91 economies are leaving that gain unclaimed.

[22] World Bank, *Women, Business and the Law 2026*, Main Messages; press release, 24 February 2026.

[23] Klapper, Singer, Starita and Norris, *The Global Findex Database 2025*, World Bank. Account ownership counts any account, including dormant or transfer-only accounts, and is not control over funds. India's parity owes more to a national account-opening drive than to inheritance law.

[24] Ashraf, Karlan and Yin, *World Development* 38(3), 2010; abstract of the working paper read.

[25] Dupas and Robinson, *AEJ: Applied Economics* 5(1), 2013; abstract read.

[26] Field, Pande, Rigol, Schaner and Troyer Moore, "On Her Own Account," *American Economic Review* 111(7), 2021; abstract read, no coefficients quoted.

What the law on the books does not do

All of this comes with a warning from the World Bank itself. Across 190 economies in 2026, the average legal score was 67 out of 100, but the score for supportive frameworks, the childcare, services and safeguards that let women use the law, was 47, and the score for perceived enforcement was 53.[27] A law on the books is a ticket, not a seat.

Cross-country work finds that the laws and the outcomes move together. An IMF study found that removing most single legal restrictions went with a 2 to 3 point narrowing of the male-female participa-

[27] World Bank, *Women, Business and the Law 2026*; global dataset average for legal frameworks 66.97. This is the new 2.0 index.

tion gap in the OECD sample, and that equality guarantees combined with equal inheritance and head-of-household rights went with a gap about 4.6 points smaller.[28] Hyland, Djankov and Goldberg describe the same pattern as a correlation.[29] I read these as consistent with the design-based studies above, not as proof of them.

Figure III.4 shows the long view. Averaged across 190 economies, the legal index rose from 45.7 in 1971 to 77.9 in 2024. Every income group gained 30 to 36 points: high-income economies from 51.3 to 87.4, low-income ones from 36.7 to 67.8.[30] The world has been legislating toward equality for half a century. The rich-poor gap has not closed.

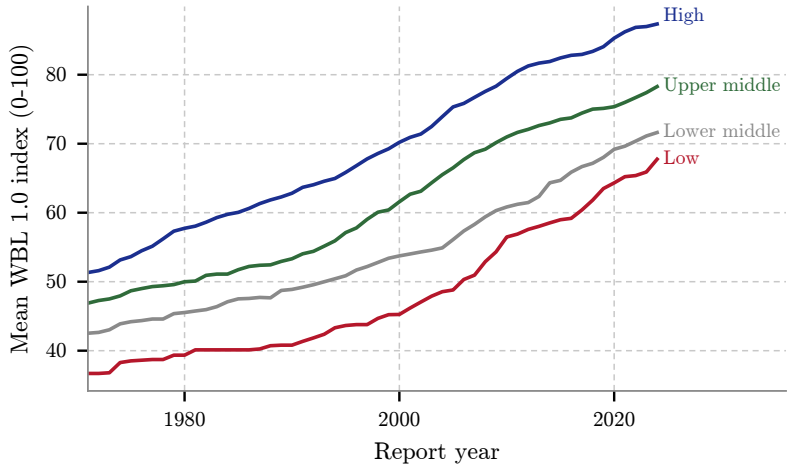


Figure III.4. Mean WBL 1.0 legal-equality index by income group, 1971 to 2024. Source: World Bank WBL 2024 Historical Panel; unweighted group means (measured; own calculation).

[28] Gonzales, Jain-Chandra, Kochhar and Newiak, "Fair Play: More Equal Laws Boost Female Labor Force Participation," IMF Staff Discussion Note 15/02, 2015. Panel correlations with country fixed effects, not causal estimates.

[29] Hyland, Djankov and Goldberg, "Gendered Laws and Women in the Workforce," *American Economic Review: Insights* 2(4), 2020.

[30] World Bank WBL 2024 Historical Panel, 1971 to 2024, unweighted means of the 1.0 index; own calculation from the panel. The 2.0 index of 2026 is not comparable.

What I am claiming

Here is the position, stated so that it can be checked.

Where legal barriers have been lifted, women's participation and investment in girls have followed within years: in Ethiopia, in the American states, in Kenya and in India. Legal equality is the cheapest reform on the list, because it costs a legislature little to pass. The costs are real and I have named them: land that is gifted to sons, sex selection that rose after the Indian reform, conflict in the household, and in Saudi Arabia a reform that moved quickly, stopped short and has begun to stall. They fall mainly on the old arrangement, not on women, and the Indian pattern shows what the fix is: pair the law with enforcement and with a change in what people believe.

What I do not claim is that law reform raises GDP. No study has

shown that. The simulations I cite elsewhere in this paper are scenarios, and the legal index tracks income at about r = 0.52, which leaves most of the variation unexplained.[31] Legal rights are an enabling condition. Next I turn to what women do once they have them, which is work.

[31] World Bank WBL 2026 legal-frameworks index against log GDP per head (PPP, 2024), 180 economies; r = 0.68 excluding the 19 economies with oil rents of 10 per cent of GDP or more. Own calculation; correlation, not causation.

IV. The Work of Talent

An economy is a machine for matching people to tasks. When half the population is kept away from most of the tasks, the machine runs below its capacity. How far below is a modelling question, and I will give the answers as scenarios and not as measured losses. What the experiments show is that jobs open to women change what young women do with their lives.

Start with a number from the United States. In 1960, 94 percent of American doctors and lawyers were white men. By 2010 the share was 62 percent.[1] The talent did not change in fifty years. The doors did.

[1] Hsieh, Hurst, Jones and Klenow, "The Allocation of Talent and U.S. Economic Growth", *Econometrica* 87(5), 2019. Occupational shares read from the paper.

Four economists asked what that was worth. Chang-Tai Hsieh, Erik Hurst, Charles Jones and Peter Klenow built a model in which people differ in their talent for each occupation and are steered by two forces: the barriers they face, and the human capital they were able to acquire. They infer the barriers from the shifting occupational shares of women and Black men, assuming that innate talent is spread equally across groups. Their finding: between 20 and 40 percent of the growth in output per person in the United States from 1960 to 2010 came from a better allocation of talent.[2]

[2] Hsieh et al. (2019). An earlier 2013 NBER draft reported 15 to 20 percent of growth in output per worker; I use the published range. The paper covers women and Black men together, not women alone.

I want to be exact about what that sentence means, because a hostile reader will test it. It is a calibrated model, not an experiment. It does not say that opening occupations to women caused 20 to 40 percent of American growth the way a drug trial shows a drug lowering blood pressure. It says that if you accept the model's structure, a large part of the measured rise in output per person is the return from letting capable people into jobs where they are most productive. The model's logic is old and plain: a country that fills its surgeon, engineer and lawyer posts from half the population has a thinner pool to choose from.

That is the thesis of this chapter, and it is narrower than the thesis of the paper. The earlier chapters dealt with the schooling and the legal rights that let a woman move. This chapter is about what happens when she walks through the door into work.

What the experiments show

The macro numbers rest on models. The micro evidence rests on designs, and it is better than most people expect.

India. Robert Jensen ran a field experiment in rural India. Villages were randomly chosen to receive three years of recruiting services for the business-process outsourcing industry: call centres and back offices that hire young women. In the treated villages, young women were significantly less likely to be married or to have children, and more likely to enter the workforce or to obtain more schooling or training after school.[3] Nobody changed a law. Nobody ran a campaign about attitudes. A recruiter simply showed up with jobs, and families and daughters changed what they did.

That is the cleanest causal design in this chapter, and the lesson is not subtle. When there is a visible, accessible return to a girl's education, she and her parents behave as if there were one.

Bangladesh. The second case is a quasi-experiment, not a randomised trial, and I will say so each time. Rachel Heath and Mushfiq Mobarak studied what happened when garment factories opened near villages. Bangladesh's ready-made garment sector grew fast; it employed almost four million people, and women were about 80 percent of them in the 2007 survey the authors cite.[4] They compared 60 villages, 1,395 households, with and without factory access, before and after the factories arrived, and used brothers as a comparison for sisters.

Among girls with access to the factories, the hazard of marriage and childbirth in the teen years dropped sharply. The hazard of childbirth fell by 29 percent. Girls aged 10 to 23 at the time were 17 percentage points more likely to have done wage work outside the home, a rise of 79 percent. And for six-year-olds, living in a garment-access village raised the probability of being in school by 7.6 percentage points. The authors judged the labour-market demand to have had a much larger effect on girls' schooling than a stipend programme.[5]

Look at what runs through both studies. A job opens. A family sees that a daughter can earn. The age of marriage rises, the number of early births falls, and the girl stays in school. This is the missing link for the schooling story: schooling pays when work is there to be had.

Bangladesh is a useful case to keep honest. Its legal index is low: 34.4 on the World Bank's 2026 scale, and 49.4 on the older index.[6] Women's modelled participation rose from 24.2 percent in 1990 to a peak near 44 percent in 2022 and then slipped to 38.7 percent in 2024.[7] Fertility fell from 6.8 births per woman in 1970 to 2.14 in 2024.[8] That is a jobs-and-schooling story and not a law-first story, and I will not dress it as the second. Hold it beside Pakistan, which was one state with Bangladesh until 1971: women's participation

[3] Jensen, "Do Labor Market Opportunities Affect Young Women's Work and Family Decisions? Experimental Evidence from India", *Quarterly Journal of Economics* 127(2), 2012. Cluster-randomised at village level. I read the abstract; I do not quote effect sizes.

[4] Heath and Mobarak, "Manufacturing growth and the lives of Bangladeshi women", *Journal of Development Economics* 115, 2015. Figures cited in the paper: about 4 million workers (BGMEA, 2013) and about 80 percent female (Khatun et al., 2007). A current female share was not verified, so I use the 2007 figure only.

[5] Heath and Mobarak (2015) for all figures in this paragraph; the comparison with the Female Secondary Stipend Project is from the NBER working-paper version (w20383).

[6] World Bank, Women, Business and the Law 2026 (version 2.0) and the WBL 1.0 historical panel, 2024. The two versions are not comparable.

[7] World Bank WDI, SL.TLF.CACT.FE.ZS, ILO modelled estimates, release of 13 July 2026. The 2022 peak is read from the series.

[8] World Bank WDI, SP.DYN.TFRT.IN, 2026 release.

24.0 percent against 38.7, fertility 3.55 against 2.14 in 2024.[9] A comparison of two countries is a comparison of two countries. It is a pattern worth noticing, not a proof.

[9] World Bank WDI, 2024 values for both countries. Descriptive; many other differences separate the two states, including the role of NGOs and aid (Hossain, *The Aid Lab*, 2017). I make no causal claim from this pair.

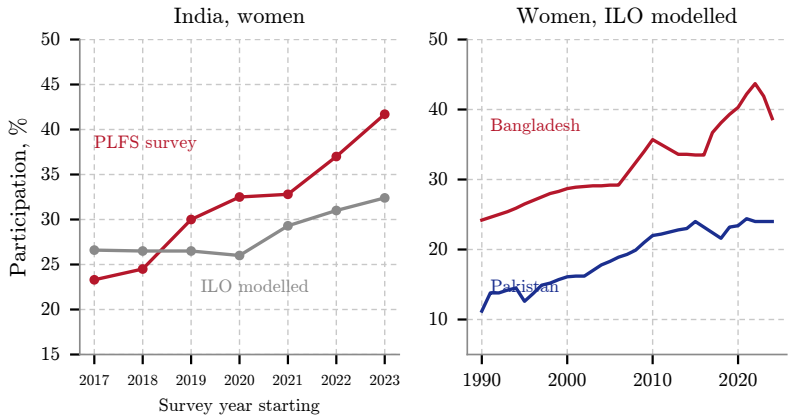


Figure IV.1. Left: India's women's participation as counted by the national survey (PLFS) and as modelled by the ILO. Right: Bangladesh and Pakistan, ILO modelled estimates. Source: MoSPI PLFS annual reports 2017-18 to 2023-24; World Bank WDI SL.TLF.CACT.FE.ZS. Definitions differ across the two India series (measured and modelled).

The paradox of the flat line

Now the fact that surprised me most when I assembled the data.

If freeing women for work were a story of steady global success, you would see it in the world's participation rate. You do not. Globally, 51.2 percent of women aged 15 and over were in the labour force in 1990. In 2024 it was 49.1 percent.[10] Men moved too, from 80.0 to 73.2, as populations aged and schooling lengthened. The gap between them has narrowed a little, and the world has not drawn a large part of its women into the labour force in thirty-four years (Figure IV.2).

[10] World Bank WDI, SL.TLF.CACT.FE.ZS, world aggregate, ILO modelled estimates, 2026 release. Men: 80.0 percent in 1990 and 73.2 percent in 2024.

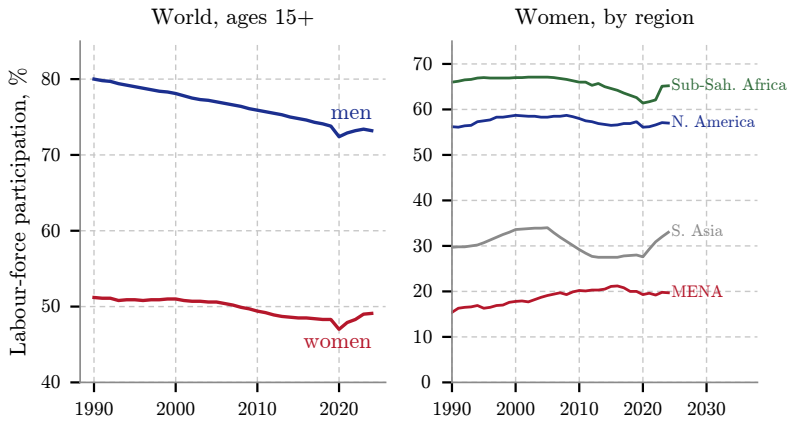


Figure IV.2. World participation of women and men aged 15 and over, 1990-2024 (left), and women's participation by World Bank region (right). Source: World Bank WDI, SL.TLF.CACT.FE.ZS and SL.TLF.CACT.MA.ZS, ILO modelled estimates, release 2026-07-13 (modelled).

I count this as an argument for the thesis, not against it. The prize is still uncollected. A flat global line hides a very uneven picture: about 15 percent in the Middle East and North Africa in 1990 and roughly 20 percent in 2024; about 30 percent in South Asia, dipping into the high 20s in the 2010s before recovering; and well above 55 percent in North America and Sub-Saharan Africa. The gap between the regions is larger than the movement of any one of them. The story is not a global rise. It is a distribution, and a question about the kind of work.

That last point deserves attention, because participation is a crude measure. Consider India.

What a participation rate counts

India's national survey, the Periodic Labour Force Survey, shows women's participation jumping from 23.3 percent in 2017-18 to 41.7 percent in 2023-24.[11] The ILO's modelled series for the same country went from 26.6 to 32.4 percent over the same period. The two do not agree, and the survey's rise is concentrated in rural self-employment: in 2023-24, 64.4 percent of women workers were in agriculture and 36.7 percent were unpaid helpers in household enterprises.[12]

So India's rise is a rise in being counted as working. It is not, in the main, a rise in paid jobs away from home. And Kerala, which has the best schooling, health and fertility outcomes in the country, has women's participation of 40.8 percent, below the national figure.[13]

Two lessons follow. The first is that a freedom to work is not the same as a statistic about work. The second is that the quality of the

[11] MoSPI, Periodic Labour Force Survey, annual reports 2017-18 to 2023-24; usual status (principal plus subsidiary), ages 15 and over.

[12] MoSPI, PLFS Annual Report 2023-24, as compiled in the research dossier (P8).

[13] PLFS 2023-24, state estimates as compiled in the research dossier (P8, series S36).

job, the right to move to it, and the safety of getting there all count. A participation rate only gets the first one.

Iran makes the same point from the education side. Female tertiary enrolment is 59.1 percent against 58.3 percent for men, yet women's modelled participation is about 14 percent.[14] Schooling without the freedom to use it is a waste, and everything in the chapters before this one is a precondition for the work in this one.

[14] Rates as given in the research dossier's rigor check (World Bank WDI, UNESCO UIS); I did not re-derive them.

The shape of the curve

Claudia Goldin documented that the participation of married women first falls and then rises as countries develop: an income effect and a stigma against manual work in early industrialisation, followed by white-collar work for educated women.[15] The cross-section of today's countries bears the pattern out, weakly (Figure IV.3). Participation is high in the poorest countries, dips in middle incomes (the quadratic fit bottoms out near $12,000 in 2024 PPP dollars), and rises again among the richest.

[15] Goldin, "The U-Shaped Female Labor Force Function in Economic Development and Economic History", NBER WP 4707, 1994, in Schultz (ed.), 1995.

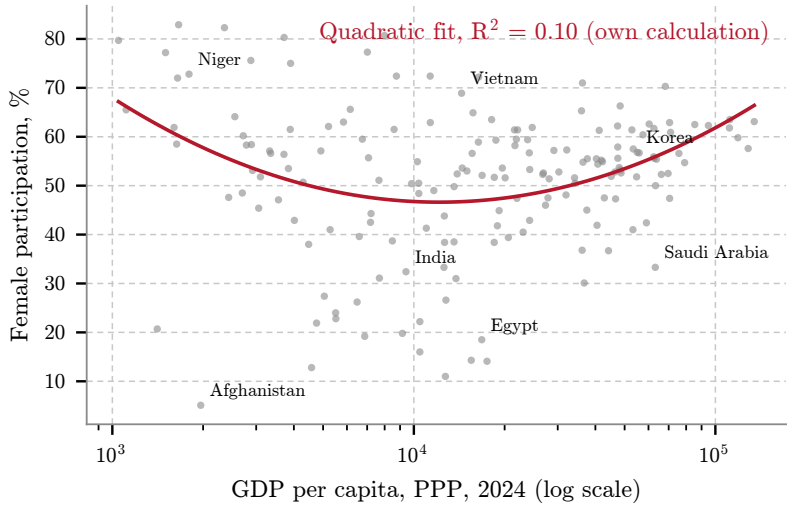


Figure IV.3. Female labour-force participation against GDP per capita, 174 countries. The fitted quadratic explains about a tenth of the variation. Source: World Bank WDI, SL.TLF.CACT.FE.ZS and NY.GDP.PCAP.PP.KD, 2024; own calculation (estimate).

It is a shallow U. A quadratic fit explains about 10 percent of the variation (own calculation from World Bank data), and Gaddis and Klasen found the support for the U as a general law over time to be feeble once panel methods are used.[16] I would not build an argument on the curve. I use it for one thing: the high rates on the left side are mostly women working on family farms because there is nothing

[16] Gaddis and Klasen, "Economic development, structural change, and women's labor force participation", *Journal of Population Economics* 27, 2014.

else, not women exercising a liberty. Nigeria and Ethiopia are in that group. The high rates on the right side are different in kind. They are the choice of women who could have done otherwise.

What the gap costs: scenarios, not measurements

Here is where the numbers get large, and here is where I will be most careful. Every figure in this section is a counterfactual produced by a model. None of them is a loss anybody has observed.

Start with the most cautious estimates, which come from peer-reviewed models. David Cuberes and Marc Teignier built an occupational-choice model in which gender gaps in the labour market act as frictions. Their central result for OECD countries is an average income loss of about 15 percent, of which about 40 percent comes from the gap in entrepreneurship.[17] Their extreme bounds, in the 2014 working-paper version, are an output-per-worker loss of almost 12 percent if all women were excluded from entrepreneurship, and an income-per-capita loss of almost 40 percent if all women were excluded from the labour force.[18]

[17] Cuberes and Teignier, "Aggregate Effects of Gender Gaps in the Labor Market: A Quantitative Estimate", *Journal of Human Capital* 10(1), 2016. Abstract read.

[18] Cuberes and Teignier, SSRN WP 2405006, 2014. These are bounds, not forecasts.

A 2025 extension of the Hsieh et al. approach, using microdata from 51 countries, finds that productivity could in some countries be 15 to 20 percent higher if distortions against women's labour were removed, with a loss of about 20 percent in the Middle East and North Africa, against below 2 percent in the United States today and about 7 percent in earlier decades.[19] Read that last comparison as the Hsieh result in miniature: the United States has already collected most of its gain.

[19] Goldberg, Gottlieb, Lall, Mehta, Peters and Lakshmi Ratan, "The Global Gender Distortions Index", NBER WP 34142, August 2025. Not yet peer-reviewed.

The World Bank's simulations, drawn from Pennings (2022), say that long-run GDP per capita would be almost 20 percent higher if female employment were raised to the male level, other things equal; Fiuratti, Pennings and Torres put the figure for the Middle East and North Africa at around 50 percent.[20] So, in simulations, up to roughly a fifth of long-run GDP per capita on average, and about half in the Middle East and North Africa. That is an upper-bound counterfactual that assumes new entrants are as productive as existing workers and that demand for their labour exists. It is a scenario.

[20] Pennings, World Bank Policy Research WP 9942, 2022; Fiuratti, Pennings and Torres, World Bank PRWP 10706, 2024; cited in World Bank, Women, Business and the Law 2026. Neoclassical growth simulations.

Then come the big institutional numbers, which I give for completeness and for scale.

- The World Bank estimated in 2018 that if women earned as much as men over a lifetime, wealth in 141 countries would be $160.2 trillion higher. This is a stock of lifetime earnings, not annual output. The report puts it at about twice the value of global GDP, and at 14.0 percent of total wealth.[21]

[21] World Bank, *Unrealized Potential: The High Cost of Gender Inequality in Earnings*, 2018. Wealth stock of human capital; 141 countries.

- McKinsey Global Institute's 2015 scenario analysis of 95 countries estimated that annual global GDP in 2025 could be $28 trillion (26 percent) higher if women participated in the economy identically to men, and as much as $12 trillion higher if each country matched the pace of improvement of the best performer in its region. The $28 trillion is a ceiling; the $12 trillion is the more realistic scenario.[22]
- The IMF, citing Aguirre and others (2012), reported that raising women's participation to the male level in each country would lift GDP by 5 percent in the United States, 9 percent in Japan, 12 percent in the United Arab Emirates and 34 percent in Egypt.[23]

[22] McKinsey Global Institute, *The Power of Parity*, September 2015. Industry research, not peer-reviewed.

[23] Elborgh-Woytek et al., IMF Staff Discussion Note 13/10, 2013, citing Aguirre et al. (2012).

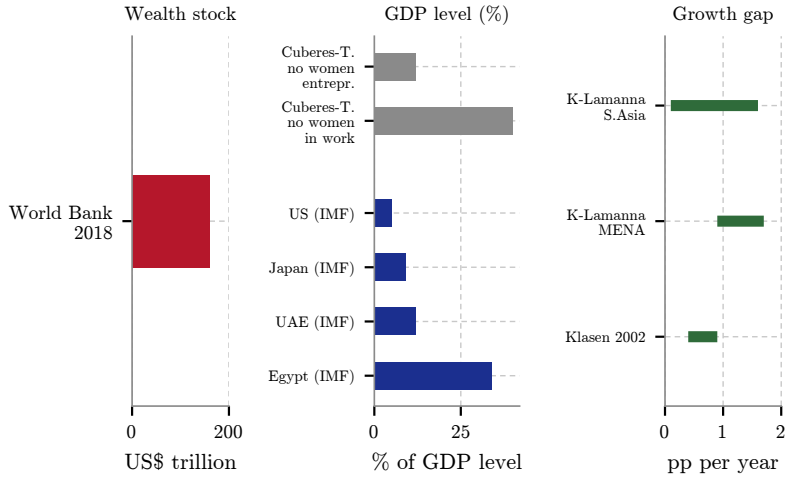


Figure IV.4. Published estimates of what gender gaps cost, grouped by what each measures. The three panels use different units and must not be compared or added. All are model counterfactuals or regression accounting, not observed losses. Source: World Bank (2018); IMF SDN/13/10 (2013); Cuberes and Teignier (2014 WP); Klasen (2002); Klasen and Lamanna (2009); data compiled in research/data.json, series S12 (modelled).

Figure IV.4 lays the estimates side by side by what they measure. I do not add them together. They use overlapping accounting logic and different metrics, so they are not independent confirmations. Nor should the reader take $160 trillion, $28 trillion and $12 trillion as three costs to be summed: one is a wealth stock and two are different scenarios for annual output in 2025. The honest reading is that models built by different people with different structures tend to give the same sign and an order of magnitude that is not small. Several of the figures come from institutions with an interest in the topic. That is why I put the peer-reviewed numbers first.

The growth-rate regressions say something similar in a different register. Klasen found that gender gaps in education account for 0.4 to 0.9 percentage points a year of the difference in per-capita growth between East Asia and Sub-Saharan Africa, South Asia and the Middle

East; Klasen and Lamanna later put the combined effect of education and employment gaps at 0.9 to 1.7 points a year for the Middle East and North Africa, and 0.1 to 1.6 for South Asia, relative to East Asia, over 1960-2000.[24] Cross-country regressions cannot separate whether equality raises growth or growth raises equality. Kabeer and Natali, reviewing the literature, concluded that the evidence that equality in education and employment contributes to growth is "far more consistent and robust" than the reverse.[25] Esther Duflo's reading is more guarded, and I think she is right: the two forces are probably too weak to be self-sustaining, and continuous policy commitment to equality for its own sake may be needed.[26]

[24] Klasen, *World Bank Economic Review* 16(3), 2002; Klasen and Lamanna, *Feminist Economics* 15(3), 2009. Cross-country regressions; abstracts read. Regional accounting, not a forecast.

[25] Kabeer and Natali, "Gender Equality and Economic Growth: Is there a Win-Win?", IDS Working Paper 417, 2013. The review also notes variable rigour and reverse causality.

[26] Duflo, "Women's Empowerment and Economic Development", *Journal of Economic Literature* 50(4), 2012; NBER WP 17702.

In my own simple cross-country calculation, I find one more thing worth reporting, as a suggestion only. Conditional on initial income, countries with a higher legal-equality score in 1990 grew faster over the next thirty-three years: about 0.3 percentage points a year faster per 10 points of the index. The unconditional correlation is weak (0.12 to 0.17), the calculation has no controls for institutions, and I cannot say which way causation runs.[27] Do not cite it as a finding. Take it as a pattern that points the same way as the models.

[27] Own calculation from the WBL 1.0 historical panel and World Bank WDI NY.GDP.PCAP.PP.KD; n = 176; OLS with no robust standard errors or region effects. Illustrative only, not causal.

The exceptions, and what they teach

A forceful case must meet its best counterexamples. Four of them belong to this chapter.

Vietnam and China. Women's participation in Vietnam is 68.9 percent and in China 59.4 percent (down from 73.1 percent in 1990), and both grew at roughly 6 percent a year.[28] Both are states with limited political freedom. They show that high participation and fast growth can coexist without the political liberty of women or men. Vietnam's participation was already high before the reforms, a socialist legacy. I accept the point: this paper is about women's liberty, meaning choice, property and voice, and not about participation as such.

[28] World Bank WDI, SL.TLF.CACT.FE.ZS (2024) and GDP growth as compiled in the research dossier (P8). Legal scores, WBL 2026 (2.0): Vietnam 86.7, China 70.0.

Socialist economies. East Germany had women's participation of about 89 percent in 1989, against 56 percent in West Germany, yet that is not the economy anyone points to as a model of women's liberty.[29] Mandated work is not freedom. The dividend I argue for comes from the option to work, to move and to own, inside an economy that rewards a good match. It does not come from a quota on hours.

[29] Lippmann, Georgieff and Senik, "Undoing Gender with Institutions", *Economic Journal* 130(629), 2020, citing Rosenfeld et al. (2004).

Korea and the East Asian tigers. Korea went from an income per head of $1,038 in 1960 to $37,048 in 2024, with large gender gaps in pay and in senior jobs.[30] The honest summary is growth despite the gap, and now constrained by it: Korea's fertility is 0.75 and Japan's is

[30] World Bank WDI, GDP per capita as compiled in the research dossier (rigor check, objection O4). Fertility: Korea 0.75 and Japan 1.15 (2024).

1.15, and the IMF has put the gain from lifting Japanese participation to G7 levels at about 4 percent of GDP per head.[31] Girls' schooling and factory labour were inputs to the Korean miracle. The bill for the rest came due later.

[31] IMF estimate for Japan as summarised in the research dossier (P3). Not independently re-derived.

The Gulf. Qatar, Kuwait and Oman score 26.3, 27.2 and 36.7 on the WBL 2026 legal-equality index, with incomes per head of $37,000 to $111,000.[32] Their wealth is a rent from oil and gas, not the output of a broad base of productive talent. Remove the 19 economies with oil rents of at least 10 percent of GDP and the correlation between legal equality and income per head rises from 0.52 to 0.68.[33] These are the exceptions that sharpen the claim: you can be rich without equality if you have a resource, and you cannot easily be rich for the long term without drawing on everyone's talent.

[32] World Bank WBL 2026 (version 2.0) and WDI GDP per capita PPP, 2024. Oil rents of 10 to 28 percent of GDP.

[33] Own calculation; WBL 2026 and WDI, n = 180 and 161.

What this adds up to

I will say what I think the work of talent shows, and in what order of confidence.

First, there is good causal evidence that opening jobs to women changes what young women do. Jensen's randomised trial and the Bangladesh garments study both show marriage and childbirth delayed, schooling extended, and work taken up when real jobs are within reach. This is the strongest ground in the chapter.

Second, there is a credible calibrated model, Hsieh et al., attributing a large share of one rich country's growth over half a century to the better allocation of talent. It is a model. It is also the most rigorous attempt in the literature to price the opening of occupations.

Third, there are scenarios, which range from a fifth of long-run GDP per head on average to a ceiling of $28 trillion in annual output. They say that the unused potential is large. They do not say how much has been lost, and they do not add up.

Fourth, there is a warning in the flat line: after thirty-four years, the global participation rate has not risen. The jobs and the freedom to take them are still the unfinished business. And the Indian and Iranian cases say that the counting of work and the schooling of girls are not substitutes for the freedom to choose it.

The costs of the transition are real. Firms have to adjust, care work has to be shared out again, fertility falls, and there are people who resist. Korea and Japan have been paying for decades. I think these costs are manageable and smaller than the gains. I do not think they are zero, and a paper that said so would not deserve to be believed.

The next chapter turns from the labour market to the other place where women's freedom is made or unmade: the vote, and the seat

at the table of public decisions.

V. Voice and Power

Give women a vote, a council seat or a say over household money, and the spending that follows tilts toward children, water and health. The best studies show it. The claims people usually attach to this idea, about corruption, microcredit and company boards, mostly fail, and I leave them out of the argument.

Freedom to act is one thing. Freedom to decide is another. A woman can hold a job, own a plot and finish school, and still have no say in where the village well goes, how the household budget is spent, or what the state does with her taxes. This chapter is about that last freedom: voice.

Voice is where the thesis of this paper is tested most cleanly, because for voice we have real experiments. Nobody can randomly assign a country a legal system. But India randomly assigned village councils a woman as head. American states gave women the vote in different years, and the timing can be read against child deaths. When the design is that good, the answer matters more than any cross-country scatter plot.

I will be disciplined here. The evidence on voice is strong in some places and weak in others, and the weak places are the ones most often quoted. I will take the strong ones first, then say plainly which popular claims I do not rely on.

America: the vote and the baby

Between 1869 and 1920, American states gave women the vote one at a time, well before the Nineteenth Amendment made it national. Grant Miller used that staggered timing to ask a narrow question: what happened to child deaths when a state enfranchised women?

The answer is large. In states that gave women the vote, child mortality fell by 8 to 15 per cent.[1] Local public health spending rose by about 35 per cent within a year.[2] The paper's own extrapolation is that this meant roughly 20,000 fewer child deaths a year nationwide. That last number is a model-based extrapolation, not a count of observed deaths, and I treat it that way.

The mechanism is not mysterious, and it is what makes the result

[1] Miller (2008), "Women's Suffrage, Political Responsiveness, and Child Survival in American History," *Quarterly Journal of Economics* 123(3). State-level difference-in-differences using staggered laws 1869–1920 and state death records 1900–1936. Evidence label: causal (moderate to strong); law timing was not randomly assigned.

[2] Miller (2008), same paper.

credible. The deaths that fell were the hygiene-sensitive ones: diarrhoeal disease, diphtheria and meningitis. These are what clean water, milk inspection and public health nurses prevent. They are the things women voters asked local government to buy. Miller finds the effect in those causes of death and not in the ones spending cannot touch.[3]

Notice the size of the claim. Suffrage explains about a tenth of the fall in child mortality over three decades. It is a real effect and not the whole story. I would rather defend a tenth that is identified than a half that is asserted.

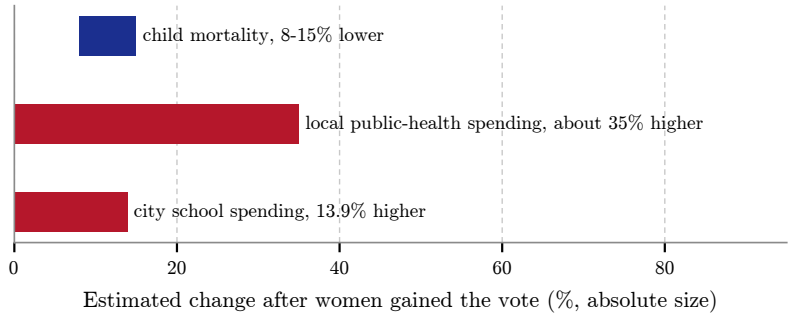


Figure V.1. US women's suffrage and public spending on children. The mortality bar spans the 8 to 15 per cent range reported. Health spending is the estimate within one year of suffrage; school spending is the city-level estimate within five years. Source: Miller (2008) and Kose, Kuka and Shenhav (2021) (estimates from published studies; own chart).

Spending on schools moved the same way. One study finds city school spending 13.9 per cent higher within five years of suffrage, and children with full childhood exposure completed about one extra year of schooling in several groups, around 0.9 years for Black children and 1.0 for Southern white children.[4] Another finds that suffrage accounts for up to a third of the rise in public school spending between 1920 and 1940 in the South.[5] See Figure V.1.

There is a hard part to this story, and it belongs here. In the South, the same research shows that the school gains went to white children, because Black women were kept from the polls. The Black to white per-capita school-spending ratio fell after suffrage in the sample studied.[6] A vote that is given to some women and denied to others shifts money toward the women who hold it. That is not a flaw in the argument. It is the argument. The effect runs through voice, and where voice is withheld, the effect does not arrive.

I should also say what this evidence does not show. It does not show that suffrage caused American growth. It shows what women voters did with local budgets, and that children lived. Women also did not vote as a bloc: women's turnout was about 10 points below men's

[3] Miller (2008), same paper. He reports that reductions were concentrated in hygiene-sensitive infectious causes, and that suffrage accounts for about 10 per cent of the 1900–1930 decline in child mortality.

[4] Kose, Kuka and Shenhav (2021), "Women's Suffrage and Children's Education," *American Economic Journal: Economic Policy*; NBER w24933. Cohort-exposure difference-in-differences, states adopting 1910–1920.

[5] Carruthers and Wanamaker (2015), "Municipal Housekeeping," *Journal of Human Resources* 50(4); NBER w20864.

[6] Carruthers and Wanamaker (2015). Moehling and Thomasson (2020, *Journal of Economic Perspectives* 34(2)) record that Black women were effectively barred from voting until 1965.

in 1940 and over 4 points above it by 2016.[7] The claim is about priorities that were previously unrepresented, not about a uniform female politics.

[7] Cascio and Shenhav (2020), *Journal of Economic Perspectives* 34(2), NBER w26709. Descriptive cohort decomposition.

India: the village council experiment

The cleanest test of what women do with political power comes from West Bengal. In West Bengal, the head positions of some village councils (*gram panchayat*) were reserved for women, and which councils were reserved was decided at random. Raghabendra Chattopadhyay and Esther Duflo used that lottery to compare reserved and unreserved councils across 161 councils and 322 villages in one district, Birbhum.[8]

[8] Chattopadhyay and Duflo (2004), *Econometrica* 72(5); figures from NBER w8615 (Table 7). Randomised reservation; one West Bengal district (working-paper version). Evidence label: causal (strong), with hedged external validity.

Randomisation matters. If women leaders had been chosen by voters, one could say that places with more progressive voters picked women and also built more wells. A lottery rules that out.

Here is what they found. Reserved councils built or repaired 23.83 drinking-water facilities per village; unreserved councils built 14.74.[9] Roads in good condition: 0.41 against 0.23. Biogas: 0.26 against 0.06. And the women were more likely to speak up: 9.8 per cent of participants in village assemblies were women under reservation, against 6.9 per cent.[10] See Figure V.2.

[9] Chattopadhyay and Duflo (2004), Table 7 of the working-paper version. The difference, 9.09 (s.e. 4.02), is about 62 per cent of the unreserved mean.

[10] Chattopadhyay and Duflo (2004), Table 4: 9.80 vs 6.88 per cent, difference 2.92 (s.e. 1.44).

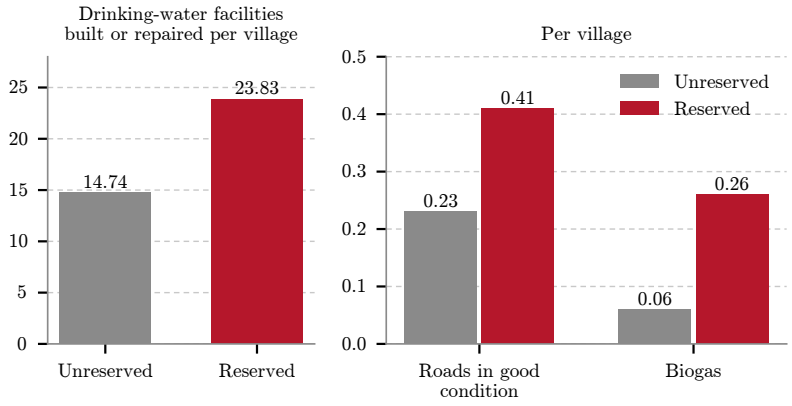


Figure V.2. India's randomised village-council reservations: public goods per village, reserved against unreserved councils. Birbhum district, West Bengal. Source: Chattopadhyay and Duflo (2004), NBER w8615, Table 7 (measured, randomised design; own chart).

The pattern is that women leaders moved money toward what women in those villages had said they wanted: water and roads. Informal education centres got less: 0.67 against 0.82 at council level. A different priority, not a bigger budget.

The second finding is about girls, and it is the one I find most striking. After two electoral cycles of reservation, the gender gap in aspirations had narrowed by 20 per cent among parents and 32 per cent among adolescents. The gender gap in adolescents' educational attainment disappeared, and girls spent less time on chores.[11] Notice what did not change: young women's job prospects. The mechanism was not new employment. It was the sight of a woman in charge. A girl who has watched a woman run the village has a different idea of what she might do.

Later work finds that exposure to women leaders weakens stereotypes and, after ten years of continuous reservation, more women stand for and win seats that are not reserved.[12] Voice at the top of the village reaches into the schoolroom.

One more result from India, using close state-assembly elections rather than a lottery: a 10-point rise in women's share of state legislators lowered neonatal mortality by 2.1 percentage points.[13]

Where the effect does not show up

I owe the reader the other half of the literature. Where voters already have rich-country institutions, the spending differences mostly wash out. In US cities, whether the mayor is a woman has no measurable effect on the size of government, the composition of spending or crime.[14] In Spanish municipalities, gender quotas raised women's presence on candidate lists by about 8 points and on councils by about 4, with no significant change in the share of women who reached the top, or in public finances.[15] And even in India, one study of the national employment-guarantee programme found that women leaders were initially *worse* on leakages and then caught up, with no sign of overtaking.[16]

So the honest summary is the one I wrote in the standfirst, with a qualifier. Where randomised and quasi-experimental studies exist in poor settings, women in local office shifted spending toward the goods women said they needed, and children and girls gained. Where a poor setting has become a rich one, the spending effects mostly vanish. That is what a catching-up effect looks like. A voice matters most where it was most absent.

Women in parliament: counting, not claiming

Now to the national scale, where the evidence is weakest and the numbers are easiest to misuse.

The count is clear. Women held about 11 per cent of national parlia-

[11] Beaman, Duflo, Pande and Topalova (2012), *Science* 335(6068); 8,453 surveys in 495 villages. The published abstract gives 20 per cent for parents and 32 per cent for adolescents; the author manuscript says 25 per cent for parents, and I use the published figure.

[12] Beaman, Chattopadhyay, Duflo, Pande and Topalova (2009), *Quarterly Journal of Economics*; NBER w14198 (abstract only read).

[13] Bhalotra and Clots-Figueras (2014), *American Economic Journal: Economic Policy* 6(2). Close-election design; I use the published figure rather than the earlier working-paper estimate.

[14] Ferreira and Gyourko (2014), *Journal of Public Economics* 112. Close-election design, US mayoral elections 1950–2005. Evidence label: null result.

[15] Bagues and Campa (2021), *Journal of Public Economics* 194.

[16] Afridi, Iversen and Sharan (2017), *Economic Development and Cultural Change* 66(1). Randomised reservations, audit panel.

mentary seats in 1995 and 27.5 per cent on 1 January 2026.[17] Seven countries are at or above half, led by Rwanda at 63.8 per cent, and three lower chambers, in Oman, Tuvalu and Yemen, have no women at all.[18] Thirty women serve as head of state or government in 28 countries.[19] Women hold 22.4 per cent of ministries. At the current pace, UN Women's own linear projection puts parliamentary parity in 2063.[20]

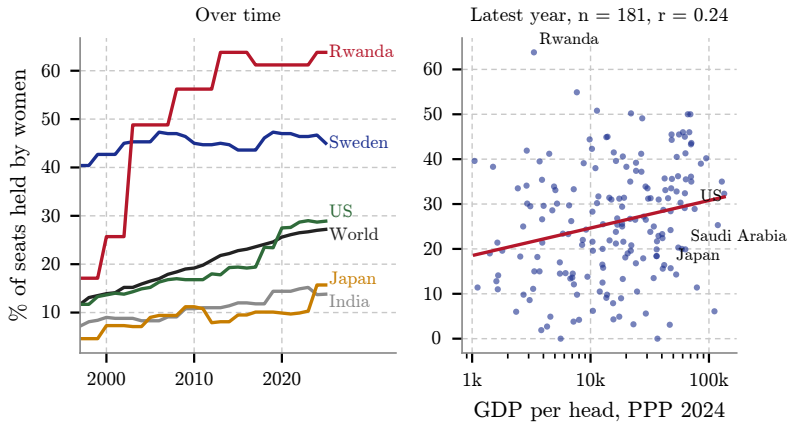


Figure V.3. Women in national parliaments. Left: share of seats, 1997–2025, selected countries and the world. Right: latest-year share against GDP per head. Source: World Bank WDI SG.GEN.PARL.ZS (IPU data) and NY.GDP.PCAP.PP.KD, release of 13 July 2026 (measured; correlation is my own calculation from public data).

Figure V.3 shows two things. On the left, the trend is up nearly everywhere, and the steepest climbs are quotas, not wealth: Rwanda goes from 17.1 per cent in 1997 to 63.8 per cent in 2025, Japan stays near 10 per cent from 2005 to 2020, and India has crept from 7 to 14. On the right, the share of women in parliament is only loosely related to income. Across 181 countries with data, the correlation with log GDP per head is 0.24.

That weak link is worth saying aloud, because it separates this chapter from the others. Earlier in this paper, the legal-equality index tracked income with $r = 0.52$. Parliament share does not. Cuba, Nicaragua and the UAE sit near the top of the ranking; Japan and the United States sit well below Sweden. Quotas and electoral systems, not wealth, explain who leads. I therefore do not use the share of women in parliament as an indicator of prosperity, and I do not claim that a female parliament makes a country rich.

I would be misleading the reader if I let Rwanda carry weight. Its 63.8 per cent is in a system with one dominant party, and its share was already above 25 per cent before the 2003 jump.[21] Any statement that Rwanda prospered because of its women legislators would be a claim the data cannot bear.

[17] UN Women (page updated 15 September 2026), citing the Inter-Parliamentary Union (IPU). The World Bank series SG.GEN.PARL.ZS gives 11.7 per cent in 1997 and 27.25 per cent in 2025; the small gap is the date convention.

[18] UN Women and IPU, "Women in politics: 2026," ranking as of 1 January 2026. The seven are Rwanda, Cuba, Nicaragua, Bolivia, Mexico, Andorra and the UAE.

[19] UN Women (1 September 2026 count), same page.

[20] UN Women, same page. This is their extrapolation, not a forecast I endorse.

[21] World Bank WDI: Rwanda's share was 25.7 per cent in 2000–2002 and 48.8 per cent in 2003. The 2003 constitutional quota is from memory and not verified in this dossier; I do not attribute the jump to it.

What can I say about national quotas? Countries with legislated candidate quotas have women's shares about 5 points higher in parliament and 7 points higher in local government than countries without them. That is a raw comparison, not a causal estimate.[22] The quasi-experimental literature on quotas is mixed: Italian quotas raised the education of those elected by 0.12 to 0.24 years, and Sweden's "zipper" quota raised the competence of male politicians,[23] while the Spanish and American evidence above finds little change in spending. The debate about quotas is open, and I leave it open.

[22] UN Women page citing UN ECOSOC Secretary-General report E/CN.6/2021/3. Cross-country comparison; evidence label: correlation.

[23] Baltrunaite, Bello, Casarico and Profeta (2014), *Journal of Public Economics* 118; Besley, Folke, Persson and Rickne (2017), *American Economic Review* 107(8).

The kitchen table: who holds the money

Politics is one place where women's voice matters. The household is the other, and for a poor family it is the more important one.

For decades, economists modelled the household as a single decision-maker, pooling all income and spending it according to one preference. If that were true, it would not matter who in the household earned or received money. The evidence rejects it.

In Brazil, Duncan Thomas found that unearned income in a mother's hands raised child survival probabilities by an amount he put at almost twenty times the effect of the same income in a father's hands.[24] When the United Kingdom moved child benefit from the father's wallet to the mother in the late 1970s, household spending shifted toward women's and children's clothing.[25] In South Africa, pensions received by women had a large effect on the weight-for-height and height-for-age of girls, and little on boys; men's pensions showed no similar effect.[26] In China, in a natural experiment in which tea and orchard prices moved, raising female income with male income held constant improved girls' survival and all children's schooling, while raising male income worsened girls' survival.[27] In Macedonia, a randomised cash-transfer scheme that paid mothers rather than household heads raised the share of spending on food by about 4 to 5 per cent.[28]

[24] Thomas (1990), *Journal of Human Resources* 25(4). Cross-section; the author notes that the unearned-income measure may be noisy and that, under some specifications, equality of effects cannot be rejected. Read the "twenty times" as illustrative of direction, not as a constant.

[25] Lundberg, Pollak and Wales (1997), *Journal of Human Resources* 32(3). Natural experiment: a policy change.

[26] Duflo (2003), *World Bank Economic Review* 17(1). Quasi-experiment based on programme expansion.

[27] Qian (2008), *Quarterly Journal of Economics* 123(3). Natural experiment: post-Mao tea and orchard price shocks.

[28] Armand, Attanasio, Carneiro and Lechene, Institute for Fiscal Studies working paper (2016; later published in *Economic Journal*); randomised recipient. I cite the working paper.

The pattern is consistent, and it is not universal. In Ecuador, a randomised transfer to women raised the share spent on food only in households with several adults and where women's bargaining position was initially weak.[29] Reviewing the field, Cheryl Doss concludes that rigorous studies are sufficient to show that women's bargaining power does affect outcomes, while in many specific instances causality cannot be rigorously identified.[30] I accept that wording. It is enough.

[29] Schady and Rosero (2007), World Bank Policy Research Working Paper 4282; randomised.

[30] Doss (2013), *World Bank Research Observer* 28(1).

It is also, I think, the deepest link between this chapter and the rest of the paper. A child's schooling and survival are the human capital of the next generation. If a mother's income and voice change how a

household spends on that capital, then women's freedom is not only a matter of fairness to women. It shapes the productive capacity of a country decades later. I cannot put a single number on that: the evidence here is about households and children, not about national GDP, and I will not pretend otherwise.

What I am not claiming

Four claims are often attached to this topic. I do not use them as pillars of the argument, and the reasons are on the record.

Corruption. The headline that women in government reduce corruption comes from cross-country regressions around 2001. It does not hold up well. One reproduction using 177 countries from 1998 to 2014 finds the negative association disappears, in both significance and magnitude, once country fixed effects are included, and that cultural measures can fully explain the link.[31] A later paper finds the link strongest where voters can detect and punish corruption, which makes it a property of institutions, not of women.[32] Brazil's close-election mayoral races, audited at random, found less corruption among female mayors, but India's randomised reservations found more leakage at first, and Mexico's municipalities show no difference.[33] I conclude that the corruption claim is conditional and contested. I do not say that women are less corrupt.

Microcredit. Small loans to women were once celebrated as a route out of poverty. The headline study failed replication: its results on poverty disappear after dropping outliers.[34] Randomised trials find modest effects: in Hyderabad, take-up rose, business investment rose, but consumption, health, education and women's empowerment did not change significantly.[35] What does work is different: Bangladesh's asset-transfer programme for the poorest women produced sustained gains in earnings and assets after seven years.[36] Credit alone is not a liberator. Relaxing several constraints at once is closer to it.

Company boards. The claim that firms with more women on boards earn more is the one I would most like to be true, and the evidence is against it. Two meta-analyses put the correlation between women on boards and performance at about 0.01 to 0.05: Post and Byron find 0.047 for accounting returns and 0.014 for market performance across 140 studies, and Pletzer and co-authors find 0.01 (95 per cent interval −0.04 to 0.07) across 20.[37] Norway's board quota is a natural experiment, and it does not rescue the case: one study finds that firm value fell, a re-analysis finds no significant valuation effect, and another finds no benefit for women elsewhere in the firm.[38] The figures that consultancies publish, such as 15 per cent, 25 per cent or 39 per cent greater likelihood of above-average profits for the most gender-diverse top teams, are quartile comparisons from industry re-

[31] Debski, Jetter, Mösle and Stadelmann (2018), *European Journal of Political Economy* 55. The original findings are Dollar, Fisman and Gatti (2001) and Swamy, Knack, Lee and Azfar (2001).

[32] Esarey and Schwindt-Bayer (2018), *British Journal of Political Science* 48(3).

[33] Brollo and Troiano (2016), *Journal of Development Economics* 122 (Brazil); Afridi et al. (2017) (India); Mexico result per Guajardo and Schwindt-Bayer, as summarised in the dossier.

[34] Roodman and Morduch (2014), *Journal of Development Studies* 50. The original is Pitt and Khandker (1998), *Journal of Political Economy* 106(5).

[35] Banerjee, Duflo, Glennerster and Kinnan (2015), *American Economic Journal: Applied* 7(1). Randomised. A synthesis of six trials finds effects that are modestly positive but not transformative (Banerjee, Karlan and Zinman 2015), and a pooled estimate suggests the effect on business and consumption may be negligible (Meager 2019).

[36] Bandiera, Burgess, Das, Gulesci, Rasul and Sulaiman (2017), *Quarterly Journal of Economics* 132. Large randomised trial.

[37] Post and Byron (2015), *Academy of Management Journal*; Pletzer, Nikolova, Kedzior and Voelpel (2015), *PLoS ONE*. Both correlational meta-analyses. See Figure V.4.

[38] Ahern and Dittmar (2012), *Quarterly Journal of Economics*; Eckbo, Nygaard and Thorburn, *Management Science*; Bertrand, Black, Jensen and Lleras-Muney (2019), *Review of Economic Studies*.

ports, not effect sizes, and I do not cite them as proof.[39]

[39] McKinsey, *Diversity Matters* series, 2015–2023. Correlational. A non-replication exists for the race and ethnicity results (Green and Hand), not for gender; the point here is that no one has shown the gender results are causal.

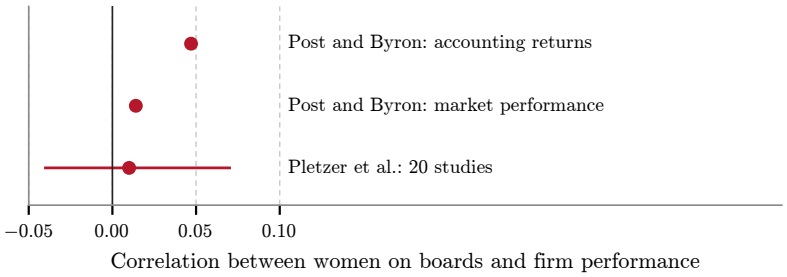


Figure V.4. Women on boards and firm performance: correlations from two meta-analyses. Both sit within a few hundredths of zero. Source: Post and Byron (2015); Pletzer et al. (2015), via research dossier (measured; own chart).

There is a narrower result that survives. In a randomised field experiment with student-run ventures, teams with an equal gender mix did better on sales and profits than male-dominated teams.[40] That is one study, with students, and it is not a general result. The case for opening firms to women is the case made in the chapter on work: a firm that draws on the whole talent pool picks better, and a woman who is excluded is a loss to everyone. It is a case about access and fairness, not a profit premium from diversity.

[40] Hoogendoorn, Oosterbeek and van Praag (2013), *Management Science*. Randomised field experiment; I read the abstract only. The ventures were run by students, and the mechanisms the authors tested found no support.

Female leaders and the pandemic. I leave this out. The early studies rest on 19 female-led countries and the results are fragile.[41]

[41] Garikipati and Kambhampati (2021), *Feminist Economics* 27(1–2); critique in Piscopo (2020), *Politics and Gender* 16(4).

What this chapter adds to the thesis

Where does this leave the argument? It gives it a different shape.

The earlier chapters established that the legal and economic freedoms of women go with prosperity, and that schooling and work are channels through which they operate. This chapter shows a third channel, the one that decides how the first two are used. When women gain a voice, whether the vote in an American state in the 1910s or a village council seat in West Bengal, public money moves to water, hygiene and children. Those are the goods that reduce child deaths and raise schooling. They are also the building blocks of a productive population.

I want to be exact about how far this goes. The experiments are about local public goods and child survival. The designs support a causal reading for those. They do not show that it causes GDP to rise, and I do not claim it. What I claim is narrower and, I think, harder to dispute: the freedom to be heard changes where a society's resources

go, and where it has been tested properly, the change favours the very things that the next generation's productivity depends on.

There are also costs, and they should be stated. Voice does not flow evenly. The southern school gains went to white children while Black women were shut out. The women who win seats do not always gain power: in India, fewer new women candidates came forward after women incumbents won, most of all in states with entrenched gender bias.[42] Quotas raise numbers without necessarily raising influence. And in rich countries, where the spending gaps have closed, the dividend is smaller. None of this undercuts the finding. It tells us where to look for it: where women's voice was weakest, and where giving it has been tried and measured.

[42] Bhalotra, Clots-Figueras and Iyer (2018), *Economic Journal* 128(613). Close-election design.

Finally, the gap between what the evidence supports and what is repeated in speeches is wide in this field. The people who hold the thesis are best served by the strong evidence and worst served by the weak. I would rather stand on a randomised lottery in Birbhum and a staggered law in 1910 than on a consultancy's slide. They are better evidence, and they are enough.

VI. Where It Worked

Seven places, seven different routes. In each, women gained schooling, jobs, rights or a voice, and the country moved up. Each also has a catch, and I put the catch next to the number.

> *The links between women's empowerment and development are probably too weak to be self-sustaining.*
>
> Esther Duflo, 2012

Cases are illustrations, not proofs. I said so in the first chapter and I will say it again here, because this is the chapter where a paper like this is most tempted to cheat. A country gets richer, a country has women in parliament, and the author draws a line between the two. I will not draw that line. Rwanda, Bangladesh and Botswana all grew for reasons that include aid, diamonds, post-war rebound and state capacity.[1]

What the cases do show is something narrower and, I think, more useful. They show the *routes*. A country can open the door for girls and women through law (the Nordics), through jobs (Bangladesh), through schooling (Kerala, Botswana), through a political settlement after catastrophe (Rwanda), or late and under pressure (Japan, Korea). The routes differ. What they share is that none of them worked by keeping women out.

Esther Duflo's warning in the epigraph is the right frame. Her 2012 review of the literature finds that empowerment and development reinforce each other but that the loop is not strong enough to run itself; policy has to push on it for its own sake.[2] I agree. The cases below are what that push looks like when it is made.

[1] The dossier's own verdict on this evidence: "good illustrations and poor proofs". The strongest causal evidence in these cases sits at the micro level: Heath and Mobarak (2015) on Bangladeshi garment jobs, Jensen (2012) on Indian call-centre recruiting, Ali, Deininger and Goldstein (2014) on Rwandan land titles, Selin (2014) on Sweden's 1971 tax reform.

[2] Duflo, "Women Empowerment and Economic Development", Journal of Economic Literature 50(4), 2012, 1051–1079.

The Nordics: the longest experiment

Start with the countries that went furthest. In the World Economic Forum's 2025 gender gap index, Iceland ranks first for the sixteenth year running, at 92.6%, the only economy above 90%. Finland is second (87.9%), Norway third (86.3%), Sweden sixth (81.7%), Denmark fourteenth (79.1%).[3]

They are also rich. In 2024, GDP per head at purchasing power was

[3] WEF, Global Gender Gap Report 2025, 148 economies (measured). The index looks at gaps in outcomes, not at levels of resources, so it says nothing about how rich a country is. The WEF itself reports only a slight correlation with income.

about $94,800 in Norway, $71,000 in Denmark, $62,600 in Sweden, $68,200 in Iceland and $55,900 in Finland, in constant 2021 international dollars.[4] Their legal equality index (World Bank WBL 1.0) was already above 60 in 1971 and reached 100 in Sweden in 2014, in Denmark in 2015 and in Iceland in 2020.[5]

Women also work. Female participation (age 15 and up, so older women pull it down) was 70.3% in Iceland in 2024, 62.3% in Norway, 61.7% in Sweden, 60.9% in Denmark and 56.7% in Finland.[6] Look at Figure VI.1. Two things stand out. The Nordic lines sit above Japan and Korea throughout, though the gap has narrowed since 1990. And Sweden and Denmark are essentially flat over the period. Norway is the exception, up from 52.8% to 62.3%. The big rise in Sweden and Denmark came before the series starts, and I will not pretend to a pre-1990 number I cannot source.

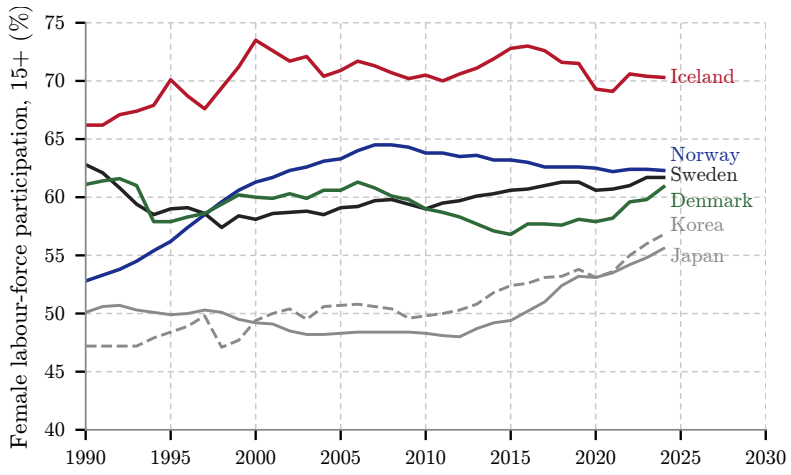


Figure VI.1. Female labour-force participation, 1990–2024: four Nordic economies against Japan and Korea. Source: World Bank WDI SL.TLF.CACT.FE.ZS, ILO modelled estimates, age 15+ (measured). Finland is not in the plotted series; its 2024 value is 56.7%.

What did policy do? Here the evidence is specific, and I would rather give three precise results than one grand claim.

First, taxation. In 1971 Sweden moved from joint to individual taxation of spouses. Selin's study, using that reform as a natural experiment, simulates that married women's employment in 1975 would have been about ten percentage points lower under the old joint system. Sweden had reached the 2007 OECD average for female participation already in 1974.[7]

Second, childcare, and here the evidence cuts both ways. Havnes and Mogstad found that Norway's subsidised childcare expansion from 1976 had strong positive effects on children's later education and labour-market participation, and that girls and children of less-

[4] World Bank WDI NY.GDP.PCAP.PP.KD, 2024 (measured).

[5] World Bank Women, Business and the Law 1.0 panel, 1971–2024 (measured). Sweden 71.2 in 1971; Norway 63.8 in 1971 and 96.9 in 2010; Finland 97.5.

[6] World Bank WDI SL.TLF.CACT.FE.ZS, ILO modelled estimates, 2024.

[7] Selin, "The rise in female employment and the role of tax incentives", International Tax and Public Finance 21, 2014, 894–922. The ten-point figure is a model simulation, not a pooled estimate; I read the abstract of the working-paper version.

educated mothers gained most.[8] The same authors, in a second paper, found little causal effect of that subsidy on maternal employment, because it mostly displaced informal care.[9] So I do not say childcare explains Nordic participation. I say it made children better off, and especially girls.

Third, a warning. Norway's reserved weeks of leave for fathers greatly raised fathers' take-up and improved children's school performance where fathers were better educated than mothers. The study finds no effect on fathers' earnings and, in its abstract, adverse effects on mothers' labour-market outcomes.[10] Good intentions do not always arrive intact.

Now the catches. Norway has oil: oil rents were 11.6% of GDP in 2000 and 3.2% in 2020.[11] Nordic wealth has many causes: early industrialisation, trade, institutions. And the old Nordic high-fertility story is over: births per woman were 1.25 in Finland and 1.43 in Sweden in 2024.[12] So the claim I make is the safe one. The Nordics pair the highest recorded legal equality and female employment with some of the highest incomes on earth, and the best natural experiments show that specific policies changed women's work and children's long-run outcomes. I do not claim the dual-earner model caused the income. I claim that a society which brought women into school, work and law did not pay for it in prosperity.

[8] Havnes and Mogstad, American Economic Journal: Economic Policy 3(2), 2011, 97–129 (difference-in-differences on a staggered municipal rollout; abstract read).

[9] Havnes and Mogstad, "Money for nothing?", Journal of Public Economics 95, 2011, 1455–1465. Olivetti and Petrongolo (NBER 23051, 2017) in their survey find stronger evidence that spending on childcare and early education raises women's participation. I quote both because the literature does.

[10] Cools, Fiva and Kirkeboen, Scandinavian Journal of Economics 117, 2015, 801–828 (abstract read).

[11] World Bank WDI NY.GDP.PETR.RT.ZS. Finland, Denmark and Sweden have no comparable oil rents, and Finland trails Norway on both income and participation.

[12] World Bank WDI SP.DYN.TFRT.IN, 2024.

Rwanda: the quota, and what it does not prove

Rwanda has the highest share of women in any national parliament: 63.75% of the lower house in 2025.[13] The 2015 constitution requires at least 30% women among deputies and senators.[14]

Figure VI.2 shows the sequence, and the honest reading starts with a fact that quota enthusiasts skip: women already held 25.7% of seats in 2000, three years before the 2003 constitution. The quota and the party lists then took the share to 48.75% in 2003 and above 60% from 2008.[15]

[13] World Bank WDI SG.GEN.PARL.ZS (IPU-sourced), corroborated by the WEF Global Gender Gap Report 2025. I could not access a 2026 figure.

[14] Constitution of Rwanda, 2015 text, via Constitute. The 2003 original was not fetched, so I cite only the 2015 provision.

[15] WDI SG.GEN.PARL.ZS: 17.1% (1997–99), 25.7% (2000–02), 48.75% (2003–07), 56.25% (2008–11), 61.2% (2020 and 2023), 63.8% (2024).

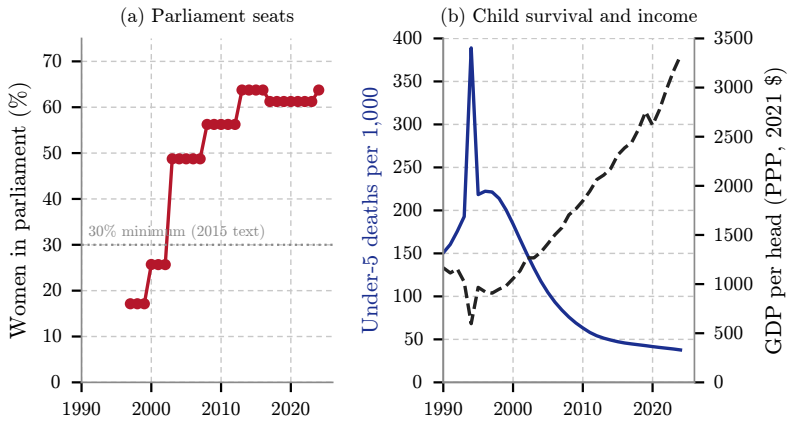


Figure VI.2. Rwanda, 1990–2025. (a) Share of women in the lower house. (b) Under-5 mortality per 1,000 (solid, left axis) and GDP per head at PPP in constant 2021 international dollars (dashed, right axis). The 1994 genocide dominates the early years. Source: World Bank WDI, via series S14 (measured). The series coincide; they do not establish cause.

The legal opening was real. Rwanda's WBL 1.0 score was 44.4 from 1971 to 2000, then 61.2 in 2003, 72.5 in 2010, 81.2 in 2020 and 91.9 in 2024, with inheritance reform in 1999 and the constitution in 2003 in the middle of the climb.[16] The outcomes are real too. Under-5 mortality fell from 184 per 1,000 in 2000 to 38 in 2024. The maternal mortality ratio fell from 885 per 100,000 in 2000 to 229 in 2023. Female life expectancy rose from 49.0 years in 2000 to 70.1 in 2024. GDP per head rose from 1,055 in 2000 to 3,325 in 2024 (constant 2021 international dollars).[17]

There is one piece of properly identified evidence. In a pilot of land tenure regularisation, Ali, Deininger and Goldstein, using a geographic discontinuity, found that the programme seems to have improved land access for legally married women, who are about 76% of married couples, and that investment in soil conservation rose, particularly for female-headed households.[18]

Now the caveat, which is large. Rwanda is a single dominant-party system with a long-serving president, and the quota operates in a parliament with limited independent power. Researchers who study gender policy in authoritarian states argue that strong political will and targets create opportunities while norms persist.[19] So I do not offer 63.75% as proof of women's power. The health gains were attributed by their authors to health-system strengthening and heavy external assistance (47% of health spending in 2010), not to the share of women in parliament.[20] And GDP growth from a base destroyed in 1994 is partly recovery. Also: 84.5% of employed women work informally.[21]

What stays standing? A country that rebuilt itself after catastrophe chose to rebuild with women inside the legal order: property, inheri-

[16] World Bank WBL 1.0 panel (measured). The dossier does not attribute individual points to individual laws.

[17] World Bank WDI SH.DYN.MORT, SH.STA.MMRT, SP.DYN.LE00.FE.IN, NY.GDP.PCAP.PP.KD. The 2000 values are distorted by the 1994 shock and HIV.

[18] Ali, Deininger and Goldstein, "Environmental and gender impacts of land tenure regularization in Africa: Pilot evidence from Rwanda", Journal of Development Economics 110, 2014. A pilot, short-run, not a country-wide effect.

[19] Debusscher and Ansoms, Development and Change 44(5), 2013, 1111–1134 (qualitative; abstract read). Burnet (Politics and Gender 7(3), 2011) reports the opposite emphasis from interviews: "women have found respect". Both are qualitative.

[20] Farmer, Nutt, Wagner and Sekabaraga, BMJ 346, 2013, f65: maternal mortality ratio down 59.5% in 2000–10 and under-5 mortality down 70.4% in 2000–11.

[21] WEF Global Gender Gap Report 2025, Rwanda profile.

tance, office. The causal claim I can defend is the small one, about land. The large one I leave to the reader to weigh.

Bangladesh: jobs as a demand shock for schooling

Bangladesh is my favourite case, because it breaks the lazy version of the thesis in the right direction. Its legal equality score is low: 35.0 in 1971, 49.4 from 2012 to 2024 on the old WBL 1.0 scale.[22] Law did not lead. Jobs did.

The ready-made garment industry hired young women in large numbers, historically about 80% of its workforce (2007), with almost four million workers in 2013.[23] Heath and Mobarak compared 60 villages in a household survey of 1,395 households, with and without garment factories within reach, before and after factories arrived, with brothers as a control.[24] Girls with access were 17 percentage points more likely to do outside wage work (a 79% increase for those aged 10 to 23). Their hazard of childbirth fell by 29%, and a six-year-old in a garment village was 7.6 percentage points more likely to be in school.[25] A randomised parallel in India, Jensen's call-centre recruiting experiment, found that treated young women were less likely to marry or have children and more likely to obtain more schooling or training.[26]

That is the mechanism, and it is a good one. Jobs for women raised the return on girls' schooling, so families sent girls to school. Look at Figure VI.3. Female secondary enrolment rose from 13.3% in 1990 to 71.5% in 2023. Births per woman fell from 6.8 in 1970 to 2.14 in 2024. Income per head at purchasing power rose from 2,070 to 8,487 over 1990–2024. Under-5 mortality fell from 263.6 per 1,000 in 1960 to 30.5 in 2024.[27]

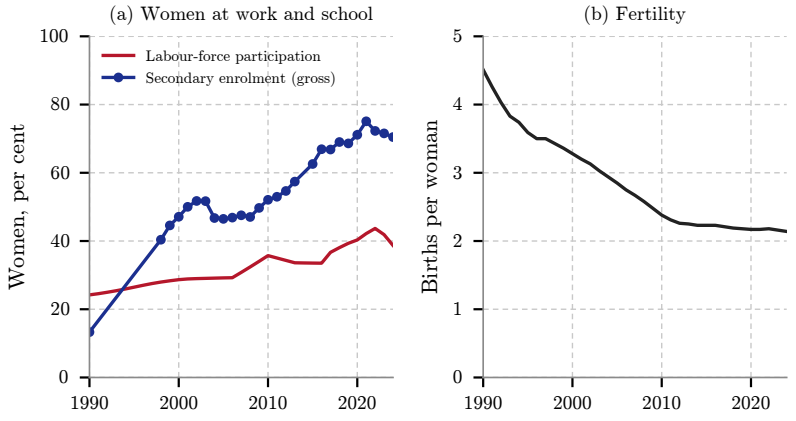


Figure VI.3. Bangladesh, 1990–2024. (a) Women's labour-force participation (ILO modelled) and gross secondary enrolment; enrolment is plotted

[22] World Bank WBL 1.0 panel (measured). Do not compare with the WBL 2.0 value (34.4 in 2026); the index changed method.

[23] Heath and Mobarak, NBER WP 20383 (text), citing Khatun et al. 2007 and BGMEA 2013. I could not verify a current female share; the dossier says to use "historically about 80%".

[24] Heath and Mobarak, Journal of Development Economics 115, 2015, 1–15. Quasi-experimental, not randomised.

[25] Same paper. The authors' extrapolation that about 14.8 points of the national rise in girls' enrolment came from the sector is an assumption; I leave it out of the argument.

[26] Jensen, Quarterly Journal of Economics 127(2), 2012, 753–792 (cluster randomised; abstract read).

[27] World Bank WDI SE.SEC.ENRR.FE, SP.DYN.TFRT.IN, NY.GDP.PCAP.PP.KD, SH.DYN.MORT (measured).

only for years with data. (b) Total fertility rate. Source: World Bank WDI via series S15 (measured). Correlational timeline; the causal studies are Heath and Mobarak (2015) and Jensen (2012).

The comparison with Pakistan, which was one state with Bangladesh until 1971, is stark. In 2024, births per woman were 2.14 against 3.55; female participation 38.7% against 24.0%; under-5 mortality 30.5 against 56.0; female life expectancy 76.7 against 70.3 years; female secondary enrolment 71.5% against 39.6% (2023).[28]

Now three caveats. First, rank volatility. Bangladesh was 24th of 148 in the 2025 gender gap index, up 75 places in a single year; the dossier's 2026 check puts it 79th.[29] That swing reflects a change in the share of women ministers (9.1% to 22.2%) and years with a woman head of state, not a change in women's economic lives. Never use a one-year rank as development evidence. I do not. Second, women's participation is modest (38.7%, and it fell from 41.9% in 2023 in the modelled series), the sector is dangerous work, and microcredit, which gets credit it does not deserve, failed its replication: Roodman and Morduch found that Pitt and Khandker's poverty results disappear after dropping outliers, and Banerjee and co-authors' randomised trial found no rise in new businesses.[30] Third, the female secondary stipend programme shows at most a small effect over trend, about 2%, in project-level data.[31]

The honest summary is this. A country with a weak legal-equality score shifted its demography and its schooling when one industry hired women and a policy paid for girls to stay in school. That is a case for opening jobs and schools to women. It is not a case that formal rights drive prosperity, and I will not pretend it is.

[28] World Bank WDI, 2024 (2023 for enrolment). Hossain (The Aid Lab, 2017) credits elite commitment, state–NGO partnerships and aid; I did not read the book. I do not claim women's position alone explains the gap.

[29] WEF GGGR 2025 (24th, 0.775, up from 0.689), and the rigor check's note of 79th in the 2026 edition, which I could not retrieve directly.

[30] Roodman and Morduch, Journal of Development Studies 50, 2014, 583–604; Banerjee, Duflo, Glennerster and Kinnan (NBER w18950).

[31] Fuwa (2006), abstract read; the effect is contested and I do not use it as a headline.

Kerala: the demographic dividend, and the work paradox

Kerala is where the thesis gets honest. The classic account, Robin Jeffrey's *Politics, Women and Well-Being: How Kerala Became a Model* (1992), traces Kerala's outcomes to its matrilineal Nair history, social movements and mass education.[32] Its fertility today is low: 1.79 births per woman in NFHS-5, against 1.99 for India and 2.35 and 2.98 in Uttar Pradesh and Bihar.[33]

Yet in the 2023–24 Periodic Labour Force Survey Kerala's female participation is 40.8%, below India's 41.7%, well below Himachal Pradesh (67.6%) and Chhattisgarh (59.5%), and just above West Bengal (40.4%).[34] The high-participation states are agrarian, where much of women's work is self-employment and unpaid helping. A study of Kerala's National Sample Survey data for 2004–2012 found falling female participation, with dropouts concentrated among young, educated women qualified for professional jobs, a discouragement ef-

[32] Jeffrey, Macmillan, 1992. I verified chapters "Old Kerala" and "Well-Being" exist; I did not read the content, and the dossier does not give me Kerala census figures I can verify, so I cite none.

[33] NFHS-5 Tables 4.2–4.3, as transcribed in the dossier (P8). By schooling in India as a whole, women with no schooling have 2.82 births and those with 12 or more years have 1.78.

[34] MoSPI, PLFS Annual Report 2023–24, Table 16, ages 15+, rural and urban (measured). See Figure VI.4b.

fect made worse by widening gender pay differences.[35]

So Kerala is evidence for one channel (schooling, health and fertility) and against a naive version of another (that educating women makes them work). I take both. Schooling bought low fertility and long lives. It did not buy paid jobs for educated women, because the jobs and the norms were not there. This is not a refutation; it is the argument for treating freedom as a bundle, not a single lever.

[35] Mathew, "Falling female labour force participation in Kerala", International Labour Review 154(4), 2015, 497–518 (abstract read).

Japan: leaving talent on the table

Japan is the case of an economy that still wastes talent, and it is useful for that reason. Female participation (ILO modelled, age 15 and up) was 50.1% in 1990, 48.0% in 2012 and 55.6% in 2024, a gain of 7.6 points since 2012.[36] The legal index barely moved: 62.5 in 1971, 71.2 in 1992, 78.8 from 2012 to 2024 (WBL 1.0). So participation rose after 2012 while law was mostly static, which fits a story about demand and childcare rather than rights.[37]

The size of the prize is modelled, not observed. An IMF working paper calculated that raising participation from 63% in 2010 to 70% in 2030, the level of the G7 without Italy and Japan, would lift GDP per head permanently by about 4%, and reaching northern-European levels would add another 4%, with potential growth about 0.2 and 0.4 percentage points higher in the transition years.[38] The costs of the old arrangement are visible: Japan ranks 118th of 148 in the 2025 gender gap index, women hold 15.7% of parliamentary seats, 28% of women born in 1975 are childless, and births per woman are 1.15.[39]

The gender wage gap in median full-time earnings did fall, from 42.4% in 1975 to 25.7% in 2015, when Sweden's was 13.4% in 2013.[40] The fall in the gap is real progress; the remaining gap is the unused part.

[36] World Bank WDI SL.TLF.CACT.FE.ZS (measured). Note that the IMF used a different measure, 63% in 2010.

[37] World Bank WBL 1.0 panel (measured). Abe's Womenomics targets and Matsui's Goldman Sachs estimates could not be verified and I do not cite them.

[38] Steinberg and Nakane, "Can Women Save Japan?", IMF WP/12/248, 2012 (simulation; a back-of-the-envelope calculation, read in full). Treat as a scenario ceiling.

[39] WEF GGGR 2025; WDI SG.GEN.PARL.ZS, 2025; OECD Society at a Glance 2024; WDI SP.DYN.TFRT.IN, 2024.

[40] OECD data via Our World in Data, "gender-wage-gap-oecd" (measured; the series ends in 2015 and Sweden's last point is 2013, so the comparison is not same-year).

Korea: the best counterexample, and the bill

Korea is the best objection to my argument, so I will make it for the other side. In constant 2015 US dollars, income per head went from $1,038 in 1960 to $37,048 in 2024, among the fastest rises in history.[41] It did so while the gender wage gap remained among the largest in the OECD's series: 52.8% in 1985, 41.7% in 2000, 36.7% in 2016.[42] In the 2025 gender gap index it ranks 101st.[43] A scholar of the region, Stephanie Seguino, argued that low women's wages in export sectors helped growth in semi-industrialised economies; others have challenged that finding.[44]

So here is the honest line. Korea grew despite gaps. And the gaps

[41] World Bank WDI NY.GDP.PCAP.KD (measured).

[42] OECD via Our World in Data (measured; the series ends in 2016). The claim that Korea's gap is the largest in 2024 is not verified; the series supports "among the largest".

[43] WEF GGGR 2025, score 0.687.

[44] Seguino, Feminist Economics 6(3) and World Development 28(7), 2000; the challenge is Schober and Winter-Ebmer, World Development 39(9), 2011, with Seguino's reply. I verified that the papers exist, not their abstracts, so I describe the argument only in outline.

now constrain it. Figure VI.4a shows fertility: 6.0 births per woman in 1960, 1.6 in 1990, 0.75 in 2024. Female gross tertiary enrolment is 99.2% (2023), yet female participation is 56.8%.[45] A country that educates nearly all its daughters to university level and then does not use them has a loss that grows quietly. I do not say that gender inequality caused Korea's low fertility; that is a hypothesis, and the OECD ties it to weak work–family conditions, which I have not checked in detail. I say that Korea shows the order of events a hostile reader would predict: growth first, and the bill later.

[45] World Bank WDI SP.DYN.TFRT.IN; SE.TER.ENRR.FE; SL.TLF.CACT.FE.ZS (measured). Singapore is the same story at 0.97 births per woman in 2024 and $134,549 GDP per head (PPP).

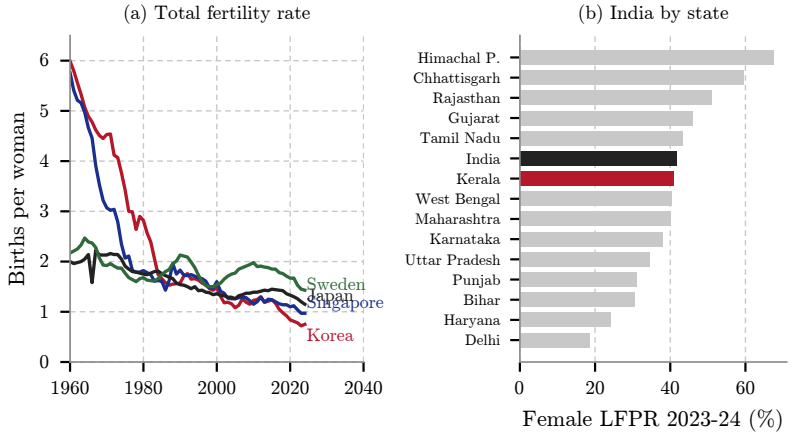


Figure VI.4. (a) Total fertility rate, 1960–2024: Korea, Singapore, Japan and Sweden. (b) Female labour-force participation in selected Indian states, 2023–24; Kerala in red, India in black. Source: World Bank WDI, series S27; MoSPI PLFS Annual Report 2023–24 Table 16 via series S36 (measured). The panels show the cases where schooling and low fertility did not carry over into measured work.

Botswana and Mauritius: growth with uneven gains

Two African success stories test the claim from the opposite side. Botswana's legal index (WBL 1.0) rose from 20.0 in 1971 to 38.1 in 1997 and 61.2 in 2006, consistent with a 2004 law ending husbands' marital power, and has stood at 63.8 since 2009.[46] Female gross secondary enrolment went from 8.5% in 1971 to 44.6% in 1990 and 77.5% in 2000. Income per head at purchasing power was 10,521 in 1990 and 18,108 in 2024.[47]

But Botswana's women hold 8.7% of parliamentary seats (2024), down from 17.0% in 2000, and its growth rested on diamond revenue and good institutions.[48] Female life expectancy fell from 63.7 years in 1990 to 54.0 in 2000 as HIV spread, then recovered to 71.9 in 2024.[49] The lesson is that schooling and legal rights improved along

[46] World Bank WBL 1.0 panel (measured). The 2004 Act's existence comes from a secondary source (Wikipedia citing Bauer 2011), which I have not checked against the statute; treat it as likely, not confirmed.

[47] World Bank WDI SE.SEC.ENRR.FE; NY.GDP.PCAP.PP.KD (measured).

[48] World Bank WDI SG.GEN.PARL.ZS (measured). The WDI resource-rent series is small (2–4% of GDP) but probably understates diamond-linked government revenue, so I do not claim diamonds are irrelevant.

[49] World Bank WDI SP.DYN.LE00.FE.IN (measured).

with growth, while political voice lagged. That is a country where the thesis is half true.

Mauritius is similar. Female secondary enrolment rose from 27.2% in 1971 to 91.3% in 2020; the legal index from 43.8 to 89.4; GDP per head at PPP from 8,986 in 1990 to 27,845 in 2024; births per woman fell from 5.9 in 1960 to 1.44 in 2024.[50] Yet female participation is only 47.5% (2024) and the gender gap index puts it 111th.[51] I cannot say how large a role women played in its export-zone jobs, because the dossier did not verify the female share of that employment, so I make no claim there.

[50] World Bank WDI and WBL 1.0 panel (measured).

[51] WDI SL.TLF.CACT.FE.ZS; WEF GGGR 2025 (0.677).

What the cases add up to

Seven places, four lessons.

One. There is no single door. Sweden went through tax and family law; Bangladesh through jobs; Kerala through schools; Rwanda through a post-war political settlement; Botswana and Mauritius through schooling and legal change under good institutions; Japan and Korea through growth first and gender integration late. The routes differ; the direction does not.

Two. The numbers are consistent with the thesis, and the exceptions refine it. Korea and the oil states show that a country can grow with its women held back. The claim I make is that such growth is narrower, riskier and, in Korea's case, now collides with a demographic bill. Rwanda and Botswana show that political voice and prosperity can come apart. Kerala shows that schooling does not automatically become paid work.

Three. The best causal evidence is small and specific. Garment jobs and girls' schooling in Bangladesh. Land titles in Rwanda. Individual taxation in Sweden. Childcare and children in Norway. I trust these because they are narrow. I do not trust any story in which a nation's GDP is traced to a single reform.

Four. The costs are real and they are smaller than the gains. Norway's leave quota may have hurt mothers' labour-market outcomes. Garment work is hard work. Fertility has fallen below replacement in Korea, Japan, Singapore and the Nordics. Parliament shares in Rwanda come with a one-party state. A paper that said otherwise would not survive a hostile reader. A paper that stops at the costs misses what the cases show: in the cases where women gained schooling, work, property or a voice, the gains showed up in child survival, schooling, fertility and, where the data allow, income, and none of the costs I found outweighs them in the numbers I have.

The next chapter looks at what happens when the door is shut.

VII. The Price of Restriction

The places that restrict women hardest are, almost without exception, the places that are poorest, youngest in their politics and slowest to change. Every one of those cases is tangled up with war, sanctions, oil or poverty, so none of them proves the thesis alone. Together they are the thesis with the lights off.

> *Afghanistan is the only country in the world that systematically denies girls and women secondary and higher education.*
>
> UNESCO and UNICEF, 2025

Every argument so far in this paper has been about what happens when women gain something: a school place, a title deed, a job, a vote. This chapter turns it around. What happens when a state takes those things away, or never grants them?

I want to be careful here, because this is the part of the case where a reader is most tempted to be carried by horror rather than evidence. No country is a laboratory. Afghanistan has had a war, a regime change and an aid cut-off. Iran has had sanctions. Yemen has had a civil war. Niger is landlocked, hot and poor. Anyone who says the restriction on women alone explains these outcomes is wrong, and I will not say it.

My claim is narrower and, I think, harder to dodge. Restriction is a cost that is paid every year, it compounds, and it is paid on top of everything else that is going wrong. In each case below I will separate what happened, what the restriction plausibly added, and what it does not explain.

Afghanistan, 1996 to 2001: a first experiment

Start with what was lost, because it tells you what was there. According to a 2000 report by the UN Special Rapporteur on violence against women, quoted by Human Rights Watch in 2001, women had made up about 70 per cent of teachers, about 50 per cent of civil servants and about 40 per cent of doctors in Afghanistan before the Taliban took power in 1996.[1]

By the end of the first Taliban government in 2001, UNESCO counts

[1] Human Rights Watch, *Humanity Denied* (October 2001), citing UN Special Rapporteur Coomaraswamy, E/CN.4/2000/68. The widely repeated version that places these shares "in Kabul" is not what HRW wrote; the report says "in the country". Secondary citation of a UN report.

roughly zero girls in primary school, about 5,000 women in higher education, and a women's literacy rate of 17 per cent.[2] That is the baseline against which the next twenty years should be read.

[2] UNESCO, "Let girls and women in Afghanistan learn!" (January 2023, updated April 2023). Descriptive figures.

And the next twenty years are the interesting part. By 2018 there were 2.5 million girls in primary school, women in higher education numbered more than 100,000 in 2021, and women's literacy had risen to nearly 30 per cent.[3] Other things were moving too. Modelled female life expectancy rose from 47.7 years in 1990 to 67.8 in 2024, and fertility fell from 7.6 children per woman to 4.8 over the same span.[4] I do not credit any one cause for that. But the direction is the point. When girls were allowed into school, the indicators that follow girls' schooling moved the way the earlier chapters would predict.

[3] UNESCO (2023), as above.

[4] World Bank WDI, 2026-07-13 release (series S16 in the research data); modelled estimates, with large revisions and uncertainty for Afghanistan.

Afghanistan, 2021 to now: the one country

The Taliban returned in August 2021. Today Afghanistan is, in UNESCO and UNICEF's words, the only country that systematically denies girls and women secondary and higher education. In October 2025 the agencies described the ban as being in its fourth year. They count about 2.2 million adolescent girls shut out of secondary school, and they report that boys' higher-education enrolment is down about 40 per cent since 2019.[5] If the ban continues, they project about 4 million girls denied secondary school by 2030.

[5] UNESCO and UNICEF, Afghanistan Education Situation Report 2025 (news item of 14 October 2025). Estimate; I read the agencies' summary, not the full report.

The labour-market picture is as stark, though the numbers need care because different sources measure different things. The ILO's modelled estimate of female labour-force participation fell from 18.3 per cent in 2019 to 14.6 per cent in 2021 and then to 5.2 per cent in 2022 (Figure VII.1). A household survey by UN Women in early 2024 puts women's participation at 24 per cent, against 89 per cent for men, because it counts informal and home-based work that the model does not.[6] The same survey finds 78 per cent of women aged 18 to 29 neither in work nor in education or training, against 20 per cent of men. Pick whichever number you like. Both say that the door has largely closed.

[6] ILOSTAT modelled estimates (WDI SL.TLF.CACT.FE.ZS), 2026-07-13 release. UN Women, *Afghanistan Gender Index 2024* (2025): household survey of 2,155 people in eight provinces, Feb-Mar 2024. The two measures are different concepts; do not mix them.

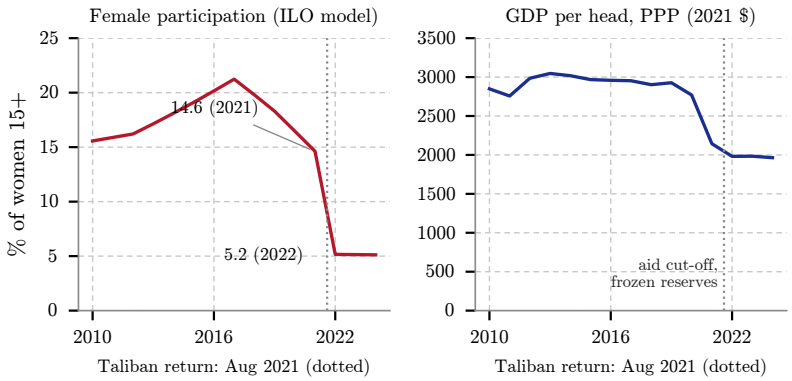


Figure VII.1. Afghanistan: female labour-force participation and GDP per head, 2010 to 2024. The fall in income after August 2021 reflects mainly the cut-off of aid and the freezing of central-bank reserves, not women's restrictions; the participation drop is a separate, additional loss. Participation is an ILO modelled estimate. Source: World Bank WDI and ILO (modelled estimate), 2026 release; UNDP Socio-Economic Outlook 2023 on the causes of the income fall.

Now the claim I must not make. Figure VII.1 also shows income per head falling sharply in 2021 and 2022. UNDP records GDP down 20.7 per cent in 2021 and 3.6 per cent in 2022.[7] That collapse came from the cut-off of foreign aid, the freezing of central-bank reserves, capital flight and a paralysed banking system. It was not caused by the restrictions on women, and I do not attribute it to them. Anyone who does is giving critics an easy win.

What can fairly be said is this. The restrictions are an additional and continuing drag. UNDP's latest projection is that the exclusion of women will cost the Afghan economy cumulative losses of US$920 million, or 5.8 per cent of GDP, over 2024 to 2026.[8] Treat it as a model, with the usual uncertainty. It is on top of the aid shock, not instead of it. UNESCO's longer simulation puts the loss from suspending women's higher education at up to US$9.6 billion by 2066, roughly two-thirds of current GDP.[9] These are scenarios. They tell you the order of magnitude that the agencies believe, which is large.

The human costs are not modelled. UN Women reports an estimated maternal mortality ratio of 638 per 100,000 live births for 2024, the seventh highest in the world, and it projects that the education restrictions could raise maternal deaths by at least 50 per cent and early childbearing by 45 per cent.[10] About 30 per cent of girls under 18 were married in 2023. UN Women counts more than 100 decrees since August 2021. Only 7 per cent of women are employed, against 84 per cent of men, on one household measure.[11]

Two further facts keep me honest. First, the economy has not stopped. The World Bank estimates real growth of 4.8 per cent in 2025 and about 4 per cent in 2026, though it warns that rapid population

[7] UNDP, *Afghanistan Socio-Economic Outlook 2023*, and *Socio-Economic Review 2023-2024* (May 2025). The Outlook attributes the collapse mainly to the aid cut-off, frozen central-bank reserves, capital flight and banking paralysis.

[8] UNDP, *Afghanistan Socio-Economic Review 2023-2024* (May 2025). This is a UNDP model projection, not an observed counterfactual; I have not audited the method. An earlier UNDP estimate (December 2021) was US$600 million to US$1 billion, or 3 to 5 per cent of the then GDP of about US$20 billion.

[9] UNESCO and UNICEF (2025), as above; a simulation, quoted at second hand.

[10] UN Women, FAQ five years after the takeover (2026). Projection. The World Bank WDI series, using UN modelled estimates, gives a lower figure (521 for 2023); sources differ.

[11] UNDP (2025) and UN Women (2026) citing the MSNA household survey; a measure of work outside the household.

growth is outpacing the gains and pushing incomes down.[12] Income per head in 2024 (US$1,964 in PPP terms) was still about 29 per cent below its 2020 level (US$2,770), which is real but, again, mainly an aid-and-shock story. Second, one country before and after a regime change is not an identified effect. I offer Afghanistan as the clearest case of what a systematic ban costs on the ledger of human capital, not as a regression coefficient.

[12] World Bank, Afghanistan Development Update, press release of 26 May 2026.

Iran: the human capital built and then idled

Iran is the case that answers a question the earlier chapters left open. If schooling is so valuable, can a country harvest it without letting women work?

The answer, so far, is no. In Iran, tertiary enrolment is 59.1 per cent for women and 58.3 per cent for men (2022). Female secondary enrolment is 86.2 per cent (2023), and female literacy is 85.1 per cent against 92.8 per cent for men.[13] Yet only 14.1 per cent of women are in the labour force, against 67.5 per cent of men (Figure VII.2, left). More women than men are in university, and fewer than 15 in 100 are in the labour force. That is human capital built and then idled.

[13] World Bank WDI (SE.TER.ENRR.FE and .MA; SL.TLF.CACT.FE.ZS), 2026 release; UNDP *Human Development Report 2025* for male participation of 67.5 per cent.

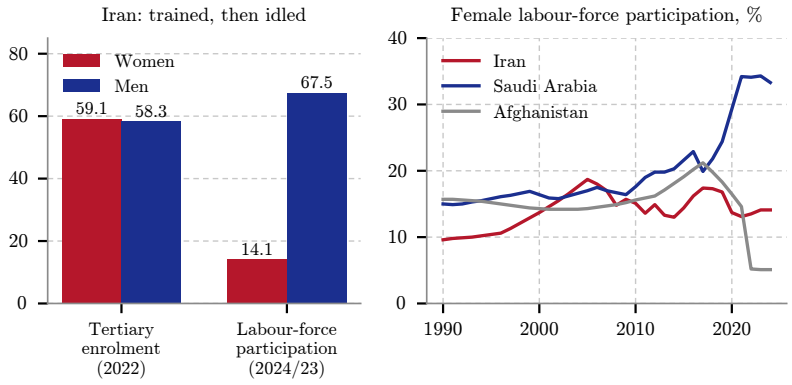


Figure VII.2. Left: Iran's women match its men in university but are a fifth as likely to be in the labour force. Right: modelled female participation, 1990 to 2024. Sources: World Bank WDI and UNDP HDR 2025 (measured and modelled); ILO modelled estimate for the series.

Fertility offers no easy explanation. Iran's total fertility rate fell from 4.9 in 1990 to 1.7 in 2024, but women's participation did not follow, ranging between about 10 and 19 per cent for three decades. A twins-based study of Iranian mothers found that an additional child lowers urban mothers' participation by only around two percentage points, so lower fertility does not by itself explain the low participation.[14] Iran sits at 145th of 148 on the World Economic Forum's 2025 gender-

[14] Majbouri, SSRN working paper 10.2139/ssrn.3209735 (2018 draft; the 2016 draft reports a different magnitude). Abstract only. Instrumental-variable (twins) design.

gap index, and its World Bank legal-frameworks score is 26.25 on the 2026 scale.[15]

What does this cost? I cannot say precisely, and I would distrust anyone who could. Iran's income per head in constant US dollars was 5,249 in 2010 and 5,834 in 2024, essentially flat for fourteen years.[16] Sanctions explain a good part of that; Salehi-Isfahani's work on household spending finds that sanctions cut oil exports, reduced living standards and raised poverty.[17] Oil dependence and war matter as well. The case is consistent with the thesis and cannot prove it. What it does show is that the human-capital channel is not enough on its own: the schooling that earlier chapters celebrate pays off at national scale when it is allowed to enter the market.

[15] WEF, *Global Gender Gap Report 2025*; World Bank, Women, Business and the Law 2026 (WBL 2.0). Do not compare WBL 2.0 scores with WBL 1.0 scores.

[16] World Bank WDI, NY.GDP.PCAP.KD, 2026 release.

[17] Salehi-Isfahani, SSRN 10.2139/ssrn.4259396 (2022). Abstract only.

The Sahel: where restriction meets poverty

Move south to Niger, Chad and Mali, and the causation becomes nearly impossible to separate. These are among the poorest countries in the world, landlocked, drought-prone, and in several cases at war. I include them for three reasons: the numbers are extreme, they show the pattern in demographic form, and one of them breaks the pattern in a way I should report.

Start with marriage. In Niger, 76.3 per cent of women aged 20 to 24 were married before 18 in the latest survey (2012). In Chad it was 60.6 per cent (2019), and in Mali 48.5 per cent (2024), down from 70.6 per cent in 2006 (Figure VII.3).[18] Bangladesh, which began at a similar level in 1994 (73.3 per cent), had cut it to 47.2 per cent by 2025. The lines in the figure are the same story told at different speeds.

[18] World Bank WDI, SP.M18.2024.FE.ZS (UNICEF, DHS and MICS surveys). Niger's latest figure is 14 years old.

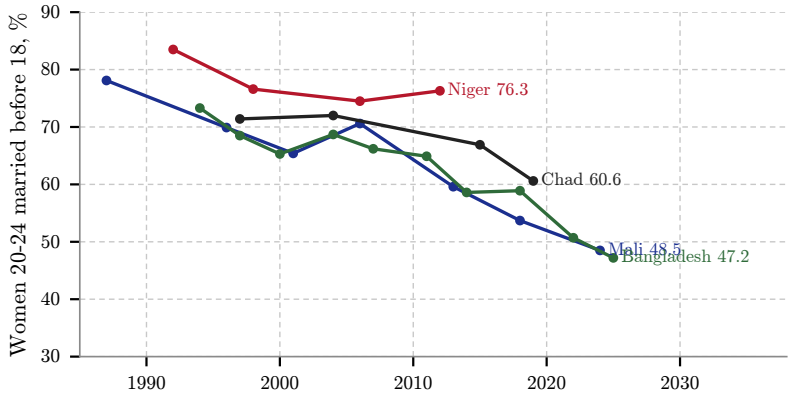


Figure VII.3. Share of women aged 20 to 24 who were married before 18: Niger, Mali, Chad and, for contrast, Bangladesh. Source: World Bank WDI SP.M18.2024.FE.ZS, from household surveys (measured).

Marriage is tied to schooling and to births. In 2024 the female secondary enrolment ratio was 19.5 per cent in Niger and 19.4 per cent in Chad, and the total fertility rate was 5.9 in Niger, 6.0 in Chad and 5.5 in Mali. Adolescent birth rates were 141.6 per 1,000 girls in Niger, 132.1 in Chad and 135.9 in Mali, against a world average of 38.3.[19] Niger's GDP per head is US$610 in 2025 (constant US dollars), only 31 per cent above its 1990 level of US$466; for Chad it is US$874 and for Mali US$934, against US$1,615 for sub-Saharan Africa as a whole.[20] On the 2026 World Bank scale their legal frameworks score 38.1 (Niger), 51.4 (Chad) and 50.3 (Mali), against 59.6 for the sub-Saharan average.[21]

[19] World Bank WDI, 2026 release (SE.SEC.ENRR.FE, SP.DYN.TFRT.IN, SP.ADO.TFRT); estimates. Mali's secondary enrolment is 37.1 per cent (2023).

[20] World Bank WDI, NY.GDP.PCAP.KD, 2026 release.

[21] World Bank, Women, Business and the Law 2026 (WBL 2.0).

Now the exception. Female labour-force participation in Niger is 72.8 per cent, in Mali 52.8 per cent and in Chad 47.3 per cent, against a world figure of 48.9 per cent.[22] Women work, overwhelmingly in agriculture and the informal economy. So the thesis cannot be that more women in the labour force means more income. These women are in the labour force and the country is poor. Participation is not liberty, a point that mandated-work economies make from the other side. The women of the Sahel work, but many marry as children, bear about six children and have little secondary schooling. The cost here is not idleness. It is that their work happens alongside early marriage, early births and little schooling, and the data I hold cannot say how far that locks them into low-productivity work.

[22] World Bank WDI, SL.TLF.CACT.FE.ZS, ILO modelled estimates, 2026 release.

I stop short of any causal claim. Niger's poverty is not credibly attributable to its gender laws alone, and I have not looked at its population growth rate here. Yemen is a weaker case still: it has the worst Gender Inequality Index score in the UN's 2025 table (0.838, rank 172) and the lowest legal score among rankable economies after Afghanistan, and a civil war that has destroyed income statistics since 2014.[23] I use it only to note that the worst legal scores and the worst outcomes tend to be found in the same places.

[23] UNDP, *Human Development Report 2025* (GII for 2023); World Bank WBL 2026; WDI. Yemen's GDP series ends in 2018.

The Gulf before reform: wealth, rented

The Gulf is the hardest case for the thesis, and I will treat it that way.

In 2010, Saudi women's labour-force participation was 17.6 per cent while GDP per head was US$54,900 in PPP terms. Qatar's was 50.8 per cent at US$132,500, Kuwait's 47.3 per cent at US$63,000, Oman's 26.5 per cent at US$48,200.[24] The pattern is plain: very high incomes alongside some of the lowest legal-equality scores outside Afghanistan. On the 2026 World Bank scale Qatar scores 26.3, Kuwait 27.2, Oman 36.7, Bahrain 43.2, the United Arab Emirates 53.6 and Saudi Arabia 56.2.[25]

[24] World Bank WDI, SL.TLF.CACT.FE.ZS and NY.GDP.PCAP.PP.KD. Qatar's and Kuwait's participation rates are high in part because of expatriate women workers.

[25] World Bank, Women, Business and the Law 2026 (WBL 2.0); research data S28. Scores on WBL 2.0 are not comparable with the earlier 1.0 index.

So, restriction and wealth can coexist. I concede it in full. Four things follow, and they sharpen the argument rather than weaken it.

First, the wealth is a rent. Oil and gas income comes out of the ground, not out of the output of a diversified labour force. I will say more about this in the next section.

Second, the Gulf states did not stay put. They are the clearest example in this paper of governments deciding that restriction had become too expensive. On the earlier 1.0 index, Saudi Arabia went from 38.1 in 2019 to 70.6 in 2020 and 80 in 2021; the United Arab Emirates from 26.9 (2000 to 2018) to 82.5 in 2021 to 2024; Bahrain from 28.8 in 2000 to 68.1 in 2023 to 2024 (Figure VII.4).[26] Qatar, Kuwait and Oman moved far less. Saudi female participation (ILO model) rose from 24.4 per cent in 2019 to 34.2 per cent in 2021, and was 33.3 per cent in 2024. Saudi nationals' participation roughly doubled between 2016 and 2024 and has since stalled, according to the Kingdom's statistics authority.[27] I make no claim that the reform caused any of Saudi Arabia's growth. The accurate statement is that the world's largest oil exporter chose to remove many of the restrictions on women's driving, travel and hiring, for its own reasons, and that participation rose afterwards.

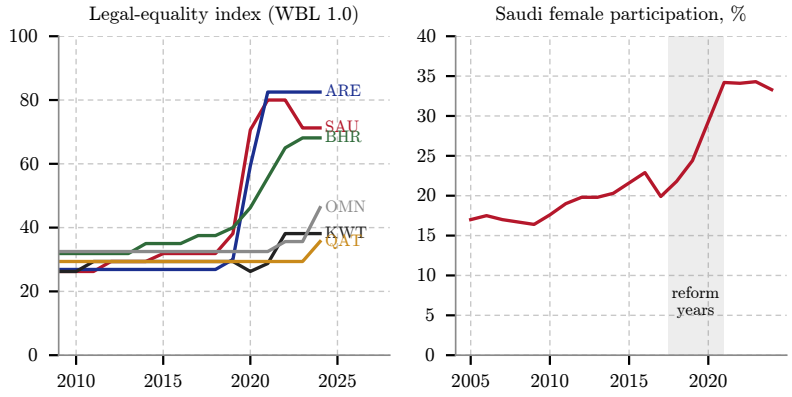


Figure VII.4. Left: legal-equality index (WBL 1.0, report years 2009 to 2024) for six Gulf states; the 1.0 and 2.0 scales are not comparable. Right: Saudi female participation (ILO modelled), with the 2018 to 2020 reform years shaded. The rise coincided with reforms, expatriate levies and a government push; it is not a causal estimate. Source: World Bank WBL 1.0 panel, WDI.

Third, women in the Gulf are not short of schooling. Female tertiary enrolment exceeds male in every Gulf state in the data: 84.2 against 83.6 per cent in Saudi Arabia, 72.6 against 56.7 in the Emirates, 69.4 against 25.1 in Qatar, 79.9 against 42.7 in Bahrain.[28] The Gulf is Iran's case in miniature, with a petroleum cushion that lets the idling go on for longer.

[26] World Bank, WBL 1.0 historical panel (report years 2009 to 2024), research data S40. Saudi Arabia's 2023 to 2024 score is 71.25, a dip from 80 that is in the source file.

[27] World Bank WDI (ILO modelled); GASTAT figures for Saudi nationals (17.7 per cent in Q2 2016, 36.0 per cent in Q4 2024, 33.7 per cent in Q2 2026), mostly at second hand. The rise coincided with expatriate levies from July 2017, the Nitaqat quota system and the pandemic; there is no clean causal estimate.

[28] World Bank WDI, SE.TER.ENRR.FE and .MA (2024; Kuwait 2021: 65.9 against 39.9).

Fourth, the cushion is thinning. Fertility in Saudi Arabia fell from 5.8 children per woman in 1990 to 2.3 in 2024; in the Emirates from 4.5 to 1.2.[29] And per-head income in constant dollars has been flat or falling since 2010 in the Emirates (US$42.3 thousand to US$41.6 thousand) and Kuwait (US$32.6 thousand to US$24.1 thousand), with Saudi Arabia up from US$21.8 thousand to US$25.1 thousand.[30] Diversification away from oil, the stated aim of Saudi Vision 2030, is plausibly what motivated the reforms, and a diversified economy draws on the whole workforce.

[29] World Bank WDI, SP.DYN.TFRT.IN, 2026 release.

[30] World Bank WDI, NY.GDP.PCAP.KD, 2026 release. Descriptive, not causal.

The oil-wealth exception, handled honestly

Here is what the data say, without gloss. Across 180 economies, the World Bank's 2026 legal-equality index and income per head have a correlation of 0.52. Remove the 19 economies where oil rents are at least 10 per cent of GDP, and it rises to 0.68.[31] In other words, the oil states are most of the reason that the relationship is not stronger. They are the scatter around the line, not the line.

[31] World Bank WBL 2026 and WDI; own calculation (research data S01), descriptive. 19 economies with oil rents at or above 10 per cent of GDP; $n = 180$ with both measures, $n = 161$ without them.

This is the best evidence I have for one sentence: rent income is not the same thing as broad-based productive growth, and a state that lives on it can be rich without drawing on half its people. I do not claim that rents cannot be shared widely. Norway is the counter-example I should name: oil rents of 6.1 per cent of GDP, a legal score of 88.1 and women's participation of 62.3 per cent.[32] Oil and equality can coexist; they simply do not have to.

[32] Research data S28 (World Bank WBL 2026 and WDI, 2024 values).

But I should not overreach in the other direction. A famous paper argued that oil causes the restriction, that oil economies keep women out of the workforce because men's rent-fuelled jobs make women's work unnecessary.[33] That argument is contested: a re-examination of the same data concluded that they do not provide evidence that oil rents causally affect female participation.[34] In the raw 2024 data the correlation between oil rents and female participation across 174 countries is -0.18.[35] I make no claim in either direction. Oil states restrict women and oil states are rich. I say that wealth of this kind has not needed women's freedom, and that the question for the Gulf is what comes after the rent.

[33] Ross, "Oil, Islam, and Women", *American Political Science Review* (2008), doi:10.1017/s0003055408080040. Abstract only.

[34] Groh and Rothschild, *Quarterly Journal of Political Science* (2012), doi:10.1561/100.00011036. Abstract only.

[35] Own calculation from World Bank WDI (research data S23); descriptive. Smaller still once income is held constant.

Nor do I say that oil wealth is bad for women. I say something more modest: the Gulf is the one place where a rich economy does not tell you how free its women are, and you need to look at the rent before you read the pattern.

What the cases share

Put the cases together and look at the aggregates. The 2026 World Bank legal-frameworks index averages 43.2 in the Middle East and North Africa and 44.3 in South Asia, against 59.6 in sub-Saharan Africa, 80.6 in Europe and Central Asia and 87.9 in high-income OECD economies. The world figure is 67.0.[36] Female labour-force participation in the Middle East and North Africa is 19.7 per cent in 2024, against 48.9 per cent for the world; income per head is US$5,485 against US$11,894 for the world (constant dollars, 2024).[37] Pakistan has a female participation rate of 24.0 per cent, literacy of 48.5 per cent for women against 69.1 for men, and ranked 148th of 148 on the 2025 gender-gap index.[38]

[36] World Bank, Women, Business and the Law 2026, regional averages (WBL 2.0), 190 economies.

[37] World Bank WDI, SL.TLF.CACT.FE.ZS (MEA aggregate) and NY.GDP.PCAP.KD, 2026 release.

[38] World Bank WDI and UNDP HDR 2025; WEF *Global Gender Gap Report 2025*.

Two cautions apply. Law is not the whole story: Bangladesh scores 34.4 on the 2026 legal index, below Pakistan's 46.7, yet has a higher female participation rate (38.7 against 24.0 per cent), more girls than boys in secondary school and a total fertility rate of 2.1 against Pakistan's 3.6.[39] Practice, norms and the economy interact with the statute book. And the indices are not independent; some of them contain the very outcomes (maternal deaths, adolescent births) that poor countries also record.

[39] World Bank WBL 2026; WDI. WBL measures the law and, in version 2.0, supporting frameworks, not outcomes.

Three honest costs of the other path should be mentioned in one line each, because the paper's argument does not need them to be zero. Freedom for women changes how families and firms are organised, and care work has to be redistributed. Fertility falls, which is a dividend in Niger and a demographic worry in Korea and Japan. And change brings political backlash, which is exactly what we see in Afghanistan. Each is real. I believe each is smaller and more manageable than the costs this chapter has documented, though I cannot prove that with a single number.

What the evidence supports is the following. Restriction goes with poverty; it goes with early marriage, high fertility, maternal death and idle education; and none of the countries in this chapter that loosened it shows a sign in these data of having been harmed by doing so, though the data are thin. What the evidence does not support is the claim that restriction alone made any of these countries poor, or that lifting it alone would make them rich. The real price of restriction is a bill that arrives every year and is added to everything else, and the sums grow with each cohort of girls who leave school.

VIII. The Strongest Objections

A case that cannot say where it might be wrong is not a case. Here are the best arguments against this paper, stated as their authors would state them, and what the evidence says back. Some objections are answered. Some are conceded in part. One section says what would make me change my mind.

> *The links between women's empowerment and development are probably too weak to be self-sustaining.*
>
> Esther Duflo, Journal of Economic Literature, 2012

I have spent six chapters arguing for one idea: where women are free, economies are richer and become richer faster. The evidence that the two move together is overwhelming. The evidence that one specific freedom causes one specific gain is strong. The evidence that women's liberty causes national GDP growth, as a single clean effect, does not exist. No study has identified it. Anyone who says otherwise is selling.

So the hostile economist has real material to work with. I want to hand it over myself. Each section below states an objection, gives the best number on its side, and answers it. Where the objection wins, I say so.

Objection one: rich countries can afford equality

This is the oldest objection and the most serious. Perhaps the arrow runs from income to equality. Rich countries have schools, courts and welfare states. They can afford to let women work, own and vote. Dollar and Gatti found that income drives gender equality in education, not the other way round. Duflo's review agrees that the two forces reinforce each other but are too weak, alone, to carry the whole load.

I concede the first half. Income helps equality. The cross-country correlation between legal equality and income per head is r = 0.52 across 180 economies, and a correlation cannot choose a direction.[1]

Four things push back.

First, the cleanest designs do not run through prior income. A school-

[1] World Bank, Women, Business and the Law 2026 (legal-frameworks index, version 2.0) and World Bank WDI GDP per capita, PPP, 2024. Correlation with log income, 180 economies; own calculation.

ing reform in Zimbabwe, a suffrage law in an American state, a randomised reservation of village council seats in India, a jobs programme in a Delhi suburb: each shifts one freedom while the rest of the economy stays put. Each moves child survival, schooling or public goods. In the US, women's suffrage was followed by 8 to 15 per cent lower child mortality.[2] In West Bengal's randomised panchayats, villages with women leaders had 23.8 drinking-water facilities against 14.7.[3] These are causal results about specific freedoms. They are not results about GDP, and I do not present them as such.

[2] Miller, "Women's Suffrage, Political Responsiveness, and Child Survival in American History", Quarterly Journal of Economics, 2008; staggered state laws, 1869–1920.

[3] Chattopadhyay and Duflo, Econometrica, 2004, as recorded in the research dossier (part P7).

Second, law often moves before income. Rwanda reformed inheritance and land law in 2003, long before its recent income gains. Saudi Arabia lifted its driving ban in 2018 and ILO-modelled female participation rose from 24.4 per cent in 2019 to 34.3 per cent in 2023.[4]

[4] ILO modelled estimates via World Bank WDI (SL.TLF.CACT.FE.ZS), 2019 and 2023. Before-and-after only; no counterfactual, and expatriate levies from 2017 confound it.

Third, the reviews lean my way, with a warning attached. Kabeer and Natali, surveying the evidence in 2013, found that the link from women's education and employment to growth is far more consistent and robust than the reverse link from growth to gender equality. They also found that growth alone does not deliver equality.

Fourth, my own regression. I asked: conditional on starting income, do countries that began with more equal laws grow faster afterwards? In the 1990 to 2023 window, each ten extra points of the legacy World Bank index in 1990 goes with 0.31 percentage points more annual growth per head (standard error 0.09, 176 economies). From 2000 the figure is 0.36 (standard error 0.08, 182 economies).[5] I call this suggestive and nothing more. The unconditional correlation is only 0.12 to 0.17, the model has no region effects, and Figure VIII.1 shows the awkward fact that the top quartile grows more slowly than the middle two. That is what catching up looks like: rich countries grow slowly whatever their laws. It is not proof of anything.

[5] Own calculation from World Bank WBL 1.0 historical series and WDI; OLS of annual growth of real GDP per head on initial index and log initial income, no robust errors, region effects or lags. Descriptive; research file S24.

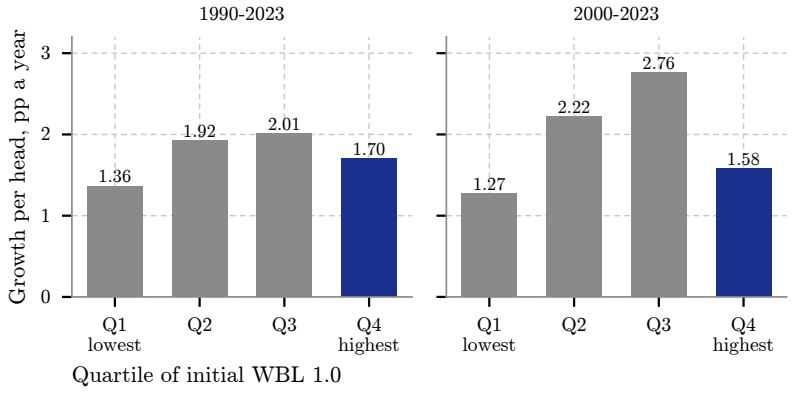


Figure VIII.1. Mean annual growth of GDP per head by quartile of initial legal equality (WBL 1.0), two windows. The top quartile trails the middle because rich economies grow slowly; the regression conditions on income, the bars do not. Source: own calculation from World Bank WBL

and WDI (illustrative, not causal)

The honest verdict: reverse causality is real, it explains part of the national pattern, and no national study has separated the two. The case rests on the specific freedoms where the design does separate them.

Objection two: something else drives both

Institutions, rule of law, religion, colonial history and culture could produce equality and prosperity together, with no link between them. Cross-country regressions cannot rule this out, and I concede it flatly.

The answer is in the designs that hold those things fixed. Indian states share a constitution, a currency and a national government, yet their reforms were staggered, and the inheritance studies compare women inside the same country. American states passed property acts in different years under the same federal law, and girls' schooling rose after the acts, though total wealth changed little.[6] Village councils inside one district differ only by a lottery. Ethiopia's 2000 family-law reform rolled out region by region, and women's work outside the home was 15 to 24 per cent higher in reform areas.[7] A confounder shared by a whole country cannot explain differences inside it.

What these designs buy is internal validity for narrow claims. What they cannot buy is the national claim. I will not pretend otherwise.

[6] Geddes, Lueck and Tennyson, "Human capital accumulation and the expansion of women's economic rights", Journal of Law and Economics, 2012.

[7] Hallward-Driemeier and Gajigo, "Strengthening economic rights and women's occupational choice: the impact of reforming Ethiopia's family law", World Development, 2015.

Objection three: oil

Qatar has GDP per head near $111,000 in PPP terms and scores 26.3 out of 100 on the World Bank's 2026 legal-equality index. Kuwait scores 27.2 at about $47,000. Oman scores 36.7 at $37,000. Saudi Arabia scores 56.2 at $63,000.[8] If women's legal freedom drove prosperity, these would be poor. They are rich.

This is the most visible exception and Figure VIII.2 shows it. I will not wave it away.

[8] World Bank WBL 2026 legal-frameworks index (version 2.0) and WDI GDP per capita PPP 2024, research file S28.

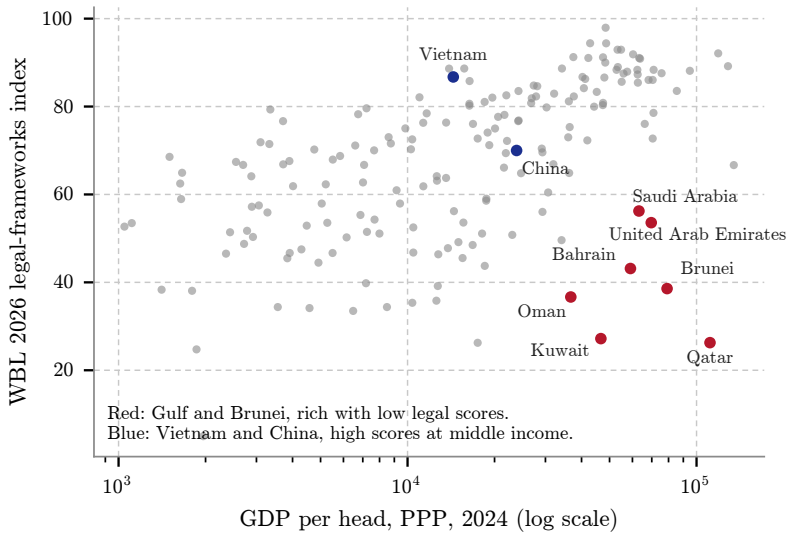


Figure VIII.2. The exceptions on the legal-equality scatter: Gulf economies and Brunei sit far below the cloud; Vietnam and China sit above it. Source: World Bank WBL 2026 (index version 2.0) and WDI, 180 economies (measured)

Three answers. First, the exception has a name: resource rent. Remove the 19 economies where oil rents reach 10 per cent of GDP and the correlation across the rest rises from 0.52 to 0.68. Legal equality then accounts for nearly half the variation in log income, up from about a quarter.[9] Oil is the main way a country is rich without broad-based productivity, which is the thing the thesis is about. A rent is paid to those who control the well. It does not depend on who may own land, sign a contract or open a bank account.

Second, the Gulf is moving. Saudi Arabia ended the driving ban in 2018, lifted travel guardianship for adult women, barred hiring discrimination and, with the 2017 expatriate levies, pushed firms toward Saudi staff. Participation among Saudi nationals roughly doubled, from 17.7 per cent in 2016 to 36.0 per cent in late 2024, then slipped to 33.7 per cent in mid-2026.[10] Guardianship remnants are still coded against it in the 2026 index. A government that spent decades living off oil is now spending political capital on women's work. That is not what a government does when it thinks the old way is optimal.

Third, I will not argue the reverse. The claim that oil itself suppresses women's employment, Ross's 2008 thesis, is contested: Groh and Rothschild found the data do not show it. I take no side.

[9] Own calculation from WBL 2026 and WDI, 180 and 161 economies; oil-rent threshold 10 per cent of GDP (WDI NY.GDP.PETR.RT.ZS).

[10] GASTAT labour force survey, Saudi nationals; most dates via secondary sources (research file S39).

Objection four: East Asia grew while women were held back

This is the best counterexample, and I mean that. South Korea's income per head rose from $1,038 in 1960 to $37,048 in 2024 while the gender wage gap stayed large and women's participation in the labour force never rose above 57 per cent.[11] Japan's path was similar. A thesis that says freedom for women precedes prosperity has to explain how the fastest growth in history happened in places where it was missing.

[11] World Bank WDI, GDP per capita (current US$), Korea, 1960 and 2024; female LFPR 56.8 per cent in 2024 (SL.TLF.CACT.FE.ZS). Gender wage gap from the dossier, section on Korea.

Start with what the record shows. Korean and Japanese growth leaned on women's schooling and on young women in export factories. Female secondary and tertiary enrolment surged; female-labour-intensive manufacturing carried exports. Seguino argues that low female wages were part of the competitive edge, a claim others, such as Schober and Winter-Ebmer, contest. Women were an input, though not a free or a paid-equally one.

The better answer is the bill. Korea's fertility rate is 0.75 children per woman, far below replacement; Japan's is 1.15.[12] Gross tertiary enrolment of Korean women is about 99 per cent, yet only 57 per cent participate in the labour force. That is a society that educated its women and then did not use them. I do not claim the low fertility is caused by this: that is a hypothesis. I claim the line the evidence supports: growth despite, and now constrained by.

[12] World Bank WDI, SP.DYN.TFRT.IN, 2024. The IMF estimates about 4 per cent higher GDP per head if Japanese female participation reached G7 levels, and 4 per cent more at Nordic levels (dossier, part P3); a model estimate.

So Korea refines the thesis. It does not refute it. The thesis is about what holds back broad-based development over a long horizon, and a catch-up economy at one stage can grow on cheap labour of either sex. It does not mean such an economy keeps growing that way.

Objection five: Vietnam and China

The mirror image of Korea. Vietnam's female participation is 69 per cent, China's 59 per cent, both among the highest in the world for their income, and both grew fast while limiting political freedom for everyone. Vietnam scores 86.7 on the World Bank's 2026 legal index, above many rich countries. China scores 70.0.[13]

[13] ILO modelled participation, 2024, via WDI (SL.TLF.CACT.FE.ZS); WBL 2026 legal-frameworks index, research file S28.

I concede it outright. Participation and prosperity can both rise under a state that gives its citizens little political voice. China's participation has also fallen, from 73.1 per cent in 1990 to 59.4 per cent in 2024, while its economy grew, which Figure VIII.3 shows. If the thesis were only about participation, these cases would damage it.

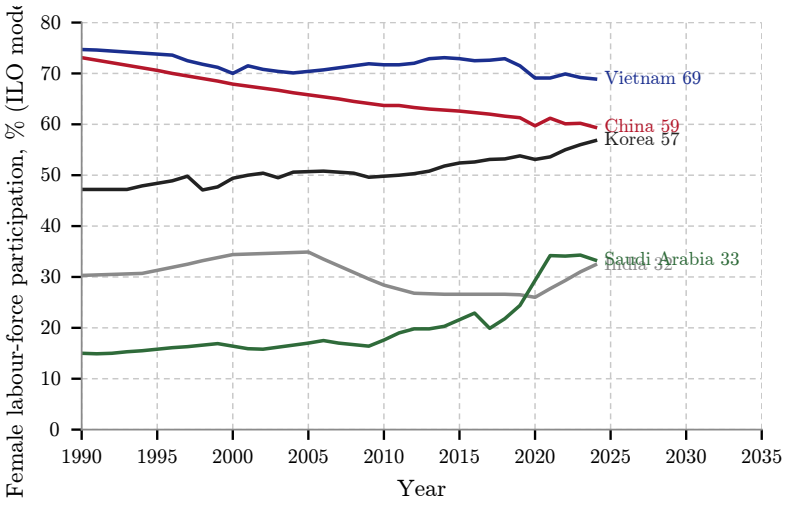


Figure VIII.3. Female participation in the labour force, 1990–2024, for the exception cases. Vietnam and China sit high and fall or hold; Korea rises slowly from lower levels; Saudi Arabia and India sit far below. Source: ILO modelled estimates via World Bank WDI (modelled)

But the thesis is not about participation alone. It is about liberty: the right to choose to work, to own, to travel, to speak. Vietnam is the strongest illustration that laws on paper matter, since its legal score is high. Its women hold property, inherit and enter contracts on terms close to equal. That does not make Vietnam free, and the paper does not claim it. It says that legal equality for women is a feature of Vietnam's growth, not an obstacle to it.

Objection six: socialist states made women work, and stagnated

East Germany had female participation of about 89 per cent in 1989, against 56 per cent in West Germany.[14] The Soviet bloc made employment close to compulsory. Its economies stagnated and then collapsed. Whatever women's work did for output, it did not save them.

I agree with the premise and draw the opposite conclusion from the objector. The claim in this paper is not that more women working means more growth. It is that women who are free, with markets, property and rights, and with the right to decide how much of their lives goes to paid work, lift an economy. Mandated work is not liberty. The East German evidence is also interesting for a second reason: East German women could out-earn their husbands without doing more housework or facing more divorce, and attitudes there shifted with the regime, which is why the same state that mandated work also changed norms.[15] Transition costs are real: the double burden of paid work and care, falling birth rates, and backlash from those

[14] Lippmann, Georgieff and Senik, "Undoing Gender with Institutions", Economic Journal, 2020, citing Rosenfeld et al. 2004.

[15] Lippmann et al. 2020, same source; finding as summarised in the dossier, part P5.

who lose status. They are smaller than the gains and manageable, but they are not zero.

Objection seven: more women working is not more women free

India makes the point best. Its official survey shows female participation rising from 23.3 per cent in 2017–18 to 41.7 per cent in 2023–24, a leap that looks like emancipation. Look inside: 64.4 per cent of working women are in agriculture and 36.7 per cent are unpaid helpers in family enterprises.[16] Kerala, which has India's best schooling and fertility numbers, has female participation of 40.8 per cent, below the national figure. Iran enrols more women than men in university (59.1 per cent against 58.3 per cent) and has female participation near 14 per cent.

[16] Periodic Labour Force Survey (usual status, ps+ss, age 15 and above), 2017–18 and 2023–24, dossier part P8. ILO-modelled participation for India is 26.6 per cent in 2017 and 32.4 per cent in 2024; the two series use different definitions.

I concede all of this. A statistic that counts an unpaid daughter-in-law on a family farm as a worker is not a measure of liberty. These cases are why the paper keeps returning to quality of work, mobility and norms, not just counts. They also show that education alone does not open the door. Iran is the sharpest proof that schooling without legal and social room produces frustration, not a labour force.

The same two-sidedness applies to India's inheritance reforms, and I will not hide it. State laws passed between 1976 and 1994, and a national law in 2005, gave daughters equal shares of family property. The gains: education for the most affected women rose by 1.2 to 1.7 years, and labour supply by 3.8 to 6.1 percentage points.[17] The costs: Roy found that daughters did not inherit more land, because parents gave land to sons in advance, up 13 points in the most affected cohorts. Bhalotra, Brule and Roy found 3.8 to 4.3 points fewer girls among births after a firstborn daughter, which means more sex selection. Anderson and Genicot found that suicide and domestic violence both rose where women's property rights improved.

[17] Roy, "Empowering women? Inheritance rights, female education and dowry payments in India", Journal of Development Economics, 2015; Heath and Tan, "Intrahousehold bargaining, female autonomy, and labor supply: theory and evidence from India", Journal of the European Economic Association, 2020 (abstract read). Research file S43.

This is the strongest hostile case on legal rights, and it is on the record. What I draw from it: rights without a change in norms can backfire in the short run, and the dividend arrives through schooling and work. That is an argument for pairing legal reform with the other freedoms, not for dropping it.

Objection eight: the gap indices are mechanical

The UNDP's Gender Inequality Index includes maternal mortality and adolescent births, which fall with income by themselves. The OECD's index of discriminatory social institutions has a development component too. If these indices correlate with income, perhaps noth-

ing is being measured but income.

Partly right, and I concede it for the UNDP index. The World Economic Forum's Global Gender Gap Index is better in that respect but measures gaps between women and men, not levels, and correlates only about 0.45 to 0.47 with log income. That is why the paper leans on the legal index, which counts laws and has no health or income component, and why it reports the other three indices as supporting evidence, not as proof.

Objection nine: the dollar figures are advocacy

"Closing the gap adds $28 trillion" is not an observation. It is a 2025 scenario from a consultancy with an interest in the question.[18] The World Bank's $160 trillion is a stock of lifetime earnings, not a yearly loss. The "20 per cent of GDP" in the legal-equality report comes from simulations by Pennings (2022) and Fiuratti and others (2024), not from the report's authors.[19]

All fair. In this paper those numbers are scenarios, labelled as such, never summed and never described as lost output. The peer-reviewed numbers come first: Hsieh, Hurst, Jones and Klenow attribute 20 to 40 per cent of growth in US output per person from 1960 to 2010 to better matching of talent to jobs, in a calibrated model that includes Black men as well as women.[20] Klasen and Lamanna find growth effects of 0.4 to 0.9 percentage points a year from education gaps.[21] These are smaller than the headline figures and still large.

[18] McKinsey Global Institute, "The Power of Parity", 2015: $28 trillion is the full-parity case for 2025 across 95 countries, $12 trillion the realistic case.

[19] World Bank, WBL 2026, citing Pennings, Policy Research Working Paper 9942 (2022), and Fiuratti et al. (2024); long-run GDP per head, other things equal, on the order of a fifth higher on average and about half higher in MENA.

[20] Hsieh, Hurst, Jones and Klenow, Econometrica, 2019; calibrated general-equilibrium model, not an experiment.

[21] Klasen, 2002, and Klasen and Lamanna, 2009; regression accounting, ranges as reported in the dossier.

Objection ten: quotas, boards and microcredit

Several popular claims in this field have failed when tested. Women on corporate boards show a meta-analytic correlation with firm performance of roughly 0.01 to 0.05.[22] Norway's board quota did not raise firm value in the studies that checked, and one found it fell.[23] The early Bangladeshi microcredit results failed replication, and randomised trials show modest or no average effect on women's empowerment. Parliamentary quotas show mixed effects on spending. The link between women and lower corruption disappears with country fixed effects.

I agree, and none of these carries weight in the argument. The case for equality at the firm level is talent access and fairness. A profit premium from board diversity is not demonstrated, and the paper does not claim one. Women in parliament are not used as an indicator of prosperity either, since the correlation with income is weak. Where the paper uses evidence on voice, it uses the randomised and quasi-

[22] Post and Byron, Academy of Management Journal, 2015; Pletzer et al., PLOS ONE, 2015. Post and Byron's accounting-return correlation is 0.047; market performance is near zero.

[23] Ahern and Dittmar, Quarterly Journal of Economics, 2012 (value fell); Eckbo, Nygaard and Thorburn (no significant valuation effect); Bertrand et al. (no spillover to other women).

experimental studies of local office and suffrage.

What would change my mind

A thesis worth holding says what would end it. Four findings would hurt, in descending order.

First, a credible national-scale study that opens a legal barrier for women and finds no gain, within a decade, in schooling, work or child survival. Not an oil state, not a case where the law was a dead letter. The designs in this paper are narrow; a clean null in a comparable setting would force me to say the effects are not general.

Second, a pattern of null results where I expect gains. Schooling reforms for girls lowered early births and child deaths in poor settings such as Zimbabwe, Taiwan, Malawi, Uganda and Nigeria, while Denmark and the 1947 British reform found nothing on child health, where schooling was already close to universal. That fits catching up. Repeated nulls in poor settings would not.

Third, a durable high-income economy with severe legal restrictions on women and without resource rents, growing broadly through a full generation. Korea comes closest, and it is now meeting a demographic wall. Vietnam and China have not yet run into theirs, which is why they stay on the watch list.

Fourth, a reversal in the regression I ran. If the 1990 and 2000 legal-equality coefficients lose sign or significance once region effects, lags and robust errors are added, I will withdraw the sentence that says initial legal equality goes with faster later growth. The result is illustrative now, and I would not be surprised if it shrank.

Label	**What backs it**	**What this paper does with it**
Causal, strong	Randomised or sharp natural experiments: panchayat seats, suffrage, jobs, girls' schooling in poor settings	Uses causal verbs, one freedom at a time
Causal, moderate	Staggered reforms: Ethiopia 2000, India inheritance, US property acts	Causal verbs with caveats, reports adverse results
Correlation	Cross-country indices, 180 economies	"Tracks", "goes with"
Simulation	$28T, $160T, "a fifth of GDP"	Labelled scenarios, never summed
Contested	Corruption, boards, quotas, microcredit	Not used as support

Table VIII.1: How the paper grades its own evidence. Classification: my own, following the research team's rigor check.

Table VIII.1 is the whole argument in one frame. The top rows are the paper's spine. The bottom rows are what I refuse to lean on. Having said where the thesis is weakest, I stand by the part that is strong: every freedom tested in a sharp design, schooling for girls, a vote, a job, a title to land, has paid off where the design could see it, and the exceptions mark the edges of the claim, not holes in it.

Sources and methods

Measured, modelled and my own calculation

Every chart carries one of four tags. *Measured* means an administrative count or survey: legal indices coded from statutes (World Bank, Women, Business and the Law), national surveys (India's Periodic Labour Force Survey; Saudi Arabia's GASTAT labour force survey), school enrolment data (UNESCO via WDI). *Modelled* means the number comes from a statistical model, most importantly the ILO's modelled labour-force participation in WDI, which fills gaps by estimation and differs from national surveys. For Afghanistan in 2022 the ILO model gives 5.2 per cent against 24 per cent in the UN Women survey, which counts informal work. *Simulation* means a counterfactual that follows from assumptions: the McKinsey, World Bank wealth and "fifth of GDP" numbers. *Own calculation* means I computed it from public data: every correlation in this chapter, the growth regressions in Section 1, and the oil-economy split.

The calculations are descriptive. They use ordinary least squares without robust standard errors, region effects or lags, and the reader should treat them as a way of showing a pattern, not as a table of findings. They are in the research files and the scripts that make the figures are in the paper folder.

The legal index changed

In February 2026 the World Bank replaced the legacy index (Women, Business and the Law 1.0, covering 1971 to 2024) with version 2.0. The two are not comparable. Bangladesh scored 49.4 on version 1.0 in 2024 and 34.4 on version 2.0 in 2026. Saudi Arabia scored 71.25 on the old scale and 56.2 on the new one.[24] Figure VIII.4 shows the shift for 21 economies. The new scale is stricter, and moves most for places where laws on the books are weakly applied or still carry guardianship remnants. Whenever this paper gives a score, it names the version. Long histories, such as the rise from 45.7 in 1971 to 77.9 in 2024, use version 1.0. Cross-country comparisons for 2026 use version 2.0. Never read a figure from one against the other.

[24] World Bank WBL 1.0 (report year 2024) and WBL 2.0 (2026), research file S28.

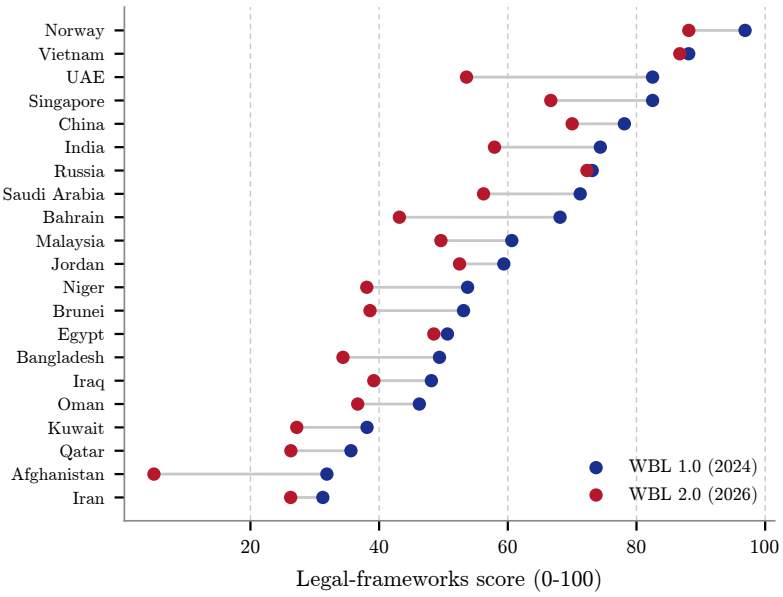


Figure VIII.4. The same economies on the two World Bank legal-equality scales. Version 2.0 scores sit below version 1.0 almost everywhere, and the Gulf falls furthest. Scores from different versions must not be compared. Source: World Bank WBL 1.0 (2024) and WBL 2.0 (2026) (measured)

What I could not verify

The research notes record every figure that was not seen in a fetched source, and I left those out. The list includes Abe's 30 per cent target and its outcome, the Matsui estimates, Soviet participation figures, the "half the sky" quotation, Meiji school enrolment, and Kerala census figures. The earlier claim of Lott and Kenny on suffrage and government growth has unverified magnitudes, so I cite Miller instead. Diversification arguments for Gulf states, from IMF working papers, were not verified and are not cited. Heath and Tan's 2020 paper was read in abstract only. The Hoogendoorn field experiment on mixed teams was read in abstract only. The IPU's own site returned an access error, so the world average of 27.5 per cent women in parliament in January 2026 comes from UN Women quoting IPU.

Three other cautions. A single year's World Economic Forum rank is volatile (Bangladesh was 24th in 2025 and 79th in 2026), and I use none as evidence of development. The 2021–22 collapse of Afghanistan's GDP, down 20.7 per cent in 2021, is mostly the loss of aid and frozen reserves, not the restrictions on women; UNDP's estimate that the exclusion of women costs about $920 million, or 5.8 per cent of GDP, over 2024–26 is a projection. And the Gulf's 2017–2024 participation figures rest on national labour surveys that mix reform with expatriate levies, a pandemic and a hiring quota system.

Nothing here is a finding of the kind you could put in a table of regression results. It is a body of evidence, graded honestly, that points one way. Where it is strong I have said so with a causal verb. Where it is weak I have said so with "tracks". The reader who wants to reject the conclusion can start at any objection in this chapter, and has the data to do it.