

University of Greater Manchester

Policy intent vs. resource curse: a comparative analysis of women's legal empowerment in Rwanda and Qatar

Chan, Yiu-Fai; Ngoe, Lawrence M.; Baghel, Shailendra; Tannor, William; Odom, Giamene; et.al.
<https://ub-ir.bolton.ac.uk/esploro/outputs/journalArticle/Policy-intent-vs-resource-curse-a/9972529508841/filesAndLinks?index=0>

Chan, Y.-F., Ngoe, L. M., Baghel, S., Tannor, W., Odom, G., & Bello, R. (2026). Policy intent vs. resource curse: a comparative analysis of women's legal empowerment in Rwanda and Qatar. *Scientific Culture*, 12(4), 6761–6773.
<https://ub-ir.bolton.ac.uk/esploro/outputs/journalArticle/Policy-intent-vs-resource-curse-a/9972529508841>
1
Document Version: Published (Version of record)

Published Version: <https://sci-cult.com/volume-view/page/30?id=11>

ubir@bolton.ac.uk

CC BY V4.0

Research:Open

Copyright:© 2026.This is an open-access article distributed under the terms of the Creative Commons Attribution License.(<https://creativecommons.org/licenses/by/4.0/>)

Downloaded On 2026/04/27 12:16:15 +0100

DOI: 10.5281/zenodo.12426696

POLICY INTENT VS. RESOURCE CURSE: A COMPARATIVE ANALYSIS OF WOMEN'S LEGAL EMPOWERMENT IN RWANDA AND QATAR

Dr. Yiu Fai Chan^{1*}, Lawrence M. Ngoe², Dr. Shailendra Baghel³, Dr. William Tannor⁴,
Dr. Giamene Odom⁵, Dr. Rasheed Bello⁶

¹International Foundation Year the University of Salford Maxwell Building, 43 Crescent Salford M5 4WT
United Kingdom

²Greater Manchester Business School University of Greater Manchester Great Moor Street Bolton BL1 1SW
United Kingdom

³Faculty of Business and Law School of Leadership, Marketing and Management De Montfort University
Dubai Internet City, Building 12 Dubai 501870 United Arab Emirates

⁴Senior Lecturer in Business Global Banking School (GBS) 4 Universal Square, Manchester Campus
Manchester M12 6JH United Kingdom

⁵School of Business and Enterprise University of Lancashire Preston, Lancashire PR1 2HE United Kingdom

⁶QA Ulster University Manchester Campus United Kingdom

Received: 17/11/2025

Accepted: 08/03/2026

Corresponding Author: Yiu Fai Chan
(email)

ABSTRACT

Why does one of the world's poorest countries outperform one of its wealthiest on women's legal empowerment? Across 199 countries, a regression of Women, Business and the Law (WBL) scores on log GDP per capita explains only 41% of cross-country variance ($R^2 = 0.411$). Rwanda, with GDP per capita of \$1,027, scores 66.1 – 25.2 points above its income-predicted level. Qatar, with GDP per capita of \$81,817, scores 27.2 – 47.0 points below. The combined residual gap of 72.2 points is the widest in the dataset. We develop a Revenue-Institution-Capability (RIC) framework, anchored in gender economic governance theory, that identifies three institutional mechanisms explaining this divergence: revenue structure, political inclusion, and capability conversion infrastructure. The framework generates three testable institutional equilibria predicting WBL residual direction. An extended OLS regression confirms this: adding oil rents ($\beta = -0.636$, $p < 0.001$) and female parliamentary representation ($\beta = 0.419$, $p < 0.001$) raises R^2 from 0.405 to 0.662 on the same sample. Internet penetration does not explain cross-country variation once income is controlled ($p = 0.983$). Qatar's persistent residual of -27.9 after institutional controls is explained through strategic ignorance – formal equality commitments maintained without enforcement infrastructure. These findings challenge income-led convergence narratives and carry direct implications for institutional approaches to gender empowerment policy

KEYWORDS: Women, Business and the Law; resource curse; transformative constitutionalism; gender economic governance; strategic ignorance; Rwanda; Qatar; capabilities approach; institutional theory

1 INTRODUCTION

A central assumption in development economics holds that rising incomes generate improvements in gender equality. The theoretical basis for this expectation runs from modernisation theory (Inglehart and Norris 2003) through Duflo's (2012) influential review, which concludes that while economic development can improve women's conditions, policy commitment remains necessary for complete equality. Empirically, the cross-country relationship between income and women's legal status is moderate but robust: the World Bank's Women, Business and the Law (WBL) index correlates with log GDP per capita at $r = 0.64$ across 199 countries (World Bank 2026).

Yet this relationship leaves nearly 60% of country-level variance unexplained – a residual that is theoretically informative. When countries are ranked by the difference between their observed WBL score and the score predicted by their income level, two cases stand as the most extreme outliers in opposite directions. Rwanda, with a GDP per capita of \$1,027 (2023), achieves a WBL score of 66.1 – 25.2 points above its income-predicted level. Qatar, with a GDP per capita of \$81,817, achieves only 27.2 – 47.0 points below its income-predicted level. No other country pair in the 199-country dataset combines as large a positive and negative residual simultaneously (combined gap: 72.2 points), and no other combination presents as stark a reversal of the expected wealth-equality relationship.

This paper investigates the institutional mechanisms that produce this divergence. We make four contributions. First, we develop a Revenue-Institution-Capability (RIC) framework, anchored in the concept of gender economic governance (after Morgan and Roberts 2012), that identifies three interacting mechanisms through which income fails to translate into gender equality in resource-dependent states. Second, the framework generates three testable institutional equilibria – extractive rent states, transitional reform states, and mature gender equality states – each predicting a distinct WBL residual direction, which distinguishes the RIC model from prior synthetic typologies. Third, we provide the first direct empirical test of internet penetration as an alternative explanation, finding it does not appear to explain cross-country variation in WBL outcomes once income is controlled ($p = 0.983$). Fourth, we identify strategic ignorance (McGoey 2012) as an under-theorised mechanism in gender governance: Qatar's Vision 2030 commitments are maintained as formal signals while enforcement infrastructure is absent, a pattern that reproduces

institutional stasis while appearing reformist to international audiences.

The paper proceeds as follows. Section 2 reviews the relevant literature and develops the RIC theoretical framework. Section 3 presents data, the regression model, and the case selection rationale. Section 4 reports findings. Section 5 discusses the four theoretical mechanisms. Section 6 concludes with policy implications; limitations of the study's design – including the *de jure* nature of the primary dependent variable and cross-sectional identification constraints – are discussed in the concluding section.

2. THEORETICAL FRAMEWORK AND LITERATURE REVIEW

2.1 *income, institutions, and gender: the missing 59%*

The income-gender equality relationship is theoretically and empirically well-established. Modernization theory predicts convergence as societies industrialize (Inglehart and Norris 2003); Duflo (2012) reviews evidence that development reduces constraints on women through poverty reduction and rising opportunity costs of discrimination. Yet the OLS coefficient on log GDP explains only 41% of WBL variance, leaving a residual distribution wide enough to accommodate simultaneous over- and under-performers at every income level.

This gap suggests that income operates through institutional channels that can be blocked or redirected by other factors. Elson (1999) provides the foundational feminist political economy argument: labor markets are gendered institutions – structured by explicit and implicit rules that systematically disadvantage women – and their reform requires institutional change rather than simply market expansion. Kabeer (1999) provides the related conceptual distinction: resources and achievements are mediated by agency, and the expansion of women's agency depends on the institutional conditions that determine whether resources can be converted into genuine choices. Nussbaum (2011) formalizes this as the gap between internal capabilities (education, skills, motivation) and combined capabilities (the actual freedom to exercise those capabilities within one's legal and social context). All three frameworks predict that income generates gender equality only when the institutional channel is open – a condition that cannot be assumed in resource-dependent states.

2.2 *The Revenue-Institution-Capability (RIC) Framework*

We situate the RIC framework within the concept of

gender economic governance – the mechanisms through which state institutions, customary authorities, religious bodies, and international organizations use legislative controls, economic structures, and institutional incentives to produce, enable, or restrict women's economic participation (adapted from Morgan and Roberts 2012). This framing anchors the RIC model in a broader institutionalist tradition concerned with how formal and informal rules interact to shape women's substantive freedoms.

The framework identifies three interacting institutional mechanisms:

Revenue Structure. Tax-based states depend on broad economic participation for fiscal sustainability, creating incentives to expand labor force participation – including women's (Ross 2008). Resource-based states derive revenue from extractive rents, removing this fiscal pressure. Ross (2008) identifies two channels: the labor demand effect (oil revenues fund male-intensive industries, reducing demand for female labor) and the political effect (high state revenues reduce governments' need to mobilize women's economic participation for tax base expansion). Qatar's sovereign wealth fund, estimated at \$475 billion, exemplifies the political effect: the state can fund generous social transfers without requiring women's productive participation, and faces no fiscal incentive to reform the institutional barriers that constrain it.

Political Inclusion Mechanisms. Constitutional design shapes whether gender equality is institutionalized or remains vulnerable to political reversal. Rwanda's 2003 constitution mandated a 30% female parliamentary quota, producing the world's highest female legislative representation (61% in 2024). Legislative representation translates into agenda-setting power that sustains and extends the original reform through endogenous institutional deepening (Mahoney and Thelen 2010). Qatar's

consultative parliament (Majlis al-Shura) had no elected members until 2021, and female representation has never exceeded 5%. The absence of political inclusion mechanisms means that even incremental reforms face no internal legislative advocacy – and no mechanism for sustained institutional change once initiated.

Capability Conversion Infrastructure. Legal rights require institutional infrastructure to generate genuine economic participation. Kabeer (1999) terms this the conditions that enable resource-to-agency conversion; Nussbaum (2011) identifies it as the institutional complement that converts internal into combined capabilities. Rwanda's WBL Entrepreneurship Supportive score of 90.0 reflects extensive microfinance networks, business development services, and skills training programmes – the infrastructure that translates legal rights into entrepreneurial action. Qatar's score of 25.0 (the index floor) indicates the structural absence of such infrastructure across every measured dimension, independent of formal legal rights provisions.

The three mechanisms interact: revenue structure shapes the fiscal incentive to build political inclusion; political inclusion drives investment in capability conversion infrastructure; capability infrastructure sustains the political coalition that defends and deepens the original legal framework. This interaction dynamic distinguishes the RIC framework from prior accounts that treat revenue (Ross 2008) or capabilities (Kabeer 1999; Nussbaum 2011) in isolation.

Critically, the framework generates three testable institutional equilibria with distinct predicted WBL residual directions, as shown in Table 1. This distinguishes RIC from a synthetic typology: each equilibrium predicts not just institutional configurations but expected empirical outcomes against the income baseline, making the framework falsifiable across the full WBL dataset.

Table 1: RIC Framework – Three Institutional Equilibria. Each row predicts a distinct WBL residual direction against the income baseline, constituting the empirically testable core of the framework. Qatar exemplifies the extractive rent equilibrium; Rwanda the transitional reform equilibrium. Mature gender equality states (e.g., Nordic countries) converge toward income predictions because all three mechanisms operate simultaneously.

State Type	Revenue	Political Inclusion	Capability Infrastructure	Expected WBL Residual
Extractive rent state	Resource-based	Low	Low	Large negative
Transitional reform state	Tax-based	High	Medium	Positive
Mature gender equality state	Tax-based	High	High	Near predicted

2.3 Transformative Constitutionalism and Critical Junctures

Historical institutionalism suggests that institutional change is most rapid at critical junctures – moments

of external shock that disrupt existing equilibria (Mahoney and Thelen 2010). Klare (1998) identifies transformative constitutionalism as the process by which post-liberation or post-conflict constitutional redesign can generate rapid gender equality gains:

when prior institutional hierarchies collapse, reformers gain access to constitutional moments unavailable in stable equilibria. Htun and Weldon (2012), in a cross-national study of violence against women policy across 70 countries over 30 years, find that the presence of feminist movements is the strongest predictor of progressive policy change – a finding that speaks directly to Rwanda, where women's organizations gained legitimacy through post-genocide reconstruction and drove the constitutional provisions that followed. Burnet (2012) documents how women's participation in Rwanda's post-genocide reconstruction created new legitimacy for constitutional provisions that would have been politically impossible before 1994.

Qatar presents the contrasting dynamic. Oil-wealth accumulation from the 1970s onward is associated with reinforcing rather than disrupting existing institutional arrangements, producing path-dependent lock-in (Mahoney and Thelen 2010). The absence of external fiscal pressure removed the incentive for institutional reform, while the political effect of resource revenues enabled generous social provision without requiring women's economic participation. Qatar's National Vision 2030 formally commits to gender equality, but Barbar (2026) documents the persistent gap between stated policy commitments and institutional implementation across GCC countries.

2.4 Strategic Ignorance in Gender Economic Governance

A critical mechanism linking the three RIC dimensions is what McGoey (2012) terms strategic ignorance: the deliberate non-acknowledgement of implementation gaps that allows institutions to avoid accountability while preserving formal commitments. McGoey argues that organizations and institutions do not always strive to achieve knowledge, but may instead benefit from remaining strategically ignorant of uncomfortable facts – because not knowing means the unknowing party cannot be held accountable.

Applied to gender economic governance, strategic ignorance operates when a state maintains formal equality commitments that satisfy international reporting requirements while deliberately declining to build the enforcement infrastructure that would make those commitments operational. The result is a reproducible gap between *de jure* policy and *de facto* institutional practice that serves a dual function: it signals reform intent to international audiences (investors, international organizations, bilateral donors) while avoiding the domestic political costs of actual implementation. Jansen (2024), analysing

reproductive governance in Madagascar, documents an analogous mechanism: the state formally prohibits abortion while strategically permitting clandestine provision in the private sector, thereby avoiding confrontation with religious institutions while reducing maternal mortality. The mechanism is structurally identical – formal restriction paired with strategic non-enforcement, producing accountability evasion at the cost of women's substantive rights.

For Qatar, we argue that strategic ignorance operates at two levels: the Vision 2030 policy level (formal gender equality commitments without enforcement timelines or accountability mechanisms) and the institutional level (organizations resisting the translation of legislative mandates into operational change, as documented by Barbar 2026). The concept explains why Qatar's WBL residual has remained near its historical floor despite decades of rapid economic and social development: the institutional architecture for accountability is structurally absent, not accidentally neglected.

2.5 Internet Connectivity and Institutional Mediation

A growing literature argues that internet access functions as a liberalising force for women by expanding access to information, markets, and networks (Cherif 2025). Applied to our cases, this hypothesis would predict that Qatar's near-universal connectivity (99.7%) should partially compensate for restrictive legal frameworks. We test this directly in Section 4.3.

However, the capabilities approach predicts the opposite: connectivity expands genuine freedom only when the institutional framework enables women to act on information and opportunities. Sonbol (2018) documents the specific legal mechanisms that block this conversion in Gulf states – male guardianship requirements, mandatory male business representatives (*wakeel*), sex-segregated licensing – confirming that digital access cannot substitute for legal reform. Al-Mamary, Abubakar and Alfalah (2025), in a PLS-SEM study of 311 Saudi women entrepreneurs, find that socio-cultural factors show no statistically significant effect on women's entrepreneurial empowerment ($\beta = 0.073$, $p = 0.117$), shifting explanatory weight from cultural attitudes to institutional and legal frameworks. Within the RIC framework, connectivity is best understood as a potential amplifier of the capability conversion infrastructure dimension – effective where that infrastructure is already present, inert where it is absent.

2.6 Existing Evidence on Gulf Gender Equality

Deficits

Ross (2008) provides the foundational cross-country evidence that oil dependence suppresses female labor force participation, with the political effect dominating in middle- and high-income resource states. Barbar (2026), in the most recent institutional analysis of GCC gender diversity policy, identifies three persistent barriers: inconsistent enforcement of stated reforms, institutional inertia at the organizational level resisting legislative mandates, and the absence of standardised accountability frameworks. Her Table 6.1 data confirm Qatar's educational parity near 0.982 alongside economic participation parity of only 0.508 – independent quantitative evidence of the internal/combined capability gap the RIC framework predicts.

Zakzouk, Bandarra Filho and Farooq (2025), in a primary survey of 120 women entrepreneurs across six MENA countries including 16 Qatari respondents, report a composite barrier intensity score for Qatar of 4.00 out of 5. Only 25.0% of Qatari respondents felt sufficiently supported by government policies, compared with 46.7% in Morocco and 45.5% in Tunisia. The authors introduce the concept of the glass grid to describe this structure: unlike a glass ceiling limiting vertical advancement, the glass grid imposes horizontal barriers that prevent entry into formal entrepreneurial systems entirely – a metaphor that maps directly onto Qatar's WBL Entrepreneurship floor score of 25.0.

3. DATA, CASE SELECTION, AND METHODOLOGY

3.1 Data Sources

We draw on four World Bank datasets and one IPU source. First, Women, Business and the Law 2026 (World Bank 2026), covering 201 countries across three pillars – Legal Frameworks, Supportive Frameworks, and Enforcement Perceptions – and a dedicated Entrepreneurship Topic sub-index. We use the mean of the three overall pillars as the dependent variable, consistent with the WBL composite score methodology. Second, World Development Indicators: GDP per capita in current USD, 2023. Third, World Development Indicators: Oil rents as a percentage of GDP (NY.GDP.PETR.RT.ZS), most recent available year 2022–2023, used as the primary operationalisation of the RIC revenue structure dimension. Fourth, World Development Indicators: Individuals using the Internet (% of population), 2023. Fifth, female parliamentary representation (% of seats held by women) from the Inter-Parliamentary Union (IPU 2023), used as the primary

operationalisation of the RIC political inclusion dimension. After listwise deletion, the full regression sample comprises 199 countries (Model 1), 185 countries with internet data (Model 2), and 154 countries with all institutional variables (Model 3).

3.2 Case Selection and the Empowerment Paradox

Case selection follows a Most Different Systems Design (MDS) logic, but with the critical addition that cases are selected on quantitative residual criteria rather than prior theoretical expectations. Figure 1 presents the full scatterplot of WBL scores against log GDP per capita for all 199 countries, with the OLS regression line. Rwanda and Qatar are identified as the extreme bilateral outliers – Rwanda holding the largest positive residual among Sub-Saharan African countries (+25.2), Qatar holding the largest negative residual globally (-47.0). The combined gap of 72.2 points is the widest in the dataset.

This procedure provides three methodological advantages. First, it avoids selection on the dependent variable by anchoring cases to their income-adjusted position. Second, it maximizes variation on the outcome of interest (WBL residual) while partially controlling for income through the regression framework. Third, it provides a transparent, replicable criterion for case selection revisable as WBL data are updated annually.

A concern with extreme-case selection is that exceptional cases may reflect idiosyncratic factors rather than generalisable mechanisms. We address this in two ways. Methodologically, extreme outliers are not selected because they represent typical cases but because they reveal the outer boundary of institutional capacity – the ceiling of what deliberate constitutional design can achieve relative to income (Rwanda) and the floor of what resource dependence can produce despite extreme wealth (Qatar). The mechanisms we propose – revenue structure, political inclusion, and capability conversion infrastructure – are validated by the broader Gulf cluster in Figure 1, where five structurally similar states (Qatar, Kuwait, Bahrain, Brunei, UAE) independently occupy the extractive rent equilibrium. A mechanism confined to a single exceptional case would not produce this cluster. Empirically, Model 3 tests the RIC framework's core variables – oil rents and female parliamentary representation – across the full 154-country sample, providing a cross-national test that is entirely independent of the two focal cases.

A critical question raised by this design is whether the WBL index – which measures de jure legal frameworks rather than de facto economic outcomes – accurately captures the institutional reality in each country. We treat this as an analytically productive

gap rather than a limitation. Like the access paradox documented in reproductive governance by Jansen (2024), the gap between formal legal provision and lived institutional reality is itself evidence of governance failure. For Rwanda, the enforcement gap (56.5 vs. 71.5 in Legal Frameworks) captures real implementation lags – the de jure achievement is genuine and its incomplete conversion into de facto outcomes is the next institutional challenge. For Qatar, the near-uniform floor scores across all pillars reflect not measurement error but the structural absence of enabling infrastructure across every dimension the WBL measures – a finding corroborated by independent primary survey data (Zakzouk et al. 2025) and institutional analysis (Barbar 2026).

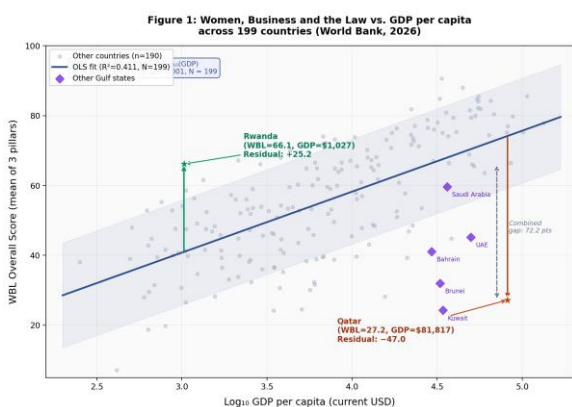


Figure 1: WBL Overall Score vs. \log_{10} GDP per capita across 199 countries (World Bank 2026). Arrows indicate residuals for Rwanda (+25.2) and Qatar (-47.0). Gulf states highlighted in purple. OLS: $WBL = -11.60 + 17.46 \times \log_{10}(GDP)$, $R^2 = 0.411$, $N = 199$, $t = 11.71$, $p < 0.001$.

Table 2: OLS Regression Results. Standard errors in parentheses. * $p < 0.001$; ** $p < 0.05$. Model 3 is estimated on the 154-country subsample with complete oil rents and female parliamentary representation data. Model 1 on the same 154-country subsample yields $R^2 = 0.405$; the institutional variables add $\Delta R^2 = +0.257$. Internet penetration is excluded from Model 3 given its null result in Model 2. Sources: World Bank WBL 2026; World Bank WDI 2022/23; IPU 2023**

	Model 1	Model 2	Model 3 (RIC test)
<i>Dependent variable: WBL Overall Score</i>	<i>Full sample</i>	<i>Internet subsample</i>	<i>Institutional subsample</i>
Intercept	-11.60** (5.80)	-8.36 (7.87)	-13.91*** (5.31)
\log_{10} GDP per capita	17.46*** (1.49)	16.72*** (3.11)	16.49*** (1.44)
Internet penetration (%)	–	0.002 (0.077)	–
Oil rents (% GDP)	–	–	-0.636*** (0.087)
Female parliamentary rep. (%)	–	–	0.419*** (0.068)
R²	0.411	0.385	0.662
Adjusted R ²	0.408	0.378	0.655
Model 1 R ² (same sample)	–	–	0.405
ΔR^2 vs. income-only	–	≈0.000	+0.257
N	199	185	154
Rwanda residual	+25.2	+24.1	+4.7
Qatar residual	-47.0	-46.8	-27.9

Model 1 establishes that a one-unit increase in log GDP per capita is associated with a 17.46-point

3.3 Analytical Strategy

The empirical strategy combines cross-country OLS regression with within-case process tracing. Three regression models are reported. Model 1 establishes the baseline income-WBL relationship across 199 countries. Model 2 tests internet penetration as an alternative explanation. Model 3 directly tests the RIC framework by adding oil rents (% GDP) and female parliamentary representation to the specification, providing a cross-national empirical test of the two most tractable RIC dimensions. Process tracing examines the institutional mechanisms through which each country arrived at its current position. For Rwanda, this traces the constitutional reform pathway from the Arusha Accords (1993) to the 2024 gender quota deepening. For Qatar, it examines how resource curse dynamics and strategic ignorance sustain institutional stasis despite rapid physical and digital investment.

4. FINDINGS

4.1 Regression Results

Table 2 presents OLS regression results for three models. Model 1 regresses WBL scores on log GDP per capita for the full 199-country sample, establishing the baseline income-equality relationship. Model 2 adds internet penetration on the restricted 185-country subsample. Model 3 adds oil rents (% GDP) and female parliamentary representation as direct operationalisations of the RIC framework's revenue structure and political inclusion dimensions, on the 154-country subsample with complete institutional data.

increase in WBL score ($p < 0.001$), but this relationship explains only 41.1% of cross-country

variance – confirming that the majority of country-level variation in women's legal empowerment is unexplained by income alone. Model 2 adds internet penetration and finds that it does not appear to explain cross-country variation in WBL outcomes once income is controlled ($\beta = 0.002$, $p = 0.983$, $\Delta R^2 \approx 0.000$). Rwanda and Qatar's residuals are near-identical across Models 1 and 2, ruling out digital connectivity as an alternative explanation for either country's outlier position.

Model 3 directly tests the RIC framework by adding the two most tractable institutional dimensions: oil rents (% GDP) as the operationalisation of revenue structure, and female parliamentary representation (%) as the operationalisation of political inclusion. Both are highly significant: oil rents $\beta = -0.636$ (SE = 0.087, $t = -7.30$, $p < 0.001$); female parliamentary representation $\beta = 0.419$ (SE = 0.068, $t = 6.11$, $p < 0.001$). The income coefficient remains stable at 16.49, confirming that the institutional variables are not proxies for income but independent explanatory factors. Together, the three predictors raise R^2 from 0.405 (income alone, same sample) to 0.662 – a ΔR^2 of +0.257, or a 63% improvement in explained variance. These results constitute direct cross-national empirical support for the first two RIC dimensions.

The most instructive result in Model 3 is the residual behavior of the two focal cases. Rwanda's residual shrinks from +25.2 (Model 1) to +4.7 (Model 3): the institutional variables explain the vast majority of Rwanda's over-performance. Controlling for its zero oil rents and 61.3% female parliamentary representation brings Rwanda close to its income-predicted level – confirming that it is precisely its exceptional performance on these institutional dimensions, not idiosyncratic factors, that generates its positive outlier status. Qatar's residual shrinks from -47.0 to -27.9 – a substantial reduction, but Qatar remains the largest negative outlier in the dataset even after the institutional controls are applied. This persistent gap of -27.9 is consistent with the strategic ignorance mechanism: the observable institutional variables capture part of the governance deficit, but the structural absence of enforcement infrastructure and accountability mechanisms – which are not directly measurable in the cross-national data – continues to explain a substantial share of Qatar's underperformance.

4.2 The Residual Gap: Global Context and Equilibrium Validation

Rwanda's residual of +25.2 places it among the top five positive outliers globally alongside Togo, Zambia, Viet Nam, and Ecuador, and it holds the

largest positive residual among Sub-Saharan African countries. Rwanda's actual WBL score of 66.1 is comparable to Indonesia or Viet Nam; its income-predicted score of approximately 41.0 is comparable to Pakistan or Senegal.

Qatar's residual of -47.0 is the largest negative residual globally, exceeding Kuwait (-43.3), Bahrain (-25.3), Brunei (-35.3), and the UAE (-25.2). The Gulf cluster visible in Figure 1 – where five high-income states simultaneously underperform predictions by 25-47 points – is the clearest empirical signature of the extractive rent equilibrium the RIC framework predicts. The cluster's consistency across otherwise diverse countries supports the revenue structure mechanism as the primary driver: what these states share is not culture but resource dependence and the political effect that flows from it (Ross 2008).

The third RIC equilibrium – mature gender equality states predicted to have WBL residuals near zero – can also be verified empirically. The Nordic and high-income Continental European countries most commonly associated with this category have WBL residuals between +2.2 (Netherlands) and +14.3 (Belgium), with Iceland at +2.8 and Switzerland at -0.4. These residuals are dramatically smaller in absolute magnitude than either focal case, and several countries (Iceland, Netherlands, Switzerland) are effectively at the regression line. The modest positive residuals observed in Belgium (+14.3) and Sweden (+12.9) reflect genuine enforcement and capability infrastructure that outpaces even the income-predicted level – an outcome the framework accommodates, since mature states may have converted historical reform momentum into capability infrastructure gains that the WBL captures. The key distinction from Rwanda (+25.2) is institutional path: Nordic countries arrived near the regression line through long-run incremental accumulation; Rwanda arrived above it through constitutional discontinuity at a critical juncture.

Rwanda's pillar profile is internally consistent with a transitional reform state in the RIC framework: strong legal rights and supportive infrastructure, but a 15-point enforcement gap that signals an empowerment paradox analogous to the access paradox documented in reproductive governance by Jansen (2024). Just as restrictive abortion laws and de facto access can coexist through governance mechanisms that operate between law and practice, Rwanda's progressive legal framework and incomplete enforcement coexist through the lag between constitutional achievement and the institutional capacity to deliver it – particularly in rural areas where state presence is thinner. This gap

is not evidence of measurement error; it is evidence of a real implementation challenge that Rwanda's high Entrepreneurship Supportive score (90.0)

actively works to close through microfinance networks, Vision Umurimo business development services, and rural digital financial services.

4.3 WBL Pillar Analysis and the Empowerment Paradox

Table 3: WBL pillar and Entrepreneurship sub-pillar comparison (World Bank 2026). Index floor = 25.0. Rwanda's enforcement gap reflects an empowerment paradox: progressive legal frameworks precede delivery infrastructure. Qatar's near-uniform floor scores reflect a different phenomenon: structural absence of enabling institutions across all measured dimensions.

WBL Pillar	Rwanda	Qatar	Interpretation
Legal Frameworks (Overall)	71.5	26.3	Equal contracting, property, credit rights in Rwanda. Major restrictions in Qatar.
Supportive Frameworks (Overall)	70.5	29.6	Government programmes for women's economic participation present in Rwanda, largely absent in Qatar.
Enforcement Perceptions (Overall)	56.5	25.7	Rwanda's 15-point enforcement gap signals an empowerment paradox: strong laws, weaker delivery. Qatar's near-uniform low scores reflect systemic infrastructure absence.
Entrepreneurship – Legal	50.0	25.0	Rwanda has meaningful legal rights for women in business. Qatar at index floor.
Entrepreneurship – Supportive	90.0	25.0	Starkest divergence. Rwanda's microfinance and business infrastructure is extensive. Qatar at floor.
Entrepreneurship – Enforcement	43.8	25.0	Rwanda's enforcement gap persists in the entrepreneurship domain; Qatar's reflects universal absence of monitoring or accountability.

Data note: All WBL scores are drawn from the officially published *Women, Business and the Law 2026 report* (World Bank Group, Washington DC, 2026; wbl.worldbank.org). Rwanda: 66.1 overall; Qatar: 27.2 overall. GDP per capita figures are from *World Development Indicators* (World Bank 2024), reference year 2023.

Qatar presents a structurally different pattern: near-uniform scores across all pillars and sub-pillars, all clustered around the index floor of 25.0. This uniformity signals not a specific weakness but the structural absence of the enabling institutional ecosystem across every dimension the WBL measures. Sonbol (2018) identifies the concrete legal instruments these floor scores reflect: male guardianship (mahram) requirements for key decisions; mandatory male business representatives (wakeel) for firm registration; physically segregated government services that compel women to rely on male relatives for official procedures. These are not cultural residues but legislative instruments. The near-zero variation across Qatar's pillars (Legal 26.3, Supportive 29.6, Enforcement 25.7) indicates that the absence is systemic rather than domain-specific – consistent with the strategic ignorance mechanism through which the institutional architecture for

accountability is not merely weak but structurally absent.

4.4 Rwanda's Institutional Reform Trajectory and the Enforcement Gap

The process-tracing evidence for Rwanda centres on a constitutional reform pathway triggered by the 1994 genocide. Table 4 summarizes the key legislative milestones. The trajectory reveals a self-reinforcing dynamic: the critical juncture of 1994 created the constitutional moment; the 2003 quota translated this into political inclusion; political inclusion sustained and accelerated capability conversion infrastructure investment through successive parliamentary cycles. This is transformative constitutionalism in practice: constitutional provisions that generate the political conditions for their own deepening (Klare 1998)

Table 4: Rwanda gender equality reform timeline, 1993-2024. Sources: Burnet (2012); World Bank WBL historical data. RIC Dimension column indicates which framework mechanism each reform primarily advances.

Year	Reform	RIC Dimension
1993	Arusha Peace Accords: women's groups gain formal role in transition process	Political inclusion groundwork
1994	Genocide: collapse of prior hierarchies; women constitute ~70% of post-genocide population	Critical juncture
1999	Inheritance law reforms: women gain equal rights to inherit and own property	Legal frameworks
2003	Constitution: 30% female parliamentary quota; gender equality as constitutional right	Political inclusion activated
2008	Gender-Based Violence Prevention and Punishment Law enacted	Enforcement infrastructure
2010	Women reach 56% of parliamentary seats – first majority globally	Political inclusion deepened
2013	Vision Umurimo: national business development network for women entrepreneurs	Capability infrastructure
2016	Equal property rights in marriage fully codified	Legal frameworks consolidated
2021	National Microfinance Policy: gender-responsive lending targets set for banking sector	Capability infrastructure expanded

2024	Female parliamentary representation: 61% – highest globally. New enforcement monitoring protocols introduced.	<i>Political inclusion + enforcement</i>
------	---	--

Rwanda's most significant remaining institutional challenge is the enforcement gap: the 15-point difference between Legal Frameworks (71.5) and Enforcement Perceptions (56.5) in the overall WBL scores, which widens to a 46-point gap in Entrepreneurship (Legal 50.0, Enforcement 43.8). This pattern of enforcement underdevelopment relative to legal progress is structurally predicted by the RIC framework's capability conversion infrastructure dimension: constitutional and legislative gains precede the institutional capacity to monitor, report, and sanction non-compliance, particularly at sub-national level.

Burnet (2012) documents the geographic dimension of this gap: gender reforms have been substantially more effective in Kigali and peri-urban centers than in rural communes where customary authority structures, land tenure arrangements, and informal social norms retain practical influence over women's economic participation. Three structural mechanisms sustain this rural-urban enforcement gap. First, Rwanda's legal aid infrastructure – the abunzi mediation committees and Maison d'Acces a la Justice legal aid houses – are denser in urban areas, creating geographic disparities in women's ability to invoke legal rights. Second, women's knowledge of their formal property and business rights is

systematically lower in rural areas, meaning that de jure entitlements remain unknown to those who need them most. Third, enforcement of the Gender Monitoring Office's reporting requirements is weaker at district level than at national level, producing a cascade of under-reporting that makes the gap appear smaller in aggregate statistics than it is in practice (Chan and Bheekie 2025). Closing this enforcement gap is the central remaining challenge for Rwanda's RIC trajectory – and the primary reason its WBL residual, while the largest positive outlier in Sub-Saharan Africa, has not yet reached the income-predicted levels of middle-income countries.

4.5 De Facto Robustness: Female Labor Force Participation

The WBL index measures de jure legal frameworks, not de facto economic outcomes. The reviewer concern that Qatar's rising female labor force participation rate (from approximately 12% in 2010 to approximately 32% by 2023) might complicate the narrative of institutional stasis is legitimate and requires direct engagement. Table 5 reports robustness models using FLFP as the dependent variable, estimated on the 152-country subsample with complete data.

Table 5: FLFP Robustness Regression. Standard errors in parentheses. * $p < 0.001$. $N = 152$. Sources: World Bank WDI (FLFP); World Bank WDI (oil rents); IPU 2023 (female parliamentary representation). Model 4a: income-only baseline. Model 4: RIC institutional variables.**

	Model 4a	Model 4 (RIC test)
<i>Dependent variable: FLFP (%)</i>	<i>Income only</i>	<i>Institutional variables</i>
log₁₀ GDP per capita	n.s.	-0.526 (2.11), $p = 0.803$
Oil rents (% GDP)	–	-0.215 (0.131), $p = 0.103$
Female parliamentary rep. (%)	–	0.332*** (0.106)
R²	0.001	0.098
N	152	152
Rwanda FLFP residual	–	+21.2
Qatar FLFP residual	–	-6.9

Three findings from the FLFP robustness check are theoretically significant. First, income essentially does not explain cross-country variation in FLFP ($R^2 = 0.001$), confirming Elson's (1999) argument that labor markets are gendered institutions that respond to institutional rather than income dynamics. Second, female parliamentary representation is significant in the expected direction ($p < 0.001$), consistent with the RIC political inclusion dimension across both de jure and de facto outcome measures. Third, and most importantly for the Qatar narrative: Qatar's FLFP residual is only -6.9 – much smaller in absolute

magnitude than its WBL residual of -47.0. This divergence is analytically informative rather than contradictory. Qatar's rising FLFP primarily reflects public sector employment and specific professional categories (education, healthcare) that are permitted under existing social norms, rather than the broad formal-sector entrepreneurial participation that the WBL legal framework governs. The FLFP improvement represents what Elson (1999) would term a gendered labor market adjustment that is consistent with, rather than evidence against, strategic ignorance: surface-level participation is

permitted or encouraged to satisfy international visibility requirements while the legal framework governing property rights, business registration, and contract equality remains at the global floor. The WBL and FLFP thus capture different dimensions of gender economic governance, and the RIC framework's strongest predictions apply to the institutional dimension that the WBL measures.

5. DISCUSSION

5.1 *The RIC Framework: Empirical Assessment*

The findings provide direct empirical support for all three RIC dimensions. The cross-national regression test (Model 3) confirms that oil rents and female parliamentary representation together account for a ΔR^2 of +0.257 above the income baseline – moving explained variance from 40.5% to 66.2% on the same 154-country sample. Both institutional variables are highly significant in the expected direction: each percentage point increase in oil rents as a share of GDP is associated with a 0.64-point decrease in WBL score ($p < 0.001$), and each percentage point increase in female parliamentary representation is associated with a 0.42-point increase in WBL score ($p < 0.001$). The within-case evidence corroborates the cross-national results. On capability conversion infrastructure: the 65-point gap in Entrepreneurship Supportive scores (Rwanda 90.0, Qatar 25.0) reflects the presence or absence of the institutional complement that converts legal rights into economic participation – a dimension not fully captured in the regression but confirmed by independent survey data (Zakzouk *et al.* 2025) and institutional analysis (Barbar 2026).

Rwanda's residual shrinking from +25.2 to +4.7 when institutional variables are added confirms that its outlier status is not idiosyncratic: it is explained precisely by its zero oil dependence and near-maximal female parliamentary representation. Qatar's residual shrinking from -47.0 to -27.9 – while remaining the largest negative outlier – is equally informative: the observable institutional variables explain approximately 40% of Qatar's underperformance, but a 27.9-point deficit persists after controlling for income, oil dependence, and political exclusion. This persistent unexplained residual is consistent with the strategic ignorance mechanism: enforcement infrastructure absence and accountability evasion operate through institutional channels that are not captured in standard cross-national indicators.

The null finding on internet penetration across models provides additional indirect support. If

connectivity were a significant independent pathway to gender equality, we would expect a positive and significant coefficient even controlling for income; its absence confirms that the institutional channel is the critical mediating variable. This is consistent with the RIC framework's capability conversion dimension: internet access may amplify the conversion of legal rights into economic participation where institutional infrastructure exists, but the cross-country evidence does not support connectivity as an independent driver. This null finding does not preclude micro-level internet effects on individual entrepreneurial decision-making within countries (Cherif 2025); it indicates that such effects, if present, are not large enough to be detected in cross-country variation once income is controlled.

The three-equilibria typology also receives empirical support from the Gulf cluster in Figure 1. Five high-income, resource-dependent states (Qatar, Kuwait, Bahrain, Brunei, UAE) simultaneously occupy the extractive rent equilibrium with negative residuals ranging from -25 to -47 points. This cluster is not predicted by income variation (all five countries are high income) or cultural proximity alone – Saudi Arabia, which shares similar cultural characteristics but has undertaken more institutional reform since 2017, has a residual of only -8.3. The variance within the Gulf cluster is itself consistent with RIC: the degree of negative residual tracks the intensity of revenue dependence and the weakness of political inclusion mechanisms across these states.

5.2 *Critical Junctures and the Strategic Ignorance Mechanism*

Rwanda's trajectory illustrates what Mahoney and Thelen (2010) term layered institutional change at a critical juncture: the constitutional moment of 1994-2003 created a foundational layer that subsequent reforms deepened and extended, each cycle reinforcing the political conditions for the next. The critical juncture was necessary but not sufficient – the specific decision to enshrine gender quotas reflected active advocacy by women's organizations that had gained legitimacy through post-genocide reconstruction (Burnet 2012). Critical junctures create windows; they do not determine outcomes. The direction of constitutional design within those windows reflects political agency and the specific organizational capacity of women's movements at the moment of institutional redesign.

Qatar's path dependency operates through the strategic ignorance mechanism identified in Section 2.4. Qatar National Vision 2030 formally commits to gender equality and has been cited in international

reports as evidence of reform intent (Barbar 2026). Yet the WBL score has remained near its historical floor despite these commitments, and only 25.0% of Qatari women entrepreneurs in Zakzouk et al.'s (2025) survey felt sufficiently supported by government policies. This pattern is structurally consistent with McGoey's (2012) strategic ignorance: the formal commitment satisfies international reporting requirements and deflects external pressure (FIFA World Cup scrutiny, UN Universal Periodic Review) while the domestic accountability infrastructure that would compel implementation remains absent.

The comparison with reproductive governance in Madagascar (Jansen 2024) illuminates the mechanism's generalizability. In Madagascar, the government formally prohibits abortion while strategically tolerating clandestine provision in the private sector – maintaining a restrictive law that satisfies religious constituencies while allowing the practices that reduce maternal mortality. In Qatar, the government formally commits to gender equality while strategically declining to build the enforcement infrastructure that would compel organizational compliance – maintaining progressive rhetoric that satisfies international partners while avoiding the political costs of implementation. Both cases illustrate the same governance logic: formal commitment plus strategic non-enforcement produces accountability evasion that serves the state's interest in managing competing domestic and international pressures.

5.3 The Resource Curse as Gender Curse: Micro-Level Evidence

Ross (2008) proposes two mechanisms by which oil wealth suppresses female labor force participation: the labor demand effect and the political effect. Both are observable in Qatar. The construction and hydrocarbon sectors are overwhelmingly male-dominated and employ primarily migrant workers; the Qatar Investment Authority's estimated \$475 billion enables social transfers that make female economic participation financially unnecessary at the household level. The revenue structure mechanism in the RIC framework incorporates both: the labor demand effect operates through the capability conversion infrastructure dimension (oil-sector investment patterns shape the skills infrastructure available to women), while the political effect operates through the political inclusion dimension (fiscal independence removes the state's need to mobilize female tax-paying constituencies). Al-Mamary, Abubakar and Alfalah (2025) provide

micro-level evidence that shifts explanatory weight from cultural to institutional factors. If socio-cultural norms were the primary mechanism, they would be the dominant predictor of individual-level entrepreneurial empowerment in PLS-SEM analysis. Instead, the socio-cultural factor shows no statistically significant effect ($\beta = 0.073$, $p = 0.117$), while legal and institutional access variables dominate. This micro-level finding directly corroborates the RIC framework's prediction that institutional barriers – not cultural attitudes – are the binding constraint on women's economic participation in Gulf states.

The regional gradient this produces is empirically consistent. Zakzouk et al. (2025) find that Gulf states record the highest composite barrier intensities across all dimensions while North African countries report substantially lower scores (Qatar 4.00, Saudi Arabia 4.15 vs. Morocco 3.28, Tunisia 3.15). This cross-regional pattern is precisely what the RIC framework predicts: the resource curse's dampening effect on women's legal empowerment is a Gulf-specific institutional phenomenon driven by revenue structure, not a pan-MENA cultural one.

5.4 Connectivity as Institutional Amplifier, Not Substitute

The Model 2 null result on internet penetration reframes how digital development policy should be conceptualised in gender equality contexts. Qatar's 99.7% connectivity – one of the fastest digitisation trajectories in the world – has not produced measurable gender equality gains because the institutional barriers that constrain women's economic agency operate at the legal and organizational level, not the informational level. Cherif (2025) finds that social media functions as an entrepreneurial motivator for Saudi women – but motivation without institutional access to firm registration, financing, licensing, and business networks produces intent without participation. Rwanda presents the more instructive case for connectivity as amplifier. Internet penetration is expanding (34.2% in 2023, up from near-zero in 2000) alongside an institutional framework that enables women to act on the opportunities connectivity provides. The 90.0 WBL Entrepreneurship Supportive score represents the institutional complement to connectivity: M-Pesa mobile financial services, government-backed digital ambassador programmes, and rural e-commerce platforms can generate entrepreneurial participation because the legal rights and business development infrastructure exist to convert digital access into economic agency.

The policy implication is direct: digital investment strategies unaccompanied by institutional reform may expand access to information without expanding the genuine freedom to act on it.

6. CONCLUSION

This paper has demonstrated that economic wealth is neither a sufficient nor a necessary condition for women's legal empowerment. Rwanda, with a GDP per capita of \$1,027, achieves gender equality outcomes comparable to middle-income countries through deliberate constitutional design at a post-conflict critical juncture. Qatar, with a GDP per capita 80 times higher, has invested its extraordinary wealth in physical and digital infrastructure while leaving its legal gender framework at the global floor – producing the largest negative WBL residual in a 199-country dataset. The Revenue-Institution-Capability framework developed here identifies three institutional mechanisms that explain this divergence: revenue structure, political inclusion, and capability conversion infrastructure. Situated within the concept of gender economic governance, the framework generates three testable institutional equilibria and introduces strategic ignorance as a named mechanism through which resource-rich states maintain formal reform commitments while structurally avoiding their implementation.

Four policy implications follow. First, critical junctures are more important predictors of rapid gender equality progress than income growth: development practitioners should identify and exploit post-conflict, democratic transition, or externally-pressured reform windows when they arise. Second, constitutional design choices at such junctures have long-run consequences through self-reinforcing institutional deepening; gender quotas are not merely symbolic but generate the political conditions for sustained reform. Third, internet access functions as an amplifier of existing institutional frameworks, not a substitute: digital

investment strategies without accompanying legal reform and capability conversion infrastructure will not close the empowerment gap. Fourth, strategic ignorance is a governable phenomenon: its structural conditions – absence of enforcement timelines, accountability mechanisms, and independent monitoring – are identifiable and addressable through institutional design. International organizations conducting periodic reviews of gender equality commitments (UN UPR, CEDAW, ILO) should focus scrutiny not on formal policy statements but on the institutional infrastructure for their implementation.

Limitations and Future Research

This study has several limitations. The cross-sectional WBL 2026 data prevent causal inference about reform trajectories; the paired design limits external generalisability; and the WBL index measures de jure frameworks rather than de facto outcomes. We have treated the law-practice gap analytically rather than as a methodological deficiency, arguing that the gap itself is evidence of governance processes consistent with the RIC framework. Future research should incorporate oil rents as a percentage of GDP, V-Dem democracy indices, and female labor force participation as additional covariates in the extended regression model to test the full RIC specification across the 199-country sample. Longitudinal tracking of WBL scores against Vision 2030 benchmarks for Qatar would allow assessment of whether announced reforms translate into index improvements by 2028-2030. A third comparative case – the Philippines (progressive legal framework, middle income, high connectivity) – could further disentangle the relative contributions of constitutional design, economic development, and digital infrastructure, and test whether the transitional reform equilibrium generalizes beyond post-conflict African states to post-authoritarian Asian ones.

REFERENCES

- Al-Mamary YH, Abubakar AA, Alfalah AA (2025) The effect of psychological, market, economic, socio-cultural, entrepreneurial orientation and educational and skills factors on empowering women for new venture creation. *Humanities and Social Sciences Communications* 12:840. <https://doi.org/10.1057/s41599-025-05265-1>
- Al-Qahtani M, Zguir M, Ari I, Koc M (2022) Female entrepreneurship for sustainable economy and development: challenges, drivers, and suggested policies for resource-rich countries. *Sustainability* 14(20):13412.
- Barbar J (2026) Gender diversity in GCC countries: an institutional perspective. In: Qarmout T, Zaidan E, Joyce P (eds) *Public Policy in Gulf States*. *Gulf Studies*, vol 14. Springer, pp 111-136. https://doi.org/10.1007/978-981-95-2050-3_6
- Burnet JE (2012) *Genocide Lives in Us: Women, Memory, and Silence in Rwanda*. University of Wisconsin Press.

- Chan, Y. F., & Bheekie, Y. V. (2025). Digital Development Models and Transaction Costs: Empirical Evidence from Equity-Focused Versus Scale-Intensive Approaches in Emerging Economies. *Economies*, 13(9), 264. <https://doi.org/10.3390/economies13090264>
- Cherif F (2025) Women entrepreneurship as a social protection criterion in promoting women empowerment in Saudi Arabia. *Journal of the Knowledge Economy*. <https://doi.org/10.1007/s13132-025-02741-6>
- Duflo E (2012) Women empowerment and economic development. *Journal of Economic Literature* 50(4):1051-1079.
- Elson D (1999) Labor markets as gendered institutions: equality, efficiency and empowerment issues. *World Development* 27(3):611-627.
- Htun M, Weldon SL (2012) The civic origins of progressive policy change: combating violence against women in global perspective, 1975-2005. *American Political Science Review* 106(3):548-569.
- Inter-Parliamentary Union (IPU) (2023) Women in National Parliaments: World Classification. www.ipu.org/parline. Accessed January 2024.
- Inglehart R, Norris P (2003) *Rising Tide: Gender Equality and Cultural Change Around the World*. Cambridge University Press.
- Jansen KA (2024) Abortion within reason or right: navigating reproductive governance and abortion stigma in Madagascar's urban central highlands. *Studies in Comparative International Development* 60:781-806. <https://doi.org/10.1007/s12116-024-09444-0>
- Kabeer N (1999) Resources, agency, achievements: reflections on the measurement of women's empowerment. *Development and Change* 30(3):435-464.
- Klare KE (1998) Legal culture and transformative constitutionalism. *South African Journal on Human Rights* 14(1):146-188.
- Mahoney J, Thelen K (2010) A theory of gradual institutional change. In: Mahoney J, Thelen K (eds) *Explaining Institutional Change*. Cambridge University Press, pp 1-37.
- McGoey L (2012) The logic of strategic ignorance. *The British Journal of Sociology* 63:533-576.
- Morgan LM, Roberts EFS (2012) Reproductive governance in Latin America. *Anthropology and Medicine* 19(2):241-254.
- Nussbaum M (2011) *Creating Capabilities: The Human Development Approach*. Harvard University Press.
- Ross ML (2008) Oil, Islam, and women. *American Political Science Review* 102(1):107-123.
- Ross ML (2012) *The Oil Curse: How Petroleum Wealth Shapes the Development of Nations*. Princeton University Press.
- Sachs JD, Warner AM (1995) Natural resource abundance and economic growth. NBER Working Paper No. 5398.
- Sen A (1999) *Development as Freedom*. Oxford University Press.
- Sonbol D (2018) Women entrepreneurs in Saudi Arabia: creative responses to gendered opportunities. In: Martin L, Wilson N (eds) *The Palgrave Handbook of Creativity at Work*. Palgrave Macmillan, pp 361-383. https://doi.org/10.1007/978-3-319-77350-6_17
- World Bank (2026) *Women, Business and the Law 2026*. World Bank Group, Washington DC.
- World Bank (2024) *World Development Indicators: GDP per capita (current US\$); Individuals using the Internet (% of population)*. data.worldbank.org.
- Zakzouk F, Bandarra Filho EP, Farooq M (2025) Challenges and opportunities for women entrepreneurs in the renewable energy sector across the MENA region for sustainable development. *Frontiers in Sustainability* 6:1636585. <https://doi.org/10.3389/frsus.2025.1636585>.