

Centre for International Health

A Gendered Approach to Democratic Development Theory

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Doctor of Philosophy
of
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Declaration

To the best of my knowledge and belief this thesis contains no material previously published by any other person except where due acknowledgement has been made.

This thesis contains no material that has been accepted for the award of any other degree or diploma in any university.



Paula Wyndow

26/07/2013

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Dedication

I dedicate this thesis to my two extraordinary daughters:

Olivia Jayne and Sarah Mackenzie

May they grow up in a world where every woman has the right

to reach her full potential and the choice

to exercise her freedoms, free from violence.

Publications and Presentations Arising from this Research

- Wyndow, P., Li, J., Mattes, E. (2013). Female empowerment as a core driver of democratic development: A dynamic panel model from 1980 to 2005. *World Development*. 52(0) 34-54.
- Translation of gender research into a “Gender Policy” for ISHAR, a multicultural women’s health centre, Mirrabooka, WA.
- Presentation at International Conference – South African Political Studies Association Biennial Conference – Boundaries, Citizenship and Political Constestation in the 21st Century – August 2012
- Presentation at Higher Degree by Research Review Seminar (Curtin) – 2013
- Presentation at Health Sciences - Mark Liveris Symposium (Curtin) – 2012
- Presentation at Population Sciences Symposium (TICHR) – 2009, 2011
- Presentation at Student Symposium (TICHR) – 2009, 2011, 2012
- Presentation at Child Health Research Series (TICHR) – 2012

Abstract

With many countries moving away from autocracy toward more democratic regimes in the latter half of the twentieth century, many scholars have sought to understand the preconditions required for democracy to emerge and to be sustained. The empirical research in the democratisation literature has focussed predominantly on the social and economic improvements within nations, including mass education, income growth, and urbanisation, using the modernisation theory proposed by Lipset in 1959 as the main theoretical framework. While other scholars have examined other factors such as the impact of neighbouring nations' political status, colonial history, and natural resources, very little empirical research has focussed on the role of women in this process. Gender and politics has become a legitimate field of research, however the relationship between gender equality and democracy remains less well understood.

Therefore, the purpose of this study is to make a significant contribution to the fields of both democracy research and gender studies by addressing the gender gap in comparative politics, and taking a gendered approach to democratic development theory. Specifically, this comparative, cross-national study investigates whether gender equality and women's empowerment played a role in the democratic development of nations over the last thirty years. A theoretical argument and framework was developed to underpin the analyses and discussion.

The scope of this study is limited to the period from 1980 to 2009 as during this period many nations moved away from autocracy toward more democratic regimes, particular near the end of the twentieth century. The focus is primarily on developing countries and countries that began the period as non-democratic. Consequently, 155 sovereign countries from every region in the world were included in the study for which data were available. A macro-level research design was employed using aggregated data. In each of the analysis chapters the dependent variable is a measure of political regime status, the Polity2 variable from the Polity IV dataset. Each analysis chapter investigates varying dimensions of gender equality and its effect on political regime status using both cross-sectional and longitudinal

data. The gender equality measures were accessed from the World Bank, Barro and Lee datasets, and the Organisation for Economic Cooperation and Development (OECD). They include broad measures of gender equality and women's empowerment, such as female educational attainment, female employment, fertility rates, and sex ratio. The analyses also included measures of gender equality at a social institutional level, such as family code, civil liberties, physical integrity, and ownership rights. Cross-sectional and longitudinal data were analysed using generalised linear multivariate regressions and dynamic panel models with a System GMM estimator.

The main findings from this study demonstrate that improvements in women's empowerment were associated with democratic development over this period, with female education and female labour force participation having a positive and causal effect on these transitions. While countries which did not transition to democracy by 2005 also made some progress in empowering women during the period, it seemed that such progress did not reach a threshold level or did not take place in all three domains of empowerment in order for democratic development to occur. Nations with low levels of gender equality and where there was a shortage of women at population level were also less likely to be democratic than those where gender equality was high and where women were in surplus. Economic development (as represented by GDP) on its own was not sufficient for democratic development to occur. Gender equality modified the relationship between economic development and democracy. Nations with high levels of gender equality as represented by social institutional variables such as polygamy, property rights, and high levels of income reported higher Polity2 scores than nations with high levels of income, but low levels of gender equality.

This thesis makes a substantial contribution to democratic development theory as its findings subvert the notion that economic development as measured by GDP naturally promotes democratic development. Tackling the social structures that legitimise men's authority over women must be a core priority to advance and deepen democracy. These findings have implications for transnational networks, national gender machineries and development activities, public policy reforms, and foreign aid interventions. Incorporating a gendered approach to democratic development theory would benefit future research in both politics and gender.

Glossary and Abbreviations

Anocracy	A country who has achieved a Polity2 score of -5 to 5
Autocracy	A country who has achieved a Polity2 score of -10 to -4
CEDAW	Convention on the Elimination of Discrimination against Women
Democracy	A country who has achieved a Polity2 score of 6 - 10
Democratic development	A country's level of democracy and its temporal movement away from autocratic regimes toward more democratic ones.
Democratisation	Political change moving toward a more democratic regime
GAD	Gender and Development
GDI	Gender Development Index
GEM	Gender Empowerment Measure
Gender	Specific characteristics or behaviours socially assigned to individuals based on their biological sex
Gender equality	"equality under the law, equality of opportunity and equality of voice" (World Bank, 2001, p. 2)
Gender machineries	Formal government structures assigned to promote gender equality (McBride & Mazur, 2011)
Gender mainstreaming	Efforts to scrutinise and reinvent processes of policy formulation and implementation across all issue areas to address and rectify persistent and emerging disparities between men and women
GI	Gender Inequality
GID-DB	Gender Institutions and Development Database
Globalisation	A process of intensifying global social inte-relatedness, whereby time and space are compressed and previously separated locations brought into a new proximity (Eschle, 2002)
HDI	Human Development Index

ICESCR	International Covenant on Economic, Social, and Cultural Rights
ICCPR	International Covenant on Civil and Political Rights
ILO	International Labour Organisation
OECD	Organisation for Economic Cooperation and Development
OP-CEDAW	Optional Protocol to the Convention on the Elimination of Discrimination against Women
Polity	A general term referring to a political organisation, or a reflection of a nation's overall authority pattern (Eckstein & Gurr, 1975)
Sex	Biological differences between men and women
Transitions	“the interval between the dissolution of the old regime and the installation of a new regime.” (O'Donnell & Schmitter, 1986)
WID	Women in Development
WAD	Women and Development
UN	United Nations
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNICEF	United Nations International Children's Emergency Fund
UNFPA	United Nations Population Fund
WDI	World Development Indicators
WEM	Women's Empowerment Matrix
WHO	World Health Organisation
WISTAT	Women's Indicators and Statistics database

International Datasets used

Barro, R. J., & Lee, J. W. (2011). *Barro-Lee Educational Attainment dataset Version 1.2 (Sept 4, 2011 update)*. Retrieved from <http://www.barrolee.com/>

OECD: <http://stats.oecd.org/Index.aspx?DatasetCode=GID2>

Pew Research Centre. (2009). *A report on the size and distribution of the world's Muslim population*. Retrieved from [http://www.pewforum.org/Muslim/Mapping-the-Global-Muslim-Population\(18\).aspx](http://www.pewforum.org/Muslim/Mapping-the-Global-Muslim-Population(18).aspx)

Marshall, M. G., & Jaggers, K. (2010). *Polity IV Project. Political Regime Characteristics and Transitions, 1800-2010*. Retrieved from <http://www.systemicpeace.org/polity/polity4.htm>

World Bank. (2011). *World Development Indicators*. Retrieved from <http://databank.worldbank.org/data/views/variableSelection/selectvariables.aspx?source=world-development-indicators>

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Preface

This research was borne out of the recognition that there appeared to be a significant gap in the empirical, (quantitative) and theoretical literature around the role of women in democratic development theory. Therefore, in bringing together the two disciplines of political science and feminist scholarship, it is hoped that this thesis contributes in some small way to breaking down the “Tower of Babel” to show that gender scholarship and quantitative research need not be mutually exclusive.

I am also conscious that I am writing from the standpoint of a white, middle class feminist. However, my involvement with Ishaar, a multicultural women’s health centre here in Perth, Western Australia has made me more appreciative of the similarities and differences between and within women across age, race, religion, sexuality, and (dis)ability.

On a personal level, the journey of completing this research has taught me so much about my own failings and shortcomings, while at the same time highlighting my strengths. Over this period I have learnt to face failure head on and in doing so I have improved my ability to persevere with the task, despite setbacks. I have learned that my work is good enough, and *so am I*. Along the way I have drawn enormous strength from the wise women and men around me who have cheered me on from the sidelines - this thesis is in part for you and because of you.

Finally, the advancement and deepening of democracy is unlikely, or incomplete, if not impossible, without policies, measures, and practices that seek to reduce inequalities between men and women in all spheres of life. Gender equality and the empowerment of women are not only key factors for development as evidenced by their inclusion as the Third Millennium Development Goal but they are also essential factors for the political development of nations.

Chapter One: Introduction and Overview

1.0 Introduction

This chapter provides an overview of the thesis, beginning with a problem statement for the study. An outline of the aims and methodology of the research is presented and key findings are summarised along with their significance and the limitations of this study.

Gender equality is an important development goal in its own right as evidenced by its inclusion as the 3rd Millennium Development Goal. It is also increasingly seen as the panacea for all of society's ills, including poverty, development, health, violence, and as a tool for economic growth. Research on gender and politics has become a legitimate field of study; however the relationship between gender and democracy remains less well understood, as few scholars have successfully integrated the two disciplines. As Lisa Baldez argues, "Mainstream scholars rarely question whether gender is relevant to politics, and, gender scholars rarely question whether gender *isn't* relevant to politics" (Baldez, 2010, p. 200).

Therefore, the purpose of this study is to make a significant contribution to the fields of *both* politics and gender by addressing the gender gap or, "gender lacuna" (Baldez, 2010, p. 200) in comparative politics and incorporating a gender perspective into democratic development theory. Specifically, this comparative, cross-national study investigates whether gender equality and the empowerment of women played a role in the democratic development of nations over the last thirty years.

1.1 Problem Statement for the Study

The end of the twentieth century was a period marked by unprecedented economic, social, and political change. With many countries moving away from autocracy toward more democratic regimes during this period, many scholars have sought to understand the preconditions required for democracy to first emerge and then to be sustained. The empirical research in the democratisation literature has focussed predominantly on the social and economic improvements within nations, including

mass education, income growth, and urbanisation. While the research consistently finds a strong association between income and democracy, the *causal* relationship between income and democracy is less clear. Furthermore, there are still many wealthy nations that have not democratised, (e.g. Singapore and Qatar), and some nations that have become democratic despite low levels of income (e.g. Mali, Benin). This challenges the assumption that wealth automatically leads to democratic development, and suggests a possible role for other social conditions, such as gender equality and the empowerment of women.

Another empirical regularity in the democratisation literature is the negative association between Muslim nations and authoritarian regimes (Donno & Russett, 2004; Fish, 2002; Papaioannou & Siourounis, 2008b). Huntington's *clash of civilisation theory* (Huntington, 1993) argues that the core clash between the West and Islam is over political values, however, others have shown that the fault line between Western and Muslim countries relates to disparate attitudes towards women and gender equality, rather than attitudes towards Democracy (Inglehart & Norris, 2003). Rather than treating all Muslim countries as homogenous and viewing one religion as being inimical to democracy, this study seeks to understand the underlying social structures within a country that may influence political change, particularly women's access to resources and power.

While the work of Fish (2002) and Inglehart & Norris (2003) have made a significant contribution to our understanding of gender equality and democracy, what is missing from these studies is a strong theoretical framework linking the two, and empirical, longitudinal analyses to show the direction of causality and to account for endogeneity problems. For example an increase in democracy may be associated with an increase in girls' literacy, however, we are not sure how much of this is due to literacy per se and how much is due to people in democracies having access to more schooling.

Consequently, the overarching aim of this research is to further the collective understanding of the role of gender equality and women's empowerment in democratic development over the last thirty years. By incorporating a gender perspective the researcher hopes to contribute a critical understanding to the

discipline of political science. The scope of this study is limited to the period from 1980 to 2009. It includes sovereign countries from every region in the world, and focuses primarily on developing countries and countries that began the period as non-democratic.

1.2 Aims and Objectives

The overarching aim of this study was to incorporate a gendered perspective into democratic development empirical research and theory. The main hypothesis was that gender equality and women's empowerment were key factors in the democratic development of nations over the period, 1980 to 2009. The following research questions were developed to test this hypothesis:

1. Was women's empowerment (as represented by female educational attainment, female labour force participation, and low fertility rates) a core driver of democratic development from 1980 to 2005?
2. Were improvements¹ in both women's reproductive and productive activities, (reflected by falls in fertility rates and increases in female educational attainment and labour force participation) required for democratic development to occur?
3. What was the nature of the relationship between female education and employment, and female education and fertility on democratic development? That is, did democratic development require improvements in two or more aspects of women's empowerment?
4. Was gender equality at a social institutional level positively associated with levels of democracy?
5. What was the nature of the relationship between gender equality, economic development (GDP), and democracy?
6. Was economic development (GDP) on its own sufficient to move developing countries toward democracy?
7. Did high (adverse) sex ratios impact negatively on democratic development?

¹ The term 'improvements' is used to reflect that overall, increases in female educational attainment, increases in female labour force participation, and falls in fertility rates have positive outcomes for women. However, it is acknowledged and discussed in Chapter Three that female labour force participation may not always be empowering for women, particularly in developing nations and that low fertility rates may not always be desired.

8. If there was a negative impact of high sex ratios on democratic development, was the causal pathway driven in part, by lower levels of women's empowerment in these nations?

1.3 Research Design

A macro-level research design was employed using aggregated data from nations across all regions of the world. In each of the analysis chapters the dependent variable is a measure of political regime status used widely in the democratisation literature, the Polity2 variable from the Polity IV data. The Polity IV dataset contains information from 1800 to present day and is presently available for over 216 developing and developed sovereign nations with populations over 500,000 (Marshall & Jaggers, 2009).

Each analysis chapter investigates varying dimensions of gender equality and its relationship with and/or effect on political regime status using both cross-sectional and longitudinal data. The gender equality data were accessed from the World Bank, Barro and Lee datasets, and the Organisation for Economic Cooperation and Development (OECD). The data includes broad measures of gender equality and women's empowerment, such as female employment and total fertility rate, sex ratios data, female educational attainment and other more specific measures of gender equality at a social institutional level, such as family code, civil liberties, physical integrity, and ownership rights. Cross-sectional and longitudinal data were analysed using a range of statistical techniques. These included generalised linear multivariate regressions, interactions, and dynamic panel models with System GMM dynamic panel estimators. Stata version 11.0 was used for all statistical analyses. Microsoft Office was used for tables and graphs.

1.4 Key Findings

The overarching finding from this study was that gender equality and the empowerment of women had a significant role to play in democratic development from 1980 to 2005.

- **Economic development** on its own was not sufficient for democratic development to occur: the relationship between economic development and democracy differed by levels of gender equality. When gender equality was high, GDP was positively associated with democracy, whereas at low or medium level of gender equality GDP had either a negative relationship or bore no relationship with democracy.
- **Women's empowerment**, particularly female education, was a core driver of democratic development during the period 1980 to 2005. Countries that began the period with higher levels of female education, female labour force participation, and lower fertility rates in 1980 were more likely to have developed democratically than nations that had improved in only one or two domains or made these improvements later in the period. Nations that did not improve in any of these three domains achieved only modest political gains and were typically represented by the sub-Saharan nations.
- **Democratic development** was more likely to occur in nations with a history of educating girls and possibly a longer experience of improvements in social and economic conditions conducive to democratic transitions (such as lower infant mortality rates and enlarged middle class) that have occurred because of this investment.
- An increase in male education was insufficient for nations to develop democratically over this period. However, increases in male education *together* with high levels of women's empowerment were important. It appears that in nations where men are highly educated *and* where women's lives have improved political progress is greater.
- Nations with a shortage of women were less likely to develop democratically than nations where equal numbers of men and women existed or women were in surplus.

- A high prevalence of polygamy, a greater acceptance of violence against women and the lack of opportunity for women to own property other than land were all strongly associated with more autocratic regimes.

1.5 Significance of the Study

1.5.1 Reconceptualising modernisation theories

Implicit in the modernisation and neo-modernisation theories is that gender equality and women's empowerment occur as a consequence of economic development. This is where this study makes a substantial contribution to the existing literature. The findings from Chapter Five show that female education was a core driver of democratic development during the period of this study, over and above key modernisation factors such as income, economic growth, urbanization, and population density. This may explain in part the consistent finding in the democratisation literature of a positive association between income and democracy, but little evidence of a direct causal effect (Acemoglu, Johnson, Robinson, & Yared, 2008, 2009; Przeworski, Alvarez, Cheibub, & Limongi, 2000; Przeworski & Limongi, 1997). Income appears to be positively associated with democracy in so far as it increases state human capital and promotes other social conditions, but it did not appear to be a significant *causal* factor in directly advancing democracy over the period researched in this study.

The results show that women's empowerment played an active, but not a passive role in moving nations toward more democratic regimes at the end of the twentieth century. Consequently, it must be considered an important aspect of modernisation theory, a dimension that has not received adequate attention in the democratisation literature to date. It appears that nations that made significant movements toward democracy during this period had both the financial resources *and* the political will to invest in the human capital of their people, particularly their women. It is not enough to raise overall living standards within a nation without tackling the social structures that discriminate against women and prevent them from participating fully as citizens.

1.5.2 Integrating politics and gender

The integration of politics and gender research is one of the key contributions of this study. By taking a gendered approach to democratic development theory and using more nuanced measure of gender equality, the results from Chapter Seven highlight how gender equality intersects with a nation's level of income and modifies its relationship with democracy. These findings demonstrate the non-linear nature of modernisation and provide some explanation as to why wealth does not always translate into more liberal political regimes (e.g. Saudi Arabia, Libya). Moreover, gender research proposes and the findings from this research suggest that these gender inequalities might be further reinforced and perpetuated by both income and the state. The integration of politics and gender has the potential to explain the variability in the quality and stability of current democracies both theoretically and in future research.

1.5.3 Women's empowerment as a causal factor in democratic development

This study provides robust empirical evidence that gender equality (as represented by sex ratios) and women's empowerment (female education, fertility rates, female employment) had a causal effect on democratic development at the end of the twentieth century. Using longitudinal data and the latest and most sophisticated statistical modeling techniques to account for problems of endogeneity and reverse causation these findings challenge much of the current thinking that gender equality improves after democratic development is achieved.

Together, these three key contributions shift the paradigm in our collective understanding of democratic development theory. To guide further research in this field a theoretical framework is proposed - the Gender and Democratic Development (GADD) model. The purpose of the GADD model is to place gender at the centre of the analyses to highlight how the social construction of gender intersects with economic development and how cultural attitudes toward women may either inhibit, or promote democratic development.

1.6. Implications and Recommendations

This thesis highlights the importance of incorporating a gendered perspective into democratic development theory. A comprehensive and expanded discussion of the key findings is provided in Chapter Eight with specific recommendations for transnational networks, developing nations, national machineries, and non-government organisations. The key findings from this study highlight the role of gender equality and women's empowerment in promoting democratic development, and call for explicit policies to tackle gender inequalities at a social institutional level and to continue to invest in female schooling to tertiary level. The key implications and recommendations are listed below:

1.6.1 Implications of key findings

- a) This study concludes that any future efforts of democratic governments and international aid organisations to promote and assist with democracy building in developing countries must consider gender equality as foundational to that process.
- b) Educating girls seems to create profound and fundamental changes in the structure of society as women become more involved in activities outside the home, and their concerns become more visible. With rising aspirations and expectations for their lives governments are increasingly pressured to respond to a more complex set of demands.
- c) Nations with a longer history of educating girls are likely to have greater numbers of *more* highly educated men and women, and they are likely to have more women with a longer experience of participating in the formal workforce and in professional roles. These nations are also more likely to have women participating in Non Government Organisations (NGOs), trade unions, and political parties, and taking on management and leadership roles. This *active* participation serves as a type of 'political apprenticeship' whereby citizens are no longer passive but become actively engaged in their societies, and seek to have a greater influence on the decision-making structures that affect their lives.

- d) Income appears to be positively associated with democracy in so far as it increases state human capital, (i.e. activities such as levels of education and employment that influence future real national income)² and promotes other social conditions, but it did not appear to be a significant causal factor in directly advancing democracy over the period researched in this study.
- e) The results of this investigation indicate that nations that made significant movements toward democracy during this period had both the financial resources *and* the political will to invest in the human capital of their people, particularly their women. In contrast, wealthy nations that kept women's status low further entrenched the dominant culture of authoritarianism.
- f) For female education to be an effective tool for democratic development it must translate into opportunities for women. Women's ability to participate in education *and* employment, or engage in activities outside the home represents an expansion of the physical and mental space in which women inhabit. As this space expands they are in a better position to raise their voices and be involved in shaping their communities.
- g) The idea that "Women's rights are human rights", strengthens the notion of a global citizen attached to a common or universal set of values, however, this idea of a universal set of values is hotly contested, with governments conceding universality at a global level, but recognising diversity at the local level. Human rights and cultural diversity need not be mutually exclusive.

1.6.2 Recommendations for international agencies and national governments

- a) Adopt gender mainstreaming as a strategy to reduce gender inequality and promote the empowerment of women at a national level.
- b) Continue to challenge gender role stereotyping that limits women's choices at a very early age, and privileges males. This free girls *and* boys, in part, from the constraints of expectations and gives them greater self-determination over their own lives.
- c) Increase the uptake and retention of girls' education in secondary education.

² See Becker (1962) for a comprehensive theoretical discussion on human capital.

- d) Coordinate efforts to tackle global attitudes that view women as commodities for sale or exchange.
- e) Develop explicit policies to tackle gender inequalities at a social institutional level, particularly violence against women, the practice of polygamy and discriminatory practices that prevent women from owning property.
- f) The issue of violence against women must become a core priority for international agencies and governments. A comprehensive and multi-faceted framework is required to tackle violence at the individual, relational, community and societal levels and men must be included in this process.
- g) Assist with the guidelines for reservations in ratifying CEDAW so that the spirit of the convention can be achieved and the gap between policy at the global level and practice at the national level is reduced. Improve monitoring of states' compliance and time limits and/or sunset clauses to encourage discussion and modification around such items that actively discriminate against women.
- h) Increase the participation and visibility of women in public life and in positions of leadership through quotas enables a form of political apprenticeship and a space for debate and discourse.
- i) Reduce adverse sex ratios by assisting nations with an abundance of natural resources to expand into other industries to create jobs for men *and* women as well as lowering the sex ratio at birth and across all age groups. This may be achieved through reducing access to sex-selection technology, education programmes promoting the value of the girl-child, and better health care for women and children.
- j) Consider population policies within a broader framework of gender equality incorporating legal, social, and economic goals.
- k) Invest in national gender machineries to carry out gender analysis, and to improve gender data collection. This is important for nations to identify where the gender inequalities exist in each society; at a national, regional, and local level.
- l) Set more relevant targets for achieving the 3rd Millennium Development Goal – Advance gender equality and promote women's empowerment.

1.6.3 Recommendations for future research

- a) Consider gender equality as integral to democratic development.

- b) Employ the Gender and Democratic Development (GADD) model to research at a regional or local level.
- c) Collect accurate gender data to support frameworks of women's empowerment. These indicators need to have meaning for women and reflect the everyday lived reality of their lives.
- d) Research the occupational segregation of women as an indicator of democratic development.
- e) Develop further the conceptualisation of democracy. This researcher argues that democracy has not been achieved until men and women realise their full legal rights to participate economically, socially and politically.
- f) Take a gendered approach to the consolidation or deepening of democracies.

1.7 Limitations

In all research, methodological decisions are made that restrict or limit the interpretation and use of the findings (Cresswell, 2003). The limitations to the methodological approach taken in this study are summarised briefly below and discussed in more detail in Chapter Seven of this thesis.

The main limitation in this study is the use of secondary data, rather than primary data to inform the analyses. As this study is an initial exploration conducted at a macro-level using aggregated data from secondary sources, these results need to be interpreted with caution. To minimise the problems with using secondary data widely used datasets and indicators from prominent international organisations have been used whenever possible. As discussed in Chapter Two, quantitative studies at a macro-level are useful for highlighting trends or patterns but do not replace the value in using primary sources of data at local and regional levels.

The removal of many countries due to the unavailability of data does not allow us to generalise the results to all countries. It may be likely that the missing data reflects elements of a particular country that may be relevant to political change. For example – many countries without education data may have low levels of education. Where possible extended samples were included to test the robustness of the results,

however, the study was constrained by the lack of Polity2 data on many of the small, independent states.

Finally, as this is a comparative, cross-national study using aggregated data it is difficult to capture the variability of women's lives within nations, within regions and/or at a local level. As such this researcher acknowledges that this is a macro-level study which takes a very broad brush to the relationship between gender equality and democratic development. These and other limitations, as well as efforts taken to moderate their effect, are discussed further in Chapter Eight of this thesis.

1.8 Summary

The purpose of this first chapter has been to introduce the thesis topic, and provide a brief outline of the main aims and objectives of the study. The research design and key findings of the analyses are presented with a summary of the key recommendations for future research and policy. Finally, the significant contribution and limitations of the research is highlighted. Section 1.9 lays out the structure for the remainder of the thesis.

1.9 Overview of Thesis

- **Chapter Two** presents background information relevant to the study and a literature review. This chapter highlights the inherent challenges in defining and measuring the key concepts, gender equality, women's empowerment, and democracy. It discusses the global trends during the period of democratic development from 1980 to 2005 and the history of women in development. The current dominant theory of democratic development, the modernisation theory is introduced with a discussion of the problems inherent in this theory, thus suggesting a possible role for gender equality and women's empowerment.
- In **Chapter Three** a theoretical argument linking gender equality and democracy is developed, particularly the causal link from gender equality and women's empowerment to democratic development. In addition, a theoretical framework is proposed that informs the research design in Chapter Four and the analyses in Chapters Five to Seven. The theoretical argument and model is

informed by both qualitative and quantitative studies from many disciplines including comparative politics, feminist economics, gender scholarship, and public health.

- In **Chapter Four**, justification for the research design chosen is offered. An argument in favour of quantitative methods over qualitative design is presented together with the rationale for choosing the data and statistical methods used in this study.
- **Chapter Five** is the first of three analysis chapters that aim to answer the key research questions. This first chapter investigates the causal effect of women's empowerment on democratic development from 1980 to 2005. The results show that improvements in women's empowerment were strongly associated with democratic development over this period, with female education having a positive and causal effect on these transitions. In addition, the effect of female education increased with lags of five and ten years, suggesting that democracy is more likely to occur in nations with a history of educating girls and a longer experience of the social and economic conditions conducive to democracy that have occurred because of this investment. The findings show that all three areas of female empowerment needed to be strong for a country to increase their level of democracy over this period.
- **Chapter Six** investigates whether high sex ratios (a surplus of males) have negative consequences for the political status of a nation by restricting women's participation in education and employment and keeping their fertility rates high. The results show that nations with a surplus of males have lower rates of female education and labour force participation. Furthermore, nations with a surplus of females were more likely to increase their level of democracy during this period than nations where men were in oversupply. Consequently, ensuring that women are not in the minority at a population level appears to be an important factor for both women's empowerment and democratic development.
- **Chapter Seven** analyses the relationship between gender equality and democracy for developing countries. Using a unique database from the OECD, the Gender Institutions, and Development Database (GID-DB), the results show that there is a positive relationship between gender equality measured at

the social institutional level and democracy, in particular a low acceptance of violence against women, a low prevalence of polygamy and the ability of women's to own property other than land. Moreover, the results show that gender equality acts as a modifying factor in the relationship between economic development and democracy. Thus, it seems that tackling the social structures that legitimise men's authority over women must be a core priority to advance and deepen democracy.

- Finally, in **Chapter Eight**, the key findings and main arguments from the thesis are outlined, and the policy implications of the findings are discussed with suggestions for future research. The significance and limitations of the research are also presented.

Chapter Two: Background and Literature Review

2.0 Introduction

The purpose of this chapter is to provide the relevant background information on the research topic and to review existing theories and research in this field to provide some context to this study. This chapter begins by arguing that democracy is a form of government that best enables citizens to exercise their personal and political freedoms. The concept of democracy and the inherent problems in defining and operationalising such a complex, multi-faceted construct is discussed. A brief history of the global development of democracy over the last century is documented, with a particular emphasis on the last thirty years, as this is the primary focus of this thesis. This is followed by a comprehensive review of the previous literature investigating the preconditions for democracy to occur, with particular emphasis on the modernisation theory and its limitations for democratic development theory. The chapter then provides a working definition for gender equality and women's empowerment and again highlights the inherent problems in defining these concepts, followed by a brief history of women in development. Finally, a critical review of the limited literature on gender equality and democracy is presented to provide a starting point for the theoretical argument presented in Chapter Three.

2.1 Why Democracy?

“Democracy is the worst form of government, except for all the others”
(Winston Churchill, November 1947 speaking in the House of Commons)

In a recent report from Freedom House (Freedom House, 2012) the attainment of political freedoms such as the right to vote, the freedom to express views, and to assemble and organise peacefully independent of the state is assumed in the literature to be an evolutionary process with liberal democracy constituting the “end point of mankind's ideological evolution” and the “final form of human government” (Fukuyama, 1992). However, as Sen (1999) suggests in his book “Development as Freedom”, we should consider these political freedoms as just one of several

freedoms including, economic, social, and civil freedoms, necessary for humans to create and live lives they value.

Sen (1999) conceives of political freedoms as a set of entitlements commonly associated with democracies and proposes three further arguments for the necessity of these political freedoms. Firstly, these political freedoms have intrinsic value. They give individuals the ability to actively engage and participate in the decision-making processes that affect their lives. Secondly, they have instrumental value, because democratic leaders seeking to hold on to power need the support of their citizens. Finally, having political rights or entitlements means that citizens have access to information, are able to debate and discuss issues of importance to them, and are able to organise and agitate to have their needs and demands met. In contrast, a civil society with few political freedoms has no opinions, no avenue for public debate and discourse, and no role in shaping the moral identity of their nation.

When citizens have a role in setting the agenda for their nation, there is an expectation that the demand for public goods that improve the wellbeing of the majority of citizens will increase (Carbone, 2009). Accordingly, democracies have been linked to greater investment in health and education (Brown & Hunter, 2004) and better population health outcomes, such as higher life expectancy (Besley & Kudamatsu, 2006; Klomp & de Haan, 2009; Lena & London, 1993) and lower infant mortality rates (Alvarez-Dardet & Franco-Giraldo, 2006; Lake & Baum, 2001; Navia & Zweifel, 2003; Ncayiyana, 2004; Safaei, 2006). The poor also benefit from democracy through its income redistribution policies (Acemoglu, Johnson, Robinson, & Yared, 2005; Boix & Stokes, 2003; Bueno de Mesquita, Smith, Siverson, & Morrow, 2003). Moreover, because democracies are better at broadcasting information through the freedom of the press, and because they need to be accountable to their citizens, no substantial famine has ever occurred in any country that is democratic (Sen, 1999). The research also shows that no modern democracy has ever gone to war against another democracy (Maoz & Russett, 1993). Democracy also confers significant, indirect benefits to its citizens such as increased individual liberties and freedoms (Huntington, 1984).

However, other studies have found that democracy does not necessarily reduce infant and child mortality rates (Houweling, Caspar, Looman, & Mackenbach, 2005; Ross, 2006; Shandra, Nobles, London, & Williamson, 2004), or improve maternal care (Wejnert, 2008), nor have they been successful in eliminating poverty in developing countries. For example, in the early nineties both India and Philippines still had one third of the population below the poverty line (Varshney, 2000). In contrast, Singapore, Taiwan, and South Korea (the latter two now democratic) all made significant strides in reducing poverty during authoritarian rule (Varshney, 2000).

The case of Singapore is unique. Under the governance of a government that may be described as an “illiberal democracy” (Zakaria, 1997, p. 22), or a “communitarian” democracy (Neher, 1994, p. 954), Singapore boasts strong economic growth, a high standard of living, and most Singaporeans can expect a long and healthy life. A small island state, with a homogenous populace the emphasis has been on discipline rather than democracy (Neher, 1994). However, the lack of free press and the de-politicisation of civil society mean that its citizens are not part of the decision-making processes that determine the future direction of this nation-state (Mutalib, 2000). Moreover, in other regions of the world the transition of former Soviet states from communism to democracy has not always improved health outcomes for women. For example, in Georgia, one of the consequences of privatising their health care system was the reduction in reproductive health services for women, resulting in one of the highest rates of induced abortion in the world (Dagargulia & Badashvili, 2008).

It appears that the quality and strength of democracy can vary significantly between nations as they undergo a process of gradual legitimisation (Diamond & Morlino, 2004). Terms such as “illiberal democracy” or “electoral democracy” are used to describe democracies with elections but no constraints on executive power of the government and little protection of its citizens’ rights (Zakaria, 1997). Similarly, the “stock of democracy”, a nation’s experience with democracy (Carbone, 2009), plays an important role in determining whether democratic regimes can reduce gender inequalities (Beer, 2009). However, as many of the long-standing democracies are also high-income countries, perhaps wealth, rather than political regime type matters more for health. Safei (2009) reports how greater income improves women’s life

expectancy from 60 years in low-income countries to 82 years in high-income countries and how dramatic falls in maternal mortality rates occur, from 650/100,000 in low-income countries to 9/100,000 in high-income countries. On balance, however, the consensus is that at present, democracy is the best form of government available because of the underlying principles of equality, liberty, fraternity, freedom, and non-violence that are inextricably linked to realising human potential (Cohen, 1971; Karstedt, 2006; Post, 2006; Sen, 1999).

2.2 Conceptualising Liberal Democracy

Studies of the links between gender equality, modernisation, and democracy are complicated by the lack of consensus over the conceptualisation of liberal democracy. *Firstly*, there is disagreement as to whether democracy is a binary concept, i.e. in the absence of democracy is a country autocratic, and vice versa (Alvarez, Cheibub, Limongi, & Przeworski, 1996; Boix & Stokes, 2003; Cheibub, Gandhi, & Vreeland, 2010), or whether it is a continuous concept where countries experience degrees of democracy or degrees of autocracy (Bollen & Jackman, 1989; Jagers & Gurr, 1995).

Proponents of democracy as a continuous concept argue, “democracy is not a quality of a social system which either does or does not exist, but rather a complex of characteristics which may be ranked in many different ways” (Lipset, 1959, p. 73). For example, the United States is generally recognised as being more democratic than India and India more than China. Others call for the recognition of the hybrid regime where nations may have aspects of both democratic and autocratic regimes, for example Indonesia and Nigeria (Diamond, 2002; Epstein, Bates, Goldstone, Kristensen, & O'Halloran, 2006). Other terms to describe these hybrids or mixed regimes are “electoral authoritarianism”, “pseudo-democracies”, ‘semi-democratic’, (Diamond, 2002) “illiberal” (Zakaria, 1997), or “incoherent democracies” (Jagers & Gurr, 1995).

Secondly, there is much discussion about how democracy is defined, how broad the notion of democracy is, and what attributes must be considered before we deem a nation to be democratic. Does it refer to political structures and institutions or is it

about the underlying values associated with democracy, such as equality, trust, tolerance, justice, and civil liberties? Can we consider a nation democratic if competitive elections are held, but the process excludes large portions of the population, or is weighed down by corruption and coercion? Schmitter and Karl (1991) propose that there is not one unique set of institutions that comprise a democracy, but rather democracy is a system of governance that is characterized by the process by which the leader/s come to power and are accountable to their citizens. Typically, these conceptual differences become more pronounced when researchers try to operationalise democracy in empirical research.

In the democratisation literature the definition and measurement of democracy largely follows Schumpeter's minimalist or procedural approach to democracy. Schumpeter states that "the democratic method is that institutional arrangement for arriving at political decisions in which individuals acquire the power to decide by means of a competitive struggle for the people's vote" (Schumpeter, 1947, p. 269). Dahl's (1971) contention that process and substance were difficult to separate led him to formulate his concept of 'Polyarchy,' rather than democracy. Dahl specifies three necessary, but not sufficient conditions required in order for a government to remain responsive to its citizens over time, and eight institutional guarantees. The three conditions include:

1. The ability of citizens to formulate their preferences,
2. The ability of citizens to signify their preferences to their fellow citizens and the government by individual and collective action, and,
3. The ability of citizens to have their preferences weighted equally in the conduct of the government, that is, weighed with no discrimination because of the content or source of the preference.

The eight institutional guarantees constitute two main dimensions, public contestation, and inclusiveness, including, the presence of free and fair elections, freedom of expression, and the right to vote (Dahl, 1971, pp. 2-3). While the Dahl and Schumpeter definitions have been criticised for being too minimalist and not including measures of social and economic equality, it has also been argued that using a broader measure of democracy makes it difficult to separate social or economic progress from political progress (Di Palma, 1990), and to empirically test

the effects of one element on another. Moon et al. (2006) argue that voter turnout is “a core feature of democracy”, although like other elements, such as economic equality, it seems more characteristic of the quality of a democracy, rather than an essential component of democracy. Munck and Verkuilen (2002) also express concerns about definitions of democracy that encompass other attributes such as civil liberties, social justice and economic development in confounding empirical research.

In creating a new political dataset Bollen defines liberal democracy as, “the extent to which a political system allows political liberties and democratic rule” (Bollen, 1993, p. 1208). Political liberties refer to freedoms such as freedom of expression and the freedom to organise or assemble and democratic rule refers to the accountability of the elites to its citizens represented by the presence of fair and free elections. Despite presenting a broader conceptualisation of liberal democracy, Bollen (2009) also emphasises the distinction between the essential components of democracy and other factors that may deepen or strengthen democracy.

In a discussion that is particularly relevant to the issues discussed in this thesis, Carbone (2009) asks whether items such as gender parity, human rights, and egalitarianism are “pre-requisites of democracy, essential aspects of democracy or consequences of democracy.” These are difficult questions to answer as democracy is constantly re-inventing itself. Not only has the extension of suffrage increased with every generation, but there has also been “a deepening and broadening of democracy and freedom within societies calling themselves free” (Gastil, 1990, p. 40). However, by incorporating broad notions of civil liberties into definitions of democracy, do we risk confusing the realisation of democracy with the deepening of democracy or has our understanding of what it means to be democratic changed?

The rise of “illiberal democracies” in the wake of the third wave of democratisation brought up the debate again about what constitutes democracy. What the West would term as ‘liberal democracy’ is characterised by both political rights and basic civil rights. Implicit in this characterisation is an expectation that a democratic government is responsible for improving the lives of citizens through democratic practices and culture. Whereas, illiberal democracies may have multi-party elections

in place but their citizens are not free to assemble or entitled to free speech (Zakaria, 1997). However, by focussing on the spread of democratic practices throughout society, are we in fact measuring the quality of democracy, rather than whether a system of democratic governance exists (Heller, 2000), or are we simply confusing political democracy with social or economic democracy? (Bollen, 1990). Hewitt (1977) concurring with those arguing for a narrow definition of democracy states, “Political democracy is not a sufficient condition for the achievement of a more equal society. The crucial matter is what the mass electorate does with the franchise and other democratic procedures” (Hewitt, 1977, p. 451). Samuel Huntington (1991, pp. 9-10) concurs, arguing that:

“Elections, open, free, and fair, are the essence of democracy, the inescapable sine qua non. Governments produced by elections may be inefficient, corrupt, shortsighted, irresponsible, dominated by special interests, and incapable of adopting policies demanded by the public good. These qualities make such government undesirable but they do not make them undemocratic.”

While Huntington makes a strong case, universal suffrage must be considered as an essential component of democracy. There can be no democracy if half the population is legally excluded from voting (Waylen, 2007).

Contemporary feminist political theorists argue that democracy without feminism makes a mockery of the values that democracy is believed to embody (Pateman, 1989; Phillips, 1991; Young, 1990). For example, liberal democracy has been roundly criticised for ignoring the gendered construction of women’s lives and assuming that if women want to become full and active citizens they will take on the characteristics of men (Pateman, 1989). An extensive literature concerning feminist constructions of citizenship, heterogeneity, representation, the public versus private divide, agency, freedom, and participation has paved the way for alternative conceptualisations of democracy, including deliberative and participatory

democracy.³ As Moghadam (2004) argues, democracy is not just about elections and governance, its truth is about citizenship, participation, and inclusion.

In expressing a preference for this approach, the researcher acknowledges that these democratic ideals are reflective of healthy, functioning democracies that do not always exist in practice. Even if we take a more qualitative, or substantive view of democracy, the marginalisation and under-representation of women in existing democracies demonstrates how gendered hierarchies have been embedded into the global spread of democracy (Eschle, 2002), thus leaving contemporary democracies flawed (Razavi, 2001). Likewise, the idea that democracy is normative is challenged on the grounds of inherent bias toward privileged elites, brought about by neo-liberalism, globalisation, and masculine constructions of democracy (Eschle, 2002).

Collier and Adcock (1999) suggest that the choice of concept depends largely on the purpose of the research. The prevalence of procedural definitions in the democratisation literature suggests that for comparative analysis “a more empirical and institutional definition is desirable” (Huntington, 1984, p. 195). Taking a causal, rather than a constitutive approach to democracy also confers significant benefits in advancing both gender equality and democracy, as neither becomes subsumed under the agenda of the other.

Accordingly, this study adopts the conceptualisation of democracy as developed by the creators of the Polity IV database. Theoretically, Jagers and Gurr (1995, p. 471) argue that there are “three essential, interdependent elements of democracy.” The first is the presence of institutions and processes through which citizens can express their preferences, the second, the existence of institutionalised constraints on executive power, and thirdly the guarantee of civil liberties to all citizens in their daily lives and in acts of political participation. While the definition of the first two dimensions has remained consistent over time, the conceptualisation of the final

³ Among the critical literature, see Carole Pateman, *The Disorder of Women* (Stanford University Press, 1989); Anne Phillips, *Engendering Democracy* (Pennsylvania State University Press, 1991); Iris Young, *Intersecting Voice: Dilemmas of Gender, Political Philosophy and Policy*. Princeton, NJ: Princeton University Press, 1997).

dimension, civil liberties, has evolved from meaning freedom from slavery and torture (Arat, 1994), to being aligned more closely with human rights. Because of this, the creators of the Polity IV database have not singled out and sought to quantify aspects of civil liberties. Instead measures such as the freedom of press “are treated as means to, or manifestations of these institutional structures.” This is one of the main criticisms of this database (Hadenius & Teorell, 2005). Comparisons between the Polity IV database and other political databases widely used in the democratisation literature will be discussed further in Chapter Four: Research Design.

2.3 History of Democratisation

In the democratisation literature the terms democratisation and democratic transition have been often used interchangeably. Implicit in their meanings is that a nation has transitioned from being non-democratic to being democratic based on a set of designated criteria. O’Donnell and Schmitter (1986) define transitions as, “the interval between the dissolution of the old regime and the installation of a new regime.” A transition to democracy is considered successful when agreement about democratic rule is reached. This usually includes a constitution and the holding of the first free elections (Di Palma, 1990). In this study the term democratic development is used to refer to a country’s level of democracy and its temporal movement away from autocratic regimes toward more democratic ones.

Huntington (1991) first coined the phrase “wave of democratisation” to reflect a group of democratic transitions that occur within a specified period of time and that significantly outnumber transitions in the opposite direction during this period (Huntington, 1991, p. 5). Over the last hundred years Huntington has identified three distinct waves toward democracy and several reversals.

- The first of these “waves” extended from the 1820s, when suffrage was granted to most men in the United States, through to 1926. This was then followed by a period of democratic reversal during which the number of democracies more than halved, falling from 29 to 12. This period of democratic reversal lasted until the onset of World War II.

- The “second wave” lasted from World War II until 1962, again followed by a period of democratic reversal from 1962-1975. During this period the number of democracies fell from 36 countries to 30.
- The final wave, which is the focus of this thesis, lasted from the mid 1970s until the end of the twentieth century. This “third wave” began in Southern Europe, spread to the military regimes of South America at the end of the 1970s and early 1980s and then extended to South and East Asia towards the end of the 1980s. The fall of the Berlin wall in 1989 and the collapse of the Soviet Union in 1991 resulted in an explosion of independent states with varying political regimes (McFaul, 2002). Finally, the 1990s saw democratic transitions throughout Africa beginning with the Sovereign National Conference in Benin and the release of Nelson Mandela in February, 1990 (Diamond, 1996, pp. 1-2).

However, Doorenspleet (2004) argued that the concept of universal suffrage was largely ignored in Huntington’s definition of democracy, and proposed a slightly different timeline for the “waves” of democratisation. Incorporating universal suffrage into her definition of democracy the first wave of democracy begins later, around 1920, and the second wave occurs in 1955. However, the third wave remains unchanged, as universal suffrage had occurred in nearly all countries by 1980.

2.3.1 Global trends affecting the third wave of democratisation

Many theorists exploring this third wave of democratisation argue that nations that became democratic after World War II faced greater obstacles to political change than nations that democratised earlier. Specifically, the pressure of underdeveloped nations to meet the increasing demands of their citizens as their populations grew rapidly (Bollen, 1979). However, others argued that the social and economic conditions in the latter part of the twentieth century were more favourable to democracy, including improved living standards since industrialisation (Barro, 1999), better transport and communication (Markoff, 1996) as well as advances in science and medicine (Caldwell, 1990).

Another important factor in the spread of democracy in the post–World War II period was the strength of the United States in promoting democracy. The perception of the United States as a world “superpower” facilitated the promotion of a governance

model that was seen to be successful and desirable, creating a snowball effect (Huntington, 1991). Autocratic regimes were also less likely to endure in a region with more democratic states or when neighbouring states democratised (Gleditsch & Ward, 2006). Wejnert (2005) was the first to compare the effects of both external factors (exogenous or diffusion factors) with internal features (endogenous factors) within nations on democratisation. Her study showed that a nation's socio-economic factors such as income, literacy levels, and urbanisation were important when measuring their effects alone. However, diffusion effects, measured by the spatial proximity of a country to other democratic nations and the level of membership in networks with democratic countries significantly reduced the influence of these socio-economic factors (Wejnert, 2005).

Despite the influence of external factors, other scholars argued that transitions to democracy were unlikely to occur if there were economic, social, and cultural conditions within nations that were at odds with democratic development, particularly, a dominant religious or cultural influence. However, a strong mandate from the Vatican in the 1960s to oppose authoritarianism demonstrated that the relationship between religion and political regime type was not static, but subject to change. As a result approximately three quarters of the countries that transitioned during the third wave were nations with a Catholic majority. By 1990, the only region where Protestants and Catholics lived under authoritarian regime was in sub-Saharan Africa (Huntington, 1991).

2.4 Preconditions for Democracy

2.4.1 The modernisation theory

With many countries moving away from autocracy toward more democratic regimes at the end of the twentieth century (Huntington, 1991), scholars have sought to understand the preconditions for democracy to emerge and be sustained. The most influential hypothesis was that wealth, and factors closely associated with it, such as education, industrialisation, and urbanisation (economic development) were key drivers of political change. This is the modernisation theory originally proposed by Lipset (1959) which has received widespread empirical support (Barro, 1996, 1999; Barro & Lee, 1993; Boix & Stokes, 2003; Epstein et al., 2006; Glaeser, Ponzetto, &

Shleifer, 2007; Huntington, 1991; Londregan & Poole, 1996; Papaioannou & Siourounis, 2008b). The origins of the modernisation theory may be traced back to the American elites and intellectuals to explain some of the social changes that occurred post World War II, in particular the emergence of developing countries and the subsequent economic, political, social, and cultural change in these societies (Tipps, 1973).

The early work of Lerner (1958) points to the evolution of a participatory society, with democracy being “the crowning institution.” He highlights the importance of improvements in all four factors – economic, political, social, and cultural, for “modernisation” to occur, and that imbalances in any one factor may lead to a breakdown in economic, social, and/or political systems. In a seminal piece of work Lipset (1959) identified the rise of the middle class as critical for building a strong civil society⁴ and the main factor linking economic development and democracy. Proponents of the modernisation theory assert that with increased income and education citizens are able to organise themselves into unions, non-government organisations, and political parties in order to have more influence over the government policies that affect them (Huntington, 1997) .

Through the existence of organisations and institutions that mediate between individuals and the state citizens learn to value association and assembly, form opinions and share information. Further, they gain valuable skills in advocacy and negotiation. A culture of deliberation and organised opposition arises and tolerance for the arguments and agendas of groups with differing and often competing interests develops (Lipset, 1994). However, the empirical literature supporting this relationship between the rise of the middle class and democracy has been mixed. Rueschemeyer, Stephens, and Stephens (1992) found that the increase in the size of the urban *working* class, not the middle class was more important to democratic transition, whereas Doorenspleet (2004), investigating democratic transitions after

⁴ Civil society refers to voluntary organisations separate from the government that citizens are members of, including churches, unions, non-government organisations, women’s and minority groups (Diamond, 1994).

1989, found no support for a relationship between class structure and democratic transition.

2.4.2 Limitations of the modernisation theory

According to the modernisation theory democratic development is an evolutionary process (Tipps, 1973) whereby improvements in a nation's overall economic development increase the likelihood of democratisation. However, the modernisation theory does not explain why some countries haven't followed this trajectory, for example many of the oil-producing nations in the Middle-East (Fish, 2002), and nations with comparatively high standards of living such as Cuba and Singapore.⁵ Moreover, India and Bangladesh have been democratic for many years, despite uneven levels of economic development. Despite a consensus that a positive relationship between economic development and democracy exists, there is less certainty about the causal nature of this relationship or the underlying mechanisms that drive this finding (Acemoglu et al., 2005; Przeworski & Limongi, 1997).

Recent studies examining the relationship between modernisation and democracy found no evidence of a causal relationship between income and democracy or education and democracy once country fixed effects were controlled for (Acemoglu et al., 2005, 2008; Przeworski & Limongi, 1997). This lack of a relationship found by Acemoglu et al. (2005) between education and democracy was challenged later by Castello-Climent (2008) who argued that when variables are highly persistent over time the system GMM estimator was a better choice. Indeed, in using this estimator Castello-Climent found that more education *was* related to higher levels of democracy.

In a seminal piece of work, Przeworski and Limongi (1997) demonstrated that economic development, as measured by per capita income, had no *causal* effect on the democratisation of nations. Rather, these authors concluded that the effect of economic development was to *sustain* democracies once they transitioned via other

⁵ According to the Human Development Report 2013 (UNDP, 2013) except for a small dip in 2000 Cuba has consistently recorded a high HDI in comparison with other Latin America nations and the world average. Since 1990 Singapore has consistently recorded a HDI higher than world average.

means. Their results showed that once a threshold of per capita income (\$6000) was reached democracies were more likely to be sustained and autocracies were more likely to stabilise. Argentina is the exception. In 1976, with a per capita income of \$6055 it reversed its standing as a democracy.

However, these authors were criticised for failing to interpret correctly their own results (Boix & Stokes, 2003; Epstein et al., 2006) and further analyses showed that the modernisation theory still held. In another critique of Przeworski et al.'s findings, Hadenius and Teorell (2005) showed that while the effect of economic development was greatest among the more democratic countries, their results found that economic development also had a positive effect on countries still in transition. More importantly, and of relevance for this study is that economic development had no significant impact on political regime change in fully autocratic nations. This suggests that other factors are required for democratisation to occur in these countries.

The empirical evidence shows that in nations where total increases in wealth result in a more equal distribution of education and/or income, democracy is more likely to emerge (Boix & Stokes, 2003; Castelló-Climent, 2008; Feng & Zak, 1999; Lutz, Cuaresma, & Abbasi-Shavazi, 2010; Muller, 1995). Therefore, it appears that for democratic development to occur the majority of citizens must benefit from increased national wealth. A person's age, class, race, and/or religion may determine whether they have the same opportunities to benefit from increases in a country's wealth. However, as gender cuts across all these categories and is the most persistent and pervasive method of categorising people, this study focuses on gender equality and its relationship with democratic development. The previous literature suggests that economic development may increase state resources, but unless both men and women have the ability to access and benefit from them, overall increases in national income is unlikely to improve the likelihood of a country becoming democratic.

2.5 Defining Economic Development

Throughout the democratisation literature the term "modernisation" has been used interchangeably with economic development, social development, and development.

For the purposes of this study ‘modernisation’ refers to the collective of factors proposed by Lipset (1959), whereas economic development refers to national levels of income and/or economic growth.

2.6 Defining Gender and Gender in(equality)

2.6.1 Introduction

The review of the modernisation theory has introduced a possible link between gender equality and democratic development. To integrate successfully the two disciplines of gender and politics it is essential to clarify all the key term used in this study. It is not enough to include gender variables into existing frameworks without considering how gendered the institutions of economics and politics are to begin with, and what the term ‘gendered’ means. In this section the links between gender equality and democratic development will be examined, beginning with a brief discussion of the key terms, gender, gender (in)equality, and women’s empowerment, followed by a review of current theoretical frameworks for gender equality and women’s empowerment.

2.6.2 Social construction of gender

Typically, gender and sex are seen as two distinct but interdependent concepts, with sex reflecting biology and gender reflecting social processes. One of the most important developments in feminist research was the shift in the late 1970s from seeing gender as being biologically determined to being socially constructed (Lorber, 1994; Risman, 2004). What this means is that from birth, society attributes specific characteristics or expectations to an individual based on their biological sex. These conscious and unconscious assumptions and expectations that we make about the perceived differences between men and women constitute the social construction of gender. Accordingly, men and women are assigned social roles that shape their everyday lives (Lorber, 1994, p. 60). These social roles may be formalised into institutional laws, rules, and organisational norms (Risman, 2011), such as inheritance and marriage laws, or they may be more implicit, such as social norms relating to the performance of different tasks within the family and community (Kabeer & Subrahmanian, 1996). This social construction of gender legitimates the privileged position of men and reinforces women’s unequal status (Lorber, 1994).

Part of this process is denying women access to and control over scarce and highly desired resources that serve as vehicles for social mobility and elevates a women's status (Blumberg, 1984).

2.6.3 Gender conceptualised as a social institution

The traditional view of gender identified it as a specialised domain, primarily concerned with the study of women and/or their roles. However, a more modern approach has been to view gender as the pattern of behaviour that exists between men and women that underlies social structures and processes (Scott, 1986), rather than a separate feature added onto existing frameworks or theories (Acker, 1992). There has been much debate about what defines social institutions (see Martin (2004) for a comprehensive discussion), but some of the most common themes to emerge are that social institutions exist among collectives of people, they are enduring, and they direct social behaviours with an element of control. Martin (2004) argues that because gender is such a pervasive and an enduring feature of our societies there is enormous value to researchers to conceptualise and study it as a social institution and a process. The value of doing so for this study is that it makes visible the complex and multi-dimensional nature of gender including its ability to restrict or facilitate people's life choices.

Feminist scholars emphasise the highly gendered nature of institutions. That is, "institutions are historically developed by men, and symbolically interpreted from the standpoint of men in leading positions" (Acker, 1992, p. 567). The privileging of men's roles in the public sphere and women's roles in the private sphere means that women have been largely absent from the central institutions of politics and economics (Pateman, 1989). Consequently, instead of being political agents in society women have been expected to take on the 'maternal' role and to cultivate and reproduce the dominant cultural values of the state, as determined by men (Yuval-Davis, 1997). For example, in post-communist states national propaganda programs encouraged women to return to their traditional role in the home to care for and educate the next generation. Motherhood was glorified and the pre-communist days when women were not in the workforce were romanticised (Lafont, 2001). Marchand and Papart (1995) also emphasised the role of institutions, particularly family structures, in keeping women's status low.

The interdependence of gender and the state occurs because the social construction of gender is supported and maintained through laws and regulation, and because gendered societies in turn support and maintain the institutions of the state (Drèze & Sen, 2002). Even when women are granted entry into the public sphere, implicit in this benevolence is that they are required to fit into the pre-existing economic or political structures that privilege men. The process of “doing gender” (West & Zimmerman, 1987, p. 126) involves making a clear distinction between what is masculine and what is feminine. Men and women then interact with each other to achieve the traits and behaviours that society has deemed are appropriate, concomitantly with other social structures and institutions, validating and reinforcing these socially constructed gender norms. This social organisation may be seen as a way of establishing social order (West & Zimmerman, 1987). The argument over how we “do gender” is deeply political. Thus, framing gender as a social institution and approaching democratic development theory with a gendered lens enables us to understand more clearly the relationship between gender equality and democracy and how they serve to support and maintain each other.

2.6.4 Gender (in) equality

Lorber, (1994, p. 285) locates gender inequality “solely in the structure of gendered social practices and institutions”, with women’s gender status central to the social construction of sexuality, fertility, pregnancy, childbirth, and parenting, not the other way round. This construction of childbearing and childrearing impacts on women’s ability to choose careers that confer prestige and power (Chafetz, 1984), and is characteristic of a society “in which its key social processes favour men” (Jackson, 1998, p. 15). Thus, the concept of gender *equality* implies that both men and women have equal opportunities to realise their full human rights, contribute to, and benefit from economic, social, cultural, and political development (USAID, 2008).

Indeed, the commonality in defining gender equality seems to be the ability for *both* men and women to be able to make choices about their lives *and* the opportunity to contribute to the communities they reside in. For example, the key objective of Sweden’s gender equality policy 2010-2014 is “that women and men are to have the

same power to shape society and their own lives” (Government Offices of Sweden, 2012, p. 6). Gender equality is also defined as “equality under the law, equality of opportunity and equality of voice” and is important in its role to both enhance the economic growth and health of nations (World Bank, 2001, p. 2).

Accordingly, gender inequality may be seen as differences between men and women in the area of decision-making, power, and in the control of critical resources such as income and assets (Mason, 1986). For some women these inequalities occur both within the home, and in the larger community, whereas other women may achieve gender equality in one aspect of their lives, but not in others. A comprehensive study of 93 pre-industrial societies by Whyte in 1978, as cited in Mason (1986) revealed that women’s status varied across different aspects of women’s lives, thus questioning the normative concept of “women’s status.”

The literature also reports that there are instances where men are more disadvantaged than women, for example, the expectation that men, but not women, serve on the front line in wars and work in hazardous occupations, however overall, women are more disadvantaged than men in jobs, political participation, and wages. Hence, most efforts are aimed at raising women’s status relative to men (Lorber, 2010). Particularly in patriarchal societies, defined as “systemic social structures that institutionalise male physical, social and economic power of women” (Reeves & Baden, 2000, p. 28), women remain excluded from important decision-making structures, despite high living standards. E.g. Japan and Saudi Arabia. The subordination, marginalisation, and exclusion of women reduce their personal autonomy, limiting their ability to shape their own lives and that of society.

For women to achieve their full ‘functionings’ or ‘capabilities’ (Sen, 1999) women must be able to access and have control over resources that enable them to challenge the existing power relations between men and women and the patriarchal structures. Thus, the process of improving women’s access to and control over key resources that enable them to create lives that they value may be seen as empowering women.

2.6.5 Women's empowerment

The Beijing Declaration of 1995 and Platform for Action set the agenda for the empowerment of women, and reaffirmed “women’s rights as human rights.” This document stresses that the empowerment of women and the equalisation of men and women’s rights are of critical concern for “achieving political, social, economic, cultural, and environmental security among all peoples” (United Nations, 1995). Since then, the term “empowerment” has been extensively used, with many attempts to conceptualise it. In a review of the empowerment literature Ibrahim and Alkire (2007) identify more than 20 definitions of “empowerment.” These include empowerment as, “a process of change during which those who have been denied the ability to make choices acquire such an ability” (Kabeer, 2005), and as the process of “enhancing the capacity of poor people to influence the state institutions that affect their lives, by strengthening their participation in political processes and local decision-making” (World Bank, 2001, p. 39).

Moghadam and Senftova, (2005, p. 391) conceptualise women’s empowerment in terms of “the achievement of basic capabilities, legal rights, and participation in key social, economic, and political domains.” The commonality in these definitions, as Ibrahim and Alkire (2007) highlight in their paper, is the relational aspect between a woman’s individual agency and the macro-social structures or institutions that enhance or restrict a woman’s ability to exercise that agency. In essence, empowerment is generally conceptualised as a process, where, over time, an individual moves from a position of lower status to a position of higher status (Kabeer, 1999; Rowlands, 1995).

Kabeer (1999) argues that women must have the freedom to decide whether to take advantage of the resources and opportunities made available to them, and stresses that the informal granting of rights is just as important as the formal laws or legislation that grant women social or economic rights. For example, despite passing inheritance laws that favour women, women may not be aware of their rights or they may feel obliged to pass on the benefits to the men in the family.

Finally, there can be no discussion of gender, gender equality, and women's empowerment without mentioning power. Unequal power relations between men and women are pervasive and operate at all levels in society. These occur at an institutional level, in the judiciary, the police, and in banks, and at household level within families, and within marriages (Charmes & Wieringa, 2003). Lukes' theory of three dimensions of power originally outlined in 1986 distinguishes between overt power, unacknowledged inequalities, and latent power. The first dimension reflects power exercised through force or protest. The second refers to the processes by which one group suppresses another's concerns, thus denying them an opportunity to make claims of injustice. The third dimension refers to latent tensions that occur because certain cultural norms are not seen as discriminatory, but natural or in the pursuit of a greater good (Lukes, 2005). Lorber (2010) identifies some of the ways that men exercise power over women. For example; sexual exploitation and violence against women are tools to exercise power over women in an overt fashion; beatings and murder prevent women leaving relationships, and rape is commonly used as a form of warfare.

2.7 Frameworks for Measuring Gender Equality and Women's Empowerment

One of the first frameworks developed to measure women's status was by Janet Giele in the 1970s. It was comprised of six domains including political expression and rights; work and mobility; family formation, duration and size; education; health and sexual control and cultural expression (Giele, 1977). This framework is a useful guide as it goes beyond basic indicators beneficial for development and reflects women's ability to make decisions about their lives. In asking questions about women's ability to own property, to move freely around, to have access to education and the existence of laws to prevent or punish violence against women, it also enables researchers to use either quantitative or qualitative measures. It also allows researchers to ask questions about the amount of time women spend in unpaid caring and in leisure activities. Moreover, this framework makes visible the role of institutions in portraying images of women in society, further perpetuating the dominant national attitudes toward women. However, this cultural aspect is difficult to measure quantitatively.

Focussing on gender equality, rather than women's status, Young, Fort & Danner (1994) developed the Social Indicators of Gender Inequality. This framework is comprised of 21 indicators that represent measures of women's lives across five key dimensions of social life – physical well-being, public power, family formation, education, and economic activity. These authors define gender inequality as, “the departure from parity in the representation of women and men in key dimensions of social life.”

Hence, their indicators compare the different outcomes for men and women that occur because of systematic gender biases that favour men. The indicators in this database are ratios that include; sex ratio, infant mortality rate, births attended by health staff, seats in national legislature, age difference in years at first marriage, total fertility rate, use of contraception, literacy, educational achievement and enrollments, female labour force participation, and sector of economic activity, all ages. Whilst comprehensive, its operationalisation is constrained by the availability of data in the Women's Indicators and Statistics database (WISTAT). Also, there is no measure of violence against women included, nor is there any reference to culture. The separation of human rights and social relations is also a concern. All the key dimensions reflect varying freedoms thus separating the two spheres seems redundant. The other concern with using parity data is that we run the risk of viewing men's achievements as the benchmark for what women should be striving for. It ignores women's lived experiences and assumes women's aspirations are the same as men's (Austen, Jefferson, & Thein, 2003).

The Women's Empowerment Matrix (WEM) developed by Wieringa (1994) also takes into account separates spheres of women's lives such as physical, socio-cultural, religious, political, legal, and economic. However, this model recognises that women's capabilities and rights may vary in different domains, thus it seeks to capture women's empowerment across six levels. These levels include the individual, the household, community, state, region, and a global level. Further development of the WEM model recommends that the matrix capture the three dimensions of power as outlined in the previous section 2.6.5, to make visible the 'latent' and 'natural' levels of power (Charmes & Wieringa, 2003). By challenging the assumption that inequalities between men and women are always visible and

universal this model makes a significant contribution to frameworks on empowerment.

Finally, inspired by the twelve critical areas of concern stated in the Beijing Platform for Action, Moghadam & Senftova (2005) proposed an empowerment framework for women including a set of 44 indicators across seven domains that reflect the achievement of women's capabilities, rights, and participation in key social, economic, and political domains. These domains include: socio-demographic (life expectancy at birth, sex ratios, and total fertility rate), bodily integrity and health, literacy and educational attainment, economic participation and rights, political participation and rights; cultural participation and rights, and the ratification of international legal frames for women's rights. In this last domain there are indicators on the year of ratification, and whether countries have lodged reservations on the following legal frames: the Convention on the Elimination of All Forms of Discrimination against Women (CEDAW); the Beijing Declaration and Platform for Action; the International Covenant on Economic, Social and Cultural Rights (ICESCR); the the International Covenant on Civil and Political Rights (ICCPR); two UNESCO Conventions; and three International Labour Organisation (ILO) Conventions.

Like the previous frameworks this model provides researchers with a strong theoretical platform, however, again, there are difficulties with operationalising all domains within the framework, in particular the cultural domain, as these indicators are largely absent from international datasets. Also, the concept of culture is highly contested as evidenced by the variety of measures suggested to measure this domain. Giele's (1977) framework asks questions pertaining to images of women and women's place, whereas Moghadam & Senftova (2005) argue that, at a minimum, measures of cultural rights should include women's access to and participation in cultural institutions and decision-making. For example, women's access to computers, the Internet, the percentage of staff in museums that are women, the existence of paternity, and the number of NGOs involved in women's issues.

Additionally, measures of international legal frameworks such as CEDAW are not necessarily reflective of action on empowerment, as the intent is often not matched

by the implementation. Indeed, many countries that are signatories to this document have cited reservations that allow national personal status laws and family laws to override their national obligations to CEDAW. Furthermore, there are nations such as the United States who are not signatories to CEDAW, casting further doubt on its validity as an empowerment measure. As the monitoring of compliance with these conventions improves perhaps their validity as empowerment measures will also increase. Finally, there is no mention of the unpaid caring work that women do; as grandmothers, mothers, daughters, sisters, or aunts.

The purpose of reviewing the current gender equality and empowerment frameworks was to highlight the disparity between developing theoretical frameworks in this field and the subsequent challenges of operationalising them, particularly within the in-county domains of political and cultural expression. These frameworks provide an important function in guiding further theoretical arguments and data collection, particularly data collection that is guided by the lived experiences of women.

For this study, a theoretical framework to examine the relationship between gender equality, women's empowerment, and democratic development at a macro level has been developed. In doing so, elements of gender equality and women's empowerment have been captured across many domains for which relevant data is available, excluding cultural expression. Central to this approach is recognising that gender as a social construction cuts across all aspects of women's lives.

2.8 History of Women and Development

The key terms and the development of the theoretical argument for the relationship between gender equality, women's empowerment, and democracy is informed by the history of women's rights in recent times, from the first recognition of the importance of women's rights to present day efforts at gender mainstreaming. The UN Charter (1945) was the first international document to call for "equal rights and fundamental freedoms for all, free from gender discrimination." Other international treaties and covenants have reaffirmed this initial treatise on human rights, including the signing of the Vienna Declaration for Human Rights and Action in 1993, the ICESCR, the ICCPR (Population Council, 1993), and the Convention on the

Elimination of Discrimination against Women (CEDAW). Since then, there have been fundamental changes in how gender is defined and how women's rights are promoted by the international community as both an intrinsic goal, and as a tool for advancing development in developing nations. A brief outline of the key movements relevant to the period of this study will be discussed next.

2.8.1 The Women in Development Movement

The Women in Development (WID) movement emerged in the 1970s on the back of the publication of Esther Boserup's research "Women in Economic Development" (Boserup, 1970). Boserup's research was the first to shed light on the sexual division of labour in agricultural economies. Moreover, her research highlighted how men and women were benefitting differently from development, to the detriment of women. The response from the WID movement was to advocate for greater social justice and equity for women including; access to employment, education, political, and social opportunities. Despite campaigning actively for women's rights, this approach was criticised for focussing primarily on women's economic or productive role without considering women's reproductive or social roles. The view was that the WID's priorities were aimed at what women could do for development and productivity, rather than what development could do for women. Additionally, the WID was criticised for not addressing the gender relations between men and women or the social structures and institutions that perpetuate women's subordinate role and keep their status low. The assumption was that promoting women's participation in the existing economic structures would automatically redress the equality between the sexes (Rathgeber, 1990; Razavi & Miller, 1995).

2.8.2 The Women and Development Approach

The Women and Development approach (WAD) took a slightly different perspective focussing on class-based inequities, where women were seen as just one group of many exploited groups (Singh, 2007). The WAD approach assumed that when international structures became more equitable women's participation economically, socially and politically would improve. Like the WID, the WAD was also criticised for prioritising women's productive role, again neglecting the role of women in social and reproductive spheres (Rathgeber, 1990; Singh, 2007).

2.8.3 The Gender and Development Approach

The 1980s saw the emergence of the Gender and Development approach (GAD) which saw the focus shift from improving the status of women to changing the unequal social relations between men and women. Proponents of the GAD approach criticised supporters of the WID for ignoring the cultural context of women's lives namely patriarchy, and the unequal gender relations that keep women's status low. They argued that raising the status of women through education and employment was insufficient without challenging the social institutions in which men exercise greater power over women (Moore & Shackman, 1996). However, this approach was criticised for its homogenisation of third world women, and its' presumption that all women are required to be educated and in some form of employment in order for them to have individual agency. The GAD was also criticised for its implicit assumption that culture impacts negatively on women's lives (Singh, 2007).

2.8.4 Women, Culture and Development Framework

To address these weaknesses, particularly the way culture was conceptualised, Chua, Bhavnani & Foran (2000) created the Women, Culture, and Development (WCD) framework. This framework focuses on each individual woman and frames culture as lived experiences, and structures of feeling, that attends to the relationship between production and reproduction in women's lives, and centres women's agency and struggles (Chua et al., 2000). Central to the WCD framework is removing economic development from its privileged role of improving the lives of people in developing countries

As highlighted above, there has been a significant shift in the women and development discourse over the last thirty years. From Boserup's initial assertion that women were not receiving the same benefits from economic development as men (Boserup, 1970), to more recent approaches that remove economic development from its central role in improving women's lives, there is greater recognition of the interplay between women's productive and reproductive lives and how gendered structures and institutions and culture impact on women's ability to access and benefit from improvements in national wealth.

2.9 Global Trends Affecting Gender Equality and Women's Empowerment from 1970 to 2000

Alongside the wave of democratisation that occurred during this period, other significant global events and trends during this period that are of significance. Perhaps the most noteworthy development during the period from 1970-2005 was the near doubling of the world's population, from 3.6 billion in 1970 to 6.5 billion in 2005. Public Health campaigns such as immunisation programmes, improved hygiene, sanitation, and access to water resulted in a decrease in infant and child mortality rates and a rise in average life expectancy. Concomitantly, the advent of the contraceptive pill in the 1960s gave women greater control over their reproductive health and led to falls in fertility rates in both the developed and developing worlds. This drop in fertility rates coincided with increases in girls' schooling (Barro & Lee, 2010) and increased female labour participation (Bloom, Canning, Fink, & Finlay, 2009). This period also experienced rapid urbanisation, as people moved away from agricultural-based industry in the rural regions to more industrialised work in the cities.

Another major development during this period was the growth of transnational networks advancing human rights, in particular the rights of women. The signing of the Universal Declaration of Human Rights in 1948 spawned many conventions and conferences on the rights of the individual, in particular the rights of women and children. The UN General Assembly declared 1975 as International Women's Year and held the first World Conference on Women, in Mexico City. This was followed by the UN Decade for Women. In 1979 the UN Assembly adopted the Convention on the Elimination of All Forms of Discrimination against Women (CEDAW), which is described as an International Bill of Rights for Women. This landmark convention explicitly defined discrimination against women and set forth an agenda to end such discrimination. CEDAW recognises the role of culture and tradition in shaping gender roles and it became the first human rights treaty to affirm the reproductive rights of women.

In 1985, the World Conference was held in Nairobi to review the United Nation's Decade for Women. This conference was significant in declaring "*all* issues to be

women's issues", and this concept was strengthened further at the Fourth World Conference on Women in Beijing in 1995 with the adoption of the Beijing Platform for Action. This platform for action set an agenda for the empowerment of women, stating that, "the human rights of women and of the girl child are an inalienable, integral and indivisible part of universal human rights." Finally, "Promote gender equality and empower women" was named as the third Millennium Development goal (United Nations, 2000). Not only is this goal seen as important in its own right, but this third Millennium goal is also viewed as a tool to advance many of the other Millennium Development goals. Consequently, the international community now view gender equality and women's empowerment as central to achieving economic, social, and political freedoms for all.

2.10 Economic Development, Gender Equality and Democratic Development

The relationship between economic development, gender equality and democratic development has been largely untested with studies either examining the relationship between economic development and democracy, gender equality and democracy or economic development and gender equality. Underlying the modernisation theory is the assumption that all citizens benefit equally from increased national wealth. Hence, gender equality and democracy are viewed as natural consequences of economic development. However, a study looking at the effect of economic development (as represented by GDPpc) on gender equality, as represented by the Gender Inequality Index (GI) found that economic development was beneficial for some women, but not for others (Forsythe, Korzeniewicz, & Durrant, 2000). The authors concluded that their findings offered some support to the Gender and Development critique (GAD), an approach that views the persistence of gender inequalities, despite economic development, as reflective of systemic attitudes toward equality in a nation, including political equality.

Inglehart and Baker (2000) and Inglehart and Welzel (2009, 2010) further our understanding of this relationship between economic development, gender equality and democracy by proposing that gains in economic security and development shift people's focus from survival to self-expression values, such as trust, tolerance,

political activism, support for gender equality and emphasis on freedom of expression. Drawing on the work of Almond and Verba (1963) which argues for the existence of a democratic culture, the authors identify the societal changes in mass attitudes that arise post-industrialisation because of increases in economic development. Rather than being a consequence of democratisation these authors suggest that gender equality is an important part of the broad cultural changes taking place that support the spread of democracy (Inglehart, Norris, & Welzel, 2002). The work of these scholars is a major contribution to the democratisation literature because it is the most comprehensive attempt to explain the causal mechanism through which modernisation increases the desire or demand for democracy. However, implicit in these studies is the presumption that gender equality and political liberalisation occur because of economic development, rather than the causal arrow running in the reverse direction. The next section reviews the limited literature in the field of gender equality and democracy.

2.11 Gender Equality and Democracy

Democratic institutions have been in existence among developed nations long before men and women had equal rights, suggesting that causality runs from democracy to gender equality. Hence, previous studies have focussed primarily on the effect of democracy on gender equality. Theoretically, the transition to democracy should benefit women as they are afforded new platforms for political participation and increased opportunities to participate in the new regime. However, there is little evidence that democratic transitions improve the health and status of women, except through increased economic development. Examining the effects of global democracy on women's health from 1970 to 2000 Wejnert (2008) found that overall health care, but particularly maternal care had actually worsened. Testing the effect of democracy on gender equality, Beer (2009) found that whilst countries with a longer history of democracy (including universal suffrage) had lower fertility rates, greater numbers of women in the labour force, and a reduced gap in life expectancy, the expected outcome did not occur for gender equality in education. Countries with a longer experience of democracy or higher levels of democracy had a wider gap in education between males and females. Moreover, socio-economic factors such as

GDP, urbanisation and the illiteracy rate were found to be stronger predictors of the gender equality measures than the level of democracy or length of experience with it.

In an earlier study, Brown (2004) found no evidence of a relationship between broad measures of democracy⁶ and gender inequality in education. However, once the Polity data were separated into its six components an association between the process of executive recruitment and gender inequality was found. Brown concludes that while broad measures of political regime type are not related to gender inequality, the specific processes used to recruit and select chief executives do influence opportunities for women. Since then, other studies have concluded that religion, not political status, has a greater impact on gender equality in education enrolments (Cooray & Potrafke, 2011).

Evidence from India, one of the world's largest democracies also challenges the idea of a causal link between democracy and gender equality. Despite being democratic for over fifty years and being one of the first countries to give women the vote (Indian women were given the vote in 1928), several researchers like Sen, and Coale calculated that somewhere in the range of 27 – 37 million women are missing in India because of son preference, injuries, and systematic discrimination against girls (Anderson & Ray, 2010; Hudson & den Boer, 2002). Moreover, the Gender Equity Index recently distributed by Social Watch in 2012 ranked India 145th out of 154 countries for closing the gap between men and women in the areas of education, employment, and political empowerment. Another democratic nation is Japan which Social Watch ranked 107th out of 154, well below the rankings of Singapore and China.⁷ These two nations ranked 67th and 81st respectively, despite governing along more authoritarian lines.

Furthermore, many studies show that democracy on its own does little to improve women's legislative representation; in fact in some nations democracy may actually

⁶ Brown's broad democracy measures include Przeworski's measure, Gastil's measure and the PolityIII measure.

⁷ China also has a problem with missing women – somewhere in the region of 34-40 million missing – (Hudson & den Boer, 2002).

hinder women's access to politics or real political power (Kenworthy & Malami, 1999; Paxton, 1997; Paxton & Kunovich, 2003; Reynolds, 1999). A recent study by Fallon, Swiss and Viterna (2012) showed that it is the democratisation process itself, rather than the level of democracy that is most salient for increasing and maintaining women's legislative representation. These findings suggest that gender equality and women's empowerment may have an important role to play in driving democratic development, rather than the reverse. However, further research is needed to test this assumption.

Fish (2002) was the first to highlight a possible link between gender equality and democracy. Using cross-sectional data to examine the causal link between predominantly Islamic and authoritarian regimes, Fish discovered that the subordinate status of women was a significant factor contributing to the democratic deficit in Muslim countries. More specifically, Fish identified gender gaps in literacy, sex ratio imbalances (more males than females in the population), low percentages of women in government and a low gender empowerment score (GEM)⁸ as being significantly correlated with more authoritarian regimes. In addition, these gender measures all reduced the negative association between Islam and authoritarianism.

Donno & Russett (2004) also tested this relationship between gender equality and authoritarian regimes, but supplemented Fish's measures with a larger set of explanatory variables and four additional measures of women's empowerment. These authors also changed the time period of the dependent variable to create a lag structure in the model to establish causality. They found that the inclusion of these empowerment indicators (excluding the proportion of women in government) exerted no causal effect on regime type, nor did it affect the negative and significant effect of Islamic religious tradition, membership in the Arab League and fatal international

⁸ The Gender Empowerment Measure (GEM) consists of % of women in parliamentary seats, % of female legislators, senior officials and managers, % of female professional and technical workers, and ratio of estimated female to male earned income (UNDP, 2011).

militarised disputes on democracy. Their results revealed that the negative impact of Islam on democracy was related to being an Arab nation rather than Islam per se.

The studies by Fish (2002) and Donno and Russett (2004) make an important contribution to the sparse literature examining the role of gender equality in the democratic development process. However, they do not provide a definitive answer to questions about these relationships. Both studies included developed and developing countries and have (as Fish concedes) difficulty in identifying the pattern of causation in the many developed countries that were democratic throughout their study period. Donno and Russett's findings are limited further to the short time period investigated. Indicators in this study were taken from the mid 1990s and a later period for democracy, years 1998-99 through to 2000-2001 was used. Such a short time period fails to account for the fact that improvements in women's status and their effects on democracy may take time to manifest. In addition, many of the countries included in their sample were already democratic prior to this period, again creating endogeneity problems. Finally, both studies used sex ratios for the total population. Population sex ratios change throughout the lifespan with the sex ratio at marriageable age being the most relevant in determining women's life choices and opportunities (Guttentag & Secord, 1983).

While these previous studies have much to offer in terms of highlighting a possible link between gender equality and democracy, what is missing from the literature is a clear understanding of the concepts around gender and women's rights. Fish (2002) describes his indicators as measuring women's status, women's station, subordinate status of women, and treatment of women. Whereas, Donno et al. (2004) refer to these same measures as women's rights and female empowerment measures. In another study linking gender equality with modernisation and democratisation, its authors (Inglehart et al., 2002) use the percentage of women in parliament to reflect gender equality.

In a study reversing the direction of causality, that is, testing the impact of democracy on gender equality, Beer (2009) argues *theoretically* for gender equality to be measured across three domains; capabilities, opportunities, and empowerment. Capabilities are measured by; the percentage of population that is female, the ratio of

female life expectancy at birth to males, fertility rates and the average female educational attainment to males; and opportunities are measured by the percentage of women in the labour force. However, only the first two domains were tested, as no data were available to test the third domain, empowerment. These studies again highlight the methodological challenge in moving from conceptualisation to operationalisation, as discussed in Section 2.6. The challenges of measuring gender equality and women's empowerment are explored fully in Chapter Four: Research Design.

2.12 Chapter Summary

This chapter has provided background information and reviewed existing theories and research in this field to provide some context for this study. A strong argument favouring democracy as a form of government that best enables citizens to exercise their personal and political freedoms was provided, followed by a discussion about the inherent problems in conceptualising such a complex, multi-faceted construct as democracy. Particular attention was paid to the most favoured theory of democratic development, the modernisation theory.

A working definition for gender equality and women's empowerment was provided, and the inherent problems in conceptualising and operationalising these concepts were then discussed. A critique of the previous literature examining gender equality and democracy highlighted the need for further research in this area to address endogeneity issues and to build upon Fish's (2002) provisional theory about why this relationship exists.

This chapter has highlighted the difficulties in conceptualising the complex and multi-faceted concepts in this study namely, democracy, gender equality, and women's empowerment. The review of the modernisation theory and subsequent neo-modernisation approaches to modernisation theory highlight the research gaps in the literature and suggest a possible role for gender equality and women's empowerment in democratic development theory.

Finally, the conceptualisation of gender as a social institution, the emergence of an international women's movement, and the Gender and Development and Women, and Culture and Development frameworks have provided a backdrop against which the theoretical argument and model for this study have been developed. The next chapter introduces the theoretical and conceptual model used in the study.

Chapter Three: The Conceptual and Theoretical Model

3.0 Introduction

Following on from Chapter Two, which provided background information about concepts around gender and democracy, this chapter establishes a strong conceptual and theoretical framework for the relationship between gender equality and democracy to exist. Specifically, it argues for the causal arrow to run from gender equality and women's empowerment to democratic development. Additionally, this chapter outlines the link between the previous literature and this project's aims and objectives.

3.1 Theoretical Argument for the Relationship between Gender Equality and Democratic Development

Chapter Two provided an introduction to the most widely researched theory of democratic development, modernisation and its successor, neo-modernisation which highlights the role of self-expression values for democracy. Implicit in this literature is that development is an evolutionary process whereby gender equality and democracy emerge once a minimum level of income is attained. However, not all countries have followed this trajectory. Wealthy nations such as Singapore and Qatar have not democratised, in contrast, other nations, such as Mali and Benin, have become democratic despite low levels of national income. This challenges the core assumption of the modernisation theories that wealth naturally leads to democracy, and suggests a possible role for gender equality and women's empowerment to play in democratic development. While the work of Fish (2002) and Inglehart et al. (2000; 2009, 2010) has made a significant contribution to our understanding of the relationship between gender equality and democracy, what is missing from these studies is a convincing theoretical framework linking the two and longitudinal analyses to show causation.

Accordingly, this chapter builds a theoretical argument in favour of a causal mechanism linking gender equality, women's empowerment, and democracy, and develops a framework that informs the research design and methods in Chapter Four

and underpins the analyses in Chapters Five to Seven. The theoretical argument offers a gendered approach to democratic development theory and is informed by both qualitative and quantitative studies from multiple disciplines including comparative politics, feminist economics, gender scholarship, and public health.

3.1.1 Gendered perspective

The idea of “multiple modernities” emphasises the non-linear nature of modernisation as it intersects with a nation’s existing cultural and institutional heritage, thus generating varying social, economic and political outcomes (Eisenstadt, 2000). Therefore, if democratic development is viewed through a gender lens it is possible to see how individuals can not only transform “gender” and the inequalities that are perpetuated by it, but also challenge and transform other institutions that perpetuate it, such as schools, churches, work and government (Acker, 1992; Martin, 2004; West & Zimmerman, 1987). As Georgina Waylen states:

“Any analysis of democratisation that fails to incorporate a gendered perspective-that ignores the actions and impact of certain groups-will be flawed. The study of comparative politics can only be improved by creating a framework for analysing the interplay between gender relations and democratisation” (Waylen, 1994, p. 327).

It is this interplay between women’s status and a nation’s economic, social, cultural, and political institutions that is important to recognise. As these state institutions enhance or constrain women’s status, women are, in turn, also shaping and influencing these institutions (Drèze & Sen, 2002). For example, a recent study examining eight sub-Saharan nations found that women are more likely to engage in political activities such as protests or marches, discuss politics with friends, and contact elected officials as the percentage of women in the national legislature increases (Barnes & Burchard, 2013).

Gender theory recognises households as being fully embedded and integrated into the wider systems of economic and political power (Ferree, 1990). Therefore, a culture of male dominance in the home and in the community is likely to reproduce itself at

higher economic and political levels in society (Li & Lavelly, 2003). Conversely, as women gain greater economic and social equality a more liberal and responsive government may emerge. It could be argued that political outcomes may simply be a reflection of patterns of behaviour and power within families and communities.

Feminist international studies have begun to include theories of gender into democratic peace theory and have emphasised the role of gender to explain state behavior (Tickner, 1992). For example, nations characterised by gender inequality, particularly states grounded in domestic violence, have been associated with higher levels of both intrastate and international violence (Caprioli, 2000, 2003, 2005; Melander, 2005) Unequal gender relations are mirrored and reinforced by social institutions. Thus, we would expect nations with a higher tolerance for violence against women to be more authoritarian.

Intuitively, the relationship between gender equality and democracy appears axiomatic. Since the UN Decade for Women (1975-1985), international strategies and conventions, such as the *Millennium Development Goals* and *Convention on the Elimination of All Forms of Discrimination against Women (CEDAW)*, have created a strong mandate to ensure that gender equality and women's empowerment are an essential component of both development and democracy. Underpinning both gender equality and democracy is a common set of values. Namely, respect for universal human rights, tolerance, equality, and the ability of citizens to be involved in the decision-making processes that affect their lives. But what is the *causal* mechanism underpinning such a relationship and why would women's empowerment in particular promote more democratic regimes? The following section highlights the direct and indirect effects of gender equality and women's empowerment on democratic development.

3.1.2 Human development

The preamble from the Universal Declaration of Rights (1948) declares that democracy is based on the “freely expressed will of the people to determine their own political, economic, social, and cultural systems and their full participation in all aspects of their lives.” From a human development perspective, economic, social, and political freedoms are necessary for people to create lives that they value (Sen,

1999). Therefore, deficits in any one of these areas mean that people do not have the capacity or opportunity to participate in the decision-making processes that affect their lives. In autocratic regimes citizens are unable to choose economic growth over poverty, modernisation over traditional practices; or argue for a set of social policies that may offer some relief from longstanding poverty or social inequalities. For example, in Singapore while the constitution allows for freedom of speech and individual liberty, in practice the government has little tolerance of dissent, thus citizens feel that they have little power to affect policy and set the national agenda (Leong, 2000).

Without the empowerment of women there can't be democracy as envisaged in the Universal Declaration of Human Rights. Women's ability to participate in shaping their own lives and that of society is limited unless women gain access to and control over resources that are tools for empowerment. These include, but are not limited to, education, reproduction, and employment. Changes in all three factors represent a significant cultural shift in gender roles within nations. It is likely that as women become less burdened by childbearing and childrearing, become more educated, and as they enter the workforce, they become increasingly conscious of the gender inequalities that exist in society. Over time, women realise that their demands for gender equality are linked to a political regime that is more responsive to their needs (Arat, 1994), thus a push for *both* gender equality and democratisation ensues. The *One Million Signatures Campaign* in Iran (Jahanshahrad, 2012) and the experience of the women's movements in Turkey in the 1980s (Arat, 1994) show that women's demands for a more liberal political regime are inextricably linked with their demand for more equal social and economic rights.

A similar argument is made by Welzel and Inglehart (2008), however they emphasise the role of economic development in empowering individuals, whereas this author argues for the importance of empowering individuals over and above economic development. They propose that as economic development increases people's economic and social resources their preoccupation with basic survival is replaced by a growing emphasis on self-expression values and matters outside their immediate sphere, including support for civil and political liberties, gender equality, and greater tolerance and trust for foreigners, gays and other minority groups. As a result, these

changes in mass attitudes increase the demand for a more responsive government.

In their book “Modernization, Cultural Change and Democracy” (2005), Inglehart and Welzel investigate the role of civic culture in promoting effective democracy by comparing the human development and the communitarian approaches. The human development approach emphasises individual human choice and sees the cultural basis of democracy as grounded in values that are inherently empowering or emancipative. In contrast the ‘communitarian approach’ emphasises communal values, interpersonal trust, and participation in voluntary activities and organisations to create a strong, cohesive society. While the human development approach allows for individual autonomy and freedom, the communitarian approach may often reflect what is best for the family unit or state. As a result, an individual’s own needs and desires may be subsumed under the needs of the ‘community’, or the national ‘interest’. Typically, women’s needs and interests suffer the most in societies that emphasise communitarian needs.

The results from Inglehart and Welzel’s (2005) study show that all five items measuring human development, (personal freedom, political liberty, tolerance of other people’s sexual liberty, self-expression values and signing petitions) were positively and significantly correlated with democracy. However, only one item from a measure of communitarianism, interpersonal trust, was significantly correlated with democracy. They concluded that a more emancipative culture, particularly an intrinsic preference for a political institution that guarantees human choice, namely democracy, was more important than explicit support for democratic institutions. One important implication of Welzel and Inglehart’s study is that nations that actively endow *both* men and women with personal freedoms, and the ability to make decisions about their own lives are more likely to become democratic than nations where there is support for democracy in principle, but little evidence in practice of individual liberty or tolerance for all citizens.

3.1.3 Cultural attitudes toward gender equality and democracy

The idea that cultural factors can promote or inhibit democracy is not new. For example many scholars have argued that the values underlying both Islam and liberal

democracy are incompatible. This is predicated on the fundamental distinction in the way that Islam and the West conceptualise sovereignty. Democracy comes from the Greek word *demos*, which signifies the sovereignty of the people, whereas in Islam sovereignty lies with God (Ehteshami, 2004). In Samuel P. Huntington's controversial "clash of civilisations" thesis (Huntington, 1993), he argues that the values of Islam and liberal democracy are opposing. However, using the World Value Survey to challenge this claim, Inglehart and Norris (2003) found that the clash of civilisations theory did not hold in relation to support for democracy, but rather for attitudes toward women. Their results showed a high level of support for democracy in Muslim countries,⁹ but significantly less support for women's rights, abortion, divorce, and sexual liberalisation. This suggests that despite supporting democracy in principle, the values commonly associated with democracy such as individual autonomy and tolerance for others are not widespread in Muslim nations, and this could pose a barrier to democratic development.

A study comparing Arab Muslim nations with non-Arab Muslim nations by Rizzo, Abdel-Latif, and Meyer (2007) points to further complexities in the relationship between attitudes to gender equality and democracy in Muslim countries. Their results showed that in non-Arab nations (Turkey, Iran, Bangladesh, Pakistan, Nigeria, and Indonesia) the majority were overwhelming supportive of both a democratic government and, to a lesser degree, gender equality. In these nations support for gender equality was strongly linked to support for democracy. However, in the Arab nations (Egypt, Algeria, Morocco, Saudi Arabia, and Jordan) the results presented a much more complex picture.

Favourable attitudes toward gender equality were not significantly related to support for democracy. Men favoured democracy more than women, but supporters of democracy were not necessarily supporters of women's rights. The majority of respondents supported women's equal rights to a university education and were

⁹ Cifti (2010) found that positive attitudes toward gender equality were strongly associated with support for democracy for ten Muslim nations across different regions. Cifti uses the following measures from the World Values Survey - "men should have more right to a job when jobs are scarce," "a university education is more important for boys," and "men make better political leaders."

against polygamy, however, the majority felt that women should obey their husband and that men had a greater right to employment when jobs were scarce. These authors concluded that supporters of gender equality were worried that democracy may bring with it deeply conservative opposition parties committed to eroding individual rights, in particular women's rights. A report from the Pew Research Centre¹⁰ found that overall, Muslim men are more likely to favour traditional roles for women, whereas, women want greater gender equality in the workplace and in their domestic lives (Pew Research Centre, 2004). Therefore, it raises the possibility that public support for democracy will waver if citizens perceive that their individual rights may be at risk under a new regime.

The experience of nations in the Muslim world also highlight the inherent problems in measuring *attitudes* toward gender equality, rather than more substantive measures of gender equality to promote democracy. Attitudes toward gender equality often reflect people's *experience* of gender equality. For example, four out of the six non-Arab Muslim countries have had female heads of state (Indonesia, Bangladesh, Pakistan, and Turkey), whereas, none of the Arab nations have experienced a woman leader, and have few women in political office.

3.1.4 Civil society, NGOs and women's movements

A further link between women's empowerment, gender equality, and democratic development may be associated with the role of international and regional organisations. The rise in membership of international and regional organisations and the adoption of international treaties supporting universal rights were found to have no direct influence on prospects for democracy in a country (Ulfelder, 2008) However, it is possible that the link between the emergence of an international system and democracy is through advancing gender equality and empowering women.

¹⁰ Pew Research Center is a subsidiary of the Pew Charitable Trusts. It is a non-partisan fact tank that informs the public about the issues, attitudes, and trends shaping America and the world. It conducts public opinion polling, demographic research, and other empirical social science research but does not take policy positions <http://www.pewresearch.org/about/>.

Proponents of liberal democratic theory envisage a strong civil society as a separate yet essential component of a democratic state (Diamond, 1994). Diamond conceptualises civil society as, “the realm of organised social life that is voluntary, self-generating, (largely) self-supporting, autonomous from the state, and bound by a legal order or set of shared rules” (Diamond, 1994, p. 5). He argues that with the support of “student movements, churches, professional associations, women's groups, trade unions, human rights organisations, producer groups, the press, civic associations...” individuals have pressed for democratic reform (Diamond, 1994, p. 5). Mainwaring (1989) also highlights the role of labour unions, church groups, and other organisations in the struggle against authoritarian governments. However, these reports fail to recognise that many of the participants in popular social movements were and are women (Waylen, 1994).

Non Government Organisations (NGOs) and social movements in civil society create an important link between gender equality and democratic development as the informal political space between the person and the state widens. Women’s participation and influence in this sphere has continued to grow as women have become more educated and support from transnational networks has legitimised their concerns (Safa, 1990). Globally, civil society has increased substantially with an explosion of NGOs of varying sizes and causes.¹¹ This growth of civil society and the rise in power and strength of women in NGOs challenges the status quo as they demand equal pay, abortion rights, divorce rights, and property rights.

The advancement of the women’s movement and women’s increased presence and influence in civil society also strengthens the democratic reform agenda as they raise their voices with men and create a shared language, (Jahanshahrad, 2012) advocating for change. In addition, because of their (often) apolitical stance and the sense that they are “dabbling” in women’s business, they are not seen as threatening to the elites (Waylen, 1994). Inadvertently, their influence and effect on society’s institutions and social structures grows. For example, in Tanzania and Uganda, in

¹¹ There are estimates that over one million NGOs are now operating in India alone (Smith et al. 1997 in Brown, Khagram, Moore, & Frumkin (2000)). At present the United Nations consults with over 3,500 NGOs (United Nations, 2012).

the early 1990s women took advantage of the new multi-party political system to create new autonomous associational forms that became a potent force for political reform (Tripp, 2000).

Feminists have criticised the conceptualisation of civil society as creating a distinct separation between the public and private spheres, with the private sphere being the domain of women and the public sphere the domain of men (Pateman, 1989; Young, 1990). This dichotomous construction views the familial relationships in the private sphere as irrelevant to notions of inclusion, citizenship and political rights in the public sphere, thus reinforcing men's domination in both spheres (Pateman, 1989). However, Jude Howell in *Gender and Civil Society* argues that civil society provides women with an associational space for political action when access to formal politics is limited or non-existent (Howell, 2006). This approach is supported in a recent paper examining the interrelation between civil society and democratic development (Jahanshahrad, 2012). In this review, Jahanshahrad documents the significant contribution of student movements, particularly the women's movement, to the democratisation movement in Iran. In campaigning against the undemocratic social and economic structures in Iran, the Iranian women's movement was instrumental in promoting a democratic way of thinking.

Scholars such as Waylen, Baldez, and Moghadam, have also highlighted the role of women's movements in Latin America, Europe and throughout the Middle East in advancing democracy. Throughout the 1970s and 1980s women's groups in Chile, Brazil, and Argentina, mobilised around both immediate social and economic conditions and human rights abuses (Waylen, 1994). The women's movement in Chile in the late 1980s saw an increasing rejection of both state-level violence and domestic violence and was the basis for a more liberal political regime. Their experience showed that progress toward democracy could be enhanced by explicitly addressing gender inequalities (Matear, 1999).

Throughout Latin America feminist groups, comprised of middle class professional women campaigned around women's subordination and authoritarianism both in society and within the home (Safa, 1990; Waylen, 1994). Integral to the emergence and survival of these groups were international organisations supporting feminist

discourse and the Catholic Church who provided an organisational base and resources for collective action (Alvarez, 1990; Baldez, 2003). Around the same time a new feminist movement also emerged in Turkey. In their campaign for expanding women's rights, the feminist movement also helped expand the "political space allotted to civil society" (Arat, 1994, p. 247). Through their push for more democratic freedoms such as equality and opportunity, women recognised that a more liberalised political regime was also needed to guarantee and protect those freedoms they were campaigning for (Arat, 1994).

The Algerian feminist movement first emerged in the late 1980s on the back of economic and political reforms, including changes to the family code prohibiting women from leaving the country unless accompanied by a male guardian. With the rise in popularity of the *Front Islamique du Salut* or Islamic Salvation Front (FIS), a political organisation whose main agenda was introducing Shari 'a law to Algeria, mass demonstrations from both men and women protesting against fundamental religious groups followed. Increasing levels of violence from the FIS then saw the emergence of feminist organisations fighting for both democracy and women's rights (Moghadam, 2003, pp. 169-171). As such, women's organisations became an integral part of the democratic movement that gained momentum during the 1990s (Moghadam, 2001). However, despite a new culture of multi-party elections, free press and free association, Algeria still has a long way to go before democracy is institutionalised in this North African nation (Quandt, 2004)¹²

Unfortunately, women's activism has had the opposite effect in Ethiopia. When the Ethiopian People's Revolutionary Democratic Front (EPRDF) first came to power in 1995, the ruling party was open to civil society activism. Ethiopia's first civil society organisation, the Ethiopian Women Lawyers Association (EWLA) was established in 1995 by professional women and was largely funded by overseas donors. Its purpose was to campaign for legal reform to secure women's rights, provide legal aid and public education, and highlight the problem of gender based violence in Ethiopia (Burgess, 2012). Burgess (2012) outlines how the EWLA's

¹² Algeria's Polity2 score moved from -9 in 1980 to 2 in 2010 (Marshall & Jaggers, 2011)

campaigning for the personal became profoundly political. Initially, the government didn't view the EWLA as a political threat compared with other organisations headed by men. However, as their criticism of the government's failure to address the issue of violence against women increased the government began to close down the political space allotted for civil society groups. In January 2010 the government passed a law prohibiting foreign organisations concerned with human/women's rights and democratic governance from operating in Ethiopia, including Ethiopian civil organisations receiving more than 10% of their funding from overseas donors. This example highlights that gender is profoundly political and that politics is in turn highly gendered.

3.1.5 Female education

For women's movements to advance and for women to have a real presence and influence in NGOs and other forms of civil societies, women need to be educated.

Woodberry (2012) highlights the role of the conversionary Protestant missionaries who played an important role in the early democratisation of Western Europe through mass education, including educating women despite resistance from the elites. By being involved in the running of religious organisations, women gained valuable skills and developed networks that could be translated to other types of grass roots movements. Together with expanded religious liberty these factors laid a foundation for democracy that was then copied by other religions, particularly Catholicism, post World War II.

A review of NGOs in Cyprus found that despite many women stating that family responsibilities prevented them from participating fully in these organisations, two NGOs confirmed that as women gained more education, their sense of empowerment, and their ability to contribute to these organisations increased (Mediterranean Institute for Gender Studies, 2006). The literature documents that in nations where women have the autonomy to make decisions about their own lives, their ability to negotiate power and make demands for increased civil and political freedoms increases. Subsequently, women become more politically active and join associations and groups outside the home (Basher, 2007; Kasapoglu & Ozerkmen, 2011).

Previous studies show that empowering women through education and employment increases their bargaining power, autonomy and wellbeing in the home (Li, 2005; Morrisson & Jütting, 2005), helps them develop greater decision-making skills (Kabeer & Mahmud, 2004), and reduces intimate partner violence (Kaya & Cook, 2010). This is an excerpt from the Beijing Platform for Action;

‘Inequality in the public arena can often start with discriminatory attitudes and practices and unequal power relations between women and men within the family ... The unequal division of labour and responsibilities within households based on unequal power relations also limits women’s potential to find the time and develop the skills required for participation in decision-making in wider public forums’ (United Nations, 1995 para. 185).

Empowering women through education and employment has a causal effect on democratic development by raising the benefits of political participation and expanding the broad base of support for democracy. “It is more appealing to participate in a collective activity, the more educated a person is, and the more educated the other participants are” (Glaeser et al., 2007, p. 88). These authors suggest that any activity that promotes collective action will also promote democracy. In 2006 the ‘*One Million Signatures Campaign*’ was established in Iran to achieve two main goals. The first was to raise women’s awareness of their individual human rights; the second was to demand legal changes to discriminatory laws against women. At the same time, the campaign strengthened the democratic reform agenda as women raised their voices with men advocating for change (Jahanshahrad, 2012). This was one of the strengths of the women’s movement in the lead up to the 2009 elections. They were able to bring together diverse groups of women *and* men actively agitating for socio-political change. Despite limited success in advancing democracy in 2009, the Iranian women’s movement has had a profound effect on the young women of Iran, concomitantly; it has been the main contributor to the growth of civil and democratic aspirations of *all* Iranians (Tahmasebi-Birgani, 2010). In Iran 90% of women are educated, hence, it would appear that the increased participation of women in education motivates *both* women and men to be more involved in grass roots political activism, thus expanding the broad base of support for democracy.

The idea of democracy being “self rule” by the people highlights the importance of women’s economic and social rights for democracy. Where women do not have the education, or civic skills to engage in the public debate to advance their causes and the opportunity to practise these skills through informal organisation or through formal work, they do not have sufficient political resources to be able to participate in or contribute to the democratic process (Bohman & Regh, 1997; Verba, Burns, & Schlozman, 1997). With the vote, but without education, women are still excluded from the decision-making process (Bohman, 1997). Education also socialises people to expect political and social opportunities (Meyer, 1977) and to think more favourably of the values associated with democracy (Evans & Rose, 2007; Shafiq, 2010). A more educated person is aware of the effect of government on the individual and is more likely to have opinions on a wider range of political issues, and to discuss them with a larger number of people. Education also provides them with a greater sense of being able to have influence the government, compared with less educated people (Almond & Verba, 1963).

With increased levels of education women begin to imagine another life for themselves. Education brings critical consciousness to the fore and women then move from a “position of unquestioning acceptance of the social order to a critical perspective on it.” Murphy-Graham (2009) described how women in Honduras improved their marital relationships by taking part in a secondary education program that gave them structural and relational resources and increased their gendered consciousness. This in turn gave women the capacity to demand better lives for themselves and their families.

Throughout the world women are predominantly the primary carers and teachers of children. Accordingly, they play a key role in their socialisation process. As women provide role models of working mothers to their families in developed nations, they pass on their beliefs about gender equality to their children, in particular their sons (Farré & Vella, 2007; Fernandez, Fogli, & Olivetti, 2004; Johnston, Schurer, & Shields, 2012). Concomitantly, and often unconsciously women also introduce the equivalent values of democracy into their families and communities such as tolerance for others, individual autonomy, and equality.

However, in some developing countries due to entrenched social and cultural norms combined with specified gender roles, many women, especially those not educated, either don't promote gender equality at home or they passively and in some situations actively, perpetuate patriarchy. Among the women there is a fear that promoting gender equality can impact household harmony and influence daughters. For example, in Kuwait the idea that women's rights were human rights were seen as threatening and resulted in more opposition from Kuwaiti women than support (Al-Mughni, 2001). There was also a fear that women's enfranchisement would destabilise society and erode existing family privileges and status (Longva, 1997).

Studies from India and Nepal show a positive relationship between female education and women's freedom of movement (Bloom, Wypij, & Gupta, 2001; Morgan & Niraula, 1995), which in turn increases their ability to assemble freely, join and participate in organisations. An Indian study found that parity in literacy rates between men and women were associated with higher proportions of women voting or running for political office (Gleason, 2001). In addition, a positive, modest correlation was found between secondary educational enrollment for girls and women's political representation for 119 countries (Grown, Gupta, & Khan, 2003).

Educating both boys and girls is acknowledged as a universal human right with benefits for individuals and society. However, educating girls produces many additional socio-economic societal gains. These include reduced fertility (Caldwell, 1982; Frey & Field, 2000; Lena & London, 1993), lower child mortality (Cleland & van Ginneken, 1988), and increased labour force participation of women (Bloom et al., 2009). Likewise, educating girls builds the human capital of the current and future generations of one half of the population, which in turn reduces the fertility rate of the next generation (Blumberg, 1989; Lehr, 2009), and promotes long-term economic growth (Galor & Weil, 1996; Lagerlöf, 2003; Psacharopoulos & Patrinos, 2004). Educating girls also reduces gender inequalities as educated women are also more likely than non-educated women to educate their sons *and* daughters, thus increasing the overall distribution of education (Basu, 2002). Psacharopoulos and Patrinos (2004) found that the economic return from girls' secondary education compared with boys' education was 18 percent versus 14 percent for boys (Bloom et al., 2001; Morgan & Niraula, 1995; Pande, Malhotra, & Grown, 2005).

However, the amount of education a woman receives is affected by cultural and economic factors. Muslim countries, and East and South Asia (e.g. Algeria, Indonesia, India) are less likely to invest in girls' education than boys' education (Barro & Lee, 2010; Sen, 2003). Where the overriding culture is for women to be educated in order to secure a husband, not secure employment, education, particularly at low levels, may not be an effective tool of empowerment. In addition, education may not be valuable for girls if the quality of education is poor or they do not receive equitable treatment at school. Gender parity, which is reflected in the number of enrolments, reflects the expansion of education (Benavot, 1996) rather than girls' receiving the same opportunity to learn as boys. Gender inequalities are quite high in some high income countries (Saudi Arabia, Libya, Iran, UAE, and Oman) reinforcing the strong role of cultural norms and traditions in shaping women's ability to participate and access resources such as education and employment (Morrisson & Jütting, 2005). However, as Tocqueville commented, the expansion of education to women typically goes along with a social structure that is generally more participatory and hence more receptive to democracy (Tocqueville, 1835 in Barro (1999)).

3.1.6 Fertility rates

Another key factor in women's empowerment, with clear links to democracy, is fertility control. High fertility rates are not only a result of systematic gender discrimination, but they also impact negatively on women's health and are related to lower levels of education, employment, and decision-making in both the family and the community (Blumberg, 1989; Gupta, 1995; UNDP, 1995). Furthermore, the expectation of women to be housewives and carers also lowers women's expectations and aspirations for careers (Huber, 1991), thus resulting in underemployment and lower paid jobs for women (Blumberg, 1991). In contrast, low fertility rates release women from the drudgery of domestic chores and enable them to engage in activities outside the home. Sub-Saharan Africa is the only region in the world where fertility declines have not followed the same path as other regions in the last 30 years. This is largely because of a cultural preference for large families (Caldwell & Caldwell, 1987). For example, In Benin and Burundi there was a slight *increase* in total number of births per women before the rates began to decrease.

Fertility rates for both nations hovered around 7 births per women in 1980 finally falling to below 6 in 2000 for Benin and 1999 for Burundi. Chad still has a total fertility rate over 6 births per woman. Other nations with high fertility rates in 1980 such as Iran and Libya were able to reduce their fertility rates at a much greater rate.

There is scant theoretical and empirical literature on the relationship between fertility rates and political regimes. Przeworski et al. (2000, p. 233) found that falling fertility rates are associated with transitions from dictatorships to democracies, for example in Authoritarian regimes that transitioned to democracy an average women had 4.1 children¹³, whereas rising fertility rates were associated with democratic reversals.

Moreover, they found that stable dictatorships record higher rates of fertility than stable democracies. In a recent, longitudinal study examining the effect of demography and education on democratisation, Lutz et al. found that fertility declines had an *independent and direct* effect on democratic development (Lutz et al., 2010). These authors concluded that a falling fertility rate affects the population age structure by decreasing the youth dependency ratio. This favourable demographic constellation is referred to as a “demographic gift” where the working population will grow much faster than the overall population and enhance economic growth through increased savings, capital accumulation, and productivity, (Bloom & Canning, 2003; Bloom & Williamson, 1998). These factors are believed to be conducive to democratic development.

This study posits that the main effect of fertility declines on democratic development occurs because an ability to control her fertility can transform a woman’s life. As falls in mortality rates and increases in life expectancy accompany falls in fertility, women’s lives are no longer solely devoted to childbearing and childrearing (Malhotra, 2012). This frees women to pursue other activities outside the home, such as further education and employment, particularly in nations where these opportunities exist. Furthermore, smaller families reduce the domestic workload

¹³ Albania had a TFR of 4.1 in 1980 and a TFR of 1.76 in 2005 (World Bank, 2011). It transitioned from Autocracy (Polity2 score of -9) to Democracy (Polity2 of score of 9) during this period.

giving women the time and space to engage in other informal political activities, such as voluntary associations and women's movements (Huber, 1991), thus contributing to the process of democratic development. In contrast, high fertility rates impact negatively on women's health and inhibit women's education, employment, and decision-making in both the family and the community (Blumberg, 1989; UNDP, 1995).

The social, cultural, economic, and political contexts of women's lives are critical in determining the extent to which fertility declines have the capacity to transform gender relations and thus improve women's lives. However, the ability of women to have some control over their fertility may be the single most important determinant of a woman's life prospects (Blumberg, 2007) and consequently her society's advancement.¹⁴

3.1.7 Female labour force participation

The expansion of economic rights for women is an important tool for women's empowerment and raising women's status (Chafetz, 1990; Collins, Chafetz, Blumberg, Coltrane, & Turner, 1993). While others have questioned its validity as a tool for empowering women in developing countries, particularly within the domestic sphere (Malhotra & Mather, 1997), female labour force participation, like education, appears to play an important role in raising women's political consciousness (Staeheli & Cope, 1994) and increasing women's political activity (Chhibber, 2002). Working women are more likely to vote (Welch, 1977), they are more likely to organise themselves into collective action (Moghadam, 1998; Ross, 2006), and they are more likely to be engaged in politics through exposure to political discussion and advocacy (Iversen & Rosenbluth, 2008). Women who are engaged in activities outside the home are more likely to be interested in politics and engage in political activities (Chhibber, 2002).

¹⁴ In situations where women have been forced to choose a small family size through national policies e.g. in Korea (Hyoung, 1997) and China, then the reduction in fertility rates may not always be an accurate representation of women's empowerment.

Educated women in full time positions are also more likely to be involved in political activities, such as voting, working in a campaign, protesting, contacting a public official, and being affiliated with a political organisation (Schlozman, Burns, & Verba, 1999). Women's entry into the workforce creates the impetus for democratic transition as women are increasingly exposed to gender discrimination, and try to juggle the demands of both work and home. Regular association with other women at work creates opportunities to share grievances and discusses strategies to overcome them. This may be lobbying unions to improve their working conditions or forming organisations to protest against discriminatory laws and practices. Concomitantly, working women's policy interests change as their challenges become increasingly disparate to those of the males in their family (Iversen & Rosenbluth, 2006). For example, as mothers join the workforce child day care needs become more pressing as women are typically the family's primary caregivers. Gradually, women realise that their demands for gender equality are linked to a political regime that is more responsive to their needs, thus a push for both gender equality and democratisation ensues.

Conversely, women in the traditional role of wife and mother are less likely to agitate for change or mobilise politically. Women's participation in the labour force gives women individual autonomy and disperses the concentration of power from men in society. The importance of women's struggle for full citizenship – that is participation across all domains – contributes to changes in the relationship between the state and the citizen (Moghadam, 2007). The presence of more women in formal employment, in parliament, in the judiciary, and in leadership positions ensures that women's struggle for equal rights becomes highly visible as it is played out in the public sphere (Kazemi, 2000). This weakens the strength of the elites and creates opportunities for democratic development to occur.

Additionally, women's economic participation is important for democratic development because it changes the social structure of society from a pyramid, with a large lower class, to a diamond with a growing middle class. Women are more likely than men to save and to reinvest their earnings back in to the health and education of their families (Jowett, 2000; Sinha, Raju, & Morrison, 2007), further expanding the human capital base of the middle class in the current and future

generations. Consequently, a stronger middle class emerges, creating a greater impetus for political change. Women's exclusion from the labour force appears to be a key factor in explaining the persistence of autocratic regimes in Muslim countries (Moghadam, 2003; Ross, 2008).

Finally, excluding women from the workforce may inhibit democratic development by slowing economic growth and productivity. Gender inequality in employment has been found to slow growth and labour productivity (Esteve-Volart, 2004; Klasen, 1999; Klasen & Lamanna, 2009). Some of the suggestions for how it does this is; by reducing the talent pool of managers and workers that employers have to draw from, thereby reducing the average ability of the workforce. Additionally, household activities are less productive than activities outside the home, and women who see their future solely within the home may be less likely to invest in their own human capital (Esteve-Volart, 2004). Gender inequalities in employment appear to be linked closely to gender inequalities in education, thus it may be difficult to ascertain the direction of causation (Klasen & Lamanna, 2009). There are other aspects of gender equality that impact on democratic development, in part, by restricting women's ability to become educated, employed, and to choose the size of their family. These include demographic and cultural factors and are discussed in the next section.

3.1.8 Missing women and sex ratio imbalances

For democracy to emerge and be sustained the government must be responsive to the needs of its populace. In countries, such as Bahrain or Pakistan where women do not even make up half the population there is there are fewer opportunities for their voices to be heard. Sen (1989) estimated that in the 1980s close to 100 million women were "missing", referring to the number of women who had died as a result of unequal access to resources in some parts of the developing world, particularly South Asia and the Middle East. This phenomenon reflects the difference between the actual number of women in these countries and the number of women that we would expect to see if there was no gender discrimination (Osmani & Sen, 2003). The effect of this marginalisation constrains women's ability to participate fully in society and demand more civil and political rights. Moreover, regardless of women's abortion rights, sex-selective abortion to determine the sex of one's children

is a form of violence against girls (Bardhan & Klasen, 1999). Adverse sex ratios also impede the personal freedom of a person which is harmful for true democracy (Sen, 1999)

The main theoretical argument for the relationship between sex ratios and democratic development draws on the sex ratio theory proposed by Guttentag and Secord in their book *Too Many Women* (1983). The central premise of the sex ratio theory is that when the sex ratio becomes abnormally low or high during men and women's marriageable years, it can have profound consequences for the balance of social power between males and females, consequently women's life circumstances.

Drawing on social exchange theory, Guttentag and Secord (1983) argue that in societies where one sex is in short supply, they are highly valued as they are a precious resource. Hence, in societies where men are in surplus, women's traditional role of wife and mother is encouraged, with women viewing their role as being complementary to their husbands. Marriage takes place at an earlier age, thus fertility rates are high, and women are less likely to seek alternative activities outside the home, such as further education and employment. In a study of 16 U.S. states, Amuedo-Dorantes and Grossbard (2007) found a negative relationship between high sex ratios and female labour force participation. An increase in sex ratio from 1.0 to 1.10 was associated with a decrease in female labour force participation of 3%.

In contrast, societies with a surplus of females experience the opposite. Women become less valued by society and are seen largely as sex objects, infinitely dispensable. Evidence shows that nations with a shortage of males record higher rates of promiscuity among men, higher rates of illegitimacy, and frequent divorces (South & Trent, 1988, p. 1098; Trent & South, 1989). In addition, the number of single households headed by women is high (Messner & Sampson, 1991). Studies on black families in America have also shown a relationship between low sex ratios and high divorce rates, illegitimate births, and single female headed families (Darity & Myers, 1984). With many women to choose from men's ability to move from relationship to relationship is high. To overcome feelings of powerlessness, women are more likely to establish themselves independently through education and employment, thus reducing their dependence on men. The age at which people marry increases and some women will never marry or bear children. Low sex ratios

may also create the impetus for feminist movements or women's organisations to emerge as women become more active agents and increasingly demand the same rights and opportunities as men (Guttentag & Secord, 1983). For example, in the aftermath of the 1994 genocides in Rwanda, when 800,000 Tutsis and Hutus moderates were slaughtered the structure of the population changed dramatically resulting in a high ratio of women to men¹⁵. As a result women were forced to take up roles previously unavailable to them such as the economic heads of households and government administrators (Burnet, 2008).

The indirect impact of high sex ratios on political regime status is to reduce the human capital of women and subsequent children through early marriage. Early marriage, between the ages of 15-19, and in some countries such as Ethiopia, Nepal, Niger and Yemen even earlier¹⁶, is associated with negative outcomes for maternal and child health across developing countries. Women in Jeddah who married before the age of 16 were at a double risk of developing chronic diseases and experiencing miscarriage, stillbirths, and infant deaths (Shawky & Milaat, 2001). In Kenya and Zambia married adolescent girls have higher rates of HIV infection than do sexually active unmarried girls mainly because their husbands are three times more likely to be HIV positive than boyfriends of single girls. Moreover, early marriage increases coital frequency, decreases condom use, and reduces abstinence as young girls do not have the skills to negotiate their sexual lives (Clark, 2004). Finally, married, adolescent women in India report poor reproductive health outcomes, higher maternal mortality rates and higher neo-natal mortality rates than older women (Jejeebhoy, 1998). These negative health outcomes affect women's ability to shape their lives and that of society.

Another argument for the effect of sex ratios on political regime status is that countries with a surplus of males will tend to develop authoritarian political systems over time (Hudson & den Boer, 2002). This is a result of the phenomenon of "bare branches." This stems from the Chinese term for surplus males (guang gun-er),

¹⁵ Estimates put the percentage of women in Rwanda in 1995 at 70% (Human Rights Watch, 1996)

¹⁶ In these nations girls are often married once they have reached puberty or even younger (UNICEF Innocenti Research Centre, 2001).

reflecting those branches of the family tree that will not produce offspring because of the scarcity of women to marry. Young men less likely to find marriageable partners are generally those from the lowest socioeconomic group, with fewer opportunities for employment or social advancement (Li & Lavelly, 2003). Consequently, these males are at greater risk of engaging in criminal acts and violence and posing a threat to national interests. There is some suggestion that authoritarian regimes are better resourced to deal with the levels of intra-societal violence (Hudson & den Boer, 2002).

3.1.9 Gender equality at a social institutional level

It is not enough to examine the causal effect of women's empowerment on democratic development without investigating gender equality at a social institutional level. Social institutions are the formal and informal rules in society that signify women's level of authority within the household, their physical integrity and safety, civil liberties, and ownership rights. They reflect deeply embedded cultures, traditions, and norms that are resistant to change and impede women's ability to access and have control over critical resources that build their human capital and that of the next generation, such as health care, education, and employment (Branisa, Klasen, & Ziegler, 2013; Morrisson & Jütting, 2005). Gender inequality not only threatens women's reproductive, mental, and overall physical health, it also has negative consequences for their families (Hudson, Caprioli, Ballif-Spanvill, McDermott, & Emmett, 2008).

Therefore, in nations where women have few personal freedoms and little decision-making power, either within the home or in the public sphere, democracy is unlikely to occur. The GAD approach stresses that over time gender inequalities will not automatically diminish *with* economic development, without challenging the fundamental social relations between men and women across every institution (Kabeer, 1994). Particularly in patriarchal societies women remain excluded from important decision-making structures, despite high living standards. This exclusion limits their capacity to influence rules and cultural norms that bring about more equitable policies and practices (Kabeer & Murthy, 1996), including democratic transition.

3.1.10 Economic growth

Recent evidence points to gender equality as being a central component of economic growth and democracy (Coleman, 2004; Fish, 2002; Klasen & Lamanna, 2009), rather than an outcome of both. The indirect effect of gender equality on democracy is through promoting economic growth, increasing the size of the middle class and building the human capital of the next generation. There is some evidence that the relationship between income and democracy is driven by human capital development, in particular parity in education and employment. Earlier studies suggest that gender inequality in education *increases* economic growth (Barro & Lee, 1994). However, the bulk of empirical studies found that *smaller* gender gaps in education were beneficial for economic growth (Dollar & Gatti, 1999; Hill & King, 1993; Klasen, 2002; Klasen & Lamanna, 2009; Knowles, Lorgelly, & Owen, 2002).

In contrast, the research on the impact of gender inequality in employment and wages on economic growth has been less conclusive. For example, Seguino (2000) found that an increase in female labour force participation coupled with a high wage gap between men and women increased economic growth in some Asian countries. It appears that women's passive acceptance of gender inequality in wages in these nations provided the impetus for foreign investment and promoted growth. Bloom et al. (2009) found that falling fertility rates promoted productivity and economic growth by increasing the female labour force supply. Moreover, their results showed that increases in female education, but not male education were positively related to increases in female labour force participation rates across all age groups. Their results also showed that increases in female education, but not male education reduced fertility rates.

Finally, the evidence shows that in nations where total increases in wealth result in a more equal distribution of education and/or income, democratic development is more likely (Boix & Stokes, 2003; Castelló-Climent, 2008; Feng & Zak, 1999; Muller, 1995). Therefore, it appears that it is not the increase in income per se, but whether all groups in society benefit equally from the increase in wealth that determines whether a country is likely to become democratic. A person's age, class, race, and/or religion may determine whether they have the same opportunities to benefit from

increases in a country's wealth. However, as gender cuts across all these categories and is the most persistent and pervasive methods of categorizing people we argue that democracy is more likely to advance and deepen in nations where gender equality is high.

3.1.11 Political representation

Finally, it seems axiomatic that women's representation in the political sphere would have a positive impact on democratic development. However, there is little empirical evidence to support this. Large cross-sectional studies have shown little support for a positive relationship between democracy and female political representation (Kenworthy & Malami, 1999; Paxton, 1997; Paxton & Kunovich, 2003; Reynolds, 1999), except where nations have been democratic for a long period of time (Paxton, Hughes, & Painter, 2010). It is probable that until there is a critical mass of women in parliamentary positions political regimes will remain highly masculinised and women's impact on political change will be low. Although, the way in which women attained these positions, i.e. through quotas and how that affects their legitimacy and power needs to be considered. In addition, women need assistance to find their voices beyond Kanter's archetypes of women to exhibit any real power and influence in these roles (See Kanter (1977) for a full discussion about women's roles). The examples from Rwanda and South Africa demonstrate that despite increasing women's representation to 45-50% in parliament through quotas, women's real power at this level is still low (Burnet, 2008).

This chapter has presented a theoretical argument for why a relationship between gender equality, women's empowerment, and democratic development may exist, in particular why women's empowerment would promote democracy, instead of the reverse. Central to this approach is examining how gender as a social construction transcends all economic and social structures to either inhibit or enhance democratic development. This theoretical argument informs the subsequent methodical and analysis chapters.

Chapter Four: Research Design

4.0 Introduction

This chapter presents the hypothesis to be tested, followed by an explanation of the rationale for the research method used, and justification for the data selected for the studies in each of the analysis Chapters, 5-7.

4.1 Hypothesis

The main hypothesis put forward for this study is that gender equality and women's empowerment were key factors in the democratic development of nations over the period, 1980 to 2005.

The following research questions are designed to test this hypothesis:

1. Was women's empowerment (as represented by female educational attainment, female labour force participation, and low fertility rates) a core driver of democratic development from 1980 to 2005?
2. Were improvements in both women's reproductive and productive activities (reflected by falls in fertility rates and increases in female educational attainment and labour force participation) required for democratic development to occur?
3. What was the nature of the relationship between female education and employment, and female education and fertility on democratic development? That is, did democratic development require improvements in two or more aspects of women's empowerment?
4. Was gender equality at a social institutional level positively associated with levels of democracy?
5. What was the nature of the relationship between gender equality, economic development (GDP), and democracy?
6. Was economic development (GDP) on its own sufficient to move developing countries toward democracy?
7. Did high (adverse) sex ratios impact negatively on democratic development?
8. If there was a negative impact of high sex ratios on democratic development, was the causal pathway driven in part, by lower levels of women's

empowerment in these nations?

4.2 The Literature Review and how it relates to the Project Aims and Objectives

The review of the democratisation literature indicates that there is only some provisional theory about why improvements in women's economic and social rights matter for democracy; that there is a lack of consensus on the definition and measurement of gender equality; and that there is scant longitudinal research that examines the effect of improvements in women's lives over time on democratic development. Cross-national comparative studies have focussed predominantly on basic development indicators such as gaps in literacy rates, secondary enrolment ratios, the ratio of female life expectancy to male life expectancy and the percentage of women in parliamentary seats, without specifically considering women's empowerment as a core driver of democratic development, either theoretically or methodologically. Therefore, to measure women's empowerment this study uses absolute levels of female educational attainment, fertility rates and female labour force participation to investigate how women's productive and reproductive activities promote or inhibit democratic development independently or together.

Several studies have examined the relationship between sex ratios (the ratio of males to females) and democracy with mixed results and some provisional theory why this relationship exists. Consequently, this thesis also explores the relationship between imbalanced sex ratios and democratic development in greater depth to test the causal effect of imbalanced sex ratios on democratic development and to determine what may be driving this relationship. For democracy to emerge and be sustained the government must be responsive to the needs of all of its populace, including men *and* women.

There are a number of social, cultural, economic, and political factors that keep women's voices quiet, this author argues that in nations where women do not even make up half the population the achievement of a 'critical mass' of women arguing for reform makes raising their voices even more difficult. Additionally, adverse sex ratios (more males than females) can have profound consequences for the balance of

social power between men and women and consequently women's life circumstances. This highlights the role of structural factors in promoting gender inequality and keeping women's status low.

Therefore, this study also investigates the relationship between democracy and more nuanced dimensions of gender equality such as family code, ownership rights, physical integrity, and civil liberties using the Gender Institutions and Development Database (GID-DB). The GID-DB contains items that reflect structural factors that restrict women's full participation in society, thus gender equality, and hence may have a role to play in democratic development. By analysing different dimensions of gender equality that take into account the structural aspects of women's lives, this thesis attempts to expand the knowledge base about the relationship between gender equality and democracy and determine what key features of women's lives are central to the process of democratic development.

Finally, this thesis develops a theoretical argument and model for the causal relationship between gender equality, women's empowerment, and democratic development and argues for the causal arrow to run from gender equality to democratic development. Central to developing the theory is examining how gender as a social construction cuts across all economic and social structures to either inhibit or promote political development, specifically, democratic development. In creating the theoretical model to investigate the relationship between gender equality and democracy and to inform the analyses in this study, the researcher has drawn from the GAD and the WCD approaches to development to create a Gender and Democratic Development (GADD) model. In doing so, a framework is consciously built and developed that seeks to complement, rather than co-opt critical feminist theories of gender. At the same time there is an attempt to create a space for generating new theories of gender while engaging with rather than substituting for the insights of feminist theory.

Figure 4.1 illustrates the Gender and Democratic Development model that has been developed. This is a broad model that informs the analyses in Chapters Five, Six, and Seven. More specific models for each of the subsequent analysis chapters

are described in Sections 4.6, 4.7, and 4.8.

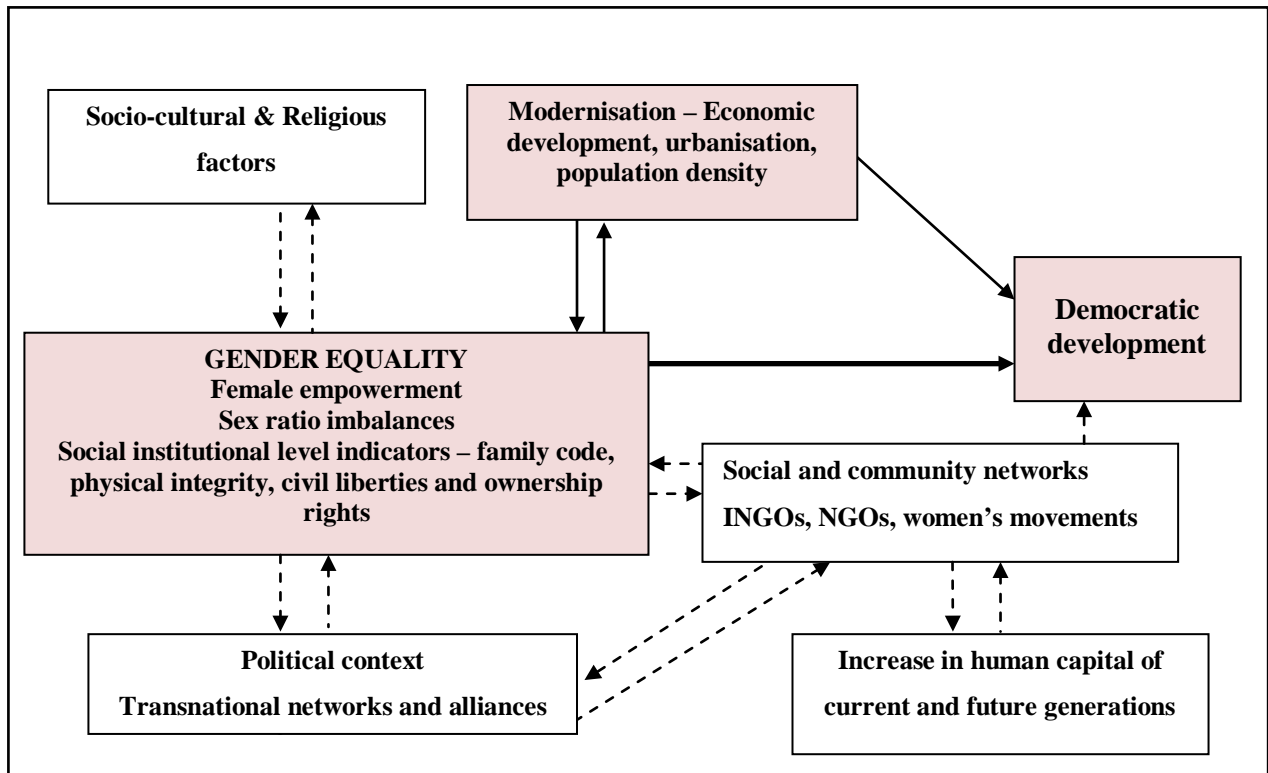


Fig. 4.0 The Gender and Democratic Development (GADD) model

4.3 Rationale for the Quantitative Methods used in this Study

As the overarching aim of this thesis was to incorporate a gendered perspective into democratic development theory, a macro-level quantitative research design was chosen to test the eight research questions listed above in 4.1. The main reason for choosing a quantitative, rather than a qualitative approach was the ability to test the above questions using comparable data from 1980 onward, for over 100 countries from all regions of the world. Historically, the two disciplines of feminist scholarship and comparative politics have remained quite distinct, in part because of their different methodological approaches to research. The democratisation literature is predominantly quantitative and typically uses aggregated data from large datasets available from international organisations such as the World Bank, United Nations, and the International Labour Office (ILO) (Barro, 1999; Boix & Stokes, 2003; Bollen, 1990; Fish, 2002; Przeworski et al., 2000).

In addition, the data is analysed using the latest and most sophisticated quantitative statistical modelling techniques (Acemoglu et al., 2005, 2008; Castelló-Climent, 2008). Inglehart et al. (2002; 2000; 2010) are notable in their use of qualitative data to show that mass beliefs and attitudes play an important role in explaining the link between modernisation and democracy, however, their empirical studies examining gender equality and democracy have been criticised for conflating democracy measures with gender equality measures, thus creating tautology problems (Beer, 2009).

In comparison, feminist scholars have drawn upon a variety of methods, including ethnography, statistical research, survey research, cross-cultural research, philosophical argument, discourse analysis, and case studies (Tickner, 2005). In doing so, they have highlighted the value of such methods in reflecting the needs of women, their families, and their communities at a local level. Ironically, because the scope of the research is often local, it means that their research is often not heard at a global level, or if it is heard, it is not given the same weight as broader, quantitative studies that are comparable across nations. “Quantitative feminist studies can provide an understanding of trends, whereas feminist methodologies provide a rich contextual analysis.... the first offers generalisability with limited detail; the latter provides details with limited applicability” (Caprioli, 2004, pp. 264-265). Regular patterns or results that emerge in cross-national comparative research give us the impetus to inquire about why a relationship may exist. For example, the regular finding of a negative association between Islam and authoritarianism drove Fish (2002) to probe the possible causal links driving this relationship.

However, empirical research and quantitative analyses must be driven by strong logic and theory, otherwise “the data degenerates into mindless fishing expeditions and are vulnerable to spurious interpretations” (Chan, 2002, p. 750). Drawing heavily from qualitative studies in the field, the recent work of Fallon et al. (2012) in resolving the “democracy paradox” is an excellent example where integrating both qualitative and quantitative methods helps to strengthen and legitimise the research. Therefore, in adopting a quantitative research design for this study a theoretical argument grounded in feminist research was presented in Chapter Three arguing why gender equality and women’s empowerment are essential elements in the democratic

development of nations.

4.4 Measurement

In Chapter Two a comprehensive discussion of the inherent difficulties in *defining* and *operationalising* democracy, gender equality, and women's empowerment was provided. This next section discusses the difficulties in *measuring* these complex and multi-faceted concepts and outlines the rationale for selection of the dependent and independent variables used in the three analysis chapters, Chapters Five to Seven.

4.4.1 Measuring democracy

The Polity IV dataset was chosen to measure political regime status in all three of the following analysis Chapters, Five to Seven. The ongoing debate about the definition and conceptualisation of democracy outlined in Chapter Two has resulted in the construction of many political databases comprising a variety of elements depending on the viewpoint of the scholar. Feminists argue, and this researcher agrees, that a nation may not even be considered democratic in the absence of universal suffrage (Waylen, 2007). Paxton (2008, pp. 49-50) also highlights the way that universal suffrage is implied in various definitions of democracy, but argues that participation or inclusion is often not measured in the political databases. The Polity database is cited as one example. However, the developers of the Polity database state that two components of their measure, competitive political participation and regulation of political participation are intended to measure overall participation (Marshall, Gurr, Davenport, & Jagers, 2002, p. 41), but concede that their measure is neutral on the issue of suffrage.¹⁷

According to Paxton (2008) only Bollen's index of liberal democracy (Bollen, 1998) incorporates a measure of suffrage. Paxton compares the transition dates of democracy for five different political databases (Lipset; Muller; Rueschemeyer,

¹⁷ "The Polity data series is largely neutral to the issue of suffrage. It only records issues regarding restrictions on [identity group participation rights] which may be incorporated in formal or informal restrictions on electoral enfranchisement. Polity does not track issues relating to male/female suffrage nor does it record information on suffrage specifically." (Personal comm: Marshall, M, 2010).

Stephens and Stephens; Reich, and the Polity data series), when women's suffrage is considered, and when it is not and finds significant differences in coding for Belgium, France and the United States (Paxton, 2008, p. 56). The largest discrepancy was Switzerland which became democratic in 1848 but did not enfranchise women until 1971.¹⁸ Further efforts to quantify enfranchisement demonstrate that universal suffrage does not guarantee democracy; rather universal suffrage is just one component of democratic governance (Paxton, Bollen, Lee, & Kim, 2003).

Together with the Polity IV dataset the Freedom House Political Rights Index, established by Raymond D. Gastil in the 1970s, is the most widely used dataset in the democratisation literature (Acemoglu et al., 2005, 2008, 2009; Barro, 1999; Castelló-Climent, 2008; Donno & Russett, 2004; Fish, 2002; Lutz et al., 2010). A country receives a score between 1 (most free) to 7 (least free) from a checklist of 25 questions about political rights. There are three sub-categories; electoral process, political pluralism and participation, and the functioning of government. The civil liberties questions also has sub-categories reflecting; freedom of expression and beliefs; association and organisation rights; rule of law and personal autonomy and individual rights. Presently it contains annual data for 194 countries (more information at www.freedomhouse.org).

However, the Freedom House Index is only available from 1972 onward, and some of the methods of coding have been criticised for not being transparent (Hadenius & Teorell, 2005) and favouring some regions (Bollen, 1993). It has also been criticised for including measures of socioeconomic rights, freedom from gross socioeconomic inequalities, 'property rights' and 'freedom from war' (Gastil, 1991, pp. 32-33; Ryan, 1994, pp. 10-11), in Munck and Verkuilen, (2002)). These items may be linked with other aspects of development, rather than political development. Additionally, one of the items on the civil liberties checklist specifically asks whether personal freedoms exist; including gender equality, choice of marriage

¹⁸ Lipset, (1994) records Switzerland's transition date as 1918 – A national referendum in 1959 failed, with 67 percent of Swiss men voting against women's right to vote.

partners and size of family. This is problematic for this study as the independent variables are measures of gender equality. In response to increasing criticism for conflating the two items, Freedom House has made available separate scores for political rights and civil liberties from 2006 onward. The separation of these two components will benefit future comparative democratisation studies. Some studies have used the Gastil index to supplement the Freedom House Index using data available before 1970 (Barro, 1999; Castelló-Climent, 2008).

Concern about the validity of political indexes that included measures of stability and economic development led Bollen (1980) to construct a new index for political democracy. The Political Democracy Index consists of four measures of political liberties and four of democratic rule. Countries receive a 0 for a full autocracy and 100 points for a full democracy. The main limitation of this index is that it is only available for a limited period prior to 1988 (Bollen, 1993, 2009; Muller, 1995). Hence, it is unsuitable for this study.

As this study is interested in a nation's temporal movement towards democracy categorical datasets are not suitable for defining nations as either democratic or non-democratic. However, as they have been widely used in the democratisation literature the most frequently used datasets are reviewed briefly in this next section. They include Gasiorowski's Political Regime Change Dataset (PRCD), Vanhanen's Index of Democratisation (ID), and Przeworski et al.'s (2000) dichotomous measure (PACL). Gasiorowski's PRCD dataset was developed primarily to track moments of regime change, and it includes 97 developing countries whose populations exceeded one million in 1996. For each of these countries, coverage begins with the date of independence and ends in 1992. The single political variable in the PRCD data set has four mutually exclusive categories: democratic, semi-democratic, authoritarian, and transitional. When a transition to a full democracy occurs a country is given a value of 1, a value of 0 is given for the other three forms of government.

A country is defined as being democratic when:

- 1) Meaningful and extensive competition exists among individuals and organised groups for all effective positions of governmental power, at regular intervals and excluding the use of force; 2) a highly inclusive level of

political participation exists in the selection of leaders and policies such that no major social (adult) group is excluded; and 3) a sufficient level of civil and political liberties exist to ensure the integrity of political competition and participation (Gasiorowski, 1996).

Vanhanen's quantitative measure is based on Dahl's concept of Polyarchy and identifies competition and participation as the two most important dimensions of democracy. The smaller parties' share of votes cast in parliamentary or presidential elections was used to measure degree of competition, and the percentage of the population who actually voted in the elections was used to measure the degree of participation. This measure is exclusively drawn from electoral data for 187 countries between 1810 and 1998 making its construction transparent. However, Vanhanen's Index calculates the percentage of the population voting from the total population, rather than the adult population or enfranchised population, nor does it consider the variation in age structure between developed and developing countries (Vanhanen, 2000). This is of particular concern when analysing developing countries with large youth populations.

Przeworski et al. (2000) provide a simple dichotomous measure, the PACL, which focuses on contestation, particularly contested elections. A regime is classified as democratic if it adheres to four operational rules; those that do not meet these requirements are viewed as non-democratic nations. They are: 1) the chief executive must be elected; 2) the legislature must be elected; 3) there must be more than one political party; 4) an alternation of government must be observed for a country to be classified as democratic. These rules and binary classification are problematic for a country like Japan, which until 2009 was ruled by the Liberal Democratic Party (LDP) without alternation, thus would not have been considered democratic. The LDP held power for almost 54 years (except for nine months in 1993-1994) until a new government, a coalition comprised of the Democratic Party of Japan (DJP), the Social Democratic Party of Japan (SDPJ) and the People's New Party (PNP) was elected by the people. The PACL is also only available up to 1990, hence does not capture the countries that democratised during the 1990s and early 2000s, which is the focus of this study.

Finally, the use of dichotomous measures has been criticised in Epstein et al. (2006) for neglecting the “partial democracies” or mixed regimes.¹⁹ Instead, these authors propose constructing a trichotomous measure using the Polity IV dataset and classifying regimes as ‘autocratic’ if they score between -10 to 0, ‘partial democracies’ if they score between 1-7, and ‘full democracies’ if they score in the range of 8-10. The use of arbitrary cut off points has been criticised in the literature (Boix & Stokes, 2003); however Epstein et al. (2006) provide a solid justification for their method of classification.

It appears that the choice of dataset to use in empirical analyses is informed by the type of research to be undertaken and the researcher’s conceptualisation of democracy. Furthermore, the choice of dataset is restricted to the availability of data and the time period being investigated. A number of studies have used a version of the Polity dataset (Beer, 2009; Epstein et al., 2006; Gleditsch & Ward, 2006; Londregan & Poole, 1996). Additionally, the Polity IV dataset is used in several other studies to test the robustness of the Freedom House Index (Acemoglu et al., 2005, 2008; Castelló-Climent, 2008). However, despite differences in defining and measuring dimensions of democracy a comparison of the earlier version of the Polity IV dataset, the Polity III dataset, with other commonly used indexes such as Freedom House, Bollen, and Gasiorowski, shows consistently strong correlations, in the range of 0.85 to 0.92 for the post World War II era (Paxton, 2008).

In examining the relationship between gender equality and level of democratic development this researcher is satisfied that the Polity IV dataset is the best choice for this study as it provides the clearest separation between socio-economic rights and political rights. Including social and economic rights as both independent and dependent variables is problematic for this study as it creates endogeneity problems. Furthermore, as this study focuses on the period from 1980 onward the omission of universal suffrage in this dataset has little impact on the Polity2 scores. All nations where women did not have the vote after this period also had not enfranchised men.

¹⁹ See Gleditsch & Ward, (1997) for a discussion about the Polity data being more of a categorical measure than a continuous one.

These countries are: Oman, Qatar, Saudi Arabia, United Arab Emirates, and Kuwait. All newly independent states formed after 1945 automatically enfranchised both men and women.

The Polity IV dataset is based on Marshall and Jagger's concept of institutionalised democracy. They view democracy as three essential, interdependent elements.

“One, the presence of institutions and procedures through which citizens can express effective preferences about alternative policies and leaders. Second is the existence of institutionalized constraints on the exercise of power by the executive. Third is the guarantee of civil liberties to all citizens in their daily lives and in acts of political participation” (Marshall & Jagers, 2009).

The following information about how this dataset was conceptualised and developed was taken from the Polity IV Project: Dataset Users' Manual (Marshall & Jagers, 2009). The Polity dataset was originally developed to examine the authority patterns that characterize any social units, including national political systems. “Polity” is a general term referring to a political organisation or a specific form of a political organisation. It is also seen as a reflection of a nation's overall authority pattern. This “authority pattern” reflects the balance of power between those that have political power and the citizenry (Eckstein and Gurr 1975: 26 in Dataset Users' Manual). Dahl (1971, p. 1) states, that one of the key characteristics of democracy is “the continuing responsiveness of the government to the preferences of its citizens, considered as political equals.” Therefore, the relationship between a democratic government and its citizens should be one of mutual reciprocity and equality. Thus, while the Polity database has been criticised for weighting heavily the constraints on executive power (Gleditsch & Ward, 1997), it appears that this is one of the most important factors reflecting a more equal relationship between the state and its citizens.

The Polity IV dataset consists of six component measures that capture the essential institutional properties of polities and include the key qualities of executive recruitment, constraints on executive authority, and political competition. Executive recruitment reflects the way in which those in government come to power and how

regulated, open, and competitive this process is. Constraints on executive authority refer to the extent of institutionalised constraints on the decision-making powers of chief executives, and political competition reflects the extent to which ordinary citizens are able to influence the decisions of the elite through political participation and competition. Implicit in these measures is a degree of civil interaction so nations where all citizens are excluded from the political process will score poorly on both components. The Polity IV dataset is the most comprehensive political dataset currently available, containing political coding for all sovereign nations with populations over 500,000, from 1800 onward. The level of democracy is measured for each country annually.

4.4.2 Gender equality and women's empowerment measures

As the overarching aim of this study is to investigate whether gender equality and women's empowerment had a role to play in the democratic development of nations from 1980 to 2005, it was important to select gender measures that were relevant for democratic development, rather than women's empowerment measures per se. Results from empirical studies and the theoretical argument developed in Chapter Three suggest that a combination of broad development measures that capture women's status across several domains together with more nuanced measures of women's lives that capture the entrenched cultural norms and attitudes toward women are necessary to understand this relationship between gender equality, women's empowerment, and democratic development. This next section discusses some of the strengths and weaknesses of widely used gender equality and women's empowerment measures.

Since the UN Decade for Women in the 1970s there has been an increasing awareness and substantial efforts to measure and collate data on women and gender. While this increased consciousness has been important to make visible women's status scholars still debate about whether these measures adequately reflect women's situation, particularly existing measures of gender equality and women's empowerment. Typically, cross-nation comparative measures are taken from existing datasets that are disaggregated by gender and reflect various social and economic outcomes such as life expectancy, maternal mortality rates, education, employment, and political representation. However, the international institutions and

scholars that provide the statistical data are overwhelmingly gender-neutral or masculine and the statistics originate from male-dominated disciplines.

Danner, Fort and Young (1999, p. 252) argue that social scientists collect data on what they think is important and highlight three underlying assumptions regarding women: “women and women’s activities are less important than men; all women are defined in terms of the biological capacity to reproduce; and, “Western/Northern” models about women and the family are valid universally.” These assumptions take a normative view of women’s lives, thus limit our understanding of the reality of women’s lives (Kabeer, 1994). Consequently, feminist scholars have called for measures that are more relevant to women such as unpaid work, the gendered nature of work, fertility rates, sexual and domestic violence, and indicators that reflect the cultural dimensions of women’s lives (Harding, 1987).

The Millennium Declaration and the Millennium Development Goals (MDGs) has become a universal framework for development. The third Millennium Development Goal (MDG3), “promote gender equality, and empower women,” is not only a key development goal in its own right, but it has also been identified as an important means to achieve all the Millennium Development Goals. However, the indicators used to measure whether this goal has been achieved are inadequate. While the three broad development indicators, education, employment, and political representation are necessary tools for women’s empowerment there is no recognition of the role of women’s reproductive activities in restricting women’s access to these opportunities or the formal or informal structures within communities that keep women’s status low. For example, education may not be empowering for women if they are unable to make decisions about who and when to marry, whether to have children, or what type of employment to pursue (Kabeer, 2005). Education may also not be empowering where only a few years of primary education has been achieved (Lehr, 2009), or if they are in casual, or low skilled work, or in workplaces where women are exposed to greater violence and harassment. The example from Rwanda shows

that despite a majority of women holding seats in parliament through quotas,²⁰ women's political power is still low. Furthermore, despite making significant progress on gender relations in Rwanda, women in parliamentary positions have since voted for bills restricting freedom of speech; including banning other political parties, and an autonomous civil society. Thus, it is difficult to know whether these women in parliament have a real voice in politics or whether they feel obliged to legitimise the agendas of existing political leaders in Rwanda (Burnet, 2008).

Finally, women's lives do not exist in a vacuum. It is the relational aspect of women's lives that determine the extent to which women can access resources and take advantage of opportunities as they present (Gouws, 2013). These social relationships within families, within communities and at a broader level with a nation's political structures can have an enormous impact on an individual's autonomy and choices. These are important factors to consider when choosing measures to reflect gender equality and the empowerment of women.

Other attempts by international organisations to distil women's empowerment into neat composite measures like the Gender Development Index (GDI) and the Gender Empowerment Measure (GEM) also fall short because they fail to recognise the context in which the discrimination takes place and the fact that discrimination in one dimension does not necessarily mean discrimination in another. The validity and reliability of the data have also been criticised on the grounds of using secondary data, instead of data available at a national level (Charmes & Wieringa, 2003). The GDI, developed by the United Nation's Development Programme (UNDP), is not a measure of gender equality but rather a measure of human development that incorporates an inequality penalty (Dijkstra & Hanmer, 2000). A country is penalised for gender inequalities even if the disparity favours women. In addition, by incorporating an overall measure of income into the composite measures it is also difficult for a poor country to receive a high score. Therefore, what is actually being

²⁰ After its 2008 elections Rwanda was the first nation to record more women than men in parliamentary positions with a 56.3% majority, and South Africa recorded 42.3% in parliamentary positions (Bauer, 2012).

measured is an overall measure of living standards, rather than gender equality. The GDI is also calculated differently prior to 1999 so it is problematic to use the data in longitudinal studies (Klasen, 2006).

The Gender Empowerment Measure (GEM) measures women's economic, and political participation including women's representation in parliaments, women's share of positions classified as managerial and professional, women's participation in the labour force, and their share of national income. However, it falls short on the socio-cultural, legal, and physical dimensions that make up women's empowerment. Moreover, its focus is on national political representation and the formal economy, neglecting other aspects of women's lives that are possibly hold greater relevance, particularly for women in developing countries, such as unpaid work and access to credit and property. For comprehensive information on how these two items were constructed see Bardhan and Klasen (1999).

Perhaps the most appropriate composite index available to measure gender parity across nations is the Global Gender Gap Index released by the World Economic Forum in 2006. It is a framework established to track gender disparities across four fundamental categories over time including; economic participation and opportunity, educational attainment, health and survival, and political empowerment. A total gender gap score for each nation is tallied as well as an annual ranking. Scores are available for each of the four categories as well as subsets of the categories, i.e. primary and secondary enrolment ratios. The scores reflect a ratio of women's achievements compared to men's achievements, thus the purpose of this Index is to measure gender equality, rather than women's empowerment, and the focus is on outcomes rather than inputs (Hausmann, Tyson, & Zahidi, 2007; World Economic Forum, 2012).

The Global Gender Index is a welcome addition to the cross-nation comparative data available to measure gender equality as it also contains additional indicators of political and social rights, similar to the Gender Institutions and Development Database such as parental authority in marriage and female genital mutilation, as well as maternity and childbearing. Additionally, in 2011 a new category was introduced – Child Ecosystem, to reflect maternity and paternity leave entitlements

and day-care options. The main limitation of this dataset is that the data is only available from 2006 onward for 135 countries (there is some data available for selected countries from 2000) (World Economic Forum, 2012). Also, data is available for the highly developed nations but many of the nations with missing data are the less developed or poorer nations, particularly those of sub-Saharan Africa.

For the purpose of this study the Gender Institutions and Development database (GID-DB) developed by Morrison and Jütting (2005) is the most appropriate and relevant database for this study. Unlike the Global Gender Gap Index, the GID-DB, measures gender equality at a social institutional level and its indicators reflect entrenched norms, values, and customs that represent how women are valued within a culture. These are important factors that impact on women's ability to access resources, such as education and employment, and include items reflecting family code, physical integrity of women, civil rights, and ownership rights (Morrison & Jütting, 2005).

This database was chosen in preference to the regular composite measures described above because they do not measure the gap between men and women's achievement, but reflect deeply entrenched discriminatory practices against women across many domains. In attempting to bridge the gap between gender and politics it is important to measure the reality of women's lives, rather than using men's achievements against which we measure the success of women's lives (Austen et al., 2003). As discussed in the section on frameworks in section 2.6.6, data that reflects items chosen, collected and distributed by women are preferred over data constructed by men. More details about this database and the indicators chosen will be revealed in the following section.

4.5 The Variables used in the Analyses

4.5.1 The dependent variable

The analyses in the following analysis Chapters, Five to Seven use the Polity2 indicator in the Polity IV dataset as the dependent variable to measure political regime status. The Polity2 indicator is a composite measure of both democracy and autocracy and is measured as a continuous variable on a 21 point scale, where 10

represents a full democracy and -10 a full autocracy. The value of using this continuous measure is that it enables us to look at gradations in political regime type instead of categorical measures that tell us very little about the degree of democracy in a nation. The Polity score (Polity2) consists of four component variables that are scored on both a democracy scale and an autocracy scale and one component (regulation of participation) that is scored on the autocracy scale only. A country receives a democratic score (0 and 10) plus an autocratic score (0 to 10).

The autocracy score is then subtracted from the democracy score to create a combined Polity score, the Polity2 variable. Countries are not awarded democracy or autocracy scores during periods of interruption, where countries are occupied by foreign powers during periods of war. For example, Lebanon was not awarded a Polity score during 1990-2004 during the Syrian occupation. For the purpose of categorising nations the Polity manual suggests the cut off of 6 to 10 for democracies, -10 to -6 for autocracies and -5 to 5 for mixed regimes or “anocracies” (-5 to 5). These terms are used throughout the thesis for ease of interpretation and discussion.

4.5.2 Independent variables

The rationale for the independent variables selected for the following analyses was guided by the theoretical argument and model. They were also selected because they were the most comprehensive indicators available to represent gender equality and women’s empowerment in cross-nation comparative studies. Further information about each of the indicators selected is provided in the next section outlining the research design used for each analysis chapter.

4.5.3 Countries used in the analyses

Slightly different samples of countries were used in each of the studies based on two main criteria, the research question posed, and the availability of data for each country. The list of countries for each study and the justification for their omission or inclusion is described in each study outlined below.

4.6 Analysis: Study One – Women’s Empowerment and Democratic Development

Figure 4.1 displays the key variables under analysis in this study. The purpose of Study One is to examine the causal effect of women’s empowerment on democratic development from 1980 to 2005, controlling for a nation’s level of modernisation as represented by income level and growth, urbanisation, and population density. Inglehart et al. (2000; 2002; 2009, 2010) propose that economic development brings about changes in attitudes toward gender equality and democracy, thus the model is adjusted for widely used measures of economic development in the literature, to ensure that the relationship between women’s empowerment and democratic development is not confounded by these factors of modernisation. The robustness of the results are tested by adjusting for other covariates such as Muslim majority and other measures of female education such as secondary enrolments.

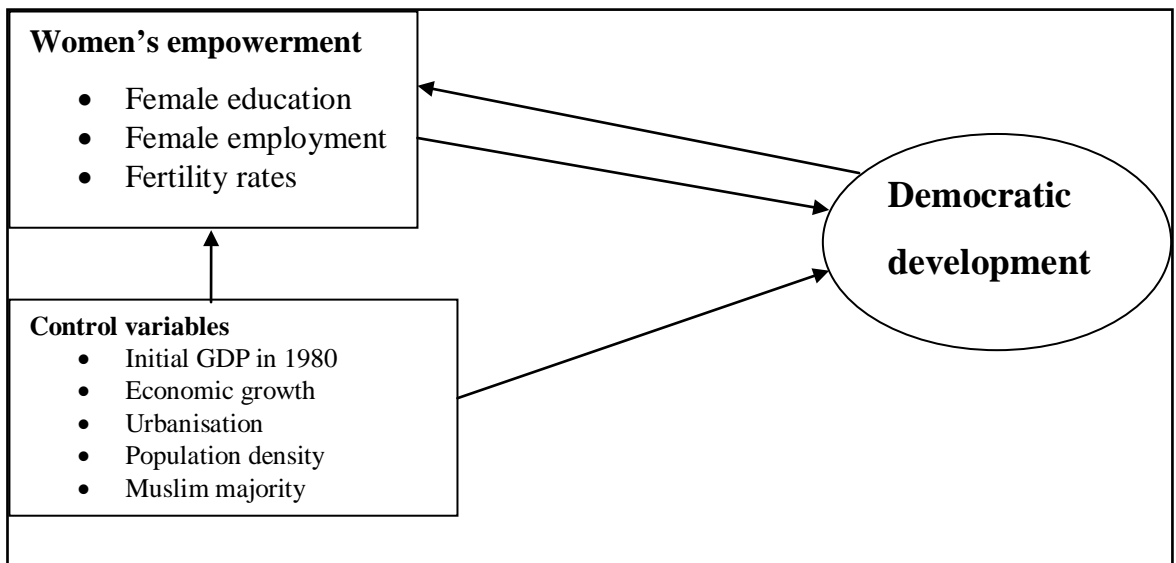


Fig. 4.1 Women’s empowerment and democratic development model

4.6.1 Sample

All sovereign countries were included for which Polity2 data were available for the period from 1980 to 2005²¹. Taiwan had no fertility or female labour force

²¹ Sovereign country is defined as “an independent member of the international system that had a population greater than 500,000” (Gurr, Jagers, & Moore, 1990).

participation data so it was removed from the analyses. Germany was also removed because prior to the unification of Germany West Germany was a democracy the entire period, and Yemen was removed as it is unclear whether data collected for the explanatory variables reflect North or South Yemen. This left 155 nations. See Appendix Table 1.0 for full list of countries.

24 nations with no education data for this period were also removed, as this study is particularly interested in the effect of female education on democratic development. The nations removed were Angola, Bhutan, Burkina Faso, Chad, Comoros, Democratic Republic of Korea, Djibouti, Eritrea, Equatorial Guinea, Ethiopia, Guinea, Guinea-Bissau, Lebanon, Macedonia, Madagascar, Nigeria, Oman, Solomon Islands, and Somalia. Additionally, five of the post-Soviet nations were also without education data. They were Azerbaijan, Belarus, Georgia, Turkmenistan, and Uzbekistan.²²

To control for reverse causation in the regression analyses all countries that were recorded as being fully democratic with a Polity2 score of 6 and above in every time period were removed²³. These countries include Australia, Austria, Belgium, Botswana, Canada, Colombia, Costa Rica, Cyprus, Denmark, Dominican Republic²⁴, Ecuador, Finland, France, Greece, India, Ireland, Israel, Italy, Jamaica, Japan, Mauritius, Netherlands, New Zealand, Norway, Portugal, Spain, Sweden,

²² With the fall of the Soviet Union in 1991 fifteen new independent states emerged. These states are: Armenia, Azerbaijan, Belarus, Estonia, Georgia, Kyrgyzstan, Kazakhstan, Latvia, Lithuania, Moldova, Russia, Tajikistan, Turkmenistan, Ukraine, and Uzbekistan. They are referred to collectively as post-Soviet Nations. They have been included in the analyses as they are classified as being non-democratic in 1980 and they follow varying political trajectories.

²³ Countries may be categorized as being fully democratic if they score above 7 throughout the whole period (Epstein et al., 2006). A score of 8 and above means that a country attains a maximum score on at least one of the three main components; measures of executive constraints, political competition, and the quality of political participation.

²⁴ Dominican Republic had a Polity2 score of 6 and above for every period except for two years in 1994-95 so it was coded as being democratic for the entire period.

Switzerland, Trinidad, United Kingdom, United States and Venezuela (n=32). Fiji and Peru remained in the analysis despite beginning and finishing the period as democratic as they had significant periods of instability (This was true for the Solomon Islands, but it was already removed due to missing education data). Two nations with large amounts of missing Polity2 data were also removed (Cambodia, and Afghanistan – Lebanon also has large chunks of Polity2 data missing but had already been excluded). This resulted in a strongly balanced²⁵ panel of 97 countries with 26 time periods from 1980 to 2005 and 2522 observations. See Appendix, Table 1.1 for a full list of countries.

The analyses were run again with an extended sample, including the aforementioned nations with missing education and Polity2 data. This resulted in a strongly balanced panel of 123 countries with 26 time periods and 3198 observations. See Appendix, Table 1.3 for a full list of countries. Summary statistics and correlation matrixes are also available for all samples. See Appendix, Tables 1.4-1.9.

4.6.2 Female educational attainment

In 1993, Barro and Lee constructed a new education database to reflect *actual* educational attainment (Barro & Lee, 1993) and this has since been improved and updated in April 2010 and then again in September 2011²⁶ to include 146 countries from 1950 – 2010. The data is disaggregated by sex and five year age intervals and reflects the overall educational attainment of the adult population over age 15 and over 25. These statistics show enormous gains in educational attainment globally, with the total average years of schooling increasing from 3.2 years in 1950 to 7.8 years in 2010. Additionally, there has been significant progress in reducing the gender gap. In 1950 the percentage of female to male average years of schooling was 57.7%; in 2010 it was 85.9% (Barro & Lee, 2010). For the purposes of this study the average level of total female educational attainment (aged over 15) was accessed from the Barro and Lee educational attainment dataset version 1.2 (Barro & Lee, 2011) .

²⁵ Strongly balanced means that there are few missing data points.

²⁶ It was recently updated again in April 2013 – version 1.3.

Previous studies have used adult literacy rates,²⁷ school enrolment rates for girls and gender gaps in education (Barro, 1999; Donno & Russett, 2004; Fish, 2002; Lutz et al., 2010; Ross, 2001; Wejnert, 2005). However, adult literacy rates do not take into account other aspects of education such as numeracy, logical and analytical reasoning (Barro & Lee, 1993), nor capture the social benefits that occur just by attending school (Glaeser et al., 2007). School enrolment statistics are collected at the beginning of the year so they do not reflect accurately the number of children who actually attended school throughout the year. This is particularly relevant in developing countries as large numbers of children repeat grades or are late entrants (UNESCO, 1983). Enrolment figures may also be inflated to obtain more resources and supplies for schools (Barro & Lee, 1993) and reflect the expansion of education rather than actual educational achievement (Benavot, 1996).

While gender gaps in education reflect the inequalities in educational achievement between men and women it is not suitable for this study as it does not measure the number of years of education achieved by women. Also, it assumes that men have achieved a desirable level of education that women should aspire to. The focus of this study is female education as a tool for social and political transformation, independently and in conjunction with fertility rates and female labour force participation. The five-year education data were interpolated to create annual female educational attainment data from 1980 to 2005.

4.6.3 Fertility rates

The total fertility rate (fertility) is defined as “the average number of children that a woman gives birth to in her lifetime, assuming that the prevailing birth rate for each age category remains unchanged” (World Bank, 2011). Annual total fertility rates for all countries in this study were accessed from the World Development Indicators Database (World Bank, 2011) because the data was available for every year and for

²⁷ In 1978, UNESCO’s General Conference adopted a definition of functional literacy which is still in use today. It states that ‘A person is functionally literate who can engage in all those activities in which literacy is required for effective functioning of his group and community and also for enabling him to continue to use reading, writing and calculation for his own and the community’s development (see Education for all Global Monitoring Project, Chapter 6 for a comprehensive discussion on the meaning of literacy) (UNESCO, 2011).

the majority of countries.

4.6.4 Female labour force participation

The data for female labour force participation (labour) were also accessed from the World Development Indicators Database and contains the most comprehensive cross-nation information since 1980. Female labour force participation rate is defined as “the proportion of the female population aged 15 years and older that is economically active: all females who supply labour for the production of goods and services during a specified period” (World Bank, 2011).

However, there are some limitations to this measure. Firstly, the data collection of the labour force measure across nations is not uniform. In many countries it fails to capture women engaged in unpaid family work or those who only work a few hours per week. This variable tells us about the percentage of women in the labour force, but not the type of work they are engaged in. While this author acknowledges that some types of work have a greater capacity to confer more power, for example, managerial and professional positions, this was the most comprehensive variable available over this period.

4.6.5 Control variables

One of the key objectives of this study is to show that women’s empowerment had a direct and causal effect on democratic development, over and above a nation’s level of modernisation. Based on Lipset’s (1959) original modernisation hypothesis wealth is seen as one of several indices including mass education, urbanisation, and industrialisation that comprise economic development and reflect the overall well-being of a nation (Lipset, 1959). In his original study Lipset (1959) measures wealth by per capita income, number of persons per motor vehicle, per physician, and the number of radios, telephones, and newspapers per 1000 persons. Industrialisation was measured by the percentage of employed males in agriculture and the production of coal per person per year; urbanisation was measured by three indices including; the percentage of population in places of 20,000 and over, the percentage of population in places of 100,000 and over and the percentage of people in metropolitan areas. Educational enrolment rates for primary, secondary, and tertiary schooling reflect a nation’s educational achievements.

Consequently, the models in this study were adjusted for the level of modernisation using widely used measures in the literature. These include the level of urbanisation, initial level of economic development, economic growth, and population density. Urbanisation is the percentage of the population living in urban areas accessed from the World Development Indicators (World Bank, 2011). To measure income and compare living standards across nations a measure of GDP per capita adjusted for Purchasing Power Parity (PPP) was used (World Bank, 2011). GDP in each country is measured in current international dollars and the PPP adjustment is made to avoid the bias in the GDP comparison caused by exchange rate fluctuations (Central Intelligence Agency, 2008). The level of initial GDP is estimated to have a negative coefficient due to the convergence toward the steady state. Conditional convergence conveys the idea that poorer countries grow faster than richer countries (Barro, 1991).

The level of initial GDP is taken from 1980 or the first available time point and was logged. Economic growth is measured by calculating the percentage change in GDP, which is mathematically equivalent to the first difference in the log of GDP.²⁸ Population density measures the number of people per sq. km of land area and was accessed from the World Development Indicators (World Bank, 2011).

There are many other variables that may affect political regime status which are too numerous to list here, many of them relate to events relevant for a handful of countries, e.g. civil wars, and other factors vary little over time, e.g. homogeneity of the population. As the purpose of this study is to examine the effect of women's empowerment on democratic development, independent of economic development, the number of control variables has been limited to the modernisation variables used widely in the literature. However, to test for the robustness of the results other variables were also accounted for and these are specified below.

²⁸ Several countries do not have GDP data – these include Myanmar, Cuba, and Zimbabwe. The baseline level of economic development was taken from 1980 or from the first year that data were available. (Czech Republic – 1990; Cambodia – 1988; Croatia – 1990; Haiti – 1991; Iraq – 1997; Laos – 1984; Libya – 1999; Mongolia-1981; Poland-1990; Qatar – 2000; Romania – 1981; Slovak Republic – 1984; Slovenia – 1990; Tanzania – 1988; Uganda – 1982; Vietnam – 1985). For the post-Soviet nations the initial GDP was taken from 1990.

4.7 Testing the Robustness of the Results

4.7.1 Muslim majority

Previous research has consistently found a negative and significant relationship between Muslim countries and democratic regimes (Donno & Russett, 2004; Fish, 2002; Papaioannou & Siourounis, 2008b). Typically, Islamic nations have more conservative attitudes toward women's role in society, thus is likely that women's level of empowerment in these countries is lower. A dummy variable was created for nations where more than 50% of the population is Muslim (Pew Research Centre, 2009). Nations with a Muslim majority were coded 1; all other nations were coded 0. See Appendix, Table 1.3 for the list of Muslim majority countries.

4.7.2 Total education and male education

To provide further evidence of the significance of increases of female education for democratic development, over and above total education and male education, measures of total educational attainment, male educational attainment and male secondary enrolment were also tested. Total education and male education, over age 15, was accessed from the Barro and Lee dataset (Barro & Lee, 2011) and male secondary enrolments were accessed from the World Development Indicators (World Bank, 2011).

4.7.3 Gender gap in education

To determine whether closing the gap in education mattered more for democratic development than the absolute levels of female education the gender gap in educational attainment was substituted for female education in subsequent models. The gender gap in education was created by subtracting the average level of male education minus average level of female education for each nation.

4.7.4 Male and female secondary enrolments

The percentage of students enrolled in secondary schooling as a measure of educational outcomes has also been included in relevant studies (Donno & Russett, 2004); hence further models substituting level of educational attainment for these measures were also run. Secondary enrolments are measured by gross percentage of students enrolled in school and this data were accessed from the World Development

Indicators (World Bank, 2011).

4.8 Statistical Analyses

4.8.1 Descriptive statistics

Descriptive statistics were run to assess the nature of the longitudinal data and look at trends over the 25-year period. Using the recommendations for regime classification (Marshall & Jaggers, 2009), countries with a Polity2 score of -10 to -6 were categorised as being autocratic, those with a score of -5 to 5 as being anocratic, and countries with Polity2 score of 6 to 10 as being democratic. Each country's change in Polity2 score was tracked over this period, and then each country was classified into three groups:

- 1) Not democratic – This included nations that remained Autocratic or Anocratic over the period from 1980 to 2005 (n = 51)
- 2) Democratic transition – This included nations that developed democratically over this period, that is they began the period as non-democratic but recorded a Polity2 score of 6 and above by 2005 (n = 46)
- 3) Democratic – This group included nations that began and finished the period with a Polity2 score above six (n = 34).

Each category was then graphed against each of the empowerment variables to show the changes that occurred from 1980 to 2005. All bar charts include 95% confidence intervals. See Appendix, Table 1.10 for the full list of countries by category.

To explore the transitions in greater depth the countries were then classified into eight categories and graphed similarly.

- 1) Always Autocratic – 18 countries
- 2) Autocratic to Anocratic – 24 countries
- 3) Autocratic to Democratic – 32 countries
- 4) Always Anocratic – 6 countries
- 5) Anocratic to Democratic – 14 countries
- 6) Always Democratic – 34 countries
- 7) Democratic to Anocratic (reversal) – Gambia and Sri Lanka
- 8) Anocratic to Autocratic (reversal) – Iran

The last two categories, 6 - 7, are not represented graphically as this study is focussed on democratic development and the last two categories only contain very small numbers of countries. See Appendix, Table 1.11 for a full list of countries by category.

4.8.2 Multicollinearity

To test for multicollinearity among the independent variables the variance inflation factor (VIF) was examined. The VIF is based on the proportion of variance the i th independent variable shares with the other independent variables in the model and relates to the variance of the regression coefficient associated with this independent variable. A VIF of 10 (a common cut off point in the literature) indicates that (all other things being equal) the variance of the i th regression coefficient is ten times greater than it would have been if the i th independent variable had been linearly independent of the other independent variable in the analysis. Thus, it informs how much the variance has been inflated by this lack of independence (O'Brien, 2007). None of the VIF figures was higher than seven. Hence, including all independent and control variables in the same model was not a concern.

4.8.3 Dynamic model

This study analyses the causal effects of female education, fertility rates, and female labour force participation on democracy controlling for the level of modernisation (GDP in 1980, economic growth, urbanisation, and population density), by estimating the following dynamic model:

Eq (1)

$$\text{Democracy}_{i,t} = a\text{Democracy}_{i,t-T} + \beta X_{i,t-T} + \epsilon_{i,t}$$

$$\beta X_{i,t} = \beta_1 \text{femeduc}_{i,t-T} + \beta_2 \text{fertility}_{i,t-T} + \beta_3 \text{labour}_{i,t-T} + \beta_4 \text{urban}_{i,t-T} + \beta_5 d.\text{lngdp}_{i,t} + \beta_6 \text{lngdp80} + \beta_7 \ln(\text{pop})_{i,t-T}$$

$$\epsilon_{i,t} = \mu_i + v_{i,t}$$

Where i is the country, t is the time period and x is the vector of the explanatory variables and the controls. The coefficient of interest is β which reflects whether female educational attainment, fertility rates or female labour force participation had any causal effect on political status over a 25 year period between 1980 and 2005, independent of modernisation. The error term consists of the fixed effects (μ_i) and idiosyncratic shocks ($v_{i,t}$). The advantage of using a dynamic panel model is that it allows for each additional time period to be independent of previous time periods by adjusting the standard errors (Cameron & Trivedi, 2009) and unobserved country-specific characteristics can be controlled for (Castelló-Climent, 2008). The System Generalized Method of Moments (GMM) estimator was chosen as it accommodates multiple endogenous variables (Roodman, 2008).

This estimator also controls for fixed effects,²⁹ as recommended by Acemoglu et al. (2005, 2008, 2009) and it shows better performance than the first difference estimator when variables are highly persistent (Castelló-Climent, 2008). To capture the causal relationships in question a lag structure has also been included in the analysis. The dependent variable, Polity2, is lagged by one year to capture the persistency of democracy (Bobba & Coviello, 2007), and the independent variables have been lagged by five and ten years to acknowledge that the effects of these variables may take time to manifest. Time dummies were also included in the model to prevent “contemporaneous correlation”³⁰ (Roodman, 2006, p. 33) and to take into account any common variations in the dependent variable (Sarafidis & Robertson, 2009). In the following studies multivariate analyses are run with the independent variables lagged by 0, 5 and then 10 years. Next, interactions are run between the three empowerment variables to highlight the importance of the interplay between productive and reproductive activities for democratic development.

²⁹ Controlling for fixed effects takes out the constant, or the historical factors affecting each country. These may be factors that affect the regressors *and* the dependent variable. Controlling for fixed effects removes the cross-sectional variation in the data to determine the *within-effect* of the regressors on the outcome variable (Acemoglu et al., 2009).

³⁰ The assumption is that error terms are independent across time, but may have cross-equation correlations.

4.8.4 Robustness

To test for the robustness of the results these models are run again with an extended sample, including nations with no female education data and some missing Polity2 data to see if the exclusion of these nations affects the results. The multivariate models were also adjusted for other covariates including Muslim majority nations and level of debt servicing. Typically, nations have more conservative attitudes toward women's role in society, and it is likely that women's level of empowerment in these countries is lower. Further analyses were run substituting alternative measures of female education such as the gap between male and female education and female secondary enrolments. Moreover to provide further evidence of the significance of increases in female education, rather than male education the direct effects of total education, male education and male secondary enrolments on democratic development were tested, as well as interactions between male education with female education and female secondary enrolments. To address the potential bias caused by the exclusion of the countries with missing education data (24 countries) the three main multivariate models were run again, this time removing female education from the analyses.

Finally, it is possible that nations that made the greatest progress in women's empowerment were already moving toward democracy in the period leading up to the 1980s, or had prior experience of democracy. Accordingly, further models were run lagging Polity2 by 2, 3, 5, and 10 years. In addition, graphs were created in STATA to show the level of Polity2 annually from 1960 onward for the 32 countries that transitioned from autocracy in 1980 to democracy by 2005.

4.9 Study Two: Sex Ratios and Democratic Development

Figure 4.2 displays the variables under analysis in this study. The purpose of this study is to test the causal effect of sex ratios at marriageable age on democratic development, and to see whether this relationship can be explained in part, by the effect of imbalanced sex ratios on women's empowerment, as represented by women's participation in education and employment, and by fertility rates. The hypothesis is that nations with high sex ratios will have lower levels of female educational attainment and employment and lower fertility rates, and this in turn will

make democratic development less likely. The control variables are the modernisation variables, initial GDP in 1980, economic growth, urbanisation, and population density.

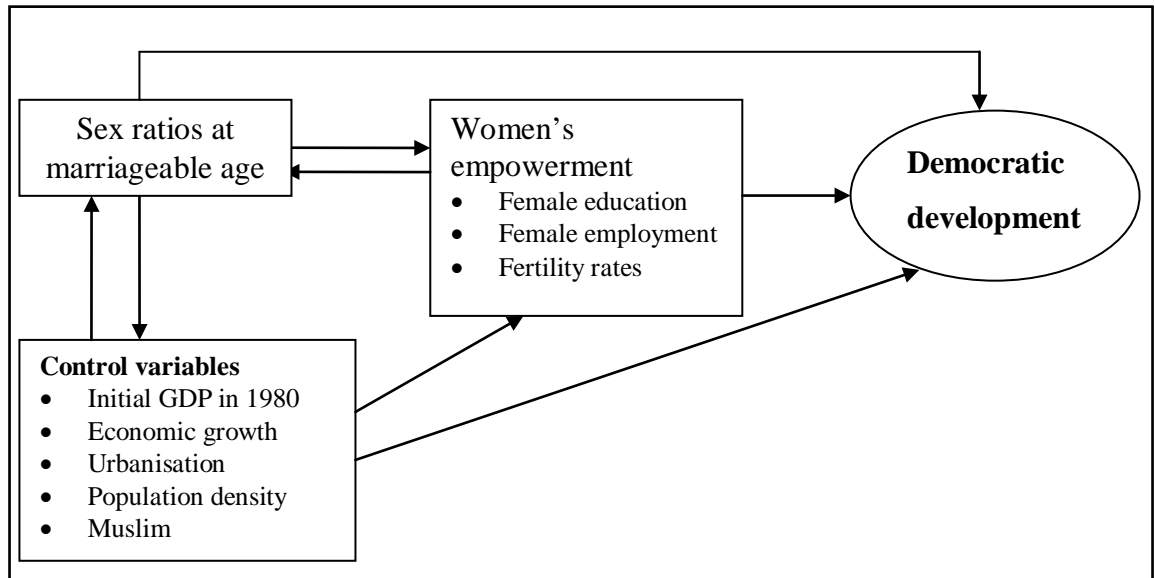


Fig. 4.2 Sex ratios and democratic development model

4.9.1 Country sample

All sovereign countries were included for which Polity2 data were available for the period from 1980 to 2005. Taiwan had no fertility or female labour force participation data so it was removed from the analyses. Germany was also removed because prior to the unification of Germany West Germany was a democracy the entire period, and Yemen was also removed as it is unclear whether data collected for the explanatory variables reflect North or South Yemen. 155 nations remained. See Appendix, Table 1.13.

To control for reverse causation in the regression analyses all countries that were recorded as being fully democratic with a Polity2 score of six and above in every time period were removed. These countries include Australia, Austria, Belgium,

Botswana, Canada, Colombia, Costa Rica, Cyprus, Denmark, Dominican Republic,³¹ Ecuador, Finland, France, Greece, India, Ireland, Israel, Italy, Jamaica, Japan, Mauritius, Netherlands, New Zealand, Norway, Portugal, Spain, Sweden, Switzerland, Trinidad, United Kingdom, United States, and Venezuela (32). Fiji, Solomon Islands, and Peru were not removed due to significant episodes of instability throughout this period. Three nations with large amounts of missing Polity data were also removed (Lebanon, Cambodia, and Afghanistan). This resulted in a strongly balanced panel of 120 countries with 26 time periods from 1980 to 2005 and a total of 3120 observations. See Appendix, Table 1.14 for a full list of countries.

4.9.2 Data

4.9.2.1 Sex ratios

All the sex ratio data were accessed from the Health, Nutrition, and Population database (World Bank, 2011). This database had the most comprehensive cross-nation data over time. The sex ratio at birth was recorded as the number of females per 1000 males. The sex ratio at ages 0-14, was calculated by first taking the population ages 0-14 (% of total) and multiplying it by the total population and then dividing by 100 to obtain the absolute number of people within this age bracket. The total number of females for this age group was then subtracted from this figure to obtain the total number of males for this age group.

To calculate the sex ratio for ages 0-14 the total number of males was divided by the total number of females. To calculate the sex ratio at marriageable age (15-64) the same steps were used. To determine gender bias in each nation Sen's (Sen, 1992) method of dividing the number of males by the number of females was employed. Theoretically, and only for the purpose of discussion the sex ratio at marriageable age was classified into three groups, low, high and balanced. All countries with a sex ratio over 1.02 were classified as high, all countries with a sex ratio between 1.0 and 1.02 were classified as balanced and all countries with an excess of females <1.0

³¹ Dominican Republic had a Polity score of 6 and above for every period except for two years in 1994-95 so it was coded as being democratic for the entire period.

were classified as low.³²

4.9.2.2 Control variables

As discussed in the introduction there is some evidence that both improvements in gender equality and level of democracy occur as a consequence of modernisation Inglehart et al. (2000; 2002; 2009, 2010). Therefore, each of the models were adjusted for each nation's level of modernisation, as measured by level of urbanisation, initial level of economic development, economic growth, and population density for each year. The same control variables used for Study one are used in this study. Urbanisation is the percentage of the population living in urban areas accessed from the World Development Indicators (World Bank, 2011). To measure income and compare living standards across nations a measure of GDP per capita adjusted for Purchasing Power Parity (PPP) from the World Development Indicators was used (World Bank, 2011) The level of initial GDP was taken from 1980 or the first available time point and was logged. Economic growth was measured by calculating the percentage change in GDP, which is mathematically equivalent to the first difference in the log of GDP.³³ Population density measures the number of people per sq. km of land area and was accessed from the World Development Indicators (World Bank, 2011).

4.9.2.3 Muslim majority

Previous research has consistently found a negative and significant relationship between Muslim countries and democratic regimes (Donno et al., 2004; Fish, 2002; Papaioannou & Siourounis, 2008). Typically, Islamic nations have more conservative attitudes toward women's role in society, thus is likely that women's level of empowerment in these countries is lower. A dummy variable was created for nations where more than 50% of the population is Muslim (Pew Research Centre,

³² Note – the classification of a high sex ratio at birth is in excess of 1.05, however by marriageable age it is expected that the sex ratio will equalise and a balanced sex ratio will be between 1.0-1.02.

³³ Several countries do not have GDP data – these include Myanmar, Cuba, and Zimbabwe. The baseline level of economic development was taken from 1980 or from the first year that data were available. (Czech Republic – 1990; Cambodia – 1988; Croatia – 1990; Haiti – 1991; Iraq – 1997; Laos – 1984; Libya – 1999; Mongolia – 1981; Poland – 1990; Qatar – 2000; Romania – 1981; Slovak Republic – 1984; Slovenia – 1990; Tanzania – 1988; Uganda – 1982; Vietnam – 1985). For the post-Soviet nations the initial GDP was taken from 1990.

2009). Nations with a Muslim majority were coded 1; all other nations were coded 0. See Appendix, Table 1.23 for a list of Muslim majority countries.

4.10 Statistical Analyses for Study Two

4.10.1 Descriptive statistics

Descriptive statistics were assembled to test for normality and to examine changes in the sex ratio at different points in the lifespan across varying groups including developing nations, developed nations, resource rich nations, and non-resource rich nations. See Appendix, Tables 1.21, 1.22 and 1.24 for a list of the countries in these categories. The classification for developed and developing nations is from the International Monetary Fund (IMF) classification (International Monetary Fund, 2009) and the resource rich countries include OPEC nations and nations classified by the IMF as being major fuel exporters.³⁴ There were four countries with mean sex ratios consistently greater than 1.5 throughout this period. They were: Kuwait, Bahrain, Qatar, and United Arab Emirates (UAE). Summary statistics and correlation matrixes are available for all samples. See Appendix, Tables 1.15-1.20.

Replicating the method in Study One, countries were categorised as being autocratic with a Polity2 score of -10 to -6, anocratic, with a score of -5 to 5, and countries with Polity2 score of 6 to 10 as being democratic. Each country's change in Polity2 score was tracked over the 25 year period, and then classified into three groups:

- 1) Not democratic – This included nations that remained Autocratic or Anocratic over the period from 1980 to 2005 (n = 67)
- 2) Democratic transition – This included nations that developed democratically over this period, that is they began the period as non-democratic but recorded a Polity2 score of 6 and above by 2005 (n = 53)
- 3) Democratic – This included nations that began and finished the period with a Polity2 score above six (n = 35).

³⁴ We concur with Donno and Russett (2004) that a continuous measure is preferable, however this was the most comprehensive measure available for this period.

Each category was then graphed against each of the empowerment variables to show the changes that occurred from 1980 to 2005. See Appendix, Table 1.25 for a full list of countries by category.

To explore the transitions in greater depth the countries were also classified into eight categories and graphed similarly.

- 1) Always Autocratic – 21 countries
- 2) Autocratic to Anocratic – 32 countries
- 3) Autocratic to Democratic – 36 countries
- 4) Always Anocratic – 7 countries
- 5) Anocratic to Democratic – 17 countries
- 6) Always Democratic – 35 countries
- 7) Democratic to Anocratic (reversal) – 2 countries
- 8) Anocratic to Autocratic (reversal) – Iran

The last two categories, 7 – 8, are not graphically represented as this study is focussed on democratic development and the last two categories contain very small numbers of countries. See Appendix, Table 1.26 for a full list of countries by category.

4.10.2 Dynamic panel model with System GMM estimator

To test the hypothesis that high sex ratios at marriageable ages (15 – 64) have a negative impact on democratic development the following dynamic model was estimated.

Eq (1)

$$\text{Democracy}_{i,t} = a\text{Democracy}_{i,t-T} + \beta X_{i,t-T} + \epsilon_{i,t}$$

$$\beta X_{i,t} = \beta_1 \text{sr1564}_{i,t-T} + \beta_2 \text{urban}_{i,t-T} + \beta_3 \text{lngdp80} + \beta_4 d.\text{lngdp}_{i,t} + \beta_5 \ln(\text{pop})_{i,t-T}$$

$$\epsilon_{i,t} = \mu_i + v_{i,t}$$

Where i is the country, t is the time period, T is the time lag, and x is the vector of controls. The coefficient of interest is β , which reflects whether a country's sex ratio at ages 15-64 had any *causal* effect on democratic development between 1980 and 2005. The error term consists of the fixed effects (μ_i) and idiosyncratic shocks ($v_{i,t}$). GDP was first-differenced to control for economic growth over time, rather than an absolute measure of GDP. The dependent variable, Polity2, is lagged by one year to capture the persistency of democracy (Bobba & Coviello, 2007), and the sex ratio has been lagged by 5 and 10 years to acknowledge that its effect may take time to manifest. Once again annual time dummies were also included in the model to prevent contemporaneous correlation (Roodman, 2006), and to take into account any common variations in the dependent variable (Sarafidis & Robertson, 2009). The empowerment variables, female education, fertility rate, and female labour force participation were then introduced into the model one at a time to examine the effect of their inclusion on the relationship between sex ratio and democratic development. These empowerment variables were then lagged by 5 and 10 years.

4.10.3 Robustness

To test for the robustness of the results, all the models presented in Table 6.8 were run again, excluding the four outliers. The multivariate models were also adjusted for other covariates including the Polity2 variable lagged by 2 years, abundance of natural resources, and Muslim majority nations. These models were also run again, excluding the four outliers.

4.11 Study 3: Gender Equality and Democracy

Figure 4.3 displays the variables under analysis in this study. The purpose of this study is to test the relationship between gender equality at a social institutional level and levels of democracy in 2009. As in the previous studies the model is adjusted for a nation's level of modernisation. In this study the level of total educational attainment is included as a control variable as female education is not a key independent variable in the analyses.

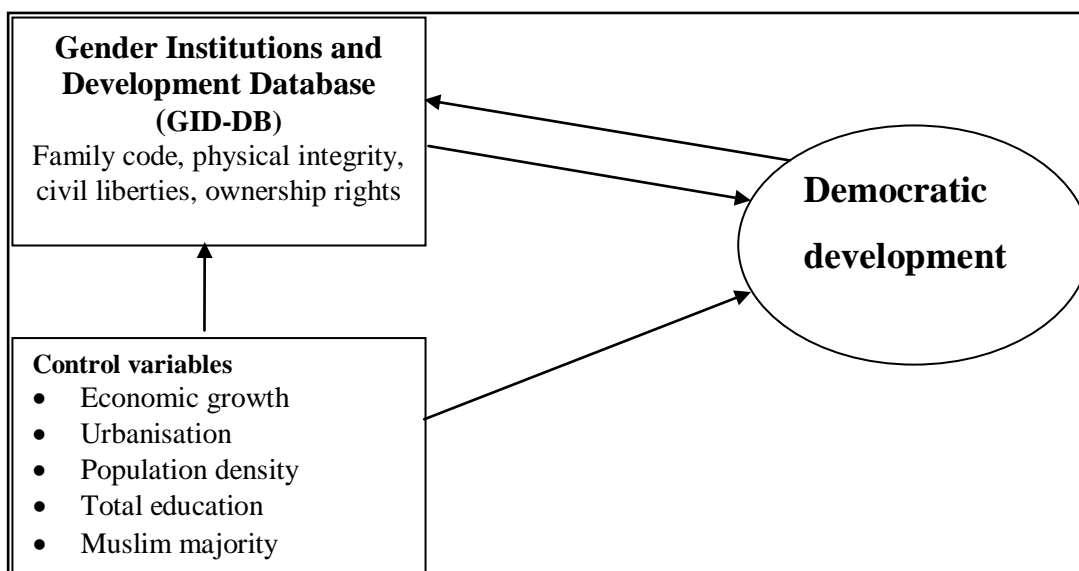


Fig. 4.3 Gender equality and democracy model

4.11.1 Sample

The Gender Institutions and Development Database (GID-DB) contains data for 123 developing countries in 2009. Six countries or regions had no Polity2 data available for 2009 so were removed from the analysis (Afghanistan, Bosnia, Hong Kong, Occupied Palestine Territory, Puerto Rico, and Iraq). Singapore, Slovenia, Israel, and Taiwan were also removed, as they were not classified as developing or emerging economies under the International Monetary Fund (IMF) classification (International Monetary Fund, 2009). See Appendix, Table 1.27 for a full list of the 113 countries included in the analysis.

4.12 Data

4.12.1 Dependent variable

The dependent variable used in the analyses is the Polity2 variable from the Polity IV database, as discussed earlier in Chapter Four, Section 4.3.1, however as this is a cross-sectional study only the data for 2009 is used as the independent variables are only available for this year.

4.12.2 Independent variables

The gender equality measures in this study are drawn from the Gender Institutions and Development Database (GID-DB), which measures gender equality at a social

institutional level (Morrisson & Jütting, 2005). At present this dataset contains data for 123 developing countries and is only available for 2009, (at the time of writing up the data for 2012 became available, however, the Polity2 data were only available up to 2010), thus the study is restricted to cross-sectional analyses.

The Gender Institutions and Development Database (GID-DB) is a recently developed database that contains information on gender equality across nations. The authors have developed this database from a variety of sources, including Amnesty International, BRIDGE (a research and information service of the Institute for Development Studies specialised in gender and development), WIDNET (the Women in Development Network), AFROL (a news agency that concentrates on Africa), and a study commissioned by the French Parliament. Where possible these databases were cross-checked with other sources to test the reliability and validity of information (Jütting, Morrisson, Dayton-Johnson, & Drechsler, 2008).

The Gender Institutions and Development Database (GID-DB) focuses on the root causes of gender inequality, in particular those that relate to social norms, traditions, and family law, rather than outcomes of gender discrimination. It classifies gender equality into the following four categories: Family code, Physical integrity, Civil liberties, and Ownership rights. Several indicators underpin each of these four categories. Each indicator is based on two components: the existence of a specific social institution, and the proportion of the population that is affected by this social institution. In the original dataset, “0” indicates gender equality and “1” represents gender inequality, except for “early marriage.”⁴ For ease of interpretation with respect to the Polity2 measure, the variable has been recoded so that “0” represents gender inequality and “1” represents gender equality for each item. Any coding between “0” and “1” reflects the degree of discrimination against women, except where otherwise specified in the next section.

4.12.2.1 Family code

This category reflects marriage, inheritance customs, and decision-making power within a household and consists of three measures: polygamy, parental authority, and inheritance. The polygamy measure (polygamy) is a reflection of the level of acceptance of polygamy in a country and the proportion of the population subject to

laws and or customs in favour of polygamy, not the percentage of polygamous households. Parental authority (authority) reflects the degree to which a father has complete control over his children. In cases where the father has complete authority, he alone can obtain passports for his children and make decisions about their education and, is most likely to gain custody of his children during divorce. Inheritance practices (inheritance) reflect the degree to which laws favour male heirs over female ones.

4.12.2.2 Physical integrity

This category reflects both the level of violence against women and attitudes about violence toward women. This subset represents three different aspects of violence, including female genital mutilation, violence, and son preference. The female genital mutilation indicator (genmut) measures the prevalence of women affected by this practice. The violence measure (violence) quantifies the existence of laws protecting women against violence in the areas of domestic violence, sexual assault or rape, and sexual harassment. The measure of violence is averaged across these three items. “0” reflects the absence of any laws on these three items and ‘1’ reflects specific laws in place for all three items. Any scores in between reflect laws being drafted or specific laws in place for one or two of the items. The son preference (sonpref) or “missing women” measure reflects the level of gender bias in mortality rates and the sex ratios in young people and adults.

4.12.2.3 Civil liberties

This category measures the extent to which women can participate in social life. The freedom of movement variable (freemove) measures the freedom of women to move outside the home including, the freedom to travel, to join a club or association, the freedom to go shopping without a male guardian, and the freedom to see one’s family and friends. Public dress code (dresscode) reflects the obligation of women to follow a certain dress code in public. “1” reflects 50 percent or less of the population are required to follow a certain dress code, “0.5” reflects more than 50 percent of the population are required to follow a dress code and “0” reflects the requirement of all women to follow a dress code by law.

4.12.2.4 Ownership rights

This category includes three measures of women's ability to own land and property, and to obtain bank loans. Variations between "0" and "1" indicate the extent of restrictions or the size of the female population affected by the restrictions. Land access (land) reflects women's ability to own agricultural land. The bank loans item (bank) reflects women's ability to obtain bank loans. Property access (property) reflects women's right to own property other than land.

4.13 Control Variables

4.13.1 Modernisation variables

As discussed in the introduction there is some evidence that both improvements in gender equality and level of democracy are a consequence of modernisation (Inglehart & Baker, 2000; Inglehart et al., 2002; Inglehart & Welzel, 2009, 2010). Therefore, to test for the independent effects of the explanatory variables on democracy all the models were adjusted for a nation's level of modernisation, as represented by level of economic development, total educational attainment, urbanisation, and population density.³⁵ Economic development and living standards were compared across nations by using a measure of GDP per capita adjusted for Purchasing Power Parity (PPP). GDP in each country is measured in constant US dollars and the PPP adjustment is made to avoid the bias in the GDP comparison caused by exchange rates fluctuations (Central Intelligence Agency, 2008).

To measure the level of education the average number of years of educational attainment by the total population over 15 years in 2005 was accessed from the Barro and Lee dataset (Barro & Lee, 2011). To measure the level of urbanisation the percentage of the population living in urban areas was accessed from the World Bank Development Indicators for 2009 (World Bank, 2011) (Population density measures the number of people per square km of land area and was also accessed from the World Development Indicators for the year 2009 (World Bank, 2011).

³⁵ Total education was included as one of the modernisation variables in this study as female education was not one of the key independent factors being examined.

4.13.2 Muslim majority

Previous research has consistently found a negative and significant relationship between Muslim countries and democratic regimes (Donno & Russett, 2004; Fish, 2002; Papaioannou & Siourounis, 2008b). Hence, a dummy variable was created for nations where more than 50% of the population is Muslim (Pew Research Centre, 2009). Nations with a Muslim majority were coded 1; all other nations were coded 0. See Appendix, Table 1.28 for a list of Muslim majority countries.

4.14 Statistical Analyses

Summary statistics were assembled and normality tests carried out. The dependent variable, Polity2, demonstrated a slightly bi-modal distribution; however the distribution of the residuals followed a normal distribution with no evidence of a pattern when the residuals were clustered against fitted lines. See Appendix, Fig. 7.9. The possibility of converting Polity2 into a categorical variable was investigated. However, the analyses showed that there was greater value in treating Polity2 as a continuous variable rather than collapsing the countries into a dichotomy of democratic and non-democratic, and losing information about mixed regime types.

A Spearman's correlation matrix was performed to determine whether a relationship existed between the gender equality indicators and the Polity2 variable and to test for multicollinearity amongst the independent variables. None of the independent variables were highly correlated with each other (>0.8). Thus, multicollinearity was unlikely to be a major concern. See Appendix, Table 1.28.

Firstly, univariate models were run to test the effect of each of the eleven gender equality variables on the level of democracy for 2009. See Appendix Table 1.29. A generalised linear multivariate model was then run to test the relationship between a nation's level of modernisation and level of democracy. Next, the gender equality indicators were added to the model altogether. Finally, eleven separate models were run testing the interaction between each of the gender equality variables and level of GDP, adjusting for total education, urbanisation, and population density. All models were run using STATA version 11.0.

4.15 Summary

This chapter begins with the main hypothesis and research questions that this thesis is attempting to answer. It explains the rationale for the research design, comparing quantitative and qualitative methods. A comprehensive description of the variables chosen to reflect the main concepts and the reason for their selection is explained. Finally, the rationale and description of the statistical methods employed for each analysis chapter was outlined. Chapters Five, Six, and Seven details the analysis undertaken and the results obtained.

Chapter Five: Results

Study One – Women’s Empowerment and Democratic Development

5.0 Introduction

This chapter presents the analysis of data from Study 1- women’s empowerment as a core driver of democratic development, and an interpretation and discussion of the results

5.1 Data Presentation

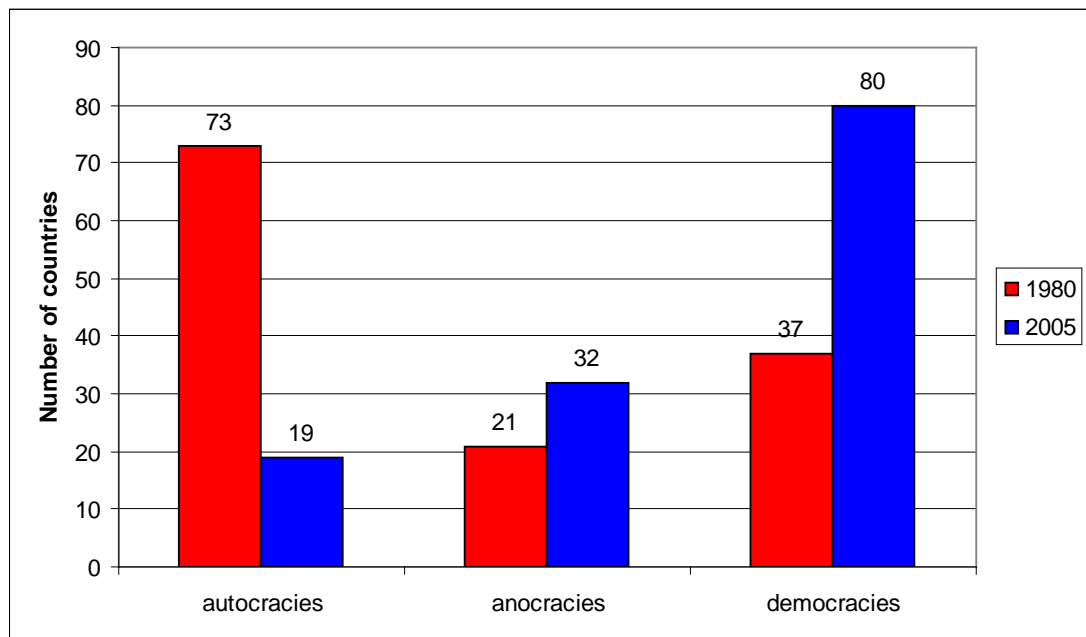


Fig. 5.0 The distribution of Polity2 from 1980 to 2005

Figure 5.0 shows that there was a substantial shift toward democracy from 1980 to 2005. In 1980, 73 countries were classified as being autocratic; in 2005 this had fallen to 19. In 1980, there were 37 democracies; in 2005 the number had increased to 80 and the number of anocracies increased by 11, with most of the shift being from autocratic nations. Only two countries suffered democratic reversal by the end

of the period. These include Sri Lanka (-6 to -5), and Gambia (8 to -5). Iran recorded a reversal from anocracy to autocracy (-2 to -6).

5.1.1 Democratic transition

The following graphs show that countries that transitioned from being ‘autocratic’ or ‘anocratic’ to ‘democratic’ reported, on average, higher female educational attainment and lower fertility rates than nations that did not develop democratically. Countries that did complete the democratic transition had on average 7.7 years of female education, a fertility rate of 2.75 and female labour force participation of 43% by 2005, whereas countries that did not make the transition had on average 5.6 years of female education, a fertility rate of 3.69, and female labour force participation of 37% by 2005. These differences were statistically significant. The mean difference between countries that did not democratise and those that did was not significant for urbanisation, population density, and initial level of GDP. There was a significant difference between the two groups (those that transitioned and those that did) for the income variable in 2005, $P < 0.10$.

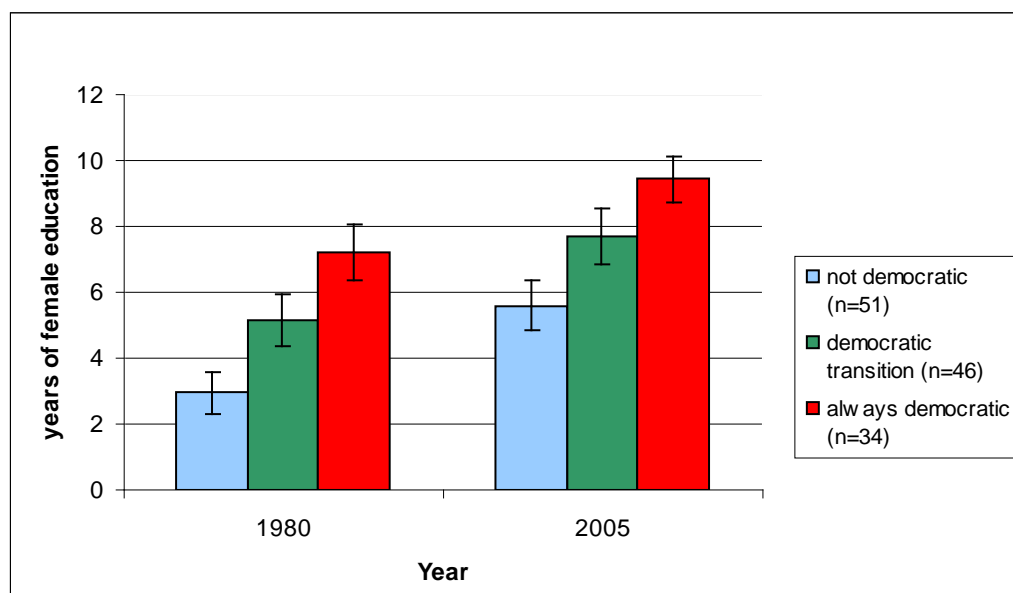


Fig. 5.1 Mean female educational attainment from 1980 to 2005 by Polity2 change

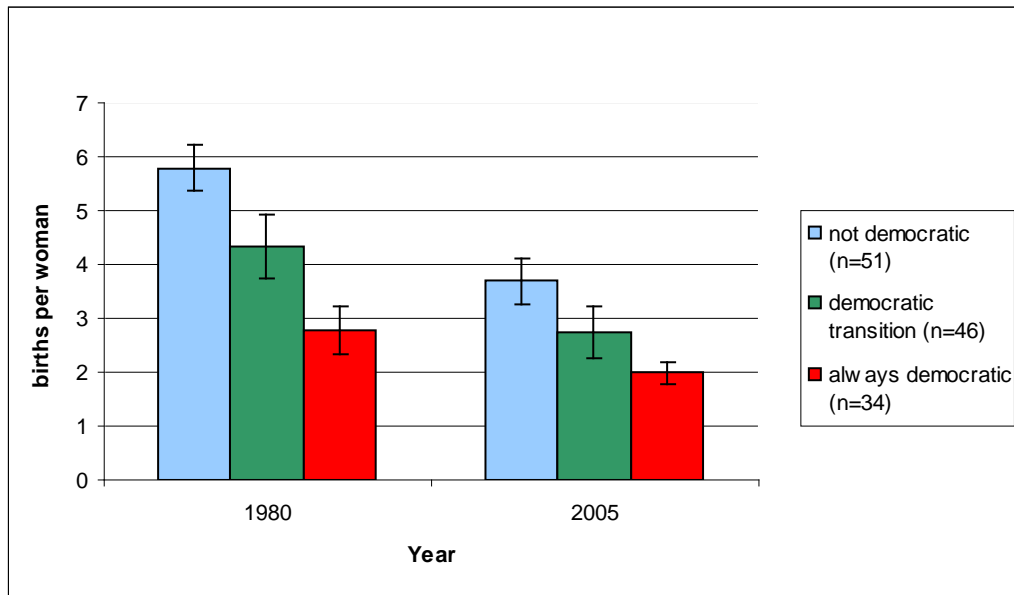


Fig. 5.2 Mean fertility rates from 1980 to 2005 by Polity2 change

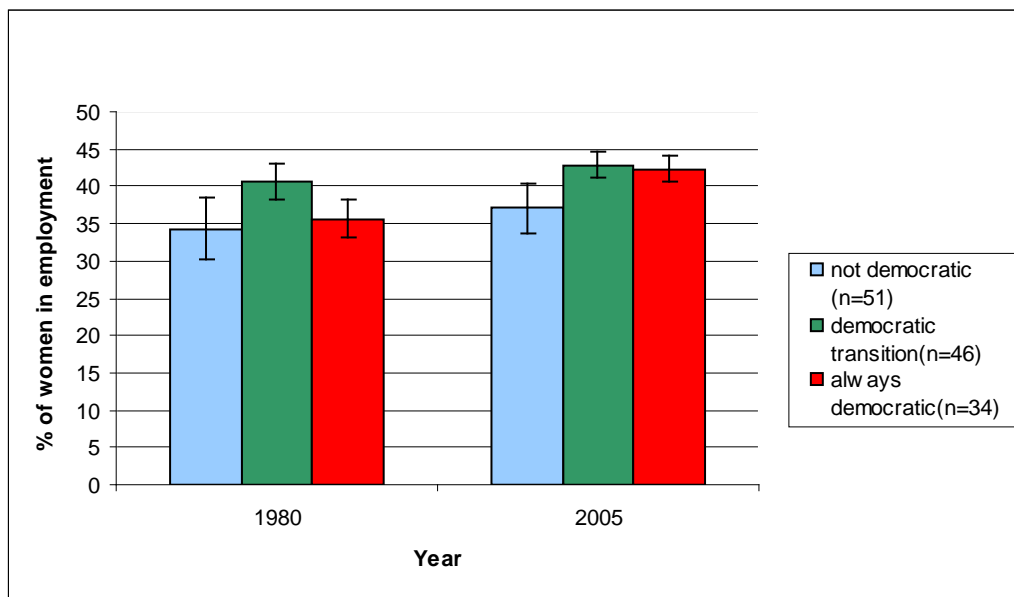


Fig. 5.3 Mean female labour force participation from 1980 to 2005 by Polity2 change.

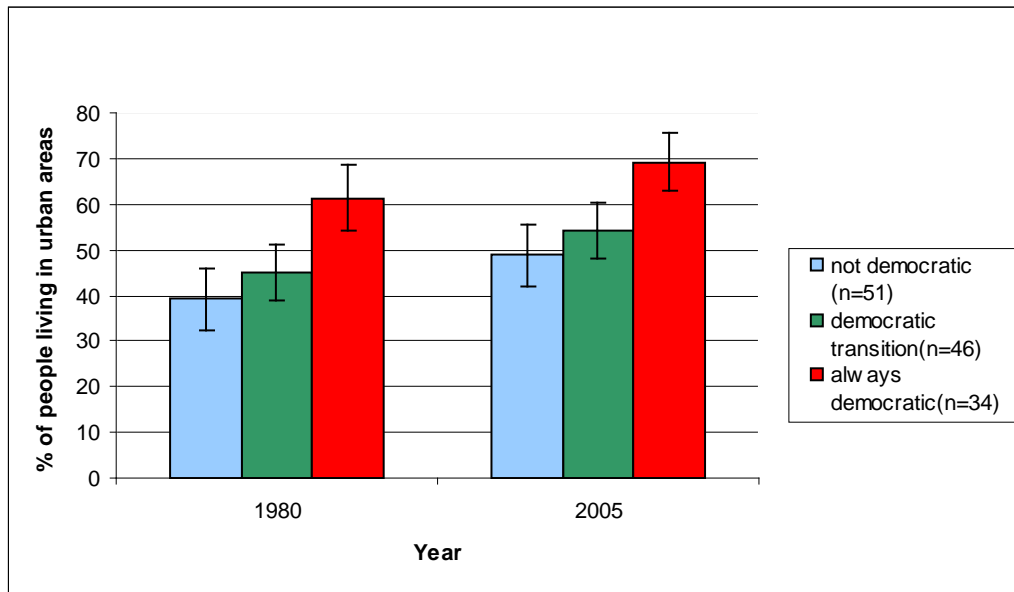


Fig. 5.4 Mean urbanisation from 1980 to 2005 by Polity2 change

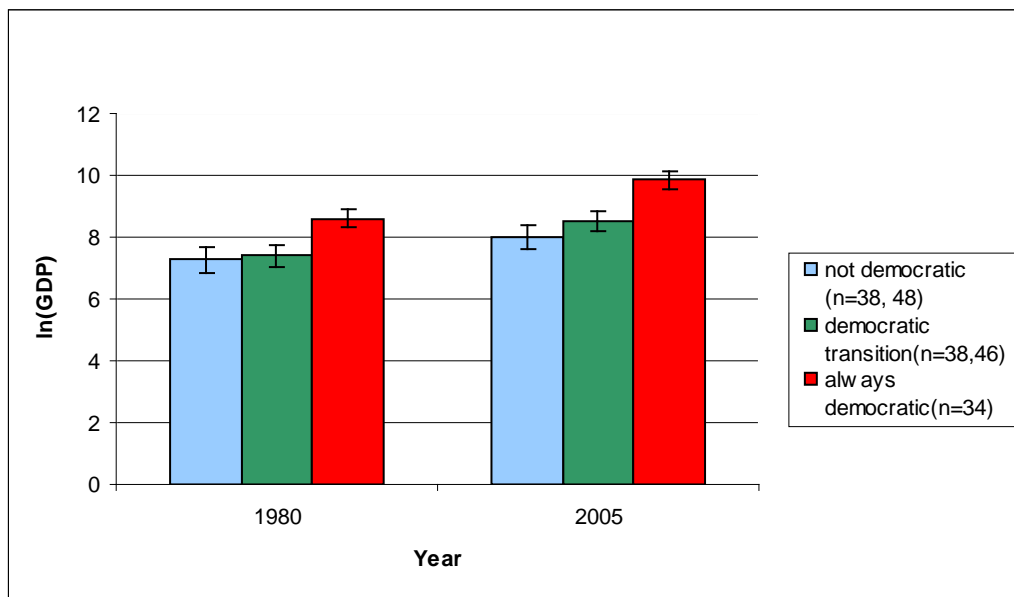


Fig. 5.5 Mean ln(gdp) from 1980* to 2005 by Polity2 change

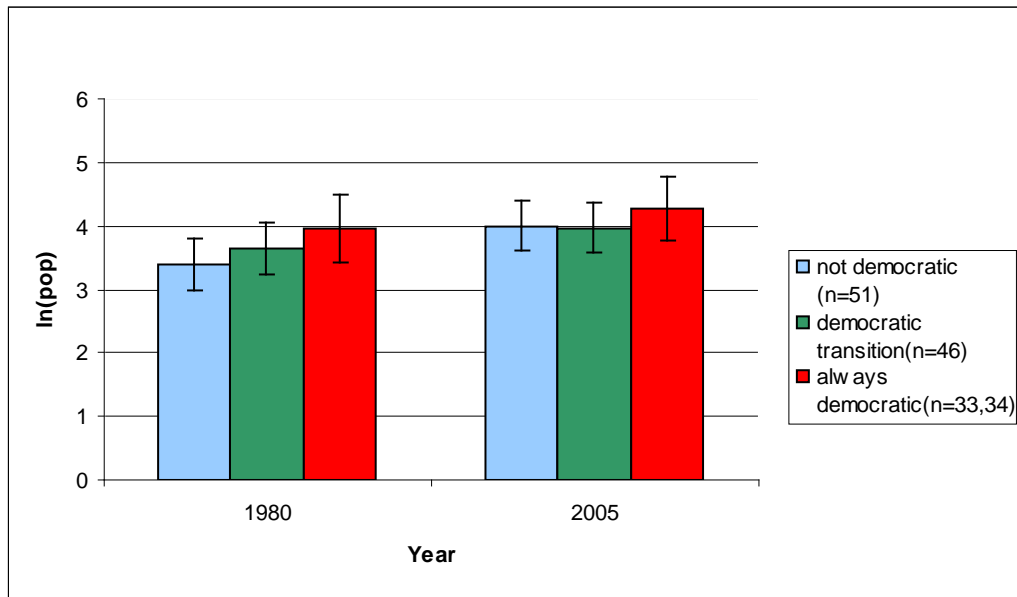


Fig. 5.6 Mean population density from 1980 to 2005 by Polity2 change.

The following graphs also track the change in female educational attainment scores by Polity2 from 1980 to 2005 but this time six categories are displayed. The expansion of the categories to six shows that the always autocratic nations made enormous gains in increasing female education levels and reducing fertility rates during this period. However, their labour force participation levels remained low in comparison with the other categories. The nations that remained anocratic during this period also increased their female education levels and had high female labour force participation rates; however their fertility rates were still high in 2005, at 3.6 births per woman. Nations that began the period with higher levels of female education and lower fertility rates were more likely to transition toward democracy than those that achieved higher levels later in the period. Overall, it seems that all three empowerment variables needed to be strong for democratic development during this period.

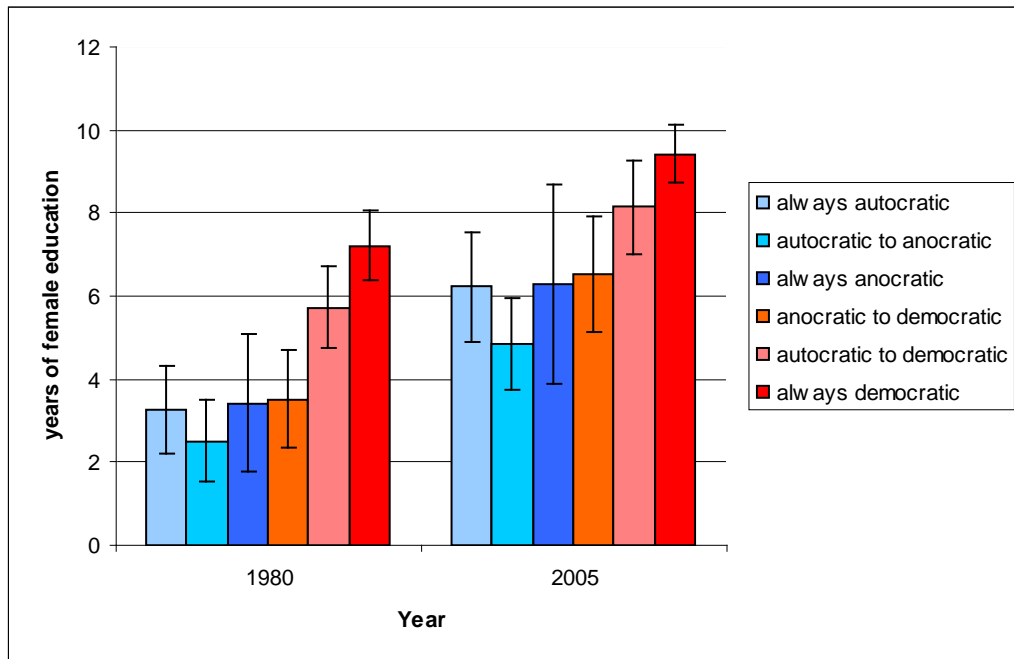


Fig. 5.7 Mean female educational attainment from 1980 to 2005 by Polity2 change

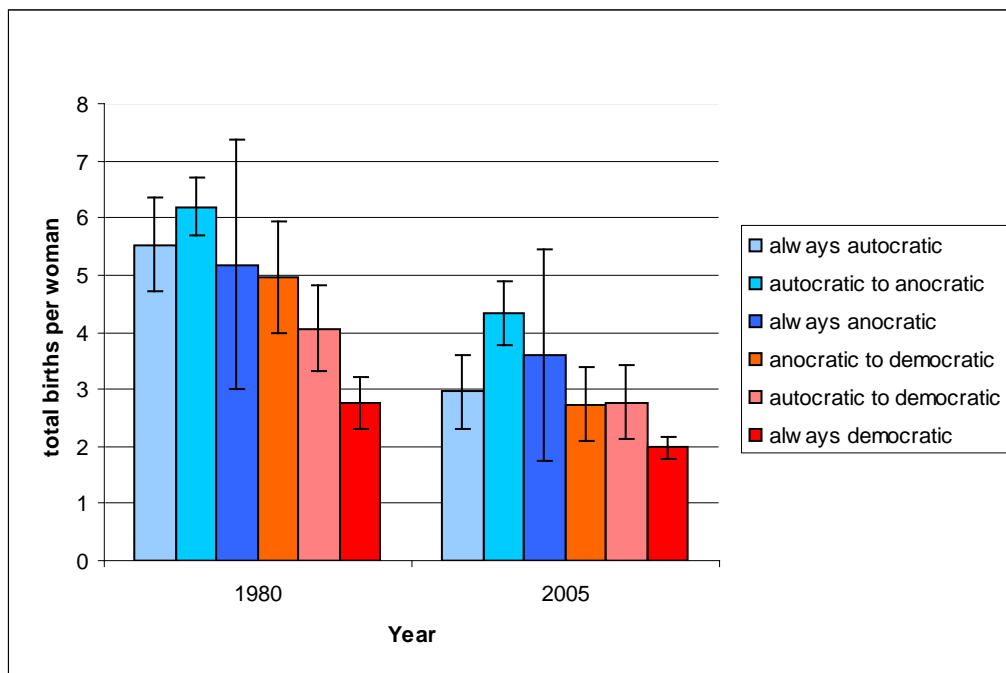


Fig. 5.8 Mean fertility rates from 1980 to 2005 by Polity2 change

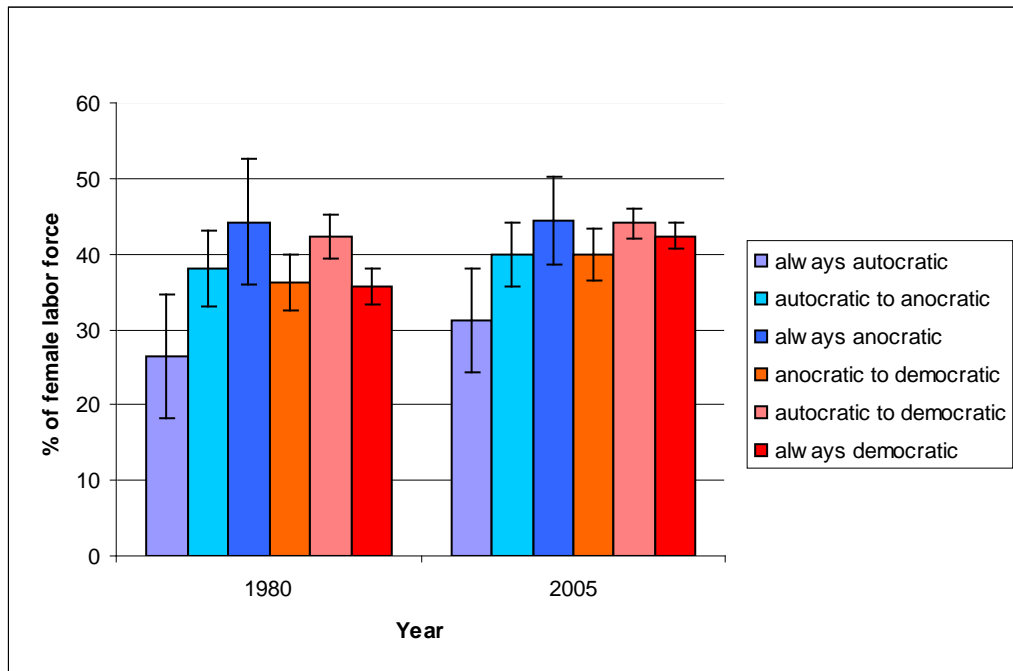


Fig. 5.9 Mean female labour force participation from 1980 to 2005 by Polity2 change.

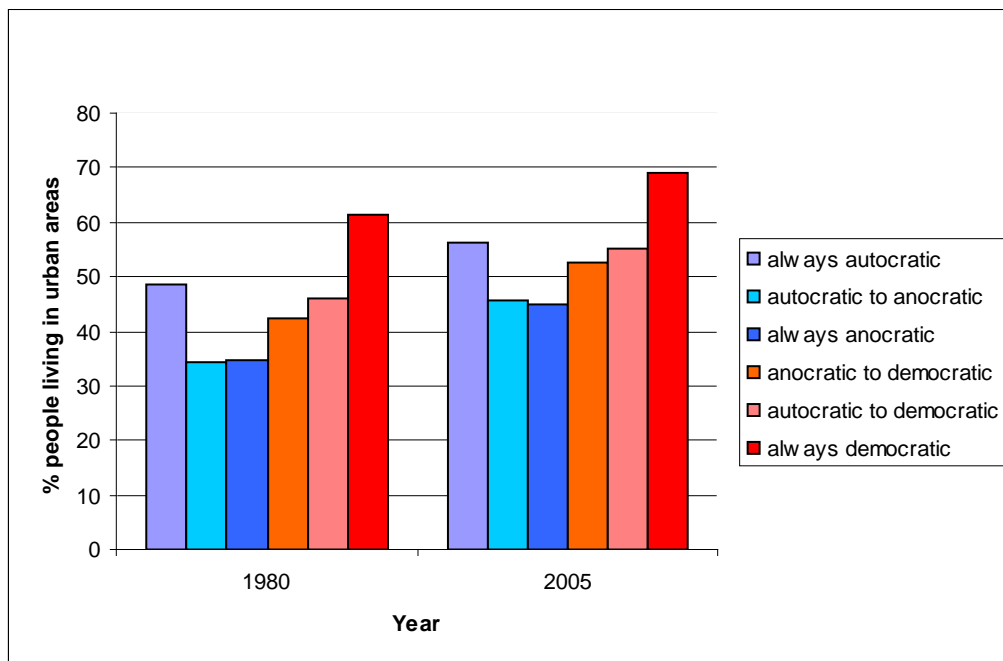


Fig. 5.10 Mean urbanisation from 1980 to 2005 by Polity2 change.

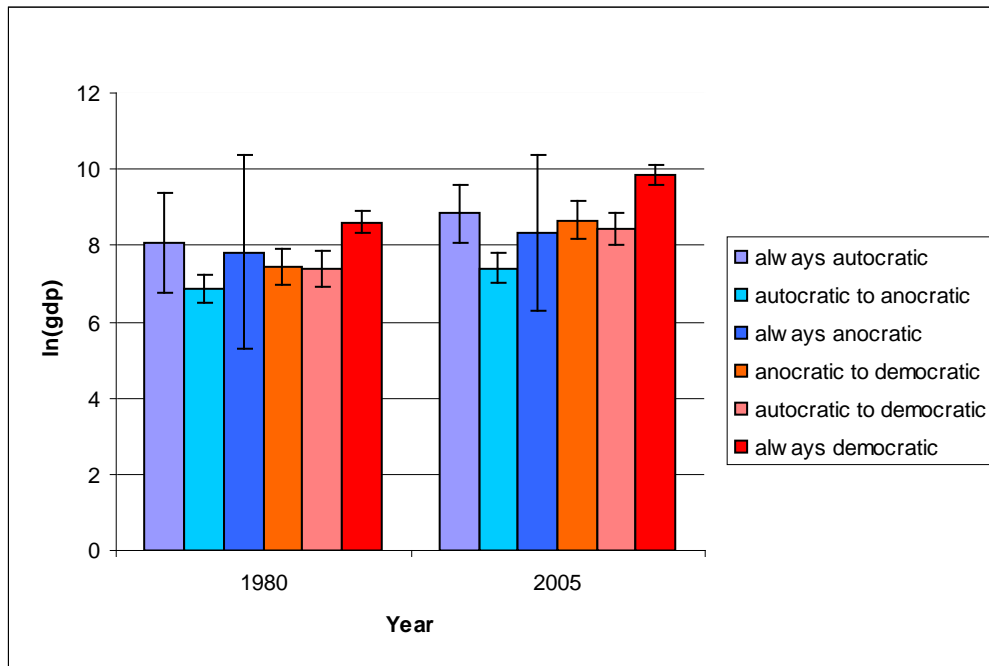


Fig. 5.11 Mean ln(gdp) from 1980 to 2005 by Polity2 change.

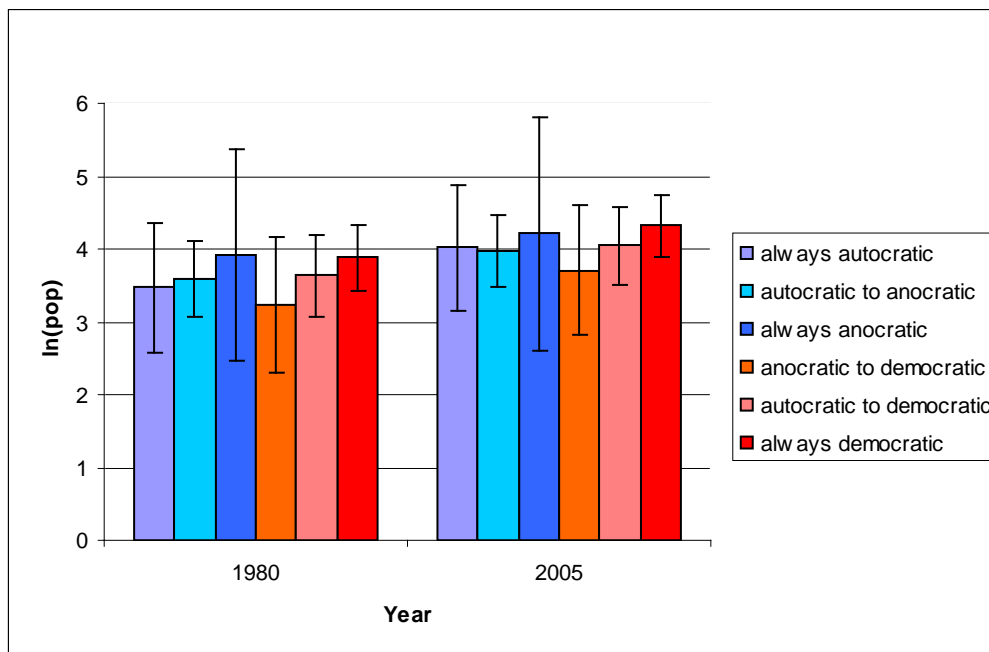


Fig. 5.12 Mean ln(pop) from 1980 to 2005 by Polity2 change.

5.1.2 Dynamic panel model with system GMM estimator

Table 5.1 displays the results of the analyses and the diagnostic tests that were conducted to determine the validity of the instruments for this part of the study. The p values of the AR(2) test, the Sargen test and the Hansen difference test suggest that the instruments are valid. In the bivariate analyses all three empowerment variables had a significant effect on democratic development with signs in the expected direction. Increases in female education attainment levels and participation in the labour force had a positive and causal effect, whereas *falls* in fertility rates had a significant impact on democratic development. In the multivariate analyses increases in female education and female labour force participation remained positively associated with democratic development over this period, their positive effect increasing with 5 and 10 year lags. However, fertility rates were no longer significant.³⁶

³⁶ Models excluding the post-Soviet nations were also run to test whether there was any difference between the two samples. Because half of these countries became democratic and half did not there was very little difference in the results between the two samples and female education and female labour force participation remained statistically significant. All 15 post soviet nations had very similar female education and labour force participation rates throughout this period with the main variation being across fertility rates. Out of the 15 post-soviet nations, 5 nations did not have education data (1 went on to be democratic (Georgia) by 2005. The other four nations – Azerbaijan, Belarus Kyrgyzstan, and Turkmenistan did not become democratic). However, the remainder of post-Soviet nations for which education data was available recorded female education attainment of at least 6 years in 1980 and at least 9 years in 2005. Despite this achievement, three of these nations, Kazakhstan, Uzbekistan, and Tajikistan did not become democratic whereas the other seven nations did. Female labour force participation rates were very similar for this group of nations (around 45-50%). Fertility rates were typically low for this group of nations; however, fertility rates were higher in Tajikistan, Turkmenistan, and Uzbekistan.

Table 5.0 System GMM dynamic panel model; a fully balanced sample (97 countries; N = 2522 country-year observations)

Polity2	(i) β (s.e)	(ii) β (s.e)	(iii) β (s.e)	(iv) β (s.e)	(v) β (s.e)	(vi) β (s.e)	(vii) β (s.e)	(viii) β (s.e)	(ix) (s.e)
Polityt-1	0.873*** (0.048)	0.860*** (0.052)	0.876*** (0.047)	0.876*** (0.049)	0.862*** (0.052)	0.811*** (0.052)	0.881*** (0.047)	0.882*** (0.047)	0.884*** (0.047)
female education	0.168** (0.060)			0.079* (0.047)			0.075* (0.044)	0.073 (0.046)	0.071 (0.045)
fertility rates		-0.278** (0.113)		-0.113 (0.089)			-0.149 (0.093)	-0.085 (0.083)	-0.092 (0.083)
% female labour force participation			0.032** (0.012)	0.020** (0.009)			0.016** (0.008)	0.027** (0.009)	0.024** (0.009)
female education t-5					0.089* (0.053)				
fertility rates t-5					-0.162 (0.109)				
% female labour force t-5					0.019** (0.009)				
female education t-10						0.134** (0.068)			
fertility rates t-10						-0.220 (0.155)			
% female labour force t-10						0.027** (0.011)			
urbanisation	0.007 (0.006)	0.001 (0.006)	0.009 (0.006)	0.006 (0.005)	-0.006 (0.006)	-0.006 (0.007)	0.006 (0.005)	0.007 (0.005)	0.007 (0.005)
economic growth	-0.130 (0.993)	-0.345 (0.972)	0.121 (0.984)	-0.230 (0.985)	-0.477 (1.066)	-0.287 (1.153)	-0.240 (0.979)	-0.233 (0.985)	-0.221 (0.987)
lngdp80	-0.296* (0.159)	-0.166 (0.163)	0.052 (0.121)	-0.169 (0.137)	-0.219 (0.154)	-0.339* (0.199)	-0.189 (0.132)	-0.174 (0.126)	-0.185 (0.134)
ln(pop)	-0.032 (0.050)	-0.086 (0.061)	0.002 (0.061)	-0.052 (0.053)	-0.063 (0.062)	-0.111 (0.083)	-0.059 (0.053)	-0.037 (0.049)	-0.038 (0.049)
femeduc*fertility							-0.026 (0.016)		
femeduc*labour								0.005** (0.002)	

fertility*labour									-0.008** (0.004)
Time dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
No of observations	2127	2104	2127	2104	1807	1413	2104	2104	2104
No of countries	94	94	94	94	94	94	94	94	94
No of instruments	53	53	53	55	48	38	56	56	56
AR(1)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
AR(2)	0.271	0.258	0.278	0.262	0.473	0.560	0.263	0.263	0.263
Sargen test	0.546	0.471	0.547	0.440	0.401	0.727	0.451	0.454	0.450
Hansen diff test	0.415	0.378	0.405	0.288	0.270	0.431	0.292	0.265	0.270

***p<0.01, ** p<0.05, *p<0.10 robust standard errors are reported in parentheses

- | | | | |
|------|--|-------|-----------------------------------|
| i) | bivariate analysis female education | vi) | lagged explanatory variables t-10 |
| ii) | bivariate analysis fertility rates | vii) | femeduc*fertility |
| iii) | bivariate analysis female labour force participation | viii) | femeduc*labour |
| iv) | multivariate analyses - contemporaneous | ix) | fertility*labour |
| v) | lagged explanatory variables t-5 | | |

5.1.3 Interactions

The results from a model that included interactions between the three empowerment variables were run and the results are presented in Table 5.0. The results are also presented graphically (Figs. 5.13-5.15). The interactions demonstrated a positive and significant interaction between female education and labour force participation on democratic development (Fig. 5.13). There was also a negative and significant relationship between fertility rates and female labour force participation. As the level of female labour force participation increased and the fertility rate *decreased*, the level of democracy also increased (Fig. 5.14). Even though the interaction between female education and fertility was not significant, a distinct pattern emerged when plotted. With high education levels and low fertility countries are more likely to be democratic than countries where both education and fertility is high (Fig. 5.15).

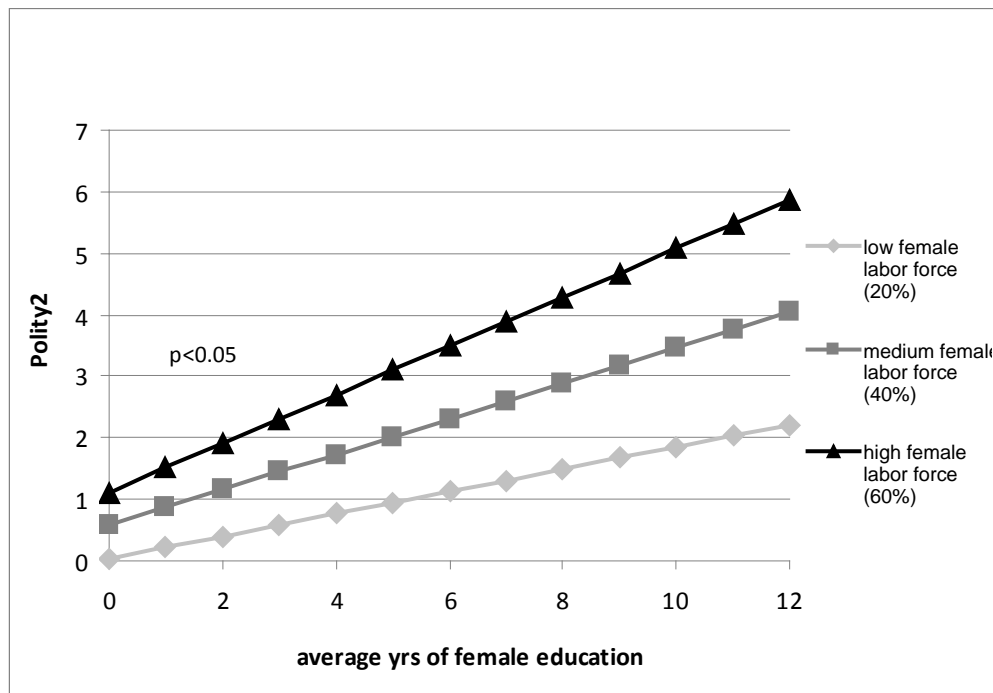


Fig. 5.13 The interaction effect of female education by percentage of females in the labour force on democratic development

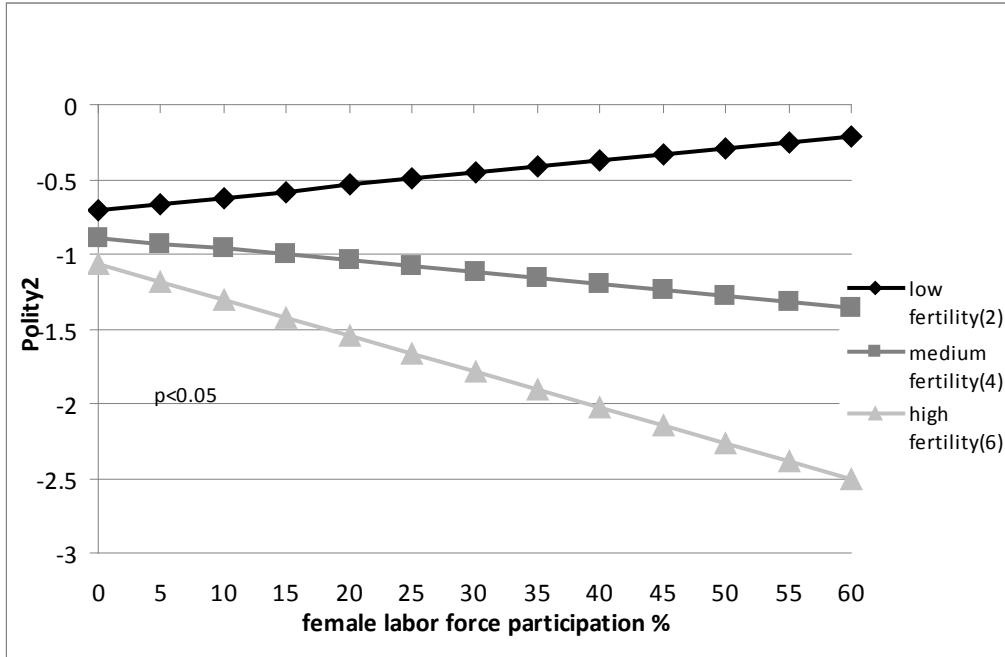


Fig. 5.14 The interaction effect of fertility rates and female labour force participation on democratic development

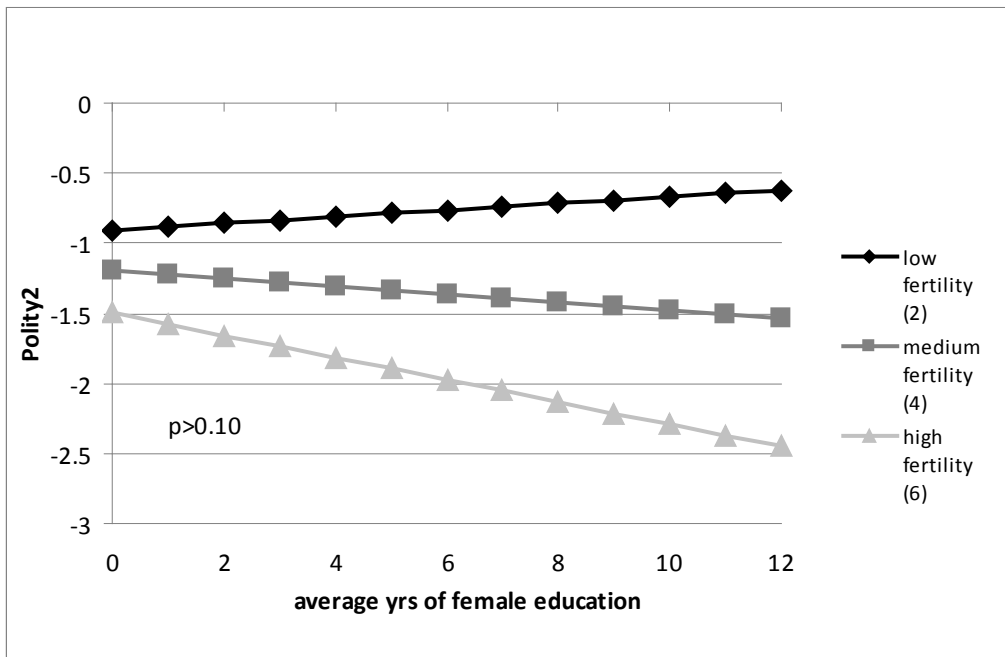


Fig. 5.15 The interaction effect of female education and fertility rates on democratic development

5.2 Robustness

To test for the robustness of the results all the models presented in Table 5.0 were run again with an extended sample including countries that had missing data education and polity data. The results remain unchanged in the extended sample (Table 5.1).

The multivariate models in Table 5.0 were also adjusted for other covariates including measures that identified as Muslim majority nations. Typically, Muslim nations have more conservative attitudes toward women's role in society (Inglehart & Norris, 2003), thus it is likely that women's level of empowerment in these countries is lower. Further analyses were run substituting alternative measures of female education such as the gap between male and female education and female secondary enrolments. Moreover, to provide further evidence of the significance of increases in female education, rather than male education, the effect of total education, male education, and male secondary enrolments on democratic development was examined. Interactions were also run for male education and the women's empowerment variables, as well as female secondary education.

Table 5.1 Robustness – An extended sample including countries with no education data and missing polity data (123 countries; N= 3198 country-year observations)

Polity2	(i) β (s.e)	(ii) β (s.e)	(iii) β (s.e)	(iv) β (s.e)	(v) β (s.e)	(vi) β (s.e)	(vii) β (s.e)	(viii) β (s.e)	(ix) β (s.e)
Polityt-1	0.876*** (0.048)	0.854*** (0.049)	0.874*** (0.045)	0.878*** (0.049)	0.864*** (0.052)	0.813*** (0.052)	0.883*** (0.047)	0.884*** (0.047)	0.886*** (0.047)
female education	0.165** (0.060)			0.077* (0.046)			0.073* (0.043)	0.072* (0.046)	0.070 (0.044)
fertility rates		-0.249** (0.098)		-0.113 (0.088)			-0.148 (0.092)	-0.084 (0.082)	-0.092 (0.082)
% female labour force participation			0.030** (0.011)	0.019** (0.009)			0.015** (0.008)	0.026** (0.009)	0.024** (0.009)
female education t-5					0.087* (0.052)				
fertility rates t-5					-0.163 (0.108)				
% female labour force t-5					0.019** (0.009)				
female education t-10						0.129* (0.067)			
fertility rates t-10						-0.225 (0.152)			
% female labour force t-10						0.027** (0.011)			
urbanisation	0.007 (0.006)	0.003 (0.006)	0.010 (0.006)	0.006 (0.005)	0.006 (0.006)	0.006 (0.007)	0.006 (0.005)	0.007 (0.005)	0.007 (0.005)
economic growth	-0.158 (0.995)	0.089 (0.797)	0.465 (0.800)	-0.261 (0.979)	-0.512 (1.059)	-0.337 (1.146)	-0.187 (0.130)	-0.173 (0.125)	-0.253 (0.982)
lngdp80	-0.293* (0.157)	-0.187 (0.153)	0.031 (0.117)	-0.169 (0.135)	-0.218 (0.153)	-0.338* (0.197)	-0.267 (0.974)	-0.265 (0.980)	-0.184 (0.132)
ln(pop)	-0.032 (0.053)	-0.041 (0.060)	0.036 (0.062)	-0.052 (0.052)	-0.063 (0.061)	-0.112 (0.082)	-0.059 (0.052)	-0.037 (0.048)	-0.038 (0.048)
femeduc*fertility							-0.025 (0.016)		
femeduc*labour								0.005** (0.002)	

fertility*labour									-0.008** (0.004)
Time dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
No of observations	2139	2545	2568	2116	1819	1425	2116	2116	2079
No of countries	95	117	117	95	95	95	95	95	93
No of instruments	53	53	53	55	48	38	56	56	56
AR(1)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
AR(2)	0.390	0.266	0.280	0.380	0.621	0.768	0.381	0.380	0.381
Sargen test	0.582	0.493	0.539	0.478	0.438	0.755	0.489	0.492	0.487
Hansen diff test	0.410	0.462	0.425	0.281	0.264	0.420	0.285	0.260	0.264

***p<0.01, ** p<0.05, *p<0.10 robust standard errors are reported in parentheses

- i) bivariate analysis female education
- ii) bivariate analysis fertility rates
- iii) bivariate analysis female labour force participation
- iv) multivariate analyses – contemporaneous
- v) lagged explanatory variables t-5
- vi) lagged explanatory variables t-10
- vii) femeduc*fertility
- viii) femeduc*labour
- ix) fertility*labour

Table 5.2 Robustness – fully balanced sample with additional covariates, alternative measures for female education and their interactions (97 countries, N = 2522 Country-year observations)

Polity2	(i) β (s.e)	(ii) β (s.e)	(iii) β (s.e)	(iv) β (s.e)	(v) β (s.e)	(vi) β (s.e)	(vii) β (s.e)	(viii) β (s.e)	(ix) β (s.e)	(x) β (s.e)	(xi) β (s.e)
Polity2,t-1	0.871*** (0.050)	0.870*** (0.050)	0.784*** (0.095)	0.791*** (0.092)	0.798*** (0.087)	0.876*** (0.049)	0.879*** (0.047)	0.879*** (0.047)	0.881*** (0.048)	0.801** * (0.089)	0.877* ** (0.049)
female education	0.055 ^d (0.041)						-0.019 (0.100)				
fertility rates	-0.134 (0.094)	-0.188*** ^a (0.094)	-0.242 (0.189)	-0.072 (0.205)	-0.039 (0.141)	-0.144* ^{b,d} (0.086)	-0.116 (0.087)	0.022 (0.115)	-0.124 (0.082)	-0.202 (0.159)	-0.124 (0.087)
% female labour force participation	0.007 (0.008)	0.023*** ^a (0.010)	0.039* (0.021)	0.028 (0.020)	-0.033 (0.020)	0.022*** ^a (0.009)	0.017** (0.008)	0.018** (0.008)	-0.021 (0.016)	0.023 (0.016)	0.021* * ^a (0.009)
urbanisation	0.005 (0.005)	0.006 (0.006)	0.008 (0.010)	0.008 (0.009)	0.013 (0.009)	0.005 (0.005)	0.007 (0.005)	0.006 (0.005)	0.006 (0.005)	0.009 (0.009)	0.005 (0.005)
economic growth	-0.236 (0.972)	-0.250 (0.975)	-0.773 (1.323)	-0.789 (1.312)	-0.669 (1.309)	-0.215 (0.981)	-0.241 (0.984)	-0.239 (0.976)	-0.200 (0.981)	-0.902 (1.323)	-221 (0.983)
lngdp80	-0.156 (0.137)	-0.103 (0.138)	-0.111 (0.197)	-0.159 (0.184)	-0.098 (0.152)	-0.117 (0.132)	-0.183 (0.131)	-0.144 (0.128)	-0.139 (0.124)	-0.167 (0.175)	-0.146 (0.134)
ln(pop)	-0.056 (0.052)	-0.056 (0.059)	-0.038 (0.100)	-0.057 (0.100)	0.053 (0.077)	-0.060 (0.054)	-0.056 (0.054)	-0.067 (0.054)	-0.045 (0.050)	-0.064 (0.100)	-0.056 (0.053)
Muslim	-0.503** (0.243)										
gender gap in education		-0.056 (0.082)									
female secondary enrolments			0.002 ^c (0.008)	0.001 (0.008)	0.006 (0.008)					-0.027* (0.014)	
female secondary enrol *fertility				-0.004 (0.003)							
female secondary enrol *labour					0.001** (0.000)						
male education						0.058 (0.044)	-0.109 (0.087)	0.057 (0.042)	0.043 (0.043)	-0.071 (0.096)	
maled*female education							0.016* (0.010)				

male education* fertility													-0.027* (0.016)
male education * female labour													0.007*** (0.003)
male education* female secondary enrol													0.004** (0.002)
total education													0.073 ^d (0.047)
Time dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
No of observations	2104	2104	1355	1355	1355	2104	2104	2104	2104	1355	2104	2104	
No of countries	94	94	93	93	93	94	94	94	94	93	94	94	
No of instruments	56	55	55	56	56	55	57	56	56	57	55	55	
AR(1)	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
AR(2)	0.261	0.261	0.255	0.258	0.270	0.262	0.262	0.263	0.263	0.260	0.262	0.262	
Sargen test	0.455	0.449	0.608	0.620	0.645	0.440	0.453	0.450	0.446	0.620	0.440	0.440	
Hansen diff test	0.318	0.316	0.825	0.831	0.835	0.280	0.285	0.288	0.258	0.823	0.281	0.281	

***p<0.01, ** p<0.05, *p<0.10 robust standard errors are reported in parentheses

- a: sig at 5% when lagged by 5 and 10 years
- b: sig at 10% level when lagged by 5 years
- c: sig at 5% level when lagged by 10 years
- d: sig at 10% level when lagged by 10 years
- e: sig at 5% when lagged by 5 years

- i) adjusted for Muslim
- ii) gender gap in education
- iii) female secondary enrolments
- iv) female secondary enrol*fertility
- v) female secondary enrol*labour
- vi) male education
- vii) male education*female education
- viii) male education*fertility
- ix) male education*labour
- x) male education*secondary enrolments
- xi) total education

Adjusting for Muslim majority reduced the size of the female education coefficient, but its positive and significant effect still held when education was lagged by 5 and 10 years. However, the effect of female labour force participation on democracy was reduced and it became no longer significant (Table 5.2 models i-iii). Female secondary enrolment had a positive and significant effect on democratic development when it was lagged by 10 years. Also, it had a significant interaction with female labour force participation, but not with fertility rates, consistent with the results when female total education was used (see the main findings in Table 5.2).

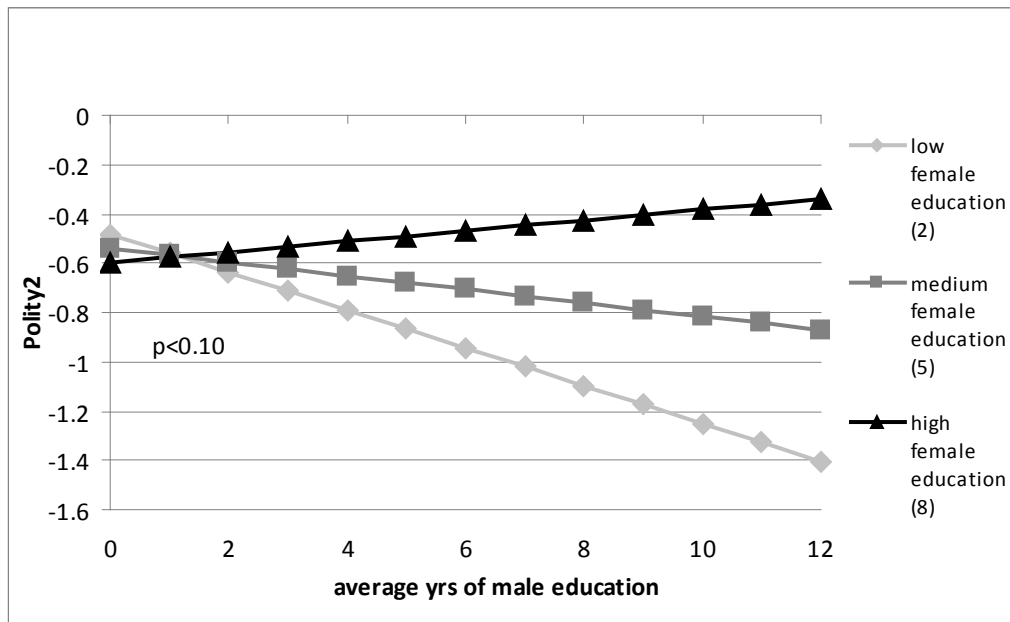


Fig. 5.16 The interaction effect of male and female education on democratic development.

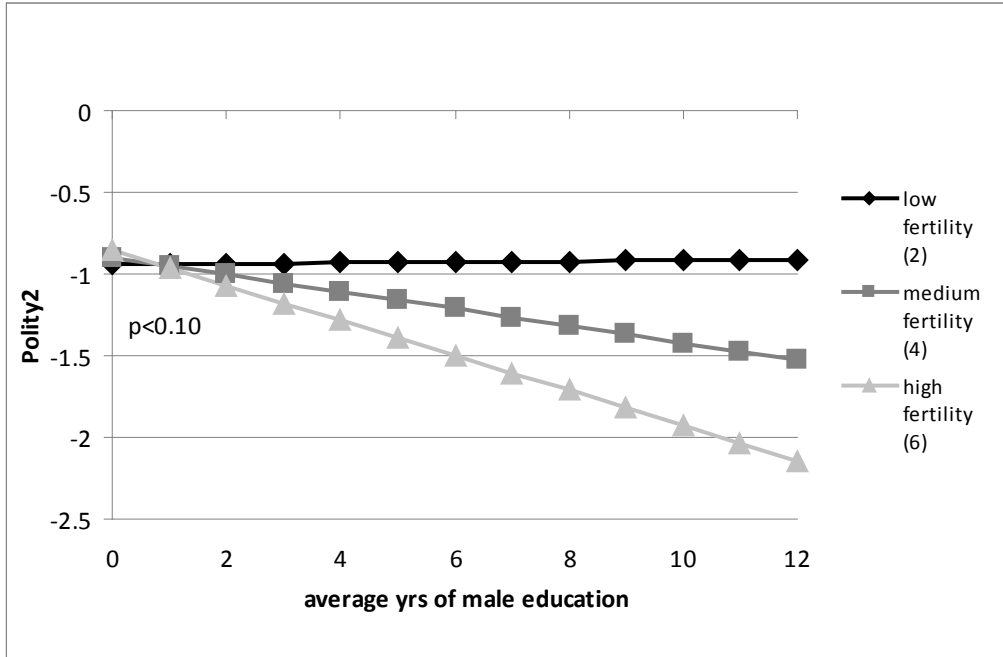


Fig. 5.17 The interaction effect of male education and fertility rates on democratic development.

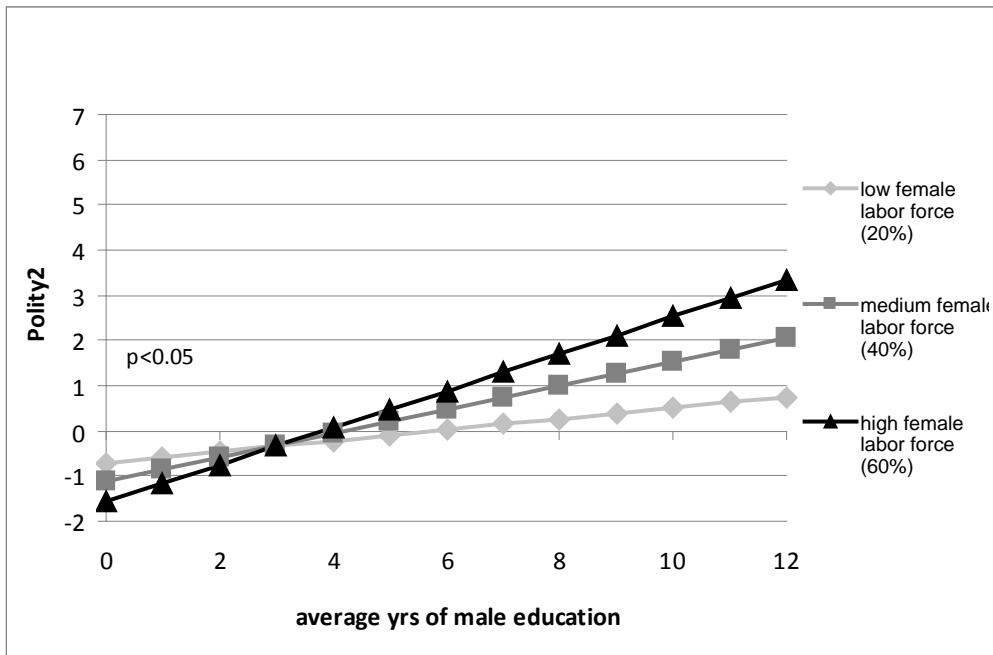


Fig. 5.18 The interaction effect of male education and female labour force participation on democratic development.

The results from the interactions between male education and the women's empowerment measures on democratic development suggest that male education on its own is insufficient to promote democratic development, and high levels of female education and female labour force participation must occur before male education can move a country toward democracy (Tables 5.2 and 5.3 and Figures 5.14 to 5.16). Further, at low to medium levels of female education or at medium to high levels of fertility rates, male education was negatively associated with democratic development. The gender gap in education was not significant in any model. The gender gap in education was not significant in any model. Further analysis showed that total education did not have a significant effect on democratic development, except when it was lagged by 10 years. Whereas, female education was significant even when not lagged and displayed larger coefficients than total education, indicating a stronger and a more immediate influence on democratic development.

All models in Table 5.2 were also re-run with an extended sample that including countries with missing education or Polity2 data. The results were very similar when controlling for Muslim majority. None of the alternative measures of female education was significant (Table 5.3).

Table 5.3 Robustness – extended sample with additional covariates, alternative measures for female education and their interactions (123 countries, N = 3198 Country-year observations)

Polity2	(i) β (s.e)	(ii) β (s.e)	(iii) β (s.e)	(iv) β (s.e)	(v) β (s.e)	(vi) β (s.e)	(vii) β (s.e)	(viii) β (s.e)	(ix) β (s.e)	(x) β (s.e)	(xi) β (s.e)
Polity2t-1	0.873*** (0.050)	0.872*** (0.050)	0.741*** (0.100)	0.791*** (0.092)	0.798*** (0.087)	0.878*** (0.049)	0.881*** (0.047)	0.881*** (0.047)	0.884*** (0.048)	0.800* (0.091)	0.879*** (0.049)
female education	0.054 ^d (0.040)										-0.019 (0.010)
fertility rates	-0.133 (0.093)	-0.186** ^a (0.093)	-0.287 (0.200)	-0.072 (0.205)	-0.039 (0.141)	-0.143 ^b (0.085)	-0.115 (0.085)	0.021 (0.112)	-0.123 (0.081)	-0.203 (0.159)	
% female labour force participation	0.007 (0.008)	0.023** ^a (0.010)	0.043* (0.023)	0.028 (0.020)	-0.033 (0.020)	0.021* ^a (0.009)	0.017** (0.008)	0.018** (0.008)	-0.021 (0.016)	0.024 (0.016)	
urbanisation	0.005 (0.005)	0.006 (0.006)	0.009 (0.010)	0.008 (0.009)	0.013 (0.009)	0.005 (0.005)	0.007 (0.005)	0.006 (0.005)	0.006 (0.005)	0.009 (0.009)	
economic growth	-0.268 (0.967)	-0.280 (0.969)	-0.611 (1.083)	-0.789 (1.312)	-0.670 (1.309)	-0.246 (0.975)	-0.268 (0.978)	-0.266 (0.971)	-0.231 (0.976)	-0.978 (1.323)	
lngdp80	-0.156 (0.137)	-0.103 (0.136)	-0.099 (0.217)	-0.159 (0.184)	-0.098 (0.152)	-0.117 (0.131)	-0.181 (0.129)	-0.144 (0.126)	-0.139 (0.122)	-0.163 (0.176)	
ln(pop)	-0.055 (0.052)	-0.056 (0.059)	-0.004 (0.113)	-0.057 (0.100)	0.053 (0.077)	-0.059 (0.053)	-0.056 (0.053)	-0.066 (0.054)	-0.045 (0.050)	-0.062 (0.099)	
Muslim	-0.496** (0.242)										
gender gap in education		-0.056 (0.081)									
female secondary enrolments			0.001 (0.009)	0.001 (0.008)	0.006 (0.008)						-0.027 (0.014)*
female secondary enrol *fertility				-0.004 (0.003)							
female secondary enrol *labour					0.001** (0.000)						
male education						0.057 (0.044)	-0.108 (0.086)	0.056 (0.041)			-0.062 (0.095)
maled*female education							0.016* (0.009)				
male education* fertility											-0.027*

	(0.016)										
male education * labour											0.007** (0.003)
male education* female secondary enrol											0.003** (0.002)
total education											0.072 ^d (0.047)
Time dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
No of observations	2116	2116	1590	1355	1355	2116	2116	2116	2116	1363	2116
No of countries	95	95	114	93	93	95	95	95	95	94	95
No of instruments	56	55	55	56	56	55	57	56	56	57	55
AR(1)	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
AR(2)	0.378	0.379	0.439	0.258	0.270	0.380	0.380	0.381	0.381	0.252	0.380
Sargen test	0.493	0.486	0.308	0.620	0.645	0.478	0.491	0.488	0.483	0.631	0.478
Hansen diff test	0.311	0.309	0.625	0.831	0.835	0.274	0.279	0.282	0.253	0.796	0.275

***p<0.01, ** p<0.05, *p<0.10 robust standard errors are reported in parentheses

- a: sig at 5% when lagged by 5 and 10 years
- b: sig at 10% level when lagged by 5 years
- c: sig at 5% level when lagged by 10 years
- d: sig at 10% level when lagged by 10 years
- e: sig at 5% when lagged by 5 years

- i. adjusted for Muslim
- ii. gender gap in education
- iii. female secondary enrolments*female education
- iv. female secondary enrol*fertility
- v. female secondary enrol*labour
- vi. male education
- vii. male education*female education
- viii. male education*fertility
- ix. male education*labour
- x. male education*secondary enrolment

To address the potential bias caused by the exclusion of the countries with missing education data (24 countries); the three multivariate models (iv, v, vi) in Table 5.2 were run again, this time removing female education from the analyses. Both fertility rates and female labour force participation remained significant at the 5% level across all three models (Table 5.4).

Table 5.4 Robustness – Female education omitted and Polity2 lagged 3, 5 and 10 years (97 countries, N = 2522 Country-year observations)

	(i) β (s.e)	(ii) β (s.e)	(iii) β (s.e)	(iv) β (s.e)	(v) β (s.e)	(vi) β (s.e)	(vii) β (s.e)
Polity2	0.871*** (0.050)	0.861*** (0.053)	0.808*** (0.053)	0.850*** (0.069)	-0.645*** (0.103)	-0.601*** (0.095)	-0.523** (0.165)
female education				0.116* ^{b,d} (0.066)	0.826 ^d (0.524)	0.830 ^d (0.508)	0.967** ^{a,b} (0.459)
fertility rates	-0.196** (0.091)	-0.249** (0.110)	-0.354** (0.146)	-0.158 (0.125)	-1.161 ^d (0.884)	-1.104 ^d (0.876)	-0.750 ^d (0.842)
% female labour force participation	0.024** (0.010)	0.023** (0.010)	0.033** (0.012)	0.030** ^a (0.012)	0.164* (0.085)	0.162* (0.084)	0.189** ^{a,b} (0.080)
urbanisation	0.005 (0.005)	0.005 (0.006)	0.005 (0.008)	0.010 (0.007)	0.058 (0.058)	0.067 (0.057)	0.083 (0.053)
economic growth	-0.233 (0.976)	0.477 (1.058)	-0.263 (1.140)	-0.1.329 (0.905)	0.541 (1.677)	0.40 (0.057)	1.231 (1.671)
lngdp80	-0.076 (0.137)	-0.117 (0.156)	-0.203 (0.212)	-0.264 (0.192)	-1.905 (1.476)	-2.095 (1.446)	-2.408* (1.370)
ln(pop)	-0.061 (0.057)	0.072 (0.066)	-0.127 (0.052)	-0.078 (0.075)	-0.499 (0.535)	-0.490 (1.446)	-0.444 (0.505)
Time dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes
No of observations	2104	1807	1413	2036	1964	1822	1440
No of countries	94	94	94	94	94	94	94
No of instruments	54	47	37	54	52	48	38
AR(1)	0.000	0.000	0.000	0.011	0.941	0.724	0.836
AR(2)	0.262	0.472	0.559	0.000	0.094	0.006	0.189
Sargen test	0.448	0.393	0.714	0.000	0.000	0.000	0.000
Hansen diff test	0.312	0.259	0.434	0.512	0.818	0.162	0.164

a: sig at 5% when lagged by 5 and 10 years
b: sig at 10% level when lagged by 5 years
c: sig at 5% level when lagged by 10 years
d: sig at 10% level when lagged by 10 years
e: sig at 5% when lagged by 5 years

- i) no female education
- ii) no female education, independent t-5
- iii) no female education, independent t-10
- iv) Polity2 lagged 2 years
- v) Polity2 lagged 3 years
- vi) Polity2 lagged 5 years
- vii) Polity2 lagged 10 years

5.3 Endogeneity

It is possible that the nations that made the greatest progress in empowering women were already moving toward democracy in the period leading up to the 1980s, or had prior experience of democracy. Consequently, further models were run lagging Polity2 by 2, 3, 5, and 10 years. Female education and female labour force participation remained significant with these lagged Polity variables. However, from a statistical point of view lagging Polity2 by more than 1 year was problematic as it rendered the tests of autocorrelation and the Sargen test invalid. Furthermore, once we lagged Polity2 by 3 years or more it became negatively associated with Polity2 (Table 5.4).

Accordingly, graphs were created showing the level of Polity annually from 1960 onward for the 32 countries that transitioned from autocracy in 1980 to democracy by 2005. Only five countries had some prior experience of democracy. They were Uruguay (1960-70), Chile (1964-72), Argentina (1973-75), Ghana (1979-1980), and Lesotho (1966-69). The remainder of countries recorded low polity scores throughout the 1970s and 1980s. Two countries from each continent were graphed as an example (Appendix, Figs. 1.0 – 1.8). The remaining graphs are available upon request. Out of the 14 countries that transitioned from anocracy to democracy only Brazil and Turkey had any prior experience of democracy.

Figs 5.19 - 27. Graphs of polity from 1960 to 2010

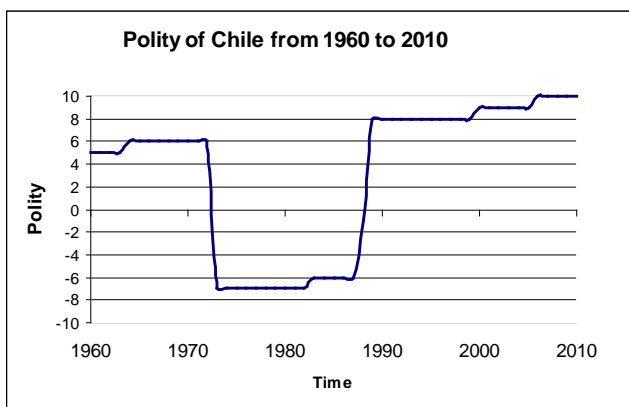


Fig. 5.19 Latin America: Chile

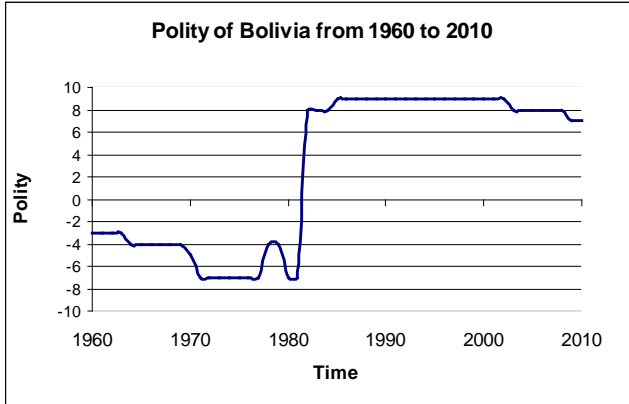


Fig. 5.20 Latin America - Bolivia

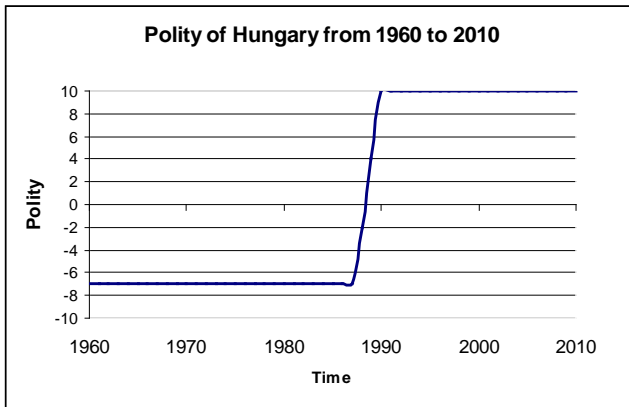


Fig. 5.21 Eastern Europe - Hungary

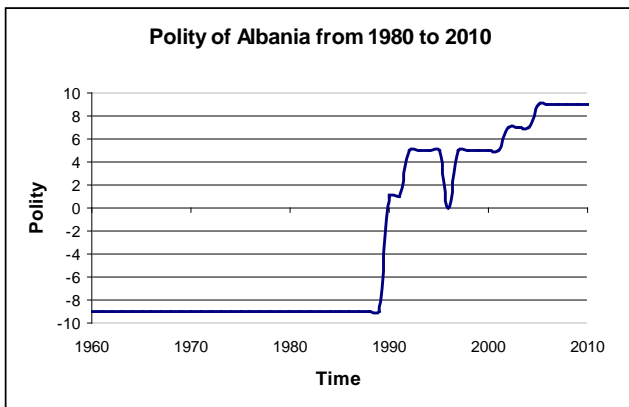


Fig. 5.22 Eastern Europe - Albania

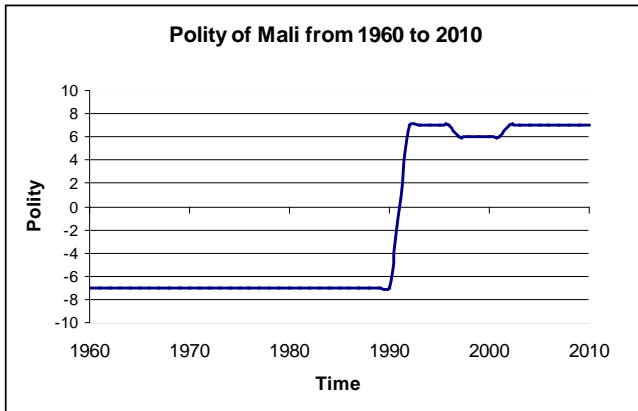


Fig. 5.23 Sub-Saharan Africa - Mali

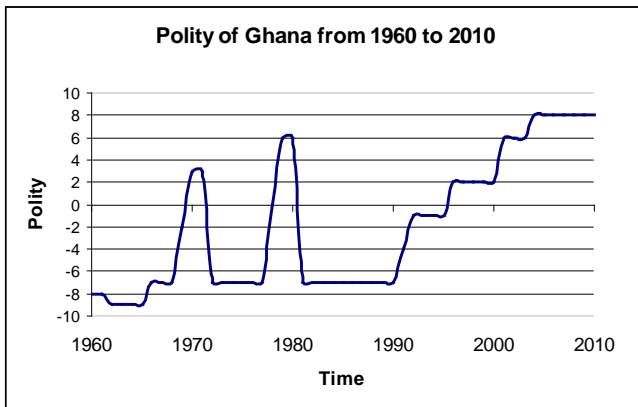


Fig. 5.24 Sub-Sahara- Ghana

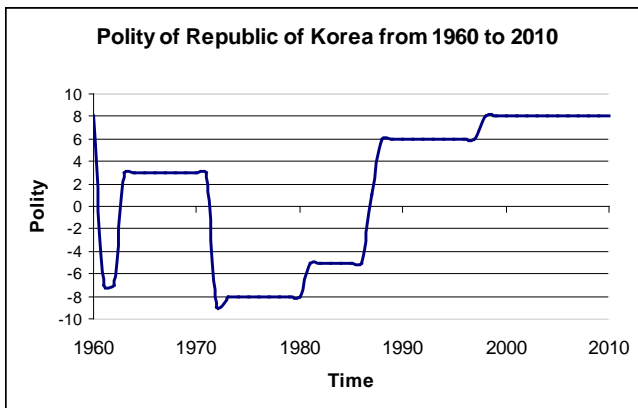


Fig. 5.25 Asia - Republic of Korea

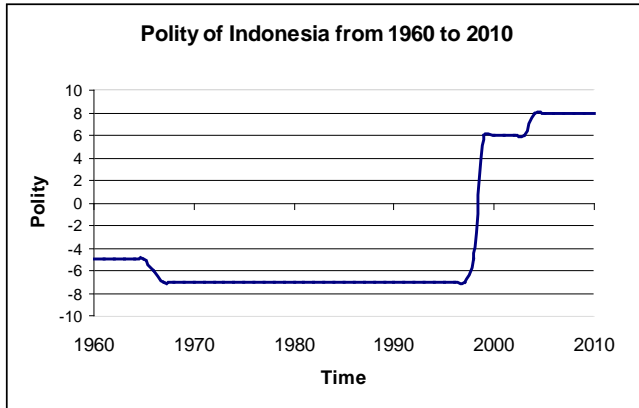


Fig. 5.26 Asia- Indonesia

5.4 Discussion

a) Main findings

This study has demonstrated that improvements in women’s empowerment were strongly associated with democratic development during this period, over and above measures of modernisation. Specifically, increases in female education and female labour force participation had a positive and causal effect on transitions toward democracy. Moreover, the effect of female education increased with lags of five and ten years, suggesting that democracy is more likely to occur in nations with a history of educating girls and possibly a longer experience of the social and economic conditions that may have occurred because of this investment.

The descriptive statistics show that nations that began the period with higher levels of female educational attainment and female labour force participation, and lower fertility rates made greater political gains than nations that made improvements in women’s empowerment later in the 25 year period. It appears that all three empowerment variables needed to be strong for a country to develop democratically over this period. This was confirmed with results from the dynamic panel models testing the multivariate interactions between the three empowerment variables: female education had the largest positive effect on democratic development when female labour participation was also high; only at high levels of female labour force participation did a decline in fertility rates contribute to progress toward democracy.

Further scrutiny of the causal link between women's empowerment and democratic development using longer lags of Polity in the multivariate analyses and descriptive analysis of the data on the Polity status of each country prior to the study period give us greater confidence with the findings. Moreover, they are largely robust to adjustment for additional covariates, alternative measures of female education, and extended samples. One caveat is that the effect of female labour force participation on the dependent variable was no longer statistically significant in models for which for Muslim majority was adjusted.

This effect of the Muslim variable on female labour force participation highlights how a relatively low number of women engage in paid work in these nations ($r = -0.60$). In many Muslim nations throughout the Middle-East cultural and social norms prevent women from participating in the service, retail, and nursing sector. As a result there are a small number of women in the workforce and they are mainly concentrated in professional or technical roles that require tertiary education (Moghadam, 2003, pp. 51-53). Local women are also prevented from engaging in menial work; hence women from Asian countries are imported to take on child care and domestic roles that are low paying and of low status (Shah, Al-Qudsi, & Shah, 1991).

Consequently, women in the Middle-East remain largely excluded from public life. It appears that engagement with formal institutions such as schools and universities, health care centres, formal workplaces, and non-government organisations are a way of creating new democratic spaces in society and serve as a type of "political apprenticeship" (Cornwall & Goetz, 2005). This capacity to engage and have relationships with people in positions of authority and to expect some good or service from them is conducive to the democratic process. In contrast, where women are educated but do not engage socially or economically outside the home there are fewer opportunities for their voices to be heard. They are less likely to mobilise politically and to lobby for expanded rights (Ross, 2008). Hence, improving the percentage of women

in the formal workforce in these countries must be a priority to advance democracy in these countries.

b) Why and how does educating girls drive democratic development?

One of the main outcomes from educating girls is to delay marriage as women seek alternative pathways outside the home in the form of further education or employment. With increased education girls are exposed to democratic values such as equality, freedom, and tolerance. However, the ability to challenge political institutions may not take full effect until they leave school and reach voting age. Through work and other informal networks women are then able to develop and practice the necessary cognitive and communication skills that enable them to agitate for political change. In addition, increased numbers of women in the workforce increase the productivity and economic development of a nation (Klasen, 2002; Klasen & Lamanna, 2009) and with two incomes parents have surplus income to invest back into their families, thus building the human capital of the next generation. Moreover, families where both parents are educated are more likely to educate their sons *and* daughters, again building the human capital of the next generation and expanding support for democracy.

The results also highlight the interplay between women's productive and reproductive activities. Typically, fertility is high in regimes where human capital is low, but low in regimes where investment in human capital is high (Becker, Murphy, & Tamura, 1990). However, when we look more closely at the temporality of these two factors across different regions a different story emerges. Countries commencing their demographic transition report smaller differentials in fertility rates between the most highly educated and the least educated groups than countries in the middle stages of transition. Also, education does not reduce fertility rates where only a few years of primary education have been achieved (Lehr, 2009). Perhaps there is a tipping point where a certain number of years of schooling reduce fertility rates substantially in order for significant transformations in women's lives to occur. The results show that nations that did become democratic throughout this period began the period with a higher average level of female education (5.2 years) and lower fertility rates (4.34 births per woman). By the

end of the period these nations had achieved on average 7.7 years of female education, and a fertility rate of 2.75. This suggests that over and beyond economic development, there is an optimal level of women's empowerment that nations need to achieve before political transformation occurs. Further research is required to test this theory.

Over the last 25 years, the majority of non-democratic nations that invested early in all three domains of women's empowerment and achieved progress in all these domains, that is at or above the threshold, developed democratically by 2005; whereas countries that failed in one or more of these elements remained autocratic or anocratic. Almost all nations that began the period with very high rates of both female education and low fertility rates achieved Polity2 scores of six and above by 2005, and these were represented mainly by the former communist and socialist nations (with the exception of South Korea, Panama and Uruguay). Two nations (China and Cuba) remained persistently autocratic, and Kazakhstan experienced varying periods of political instability and political progress. Armenia's trajectory has also been unstable, but in recent years the political regime has liberalised.

There was another group of countries that were strong on all three empowerment indicators by the end of the study period, but did not develop democratically. One of these nations, Gabon has made recent democratic progress with a change in Polity2 score from -9 to 3 in 2009-2010. This seems to hold promise for continual political progress in the future. Another nation, Malaysia became democratic in 2010; and three other countries remain non-democratic today (Singapore, Swaziland and Zimbabwe). Persistent cultural factors such as Confucianism and royal nepotism, the HIV/AIDS epidemic, and wide spread poverty may have prevented these countries from making greater democratic progress. See Table 1.6 in the Appendix for a comparison of these three groups.

The significant interaction between female education and female labour force participation (Fig. 5.12) shows that a more highly educated female workforce is important for advancing democracy. Previous research shows that greater numbers of

women in the skilled sectors is associated with higher levels of democracy (Ross, 2001). However, highly educated women may be excluded from the workforce, because of cultural and social expectations about family composition or women's roles. This may be exacerbated in countries where unemployment levels are high and opportunities for work are limited. For example, in Jordan, men *and* women report low rates of labour force participation (Spierings, Smits, & Verloo, 2009). In contrast, women with only a few years of education are less likely to be in the workforce (Psacharopoulos & Tzannatos, 1992), or be employed in work that is of low status and is low paid (Nisha & Ravi, 2010). In this scenario the opportunity cost of bearing children may be higher than the income a woman earns (Galor & Weil, 1996).

Therefore, while improvements in female education confer significant benefits to women and society, we must not rely on educating girls as the only solution for solving all of society's problems, including democratic development. Education on its own may not equip girls and women with the ability to question the second class status assigned to them and to mobilise politically, if they are still excluded from the public sphere because of childrearing and domestic duties (Kabeer, 2005). Consideration must be given to the different cultural or social structures across societies that restrict women's participation in the economic or political sphere and keep women's status low.

The results also show that, on its own, an increase in male education was insufficient for nations to develop democratically over this period. However, increases in male education *together* with high levels of women's empowerment were important. It appears that in nations where men are highly educated *and* where women's lives have improved political progress is greater. In contrast, some nations, despite being financially able to do so may not choose to invest in their girls. Cultural barriers to women accessing education, permission to work in certain industries, and son preference impact on women's ability to take advantage of opportunities. When a country's income is high and women's education and labour force participation is low this suggests that a nation's income distribution skews toward the men of these countries. As a result men have a disproportionate level of power and prestige (Friedl, 1975). These findings

further emphasise the importance of investing in the education of girls to advance both gender equality and democracy.

c) Factors contributing to improvements in women's empowerment

Economic development did not have a significant impact on democratic development during this period. Moreover, the majority of countries that transitioned from autocracy to democracy had little prior experience of democracy, particularly in the preceding decade. So what could explain the increased participation of women in education and employment and the fall in fertility rates over this period? The role of the UN Decade for Women (1975-85) as a major force for advancing both women's rights and democracy cannot be underestimated. It championed women's rights and promoted the incorporation of women into development activities when many states were governed by non-democratic regimes. It also facilitated opportunities for women to meet at conferences and triggered a proliferation across the globe of women's movements. This increased global focus gave women's movements pressing for equality and democratic reform at a national level legitimacy (Safa, 1990).

International organisations such as the United Nations have informed domestic policy and practice and domestic and regional activities have in turn informed international agreements and conventions. The Mexico World conference on Women in 1975 was attended by 133 member states, of which 113 delegations were headed by women. From the countries that attended there were distinct differences in priorities for the delegations. The Eastern block countries were concerned with peace, the Western nations were concerned with equality and the developing countries were concerned with development. From the conference The United Nations General Assembly identified three key objectives that would guide the work of the United Nations on behalf of women: They were: full gender equality and the elimination of gender discrimination; the integration and full participation of women in development; and an increased contribution by women in the strengthening of world peace.

A World Plan of Action was created providing guidelines for governments and the international community to follow for the next ten years to achieve the three key objectives. The minimum targets, to be met by 1980, focused on achieving equal access for women to resources such as education, employment opportunities, political participation, health services, housing, nutrition and family planning. By 1985, the end of the Decade for Women, 127 countries had established some form of national gender machinery, institutions aimed at advancing women's status and increasing their participation in development. Furthermore, a new era of women's mobilisation and activism emerged, resulting in a proliferation of women networking at local, regional, and national levels and the growth of women's International Non-government organisations (INGOs) (True & Mintrom, 2001). Hence, it is likely that International Non-Government Organisations will continue to encourage governments to expand and strengthen national gender machineries as an integral part of the democratic reform process.

(d) Women's empowerment as a dimension of modernisation

We consider women's empowerment to be an important aspect of modernisation, a dimension that to date has not received adequate attention in the democratisation literature. The purpose of this study was to provide a gendered lens to both theoretical and empirical research in democratic development. We believe that change in all three aspects of women's empowerment (female education, female employment, and fertility) represents a significant cultural shift in gender roles within nations, rather than reflecting a nation's overall level of development. By including all three indicators in the analysis, we were able to demonstrate empirically that this shift has had a causal effect on democratic development in the last 25 years, independent of the conventional indicators of modernisation (economic growth, GDP, urbanisation, and population density).

e) Anomalies

This study demonstrates that women's empowerment had an important role to play in advancing democracy during the period 1980 to 2005. Despite being a cross-national study the uniqueness of every country within each time period is acknowledged and it is

recognised that there are a handful of countries that have not yet become democratic, despite achieving high levels of education for women, low fertility rates, and high levels of labour force participation. These countries include Singapore, China, and Cuba³⁷. However, if we look more closely at these nations there is evidence of other discriminatory practices toward women in these countries. A recent report into “Trafficking in Persons” (U.S. Department of State, 2011) reveal that these three governments still have a long way to go to eliminate sex trafficking of women and children for prostitution and forced labour in their countries. Additionally, it is expected that by 2020 China will record over 33 million “missing women”, because of infanticide, son preference, and general discrimination toward girls and women (Hudson & den Boer, 2002).

In contrast, other countries, such as Guatemala and Mali *have* become democratic without achieving primary school completion for women, high female labour force participation, and low fertility rates. In Guatemala the negotiations and signing of the Peace Accords in 1996 to end 36 years of civil war opened up the political space for a transition to democracy. Since then, the extreme social and economic poverty experienced by the majority of citizens in Guatemala continues to present a threat to the future strength and sustainability of democracy in this nation (Jonas, 2000). Mali has been a democratic regime for the last twenty years. In 1991 its citizens came together to protest against and overthrow the military dictatorship of Moussa Traoré (Smith, 2001). Some explanations for this pro-democracy movement is Mali’s history of a decentralised government (Pringle, 2006) and the presence of cultural norms conducive to democracy, including tolerance, trust, pluralism, the separation of powers, and government’s accountability to its people (Smith, 2001).

³⁷ Data out of Cuba is limited, hence it is difficult to know the true extent of the problem (U.S. Department of State, 2011). The formation of the Federation of Cuban women of which 85% of Cuban women are members (4 million women) has tackled equal rights for women in education, employment, reproductive health, and violence. As a result, women in Cuba enjoy some of the highest levels of equality and opportunity in the world. http://www.cuba-solidarity.org/cubasi_article.asp?ArticleID=30

However, recent political events in Mali have seen the government overthrown by the military. There is some evidence that the recent neo-liberal policies of the government, whereby much of the land, resources, and public companies of Mali have been privatised and sold to international investors, has failed the ordinary citizens of Mali and contributed to the current weak economic conditions and democratic instability (County & Peterson, 2012). These recent events suggest that moving beyond a minimum level of economic and social development is important for democracy to deepen, and prevent democratic reversal and further research is required to test this. Nevertheless, despite these few anomalies what this study has highlighted is that overall, the transformation of women's lives has made a significant contribution to democratic development at the end of the last century. As women's social and economic rights continue to improve it is likely that more nations will democratise and existing democracies strengthen and deepen.

5.5 Conclusion

Neither the modernisation theory nor the neo-modernisation theory explicitly views gender equality or women's empowerment as playing an *active* role in the modernisation process. Implicit in the neo-modernisation theory is the presumption that *both* gender equality and democracy occur as a consequence of economic development. It appears that women's empowerment plays an active role in democratic development, thus consider it an important aspect of modernisation that has not received adequate attention in the democratisation literature to date. Rather than being a natural consequence of economic development, this study has shown empirically that empowering women had a causal effect on democratic development, independent of the commonly used measures of modernisation, and as such it deserves much greater attention in future democracy research. Further, this study provides a different lens to view democratic development and broaden our understanding of what drives this process. The findings suggest that a gendered approach to democratic development theory has the potential to explain some of the variability in the quality and stability of current and future democracies, thus underscoring the importance of a multi-disciplined approach to future research in this area. The next chapter is Chapter Six which is the second of the analysis chapters.

Chapter Six: Results

Study Two – Sex Ratios and Democratic Development

This chapter presents the analysis of data from Study Two – Sex ratios and democratic development, and an interpretation and discussion of the results drawn from the analysis.

6.1 Descriptive Statistics

Tables 6.0 – 6.2 display the mean sex ratio at birth, at ages 0 -14, at ages 15 – 64 for all countries in this study, for non-resource rich countries, for resource rich countries, for developed and developing countries. There is substantial variation between and within groups. The mean sex ratio at birth across all groups is 1.050 with a range of 1.046 in resource-rich countries to 1.057 in the developed countries. The mean sex ratio of each category declines at ages 0 – 14, except for the resource-rich countries, which records an increased mean sex ratio of 1.094. At ages 15 – 64 the mean across all groups has fallen further, except for the resource-rich countries where the mean sex ratio increases to 1.179. It is at marriageable age that the mean sex ratios in developed countries and in non-resource countries, report a surplus of women, rather than a surplus of men.

Table 6.0 Mean sex ratio at birth by category

Variable	Obs	Mean	Std. dev	Min	Max
sexrbirth – all countries	930	1.050	0.018	1.01	1.21
sexrbirth – developing countries	756	1.048	0.020	1.01	1.21
sexrbirth – developed countries	174	1.057	0.007	1.043	1.073
sexrbirth – non-resource countries	800	1.051	0.019	1.01	1.21
sexrbirth – resource- rich countries	130	1.046	0.011	1.03	1.065

Table 6.1 Mean sex ratio at ages 0 – 14 by category

Variable	Obs	Mean	Std. Dev	Min	Max
sr0_14 – all countries	4027	1.018	0.070	0.918	1.695
sr0_14 – developing countries	3273	1.021	0.077	0.918	1.695
sr0_14 – developed countries	754	1.007	0.015	0.968	1.056
sr0_14 – non-resources countries	3468	1.006	0.028	0.918	1.128
sr0_14 – resource-rich countries	559	1.094	0.155	0.972	1.695

Table 6.2 Mean sex ratio at ages 15 – 64 by category

Variable	Obs	Mean	Std. Dev	Min	Max
sr1564 – all countries	4027	1.008	0.152	0.805	2.531
sr1564 – developing	3273	1.014	0.168	0.805	2.531
sr1564 – developed countries	754	0.982	0.022	0.923	1.046
sr1564 – non-resource countries	3468	0.980	0.046	0.805	1.135
sr1564 – resource-rich countries	559	1.179	0.347	0.941	2.531

The results from the summary statistics show a range of 0.75 to 1.35 for the within-groups thus, any nations with mean sex ratios outside this range for this period were identified as outliers. These were Kuwait, Bahrain, Qatar, and United Arab Emirates (UAE). The summary statistics were run again excluding these four nations. The means for each group are presented below in Tables 6.3 – 6.5.

Table 6.3 Mean sex ratio at birth by category – outliers excluded

Variable	Obs	Mean	Std. dev	Min	Max
sexrbirth – all countries	906	1.050	0.018	1.01	1.21
sexrbirth – developing countries	732	1.048	0.020	1.01	1.21
sexrbirth – developed countries	174	1.057	0.007	1.043	1.073
sexrbirth – non-resource countries	800	1.051	0.019	1.01	1.21
sexrbirth – resource-rich countries	106	1.046	0.011	1.03	1.065

Table 6.4 Mean sex ratio at ages 0 – 14 by category – outliers excluded

Variable	Obs	Mean	Std. dev	Min	Max
sr0_14 – all countries	3926	1.009	0.032	0.918	1.25
sr0_14 – developing countries	3172	1.010	0.034	0.918	1.25
sr0_14 – developed countries	754	1.007	0.015	0.968	1.056
sr0_14 – non-resources countries	3468	1.006	0.028	0.918	1.128
sr0_14 – resource rich-countries	458	1.033	0.045	0.972	1.25

Table 6.5 Mean sex ratio for ages 15-64 by category – outliers excluded

Variable	Obs	Mean	Std. dev	Min	Max
sr1564 – all countries	3926	0.987	0.061	0.805	1.595
sr1564 – developing countries	3172	0.989	0.067	0.805	1.595
sr1564 – developed countries	754	0.982	0.022	0.923	1.046
sr1564 – non-resource countries	3468	0.980	0.046	0.805	1.135
sr1564 – resource-rich countries	458	1.043	0.113	0.941	1.595

As the four nations excluded from the analyses are also resource-rich nations and classified as developing nations it was expected that the main differences would be in these categories. The mean sex ratio at birth remained the same across all categories. The mean sex ratio at ages 0 to 14 fell across all groups from 1.018 to 1.009 for all countries; 1.021 to 1.010 for developing countries and from 1.094 to 1.033 for resource-rich countries. Finally, the mean sex ratio at ages 15 to 64 fell from a surplus of males to a surplus of women across all categories, excluding again the resource-rich nations. The mean sex ratio for the resource-rich nations fell from 1.094 to 1.043 however; this still represented a surplus of males and a figure well above the average of 0.987 for all countries for this category.

6.2 Democratic Transitions

Figure 6.0 shows that the countries that remained autocratic throughout this period had significantly higher sex ratios than the countries that had made greater democratic progress. The difference between the group that did not become democratic throughout this period and the group that did was statistically significant at $p < 0.05$. Similarly, the countries that remained autocratic throughout this period had a significantly higher mean sex ratio than countries that were always democratic during this period. However, the difference was not statistically significant.

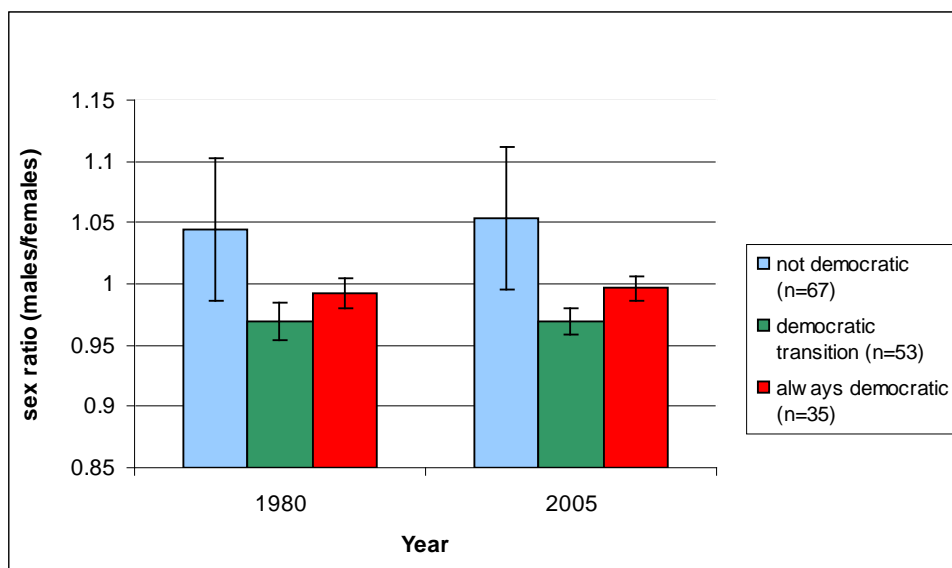


Fig. 6.0 Mean sex ratio at ages 15-64 by Polity2 from 1980 to 2005: All countries

In Figure 6.1 the outliers Bahrain, Kuwait, Saudi Arabia, and United Arab Emirates were excluded. The results are similar to the previous model however; the mean sex ratio is reduced. The difference between the group that did not become democratic throughout this period and the group that did was statistically significant at $p < 0.05$. Interestingly, the mean sex ratio for the not democratic group was similar to the sex ratio for the always democratic nations in 1980; in 2005 the mean sex ratio for the not democratic group increased from 0.994 to 1.002, whereas the always democratic group reported a drop in mean sex ratio from 0.992 to 0.996. However, the difference between these two groups was not significant.

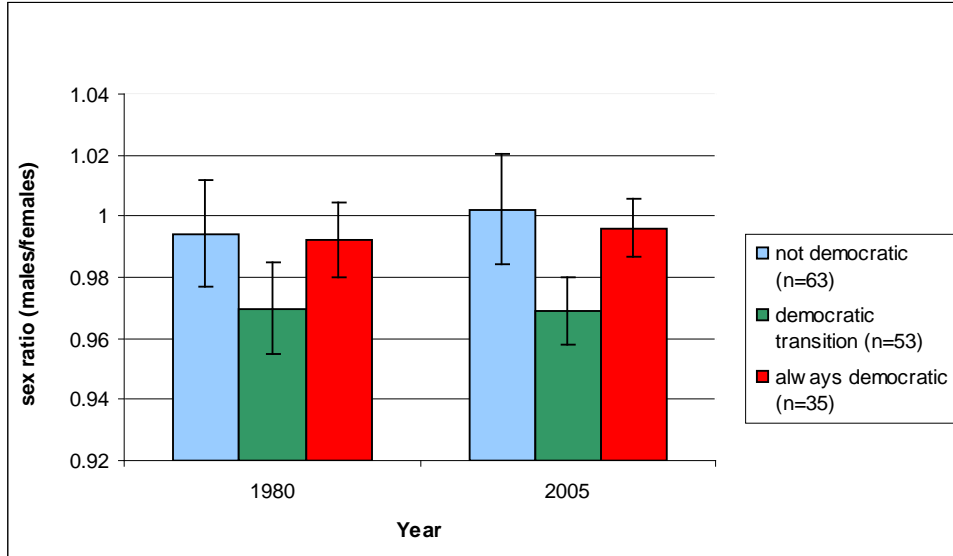


Fig. 6.1 Mean sex ratio at ages 15-64 by Polity2 from 1980 to 2005: Outliers excluded

To examine these differences further the number of country categories was expanded from 3 to eight. The first six categories are graphed below, including the outliers (Figure 6.2), and without (Figure 6.3).

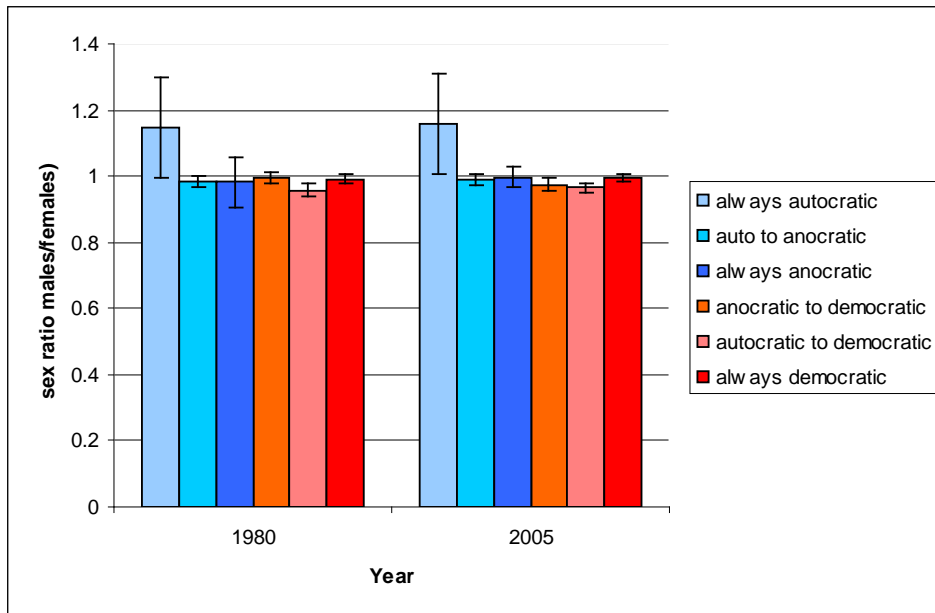


Fig. 6.2 Mean sex ratio at ages 15-64 by Polity2 from 1980 to 2005: All countries

Expanding the number of categories shows a significant difference between nations that remained autocratic throughout this period and those that made some movement toward democracy. In Figure 6.3 the mean sex ratio for the always autocratic nations remained over 1.0 for the period, increasing to 1.024 by 2005. This is in comparison with the nations that made the biggest transition from being autocratic to democratic this period. This category recorded the lowest mean sex ratio in 1980 and in 2005 of 0.958 and 0.966 respectively. The anocratic to democratic nations reduced their mean sex ratio significantly during this period from 0.995 to 0.975. Finally, the always democratic nations recorded sex ratios close to 1.0.

These transitions are displayed again, with Bahrain, Kuwait, Qatar, and United Arab Emirates excluded. The results are very similar, except the mean sex ratio for the always autocratic nations is lower.

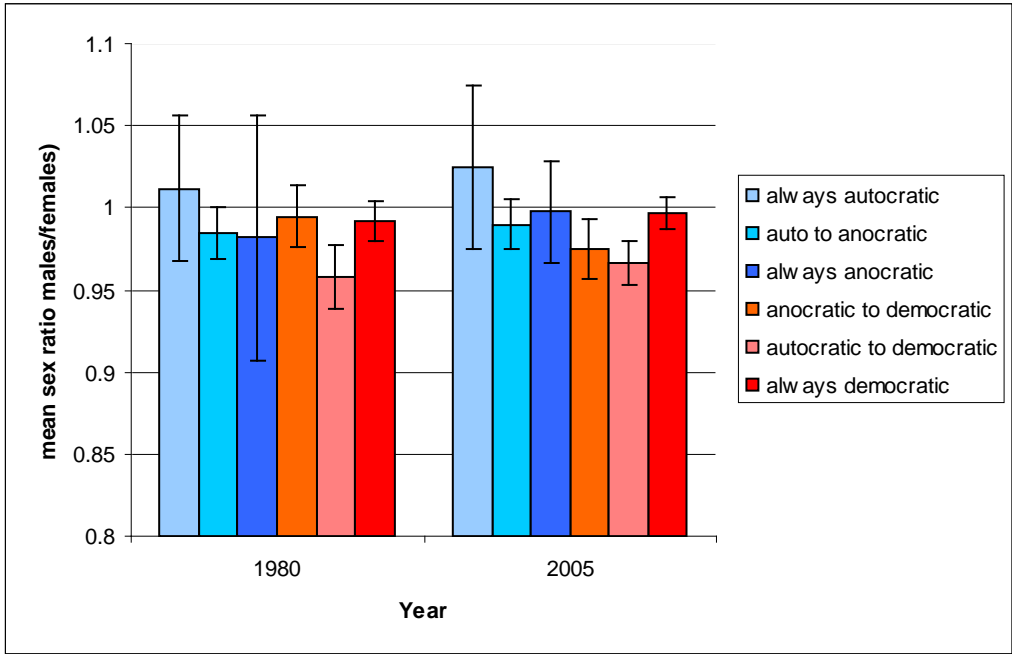


Fig. 6.3 Mean sex ratio at ages 15-64 by Polity2 from 1980 to 2005: Outliers excluded

6.3 Dynamic Panel Model with System GMM Estimator

Dynamic panel models were run to examine the effect of a nation's sex ratio on democratic development. The independent variables were lagged by 5 and then 10 years to allow for the fact that their effect may take time to manifest. The empowerment variables were entered into the model one at a time to determine their impact on the relationship between sex ratio and democratic development. The independent variables were also lagged by 5 and then 10 years.

Table 6.6 displays the results and the diagnostic tests to determine the validity of the instruments. The p values of the AR(2) test, the Sargen test and the Hansen difference test suggest that the instruments are valid. The results show that high sex ratios had a strong, negative effect on democratic development over this period. Moreover, the strength of this effect increased when sex ratio was lagged by 5 and then 10 years. When female educational attainment was entered into the models (models iv-vi) the coefficient of sex ratio decreased by approximately 25%. The inclusion of fertility rates reduced the sex ratio coefficient by around 17 – 40% (models vii-ix). Finally, the inclusion of female labour participation (models x-xii) reduced the effect of sex ratio on democratic development by 25 – 30%. All three empowerment variables were significant across all models: female labour force when lagged 5 years was significant at $p < 1.05$. The analyses were re-run excluding the four outliers (Bahrain, Kuwait, Qatar, and United Arab Emirates) (Table 6.7).

Table 6.6 Multivariate analyses: System GMM dynamic panel models

	(i) β (st.err)	(ii) β (st.err)	(iii) β (st.err)	(iv) β (st.err)	(v) B (st.err)	(vi) β (st.err)	(vii) β (st.err)	(viii) β (st.err)	(ix) β (st.err)	(x) β (st.err)	(xi) β (st.err)	(xii) β (st.err)
Polity2t-1	0.869*** (0.044)	0.854*** (0.046)	0.804*** (0.046)	0.877*** (0.046)	0.858*** (0.048)	0.784*** (0.051)	0.864*** (0.047)	0.865*** (0.050)	0.827*** (0.048)	0.873*** (0.044)	0.858*** (0.046)	0.806*** (0.046)
sex ratio 15-64	-2.477** (0.908)	-2.767** (0.988)	-3.610** (1.092)	-1.807** (0.760)	-1.997** (0.852)	-2.693** (1.047)	-2.056** (0.824)	-1.942** (0.844)	-2.092** (0.879)	-1.877** (0.803)	-2.122** (0.908)	-2.534** (0.993)
economic growth	0.342 (0.807)	0.178 (0.867)	0.388 (0.920)	-0.158 (0.984)	-0.297 (1.067)	-0.61 (1.149)	0.161 (0.808)	-0.040 (0.874)	0.130 (0.935)	0.394 (0.807)	0.246 (0.869)	0.510 (0.926)
lngdp80	0.172 (0.140)	0.173 (0.157)	0.238 (0.202)	-0.046 (0.146)	-0.095 (0.169)	-0.195 (0.242)	0.043 (0.149)	-0.003 (0.158)	-0.084 (0.201)	0.151 (0.132)	0.149 (0.150)	0.194 (0.193)
urbanisation	0.004 (0.006)	0.006 (0.007)	0.003 (0.009)	0.004 (0.005)	0.005 (0.007)	0.005 (0.009)	0.003 (0.006)	0.002 (0.006)	-0.000 (0.007)	0.006 (0.006)	0.008 (0.007)	0.007 (0.009)
ln(pop)	0.051 (0.061)	0.070 (0.072)	0.097 (0.098)	-0.007 (0.049)	-0.004 (0.058)	-0.021 (0.085)	-0.002 (0.058)	-0.003 (0.062)	-0.034 (0.080)	0.044 (0.060)	0.063 (0.070)	0.082 (0.097)
female education				0.113** (0.046)	0.144** (0.054)	0.247** (0.077)						
fertility rates							-0.146** (0.073)	-0.183** (0.088)	-0.280** (0.119)			
female labour force participation										0.015* (0.009)	0.016 (0.010)	0.027** (0.013)
Time dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
No. of observations	2555	2226	1773	2127	1836	1448	2532	2194	1734	2555	2226	1773
No. of countries	115	115	115	94	94	94	115	115	115	115	115	115
No of instruments	53	46	36	54	47	37	54	47	37	54	47	37
AR(1)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
AR(2)	0.188	0.311	0.366	0.272	0.419	0.528	0.182	0.364	0.396	0.190	0.313	0.368
Sargen test	0.534	0.608	0.834	0.552	0.596	0.893	0.458	0.394	0.608	0.515	0.596	0.829
Hansen diff test	0.428	0.327	0.436	0.371	0.339	0.575	0.417	0.318	0.305	0.412	0.321	0.438

***p<0.01, ** p<0.05, *p<0.10 robust standard errors are reported in parentheses

- | | | | |
|------|--|-------|--|
| i) | Adjusted for modernisation variables | vii) | Adjusted for fertility |
| ii) | i, all independent variables lagged by 5 yrs | viii) | vii, lagged 5 yrs |
| iii) | i, all independent variables lagged by 10yrs | ix) | vii, lagged 10yrs |
| iv) | Adjusted for female education attainment | x) | Adjusted for female labour force participation |
| v) | iv, lagged 5 yrs | xi) | x lagged by 5 years |
| vi) | iv, lagged 10yrs | xii) | x lagged by 10yrs |

Table 6.7 Multivariate analyses: System GMM dynamic panel models – outliers excluded

	(i) β (st.err)	(ii) β (st.err)	(iii) β (st.err)	(iv) β (st.err)	(v) β (st.err)	(vi) β (st.err)	(vii) β (st.err)	(viii) β (st.err)	(ix) β (st.err)	(x) β (st.err)	(xi) β (st.err)	(xii) β (st.err)
Polity2t-1	0.878*** (0.043)	0.863*** (0.045)	0.809*** (0.045)	0.886*** (0.044)	0.867*** (0.045)	0.789*** (0.049)	0.874*** (0.045)	0.873*** (0.048)	0.830*** (0.046)	0.880*** (0.043)	0.864*** (0.044)	0.808*** (0.045)
sex ratio 15-64	-3.55** (1.165)	-3.830** (1.320)	-5.298** (1.607)	-3.016** (1.271)	-3.224** (1.523)	-4.684** (2.149)	-3.062** (1.101)	-2.820** (1.176)	-3.360** (1.513)	-2.709** (1.282)	-2.942* (1.516)	-3.537* (2.072)
economic growth	0.458 (0.848)	0.288 (0.904)	0.435 (0.933)	-0.071 (1.045)	-0.225 (1.122)	-0.049 (1.169)	0.305 (0.850)	0.072 (0.914)	0.180 (0.946)	0.480 (0.847)	0.318 (0.903)	0.496 (0.935)
lngdp80	0.126 (0.129)	0.124 (0.146)	0.178 (0.193)	-0.048 (0.129)	-0.095 (0.151)	-0.204 (0.224)	0.029 (0.135)	-0.010 (0.146)	-0.093 (0.190)	0.121 (0.125)	0.118 (0.143)	0.164 (0.190)
urbanisation	0.007 (0.006)	0.008 (0.007)	0.007 (0.009)	0.006 (0.005)	0.008 (0.007)	0.008 (0.009)	0.005 (0.005)	0.005 (0.006)	-0.003 (0.007)	0.008 (0.006)	0.009 (0.007)	0.009 (0.010)
ln(pop)	0.060 (0.063)	0.082 (0.074)	0.113 (0.102)	0.013 (0.051)	0.020 (0.061)	0.012 (0.091)	0.017 (0.060)	0.018 (0.065)	-0.010 (0.085)	0.058 (0.063)	0.078 (0.074)	0.104 (0.103)
female education				0.096** (0.041)	0.124** (0.049)	0.221** (0.073)						
fertility rates							-0.115* (0.066)	-0.149* (0.080)	-0.245** (0.115)			
female labour force participation										0.010 (0.009)	0.011 (0.011)	0.022 (0.016)
Time dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
No. of observations	2481	2167	1729	2053	1777	1404	2458	2135	1690	2481	2167	1729
No. of countries	111	111	111	90	90	90	111	111	111	111	111	111
No of instruments	53	46	36	54	47	37	54	47	37	54	47	37
AR(1)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
AR(2)	0.194	0.314	0.370	0.277	0.421	0.532	0.189	0.366	0.400	0.195	0.315	0.369
Sargen test	0.428	0.480	0.779	0.437	0.467	0.849	0.359	0.293	0.551	0.419	0.478	0.775
Hansen diff test	0.254	0.204	0.282	0.178	0.159	0.368	0.231	0.185	0.211	0.250	0.200	0.299

***p<0.01, ** p<0.05, *p<0.10 robust standard errors are reported in parentheses

- i. adjusted for modernisation variables
- ii. i, all independent variables lagged by 5 yrs
- iii. i, all independent variables lagged by 10yrs
- iv. adjusted for female education attainment
- v. iv, lagged 5 yrs
- vi. iv, lagged 10yrs

- vii. adjusted for fertility
- viii. vii, lagged 5 yrs
- ix. vii, lagged 10yrs
- x. adjusted for female labour force participation
- xi. x lagged by 5 years
- xii. x lagged by 10yrs

The results for Table 6.7 were similar to the results in Table 6.6. However, there were also some important differences. Firstly, the strength of the negative effect of sex ratio on democratic development *increased* with the removal of the outliers. Secondly, the effect of female education on the sex ratio coefficient was reduced (15 – 17%). Despite significantly reducing the effect of sex ratio on democratic development, the independent effect of female labour force participation became no longer significant in any of the models. This suggests that the relationship between female labour force participation and democratic development is driven largely by those four nations. The multivariate models in Table 6.6 were also adjusted for Muslim majority nations. Polity2 was also lagged by two years to address endogeneity problems. These models were all run again excluding the four outliers (Table 6.9).

Table 6.8 Robustness: Alternative covariates

	(i) β (s.e)	(ii) β (s.e)	(iii) β (s.e)	(iv) β (s.e)	(v) β (s.e)	(vi) β (s.e)
Polity2t-1				0.867*** (0.045)	0.851*** (0.046)	0.804*** (0.046)
Polity2t-2	0.865*** (0.060)	0.840*** (0.060)	0.737*** (0.064)			
sex ratio 15-64	-3.187** (1.197)			-1.778**a (0.707)		
sex ratio 15-64 t-5		-3.511** (1.255)			-1.965** (0.769)	
sex ratio 15-64 t-10			-5.155** (1.492)			-2.386** (0.837)
Muslim				-0.632** (0.226)	-0.750** (0.263)	-1.130** (0.337)
urbanisation	0.008 (0.007)	0.008 (0.009)	0.005 (0.013)	0.007 (0.005)	0.008 (0.007)	0.008 (0.009)
economic growth	-0.868 (0.723)	-1.051 (0.754)	-1.185 (0.811)	0.349 (0.797)	0.172 (0.853)	0.358 (0.911)
lnGDP80	0.189 (0.183)	0.206 (0.205)	0.363 (0.289)	-0.111 (0.123)	0.097 (0.139)	0.113 (0.180)
ln(pop)	0.057 (0.080)	0.092 (0.093)	0.141 (0.144)	0.034 (0.059)	0.048 (0.070)	0.056 (0.094)
Time dummies	Yes	Yes	Yes	Yes	Yes	Yes
No of observations	2476	2225	1769	2555	2226	1773
No of countries	115	115	115	115	115	115
No of instruments	52	46	36	54	47	37
AR(1)	0.004	0.006	0.017	0.000	0.000	0.000
AR(2)	0.000	0.000	0.000	0.188	0.311	0.364
Sargen test	0.004	0.018	0.758	0.539	0.619	0.830
Hansen diff test	0.377	0.326	0.642	0.433	0.306	0.431

***p<0.01, ** p<0.05, *p<0.10 robust standard errors are reported in parentheses

- i) Polity2, t-2
- ii) Polity2, t-2, independent lagged 5 years
- iii) Polity2, t-2, independent variables lagged 10 years
- iv) adjusted for Muslim
- v) adjusted for Muslim, independent lagged 5 years
- vi) adjusted for Muslim, independent variables lagged 10 years

Table 6.9 Robustness: Alternative covariates– outliers excluded

	(i) β (s.e)	(ii) β (s.e)	(iii) β (s.e)	(iv) β (s.e)	(v) β (s.e)	(vi) β (s.e)
Polity2t-1				0.875*** (0.043)	0.858*** (0.045)	0.805*** (0.045)
Polity2t-2	0.875*** (0.060)	0.848*** (0.059)	0.737*** (0.061)			
sex ratio 15-64	-4.723** (1.516)			-2.485** (1.042)		
sex ratio 15-64 t-5		-5.042** (1.672)			-2.654** (1.196)	
sex ratio 15-64 t-10			-7.711** (2.251)			-3.432** (1.546)
Muslim				-0.539** (0.201)	-0.634** (0.240)	-0.991** (0.319)
urbanisation	0.011 (0.007)	0.011 (0.009)	0.010 (0.014)	0.008 (0.005)	0.010 (0.007)	0.10 (0.009)
economic growth	-0.760 (0.744)	-0.945 (0.770)	-1.109 (0.810)	0.433 (0.835)	0.245 (0.888)	0.363 (0.921)
lnGdp80	0.129 (0.171)	0.145 (0.193)	0.285 (0.282)	0.080 (0.117)	0.068 (0.133)	0.078 (0.178)
ln(pop)	0.066 (0.084)	0.105 (0.098)	0.164 (0.151)	0.054 (0.064)	0.073 (0.075)	0.090 (0.103)
Time dummies	Yes	Yes	Yes	Yes	Yes	Yes
No of observations	2405	2166	1728	2481	2167	1729
No of countries	111	111	111	111	111	111
No of instruments	52	46	36	54	47	37
AR(1)	0.004	0.006	0.017	0.000	0.000	0.000
AR(2)	0.000	0.000	0.000	0.193	0.312	0.366
Sargen test	0.001	0.004	0.676	0.438	0.499	0.776
Hansen diff test	0.251	0.219	0.525	0.275	0.200	0.298

***p<0.01, ** p<0.05, *p<0.10 robust standard errors are reported in parentheses

- vii) Polity2, t-2
- viii) Polity2, t-2, independent lagged 5 years
- ix) Polity2, t-2, independent variables lagged 10 years
- x) adjusted for Muslim
- xi) adjusted for Muslim, independent lagged 5 years
- xii) adjusted for Muslim, independent variables lagged 10 years

6.4 Discussion

The results show that when the models were adjusted for Muslim majority the effect of sex ratio on democratic development was reduced, although still significant (Table 6.8). This effect was reduced further when the outliers were excluded from the model (Table 6.9). When Polity2 was lagged by 2 years sex ratio was still significant, and the strength of its effect on democratic development increased. However, from a statistical point of view lagging Polity2 by more than 1 year was problematic as it rendered the tests of autocorrelation and the Sargen test invalid.

The results support the hypothesis that nations with a surplus of males at marriageable age are less likely to become democratic than nations where women are in excess. The countries that remained autocratic over this period recorded significantly higher sex ratios (1.14 in 1980 and 1.16 in 2005) than the countries that transitioned from being autocratic to democratic (0.96 in 1980 to 0.97 in 2005). Additionally, the dynamic panel model demonstrated that nations with a surplus of males were less likely to develop democratically during this period. The strength of this inhibiting effect increased in nations with a longer history of male surplus and possibly the subsequent societal conditions because of this gender imbalance.

In nations with high sex ratios at marriageable age a large number of women are physically “missing” in the population, hence also missing from the sources of power and decision-making structures that shape society, including political participation. The raising of women’s voices is deeply political. The inclusion of their stories, their lived experiences, and their desires in the public arena creates new language, disseminates new knowledge and shapes a new culture that affects how people perceive and experience the world around them (Lorber, 2010). As women’s voices are increasingly heard their demands for economic and social freedoms necessitates a political platform where public discourse and debate can take place. Consequently, a critical mass of citizens demanding a more responsive government arises. In contrast, in a society where women do not even make up 50% of the population there are fewer opportunities for their voices to be heard. Moreover, their silence is normalised.

It appears that some of the inhibiting effects of high sex ratios on democratic transitions are mediated through lower levels of women's empowerment. Adjusting for the empowerment variables in the dynamic panel model the results showed that all three factors reduced the strength of the effect of high sex ratios on democratic development by 20 – 35 percent. This suggests that the negative effects of high sex ratios on political development are felt most strongly in countries where women's roles are more traditional.

Women's inability to pursue an alternative pathway to adulthood other than the traditional expectation of family formation means that women marry at earlier ages, marriage and fertility rates are higher, and literacy and divorce rates are low. Early marriage, between ages 15 – 19 is linked to premature pregnancy and childrearing, often resulting in higher rates of morbidity and mortality (Jejeebhoy, 1998; Shawky & Milaat, 2001). Younger girls are also at risk of greater physical and sexual violence. Once married a girl's childhood is over, regardless of age, and their opportunities and freedoms are limited (UNICEF Innocenti Research Centre, 2001). Not only does this impede their personal freedoms it also has consequences for the political development of a nation by reducing their economic and political participation.

Overall, the findings support Guttentag and Secord's (1983) theory that women's participation in education and employment will be lower in nations where the sex ratio is high and women are scarce. However, when the democratic nations are removed from the analysis and the four outliers are included the correlation between high sex ratios and female education is weakly positive (See Appendix, Table 1.18). In contrast the relationship between female labour force and sex ratio is strongly negative in all models (Appendix, Tables 1.17 – 1.19) The four outliers, Bahrain, Kuwait, Qatar and United Arab Emirates all share important commonalities. They are all resource abundant nations, they are all members of the Gulf Cooperation Council, and they all have a Muslim majority. They are also very wealthy nations, thus they have the financial wherewithal to provide education to their citizens. As a result, all four nations report high rates of female education by the end of the period.

Nevertheless, this has not translated into large numbers of women in the workforce. Despite significant increases in participation rates these figures continue to be very low, less than 25%. The work of Kanter (1977) and Dahlerup (1988) suggest that a threshold of around 30% of women is necessary for cultural shifts to take place within organisations and within politics. It is likely that *at least* this percentage is required before the flow-on effects of women in the workforce are felt, particularly in patriarchal nations and where occupational segregation exists. The dominant male culture in nations where there is a shortage of women interacts with organisational and political culture and so women's power is further diluted when they are in the minority *and* not in the workforce.

The data also reveals that female labour force participation is low in non-resource countries, in particular poor countries where both men and women record high rates of unemployment, and in patriarchal societies where attitudes toward women are still very conservative, for example in Pakistan and the Solomon Islands. In Pakistan women's labour force participation is constrained by opportunities for employment, and cultural norms and ideologies about a woman's role (Azid, Khan, & Alamasi, 2010). In the Solomon Islands gender based violence is a serious problem. 64% of women report experiencing physical, sexual, or emotional abuse from an intimate partner. Not only does this affect their own physical and mental health, it also has broader repercussions on their ability to care for their family and participate in work based activities (Solomon Islands Ministry of Women Youth and Children's Affairs, 2009).

Consequently, it seems that in nations where there is little financial need for *both* men and women to work, or in nations where there are few jobs available traditional attitudes toward women's roles are preserved. Men are given the first right to employment when jobs are scarce and women are expected to marry and remain within the home. Without employment women are unable to experience the increased freedoms that economic independence brings. Consigned to the traditional role of wife and mother they remain dependent on the males of the family for emotional, social, and economic support, and decisions are made and expressed on their behalf.

Particularly in patriarchal societies women's non-productive role in society and inferior role within the home recreates itself at a macro or state level, hence women acquiesce to the prevailing dominant culture both socially and politically. Consequently, it seems that in patriarchal societies the uneven distribution of income may have a role to play in further entrenching the dominant power structures and making democracy less likely to emerge. For example, in an examination of why modernisation failed to bring about democracy in Kuwait, Shultziner and Tétreault (2011, p. 8) concluded that, "Modernization may have changed women's roles and their access to education, but it did not alter a generally submissive state of mind. Women's exclusion was merely refurbished for modern and affluent times."

Finally, the findings show that independent of women's empowerment and measures of modernisation, high sex ratios continue to exert a significant negative impact on democratic development. So what could be the other mechanisms driving this relationship? Dyson (2012) argues that in patriarchal societies excess female child mortality translates into a greater likelihood of more males in adulthood over many ages, thus patriarchy is sustained and gender inequalities exacerbated. He also suggests that high sex ratios at young adult ages help to maintain a relatively large age gap between husbands and wives, further strengthening male dominance within households.

Although sex ratios are still high in Oman, Qatar, Saudi Arabia, United Arab Emirates, China, India, and Kuwait, sex ratios have begun to fall in several countries including, Bahrain, Pakistan, Cote D'Ivoire, and Singapore. Perhaps the most notable change over this period has been in Albania. Albania's sex ratio at marriageable age has fallen significantly over the last 25 years from a high of 1.09 in 1980 to 0.99 in 2005. This decrease in the number of males has largely come about through a disproportionate emigration of males to Greece and Italy in the early 1990s. Rising population levels, an unstable transition from communism to a free market led to a thirty per cent reduction in job availability, hence many Albanians sought work abroad. This changed the population structure of the society, reducing the number of men in this particular age

group (King, 2004). At the same time Albania reported an increase in female educational attainment from seven years to ten years, falls in fertility from 4 births per woman to 1.76 births per woman and a Polity2 score that changed from -9 to 9 over the period. Approximately 40% of women were in the workforce during this period.

Other countries with low or balanced sex ratios together with improvements in female educational attainment, fertility rates, and female labour force participation include Gabon, Malaysia, and Vietnam. It is likely that these nations will move toward more liberalised political regimes as they continue to advance gender equality and promote the empowerment of women. In contrast countries that develop democratically without altering fundamental gender relations between men and women risk creating a democratic regime based on authoritarian culture and practice and hence unsustainable democracy.

6.5 Summary

The results from this study suggest that more liberalised regimes with the capacity to invest in the human capital of its women have the potential to counteract the negative effect of high sex ratios on democracy caused by a natural resource abundance, labour migration policies or other discriminatory practices toward women. The expansion into other industries apart from oil and gas, as well as changing cultural attitudes toward women's roles will provide greater opportunities for women to enter the formal workforce.

In addition, lowering the sex ratio at birth by reducing access to sex selection technology, education programmes promoting the value of the girl-child, and better health care for women and children will also assist in reducing the sex ratio at marriageable age and reduce the number of "missing women."³⁸ Hence, investing in

³⁸ A study by Anderson and Ray (2010) highlights the high rates of missing women in sub-Saharan Africa due to an excess number of female deaths by HIV/AIDS compared to male deaths. Some reasons for this imbalance may be due to male promiscuity, unequal power to request safe sex, rape, health illiteracy.

girls and women is beneficial to empower women and reduce the negative impact of high sex ratios on democratic development. The next chapter which is Chapter Seven is the final analysis chapter.

Chapter Seven: Results

Study Three - Gender Equality and Democracy

This chapter presents the analysis of data from Study Three – Gender equality and democracy, and an interpretation and discussion of the results.

7.1 Results

The scatterplot below shows a moderately negative relationship between Polity2 and $\ln(\text{GDP})$ in 2009.

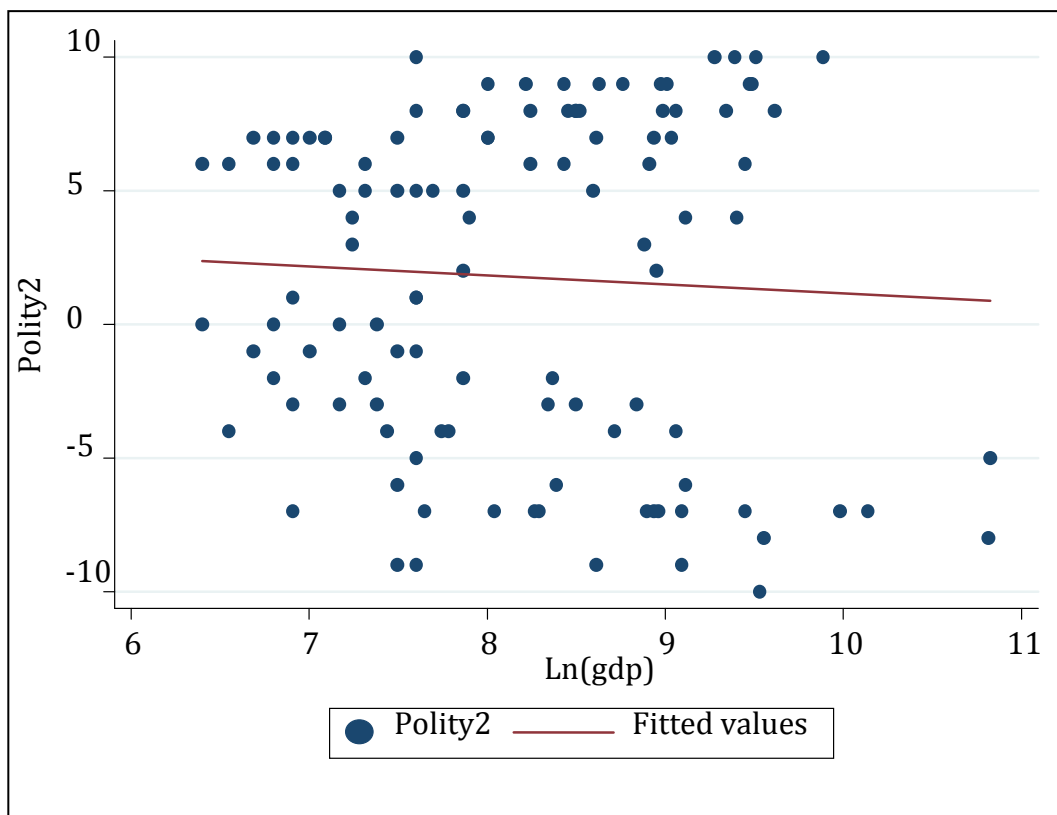


Fig. 7.0 Scatterplot of Polity2 by $\ln(\text{GDP})$ in 2009

This is supported by the results of the univariate regression analyses in Table 7.0 that show a negative and significant relationship between $\ln(\text{GDP})$ and levels of democracy.

Table 7.0 Generalised linear univariate regression analyses

Polity2	Coefficient	Robust Std. error	Confidence interval	Observations
polygamy	4.220**	1.30	1.679-6.760	113
parental authority	3.807**	1.371	1.120-6.495	112
inheritance laws	1.851	1.688	-1.458-5.160	111
female genital mutilation	2.762	1.813	-0.791-6.315	106
violence	8.764***	2.199	4.454-13.075	113
son preference	6.171**	2.591	1.093-11.248	113
freedom of movement	5.578**	2.235	1.197-9.959	112
public dress code	6.167**	1.896	2.450-9.884	113
land access	1.338	1.763	-2.117-4.793	112
bank loans	0.342	1.849	-3.282-3.966	113
property access	1.418	1.998	-2.499-5.335	112
ln(gdp)	-0.340	0.613	-1.542-0.861	113

Table 7.0 shows that overall, gender equality, as measured by social institutional variables has a positive relationship with levels of democracy in 2009; with polygamy, parental authority, the acceptance of violence, son preference, freedom of movement and public dress code all having a strong and significant effect.

The results in Table 7.1 below show a positive and significant relationship between a nation's total educational attainment and level of democracy, and a negative, although not significant relationship between the other modernisation variables, GDP, urbanisation, and level of democracy. The inclusion of the gender variables substantially reduced the significance of the education variable, and three of the gender variables, polygamy, violence, and property ownership were all positively and significantly associated with levels of democracy. Adjusting for Muslim majority *increased* the effect of polygamy and violence on democracy and *reduced* the significant effect of property ownership.

Table 7.1 Generalised linear multivariate regression analyses

Polity2	(i) β (st.err)	(ii) β (st.err)	(iii) β (st.err)	(iv) (st.err)
ln(gdp)	-1.166 (1.083)	0.287 (1.135)	0.027 (1.093)	
urbanisation	-0.019 (0.040)	-0.045 (0.046)	-0.029 (0.045)	
total education	0.767** (0.334)	0.081 (0.377)	0.046 (0.377)	
ln(pop)	0.000 (0.004)	-0.001 (0.003)	-0.001 (0.003)	
polygamy		4.884** (2.075)	4.914** (1.964)	
parental authority		-3.455 (2.606)	-3.670 (2.505)	
inheritance laws		1.529 (3.172)	-0.107 (3.029)	
female genital mutilation		0.434 (2.489)	-1.321 (2.577)	
violence		6.257** (2.723)	6.534** (2.638)	
son preference		5.166 (4.108)	3.400 (4.611)	
freedom of movement		-0.283 (3.376)	0.819 (3.519)	
public dress code		4.611 (2.979)	1.446 (3.484)	
land access		-1.296 (2.353)	-0.594 (2.525)	
bank loans		-4.534 (2.851)	-3.061 (2.740)	
property access		3.990* (2.179)	3.144 (2.044)	
Muslim			-3.872** (1.942)	
polygamy*lngdp				2.365* (1.330)
parental authority*lngdp				3.763** (1.267)
female genital mutilation*lngdp				6.638** (2.269)
violence*lngdp				8.139** (2.531)
son preference*lngdp				8.269*** (2.305)
freedom of movement*lngdp				6.382** (2.827)
public dress code*lngdp				5.005** (1.797)
constant	7.927 (6.689)	-9.762 (7.540)	-1.959 (8.651)	
No. of observations	91	83	83	83

***p<0.01, ** p<0.05, *p<0.1 regression coefficients reported with robust standard errors in parentheses.

- i. Multivariate model with modernisation indicators only
- ii. Multivariate model
- iii. Multivariate model adjusted for Muslim majority
- iv. Separate interaction models for each gender equality variables and lngdp, adjusting for all other variables in the multivariate model iv. Only significant interactions at p<0.05 level reported.

Significant interactions between economic development and gender equality were found for seven out of the eleven gender variables. These were polygamy, parental authority, female genital mutilation, violence, son preference, freedom of movement, and public dress code. All the interactions were then graphed to illustrate the inter-relationship between gender equality, economic development, and level of democracy (Figs. 7.1 – 7.7). Overall, the graphs show a negative relationship between economic development and democracy at low levels of gender equality, but a strong and significant positive relationship between economic development and democracy at high levels of gender equality. Wealthy nations with low levels of gender equality have a strong tendency to be autocratic regimes, whereas wealthy nations with greater levels of gender equality are more likely to be democratic. At medium levels of gender equality, as reflected in violence against women and parental authority, there is little or no relationship between economic development and democracy.

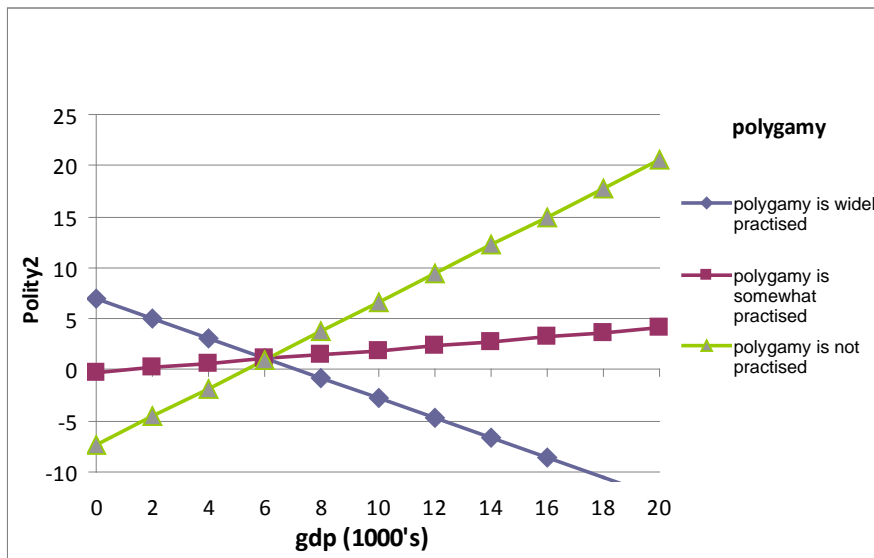


Fig. 7.1 Polygamy, GDP, and Polity2

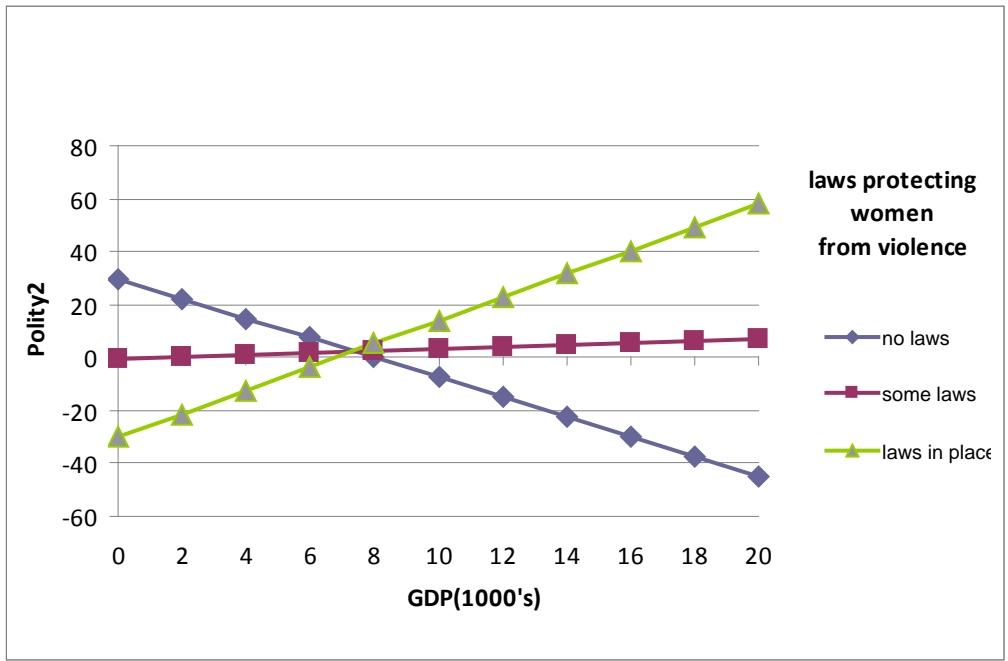


Fig. 7.2 Violence, GDP, and Polity2

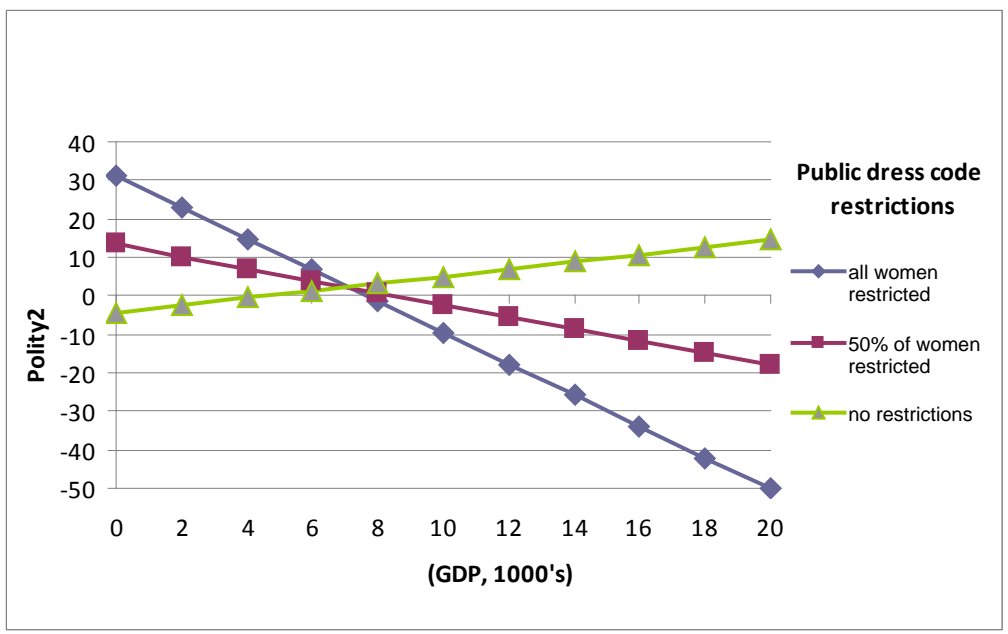


Fig. 7.3 Public dress code, GDP, and Polity2

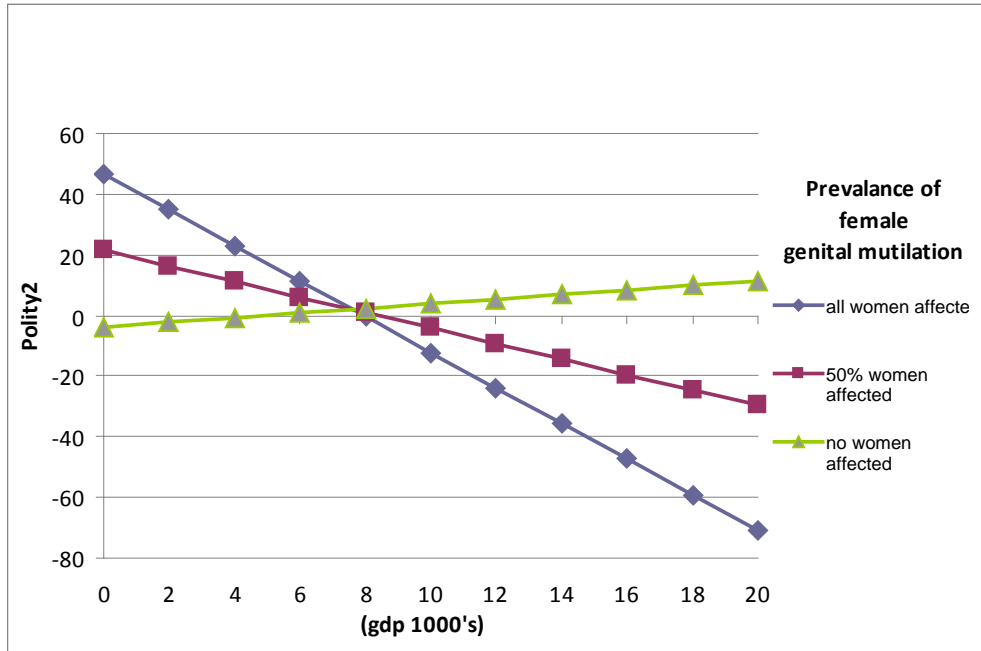


Fig. 7.4 Female genital mutilation, GDP, and Polity2

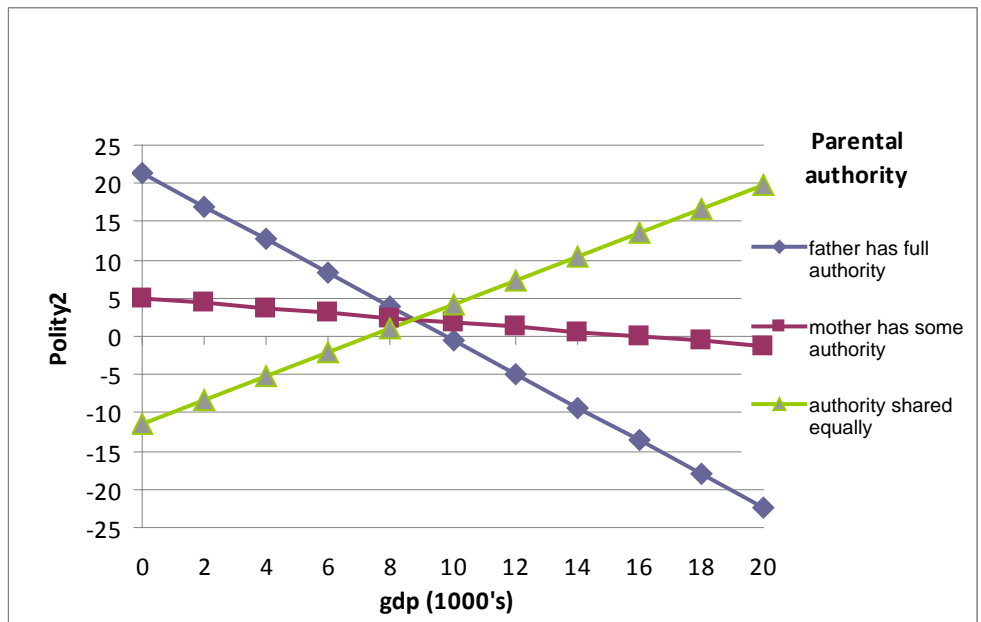


Fig. 7.5 Parental authority, GDP, and Polity2

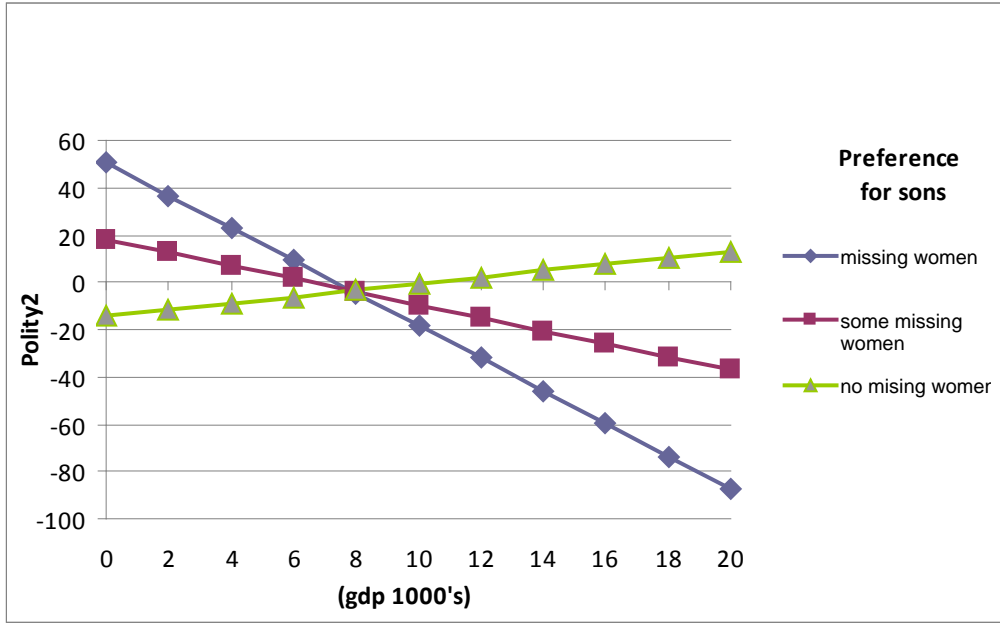


Fig. 7.6 Son preference, GDP, and Polity2

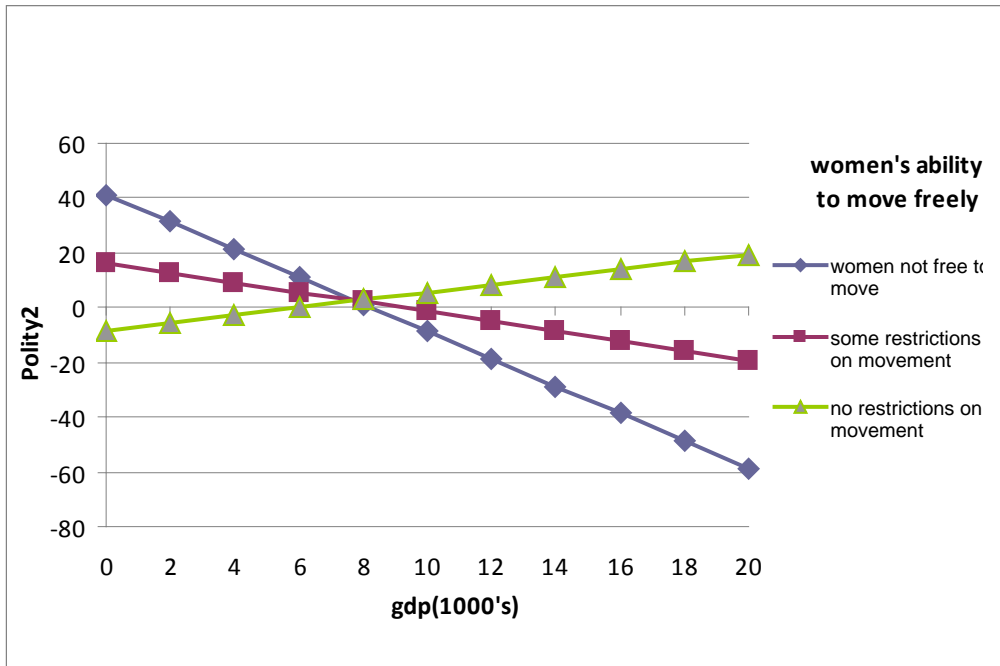


Fig. 7.7 Freedom of movement, GDP, and Polity2

7.2 Discussion

Using a unique database that allowed us to operationalise gender as a social institution, an association between a broad range of gender inequalities and the level of democracy in developing countries was found. Social institutions are the formal and informal rules in society that signify women's level of authority within the household, their physical integrity and safety, civil liberties, and ownership rights. They reflect deeply embedded cultures, traditions, and norms that are resistant to change and impede women's ability to access and have control over critical resources that build their human capital and that of the next generation, such as health care, education, and employment (Branisa et al., 2013; Morrisson & Jütting, 2005). Therefore, in nations where women have few personal freedoms and little decision-making power, either within the home or in the public sphere, democracy is unlikely to occur.

All the gender equality indicators examined in this study reflect the degree to which women "have equality of voice", are able to make decisions regarding their own health and welfare, and are equally valued as men. Gender inequality not only threatens women's reproductive, mental, and overall physical health, and has negative consequences for their families (Hudson et al., 2008), it is also associated with the likelihood of being a non-democratic country. In autocratic regimes, the political system and the social institutions that perpetuate gender inequality are mutually reinforcing. They both depend upon each other to uphold their power and their privileged position of authority. In contrast, democratic regimes require that all citizens have an opportunity to contribute to the laws and regulations that govern their lives, and in return expect basic civil and political rights. The twenty-first century witnessed the greatest numbers of nations make the transition to democracy. This analysis suggests that greater equality between men and women may have played an important role in that change.

The aspects of gender equality that bear the strongest association with levels of democracy were the acceptance of polygamy, violence against women, and women's ability to own property other than land. The variable measuring laws protecting women against violence demonstrated the strongest relationship with democracy. This measure

reflects the widespread acceptance of domestic violence, sexual assault or rape, and sexual harassment across societies (Jütting et al., 2008). Domestic violence reflects power imbalances within the household and mirrors the extent of male control within a nation (Matear, 1999), where it ultimately disengages women from economic, social, and political activities outside the home. Initially, women's subordinate position is maintained through cultural beliefs and when that fails men feel justified in using violence and force to enforce their position (Epstein, 2007). When nations fail to protect women from domestic or sexual violence through enforcement of laws and punishment, they give men permission to exercise power over women, and further reinforce the state's power over its citizens (Carey Jr & Torres, 2010). The boundaries between domestic and political violence and private and public violence are often blurred (Boesten, 2010), hence the suppression of women within the home reflects overall suppression of political rights for all citizens.

Crafting formal legislation to guarantee women's rights is an important first step to achieve gender equality, and as this study has shown countries with formal laws denouncing violence against women recorded higher levels of democracy than countries with no legislation in place. Nevertheless, legal reform may not always translate into better outcomes for women. For example, in a multi-country study including participants from India, Rwanda, Croatia, Brazil, Chile, and Mexico the majority of men (except India) reported positive attitudes toward gender equality, were aware of legal frameworks and campaigns denouncing violence against women. However, rates of violence against partners had not changed in these nations (Barker et al., 2011). Despite relatively low numbers of men charged with assaults against women a large percentage of men believed that the laws made it too easy for people to charge men with grievous bodily harm against women. Thus, programmes at the grassroots level involving both men and women are essential to tackle cultural norms and values toward women. This highlights the importance of other activities beyond legal reform to ensure that women lives are changed for the better.

Out of 1170 societies in the world, polygamy is practised legally and widely in 850 societies (Hartung et al., 1982). Twenty to fifty percent of all marriages in Africa are polygamous (Caldwell & Caldwell, 1990). Polygamy reflects how women are valued in a society, and where it exists, women are seen as tools for increasing the economic security and stability of the family (Klomegah, 1997), rather than individuals with their own intrinsic value. Polygamy structures social relationships in a household by requiring that all wives work together in production and reproduction matters, simultaneously placing them in a subordinate role to their husband who has the authority to decide how much time and resources he will invest in each wife (Dorjahn, 1988; Madhavan, 2002). The lack of decision-making power and control over their lives has negative consequences for women's sexual health, fertility, and mental health (Al-Krenawi, 1999; Al-Krenawi, Graham, & Al-Krenawi, 1997; Bove & Valeggia, 2009) and excludes women from the public sphere (Peterson, 1999).

There is a large body of evidence suggesting that the practise of polygamy is harmful for women and children (Al-Krenawi, 1999, 2012; Al-Krenawi et al., 1997; Al-Krenawi, Graham, & Al Gharaibeh, 2011; Bove & Valeggia, 2009; Elbedour, Onwuegbuzie, Caridine, & Abu-Saad, 2002; Ozkan, Altindag, Oto, & Sentunali, 2006). Several studies from the Middle East and Africa have exposed the negative health consequences for women, particularly negative outcomes for first wives, with a majority of women not in favour of this "cultural practice." This practice is an expression of a latent inequality where women are "bounded" by cultural norms. There is some suggestion that polygamy and democracy are incompatible as it promotes the interests of the wealthiest men in society (they are the only ones who can afford many wives or bride price) over both men and women (Gibson & Mace, 2007).

South Africa is one of 28 nations that are signatories to the Protocol to the African Charter on Human and Peoples' Rights on the Rights of Women in Africa (2003). This document calls for the end to discrimination against women and reaffirms the principles of CEDAW, The Beijing Platform for Action, ICCPR, and the ICESCR. In Article 6

concerning marriage monogamy is encouraged as the preferred form of marriage, but this documents also stipulates that the “rights of women in marriage and family, including in polygamous marital relationships are promoted and protected.” South African President Jacob Zuma actively promotes polygamy, an inherently unequal social institution, thus it will be interesting to see whether making visible the practice of polygamy will increase the uptake of polygamous marriages in the community or conversely, whether community opposition to this marriage arrangement will strengthen.

In many developing countries an adherence to the inheritance laws and traditions of property ownership has generally meant that women cannot take advantage of the benefits associated with ownership and control of property. The ability to have control over an asset like a home, rather than just access to it has been found to reduce substantially women’s risk of both physical and psychological violence. Home ownership gives women an exit option and increases their bargaining power in the home (Panda & Agarwal, 2005). In a study in Changirag, India, joint titling of property was found to increase a wife’s decision-making power, self-esteem and respect from her spouse (Datta, 2006). Homes and other forms of property (e.g., phones, livestock and machinery) not only provide a basic means of survival, but also serve as tools of income generation and access to credit or loans (Jaquette & Summerfield, 2006, p. 163). Ownership of assets is also seen as a measure of social status (Steinzor, 2003). The inability of women to own property, the practice of polygamy, and the widespread acceptance of violence against women are all structurally inegalitarian practices that reflect a fundamental imbalance in power between men and women (Brooks, 2009; Matear, 1999), and as this study shows may be key impediments to democratic development.

The most significant finding from the analyses is that the relationship between economic development and democracy in developing countries is modified by the level of gender equality in a society. Where gender equality is high, GDP is positively associated with democracy, whereas at low or medium levels of gender equality GDP has either a negative relationship or bears no relationship with democracy. Alternatively, levels of

gender equality and economic development are high in more democratic regimes, but levels of gender equality are low in wealthy, more autocratic regimes. As this is cross-sectional data it is difficult to determine the direction of causality. However, it appears that countries with high levels of economic development, but without gender equality are less likely to be democratic.

These results lend support to the Gender and Development (GAD) approach which suggests that increased economic development may not always improve women's status, and that "inequalities between men and women are shaped and maintained by institutional factors which are resistant to change" (Forsythe et al., 2000). Boserup (1970) also stressed that economic development would not automatically improve women's status in patriarchal societies, and Marchand and Papart (1995) also emphasised the role of institutions, particularly family structures, in keeping women's status low. This finding has important policy implications. Raising overall living standards will not reduce gender inequalities without fundamental changes to the social structures and processes that give rise to women's subordinate position. Explicit policies tackling gender inequalities at a social institutional level may be a requirement for countries to move peacefully toward more democratic regimes.

Despite this finding it is difficult to state conclusively whether individual nations have higher levels of gender equality than other nations as nations may score highly on some indicators, but low on other items. For example South Africa scores very highly on all the gender equality variables except for laws protecting women from violence. This is also true for China, except they score poorly on the item son preference. In contrast, Saudi Arabia scores poorly on most items, but scores highly on women's ability to own property. This highlights the importance of looking at gender inequalities *within* nations to determine what factors may be restricting democratic development within these nations.

The cross-sectional nature of this study leads us to caution against assuming causality. Democratic regimes overall, appear to be able to deliver better social and economic

conditions for women (Lake & Baum, 2001; Pillai & Gupta, 2006). However, it appears that democracy needs to be legitimised and stabilised before these benefits are felt (Beer, 2009; Donno & Russett, 2004; Lutz et al., 2010; Papaioannou & Siourounis, 2008a; Persson & Tabellini, 2009). It is unclear whether the movement toward more egalitarian policies for women begins before the transition to democracy or whether women's status improves many years after democracy gains legitimacy and consolidates.

However, it is plausible that a minimum level of both economic development and gender equality is required for democracy to emerge and be sustained, as there were only a handful of democratic nations in this study with high gender equality and low levels of income (Burundi, Nepal, Timor–Leste, Kenya, Malawi, Mongolia, and Moldova). There is evidence to suggest that countries where democracy is established without minimum social and economic conditions may have strong procedural democracy, but weak substantive democracy, e.g. Mali, Benin. Therefore, improvements in gender equality may also have an important role to play in the consolidation and deepening of democratic regimes.

7.3 Summary

This chapter presents the analysis of data from Study 3 - Gender equality and democracy, and an interpretation and discussion of the results. The results demonstrated a negative association between a broad range of gender inequalities and the level of democracy for 113 developing countries. In the multivariate model three of the gender equality variables, polygamy, violence, and property ownership were all positively and significantly associated with levels of democracy. What that means is that a low prevalence of polygamy, a low acceptance for the level of violence in a society and high degree of female property ownership were all associated with more democratic regimes.

The most significant finding was that the relationship between economic development and democracy in developing countries is modified by the level of gender equality in a society. Where gender equality is high, GDP is positively associated with democracy, whereas at low or medium levels of gender equality GDP has either a negative

relationship or bears no relationship with democracy. This finding has important policy implications. Raising overall living standards will not reduce gender inequalities without fundamental changes to the social structures and processes that give rise to women's subordinate position. Thus, explicit policies tackling gender inequalities at a social institutional level may be a requirement for countries to move peacefully toward more democratic regimes.

Chapter Eight: Synthesis, Significance, Recommendations and Conclusion

This chapter draws on the research findings, observations, and literature from previous chapters to determine whether the overall aim of the thesis has been achieved and whether the research questions have been answered. It provides a synthesis of the main findings as well as recommendations for policy makers, and non-government parties. The significance and limitations of this study are also outlined as well as guidelines for the direction of future research in the area of democratic development.

Research on gender and politics has become a legitimate field of research, however the relationship between gender equality and democracy remains less well understood, as few scholars have successfully integrated the two disciplines. Therefore, the purpose of this study was to make a significant contribution to the fields of *both* democracy research and gender studies by addressing the “gender lacuna” (Baldez, 2010, p. 200), or gender gap in comparative politics, and to incorporate a gender perspective into democratic development theory. The overarching finding from this thesis is that gender equality and women’s empowerment did play an important role in the democratic development of nations over the last 30 years, and that a gendered approach to democratic development theory has much to offer in addition to the existing modernisation and neo-modernisation theories. The next section summarises the main findings in response to the study’s main research questions.

8.1 Response to the Research Questions

8.1.1 Was women’s empowerment (as represented by female educational attainment, female labour force participation, and low fertility rates) a core driver of democratic development from 1980 to 2005?

The results from Chapter Five showed that improvements in women’s empowerment were associated with democratic development over this period, with female education

and female labour force participation having a positive and causal effect on these transitions. In addition, the strength of the effect of female education on democratic development increased when the relationship was studied with lags of five and ten years, suggesting democracy is more likely to occur in nations with a history of educating girls and a longer experience of the social and economic conditions that have occurred because of this investment. Female labour force participation also showed a positive and significant effect on democratic development. However, when the low level of female labour force participation in some Muslim nations was accounted for, the positive impact of female labour force participation on democratic development decreased.

8.1.2 Were improvements in both women’s reproductive and productive activities (as reflected by falls in fertility rates and increases in female educational attainment and labour force participation) required for democratic development to occur?

The descriptive statistics from Chapter Five show clearly that nations that developed democratically (e.g., Argentina and South Korea) began and finished the study period with higher female education levels, higher female participation rates, and lower fertility rates than nations that remained autocratic or anocratic during this period (e.g., Bahrain and Laos). The empirical results also show that for each of the empowerment variables the difference between nations that remained non-democratic and those that developed democratically was statistically significant. Further analyses that expanded the three categories of democratic development (Always Autocratic, Democratic Transition and Always Democratic) to six categories (Always Autocratic, Autocratic to Anocratic, Always Anocratic, Autocratic to Democratic, Anocratic to Democratic and Always Democratic) provides further evidence that *both* improvements in women’s productive activities (proxied by education and labour force participation rates) *and* reductions in fertility rates were required for democratic development to occur. For example, two nations that remained autocratic such as Libya and Qatar, made enormous gains in increasing female education levels and reducing fertility rates during the study period.

However, female labour force participation levels remained low in comparison to other nations. The nations that remained anocratic during this period (e.g. Uganda (4.1) and Swaziland (3.78)) also increased their female education levels, and achieved high rates of female labour force participation; however, on average, their fertility rates were still reasonably high in 2005, at 3.6 births per woman. Nations that began the period with higher levels of female education and lower fertility rates were more likely to transition toward democracy than those that achieved improvements later in the period. Overall, all three empowerment variables needed to be strong for democratic development to occur during this period.

8.1.3 What was the nature of the relationship between female education and employment, and female education and fertility on democratic development?

The empirical analysis conducted in this thesis indicated that, at national level, there was a positive and statistically significant interaction between female education and female labour force participation in the determination of democratic development. The results also indicate a negative and statistically significant interaction between fertility rates and female labour force participation in the determination of democratic development. Across countries and time periods, as the level of female labour force participation increased *and* the fertility rate decreased, the level of democracy increased. The interaction between female education and fertility did not have a statistically significant effect on democratic development. However, countries characterised by relatively high education levels *and* low fertility rates recorded higher levels of democratic development than countries where both education and fertility rates were high. It appears that when educating girls is transformative, i.e., translates into greater opportunities and choices for women, including around their fertility, education is more likely to have a positive influence on democratic development.

8.1.4 Was gender equality at a social institutional level positively associated with levels of democracy?

The bivariate analyses in Chapter Seven demonstrated a positive and statistically significant relationship between six of the gender equality variables (representing family code, civil liberties and physical integrity) and levels of democracy in 2009. In the multivariate analysis three items remained positively and significantly associated with democracy. They were: a low tolerance for violence against women, a low prevalence of polygamy and the ability for women to own property. This highlights the important role that gender inequalities at a social institutional level play. Social institutions reflect deeply embedded cultures, traditions, and norms that are resistant to change and impede women's ability to access and have control over critical resources that build their human capital and that of the next generation, such as health care, education, and employment (Morrisson & Jütting, 2005). As this is a cross-sectional study we are cautious about assuming causality, however it appears that in nations where women have few personal freedoms and little decision-making power, either within the home or in the public sphere, democracy is unlikely to exist. Consequently, future efforts to advance democracy in developing countries (and possibly some of the more developed countries) may need to consider gender inequalities at this level.

8.1.5 What was the nature of the relationship between gender equality, economic development (GDP), and democracy?

The main finding from Chapter Seven showed that there was a significant interaction effect between gender equality and GDP on democracy for seven out of the eleven gender equality variables. Where gender equality was high, GDP was positively associated with democracy, whereas at low or medium levels of gender equality GDP had either a negative relationship or bore no relationship with democracy. This finding rebuts the assumption that gender equality and democracy occur "naturally" with increased income. It appears that raising the overall living standards of a nation will not reduce gender inequalities without fundamental changes to the social structures and

processes that give rise to women's status. Thus, explicit policies tackling gender inequalities at a social institutional level may be a requirement for countries to move toward democracy.

8.1.6 Was economic development (GDP) on its own sufficient to move developing countries toward democracy?

The three analysis chapters (Chapters Five, Six and Seven) tested varying measures of gender equality and women's empowerment and demonstrated that economic development as measured by GDP was, on its own, insufficient to drive democratic development if the structural, cultural, and/or social conditions within nations inhibited or limited women's capacity to participate fully as citizens. Overall, it appears that a minimum level of income and the political will to invest in the health and wellbeing of girls is essential for democratic development to occur.

8.1.7 Do high (adverse) sex ratios at marriageable age impact negatively on democratic development?

The results from Chapter Six showed that nations with a shortage of women at population level were less likely to develop democratically than nations where equal numbers of men and women existed or women were in surplus. The countries that remained autocratic over this period recorded much higher sex ratios than the countries that transitioned from being autocratic to democratic and the difference between these two groups was statistically significant. In addition, the results from the dynamic panel model demonstrated that a surplus of males had negative and causal effect on democratic development during this period. The strength of this inhibiting effect increased with lags of five and ten years suggesting that democracy was less likely to occur in nations with a longer history of an oversupply of men and the subsequent societal conditions, not conducive to democracy that may have occurred because of this gender imbalance.

8.1.8 Does women's empowerment provide a causal link between the effects of sex ratio at marriageable age on democratic development?

The results showed that the inhibiting effect of high sex ratios on democratic development was driven, in part, by the lower levels of women's empowerment (low female education, high fertility, low female labour force participation) in nations with an oversupply of men. It is plausible to conclude that the negative effects of high sex ratios on political development are felt most strongly in countries where women's roles are more traditional. Therefore, efforts to promote the empowerment of women through investing in girls' education, enabling women's participation in the workforce, and reducing fertility rates may help to offset the inhibiting effects of high sex ratios on democratic development.

8.2 Response to the Hypothesis Proposed in the Study

The overall finding from this study is that gender equality and women's empowerment *did* have a significant role to play in the democratic development of nations over the last 30 years. The three analysis chapters (Chapters Five, Six, and Seven) testing varying measures of gender equality and women's empowerment demonstrated that economic development was insufficient to drive democratic development if the structural, cultural and/or social conditions within nations inhibited or limited women's capacity to participate fully as citizens. This study demonstrates that the combination of female education *and* female employment and the combination of low fertility rates and high female labour force participation are powerful predictors of democratic development. These findings may explain, in part, why some nations remain non-democratic despite investing in girls' education and achieving low fertility rates.

In nations where women are educated, but dissuaded from participating in formal work because of cultural, social, or economic factors, women's life choices are limited to marriage and childbearing. Moreover, in wealthy nations with low numbers of women in employment, a nation's income distribution skews toward the men of these countries. Thus, this uneven distribution of income may have a role to play in further entrenching

the unequal power structures in society, as the traditional role of man as the “breadwinner” and woman as the “homemaker” is reinforced. For example, in an examination of why economic development failed to bring about democracy in Kuwait, Shultziner and Tétreault, (2011, p. 8) concluded that, “Modernization may have changed women’s roles and their access to education, but it did not alter a generally submissive state of mind. Women’s exclusion was merely refurbished for modern and affluent times.” This highlights that increased wealth and improvements in overall living standards may not substantially change women’s status or power in society if the prevailing attitude toward women is still that of a second class citizen.

8.3 Response to the Overall Research Aim

The overall aim of the thesis was to examine empirically whether gender equality and women’s empowerment played an important role in democratic development between 1980 and 2005 and to provide a gendered approach to democratic development theory. The results from Chapter Five showed that empowering women was a core driver of democratic development during this period. Nations that began the period with higher levels of female education and female labour force participation and low fertility rates were more likely to develop democratically than nations that had achieved improvements in these areas later in the period. These three variables represent a *significant cultural shift in gender roles* within a nation, and this cultural shift appears to be conducive to democratic development.

As discussed in the research design in Chapter Four, the two disciplines of feminist scholarship and comparative politics have remained quite disparate, in part because of their different methodological approaches to research. The democratisation literature is predominantly quantitative, whereas the feminist research is predominantly qualitative. By grounding the theoretical argument in feminist research and using more nuanced measures of women’s lives such as parental authority and female genital mutilation, as well as broad gender-sensitive indicators such as education and sex ratios, this study makes a significant contribution to both fields of politics and gender. Moreover, the

development of a Gender and Democratic Development model (GADD) provides a framework to guide further research in this field.

8.4 Significance of Key Findings

8.4.1 Re-conceptualising modernisation theories

In the democratisation literature many studies have examined the role of income, urbanisation, population indicators, and/or total education as representing economic development or modernisation. The term “modernisation” has been used interchangeably throughout the literature with economic development, social development, and development. Studies by Inglehart et al. (2002; 2008; 2010) have put forward a revised version of the modernisation theory (the neo-modernisation theory) proposing that in post-industrial society economic security and development brings about socio-cultural changes, such as gender equality, tolerance for others, and trust, changes in mass attitudes that make democracy more likely.

However, implicit in the modernisation and neo-modernisation theories is that gender equality and women’s empowerment occur as a consequence of economic development. This is where this study makes a substantial contribution to the existing literature. The findings from Chapter Five show that educating girls was a core driver of democratic development during the period of this study, over and above key modernisation factors such as income, economic growth, urbanisation, and population density. This may explain in part the consistent finding in the democratisation literature of a positive association between income and democracy, but little evidence of a direct causal effect (Acemoglu et al., 2008, 2009). Income appears to be positively associated with democracy in so far as it increases state human capital and promotes other social conditions, but it did not appear to be a significant *causal* factor in directly advancing democracy over the period researched in this study.

The results show that women’s empowerment played an active role in moving nations toward more democratic regimes at the end of the twentieth century. Consequently, it must be considered an important aspect of modernisation theory, a dimension that has

not received adequate attention in the democratisation literature to date. It appears that nations that made significant movements toward democracy during this period had both the financial resources *and* the political will to invest in the human capital of their people, particularly their women. This has important implications for national governments. It is not enough to raise overall living standards within a nation without tackling the social structures that discriminate against women and prevent them from participating fully as citizens.

8.4.2 Integrating politics and gender

Research on gender and politics has become a legitimate field of study; however the relationship between gender and democracy remains less well understood, as few scholars have successfully integrated the two disciplines. As Lisa Baldez argues, “Mainstream scholars rarely question whether gender is relevant to politics, and, gender scholars rarely question whether gender *isn't* relevant to politics” (Baldez, 2010, p. 200).

The strength of comparative political research is the ability to compare the political development of nations using quantitative data from international datasets. This allows researchers to develop broad theories about the economic and social factors that contribute to democratic development, but these studies do not explain why some countries do not follow the same trajectory as others. This is one of the key contributions of this study. By taking a gendered approach to democratic development theory and using more nuanced measure of gender equality, the results from Chapter Seven highlight how gender equality intersects with a nation’s level of income and modifies its relationship with democracy. These findings demonstrate the non-linear nature of modernisation and provide some explanation as to why wealth does not always translate into more liberal political regimes (e.g. Saudi Arabia, Libya). Moreover, gender research proposes and the findings from this research suggest that these gender inequalities might be further reinforced and perpetuated by both income and the state. The integration of politics and gender has the potential to explain the variability in the quality and stability of current democracies both theoretically and in future research.

8.4.3 Women's empowerment as a causal factor in democratic development

This study provides strong empirical evidence that gender equality (as represented by sex ratios) and women's empowerment (female education, fertility rates, female employment) had a causal effect on democratic development at the end of the twentieth century. Using longitudinal data and the latest and most sophisticated statistical modeling techniques to account for problems of endogeneity and reverse causation these findings challenge much of the current thinking that gender equality improves after democratic development is achieved. These findings support earlier literature that found that women's status in some of the post-communist nations (Poland, Bulgaria, Russia) worsened after democratisation (Lafont, 2001). In contrast, a recent report from the Middle East and North Africa documents that significant changes to personal status laws have been achieved in Algeria, Morocco and Bahrain (Kelly, 2010), despite little democratic progress. What this highlights is that gender equality and women's empowerment can be achieved irrespective of political regime status, however, political freedoms are still intrinsically valuable for people to be able to shape their lives and those of their community.

Together, these three key contributions shift the paradigm in our collective understanding of democratic development theory. Further implications of the significance of these findings will be discussed in the next section.

8.5 Further Implications

8.5.1 Gender equality is foundational to democracy building

This study concludes that any future efforts of democratic governments and international aid organisations to promote and assist with democracy building in developing countries must consider gender equality as foundational to that process. The examples from Ethiopia and Iran as discussed in Chapter Three demonstrate the interconnectedness between gender equality and democracy. Despite the negative outcomes in these countries so far, their experiences show how activists committed to human rights, in particular women's rights, can shape political culture. Gender and politics are not

separate concerns; gender (in)equality is highly political and politics is profoundly gendered.

8.5.2 Educating girls is a priority for democratic development to occur

One of the key findings from this study is that democracy is more likely to occur in nations with a history of educating girls, e.g. the former communist nations, and a longer experience of the social and economic conditions, e.g. South Korea and Argentina, conducive to democratic development that have occurred because of this investment. There is a substantial amount of research on the benefits of educating girls, as discussed in Chapter Three. These include economic development, building human capital, reducing fertility rates, delaying marriages and investing in the health and education of the next generation. Educating girls seems to create profound and fundamental changes in the structure of society as women become more involved in activities outside the home, and their concerns become more visible. As their aspirations and expectations for their lives increase governments are increasingly pressured to respond to a more complex set of demands. Wealthy governments can placate citizens with increased social spending, for example the case of Saudi Arabia during the Arab Spring (Kuhn, 2012). However, other reforms require greater public participation and involvement. With greater education and rising expectations the social contract between the citizen and the state shifts and concessions from the government are required to move forward.

One of the outcomes of empowering women is to delay marriage. This puts increased pressure on men to build their own human capital in order to be competitive in the marriage market. Thus, nations with a longer history of educating girls are likely to have greater numbers of *more* highly educated men and women, and they are likely to have more women with a longer experience of participating in the formal workforce and in professional roles. These nations are also more likely to have women participating in NGOs, trade unions, and political parties, and taking on management and leadership roles. This *active* participation serves as a type of ‘political apprenticeship’ whereby citizens are no longer passive but become actively engaged in their societies, and seek to have a greater influence on the decision-making structures that affect their lives. A

recent study by Hoffman and Jamal (2012) shows that the relative odds of men and women engaging in political protests in the Arab states are 1.5 times higher among those with *both* higher education and employment.

Despite the findings from Chapter Five suggesting that secondary schooling for girls is a requisite for democratic development, the results showed that gender parity in education is not. What is often forgotten in seeking gender parity in education is that schooling itself is highly gendered (Stromquist, 2001), thus the absolute number of years of education may be more important for it be transformative for women, rather than simply reaching parity with boys' education which may also be quite low. Moreover, it is also important to recognise that the quality of education and cultural context in which girls are educated may also play an important role in its efficacy as a tool for political transformation.

8.5.3 For female education to be an effective tool for democratic development it must translate into economic opportunities for women

The findings show the importance of both educating girls *and* employment for democratic development. Therefore, it is important to ask whether increases in educational equality are translating into employment opportunities for women, and if so, what occupations? Labour market statistics show that occupational segregation is a concern across the globe, with women overrepresented in nursing and administration roles and under-represented in managerial positions (Anker, Melkas, & Korten, 2003).

Additionally, as women begin to outstrip men in educational outcomes what will be the ramifications for women? Will the effects be positive as long as women are achieving less or equal to men, but adverse if women begin to outperform men? The recent example of Iran is a case in point. In Iran women constitute the majority of college graduates, and have outnumbered men at universities for more than a decade. However, 36 Iranian universities have recently announced that they will prevent women from pursuing 77 fields of study, such as engineering, accounting, education, counseling, and chemistry. Additionally, other liberal arts programs including economics,

administration, psychology, library sciences, and literature will begin reducing gender quotas by 30 - 40 percent. Science Minister Kamran Daneshjoo has called for gender segregation at Iranian Universities to be a top priority to protect morality (Women's Learning Partnership for Rights Development and Peace, 2012).

These new limitations on women's access to education are a significant rollback for women's rights and educational gains in Iran. This planned gender segregation and study restrictions at Iranian universities will harm the quality of education for female students, as well as job prospects, and have adverse implications for the next generation of college applicants. As well as restricting the freedom of women to create a life of their own these study restrictions also have the capacity to affect women's economic power, social standing, and access to jobs that confer power and privilege. Women's ability to participate in education and employment represents an expansion of the physical and mental space in which women inhabit. As this space expands they are in a better position to raise their voices and be involved in shaping their communities. The gender segregation of men and women further entrenches patterns of male and female interests and behaviour and should be seen as a form of structural violence against women. Further research is warranted to monitor the regime status of Iran, and to determine whether these changes are likely to delay or inhibit Iran's movement toward democracy?

In developed nations such as Australia and the United States the number of women graduating from university over the last decade has been consistently higher than men (DIISRT, 2012; Snyder & Dillow, 2011). Yet, rates of full time employment are much lower for women than men, women still receive lower rates of remuneration and there are still fewer women than men in senior management positions. In 2010 Australia women held approximately 10% of senior executive and directorship positions in ASX companies (Australian Government, 2012) and American women held approximately 15% of leadership positions in Fortune 500 companies (Catalyst, 2012). In both nations women earn 15-25% less than men. This is due in part to occupational segregation, but wage differences persist even when men and women are employed in similar roles

(Australian Government, 2013; Wirth, 2009). These statistics show that other factors beyond educating women need to be considered before women can achieve equality in the labour force.

8.5.4 Political will

It appears that nations that made significant movements toward democracy during this period had both the financial resources *and* the political will, to invest in the human capital of their people, particularly their women. Political will, like democracy is a multi-facted, highly contested concept. In this context it refers to “the extent of committed support among key decision makers for a particular policy solution to a particular problem” (Post, Raile, & Raile, 2010, p. 659).³⁹ For example, the political economy literature argues that no government will provide primary education to its citizens, particularly its poorest citizens unless doing so will help it to remain in power (Kosack, 2009). Further, governments have less compulsion to invest in girls’ education if a nation’s economic performance does not depend on educated women participating in the paid workforce. This includes poorer nations where women are primarily employed in agriculture and wealthier nations where national income comes from industries largely populated by men. Thus, continued pressure and support from international organisations such as the United Nations and the World Bank will be required to persuade governments that investing in education for all is not only a universal right but that it will help prepare countries for changing labour force and market conditions in the long term.

8.5.5 Arguments for a universal set of values based on human rights principles

Where does the responsibility lie to ensure that both men and women have access to quality education that enables them to create and live lives that they value? Unterhalter (2008) discusses the concept of ‘cosmopolitanism’ as way of locating gender equality in education as a global social justice issue. She states that in its original context

³⁹ See Post, Raile & Raile (2010) for a comprehensive discussion about the conceptualisation of political will.

cosmopolitanism signifies concerns and duties attached to a space common to all, not bounded by locality, the notion of a “global citizen.” International conventions and treaties such as the Beijing Platform for Action in declaring, “Women’s rights are human rights”, strengthens this idea of a global citizen attached to a common or universal set of values.

Sen (1999), claims that universal values are not formed by consent but rather a universal value may be seen as something that everyone has reason to value. Sen extends this reasoning arguing that democracy also must be considered as one of those universal values due to its instrumental, and its intrinsic value to citizens, and its constructive ability to shape a society’s values and priorities (Sen, 1999).

However, this idea of a universal set of values is hotly contested with governments conceding universality at a global level, but recognising diversity at the local level. For example, the Tunis Declaration signed by African nations on the eve of the Vienna Conference states, “The universal nature of human rights is beyond question; their protection and promotion are the duty of all States, regardless of their political, economic, or cultural systems.” However, the document also states, “No ready-made model can be prescribed at the universal level since the historical and cultural realities of each nation and the traditions, standards and values of each people cannot be disregarded.” This idea of a universal set of human rights was also criticised by the Foreign Minister from Singapore at the Vienna Conference in 1993. He argued that, “The universal ideal of human rights can be harmful if universalism is used to deny or mask the reality of diversity.”

On the other hand, the reality of cultural diversity cannot be used to excuse or ignore human rights abuses that leave people without their human dignity intact. Stromquist (2001) argues that bounded by locality, culture tends to create norms that *restrict*, rather than enhance women’s physical and mental space. However, some women hotly contest this premise. For example, a recent debate on Australian national television highlighted that while women in Somalia may see the practice of female genital mutilation as

harmful, women in Sierra Leone view it as a normal part of the initiation process of Bondo (Insight, ABC TV). This example shows how some cultural practices are normalised to such a degree that women themselves do not view them as harmful.

It seems that the binary between culture and universal rights is not ubiquitous; that is they do not need to be mutually exclusive. Despite pervasive and persistent gender inequalities throughout the Middle-East and North Africa, there has been some progress. For example, Algeria made significant amendments to its personal status code in 2005, giving women greater power and autonomy within the family. Women are now able to pass on their own citizenship to their husband and children, the minimum age of marriage for both men and women is 19, and several conditions on the practice of polygamy have been imposed (Kelly, 2010). Citizenship rights for women have also been expanded in Tunisia, (Grami, 2008) and Morocco (Maddy-Weitzman, 2005). In Bahrain, Kuwait and Qatar, laws requiring women to receive permission from their husbands to travel have been rescinded (Kelly, 2010). Thus, women's formal rights are slowly expanding to include greater citizenship and freedom of movement.

While progress has been made in some areas, the findings from Chapter Six show that the acceptance of violence against women is still pervasive. Many countries still do not have laws that protect women from domestic violence and sexual assault. Pakistan finally passed a bill protecting women from domestic violence in March, 2013. Laws protecting women from violence demonstrated the strongest relationship with levels of democracy, lending support to the idea that personal violence at a micro-level and structural violence at a state or national level are inextricably related. Democracy requires a process of deliberative discussion and a tolerance for other viewpoints without resorting to violence to establish domination (Schwarzmantel, 2010). A culture where violence is used as way of settling disputes or establishing and maintaining order is not conducive to the formation of a democratic regime with democratic practices. Indeed, one could argue that a nation that doesn't see reason to value a culture of non-violence is also unlikely to value democracy.

8.5.6 Gender equality more threatening than democracy

While the findings suggest that advancing gender equality may be a viable option to promote democracy in developing nations, it is also important to recognise that perceptions of gender equality and democracy may vary across nations. Lyons, Curnow and Mather (2004, p. 62) argue that a successful gender mainstreaming policy “would substantially shift and change the socioeconomic power structures in society. ...and this may prove to be more threatening than democracy in many countries.” Indeed, nations that transition from authoritarian rule without transforming the internal social and economic institutions run the risk of transitioning to democracy with an autocratic culture or creating a democracy with a ‘male face’ (Moghadam, 2003). Citizens’ daily lives may worsen rather than improve under this type of regime, as the elites seek to hang on to their privilege and power.

Conversely, women in nations where there have been recent gains in personal or family laws may be fearful of losing their existing rights under a more liberalised regime, particularly where there is a risk of more traditional or militant parties coming into power. Rather than lobby for political rights, their focus may be to continue to lobby for more personal rights, such as the right to travel freely. Particularly in nations where there is no history of democratic citizenship, citizens may be fearful of the unknown, especially in nations where the overall standard of living is high. Conversely, men who fear the expansion of women’s rights may decide that a democratic structure would enable a more traditional government to govern and rollback some of the more liberal laws. Consequently, it is difficult to say with any certainty if the extension of women’s rights in these nations will continue to liberalise these regimes or further entrench authoritarian regimes.

8.5.7 New face of political engagement

The rise in social media will continue to make visible the plight of women around the world. As we have seen with campaigns launched by People’s Health Movement (PHM) and Avaaz the use of social media as a watchdog over human rights abuses will grow. Human rights transgressions will continue to be dispersed across the Internet and

calls for action will be immediate. It will be more difficult to ignore the genocides, the famines, violence against women, sex and human trafficking as the Internet becomes a platform for conscious raising, advocacy, action, and accountability. Mass protests and demonstrations will be easier to organise through social networks and even those who are unable to attend a rally physically will be able to raise their voices with others. Political parties will take on a new face as they realise that women make up 50% of the voters and that one way of staying in power is to appeal to their concerns. It is possible that Democracy will become the only game in town as citizens seek transparency and the ability to shape their lives and that of society.

While gender equality and women's empowerment play an important role in democratic development this researcher acknowledges that gender equality and women's empowerment in isolation are not sufficient for democratic development to occur. Each country is bound by its individual cultural/historical/social factors that serve to promote and/or inhibit democratic development, at different points in time and in response to other global factors that influence and create an impetus for change. As the aim of this study was to take a gendered approach to democratic development theory and empirical research, the recommendations suggested below specifically relate to this particular perspective.

8.6 Recommendations for INGOs, NGOs, and National Governments

8.6.1 Adoption of gender mainstreaming as a strategy by nations

Democracy is not an endpoint, but rather a process of social, economic, and political changes that occur within society. The creation of a democratic regime without liberalising the social structures and conditions is problematic and unsustainable. It is the researcher's contention that reducing gender inequality and empowering women is an important first step in this process. Gender mainstreaming has been adopted as the principal strategy by nations to achieve gender equality. Gender mainstreaming is the term used to "describe strategies aimed at integrating a gender perspective into all decision-making aspects of an organisation, i.e. policies, strategies, programmes, and administrative and financial activities, thereby contributing to organisational

transformation (Ahmed, 2002). Ultimately, its purpose is to change the social and political institutions or arrangements that lead to gendered outcomes (True & Mintrom, 2001). As NGOs play an important role in renegotiating gender relations through struggles for social justice and gender equity, they can also be seen as 'en-gendering' organisations (Murthy, 1998, p. 204).

By incorporating a gendered perspective into the fabric of society, national governments become aware of the consequences of their decisions; how state resources are allocated and how social institutions and processes affect both men and women. Gender mainstreaming tools such as gender analysis, gender budgeting and the collection of data disaggregated by gender play important roles in highlighting the impact that specific government policies will have on women's status. Moreover, through these processes gender mainstreaming makes visible the inequalities that exist between men and women at every level of society, at a micro-level, a meso-level, and a macro-level.

However, gender equality and the empowerment of women can only be addressed through gender mainstreaming strategies that are considered within a relevant cultural framework. Gender advisers need to meet and listen to citizens' concerns and allow them to develop terminology that they can relate to and practices they can implement without losing any of the positive aspects of their culture (Lyons et al., 2004). For example, the Fijian Nadave Declaration on Gender Respect highlights the way gender mainstreaming was considered and then made more relevant for the Fijian culture⁴⁰ (Gender Mainstreaming Workshop, Fiji, November 2002 as cited in Lyons, Curnow and Mather (2004). Gender mainstreaming that is developed with the people, by the people and for the people is more likely to have relevance and be transformative than a one-size-fits-all framework. Both men and women need to have ownership of the language for gender mainstreaming to be successful.

⁴⁰ Fijian Nadave Declaration on Gender Respect - To acknowledge the biological sex differences between men and women, with respect to cultural, religious, ethnic and age differences, enabling both to reach their full potential in society

8.6.2 Challenge gender role stereotyping

Unless we see difference between men and women, we cannot justify inequality. This observation from Lorber (1994) goes to the very heart of the injustices that occur throughout the world. The assignation of social roles for boys and girls based on their biology limits women's choices at a very early age, and privileges males. Every society has deeply embedded gender structures (Lorber, 1994), thus the challenge for the future is to find a way of acknowledging and celebrating biological differences without constructing set patterns of masculine and feminine that are inherently unequal and unjust.

However, challenging these set patterns is difficult as they are heavily ingrained and form a large part of one's social and cultural identity. For example, a study of men in the Democratic Republic of Congo (Lwambo, 2013) revealed a strong sense of 'manhood' and firmly entrenched beliefs and values that view men as superior to women, who are seen as the property of men. Education was seen as empowering for men, however educating girls was seen as a threat to the gender norms in their society where men were expected to be dominant and women submissive (Lwambo, 2013). Nonetheless, by breaking down fixed gender stereotypes of males and females, it may be possible to release parents from the strain of investing in their sons over their daughters if they know that girls can provide financially for the family as well. This free boys *and* girls, in part, from the constraints of expectations and gives them greater self-determination over their own lives. A long history and culture of gender equality in Finland has enabled politics in this nation to be seen as "women's business." This example shows the influence of the socialisation process in shaping gender roles and expectations.

8.6.3 Increase uptake of girls' education and retention at secondary school

Efforts to remove barriers preventing girls attending schooling beyond primary level are essential for democratic development to occur. Particularly in poorer societies girls are often forced to leave school to assist with unpaid household chores for their parents and to help with younger siblings. Eventually, many girls marry and leave the family home

and then are obliged to care and assume domestic responsibilities for the home of their in-laws, their husband, and their own children. Thus, parents commonly anticipate greater returns to their family from investing in their sons, rather than their daughters (Post, 2001). Herz and Sperling (2004) offer some suggestions for increasing the uptake of girls' education in developing countries, including subsidies, scholarships, and fee reductions and separate toilets to promote girls' education. Other recommendations include flexible schooling arrangements for girls so that they still have time to carry out their domestic chores, and child-care services in situations where there are many small children in the family. More targeted initiatives are also recommended for girls from poor families to improve the uptake of education for girls in these communities (Aikman, Halai, & Rubagiza, 2011).

International conventions and treaties continue to play an important role in changing global attitudes toward women and advancing women's rights. For example, the *Dakar Framework for Action, (2000)* is a collective commitment to action to re-affirm the vision of the *World Declaration on Education for All* (UNESCO, 2000). Specifically, this framework for collective action on education targets the gender inequities in education for girls, both *access* to education and the *quality* of that education. Acting as the lead agency for education, UNESCO's role is to "co-ordinate and mobilize all partners at national, regional and international levels: multilateral and bilateral funding agencies, non-governmental organisations and the private sector as well as broad-based civil society organisations" (UNESCO, 2013). These types of global commitments continue to provide valuable frameworks and to assist nations make universal education for all a reality within their countries.

However, unless we tackle global attitudes that view women as commodities for sale or exchange practical suggestions to improve the uptake of girls' education will not succeed. For example in the Democratic Republic of Congo the widespread sexual abuse of girl students, referred to as "sexually transmitted grades" persuades girls that they need to make themselves sexually available in order to succeed in education (Lwambo, 2013). The practices of polygamy, sex trafficking, and prostitution all

highlight the way that women are used and exchanged like common goods, rather than humans with intrinsic worth. This devaluation of women stems in part, from their unpaid role as domestics and carers. The lack of economic value attached to the work women do must be addressed if a woman's worth is to rise.

8.6.4 Explicit policies to tackle violence against women

The main findings from Chapter Seven have shown that it is not enough to raise the living standard of a nation for democratic development to occur; that explicit policies to tackle gender inequalities at a social institutional level are necessary, particularly violence against women. The 1993 UN General Assembly *Declaration on the Elimination of Violence against Women* defined violence against women as, “any act of gender-based violence that results in, or is likely to result in, physical, sexual or mental harm or suffering to women, including threats of such acts, coercion or arbitrary deprivation of liberty, whether occurring in public or private life.”

This may include, but is not limited to domestic violence, female infanticide, sexual abuse, sex trafficking, prostitution, marital rape, child marriage, sexual harassment and intimidation and sexual violence during war. Women's exposure to and risk of violence may also vary across the life span. Consequently, violence against women is a complex phenomenon that requires a comprehensive and multi-faceted framework that tackles violence at the individual, relational, community and societal levels (Heise, 1998).

These include, but are not limited to:

1. Universal secondary education for boys *and* girls;
2. Raising the legal age of marriage to 18;
3. Closing the employment and wage gap between men and women;
4. Reducing fertility rates;
5. Tackling poverty;
6. Securing women's rights as human rights;
7. Reducing social isolation and building strong communities;
8. Challenging traditional gender roles;

9. Educating law enforcement officials, court and social services;
10. Closing the gap between international standards and laws and practices at a state level;
11. Collect and publish data on the extent of the violence against women; and ensure adequate funding and resources to prevent and provide redress for violence against women through programmes and the justice system;
12. Establishing programmes to assist male perpetrators of violence;
13. Involving men as champions to end violence against women.

Violence against women cannot be tackled without including and engaging men in the process, in particular acknowledging the construction of male identities within societies. In a study of masculinities in sub-Saharan Africa becoming a man is dependent on being financially independent and starting a family (Barker & Ricardo, 2005). This achievement can be difficult in times of economic hardship and create stress and a loss of identity when men fail to live up to expectations. Violence against women is not only an example of gender inequality; it is also a cause and a consequence of gender inequalities, the manifestation of a power imbalance between men and women that may be visible, latent or invisible. Despite 125 countries having laws that protect women from violence there are still 603 million women living in countries where violence against women is not considered a crime.

The elimination and prevention of all forms of violence against women and girls was the priority theme at the 57th gathering of the Commission on the Status of women held at UN headquarters in New York in March 2013, signifying it as a critical issue. The agreed conclusions from this summit reaffirm the Commission's commitment to prevent and eradicate violence against women by: strengthening the implementation of legal and policy frameworks and accountability, addressing structural and underlying causes and risk factors of violence, strengthening multi-sectoral services, programmes, and responses to violence, and improving the evidence base. Continued international pressure from human rights activists to amend laws that discriminate against women is important in the march toward greater equality and political freedoms.

8.6.5 Enforce CEDAW

International Human Rights laws are an essential tool to effect social change and the Convention on the Elimination of Discrimination against Women (CEDAW) has the potential to be transformative. Its unique contribution is that it recognises women's right to equality is independent of other social, political, and cultural processes and values within societies. By addressing the binary between culture and gender equality it visibly preferences women's right to equality over and beyond discriminatory norms and practices. Moreover, CEDAW clarifies the relationship between gender equality and democracy. It argues that a woman's right to equality is not a consequence of democratic citizenship but that women are equal to men, irrespective of the will of the majority (Raday, 2012).

However, despite the call to modify social or cultural patterns that are prejudiced against women, individual country reservations favouring Sharia Law over national personal and family laws, pose a significant challenge to progressing women's rights. Further assistance with the guidelines for reservations in ratifying CEDAW is required so that the spirit of the convention can be achieved. Improved monitoring of states' compliance and time limits and/or sunset clauses are needed to encourage discussion and modification around such items that actively discriminate against women. To close the gap between policy at the global level and practice at the national level greater efforts to translate the spirit of CEDAW into enabling legislation and constitutional reform at a national level are required. Finally, despite the majority of countries signing and ratifying CEDAW as of March 2013, the United States is still one of a handful of nations that have not ratified it. It is imperative that this nation show leadership and join with the rest of the world in validating this bill of rights for women.⁴¹

⁴¹ See Piccard (2010) for a comprehensive discussion on US Senate's failure to ratify CEDAW.

8.6.6 Increase visibility of women

The increased participation and visibility of women in public life and in positions of leadership also play an important role in challenging public expectations of what women are capable of and what their role in society should be. Instead of relying on an incremental increase in the number of women in parliament as a country develops countries are fast-tracking women's involvement in politics by setting electoral gender quotas. In more than forty countries (12 from Latin America), either by constitutional amendments or electoral law, there are now quotas requiring that a minimum number of parties' candidates for election to national parliament must be women (Dahlerup & Freidenvall, 2005). It is beyond the scope of this study to explore the arguments for and against the use of quotas, however, as a tool for gender equality they play a critical role in forcing political parties to scrutinize and change the male dominated composition of their political parties and actively recruit capable women. Quotas also create a critical mass (Kanter, 1977) a threshold at which women are able to have influence and effect change. The widening of the civic space between the citizen and the state through women's involvement in NGOs, unions and women's movements also play important roles in shaping democratic ideas and practices and provide a space for debate and discourse.

8.6.7 Include and engage men in advancing gender equality

One of the more interesting findings from Chapter Five was that educating boys is only relevant for democratic development when girls are also empowered. Perhaps this says

something about the overall culture of a nation where both men and women are free to pursue education and work of their choosing. With more education men realise the benefits of women's full participation for their families and communities. As overall health and wellbeing improves, increasing pressure on the government to respond to a whole new set of complex needs and concerns ensues (Kuhn, 2012).

The debate about working with men on gender equality continues. Despite fears that resources will be taken away from women's programs and concerns about how to balance the needs of both men and women the consensus seems to be that men play an important role in transforming gender norms and roles, and as such their needs must be considered (Sweetman, 2013). While we recognise that gender constructions intersect with race, age, disability, and socio-economic status, sometimes to the detriment of men, overwhelmingly women are at a disadvantage. Consequently efforts to address men's concerns need to ensure that any changes will benefit women, without putting women at a disadvantage.

8.6.8 Reduce high (adverse) sex ratios at birth and at marriageable age

A surplus of men was strongly linked to more authoritarian regimes and the findings suggest that the negative effects of high sex ratios on political development are felt most strongly in countries where women's roles are more traditional. Thus, women must be given the opportunity to pursue alternative pathways to adulthood other than marriage and motherhood at a young age. Raising the legal age of marriage enables girls to finish school, reduces the age gap between husband and wife, and reduces the likelihood of pregnancy at a young age. All these factors also reduce the incidence of violence against girls and enable them to complete childhood (UNICEF Innocenti Research Centre, 2001). This opens the door for greater engagement in public life and full participation in civil society.

Other strategies to reduce the sex ratio at marriageable age include assisting nations with an abundance of natural resources to expand into other industries to create jobs for men *and* women as well as lowering the sex ratio at birth and across all age groups. This may be achieved through reducing access to sex-selection technology, education

programmes promoting the value of the girl-child, and better health care for women and children.

8.6.9 Link population policies with equal rights policies

The findings of this thesis demonstrate that population composition plays an important role in democratic development; high fertility rates and populations with an excess of males inhibit movement toward more democratic regimes. Moreover, the persistence of these two demographic constellations has negative implications for women's lives. Thus, population policies need to be considered within a broader framework of gender equality incorporating legal, social, and economic goals. The youth of today are increasingly better educated, healthier, and they have greater social and economic connections through technology and the Internet. Consequently, they have a greater awareness of the freedoms available to other young people in other countries. This creates a new demographic of citizen with higher expectations for their future. Consequently, governments will be under increased pressure to respond to these aspirational young people and their more complex demands than those of previous generations.

8.6.10 Integrate and embed gender issues across political conferences

The inclusion of a separate gender stream at political conferences is an important step forward to highlight the role of women in politics and vice versa, however often the presenters are preaching to those already cognisant of the value of the relationship between gender equality and politics. To have greater impact gender papers could be integrated across all conference streams so that these issues come to the attention of those who ordinarily would dismiss gender as not relevant to the business of politics. This would provide an opportunity for researchers to start building the bridge between the fields of both gender and politics, creating opportunities for discourse and collaboration, thus strengthening both disciplines.

8.6.11 Focus on consolidating and deepening new and existing democracies

With the advent of the Arab Spring at the beginning of 2011, there was hope that a new wave of democratisation was occurring throughout the region. These upheavals appeared to come from the endogenous economic and social factors within these nations and have surprised analysts (Gause III, 2011). It is too early to say with any confidence how the transformation in these countries will play out but these are encouraging signs for democratic development in this region for the future. Additionally, there have positive trends toward greater democracy throughout Asia and Sub-Sahara Africa with nations such as Malaysia increasing their polity score in 2005 from 3 to 6 in 2010; Comoros (6 to 9); Bhutan (-6 to 3); Gabon (-4 to 3) and Bangladesh (-6 to 5) (Marshall & Jagers, 2011).

Perhaps of more concern is the democratic backsliding in other regions such as Latin America, especially, Venezuela, Bolivia, and Ecuador. While the focus of this thesis has been on the role of gender equality and women's empowerment for democratic development, the findings also suggest that advancing gender equality and women's empowerment may also assist with the deepening and consolidation of democracy in new or fragile democracies. The finding that economic development was not a core driver of democratic development during this period suggests that perhaps a minimum set of social and economic conditions are required for democracy to occur and that gender equality must be considered as one of those social conditions. The pathways to achieving this set of minimum social conditions may vary from country to country. For example, in some nations the priority may be to reduce the fertility rate, in other nations it may be tackling family structures such as polygamy, or reducing high sex ratios. It appears that moving beyond economic development to tackle inherent unequal practices within nations is essential for democratic development to advance and deepen.

8.6.12 Reconceptualise democracy

Returning to Carbone's (2009) question whether items such as gender parity, human rights, and egalitarianism are "pre-requisites of democracy, essential aspects of democracy or consequences of democracy", the findings of this study suggest that a

national culture that actively promotes and practises gender equality across all levels of society is required for democratic development to occur. As Moghadam (2004) argues, democracy is not just about elections and governance, its truth is about citizenship, participation, and inclusion. Indeed, as the values of both gender equality and democracy are similar we would expect that nations where support for both does not mirror each other then democracy would be unlikely to emerge.

The empowerment of women over the last fifty years has transformed societies socially, economically, culturally, and politically. It seems that the intrinsic values and basic tenets of democracy have not changed, but perhaps the expectation of how we “do democracy” has. As societies have progressed is it reasonable for citizens to expect more from their governments? Do they have the right to demand a greater role in the decision-making structures that impact on their lives and responsibility for shaping the dominant culture? It is time to move past current conceptions of illiberal and liberal democracy and to argue and demand for more deliberative and participatory regimes where citizens have the capacity and opportunity to be a part of political decision-making processes themselves. This author proposes that it is time to reconceptualise our notion of democracy and argue that democracy has not been achieved until all men and women realise their full legal rights to participate economically, socially, and politically.

Instead of one index of political rights perhaps we should be constructing indexes of political rights, social rights and economic rights with gender cutting across all dimensions, and where minimum levels of attainment are required before nations can call themselves truly democratic. This then provides a framework for national governments to move forward on these items without subsuming any one dimension under the other. Rather than being a measure of political regime type, it would be a measure of a nation’s governance model. Furthermore, it may also provide scope for governments to deepen or improve the quality of democracy by putting in policies and programmes to advance progress in each of these domains for all its citizens.

This study has reviewed and critiqued relevant literature on the relationship between gender equality, women's empowerment, and democracy, informed a theoretical argument and model and a set of analyses to test the main research questions. Based on a synthesis of this combined information, a discussion of the findings has informed the implications of the research and recommendations. This section offers suggestions and guidelines for future research into democratic development.

8.7 Recommendations for Future Research

8.7.1 Apply a gendered approach to democratic development theory

The purpose of this thesis was to apply a gendered perspective to democratic development theory and in doing so provide a strong theoretical argument and framework to inform the analyses. One of the outcomes of taking a gendered approach to democratic development theory is the introduction of a new language to the discipline. Introducing new terminologies into the democratisation literature such as gendered approach, gendered perspective, gender inequalities, women's empowerment, gender analysis, and gender mainstreaming is transformative as it makes visible women's struggles into a field of research largely dominated by men. Future studies need to consider gender equality as an integral part of the process of democratic development.

8.7.2 Employ the GADD model at a national or local level

One of the outcomes of this research was to provide a theoretical framework to guide future research in democratic development theory. The value of using the GADD model is that it may be adapted at a local or regional level to reflect the inequalities that are relevant for a particular society or region. While issues around polygamy may be relevant for Sub-Sahara Africa, they may not be relevant in South America. In contrast, high sex ratios may be relevant throughout the Middle East and Asia, but not in Eastern Europe. Gender inequalities will vary from country to country but also between groups of women within nations by class, race, sexuality, and religion. More nuanced analyses at country level across these dimensions will enhance future research in this field.

8.7.3 Collect accurate gender data

There are several frameworks (Charmes & Wieringa, 2003; Moghadam & Senftova, 2005) that may be used to guide research on gender equality and women's empowerment as discussed in Chapter Two; however what is missing is the data to support these frameworks. Increased support to countries to enable them to collect and provide more comprehensive information on gender indicators at an individual level, at a meso level and at a macro level is needed. This may include indicators reflecting; occupational gender segregation, gender wage gap, parental leave, unpaid caring work, time spent on domestic duties, decision-making, involvement in NGOs and associations, leadership roles, training opportunities, and indicators of rape, violence and sexual harassment. It may also extend to time spent on health, recreation, creative or spiritual activities. These indicators need to have meaning for women and reflect the everyday lived reality of their lives.

8.7.4 Research occupational segregation of women

Labour market statistics show that occupational segregation is a concern across the globe, with women overrepresented in nursing and administration roles and underrepresented in managerial positions (Anker et al., 2003). This research shows that nations where women are highly educated and in employment are more likely to move toward more democratic regimes, thus future research could focus on women's employment in high status occupations as an important indicator of democratic development or consolidation.

8.7.5 Review conceptualisation of democracy

The research findings suggest that a minimum set of economic and social conditions are required for democratic development to occur, gender equality and women's empowerment are some of these conditions. Thus, as discussed in section 8.6.12 perhaps it is time to move away from a narrow model of political regime type toward a broader governance model. This broader model could include measures of political, social, and economic rights for men and women. This would enable monitoring to determine whether governments are on track to achieve basic criteria for democracy, but

also whether the values and spirit of democracy are also being achieved. Moreover, it would provide a roadmap for the achievement of fundamental freedoms for all.

8.7.6 Research the consolidation or deepening of existing democracies

While the focus of this study has been the effect of gender equality and women's empowerment on democratic development, it is highly probable that improvements in gender equality and women's empowerment also have a role to play in young democracies and long-standing democracies. In young democracies gender equality may assist in consolidation, and in long-standing democracies gender equality may assist in deepening democracy. Research focussing on the consolidation and deepening of democracies would be beneficial to further our understanding of the role of gender equality and women's empowerment in politics.

8.8 Limitations and Strengths

This study has taken a gendered approach to democratic development theory. A single study could not possibly cover the breadth of issues within this topic and a number of limitations are inherent in the methodological approach taken. These are acknowledged below.

8.8.1 Use of secondary data

The main limitation in this study is the use of secondary data, rather than primary data to inform the analyses. As this study is an initial exploration conducted at a macro-level using aggregated data from secondary sources, these results need to be interpreted with caution. As discussed in Chapter Two, quantitative studies at a macro-level are useful for highlighting trends or patterns but do not replace the value in using primary sources of data at local and regional levels. The use of secondary data comes with it inherent problems. The variability across countries in the process of data collection affects the consistency and comparability of international statistics. However, since the formation of the United Nations System of National Accounts, every effort has been made to ensure that statistics are in principle comparable across countries and reflect the underlying concepts in a consistent way over time (Atkinson & Brandolini, 2001).

Thus, to minimise these problems widely used datasets and indicators from prominent international organisations have been chosen whenever possible. To avoid biases resulting from incomparability across time within a country because of unions or separations, the data has been omitted. Additionally, data in these international datasets and in the GID-DB has been collected at a national level thus, does not take into consideration any variations at a regional or local level.

There are also some limitations to the female labour force measure. Firstly, the data collection of this measure across nations is not uniform. In many countries it fails to capture women engaged in unpaid family work or those who only work a few hours per week. Also, there are often cultural aspects that determine whether women are classified as paid workers or not (Psacharopoulos & Tzannatos, 1989).⁴² This variable tells us about the percentage of women in the labour force, but not the type of work they are engaged in. While this author acknowledges that some types of work have a greater capacity to confer more power, for example, managerial and professional positions, this was the most comprehensive variable available over this period.

Despite the limitations in using secondary data from international datasets the study has provided a strong theoretical framework that has sufficiently “grounded” the analyses. Furthermore, as discussed in the justification for using quantitative methods over qualitative methods the choice to utilise existing international datasets is highly political. Because policy and funding decisions are typically made on the basis of quantifiable evidence this author has purposefully and purposely used existing datasets and statistical methods that are internationally recognised and widely used. In doing so, it is hoped

⁴² India, Pakistan and Bangladesh have very high rates of unpaid work (Psacharopoulos & Tzannatos, 1989).

that this research furthers the rights of women and their families. However, this researcher also acknowledges the risk in alienating feminist scholars who may criticise the methods used and argue that the gender variables have merely been inserted into a highly masculinised area of research.

Finally, as this is a macro-level study using cross-national comparative data, it is difficult to translate the key findings to specific nations. However, detailed explanations for countries that were not consistent with the major findings, i.e. anomalies, were given in the discussions at the end of each analysis chapter. Furthermore, the development of a strong theoretical argument and model provides a framework to inform and guide further gender and politics research at a regional, country or local level.

8.8.2 Sampling issues

The removal of many countries due to the unavailability of data does not allow us to generate the results to all countries. It may be likely that the missing data reflects elements of a particular country that may be relevant to political change. For example – many countries without education data may have low levels of educational attainment. Where possible extended samples were included to test the robustness of the results, however, the study was constrained by the lack of Polity2 data on many of the small, independent states.

8.8.3 Scope of the study

Another limitation of the study is that the analyses have been restricted to the last quarter of the twentieth century and the beginning of this one. However, this period was chosen specifically because of the large number of countries that moved away from authoritarian regimes during this period. Additionally, one of the key variables under examination, female labour force participation, was only available from 1980 onward. For countries that made the greatest gains during this period graphs were created to see whether any of these countries had already started to move toward democracy before 1980, thus acknowledging that this period may be influenced by nations' prior experience with democracy. Global trends during this period, historical events such as

the end of the Cold War and the dissolution of the Soviet Union, provide an important backdrop for domestic changes during this period. Therefore, studies such as these must consider the period chosen as an important variable in the research.

8.9 Conclusion

This study arose from the observation that democratic development theory had not been examined from a gender perspective. Rather than making a case for gender equality and women's empowerment based on its intrinsic value which is unquestioned, this study has argued and tested the theory that the discrimination, marginalisation, and subordination of women also has implications for the political status of nations. Indeed, this quantitative research project leads to several conclusions:

The expansion of economic and social freedoms for women has the capacity to not only transform women's lives but also contribute to democratic development. This study highlights the benefits of investing in women and girls, not just for the intrinsic benefit to themselves, but also for the political status of their nations. Hence, advancing gender equality and empowering women may be a more effective way to promote democracy. In 2011 the UN Secretary-General issued a "Guidance note on Democracy"(United Nations, 2011) which acknowledges that promoting women's rights must form an integral part of any democracy assistance, 'including explicitly addressing gender discrimination that contributes to women's exclusion and the marginalization of their concerns'. Denying women their right to participate fully in society is not only discriminatory, but also has consequences for the future political status of their nation.

Social institutions play a critical role in shaping women's ability to access and have control over resources. Economic growth may increase state resources, but unless both men and women have the ability to access them, improved standards of living are unlikely to increase the likelihood of a country becoming a democracy. Therefore, a fundamental change in the social structures and processes that legitimise men's authority over women may be an important factor for democracies to emerge in developing countries. The breaking down of fixed gender norms and stereotypes is essential to end

discrimination against women and to promote economic, social, and political freedoms for all.

Gender equality and women's empowerment need to be treated as specific goals for democracy building and must be addressed at all levels of society; in the home, in the community and at a national level. This includes the visible and invisible displays of unequal power relations, and those acts that men and women are not even aware of as being discriminatory because culture has deemed them to be natural or for the good of the wider society. Ambivalence toward gender issues inhibits both economic and human development and highlights the lack of understanding about gender equality and its role in nation-building. Gender equality is foundational to advance individual freedoms in all forms, economic, social, and political. While writing the conclusion to this thesis, the Taliban has shot a fourteen year old girl in Pakistan for championing education for women; another girl of the same age in Indonesia has been humiliated in front of her school for being raped; and a 23 year old Indian student was gang raped, sparking a nationwide and global outcry.

The overall aim of this thesis was to provide a gendered perspective to democratic development theory. Promoting women's rights requires embedding the notion of fundamental freedoms for all in the national psyche. Investment in national gender machineries, "the formal government structures assigned to promote gender equality and/or improve the status and rights of women within nations" (McBride & Mazur, 2011, p. 4), is critical to progressing gender mainstreaming at a national level. Can nations be allowed to call themselves democratic when 50% of the population are not legally entitled to the same economic, social, and political freedoms as men? As Gandhi said "My notion of democracy is that, under it, the weakest should have the same opportunity as the strongest and that can never happen except through non-violence" (Interview - Gandhi, 1940). The future of democracy depends on addressing the social injustices occurring around the world, in particular, the advancement of gender equality and women's empowerment.

Finally, this study has shown that gender equality and women's empowerment are important elements of modernisation, and as such they must be considered as critical factors when measuring the level of economic, social, and political development within nations. Perhaps, then, when *all* citizens within a nation have the opportunity and ability to create lives that they value, free from discrimination and violence, can we consider a nation to be at the end point of development.

“The seed of democracy lies in the principle that the legitimacy of the power to make decisions about peoples’ lives, their society and their country should derive from a choice by those who will be affected.” (Frene Ginwala, original foreword of Beyond Numbers 1998) as cited in Ballington & Karam (2005, p. 14)

References

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- Acemoglu, D., Johnson, S., Robinson, J. A., & Yared, P. (2005). From education to democracy? *American Economic Review*, *95*(2), 44-49.
- Acemoglu, D., Johnson, S., Robinson, J. A., & Yared, P. (2008). Income and democracy. *American Economic Review*, *98*(3), 808-842. doi:10.1257/aer.98.3.808
- Acemoglu, D., Johnson, S., Robinson, J. A., & Yared, P. (2009). Reevaluating the modernization hypothesis. *Journal of monetary economics*, *56*(8), 1043-1058.
- Acker, J. (1992). From sex roles to gendered institutions. *Contemporary Sociology*, *21*(5), 565-569.
- Ahmed, S. (2002). Engendering organisational practice in NGOs: The case of Utthan. *Development in Practice*, *12*(3/4), 298-311.
- Aikman, S., Halai, A., & Rubagiza, J. (2011). Conceptualising gender equality in research on education quality. *Comparative Education*, *47*(1), 45-60.
- Al-Krenawi, A. (1999). Women of polygamous marriages in primary health care centers. *Contemporary Family Therapy*, *21*(3), 417-430.
- Al-Krenawi, A. (2012). A study of psychological symptoms, family function, marital and life satisfactions of polygamous and monogamous women: The Palestinian case. *International Journal of Social Psychiatry*, *58*(1), 79-86.
- Al-Krenawi, A., Graham, J. R., & Al-Krenawi, S. (1997). Social work practice with polygamous families. *Child and Adolescent Social Work Journal*, *14*(6), 445-458.
- Al-Krenawi, A., Graham, J. R., & Al Gharaibeh, F. (2011). A comparison study of psychological, family function marital and life satisfactions of polygamous and monogamous women in Jordan. *Community Mental Health Journal*, *47*(5), 594-602.

- Al-Mughni, H. (2001). *Women in Kuwait: The politics of gender*. London: Saqi Books.
- Almond, G., & Verba, S. (1963). *The Civic Culture: Political attitudes and democracy in five nations*. Princeton: Princeton University Press.
- Alvarez-Dardet, C., & Franco-Giraldo, A. (2006). Democratisation and health after the fall of the Wall. *Journal of Epidemiology and Community Health*, 60(8), 669-671. doi:10.1136/jech.2005.038273
- Alvarez, M., Cheibub, J. A., Limongi, F., & Przeworski, A. (1996). Classifying political regimes. *Studies in Comparative International Development*, 31(2), 3-36.
- Alvarez, S. (1990). *Engendering democracy in Brazil: Women's movements in transition politics*. Princeton New Jersey: Princeton University Press.
- Amuedo-Dorantes, C., & Grossbard, S. (2007). Cohort-level sex ratio effects on women's labor force participation. *Review of Economics of the Household*, 5(3), 249-278. doi:10.1007/s11150-007-9014-1
- Anderson, S., & Ray, D. (2010). Missing women: age and disease. *The Review of Economic Studies*, 77(4), 1262-1300.
- Anker, R., Melkas, H., & Korten, A.(2003). *Gender-based Occupational Segregation in the 1990s*. Retrieved from http://www.ilo.int/wcmsp5/groups/public/---ed_norm/---declaration/documents/publication/wcms_decl_wp_18_en.pdf
- Arat, Y. (1994). Toward a democratic society : The women's movement in Turkey in the 1980s. *Women's Studies International Forum*, 17(2-3), 241-248.
- Atkinson, A. B., & Brandolini, A. (2001). Promise and pitfalls in the use of "secondary" data-sets: Income inequality in OECD countries as a case study. *Journal of Economic Literature*, 39(3), 771-799. doi:10.2307/2698313
- Austen, S., Jefferson, T., & Thein, V. (2003). Gendered social indicators and grounded theory. *Feminist Economics*, 9(1), 1-18.
- Australian Government.(2012). *Australian census for women in leadership*. Retrieved from http://www.wgea.gov.au/sites/default/files/2012_CENSUS%20REPORT.pdf
- Australian Government.(2013). *Gender pay gap statistics*. Retrieved from <http://www.wgea.gov.au/sites/default/files/2013-02-Gender%20pay%20gap%20statistics.pdf>

- Azid, T., Khan, R. E. A., & Alamasi, A. M. S. (2010). Labor force participation of married women in Punjab (Pakistan). *International Journal of Social Economics*, 37(8), 592-612.
- Baldez, L. (2003). Women's movements and democratic transition in Chile, Brazil, East Germany, and Poland. *Comparative Politics*, 35(3), 253-272.
- Baldez, L. (2010). The gender lacuna in comparative politics. *Perspectives on Politics*, 8(1), 199-205.
- Ballington, J., & Karam, A. M. (2005). *Women in parliament: Beyond numbers* (Vol. 2): International Idea.
- Bardhan, K., & Klasen, S. (1999). UNDP's gender-related indices: A critical review. *World Development*, 27(6), 985-1010.
- Barker, G., Contreras, J. M., Heilman, B., Singh, A. K., Verma, R. K., & Nascimento, M. (2011). *Evolving Men: Initial results from the International Men and Gender Equality Survey (IMAGES)*. Washington, D.C: International Center for Research on Women (ICRW) and Rio de Janeiro: Instituto Promundo.
- Barker, G., & Ricardo, C. (2005). *Young men and the construction of masculinity in sub-Saharan Africa: Implications for HIV/AIDS, conflict, and violence*: World Bank Washington, DC.
- Barnes, T. D., & Burchard, S. M. (2013). "Engendering" politics: The impact of descriptive representation on women's political engagement in Sub-Saharan Africa. *Comparative Political Studies*, 46(7), 767-790. doi:10.1177/0010414012463884
- Barro, R. J. (1991). Economic growth in a cross section of countries. *The Quarterly Journal of Economics*, 106(2), 407-443.
- Barro, R. J. (1996). Democracy and Growth. *Journal of Economic Growth*, 1(1), 1-27.
- Barro, R. J. (1999). Determinants of democracy. *Journal of Political Economy*, 107(6), S158-S183.
- Barro, R. J., & Lee, J.-W. (1993). International comparisons of educational attainment. *Journal of Monetary Economics*, 32(3), 363-394.

- Barro, R. J., & Lee, J.-W. (2010). *A new data set of educational attainment in the world, 1950-2010* NBER Working Paper Series. National Bureau of Economic Research. Cambridge, MA. Retrieved from <http://www.nber.org/papers/w15902>
- Barro, R. J., & Lee, J. W. (1994). Sources of economic growth. *Carnegie-Rochester Confer. Series on Public Policy*, 40(C), 1-46.
- Barro, R. J., & Lee, J. W. (2011). *Barro-Lee Educational Attainment dataset Version 1.2 (Sept 4, 2011 update)*. Retrieved from <http://www.barrolee.com/>
- Basher, M. A. (2007). Empowerment of microcredit participants and its spillover effects: Evidence from the Grameen Bank of Bangladesh. *The Journal of Developing Areas*, 40(2), 173-183. doi:http://muse.jhu.edu/journals/journal_of_developing_areas/v040/40.2basher.html
- Basu, A. M. (2002). Why does education lead to lower fertility? A critical review of some of the possibilities. *World Development*, 30(10), 1779-1790.
- Bauer, G. (2012). 'Let there be a balance': Women in African parliaments. *Political Studies Review*, 10(3), 370-384. doi:10.1111/j.1478-9302.2012.00272.x
- Becker, G. S. (1962). Investment in human capital: A theoretical analysis. *Journal of Political Economy*, 70(5), 9-49. doi:10.2307/1829103
- Becker, G. S., Murphy, K. M., & Tamura, R. (1990). Human capital, fertility, and economic growth. *The Journal of Political Economy*, 98(5), S12-S37.
- Beer, C. (2009). Democracy and gender equality. *Studies in Comparative International Development (SCID)*, 44(3), 212-227.
- Benavot, A. (1996). Education and political democratization: Cross-national and longitudinal findings. *Comparative Education Review*, 40(4), 377-403.
- Besley, T., & Kudamatsu, M. (2006). Health and democracy. *American Economic Review*, 96(2), 313-318. doi:doi: 10.1257/000282806777212053
- Bloom, D. E., & Canning, D. (2003). Contraception and the Celtic tiger. *Economic and Social Review*, 34(3), 229-247.
- Bloom, D. E., Canning, D., Fink, G., & Finlay, J. (2009). Fertility, female labor force participation, and the demographic dividend. *Journal of Economic Growth*, 14(2), 79-101.

- Bloom, D. E., & Williamson, J. G. (1998). Demographic transitions and economic miracles in emerging Asia. *World Bank Economic Review*, 12(3), 419-455.
- Bloom, S. S., Wypij, D., & Gupta, M. D. (2001). Dimensions of women's autonomy and the influence on maternal health care utilization in a north Indian city. *Demography*, 38(1), 67-78.
- Blumberg, R. L. (1984). A general theory of gender stratification. *Sociological Theory*, 2, 23-101.
- Blumberg, R. L. (1989). *Making the case for the gender variable: Women and the wealth and well-being of nations*. US Agency for International Development, Office of Women in Development.
- Blumberg, R. L. (1991). *Gender, family and economy: The triple overlap* (Vol. 125): SAGE Publications, Incorporated.
- Blumberg, R. L. (2007). How mother's economic activities and empowerment affect early childhood care and education (ECCE) for boys and girls: A theory-guided exploration across history, cultures and societies: (Paris: UNESCO).
- Bobba, M., & Coviello, D. (2007). Weak instruments and weak identification, in estimating the effects of education, on democracy. *Economics Letters*, 96(3), 301-306.
- Boesten, J. (2010). Revisiting 'democracy in the country and at home' in Peru. *Democratization*, 17(2), 307-325.
- Bohman, J. (1997). *Deliberative democracy: Essays on reason and politics*: MIT press.
- Bohman, J., & Regh, W. (1997). *Deliberative democracy: Essays on reason and politics*. Cambridge: MIT Press.
- Boix, C., & Stokes, S. C. (2003). Endogenous democratization. *World Politics*, 55(4), 517-549.
- Bollen, K. A. (1979). Political democracy and the timing of development. *American Sociological Review*, 44(4), 572-587.
- Bollen, K. A. (1980). Issues in the comparative measurement of political democracy. *American Sociological Review*, 45(3), 370-390.
- Bollen, K. A. (1990). Political democracy: Conceptual and measurement traps. *Studies in Comparative International Development*, 25(1), 7.

- Bollen, K. A. (1993). Liberal democracy - Validity and method factors in cross-national measures. *American Journal of Political Science*, 37(4), 1207-1230.
- Bollen, K. A. (1998). Cross-national indicators of liberal democracy, 1950-1990. *computer file. 2nd ICPSR version. Chapel Hill, NC: University of North Carolina [producer]*
- Bollen, K. A. (2009). Liberal democracy series I, 1972-1988: Definition, measurement, and trajectories. *Electoral Studies*, 28(3), 368-374.
- Bollen, K. A., & Jackman, R. W. (1989). Democracy, stability, and dichotomies. *American Sociological Review*, 54(4), 612-621. doi:10.2307/2095882
- Boserup, E. (1970). *Woman's role in economic development*. London: Allen & Unwin.
- Bove, R., & Valeggia, C. (2009). Polygyny and women's health in Sub-Saharan Africa. *Social Science & Medicine*, 68(1), 21-29.
- Branisa, B., Klasen, S., & Ziegler, M. (2013). Gender Inequality in social institutions and gendered development outcomes. *World Development*, 45(0), 252-268. doi:<http://dx.doi.org/10.1016/j.worlddev.2012.12.003>
- Brooks, T. (2009). The problem with polygamy. *Philosophical Topics*, 37(2), 109-122.
- Brown, D. S. (2004). Democracy and gender inequality in education: A cross-national examination. *British Journal of Political Science*, 34(1), 137-152.
- Brown, D. S., & Hunter, W. (2004). Democracy and human capital formation: Education spending in Latin America, 1980 to 1997. *Comparative Political Studies*, 37(7), 842-864.
- Brown, L., Khagram, S., Moore, M., & Frumkin, P. (2000). Globalization, NGOs and multi-sectoral relations. *Hauser Center for Nonprofit Org. Working Paper*(1)
- Bueno de Mesquita, B., Smith, A., Siverson, R. M., & Morrow, J. D. (2003). *The logic of political survival*. Cambridge: MIT Press.
- Burgess, G. L. (2012). When the personal becomes political: Using legal reform to combat violence against women in Ethiopia. *Gender, Place and Culture*, 19(2), 153-174.
- Burnet, J. E. (2008). Gender balance and the meanings of women in governance in post-genocide Rwanda. *African Affairs*, 107(428), 361-386. doi:10.1093/afraf/adn024
- Caldwell, J. C. (1982). *Theory of fertility decline*. . London: Academic Press.

- Caldwell, J. C. (1990). Cultural and social factors influencing mortality levels in developing countries. *The ANNALS of the American Academy of Political and Social Science*, 510(1), 44-59. doi:10.1177/0002716290510001004
- Caldwell, J. C., & Caldwell, P. (1987). The cultural context of high fertility in sub-Saharan Africa. *Population and Development Review*, 13(3), 409-437.
- Caldwell, J. C., & Caldwell, P. (1990). High fertility in sub-Saharan Africa. *Scientific American*, 262(5), 118-125.
- Cameron, C. A., & Trivedi, P. K. (2009). *Microeconometrics Using Stata*. Texas: Stata Press.
- Caprioli, M. (2000). Gendered conflict. *Journal of Peace Research*, 37(1), 51-68.
- Caprioli, M. (2003). Gender equality and state aggression: The impact of domestic gender equality on state first use of force. *International Interactions*, 29(3), 195-214.
- Caprioli, M. (2004). Feminist IR theory and quantitative methodology: A critical analysis. *International Studies Review*, 6(2), 253-269.
- Caprioli, M. (2005). Primed for violence: The role of gender inequality in predicting internal conflict. *International Studies Quarterly*, 49(2), 161-178.
- Carbone, G. (2009). The consequences of democratization. *Journal of democracy*, 20(2), 123-137.
- Carey Jr, D., & Torres, M. G. (2010). Precursors to femicide: Guatemalan women in a vortex of violence. *Latin American Research Review*, 45(3), 142-164.
- Castelló-Climent, A. (2008). On the distribution of education and democracy. *Journal of Development Economics*, 87(2), 179-190.
- Catalyst.(2012). *Statistical overview of women in the workplace*. Retrieved from <http://www.catalyst.org/knowledge/statistical-overview-women-workplace>
- Central Intelligence Agency.(2008). *The World Factbook*. Retrieved from <https://www.cia.gov/library/publications/the-world-factbook/rankorder/2001rank.html>
- Chafetz, J. S. (1984). *Sex and Advantage: A Comparative, Macrostructural Theory of Sex Stratification*. Totowa, NJ: Rowman and Allenheld.

- Chafetz, J. S. (1990). *Gender equity. An integrated theory of stability and change*. California: Sage Publications.
- Chan, S. (2002). On different types of international relations scholarship. *Journal of peace research*, 39(6), 747-756.
- Charmes, J., & Wieringa, S. (2003). Measuring women's empowerment: An assessment of the Gender-related Development Index and the Gender Empowerment Measure. *Journal of Human Development*, 4(3), 419-435. doi:10.1080/1464988032000125773
- Cheibub, J. A., Gandhi, J., & Vreeland, J. R. (2010). Democracy and dictatorship revisited. *Public Choice*, 143(1), 67-101.
- Chhibber, P. (2002). Why are some women politically active? The household, public space, and political participation in India. *International Journal of Comparative Sociology*, 43(3-5), 409-429. doi:10.1177/002071520204300310
- Chua, P., Bhavnani, K. K., & Foran, J. (2000). Women, culture, development: A new paradigm for development studies? *Ethnic and Racial Studies*, 23(5), 820-841.
- Ciftci, S. (2010). Modernization, Islam, or social capital: What explains attitudes toward democracy in the Muslim world? Vol. 43, pp. 1442-1470.
- Clark, S. (2004). Early marriage and HIV risks in sub-saharan Africa. *Studies in Family Planning*, 35(3), 149-160.
- Cleland, J., & van Ginneken, J. (1988). Maternal education and child survival in developing countries: The search for pathways of influence. *Social Science & Medicine*, 27(12), 1357-1368.
- Cohen, C. (1971). *Democracy*. Athens: University of Georgia Press.
- Coleman, I. (2004). The payoff from women's rights. *Foreign Affairs*, 83(3), 80-95.
- Collier, D., & Adcock, R. (1999). Democracy and dichotomies: A pragmatic approach to choices about concepts In *Annual Review of Political Science* (Vol. 2, pp. 537-565).
- Collins, R., Chafetz, J. S., Blumberg, R. L., Coltrane, S., & Turner, J. H. (1993). Toward an integrated theory of gender stratification. *Sociological Perspectives*, 36(3), 185-216.

- Cooray, A., & Potrafke, N. (2011). Gender inequality in education: political institutions or culture and religion? *European Journal of Political Economy*, 27, 268-280.
- Cornwall, A., & Goetz, A. M. (2005). Democratizing democracy: Feminist perspectives. *Democratization*, 12(5), 783-800.
- County, B., & Peterson, B. (2012). Mali: Hungry for democracy - the peasantry and the coup. Retrieved from <http://allafrica.com/stories/201204030227.html>
- Cresswell, J. (2003). *Research design: qualitative, quantitative, and mixed methods approaches* (2nd edition ed.). Thousand Oaks, CA: SAGE.
- Dagargulia, T., & Badashvili, M. (2008). Maternal health in post-Soviet Georgia. *Marriage and Family Review*, 44(2-3), 301-317.
- Dahl, R. A. (1971). *Polyarchy: Participation and opposition*. New Haven: Yale University Press.
- Dahlerup, D. (1988). From a small to a large minority: Women in scandinavian politics. *Scandinavian Political Studies*, 11(4), 275-298. doi:10.1111/j.1467-9477.1988.tb00372.x
- Dahlerup, D., & Freidenvall, L. (2005). Quotas as a 'fast track' to equal representation for women. *International Feminist Journal of Politics*, 7(1), 26-48.
- Danner, M., Fort, L., & Young, G. (1999). International data on women and gender: Resources, issues, critical use. *Women's Studies International Forum*, 22(2), 249-259.
- Darity, W. A., Jr., & Myers, S. L., Jr. (1984). Does welfare dependency cause female headship? The case of the black family. *Journal of Marriage and Family*, 46(4), 765-779.
- Datta, N. (2006). Joint titling-a win-win policy? Gender and property rights in urban informal settlements in Chandigarh, India. *Feminist Economics*, 12(1-2), 271-298.
- Di Palma, G. (1990). *To craft democracies: An essay on democratic transitions*. Berkeley: University of California Press.
- Diamond, L. (1994). Toward democratic consolidation. *Journal of Democracy*, 5(3), 4-17.
- Diamond, L. (1996). Is the third wave over? *Journal of Democracy*, 7(3), x1-37.

- Diamond, L. (2002). Thinking about hybrid regimes. *Journal of Democracy*, 13(2), 21-35.
- Diamond, L., & Morlino, L. (2004). An overview. *Journal of Democracy*, 15(4), 20-31.
- DIISRT.(2012). *UCube Higher Education Statistics*. Retrieved from <http://www.highereducationstatistics.deewr.gov.au/>
- Dijkstra, A. G., & Hanmer, L. C. (2000). Measuring socio-economic gender inequality: Toward an alternative to the UNDP Gender-Related Development Index. *Feminist Economics*, 6(2), 41-75. doi:10.1080/13545700050076106
- Dollar, D., & Gatti, R. (1999). *Gender inequality, income, and growth: are good times good for women?* : Development Research Group, The World Bank.
- Donno, D., & Russett, B. (2004). Islam, authoritarianism, and female empowerment - What are the linkages? *World Politics*, 56(4), 582.
- Doorenspleet, R. (2004). The structural context of recent transitions to democracy. *European Journal of Political Research*, 43(3), 309-335.
- Dorjahn, V. R. (1988). Changes in temne polygyny. *Ethnology*, 27(4), 367-390.
- Drèze, J., & Sen, A. (2002). *India: Development and participation* (2nd ed.). New York: Oxford University Press.
- Dyson, T. (2012). Causes and consequences of skewed sex ratios In *Annual Review of Sociology* (Vol. 38, pp. 443-461.
- Eckstein, H., & Gurr, T. R. (1975). *Patterns of authority: A structural basis for political inquiry*: Wiley New York.
- Ehteshami, A. (2004). Islam, Muslim polities and democracy. *Democratization*, 11(4), 90-110.
- Eisenstadt, S. N. (2000). Multiple modernities. *Daedalus*, 129(1), 1-29.
- Elbedour, S., Onwuegbuzie, A. J., Caridine, C., & Abu-Saad, H. (2002). The effect of polygamous marital structure on behavioral, emotional, and academic adjustment in children: A comprehensive review of the literature. *Clinical child and family psychology review*, 5(4), 255-271.
- Epstein, C. F. (2007). Great divides: the cultural, cognitive, and social bases of the global subordination of women. *American Sociological Review*, 72(1), 1-22. doi:10.1177/000312240707200101

- Epstein, D. L., Bates, R., Goldstone, J., Kristensen, I., & O'Halloran, S. (2006). Democratic transitions. *American Journal of Political Science*, 50(3), 551-569.
- Eschle, C. (2002). Engendering global democracy. *International Feminist Journal of Politics*, 4(3), 315-341.
- Esteve-Volart, B.(2004). *Gender discrimination and growth: Theory and evidence from India STICERD Discussion Papers DEDPS42*, LSE: London. Retrieved from <http://sticerd.lse.ac.uk/dps/de/dedps42.pdf>
- Evans, G., & Rose, P. (2007). Support for democracy in Malawi: Does schooling matter? *World Development*, 35(5), 904-919.
- Fallon, K. M., Swiss, L., & Viterna, J. (2012). Resolving the democracy paradox: Democratization and women's legislative representation in developing nations, 1975 to 2009. *American Sociological Review*, 77(3), 380-408.
- Farré, L., & Vella, F. (2007). The intergenerational transmission of gender role attitudes and its implications for female labor force participation. *IZA Discussion Papers*, (No. 2802). Retrieved from <http://hdl.handle.net/10419/34249> doi:urn:nbn:de:101:1-20080401283
- Feng, Y., & Zak, P. J. (1999). The determinants of democratic transitions. *The Journal of Conflict Resolution*, 43(2), 162-177.
- Fernandez, R., Fogli, A., & Olivetti, C. (2004). Mothers and sons: preference formation and female labor force dynamics. *The Quarterly Journal of Economics*, 119(4), 1249-1299.
- Ferree, M. M. (1990). Beyond separate spheres: feminism and family research. *Journal of Marriage and Family*, 52(4), 866-884.
- Fish, M. S. (2002). Islam and authoritarianism. *World Politics*, 55(1), 4-37.
- Forsythe, N., Korzeniewicz, R. P., & Durrant, V. (2000). Gender inequalities and economic growth: A longitudinal evaluation. *Economic Development and Cultural Change*, 48(3), 573-617.
- Freedom House. (2012). Worst of the worst 2012: The world's most repressive societies. Retrieved from <http://www.freedomhouse.org/report/special-reports/worst-worst-2012-worlds-most-repressive-societies>

- Frey, R. S., & Field, C. (2000). The determinants of infant mortality in the less developed countries: A cross-national test of five theories. *Social Indicators Research, 52*(3), 215-234.
- Friedl, E. (1975). *Women and men: An anthropologist's view*
New York: Holt, Rinehart and Winston.
- Fukuyama, F. (1992). *The end of history and the last man* Newark: Free Press.
- Galor, O., & Weil, D. N. (1996). The gender gap, fertility, and growth. *The American Economic Review, 86*(3), 374-387.
- Gasiorowski, M. J. (1996). An overview of the political regime change dataset. *Comparative political studies, 29*(4), 469-483.
doi:10.1177/0010414096029004004
- Gastil, R. D. (1990). The comparative survey of freedom: Experiences and suggestions. *Studies in Comparative International Development, 25*(1), 25-50.
- Gastil, R. D. (1991). The comparative survey of freedom: Experiences and suggestions. *On Measuring Democracy: Its Consequences and Concomitants, 21-46.*
doi:Export Date 10 July 2013
- Gause III, F. G. (2011). Why Middle East studies missed the Arab spring. *Foreign Affairs, 90*(4)
- Gibson, M. A., & Mace, R. (2007). Polygyny, reproductive success and child health in rural Ethiopia: Why marry a married man? *Journal of Biosocial Science, 39*(2), 287-300.
- Giele, J. (1977). Introduction: the status of women in comparative perspective. In J. Z.Giele & A. C. Smock (Eds.), *Women: Roles and status in eight countries*. New York: John Wiley.
- Glaeser, E. L., Ponzetto, G. A. M., & Shleifer, A. (2007). Why does democracy need education? *Journal of Economic Growth, 12*(2), 77-99.
- Gleason, S. (2001). Female political participation and health in India. *The ANNALS of the American Academy of Political and Social Science, 573*(1), 105-126.
- Gleditsch, K. S., & Ward, M. D. (1997). Double take: A reexamination of democracy and autocracy in modern polities. *The Journal of Conflict Resolution, 41*(3), 361-383.

- Gleditsch, K. S., & Ward, M. D. (2006). Diffusion and the international context of democratization. *International organization*, 60(4), 911-933.
- Gouws, A. (2013). Multiculturalism in South Africa: Dislodging the binary between universal human rights and culture/tradition. *Politikon*, 40(1), 35-55.
- Government Offices of Sweden.(2012). *Equal power to shape society and one's own life – The Swedish Government's gender equality policy 2010–2014*. Retrieved from <http://www.government.se/content/1/c6/19/73/18/fafb54bf.pdf>
- Grami, A. (2008). Gender equality in Tunisia. *British Journal of Middle Eastern Studies*, 35(3), 349-361.
- Grown, C., Gupta, G. R., & Khan, Z. (2003). Promises to keep: achieving gender equality and the empowerment of women. *Background Paper of the Task Force on Education and Gender Equality: Millenium Project*. Washington, DC: International Center for Research on Women
- Gupta, M. D. (1995). Life course perspectives on women's autonomy and health outcomes. *American Anthropologist*, 97(3), 481-491.
- Gurr, T., Jagers, K., & Moore, W. (1990). The transformation of the western state: The growth of democracy, autocracy, and state power since 1800. *Studies in Comparative International Development (SCID)*, 25(1), 73-108.
- Guttentag, M., & Secord, P. F. (1983). *Too many women? The sex ratio question*. California: Sage Publications.
- Hadenius, A., & Teorell, J. (2005). Cultural and economic prerequisites of democracy: Reassessing recent evidence. *Studies in Comparative International Development*, 39(4), 87-106.
- Harding, S. (1987). *Feminism and Methodology*. Bloomington: Indiana University Press.
- Hartung, J., Dickemann, M., Melotti, U., Pospisil, L., Scott, E. C., Smith, J. M., & Wilder, W. D. (1982). Polygyny and inheritance of wealth [and comments and replies]. *Current Anthropology*, 23(1), 1-12.
- Hausmann, R., Tyson, L. D., & Zahidi, S.(2007). *The Global Gender Gap Index 2007. The global gender gap report*. Retrieved from <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.192.4073&rep=rep1&type=pdf>

- Heise, L. L. (1998). Violence against women: An integrated, ecological framework. *Violence Against Women*, 4(3), 262-290.
- Heller, P. (2000). Degrees of democracy: Some comparative lessons from India. *World Politics*, 52(4), 484-519.
- Herz, B. K., & Sperling, G. B. (2004). *What Works In Girls' Education?: Evidence And Policies From The Developing World*: Council on Foreign Relations Press.
- Hewitt, C. (1977). The effect of political democracy and social democracy on equality in industrial societies: A cross-national comparison. *American Sociological Review*, 42(3), 450-464.
- Hill, M. A., & King, E. M. (1993). Women's education in developing countries: an overview. *Women's education in developing countries*, 1-50.
- Hoffman, M., & Jamal, A. (2012). The Youth and the Arab Spring: Cohort differences and similarities. *Middle East Law and Governance*, 4(1), 168-188.
- Houweling, T. A. J., Caspar, A. E. K., Looman, W. N., & Mackenbach, J. P. (2005). Determinants of under-5 mortality among the poor and the rich: a cross-national analysis of 43 developing countries. *International Journal of Epidemiology*, 34(6), 1257-1265. doi:10.1093/ije/dyi190
- Howell, J. (2006). *Gender and civil society*. London: SAGE Publications Ltd.
- Huber, J. (1991). Macro-micro links in gender stratification. *Macro-Micro Linkages in Sociology*. (pp. 11-25). Newbury Park, CA: Sage Publications.
- Hudson, V. M., Caprioli, M., Ballif-Spanvill, B., McDermott, R., & Emmett, C. F. (2008). The heart of the matter. The security of women and the security of states. *International Security*, 33(3), 7-45.
- Hudson, V. M., & den Boer, A. (2002). A surplus of men, a deficit of peace: Security and sex ratios in Asia's largest states. *International Security*, 26(4), 5-38.
- Human Rights Watch. (1996). Shattered lives. Sexual violence during the Rwandan genocide and its aftermath. Retrieved from <http://www.hrw.org/reports/1996/Rwanda.htm>
- Huntington, S. P. (1984). Will more countries become democratic? *Political Science Quarterly*, 99(2), 193-218.

- Huntington, S. P. (1991). *The third wave: democratization in the late twentieth century*. Oklahoma: University of Oklahoma Press.
- Huntington, S. P. (1993). The clash of civilizations? *Foreign Affairs*, 72 (3), 22-28.
- Huntington, S. P. (1997). After twenty years: The future of the third wave. *Journal of Democracy*, 8(4), X1-12.
- Hyoung, C. (1997). Fertility control, reproductive rights, and women's empowerment in Korea. *Asian Journal of Women's Studies*, 3(1), 103-132.
- Ibrahim, S., & Alkire, S. (2007). Agency and empowerment: A proposal for internationally comparable indicators. *Oxford Development Studies*, 35(4), 379-403. doi:10.1080/13600810701701897
- Inglehart, R. (2002). Gender equality and democracy. *Comparative Sociology*, 1(3-4), 321-346.
- Inglehart, R., & Baker, W. E. (2000). Modernization, cultural change, and the persistence of traditional values. *American Sociological Review*, 65(1), 19-51.
- Inglehart, R., Foa, R., Peterson, C., & Welzel, C. (2008). Development, freedom, and rising happiness. A global perspective (1981-2007). *Perspectives on psychological science*, 3(4), 264-285.
- Inglehart, R., & Norris, P. (2003). The true clash of civilizations. *Foreign Policy*(135), 62-70.
- Inglehart, R., Norris, P., & Welzel, C. (2002). Gender equality and democracy. *Comparative Sociology*, 1(3-4), 321-346.
- Inglehart, R., & Welzel, C. (2005). *Modernization, cultural change and democracy: The human development sequence*. New York: Cambridge University Press.
- Inglehart, R., & Welzel, C. (2009). How development leads to democracy. *Foreign Affairs*, 88(2), 33-48.
- Inglehart, R., & Welzel, C. (2010). Changing mass priorities: The link between modernization and democracy. *Perspectives on Politics*, 8(2), 551-567.
- International Monetary Fund.(2009). *General features and composition of groups in the world economic outlook classification*. *World Economic Outlook* Retrieved from <http://www.imf.org/external/pubs/ft/weo/2009/01/pdf/statapp.pdf>

- Iversen, T., & Rosenbluth, F. (2006). The political economy of gender: Explaining cross-national variation in the gender division of labor and the gender voting gap. *American Journal of Political Science*, 50(1), 1-19.
- Iversen, T., & Rosenbluth, F. (2008). Work and power: The connection between female labor force participation and female political representation. *Annual Review of Political Science*, 11, 479-495.
- Jackson, R. M. (1998). *Destined for equality: The inevitable rise of women's status*. Cambridge: Massachusetts: Harvard University Press.
- Jagers, K., & Gurr, T. (1995). Tracking democracy's 3rd wave with the Polity-III data. *Journal of Peace Research*, 32(4), 469-482.
- Jahanshahrad, H. (2012). A genuine civil society and its implications for the Iranian women's movement. *Women's History Review*, 21(2), 233-252.
- Jaquette, J. S., & Summerfield, G. (2006). *Women and gender equity in development theory and practice: institutions, resources, and mobilization*. Durham: Duke University Press.
- Jejeebhoy, S. J. (1998). Adolescent sexual and reproductive behavior: A review of the evidence from India. *Social Science and Medicine*, 46(10), 1275-1290.
- Johnston, D. W., Schurer, S., & Shields, M. A. (2012). Maternal gender role attitudes, human capital investment, and labour supply of sons and daughters. *Discussion Paper No. 6656*. Retrieved from <http://ftp.iza.org/dp6656.pdf>
- Jonas, S. (2000). Democratization through peace: The difficult case of Guatemala. *Journal of Interamerican Studies & World Affairs*, 42(4), 9.
- Jowett, M. (2000). Safe motherhood interventions in low-income countries: An economic justification and evidence of cost effectiveness. *Health Policy*, 53(3), 201-228.
- Jütting, J. P., Morrisson, C., Dayton-Johnson, J., & Drechsler, D. (2008). Measuring gender (in)equality: The OECD Gender, Institutions and Development Data Base. *Journal of Human Development*, 9, 65-86. doi: 10.1080/14649880701811401
- Kabeer, N. (1994). *Reversed realities: gender hierarchies in development thought*. London: Verso.

- Kabeer, N. (1999). Resources, agency, achievements: Reflections on the measurement of women's empowerment. *Development and Change*, 30(3), 435-464.
- Kabeer, N. (2005). Gender equality and women's empowerment: A critical analysis of the third Millennium Development Goal. *Gender and Development*, 13(1), 13-24.
- Kabeer, N., & Mahmud, S. (2004). Globalization, gender and poverty: Bangladeshi women workers in export and local markets. *Journal of International Development*, 16(1), 93-109.
- Kabeer, N., & Murthy, R. K. (1996). Compensating for institutional exclusion? Lessons from Indian government and non-government credit interventions for the poor. *IDS Discussion Paper*, 356
- Kabeer, N., & Subrahmanian, R. (1996). Institutions, relations and outcomes : framework and tools for gender-aware planning / by Naila Kabeer and Ramya Subrahmanian In *IDS discussion paper ; 357* ((Institute of Development Studies, University of Sussex).
- Kanter, R. M. (1977). Some effects of proportions on group life: Skewed sex ratios and responses to token women. *American Journal of Sociology*, 82(5), 965-990. doi:10.2307/2777808
- Karstedt, S. (2006). Democracy, values, and violence: Paradoxes, tensions, and comparative advantages of liberal inclusion. *Annals of the American Academy of Political and Social Science*, 605(1), 50-81.
- Kasapoglu, A., & Ozerkmen, N. (2011). Gender imbalance: The case of women's political participation in Turkey. *Journal of international Women's Studies*, 12(4), 97-107.
- Kaya, Y., & Cook, K. (2010). A cross-national analysis of physical intimate partner violence against women. *International journal of comparative sociology*, 51(6), 423-444.
- Kazemi, F. (2000). Gender, Islam, and politics. *Social Research*, 67(2), 439-474.
- Kelly, S. (2010). Hard-won progress and a long road ahead: Women's rights in the Middle East and North Africa. In S. Kelly & J. Breslin (Eds.), *Women's Rights in the Middle East and North Africa: Progress Amid Resistance*. New York:

Rowman & Littlefield Publishers. Retrieved from <http://www.freedomhouse.org/sites/default/files/270.pdf>

- Kenworthy, L., & Malami, M. (1999). Gender inequality in political representation: A worldwide comparative analysis. *Social Forces*, 78(1), 235-268.
- King, R. (2004). Albania: interrelationships between population, poverty, development, internal and international migration/Albanie: relations entre population, pauvreté, développement, migrations internes et externes. *Méditerranée*, 103(3-4), 37-47.
- Klasen, S. (1999). Does gender inequality reduce growth and development? Evidence from cross-country regressions. *Engendering Development, Working Paper No.7*
- Klasen, S. (2002). Low schooling for girls, slower growth for all? Cross-country evidence on the effect of gender inequality in education on economic Development. *The World Bank Economic Review*, 16(3), 345-373.
- Klasen, S. (2006). UNDP's gender-related measures: Some conceptual problems and possible solutions. *Journal of Human Development*, 7(2), 243-274.
- Klasen, S., & Lamanna, F. (2009). The impact of gender inequality in education and employment on economic growth: new evidence for a panel of countries. *Feminist Economics*, 15(3), 91 - 132.
- Klomegah, R. (1997). Socio-economic characteristics of Ghanaian women in polygynous marriages. *Journal of Comparative Family Studies*, 28(1), 73-88.
- Klomp, J., & de Haan, J. (2009). Is the political system really related to health? *Social Science and Medicine*, 69(1), 36-46.
- Knowles, S., Lorgelly, P. K., & Owen, P. D. (2002). Are educational gender gaps a brake on economic development? Some cross-country empirical evidence. *Oxford Economic Papers*, 54(1), 118-149.
- Kosack, S. (2009). Realising Education for All: defining and using the political will to invest in primary education. *Comparative Education*, 45(4), 495-523. doi:10.1080/03050060903391586
- Kuhn, R. (2012). On the role of human development in the Arab Spring. *Population and Development Review*, 38(4), 649-683. doi:10.1111/j.1728-4457.2012.00531.x
- Lafont, S. (2001). One step forward, two steps back: Women in the post-communist states. *Communist and Post-Communist Studies*, 34(2), 203-220.

- Lagerlöf, N.-P. (2003). Gender equality and long-run growth. *Journal of Economic Growth*, 8(4), 403-426. doi:10.1023/a:1026256917489
- Lake, D. A., & Baum, M. A. (2001). The invisible hand of democracy: political control and the provision of public services. *Comparative Political Studies*, 34(6), 587-621.
- Lehr, C. S. (2009). Evidence on the demographic transition. *Review of Economics and Statistics*, 91(4), 871-887. doi:doi:10.1162/rest.91.4.871
- Lena, H. F., & London, B. (1993). The political and economic determinants of health outcomes: A cross- national analysis. *International Journal of Health Services*, 23(3), 585-602.
- Leong, H. K. (2000). Citizen participation and policy making in Singapore: Conditions and Predicaments. *Asian Survey*, 40(3), 436-455.
- Lerner, D. (1958). *The passing of traditional society: Modernizing the Middle East*: New York: Free Press.
- Li, J. (2005). Women's status in a rural Chinese setting. *Rural Sociology*, 70(2), 229-232.
- Li, J., & Lavelly, W. (2003). Village context, women's status, and son preference among rural Chinese women. *Rural Sociology*, 68(1), 87-106.
- Lipset, S. M. (1959). Some social requisites of democracy - economic development and political legitimacy. *The American Political Science Review*, 53(1), 69-105.
- Lipset, S. M. (1994). The social requisites of democracy revisited - 1993 Presidential address. *American Sociological Review*, 59(1), 1-22.
- Londregan, J. B., & Poole, K. T. (1996). Does high income promote democracy? *World Politics*, 49(1), 1-30.
- Longva, A. N. (1997). *Walls built on sand: Migration, exclusion and society in Kuwait* Boulder CO, London: Westview Press.
- Lorber, J. (1994). "Night to his Day": The social construction of gender. In J. Lorber (Ed.), *Paradoxes of gender*. New Haven:CT: Yale University Press.
- Lorber, J. (2010). *Gender Inequality: Feminist theories and politics*. Oxford: Oxford University Press.
- Lukes, S. (2005). *Power: A radical view* (2nd ed.). Basingstoke: Palgrave MacMillan.

- Lutz, W., Cuaresma, J. C., & Abbasi-Shavazi, M. J. (2010). Demography, education, and democracy: global trends and the case of Iran. *Population and Development Review*, 36(2), 253-281.
- Lwambo, D. (2013). 'Before the war, I was a man': Men and masculinities in the Eastern Democratic Republic of Congo. *Gender and Development*, 21(1), 47-66.
- Lyons, T., Curnow, J., & Mather, G. (2004). Developing gender mainstreaming and 'gender respect'. *Women, gender and development in the Pacific: Key issues 64*, 60. Retrieved from https://crawford.anu.edu.au/rmap/devnet/devnet/gen/gen_mainstream.pdf#page=60
- Maddy-Weitzman, B. (2005). Women, Islam, and the Moroccan State: The struggle over the personal status law. *Middle East Journal*, 59(3), 393-410. doi:10.2307/4330155
- Madhavan, S. (2002). Best of friends and worst of enemies: competition and collaboration in polygyny. *Ethnology*, 41(1), 69-84.
- Mainwaring, S.(1989). *Transitions to democracy and democratic consolidation: theoretical and comparative issues. Working Paper - Helen Kellogg Institute for International Studies* Retrieved from <http://www.scopus.com/inward/record.url?eid=2-s2.0-0024909961&partnerID=40&md5=444378aeff36aea5e4e0bc928ed0ccd7>
- Malhotra, A.(2012). *Remobilizing the gender and fertility connection: The case for examining the impact of fertility control and fertility declines on gender equality. Fertility and Empowerment Work Paper Series , 001-2012-ICRW-FE, 1-38* Retrieved from http://www.icrw.org/files/publications/WPS_Edited_Malhotra%20FINAL%20corrected%20Feb2013_0.pdf
- Malhotra, A., & Mather, M. (1997). Do schooling and work empower women in developing countries? Gender and domestic decisions in Sri Lanka. *Sociological Forum*, 12(4), 599-630.
- Maoz, Z., & Russett, B. (1993). Normative and structural causes of democratic peace, 1946-1986. *The American Political Science Review*, 87(3), 624-638.

- Marchand, M. H., & Parpart, J. L. (1995). *Feminism/postmodernism/development*. London: Routledge.
- Markoff, J. (1996). *Waves of democracy: Social movements and political change* (Vol. 10): SAGE Publications, Incorporated.
- Marshall, M. G., Gurr, T. R., Davenport, C., & Jagers, K. (2002). Comments on Munck and Verkuilen. *POLITY*, 4, 1800-1999.
- Marshall, M. G., & Jagers, K.(2009). *Polity IV Project. Political Regime Characteristics and Transitions, 1800-2008*. Retrieved from <http://www.systemicpeace.org/polity/polity4.htm>
- Marshall, M. G., & Jagers, K.(2011). *Polity IV Project. Political Regime Characteristics and Transitions, 1800-2010*. Retrieved from <http://www.systemicpeace.org/polity/polity4.htm>
- Martin, P. Y. (2004). Gender as social institution. *Social Forces*, 82(4), 1249-1273.
- Mason, K. O. (1986). The status of women: Conceptual and methodological issues in demographic studies. *Sociological Forum*, 1(2), 284-300.
- Matear, A. (1999). Gender relations, authoritarianism and democratization in Chile. *Democratization*, 6(3), 100-117.
- McBride, D., & Mazur, A.(2011). *Gender machineries worldwide. World Development Report 2012 - Gender Equality and Development* Retrieved from <http://siteresources.worldbank.org/INTWDR2012/Resources/7778105-1299699968583/7786210-1322671773271/McBride-Mazur-Background-Paper-Final.pdf>
- McFaul, M. (2002). The fourth wave of democracy and dictatorship: Noncooperative transitions in the postcommunist world. *World Politics*, 54(2), 212-244.
- Mediterranean Institute for Gender Studies.(2006). *Participation in NGOs: The gender gap in participation. A report prepared for the Mediterranean Insitute of Gender Studies as a follow up to the CIVICUS survey*. Retrieved from <http://www.medinstgenderstudies.org/wp-content/uploads/research-report-civicus-revised.pdf>
- Melander, E. (2005). Gender equality and intrastate armed conflict. *International Studies Quarterly*, 49(4), 695-714.

- Messner, S. F., & Sampson, R. J. (1991). The sex ratio, family disruption, and rates of violent crime: The paradox of demographic structure. *Social Forces*, 69(3), 693-713.
- Meyer, J. W. (1977). The effects of education as an institution. *The American Journal of Sociology*, 83(1), 55-77.
- Moghadam, V. M. (1998). *Women, work, and economic reform in the Middle East and North Africa*: Lynne Rienner Publishers Boulder, CO.
- Moghadam, V. M. (2001). Organizing women: The new women's movement in Algeria. *Cultural Dynamics*, 13(2), 131-154. doi:10.1177/092137400101300201
- Moghadam, V. M. (2003). *Modernizing women: Gender and social change in the Middle East* (2nd ed.). London: Lynne Rienner Publishers.
- Moghadam, V. M. (2004). The gender of democracy: The link between women's rights and democratization in the Middle East. *Arab Reform Bulletin July/August*
- Moghadam, V. M. (2007). *Governance and women's citizenship in the Middle East and North Africa*. Paper presented at the IDRC MENA Regional Consultation, Women's Rights and Citizenship, Cairo, Egypt.
- Moghadam, V. M., & Senftova, L. (2005). Measuring women's empowerment: Participation and rights in civil, political, social, economic, and cultural domains. *International Social Science Journal*, 57(184), 389-412. doi:10.1111/j.1468-2451.2005.00557.x
- Moon, B. E., Birdsall, J. H., Ciesluk, S., Garlett, L. M., Hermias, J. J., Mendenhall, E., . . . Wong, W. H. (2006). Voting counts: Participation in the measurement of democracy. *Studies in Comparative International Development*, 41(2), 3-32.
- Moore, G., & Shackman, G. (1996). Gender and authority: A cross-national study. *Social Science Quarterly*, 77(2), 269-288.
- Morgan, S. P., & Niraula, B. B. (1995). Gender inequality and fertility in two Nepali villages. *Population and Development Review*, 541-561.
- Morrisson, C., & Jütting, J. P. (2005). Women's discrimination in developing countries: A new data set for better policies. *World Development*, 33(7), 1065-1081.
- Muller, E. N. (1995). Economic determinants of democracy. *American Sociological Review*, 60(6), 966-982.

- Munck, G. L., & Verkuilen, J. (2002). Conceptualizing and measuring democracy: Evaluating alternative indices. *Comparative Political Studies*, 35(1), 5-34.
- Murphy-Graham, E. (2009). And when she comes home? Education and women's empowerment in intimate relationships. *International Journal of Educational Development*, 30(3), 320-331.
- Murthy, R. K. (1998). Viewpoint Power, institutions and gender relations: Can gender training alter the equations? *Development in Practice*, 8(2), 203-211.
- Mutalib, H. (2000). Illiberal democracy and the future of opposition in Singapore. *Third World Quarterly*, 21(2), 313-342.
- Navia, P., & Zweifel, T. (2003). Democracy, dictatorship, and infant mortality revisited. *Journal of Democracy*, 14(3), 90-103.
- Ncayiyana, D. J. (2004). Is democracy good for people's health? A South African perspective. *British Medical Journal*(December), 1425-1426.
- Neher, C. D. (1994). Asian style democracy. *Asian Survey*, 34(11), 949-961.
- Nisha, S., & Ravi, S. (2010). Women, work, and employment outcomes in rural India. *Economic and Political Weekly*, 45(28), 49-60.
- O'Brien, R. M. (2007). A caution regarding rules of thumb for variance inflation factors. *Quality and Quantity*, 41(5), 673-690.
- O'Donnell, G., A., & Schmitter, P. C. (1986). *Transitions from authoritarian rule: Tentative conclusions about uncertain democracies*. Baltimore, MD: John Hopkins University Press.
- Osmani, S., & Sen, A. (2003). The hidden penalties of gender inequality: fetal origins of ill-health. *Economics & Human Biology*, 1(1), 105-121. doi:[http://dx.doi.org/10.1016/S1570-677X\(02\)00006-0](http://dx.doi.org/10.1016/S1570-677X(02)00006-0)
- Ozkan, M., Altindag, A., Oto, R., & Sentunali, E. (2006). Mental Health Aspects of Turkish Women from Polygamous Versus Monogamous Families. *International Journal of Social Psychiatry*, 52(3), 214-220. doi:10.1177/0020764006067207
- Panda, P., & Agarwal, B. (2005). Marital violence, human development and women's property status in India. *World Development*, 33(5), 823-850.
- Pande, R., Malhotra, A., & Grown, C.(2005). *Impact of investments in female education on gender equality*. International Centre for Research on Women. Paper

- prepared for presentation at Session 3: Schooling XXV IUSSP International Population Conference, Tours, France* Retrieved from <http://iussp2005.princeton.edu/download.aspx?submissionId=51014>
- Papaioannou, E., & Siourounis, G. (2008a). Democratisation and growth. *Economic Journal*, 118(532), 1520-1551.
- Papaioannou, E., & Siourounis, G. (2008b). Economic and social factors driving the third wave of democratization. *Journal of Comparative Economics*, 36(3), 365-387.
- Pateman, C. (1989). *The disorder of women: Democracy, feminism and political theory*. Stanford, CA: Stanford University Press.
- Paxton, P. (1997). Women in national legislatures: A cross-national analysis. *Social Science Research*, 26(4), 442-464.
- Paxton, P. (2008). Gendering democracy. In A. M. Goetz & A. Mazur (Eds.), *Politics, gender and concepts*. Cambridge: Cambridge University Press.
- Paxton, P., Bollen, K. A., Lee, D., & Kim, H. (2003). A half-century of suffrage: New data and a comparative analysis. *Studies in Comparative International Development (SCID)*, 38(1), 93-122.
- Paxton, P., Hughes, M. M., & Painter, M. A. (2010). Growth in women's political representation: A longitudinal exploration of democracy, electoral system and gender quotas. *European Journal of Political Research*, 49(1), 25-52.
- Paxton, P., & Kunovich, S. (2003). Women's political representation: The importance of ideology. *Social Forces*, 82(1), 87-114.
- Persson, T., & Tabellini, G. (2009). Democratic capital: The nexus of political and economic change. *American Economic Journal*, 1(2), 88-126.
- Peterson, S. A. (1999). Marriage structure and contraception in Niger. *Journal of Biosocial Science*, 31(01), 93-104. doi:doi:null
- Pew Research Centre.(2004). *Global attitudes project*. Retrieved from <http://www.pewglobal.org/2004/05/13/global-gender-gaps-2/>
- Pew Research Centre.(2009). *A report on the size and distribution of the world's Muslim population*. Retrieved from [http://www.pewforum.org/Muslim/Mapping-the-Global-Muslim-Population\(18\).aspx](http://www.pewforum.org/Muslim/Mapping-the-Global-Muslim-Population(18).aspx)

- Phillips, A. (1991). *Engendering democracy*. University Park, PA: Penn State University Press.
- Piccard, A. M. (2010). U.S. ratification of CEDAW: from bad to worse?". *Law & inequality*, 28(1), 119-161.
- Pillai, V. K., & Gupta, R. (2006). Cross-national analysis of a model of reproductive health in developing countries. *Social Science Research*, 35(1), 210-227.
- Population Council. (1993). Vienna Declaration on Human Rights. *Population and Development Review*, 19(4), 877-882. doi:10.2307/2938429
- Post, D. (2001). Region, Poverty, Sibship, and Gender Inequality in Mexican Education: Will Targeted Welfare Policy Make a Difference for Girls? *Gender and Society*, 15(3), 468-489. doi:10.2307/3081894
- Post, L. A., Raile, A. N. W., & Raile, E. D. (2010). Defining political will. *Politics & Policy*, 38(4), 653-676.
- Post, R. (2006). Democracy and equality. *Annals of the American Academy of Political and Social Science*, 603, 24-36.
- Pringle, R.(2006). *Democratization in Mali putting history to work*. Retrieved from <http://purl.access.gpo.gov/GPO/LPS77398>
- Przeworski, A., Alvarez, M. E., Cheibub, J. A., & Limongi, F. (2000). *Democracy and development: Political institutions and well-being in the world, 1950-1990*. New York: Cambridge University Press.
- Przeworski, A., & Limongi, F. (1997). Modernization: Theories and facts. *World Politics*, 49(2), 155-183.
- Psacharopoulos, G., & Patrinos, H. A. (2004). Returns to investment in education: A further update. *Education Economics*, 12(2), 111-134.
- Psacharopoulos, G., & Tzannatos, Z. (1989). Female labor force participation: An international perspective. *The World Bank Research Observer*, 4(2), 187-201.
- Psacharopoulos, G., & Tzannatos, Z.(1992). *Latin American women's earnings and participation in the labor force*. Retrieved from http://www-wds.worldbank.org/servlet/WDSContentServer/WDSP/IB/1992/02/01/000009265_3961002093302/Rendered/PDF/multi_page.pdf.

- Quandt, W. (2004). Algeria's transition to what? *The Journal of North African Studies*, 9(2), 82-92. doi:10.1080/1362938042000323356
- Raday, F. (2012). Gender and democratic citizenship: The impact of CEDAW. *International Journal of Constitutional Law*, 10(2), 512-530.
- Rathgeber, E. M. (1990). WID, WAD, GAD: Trends in research and practice. *The Journal of Developing Areas*, 24(4), 489-502.
- Razavi, S. (2001). Women in contemporary democratization. *International Journal of Politics, Culture and Society*, 15(1), 201-224.
- Razavi, S., & Miller, C. (1995). From WID to GAD: Conceptual shifts in the women and development discourse. <http://www.scopus.com/inward/record.url?eid=2-s2.0-0029480284&partnerID=40&md5=933151e16e9f9979b8b8a6c465a1ee7c>
- Reeves, H., & Baden, S.(2000). *Gender and development: concepts and definitions*. Retrieved from <http://www.bridge.ids.ac.uk/reports/re55.pdf>
- Reynolds, A. (1999). Women in the legislatures and executives of the world: Knocking at the highest glass ceiling. *World Politics*, 51(04), 547-572. doi:doi:10.1017/S0043887100009254
- Risman, B. J. (2004). Gender as a social structure. Theory wrestling with activism. *Gender and Society*, 18(4), 429-450.
- Risman, B. J. (2011). Gender as structure or trump Card? *Journal of Family Theory & Review*, 3(1), 18-22.
- Rizzo, H., Abdel-Latif, A. H., & Meyer, K. (2007). The relationship between gender equality and democracy: A comparison of Arab versus non-Arab Muslim societies. *Sociology-the Journal of the British Sociological Association*, 41(6), 1151-1170. doi:10.1177/0038038507082320
- Roodman, D.(2006). *How to do xtabond2: An introduction to "Difference" and "System" GMM in Stata*. Retrieved from http://www.cgdev.org/sites/default/files/11619_file_HowtoDoxtabond8_with_forword_0.pdf
- Roodman, D.(2008). *A note on the theme of too many instruments*. Retrieved from http://www.cgdev.org/sites/default/files/14256_file_Instruments.pdf
- Ross, M. L. (2001). Does oil hinder democracy? *World Politics*, 53(3), 325-361.

- Ross, M. L. (2006). Is democracy good for the poor? *American Journal of Political Science*, 50(4), 860-874.
- Ross, M. L. (2008). Oil, Islam, and women. *American Political Science Review*, 102(1), 107-123.
- Rowlands, J. (1995). Empowerment examined. *Development in Practice*, 5(2), 101-107.
- Rueschemeyer, D., Stephens, E. H., & Stephens, J. D. (1992). *Capitalist development and democracy*. Chicago, IL: University of Chicago Press.
- Ryan, J. E. (1994). Survey methodology. *Freedom Review*, 25(1), 9-13. doi:Export Date 10 July 2013
- Safa, H. I. (1990). Women's social movements in Latin America. *Gender & Society*, 4(3), 354-369. doi:10.1177/089124390004003006
- Safaei, J. (2006). Is democracy good for health? *International Journal of Health Services*, 36(4), 767-786.
- Safaei, J. (2009). Democracy and women's health. *Mens Sana Monographs*, 7(1), 20-36.
- Sarafidis, V., & Robertson, D. (2009). On the impact of error cross-sectional dependence in short dynamic panel estimation. *Econometrics Journal*, 12(1), 62-81. doi:10.1111/j.1368-423X.2008.00260.x
- Schlozman, K. L., Burns, N., & Verba, S. (1999). "What happened at work today?": A multistage model of gender, employment, and political participation. *The Journal of Politics*, 61(01), 29-53.
- Schmitter, P. C., & Karl, T. L. (1991). What democracy is... and is not. *Journal of Democracy* 2(3), 75-88.
- Schumpeter, J. (1947). *Capitalism, socialism and democracy* (2nd ed.). New York: Harper.
- Schwarzmantel, J. (2010). Democracy and violence: A theoretical overview. *Democratization*, 17(2), 217-234.
- Scott, J. W. (1986). Gender: a useful category of historical analysis. *The American Historical Review*, 91(5), 1053-1075.
- Seguino, S. (2000). Accounting for gender in Asian economic growth. *Feminist Economics*, 6(3), 27-58.

- Sen, A. (1989). Women's survival as a development problem. *Bulletin of the American Academy of Arts and Sciences*, 43(2), 14-29.
- Sen, A. (1992). Missing women. *British Medical Journal*, 304(6827), 587-588.
- Sen, A. (1999). *Development as Freedom*. New York: Random House.
- Sen, G. (2003). Inequalities and health in India. *Development*, 46(2), 18-20.
- Shafiq, M. N. (2010). Do education and income affect support for democracy in Muslim countries? Evidence from the Pew Global Attitudes Project. *Economics of Education Review*, 29(3), 461-469.
- Shah, N. M., Al-Qudsi, S. S., & Shah, M. A. (1991). Asian women workers in Kuwait. *International Migration Review*, 25(3), 464-486.
- Shandra, J. M., Nobles, J., London, B., & Williamson, J. B. (2004). Dependency, democracy, and infant mortality: a quantitative, cross-national analysis of less developed countries. *Social Science & Medicine*, 59(2), 321-333. doi:10.1016/j.socscimed.2003.10.022
- Shawky, S., & Milaat, W. (2001). Cumulative impact of early maternal marital age during the childbearing period. *Paediatric and Perinatal Epidemiology*, 15(1), 27-33.
- Shultziner, D., & Tétreault, M. A. (2011). Paradoxes of democratic progress in Kuwait: The case of the Kuwaiti women's rights movement. *Muslim World Journal of Human Rights*, 7(2)
- Singh, S. (2007). Deconstructing 'gender and development' for 'identities of women'. *International Journal of Social Welfare*, 16(2), 100-109. doi:10.1111/j.1468-2397.2006.00454.x
- Sinha, N., Raju, D., & Morrison, A. (2007). *Gender equality, poverty and economic growth*. World Bank Policy Research Working Paper No. 4349. Retrieved from <http://ssrn.com/abstract=1014233>
- Smith, Z. K. (2001). Mali's decade of democracy. *Journal of Democracy*, 12(3), 73-79.
- Snyder, T. D., & Dillow, S. A. (2011). *Digest of education statistics, 2010*. NCES 2011-015. National Center for Education Statistics Retrieved from <http://nces.ed.gov/programs/digest/d11/index.asp>

- Solomon Islands Ministry of Women Youth and Children's Affairs. (2009). *Solomon Islands family health and safety study: a study on violence against women and children / report prepared by the secretariat of the Pacific community*. Suva:Fiji.
- South, S. J., & Trent, K. (1988). Sex ratios and women's roles: A cross-national analysis. *American Journal of Sociology*, 93(5), 1096-1115.
- Spierings, N., Smits, J., & Verloo, M. (2009). On the compatibility of Islam and gender equality. *Social Indicators Research*, 90(3), 503-522. doi:10.1007/s11205-008-9274-z
- Staheli, L. A., & Cope, M. S. (1994). Empowering women's citizenship. *Political Geography*, 13(5), 443-460.
- Steinzor, N.(2003). *Women's property and inheritance rights: improving lives in changing times. Final synthesis and conference proceedings paper*. . Office of Women in Development, Bureau for Global Programs Field Support and Research Retrieved from http://pdf.usaid.gov/pdf_docs/PNADA958.pdf
- Stromquist, N. P. (2001). What poverty does to girls' education: The intersection of class, gender and policy in Latin America. *Compare: A Journal of Comparative and International Education*, 31(1), 39-56. doi:10.1080/03057920020030153
- Sweetman, C. (2013). Introduction: Working with men on gender equality. *Gender & Development*, 21(1)
- Tahmasebi-Birgani, V. (2010). Green women of Iran: The role of the women's movement during and after Iran's presidential election of 2009. *Constellations*, 17(1), 78-86.
- Tickner, J. A. (1992). *Gender in international relations: Feminist perspectives on achieving global security*. New York: Columbia University Press.
- Tickner, J. A. (2005). What is your research program? Some feminist answers to international relations methodological questions. *International Studies Quarterly*, 49(1), 1-22. doi:10.1111/j.0020-8833.2005.00332.x
- Tipps, D. C. (1973). Modernization theory and the comparative study of national societies: A critical perspective. *Comparative Studies in Society and History*, 15(02), 199-226. doi:doi:10.1017/S0010417500007039

- Trent, K., & South, S. J. (1989). Structural determinants of the divorce rate: A cross-societal analysis. *Journal of Marriage and Family*, 51(2), 391-404.
- Tripp, A. M. (2000). Political reform in Tanzania: The struggle for associational autonomy. *Comparative Politics*, 32(2), 191-214.
- True, J., & Mintrom, M. (2001). Transnational networks and policy diffusion: The case of gender mainstreaming. *International Studies Quarterly*, 45(1), 27-57.
- U.S. Department of State.(2011). *Trafficking in persons report 2011*. Retrieved from <http://www.state.gov/j/tip/rls/tiprpt/2011/index.htm>
- Ulfelder, J. (2008). International integration and democratization: An event history analysis. *Democratization*, 15(2), 272-296.
- UNDP.(1995). *Human Development Report 1995*. Retrieved from http://hdr.undp.org/en/media/hdr_1995_en_overview.pdf
- UNDP.(2011). *Measuring inequality: Gender-related Development Index (GDI) and Gender Empowerment Measure (GEM)*. Retrieved from http://hdr.undp.org/en/statistics/indices/gdi_gem/
- UNDP.(2013). *Human Development Report 2013*. Retrieved from <http://hdr.undp.org/en/countries/>
- UNESCO.(1983). *Training seminars on education statistics. Statistics of education in developing countries. Book 3. An introduction to their collection and analysis*. Retrieved from <http://unesdoc.unesco.org/images/0005/000548/054881eo.pdf>
- UNESCO.(2000). *The Dakar framework for action: Education for all: Meeting our collective commitments: Including six regional frameworks for action*. Retrieved from
- UNESCO.(2011). *Education for all Global Monitoring Project, Chapter 6: Understandings of literacy*. Retrieved from http://www.unesco.org/education/GMR2006/full/chapt6_eng.pdf
- UNESCO.(2013). *Education for all movement*. Retrieved from <http://www.unesco.org/new/en/education/themes/leading-the-international-agenda/education-for-all/>
- UNICEF Innocenti Research Centre. (2001). *Early marriage. Child spouses*. Florence, Italy. Retrieved from <http://www.unicef-irc.org/publications/pdf/digest7e.pdf>

- United Nations.(1995). *Beijing Declaration and Platform for Action. Fourth World Conference on Women, Beijing, China.* Retrieved from <http://www.un.org/womenwatch/daw/beijing/platform/plat1.htm#statement>
- United Nations.(2000). *Millennium Development Goals.* Retrieved from <http://www.un.org/millenniumgoals/>
- United Nations.(2011). *Guidance note of the Secretary-General on democracy.* Retrieved from <http://www.un.org/democracyfund/Docs/UNSG%20Guidance%20Note%20on%20Democracy.pdf>
- United Nations.(2012). *NGO Branch, Department of Economic and Social Affairs.* Retrieved from <http://csonet.org/>
- Unterhalter, E. (2008). Cosmopolitanism, global social justice and gender equality in education. *Compare: A Journal of Comparative and International Education*, 38(5), 539-553. doi:10.1080/03057920802351291
- USAID.(2008). *Education from a gender equality perspective.* Retrieved from http://www.ungei.org/resources/files/Education_from_a_Gender_Equality_Perspective.pdf
- Vanhanen, T. (2000). A new dataset for measuring democracy, 1810 -1998. *Journal of Peace Research*, 37(2), 251-265.
- Varshney, A. (2000). Why have poor democracies not eliminated poverty? A suggestion. *Asian Survey*, 40(5), 718-736.
- Verba, S., Burns, N., & Schlozman, K. L. (1997). Knowing and caring about politics: Gender and political engagement. *The Journal of Politics*, 59(4), 1051-1072.
- Waylen, G. (1994). Women and democratization: Conceptualizing gender relations in transition politics. *World Politics*, 46(3), 327-354.
- Waylen, G. (2007). *Engendering transitions: Women's mobilization, institutions, and gender outcomes:* Oxford University Press.
- Wejnert, B. (2005). Diffusion, development, and democracy, 1800-1999. *American Sociological Review*, 70(1), 53-81.
- Wejnert, B. (2008). Effects of global democracy on women's reproductive health: 1970-2005, cross-world analysis. *Marriage and Family Review*, 44(2-3), 154-172.

- Welch, S. (1977). Women as political animals - Test of some explanations for male-female political-participation differences. *American Journal of Political Science*, 21(4), 711-730.
- Welzel, C., & Inglehart, R. (2008). The role of ordinary people in democratization. *Journal of democracy*, 19(1), 126-140.
- West, C., & Zimmerman, D. H. (1987). Doing gender. *Gender and Society*, 1(2), 125-151.
- Wieringa, S. (1994). Women's interests and empowerment: gender planning reconsidered. *Development & Change*, 25(4), 829-848.
- Wirth, L. (2009). *Breaking through the glass ceiling: Women in management*. Geneva: International Labour Organization. Retrieved from <http://dspace.cigilibrary.org/jspui/bitstream/123456789/21576/1/Breaking%20through%20the%20glass%20ceiling%20Women%20in%20management.pdf?1>
- Women's Learning Partnership for Rights Development and Peace.(2012). Retrieved from <http://www.payvand.com/news/11/jul/1080.html>
- Woodberry, R. D. (2012). The missionary roots of liberal democracy. *American Political Science Review*, 106(2), 244-274.
- World Bank. (2001). *Engendering development: Through gender equality in rights, resources and voice*. (pp. 1). Washington D.C: World Bank.
- World Bank.(2011). *World Development Indicators*. Retrieved from <http://databank.worldbank.org/data/views/variableSelection/selectvariables.aspx?source=world-development-indicators>
- World Economic Forum.(2012). *Global Gender Gap Index*. Retrieved from <http://www.weforum.org/issues/global-gender-gap>
- Young, G., Fort, L., & Danner, M. (1994). Moving from the 'the status of women to 'gender inequality': Conceptualisation, social indicators and an empirical application. *International Sociology*, 9(1), 55-85. Young, I. M. (1990). *Justice and the politics of difference*. Princeton, NJ: Princeton University Press.
- Yuval-Davis, N. (1997). *Gender and nation*. London: Sage Publications. .
- Zakaria, F. (1997). The rise of illiberal democracy. *Foreign Affairs*, 76(6), 22-39.

Appendices: Appendix A

Study One – Women’s Empowerment and Democratic Development

Table 1.0 Full sample of countries

Afghanistan	Djibouti	Laos	Republic of Congo
Albania	Dominican Republic	Latvia	Romania
Algeria	Ecuador	Lebanon	Russia
Angola	Egypt	Lesotho	Rwanda
Argentina	El Salvador	Liberia	Saudi Arabia
Armenia	Equatorial Guinea	Libya	Senegal
Australia	Eritrea	Lithuania	Sierra Leone
Austria	Estonia	Macedonia	Singapore
Azerbaijan	Ethiopia	Madagascar	Slovak Republic
Bahrain	Fiji	Malawi	Slovenia
Bangladesh	Finland	Malaysia	Solomon Islands
Belarus	France	Mali	Somalia
Belgium	Gabon	Mauritania	South Africa
Benin	Gambia	Mauritius	Spain
Bhutan	Georgia	Mexico	Sri Lanka
Bolivia	Ghana	Moldova	Sudan
Botswana	Greece	Mongolia	Swaziland
Brazil	Guatemala	Morocco	Sweden
Bulgaria	Guinea	Mozambique	Switzerland
Burkina Faso	Guinea-Bissau	Myanmar	Syria
Burundi	Guyana	Namibia	Tajikistan
Cambodia	Haiti	Nepal	Tanzania
Cameroon	Honduras	Netherlands	Thailand
Canada	Hungary	New Zealand	Togo
Central African Republic	India	Nicaragua	Trinidad
Chad	Indonesia	Niger	Tunisia
Chile	Iran	Nigeria	Turkey
China,	Iraq	Norway	Turkmenistan
Colombia	Ireland	Oman	Uganda
Comoros	Israel	Pakistan	Ukraine
Costa Rica	Italy	Panama	United Arab Emirates
Cote d'Ivoire	Jamaica	Papua New Guinea	United Kingdom
Croatia	Japan	Paraguay	United States
Cuba	Jordan	Peru	Uruguay
Cyprus	Kazakhstan	Philippines	Uzbekistan
Czech Republic	Kenya	Poland	Venezuela
Democratic Republic of Congo	Korea North	Portugal	Vietnam
Denmark	Korea South	Qatar	Zambia
	Kuwait		Zimbabwe (155)
	Kyrgyzstan		

Table 1.1 All countries included in the dynamic panel models – fully balanced

Armenia	Gabon	Moldova	Sierra Leone
Albania	Gambia	Mongolia	Singapore
Algeria	Ghana	Morocco	Slovak Republic
Argentina	Guatemala	Mozambique	Slovenia
Bahrain	Guyana	Myanmar	South Africa
Bangladesh	Haiti	Namibia	Sri Lanka
Benin	Honduras	Nepal	Sudan
Bolivia	Hungary	Nicaragua	Swaziland
Brazil	Indonesia	Niger	Syria
Bulgaria	Iran	Pakistan	Tanzania
Burundi	Iraq	Panama	Thailand
Cameroon	Jordan	Papua New Guinea	Togo
Central African Republic	Kazakhstan	Paraguay	Tunisia
Chile	Kenya	Peru	Turkey
China	Kyrgyzstan	Philippines	Turkmenistan
Cote d'Ivoire	Kuwait	Poland	Uganda
Croatia	Laos	Qatar	Ukraine
Cuba	Latvia	Republic of Congo	United Arab Emirates
Czech Republic	Lesotho	Republic of Korea	Uruguay
Democratic Republic of Congo	Liberia	Romania	Vietnam
Egypt	Libya	Russia	Zambia
El Salvador	Lithuania	Rwanda	Zimbabwe (97)
Estonia	Malawi	Saudi Arabia	
Fiji	Malaysia	Senegal	
	Mali		
	Mauritania		
	Mexico		

Table 1.2 All countries included in the dynamic panel models – extended sample

Afghanistan	Djibouti	Lithuania	Saudi Arabia
Albania	Egypt	Macedonia	Senegal
Angola	El Salvador	Madagascar	Sierra Leone
Algeria	Equatorial	Malawi	Singapore
Argentina	Guinea	Malaysia,	Slovak
Armenia	Eritrea	Mali	Republic
Azerbaijan	Estonia	Mauritania	Slovenia
Bahrain	Ethiopia	Mexico	Solomon
Bangladesh	Fiji	Moldova	Islands
Belarus	Gabon	Mongolia	Somalia
Benin	Gambia	Morocco	South Africa
Bhutan	Georgia	Mozambique	Sri Lanka
Bolivia	Ghana	Myanmar	Sudan
Brazil	Guatemala	Namibia	Swaziland
Bulgaria	Guinea	Nepal	Syria
Burkina Faso	Guinea-Bissau	Nicaragua	Tajikistan
Burundi	Guyana	Niger	Tanzania
Cambodia	Haiti	Nigeria	Thailand
Cameroon	Honduras	Oman	Togo
Central African	Hungary	Pakistan	Tunisia
Republic	Indonesia	Panama	Turkey
Chad	Iran	Papua New	Turkmenistan
Chile	Iraq	Guinea	Uganda
China	Jordan	Paraguay	Ukraine
Comoros	Kazakhstan	Peru	United Arab
Cote d'Ivoire	Kenya	Philippines	Emirates
Croatia	Kuwait	Poland	Uruguay
Cuba	Kyrgyzstan	Qatar	Uzbekistan
Czech Republic	Laos	Republic of	Vietnam
Democratic	Latvia	Congo	Zambia
Republic of	Lebanon	Republic of	Zimbabwe
Congo	Lesotho	Korea	(123)
Democratic	Liberia	Romania	
Republic of	Libya	Russia	
Korea		Rwanda	

Table 1.3 Muslim majority nations

Afghanistan	Guinea	Mauritania	Syria
Albania	Indonesia	Morocco	Tajikistan
Algeria	Iran	Niger	Tunisia
Azerbaijan	Iraq	Nigeria	Turkey
Bahrain	Jordan	Oman	Turkmenistan
Bangladesh	Kazakhstan	Pakistan	United Arab
Burkina Faso	Kuwait	Qatar	Emirates
Chad	Kyrgyzstan	Saudi Arabia	Uzbekistan
Comoros	Lebanon	Senegal	(43)
Djibouti	Libya	Sierra Leone	
Egypt	Malaysia	Somalia	
Gambia	Mali	Sudan	

Table 1.4 All nations (n=155) – summary statistics

Variable		Mean	Std. Dev.	Min	Max	Observations
Polity2	overall	0.7685535	7.33591	-10	10	N = 3975
	between		6.091015	-10	10	n = 155
	within		4.100399	-13.96222	12.653	T-bar = 25.645
female education	overall	6.129	3.069	0.250	12.949	N = 3406
	between		2.962	0.577	12.456	n = 131
	within		0.844	2.325	8.902	T = 26
fertility rates	overall	3.877	1.921	1.080	8.310	N = 3959
	between		1.808	1.325	7.787	n = 155
	within		0.648	1.425	6.577	T-bar = 25.542
female labour force	overall	38.997	9.806	5.048	55.108	N = 4027
	between		9.679	10.382	52.868	n = 155
	within		1.799	31.166	45.410	T-bar = 25.981
urban	overall	50.018	23.572	4.339	100.000	N = 4030
	between		23.355	6.765	100.000	n = 155
	within		3.686	25.125	65.966	T = 26
d.lngdp	overall	0.041	0.067	-0.662	0.674	N = 3393
	between		0.024	-0.036	0.145	n = 150
	within		0.063	-0.610	0.751	T-bar = 22.62
ln(gdp80)	overall	7.605	1.215	5.325	10.959	N = 3565
	between		1.230	5.325	10.959	n = 150
	within		0.000	7.605	7.605	T-bar = 23.767
ln(pop)	overall	3.803	1.374	0.086	8.744	N = 4007
	between		1.373	0.336	8.497	n = 155
	within		0.159	3.068	4.498	T-bar = 25.852
Muslim	overall	0.277	0.448	0	1	N = 4030
	between		0.449	0	1	n = 155
	within		0	0.277	0.277	T = 26
debt servicing	overall	2.293	2.369	0.002	43.728	N = 2429
	between		1.602	0.331	11.057	n = 109
	within		1.696	-7.441	34.964	T-bar = 22.284
gender gap in education	overall	0.888	0.955	-2.077	4.371	N = 3406
	between		0.916	-1.747	3.328	n = 131
	within		0.283	-1.063	2.566	T = 26
female secondary enrolment	overall	61.873	36.763	0.000	175.068	N = 2545
	between		35.504	3.808	147.400	n = 152
	within		10.305	14.533	116.837	T-bar = 16.743
male education	overall	7.017	2.642	0.879	12.899	N = 3406
	between		2.540	1.317	12.399	n = 131
	within		0.757	3.020	9.659	T = 26
male secondary enrolment	overall	64.297	32.209	2.966	161.528	N = 2545
	between		31.060	5.237	148.241	n = 152
	within		9.263	25.498	105.091	T-bar = 16.743
total education	overall	6.569	2.826	0.615	12.911	N = 3406
	between		2.723	1.000	12.428	n = 131
	within		0.791	2.674	9.049	T = 26

Table 1.5 Fully balanced sample (97 countries) – summary statistics

Variable		Mean	Std. Dev.	Min	Max	Observations
Polity2	overall	-1.023	6.68	-10.00	10.00	N = 2518
	between		4.69	-10.00	7.54	n = 97
	within		4.79	-15.75	10.86	T-bar = 25.959
female education	overall	5.434	2.91	0.25	12.61	N = 2522
	between		2.79	0.58	10.93	n = 97
	within		0.88	2.27	8.21	T = 26
fertility rates	overall	4.105	1.82	1.08	8.31	N = 2484
	between		1.69	1.44	7.75	n = 97
	within		0.72	1.90	6.81	T-bar = 25.608
female labour force	overall	38.385	10.86	5.05	53.76	N = 2519
	between		10.79	10.38	52.87	n = 97
	within		1.69	30.92	44.21	T-bar = 25.969
urbanisation	overall	47.757	22.75	4.34	100.00	N = 2522
	between		22.56	6.76	100.00	n = 97
	within		3.70	31.30	61.65	T = 26
economic growth	overall	0.037	0.07	-0.66	0.67	N = 2130
	between		0.02	-0.04	0.11	n = 94
	within		0.07	-0.61	0.75	T-bar = 22.660
ln(gdp80)	overall	7.355	1.15	5.32	10.96	N = 2240
	between		1.21	5.32	10.96	n = 94
	within		0.00	7.35	7.35	T-bar = 23.830
log (population density)	overall	3.760	1.39	0.09	8.74	N = 2519
	between		1.38	0.34	8.50	n = 97
	within		0.17	3.02	4.45	T-bar = 25.970
Muslim	overall	0.309	0.46	0.00	1.00	N = 2522
	between		0.46	0.00	1.00	n = 97
	within		0.00	0.31	0.31	T = 26
gender gap in education	overall	1.001	1.00	-2.08	3.81	N = 2522
	between		0.96	-1.75	3.33	n = 97
	within		0.30	-0.95	2.37	T = 26
female secondary enrolment	overall	53.908	32.67	1.63	117.00	N = 1550
	between		32.10	3.81	110.08	n = 96
	within		9.26	13.76	94.91	T-bar = 16.146
male education	overall	6.435	2.52	0.88	12.90	N = 2522
	between		2.41	1.32	11.51	n = 97
	within		0.78	3.71	9.08	T = 26
male secondary enrolment	overall	57.584	28.45	3.40	119.54	N = 1550
	between		27.88	5.24	100.06	n = 96
	within		0.782	3.711	9.077054	T = 26
total education	overall	5.889	2.68	0.615	12.749	N = 2574
	between		2.57	1.000	11.211	n = 97
	within		0.81	3.11	8.369	T = 26

Table 1.6 Extended sample (123 countries) – summary statistics

Variable		Mean	Std. Dev.	Min	Max	Observations
Polity2	overall	-1.527	6.526	-10	10	N = 3143
	between		4.632	-10	7.538	n = 123
	within		4.605	-16.258	10.358	T-bar = 25.553
female education	overall	5.384	2.922	0.250	12.609	N = 2574
	between		2.804	0.577	10.935	n = 99
	within		0.868	2.224	8.157	T = 26
fertility rates	overall	4.306	1.877	1.080	8.310	N = 3156
	between		1.748	1.444	7.787	n = 123
	within		0.703	1.855	7.007	T-bar = 25.658
female labour force	overall	38.853	10.535	5.048	55.108	N = 3195
	between		10.463	10.382	52.868	n = 123
	within		1.606	31.391	44.690	T-bar = 25.976
urbanisation	overall	45.642	22.652	4.339	100.000	N = 3198
	between		22.433	6.765	100.000	n = 123
	within		3.720	28.185	59.700	T = 26
economic growth	overall	0.038	0.074	-0.662	0.674	N = 2593
	between		0.025	-0.036	0.145	n = 118
	within		0.070	-0.613	0.748	T-bar = 21.975
ln(gdp80)	overall	7.281	1.139	5.325	10.959	N = 2733
	between		1.183	5.325	10.959	n = 118
	within		0.000	7.281	7.281	T-bar = 23.161
log (population density)	overall	3.709	1.335	0.086	8.744	N = 3195
	between		1.329	0.336	8.497	n = 123
	within		0.170	2.974	4.404	T-bar = 25.976
Muslim	overall	0.349	0.477	0	1	N = 3198
	between		0.479	0	1	n = 123
	within		0.000	0.350	0.350	T = 26
gender gap in education	overall	1.017	1.006	-2.077	4.371	N = 2574
	between		0.962	-1.747	3.328	n = 99
	within		0.307	-0.933	2.695	T = 26
female secondary enrolment	overall	50.548	33.485	0.000	116.998	N = 1848
	between		32.945	3.808	110.080	n = 120
	within		9.234	10.399	91.550	T-bar = 15.4
male education	overall	6.401	2.516	0.879	12.899	N = 2574
	between		2.404	1.317	11.512	n = 99
	within		0.781	3.677	9.043	T = 26
male secondary enrolment	overall	54.760	29.322	2.966	124.497	N = 1848
	between		28.778	5.237	100.062	n = 120
	within		8.362	15.961	91.501	T-bar = 15.4
total education	overall	5.931	2.68	0.615	12.749	N = 2522
	between		2.57	1.000	11.211	n = 97
	within		0.82	3.16	8.411	T = 26

Table 1.7 Spearman's correlation – extended sample (155 countries)

	polity2	femeduc	fertility	labour	urban	lngdp80	d.lngdp	ln(pop)
Polity2	1							
femeduc	0.4940*	1						
fertility	-0.4976*	-0.8304*	1					
labour	0.1671*	0.1973*	-0.1190*	1				
urban	0.2936*	0.6283*	-0.6341*	-0.2514*	1			
lngdp80	0.3855*	0.7342*	-0.6971*	-0.2151*	0.8367*	1		
d.lngdp	0.0380*	0.0894*	-0.1125*	-0.0146	0.0132	0.0037	1	
ln(pop)	0.1450*	0.0934*	-0.3313*	0.0163	0.0514*	0.0498*	0.0624*	1
Muslim	-0.4103*	-0.3360*	0.3137*	-0.4662*	-0.0415*	-0.1297*	-0.0369*	-0.0991*
gaped	-0.2780*	-0.5716*	0.4415*	-0.1583*	-0.3138*	-0.4151*	-0.0636*	0.0650*
femsecenrol	0.5105*	0.8873*	-0.8575*	0.0543*	0.7578*	0.8098*	0.0217	0.1910*
maled	0.4726*	0.9550*	-0.8044*	0.1720*	0.6164*	0.7019*	0.0808*	0.1320*
malesecenrol	0.4685*	0.8411*	-0.8314*	0.0185	0.7453*	0.7946*	0.0314	0.2194*
toteduc	0.4897*	0.9897*	-0.8265*	0.1864*	0.6297*	0.7264*	0.0870*	0.1104*

	Muslim	gaped	femsecenrol	maled	malesecenrol	toteduc
Muslim	1					
gaped	0.2620*	1				
femsecenrol	-0.2868*	-0.4655*	1			
maled	-0.2956*	-0.3024*	0.8608*	1		
malesecenrol	-0.2375*	-0.3355*	0.9735*	0.8531*	1	
toteduc	-0.3196*	-0.4498*	0.8837*	0.9871*	0.8551*	1

Table 1.8 Spearman's correlation – extended sample (97 countries)

	polity2	femeduc	fertility	labour	urban	ln(gdp80)	d.lngdp	ln(pop)
Polity2	1							
femeduc	0.3358*	1						
fertility	-0.3495*	-0.8270*	1					
labour	0.2336*	0.1209*	-0.1090*	1				
urban	0.0998*	0.5585*	-0.5563*	-0.3777*	1			
ln(gdp80)	0.1103*	0.6536*	-0.5738*	-0.3524*	0.8303*	1		
d.lngdp	0.0255	0.0758*	-0.1487*	0.0072	0.015	-0.0225	1	
ln(pop)	0.0521*	0.1340*	-0.2915*	0.0576*	0.0042	-0.0158	0.1106*	1
Muslim	-0.2941*	-0.2386*	0.1800*	-0.6018*	0.1095*	0.0738*	-0.0116	-0.0734*
gaped	-0.1833*	-0.5379*	0.4179*	-0.1180*	-0.2499*	-0.3720*	-0.0613*	0.0404*
femsecenrol	0.3107*	0.8927*	-0.8289*	-0.1050*	0.7368*	0.7467*	0.0548*	0.1835*
maled	0.3155*	0.9427*	-0.7894*	0.0931*	0.5465*	0.6075*	0.0632*	0.1708*
malesecenrol	0.2534*	0.8267*	-0.7879*	-0.1613*	0.7365*	0.7309*	0.0700*	0.2112*
toteduc	0.3320*	0.9867*	-0.8201*	0.1082*	0.5611*	0.6410*	0.0718*	0.1502*

	Muslim	gaped	femsecenrol	maled	malesecenrol	toteduc
Muslim	1					
gaped	0.1950*	1				
femsecenrol	-0.0782*	-0.4481*	1			
maled	-0.1985*	-0.2257*	0.8533*	1		
malesecenrol	-0.0076	-0.2989*	0.9616*	0.8356*	1	
toteduc	-0.02220*	-0.3958*	0.8857*	0.9836*	0.8415*	1

Table 1.9 Spearman's correlation – extended sample (123 countries)

	polity2	femeduc	fertility	labour	urban	ln(gdp80)	d.lngdp	ln(pop)
Polity2	1							
femeduc	0.3358*	1						
fertility	-0.3493*	-0.8270*	1					
labour	0.2337*	0.1209*	-0.1092*	1				
urban	0.0997*	0.5583*	-0.5556*	-0.3779*	1			
ln(gdp80)	0.1105*	0.6534*	-0.5730*	-0.3525*	0.8304*	1		
d.lngdp	0.0255	0.0758*	-0.1487*	0.0072	0.015	-0.0225	1	
ln(pop)	0.0524*	0.1340*	-0.2913*	0.0578*	0.0042	-0.0157	0.1106*	1
Muslim	-0.2939*	-0.2385*	0.1802*	-0.6018*	0.1100*	0.0743*	-0.0116	-0.0733*
gaped	-0.1834*	-0.5379*	0.4180*	-0.1181*	-0.2496*	-0.3718*	-0.0613*	0.0403*
femsecenrol	0.3106*	0.8925*	-0.8282*	-0.1054*	0.7369*	0.7467*	0.0548*	0.1835*
maled	0.3154*	0.9427*	-0.7894*	0.0930*	0.5464*	0.6074*	0.0632*	0.1708*
malesecenrol	0.2533*	0.8265*	-0.7873*	-0.1616*	0.7365*	0.7309*	0.0700*	0.2111*
toteduc	0.3334*	0.9867*	-0.8217*	0.1196*	0.5651*	0.6403*	0.0699*	0.1518*

	Muslim	gaped	femsecenrol	maled	malesecenrol	toteduc
Muslim	1					
gaped	0.1951*	1				
femsecenrol	-0.0777*	-0.4478*	1			
maled	-0.1984*	-0.2257*	0.8532*	1		
malesecenrol	-0.0072	-0.2987*	0.9616*	0.8356*	1	
toteduc	-0.2370*	-0.4066*	0.8848	0.9835*	0.8416*	1

Table 1.10 List of countries by regime type – three categories

Always Autocratic or Anocratic

Afghanistan	Gabon	Mozambique	Sudan
Algeria	Gambia	Myanmar	Swaziland
Armenia	Haiti	Nepal	Syrian Arab Republic
Bahrain	Iran	Pakistan	Tajikistan
Cambodia	Iraq	Papua New Guinea	Tanzania
Cameroon	Jordan	Qatar	Togo
Central African Republic	Kazakhstan	Republic of the Congo	Tunisia
China	Kuwait	Rwanda	Uganda
Cote d'Ivoire	Kyrgyzstan	Saudi Arabia	United Arab Emirates
Cuba	Lao PDR	Sierra Leone	Vietnam
Democratic Republic of Congo	Liberia	Singapore	Zambia
Egypt	Libya	Sri Lanka	Zimbabwe (51)
	Malaysia		
	Mauritania		
	Morocco		

Transition to Democracy

Albania	Estonia	Malawi	Romania
Argentina	Ghana	Mali	Russia
Bangladesh	Guatemala	Mexico	Senegal
Benin	Guyana	Moldova	Slovak Republic
Bolivia	Honduras	Mongolia	Slovenia
Brazil	Hungary	Namibia	South Africa
Bulgaria	Indonesia	Nicaragua	Thailand
Burundi,	Kenya	Niger	Turkey
Chile	Korea South	Panama	Ukraine
Croatia	Latvia	Paraguay	Uruguay (46)
Czech Republic	Lesotho	Philippines	
El Salvador	Lithuania	Poland	

Democratic throughout the period

Australia	Dominican Republic*	Israel	Portugal
Austria	Ecuador	Italy	Spain
Belgium	Fiji	Jamaica	Sweden
Botswana	Finland	Japan	Switzerland
Canada	France	Mauritius	Trinidad
Colombia	Greece	Netherlands	United Kingdom
Costa Rica	India	New Zealand	United States
Cyprus	Ireland	Norway	Venezuela (34)
Denmark		Peru	

Table 1.11 List of countries by regime type – eight categories

Always Autocratic

Afghanistan	Kuwait	Qatar	United Arab Emirates
Bahrain	Lao PDR	Saudi Arabia	Emirates
China	Libya	Swaziland	Vietnam (18)
Cuba	Morocco	Syrian Arab Republic	
Iraq	Myanmar		
Kazakhstan	Nepal		

Autocratic to Anocratic

Algeria	Republic of Congo	Liberia	Sierra Leone
Armenia	Congo	Mauritania	Sudan
Cameroon	Egypt	Mozambique	Tajikistan
Central African Republic	Gabon	Pakistan	Tanzania
Cote d'Ivoire	Haiti	Republic of the Congo	Togo
Democratic	Jordan	Rwanda	Tunisia
	Kyrgyzstan		Zambia (24)

Autocratic to Democratic

Albania	Ghana	Lithuania	Philippines
Argentina	Guyana	Malawi	Poland
Benin	Hungary	Mali	Romania
Bolivia	Indonesia	Moldova	Russia
Bulgaria	Kenya	Mongolia	Slovak Republic
Burundi	Korea South	Niger	Ukraine
Chile	Latvia	Panama	Uruguay (32)
Czech Republic	Lesotho	Paraguay	
Estonia			

Always Anocratic

Cambodia, Malaysia, Papua New Guinea, Singapore, Uganda, Zimbabwe (6)

Anocratic to Democratic

Bangladesh	El Salvador	Namibia	South Africa
Brazil	Guatemala	Nicaragua	Thailand
Croatia	Honduras	Senegal	Turkey (14)
	Mexico	Slovenia	

Always Democratic

Australia	Costa Rica	Finland	Jamaica
Austria	Cyprus	France	Japan
Belgium	Denmark	Greece	Mauritius
Botswana	Dominican Republic	India	Netherlands
Canada	Ecuador	Ireland	New Zealand
Colombia	Fiji	Israel	Norway
		Italy	Peru

Portugal
Spain

Sweden
Switzerland
Trinidad

United Kingdom
United States
Venezuela (34)

Democratic to Anocratic

Sri Lanka, Gambia (2)

Anocratic to Autocratic

Iran (1)

Table 1.12 Comparison of countries that developed democratically by their level of female education§

Countries that did develop democratically (Polity2 scores 6-10)		
Began period with female education over 6 years A	Over 6 years of education achieved during this period B	Below 6 years of education achieved during this period C
Albania, Bulgaria, Chile, Croatia, Czech Republic, Estonia, Guyana, Hungary, South Korea, Latvia, Lithuania, Moldova, Panama, Russia, Slovak Republic, Slovenia, Ukraine, and Uruguay	Bolivia, Brazil, El Salvador, Honduras, Lesotho, Mongolia, Mexico, Namibia, Paraguay, South Africa, and Thailand	Bangladesh (4.85), Nicaragua (5.27), and Turkey* (5.5)

Countries that did not develop democratically (Polity2 score less than 6)		
Began period with female education over 6 years D	Over 6 years of education achieved during this period E	Below 6 years of education achieved during this period F
Armenia, China, Cuba, and Kazakhstan	Algeria*, Bahrain*, Gabon, Iran*, Jordan*, Kuwait*, Libya*, Malaysia, Qatar*, Saudi Arabia*, Singapore, Swaziland, UAE*, and Zimbabwe	Cambodia, Egypt*, Haiti, Laos, Morocco*, Myanmar, Nepal, Pakistan*, Syria*, Tunisia*, Vietnam

§ All nations in the table achieved a low fertility rate (< 4 children per woman).

* These nations have very low female labour force participation rates below 30%.

Nations without * had achieved female labour force participation above 30%.

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Table 1.13 List of countries in the descriptive analyses

Afghanistan	Dominican	Latvia	Rwanda
Albania	Republic	Lebanon	Saudi Arabia
Algeria	Ecuador	Lesotho	Senegal
Angola	Egypt	Liberia	Sierra Leone
Argentina	El Salvador	Libya	Singapore
Armenia	Equatorial	Lithuania	Slovak
Australia	Guinea	Macedonia	Republic
Austria	Eritrea	Madagascar	Slovenia
Azerbaijan	Estonia	Malawi	Solomon
Bahrain	Ethiopia	Malaysia	Islands
Bangladesh	Fiji	Mali	Somalia
Belarus	Finland	Mauritania	South Africa
Belgium	France	Mauritius	Spain
Benin	Gabon	Mexico	Sri Lanka
Bhutan	Gambia	Moldova	Sudan
Bolivia	Georgia	Mongolia	Swaziland
Botswana	Ghana	Morocco	Sweden
Brazil	Greece	Mozambique	Switzerland
Bulgaria	Guatemala	Myanmar	Syria
Burkina Faso	Guinea	Namibia	Tajikistan
Burundi	Guinea-Bissau	Nepal	Tanzania
Cambodia	Guyana	Netherlands	Thailand
Cameroon	Haiti	New Zealand	Togo
Canada	Honduras	Nicaragua	Trinidad
Central African	Hungary	Niger	Tunisia
Republic	India	Nigeria	Turkey
Chad	Indonesia	Norway	Turkmenistan
Chile	Iran	Oman	Uganda
China	Iraq	Pakistan	Ukraine
Colombia	Ireland	Panama	United Arab
Comoros	Israel	Papua New	Emirates
Costa Rica	Italy	Guinea	United
Cote d'Ivoire	Jamaica	Paraguay	Kingdom
Croatia	Japan	Peru	United States
Cuba	Jordan	Philippines	Uruguay
Cyprus	Kazakhstan	Poland	Uzbekistan
Czech Republic	Kenya	Portugal	Venezuela
Democratic	Korea North	Qatar	Vietnam
Republic of	Korea South	Republic of	Zambia
Congo	Kuwait	Congo	Zimbabwe
Denmark	Kyrgyzstan	Romania	(155)
Djibouti	Laos	Russia	

Table 1.14 List of countries in the multivariate analyses

Albania	El Salvador	Lithuania	Saudi Arabia
Algeria	Equatorial	Macedonia	Senegal
Angola	Guinea	Madagascar	Sierra Leone
Argentina	Eritrea	Malawi	Singapore
Armenia	Estonia	Malaysia	Slovak
Azerbaijan	Ethiopia	Mali	Republic
Bahrain	Fiji	Mauritania	Slovenia
Bangladesh	Gabon	Mexico	Solomon
Belarus	Gambia	Moldova	Islands
Benin	Georgia	Mongolia	Somalia
Bhutan	Ghana	Morocco	South Africa
Bolivia	Guatemala	Mozambique	Sri Lanka
Brazil	Guinea	Myanmar	Sudan
Bulgaria	Guinea-Bissau	Namibia	Swaziland
Burkina Faso	Guyana	Nepal	Syria
Burundi	Haiti	Nicaragua	Tajikistan
Cameroon	Honduras	Niger	Tanzania
Central African	Hungary	Nigeria	Thailand
Republic	Indonesia	Oman	Togo
Chad	Iran	Pakistan	Tunisia
Chile	Iraq	Panama	Turkey
China	Jordan	Papua New	Turkmenistan
Comoros	Kazakhstan	Guinea	Uganda
Cote d'Ivoire	Kenya	Paraguay	Ukraine
Croatia	Korea North	Peru	United Arab
Cuba	Korea South	Philippines	Emirates
Czech Republic	Kuwait	Poland	Uruguay
Democratic	Kyrgyzstan	Qatar	Uzbekistan
Republic of	Laos	Republic of	Vietnam
Congo	Latvia	Congo	Zambia
Djibouti	Lesotho	Romania	Zimbabwe
Egypt	Liberia	Russia	(120)
	Libya	Rwanda	

Table 1.15 Summary statistics – including democracies

Variable		Mean	Std. Dev.	Min	Max	Observations
Polity2	overall	0.769	7.336	-10	10	N = 3975
	between		6.091	-10	10	n = 155
	within		4.100	-13.962	12.653	T-bar = 25.645
sr1564	overall	1.008	0.152	0.805	2.531	N = 4027
	between		0.151	0.873	2.188	n = 155
	within		0.024	0.750	1.350	T-bar = 25.981
female education	overall	6.129	3.069	0.250	12.949	N = 3406
	between		2.962	0.577	12.456	n = 131
	within		0.844	2.325	8.902	T = 26
fertility rates	overall	3.877	1.921	1.080	8.310	N = 3959
	between		1.808	1.325	7.787	n = 155
	within		0.648	1.425	6.577	T-bar = 25.542
female labour force	overall	38.997	9.806	5.048	55.108	N = 4027
	between		9.679	10.382	52.868	n = 155
	within		1.799	31.166	45.410	T-bar = 25.981
urbanisation	overall	50.018	23.572	4.339	100.000	N = 4030
	between		23.355	6.765	100.000	n = 155
	within		3.686	25.125	65.966	T = 26
ln(gdp)	overall	8.066	1.292	4.735	11.181	N = 3544
	between		1.254	5.737	11.062	n = 150
	within		0.338	6.610	10.011	T-bar = 23.627
ln(gdp80)	overall	7.605	1.215	5.325	10.959	N = 3565
	between		1.230	5.325	10.959	n = 150
	within		0.000	7.605	7.605	T-bar = 23.767
ln (pop)	overall	3.803	1.374	0.086	8.744	N = 4007
	between		1.373	0.336	8.497	n = 155
	within		0.159	3.068	4.498	T-bar = 25.852

Table 1.16 Summary statistics – excluding democracies

Variable		Mean	Std. Dev.	Min	Max	Observations
Polity2	overall	-1.535	6.556	-10	10	N = 3102
	between		4.670	-10	7.538	n = 120
	within		4.626	-16.266	10.349	T-bar = 25.85
sr1564	overall	1.013	0.171	0.829	2.531	N = 3117
	between		0.170	0.873	2.188	n = 120
	within		0.027	0.756	1.356	T-bar = 25.975
female education	overall	5.434	2.914	0.250	12.609	N = 2522
	between		2.793	0.577	10.935	n = 97
	within		0.876	2.274	8.207	T = 26
fertility rates	overall	4.281	1.864	1.080	8.310	N = 3078
	between		1.735	1.444	7.751	n = 120
	within		0.701	1.830	6.982	T-bar = 25.65
female labour force	overall	38.990	10.413	5.048	53.764	N = 3117
	between		10.341	10.382	52.868	n = 120
	within		1.608	31.528	44.827	T-bar = 25.975
urbanisation	overall	45.807	22.380	4.339	100.000	N = 3120
	between		22.155	6.765	100.000	n = 120
	within		3.737	28.350	59.865	T = 26
Ln(gdp)	overall	7.673	1.148	4.735	11.181	N = 2677
	between		1.138	5.737	11.062	n = 115
	within		0.327	6.217	9.618	T-bar = 23.278
Ln(gdp80)	overall	7.279	1.138	5.325	10.959	N = 2698
	between		1.185	5.325	10.959	n = 115
	within		0.000	7.279	7.279	T-bar = 23.461
ln(pop)	overall	3.691	1.338	0.086	8.744	N = 3117
	between		1.332	0.336	8.497	n = 120
	within		0.170	2.956	4.386	T-bar = 25.975

Table 1.17 Summary statistics – excluding outliers

Variable		Mean	Std. Dev.	Min	Max	Observations
Polity2	overall	-1.287	6.523	-10	10	N = 2999
	between		4.548	-10	7.538	n = 116
	within		4.703	-16.018	10.598	T-bar = 25.853
sr1564	overall	0.987	0.066	0.829	1.595	N = 3016
	between		0.064	0.873	1.340	n = 116
	within		0.019	0.792	1.242	T = 26
female education	overall	5.387	2.954	0.250	12.609	N = 2418
	between		2.842	0.577	10.935	n = 93
	within		0.856	2.564	8.146	T = 26
fertility rates	overall	4.301	1.884	1.080	8.310	N = 2974
	between		1.761	1.444	7.751	n = 116
	within		0.690	1.849	7.001	T-bar = 25.638
female labour force	overall	39.785	9.583	8.854	53.764	N = 3016
	between		9.494	11.852	52.868	n = 116
	within		1.561	33.365	45.622	T = 26
urbanisation	overall	44.293	21.160	4.339	100.000	N = 3016
	between		20.905	6.765	100.000	n = 116
	within		3.789	26.836	58.351	T = 26
ln(gdp)	overall	7.596	1.073	4.735	10.723	N = 2598
	between		1.036	5.737	9.878	n = 111
	within		0.327	6.140	9.541	T-bar = 23.405
ln(gdp80)	overall	7.191	1.038	5.325	9.691	N = 2614
	between		1.066	5.325	9.691	n = 111
	within		0.000	7.191	7.191	T-bar = 23.550
ln(pop)	overall	3.663	1.328	0.086	8.744	N = 3016
	between		1.324	0.336	8.497	n = 116
	within		0.165	3.078	4.091	T = 26

Table 1.18 Correlation matrix – 155 countries, including democratic nations

	polity2	sr1564	femeduc	fertility	labour	urban	lngdp80	lngdp	ln(pop)
Polity2	1								
sr1564	-0.2179*	1							
femeduc	0.4940*	-0.0173	1						
fertility	-0.4976*	0.0637*	0.8304*	1					
labour	0.1671*	-0.5603*	0.1973*	-0.1190*	1				
urban	0.2936*	0.2401*	0.6283*	-0.6341*	-0.2514*	1			
ln(gdp80)	0.3855*	0.2933*	0.7342*	-0.6971*	-0.2151*	0.8367*	1		
ln(gdp)	0.4584*	0.2621*	0.7795*	-0.7612*	-0.1997*	0.8287*	0.9307*	1	
ln(pop)	0.1450*	-0.0247	0.0934*	-0.3313*	0.0163	0.0514*	0.0498*	0.1121*	1

Table 1.19 Correlation matrix – 120 countries, excluding democratic nations

	polity2	sr1564	femeduc	fertility	labour	urban	lngdp80	lngdp	ln(pop)
Polity2	1								
sr1564	-0.2281*	1							
femeduc	0.3358*	0.028	1						
fertility	-0.3166*	0.0317	-0.8270*	1					
labour	0.1936*	-0.5849*	0.1209*	-0.0946*	1				
urban	0.0938*	0.3214*	0.5585*	-0.5768*	-0.3635*	1			
Ln(gdp80)	0.1260*	0.4207*	0.6536*	-0.5969*	-0.3600*	0.8367*	1		
ln(gdp)	0.1897*	0.4047*	0.6988*	-0.6746*	-0.3851*	0.8315*	0.9137*	1	
ln(pop)	0.0821*	-0.0114	0.1340*	-0.3332*	0.0719*	0.0469*	-0.0009	0.0176*	1

Table 1.20 Correlation Matrix - 116 countries, excluding outliers

	polity2	sr1564	femeduc	fertility	labour	urban	lngdp80	lngdp	ln(pop)
Polity2	1								
sr1564	-0.1531*	1							
femeduc	0.3673*	-0.1460*	1						
fertility	-0.3363*	0.1807*	-0.8276*	1					
labour	0.1220*	-0.6153*	0.1722*	-0.1249*	1				
urban	0.1849*	0.0898*	0.5789*	-0.6017*	-0.2572*	1			
ln(gdp80)	0.2431*	0.1150*	0.6978*	-0.6347*	-0.2268*	0.8198*	1		
ln(gdp)	0.2961*	0.1815*	0.7298*	-0.7047*	-0.2762*	0.8124*	0.8991*	1	
ln(pop)	0.1104*	-0.1318*	0.1269*	-0.3300*	0.1253*	0.0043	-0.0476*	0.0385*	1

Table 1.21 Developed countries (IMF classification)

Australia	Greece	New Zealand	Sweden
Austria	Hungary	Norway	Switzerland
Belgium	Ireland	Poland	United
Canada	Israel	Portugal	Kingdom
Cyprus	Italy	Singapore	United States
Czech Republic	Japan	Slovak Republic	(29)
Denmark	Korea South	Slovenia	
Finland	Netherlands	Spain	
France			

Table 1.22 Developing countries

Afghanistan	Djibouti	Lebanon	Russia
Albania	Dominican	Lesotho	Rwanda
Algeria	Republic	Liberia	Saudi Arabia
Angola	Ecuador	Libya	Senegal
Argentina	Egypt	Lithuania	Sierra Leone
Armenia	El Salvador	Macedonia	Solomon
Azerbaijan	Equatorial	Madagascar	Islands
Bahrain	Guinea	Malawi	Somalia
Bangladesh	Eritrea	Malaysia	South Africa
Belarus	Estonia	Mali	Sri Lanka
Benin	Ethiopia	Mauritania	Sudan
Bhutan	Fiji	Mauritius	Swaziland
Bolivia	Gabon	Mexico	Syria
Botswana	Gambia	Moldova	Tajikistan
Brazil	Georgia	Mongolia	Tanzania
Bulgaria	Ghana	Morocco	Thailand
Burkina Faso	Guatemala	Mozambique	Togo
Burundi	Guinea	Myanmar	Trinidad
Cambodia	Guinea-Bissau	Namibia	Tunisia
Cameroon	Guyana	Nepal	Turkey
Central African	Haiti	Nicaragua	Turkmenistan
Republic	Honduras	Niger	Uganda
Chad	India	Nigeria	Ukraine
Chile	Indonesia	Oman	United Arab
China	Iran	Pakistan	Emirates
Colombia	Iraq	Panama	Uruguay
Comoros	Jamaica	Papua New	Uzbekistan
Costa Rica	Jordan	Guinea	Venezuela
Cote d'Ivoire	Kazakhstan	Paraguay	Vietnam
Croatia	Kenya	Peru	Zambia
Cuba	Korea North	Philippines	Zimbabwe
Democratic	Kuwait	Qatar	(126)
Republic of	Kyrgyzstan	Republic of	
Congo	Laos	Congo	
	Latvia	Romania	

Table 1.23 Muslim majority nations

Afghanistan	Guinea	Mauritania	Syria
Albania	Indonesia	Morocco	Tajikistan
Algeria	Iran	Niger	Tunisia
Azerbaijan	Iraq	Nigeria	Turkey
Bahrain	Jordan	Oman	Turkmenistan
Bangladesh	Kazakhstan	Pakistan	United Arab
Burkina Faso	Kuwait	Qatar	Emirates
Chad	Kyrgyzstan	Saudi Arabia	Uzbekistan
Comoros	Lebanon	Senegal	(43)
Djibouti	Libya	Sierra Leone	
Egypt	Malaysia	Somalia	
Gambia	Mali	Sudan	

Table 1.24 Natural resources

Algeria	Gabon	Oman	Trinidad and
Angola	Indonesia	Qatar	Tobago
Azerbaijan	Iran	Republic of	Turkmenistan
Bahrain	Iraq	Congo	United Arab
Ecuador	Kazakhstan	Saudi	Emirates
Egypt	Kuwait	Arabia	Venezuela (24)
Equatorial	Libya	Syria	
Guinea	Nigeria		

Founding members of OPEC were Iran, Iraq, Kuwait, Saudi Arabia, and Venezuela. These countries were joined later by Qatar (1961), Indonesia (1962-2009), Libya (1962), United Arab Emirates (1967), Algeria (1969), Nigeria (1971), Ecuador (1973-2007), Gabon (1975-1995), and Angola (2007).

Table 1.25 List of countries by regime type – three categories

Always Autocratic or Anocratic

Afghanistan	Republic of	Liberia	Singapore
Algeria	Congo	Libya	Somalia
Angola	Djibouti	Malaysia	Sri Lanka
Armenia	Egypt	Mauritania	Sudan
Azerbaijan	Equatorial	Morocco	Swaziland
Bahrain	Guinea	Mozambique	Syria
Belarus	Eritrea	Myanmar	Tajikistan
Bhutan	Ethiopia	Nepal	Tanzania
Burkina Faso	Gabon	Nigeria	Togo
Cambodia	Gambia	Oman	Tunisia
Cameroon	Guinea	Pakistan	Turkmenistan
Central African	Haiti	Papua New	Uganda
Republic	Iraq	Guinea	United Arab
Chad	Jordan	Qatar	Emirates
China	Kazakhstan	Republic of	Uzbekistan
Cote d'Ivoire	Korea North	Congo	Vietnam
Cuba	Kuwait	Rwanda	Zambia
Democratic	Kyrgyzstan	Saudi Arabia	Zimbabwe (67)
	Laos	Sierra Leone	

Transition to Democracy

Albania	Ghana	Macedonia	Romania
Argentina	Guatemala	Madagascar	Russia
Bangladesh	Guinea-Bissau	Malawi	Senegal
Benin	Guyana	Mali	Slovak
Bolivia	Honduras	Mexico	Republic
Brazil Bulgaria	Hungary	Moldova	Slovenia
Burundi	Indonesia	Mongolia	South Africa
Chile	Iran	Namibia	Thailand
Comoros	Kenya	Nicaragua	Turkey
Croatia	Korea South	Niger	Ukraine
Czech Republic	Latvia	Panama	Uruguay (53)
El Salvador	Lebanon	Paraguay	
Estonia	Lesotho	Philippines	
Georgia	Lithuania	Poland	

Democratic throughout the period

Australia	Canada	Denmark	Fiji
Austria	Colombia	Dominican	Finland
Belgium	Costa Rica	Republic	France
Botswana	Cyprus	Ecuador	Greece

India
Ireland
Israel
Italy
Jamaica
Japan

Mauritius
Netherlands
New Zealand
Norway
Peru

Portugal
Solomon Islands
Spain
Sweden
Switzerland
Trinidad

United
Kingdom
United States
Venezuela (35)

Table 1.26: List of countries by regime type – eight categories

Always Autocratic

Afghanistan	Eritrea	Myanmar	Syria
Azerbaijan	Iraq	Nepal	Turkmenistan
Bahrain	Kazakhstan	Oman	United Arab Emirates
Belarus	Korea North	Qatar	Uzbekistan
Bhutan	Kuwait	Saudi Arabia	Vietnam (25)
China	Laos	Swaziland	
Cuba	Libya		

Autocratic to Anocratic

Algeria	Republic of	Jordan	Sierra Leone
Angola	Congo	Kyrgyzstan	Somalia
Armenia	Djibouti	Liberia	Sudan
Burkina Faso	Egypt	Mauritania	Tajikistan
Cameroon	Equatorial	Morocco	Tanzania
Central African Republic	Guinea	Mozambique	Togo
Cote d'Ivoire	Ethiopia	Pakistan	Tunisia
Democratic	Gabon	Republic of	Zambia (32)
	Guinea	Congo	
	Haiti	Rwanda	

Autocratic to Democratic

Albania	Georgia	Lesotho	Panama
Argentina	Ghana	Lithuania	Paraguay
Benin	Guinea-Bissau	Macedonia	Philippines
Bolivia	Guyana	Madagascar	Poland
Bulgaria	Hungary	Malawi	Romania
Burundi	Indonesia	Mali	Russia Slovak Republic
Chile	Kenya	Moldova	Ukraine
Czech Republic	Korea South	Mongolia	Uruguay (36)
Estonia	Latvia	Niger	

Always Anocratic

Cambodia, Chad, Malaysia, Papua New Guinea, Singapore, Uganda, Zimbabwe (7)

Anocratic to Democratic

Bangladesh	El Salvador	Lebanon	Senegal
Brazil	Guatemala	Mexico	Slovenia
Comoros	Honduras	Namibia	South Africa
Croatia	Iran	Nicaragua	Thailand

Turkey (17)

Always Democratic

Australia	Republic	Jamaica	Sweden
Austria	Ecuador	Japan	Switzerland
Belgium	Fiji	Mauritius	Trinidad
Botswana	Finland	Netherlands	United
Canada	France	New Zealand	Kingdom
Colombia	Greece	Norway	United States
Costa Rica	India	Peru	Venezuela (35)
Cyprus	Ireland	Portugal	
Denmark	Israel	Solomon Islands	
Dominican	Italy	Spain	

Democratic to Anocratic

Sri Lanka, Gambia (2)

Anocratic to Autocratic

Iran (1)

Study Three – Gender Equality and Democracy

Table 1.27 List of countries included in regression analyses

Albania	Republic	Liberia	Saudi Arabia
Algeria	Ecuador	Libya	Senegal
Angola	Egypt	Macedonia	Sierra Leone
Argentina	El Salvador	Madagascar	Somalia
Armenia	Equatorial	Malaysia	South Africa
Azerbaijan	Guinea	Malawi	Sri Lanka
Bahrain	Eritrea	Mali	Sudan
Bangladesh	Ethiopia	Mauritania	Swaziland
Belarus	Fiji	Mauritius	Syria
Benin	Gabon	Moldova	Tajikistan
Bhutan	Gambia	Mongolia	Tanzania
Bolivia	Georgia	Morocco	Thailand
Botswana	Ghana	Mozambique	Timor-Leste
Brazil	Guatemala	Myanmar	Togo
Burkina Faso	Guinea	Namibia	Trinidad and
Burundi	Guinea-Bissau	Nepal	Tobago
Cambodia	Haiti	Nicaragua	Tunisia
Cameroon	Honduras	Niger	Turkmenistan
Central African	India	Nigeria	Uganda
Republic	Indonesia	Oman	Ukraine
Chad	Iran	Pakistan	United Arab
China	Jamaica	Panama	Emirates
Colombia	Jordan	Papua New	Uruguay
Costa Rica	Kazakhstan	Guinea	Uzbekistan
Cote d'Ivoire	Kenya	Paraguay	Venezuela
Croatia	Korea North	Peru	Vietnam
Cuba	Kuwait	Philippines	Yemen
Democratic	Kyrgyzstan	Republic of	Zambia (113)
Republic of	Laos	Congo	
Congo	Lebanon	Russia	
Dominican	Lesotho	Rwanda	

Table 1.28 Muslim majority nations

Albania	Iran	Niger	Tajikistan
Algeria	Jordan	Nigeria	Tunisia
Azerbaijan	Kazakhstan	Oman	Turkmenistan
Bahrain	Kuwait	Pakistan	United Arab Emirates
Bangladesh	Kyrgyzstan	Saudi Arabia	Uzbekistan
Burkina Faso	Lebanon	Senegal	Yemen (38)
Chad	Libya	Sierra Leone	
Egypt	Malaysia	Somalia	
Gambia	Mali	Sudan	
Guinea	Mauritania	Syria	
Indonesia	Morocco		

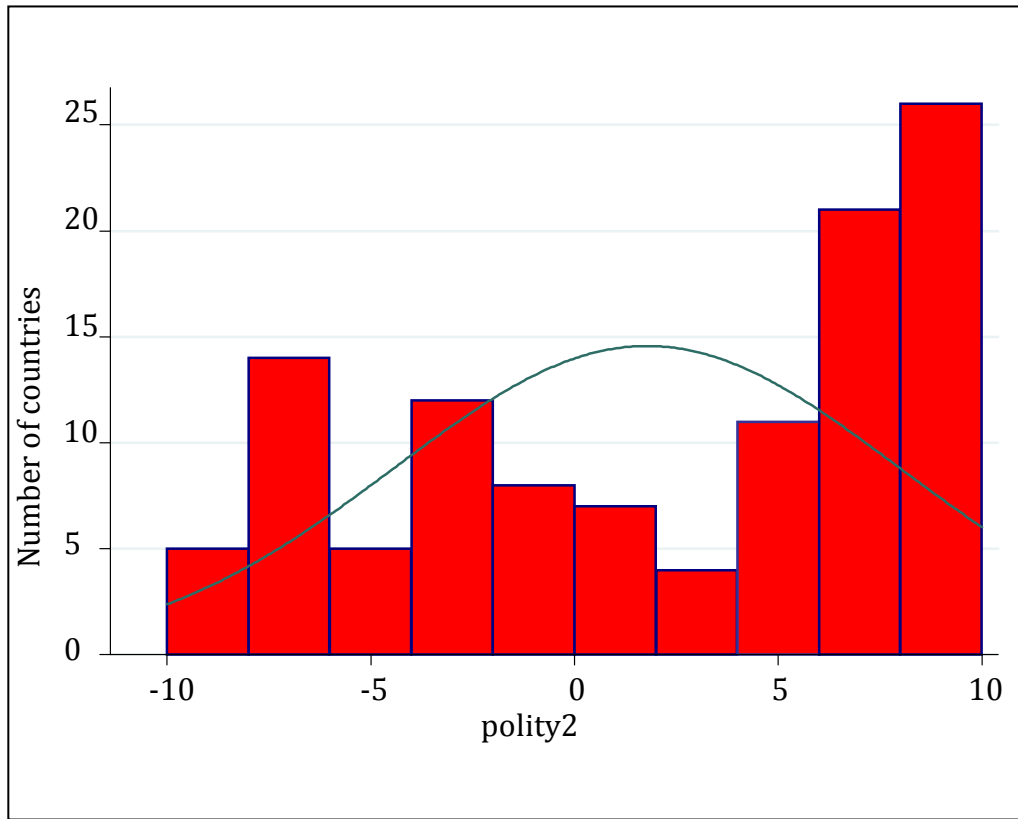


Fig. 7.9 Distribution of Polity2 in 2009

Table 1.29 Univariate generalised linear regression analyses

Variable	Obs	Mean	Std.		
			Dev.	Min	Max
Polity2	113	1.779	6.187	-10	10
polygamy	113	0.553	0.408	0	1
parental authority	112	0.589	0.415	0	1
inheritance	111	0.626	0.333	0	1
female genital mutilation	106	0.868	0.267	0.06	1
violence	113	0.417	0.236	0	0.92
son preference	113	0.874	0.229	0	1
freedom of movement	112	0.848	0.250	0	1
dress code	113	0.881	0.252	0	1
land ownership	112	0.643	0.318	0	1
bank loans	113	0.730	0.292	0	1
property ownership	112	0.737	0.292	0	1
lngdp	113	8.163	0.992	6.397	10.824
total education	91	6.586	2.390	1.239	11.292
urbanisation	113	49.228	21.267	10.7	98.38
ln(pop)	113	116.186	198.266	1.745	1538.918
Muslim	113	0.336	0.475	0	1

Table 1.30 Spearman's correlation matrix

	polity2	polygamy	authority	inheritance	genmut	violence	sonpref	freemove	dresscode
Polity2	1								
polygamy	0.2785*	1							
authority	0.2577*	0.5671*	1						
inheritance	0.1009	0.6522*	0.6169*	1					
genmut	0.1206	0.3503*	0.4062*	0.4523*	1				
violence	0.3345*	0.3149*	0.3297*	0.2582*	0.1609	1			
sonpref	0.2287*	0.1079	0.2499*	0.0499	-0.0808	0.0993	1		
freemove	0.2246*	0.3757*	0.4931*	0.4147*	0.0198	0.3009*	0.4254*	1	
dresscode	0.2516*	0.2786*	0.4676*	0.2898*	0.1723	0.1568	0.4893*	0.6340*	1
land	0.0685	0.5799*	0.5397*	0.6474*	0.3312*	0.3148*	0.066	0.2349*	0.1878*
bank	0.0161	0.4964*	0.5005*	0.5629*	0.3748*	0.2242*	-0.0462	0.2714*	0.1949*
property	0.0667	0.2691*	0.3041*	0.2702*	0.0301	0.0936	-0.0675	0.0383	0.0236
ln(gdp)	-0.0545	0.3267*	0.1481	0.2755*	0.4019*	0.2160*	-0.1694	-0.1443	-0.1381
toteduc	0.1517	0.5249*	0.3268*	0.4466*	0.4119*	0.3627*	0.1004	0.1013	0.0326
urban	-0.015	0.3120*	0.0769	0.2995*	0.2543*	0.1373	-0.0052	-0.1211	-0.1522
ln(pop)	0.0469	0.1678	-0.0889	0.0203	0.158	0.0913	-0.1879*	-0.1487	-0.1782
Muslim	-0.3941*	-0.2772*	-0.4276*	-0.2974*	-0.3283*	-0.1277	-0.3452*	-0.3211*	-0.5933*

	land	bank	property	ln(gdp)	toteduc	urban	ln(pop)	Muslim
land	1							
bank	0.5859*	1						
property	0.3054*	0.3501*	1					
ln(gdp)	0.4043*	0.4311*	0.0956	1				
toteduc	0.4491*	0.4829*	0.0456	0.6468*	1			
urban	0.3628*	0.2765*	0.1139	0.6327*	0.4762*	1		
n(pop)	0.0106	0.0351	-0.08	0.1286	0.0343	-0.0148	1	
Muslim	-0.1447	-0.0803	-0.0642	0.0743	-0.1041	0.1004	0.082	1

Appendix B: Copy of Published Article

1. Wyndow, P., Li, J., Mattes, E. (in press). Female empowerment as a core driver of democratization: A dynamic panel model from 1980 to 2005. *World Development*, 52 (0) 34-54. DOI: 10.1016/j.worlddev.2013.06.004

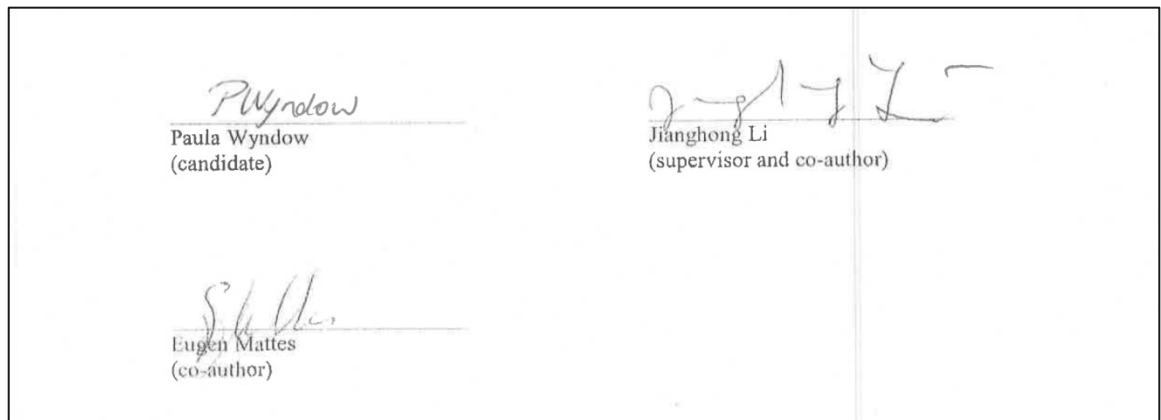
[Note: For ease of inclusion of the edited proof in press, the article is included after Appendix C & D]

Appendix C: Statement of Contribution by Co-Authors

To whom it may concern,

Paula Wyndow was the primary author of the paper listed below, completed the data analysis, interpretation of results and writing of the paper. Jianghong Li contributed to the conceptual development, analysis design, the interpretation of results and writing of the paper. Eugen Mattes assisted with the initial conceptual development and writing of the paper. All co-authors have edited drafts of the paper.

1. Wyndow, P., Li, J., & Mattes, E. (in press). Female empowerment as a core driver of democratization: A dynamic panel model from 1980 to 2005. Accepted by World Development for publication on June 18, 2013. DOI: 10.1016/j.worlddev.2013.06.004



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Wyndow, P., Li, J., & Mattes, E. (2013). Female empowerment as a core driver of democratization: A dynamic panel model from 1980 to 2005. *World Development*, 52(0) 34-54. DOI: 10.1016/j.worlddev.2013.06.004

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Female Empowerment as a Core Driver of Democratic Development: A Dynamic Panel Model from 1980 to 2005

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Summary. — We investigated the causal effects of female empowerment (female educational attainment, female labor force participation, and total fertility rates) on democratic development for 97 countries from 1980 to 2005. Using Polity IV as an indicator of levels of democracy, our results show that female empowerment was strongly associated with democratic development over this period. The effect of female education increased with lags of 5 and 10 years, suggesting that democracy is more likely to occur in nations with a history of educating girls and a longer experience of the social and economic conditions that have occurred because of this investment.
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Key words — democracy, gender equality, economic development, modernization theory, social institutions, gender theory, cross-nation

1. INTRODUCTION

In the latter part of the 20th century many countries moved away from autocratic rule toward more democratic regimes. During this period women's economic and social rights also improved, with greater access to education (Barro & Lee, 2010) and employment (UN, 2000), and a world wide fall in fertility rates (World Bank, 2011). The general presumption has been that democracy leads to improvements in these aspects of gender equality. However, insufficient attention has been paid to the possibility that a causal relationship may operate in the opposite direction. Hence, the absence of empirical studies investigating the role played by improvements in women's rights in advancing democracy is a significant gap in the research literature. Existing literature on the social and economic determinants of democracy has tended to focus on income and factors closely associated with it, such as mass education and urbanization (Barro, 1999; Bollen, 1979; Epstein, Bates, Goldstone, Kristensen, & O'Halloran, 2006; Glaeser, Ponzetto, & Shleifer, 2007; Lipset, 1994; Londregan & Poole, 1996; Papaioannou & Siourounis, 2008). However, there are still many wealthy countries that have not become democratic, particularly throughout the Middle-East. This challenges the assumption that wealth automatically leads to more democratic regimes, and suggests a possible role for gender equality and female empowerment in advancing democracy.

While we recognize that there are many factors that contribute to the democratic development process, the purpose of this paper is to address the "gender lacuna" (Baldez, 2010) or gender gap in comparative politics and to incorporate a gendered perspective into democratic development theory. Specifically, this cross-national study investigates the causal relationship between female empowerment and democratic development from 1980 to 2005 for countries that began the period as non-democratic. Democracy is measured on a continuum using the Polity IV dataset and democratic development refers to a country's temporal movement toward democracy. Three indicators representing the empowerment of women are female educational attainment, fertility rates, and female labor force participation, and they reflect the interplay between women's productive and reproductive activities. A dynamic panel model with a System Generalized Method of Moments (GMM)

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estimator is employed to account for the possibility that the relationship between female empowerment and democratic development is influenced by endogeneity and autocorrelation.

Our results show that improvements in female empowerment were associated with democratic development over this period, with female education and female labor force participation having a significant positive and causal effect on these movements. The magnitude of the effect of female education increased with lags of 5 and 10 years, suggesting that democracy is more likely to occur in countries with a history of educating girls and possibly a longer experience of the social and economic conditions that have occurred because of this investment. Moreover, it appears that all three empowerment indicators were requisites for democracy to occur, with deficits in any area hindering democratic development. This highlights the importance of recognizing the interplay between women's productive and reproductive activities for advancing democracy.

2. THE DETERMINANTS OF DEMOCRACY

With countries moving away from autocracy toward more democratic regimes in the latter part of the 20th century many scholars have sought to understand the preconditions required for democracy to emerge and be sustained. According to the modernization theory democracy is more likely to occur in affluent and educated societies (Lipset, 1959, 1994). Lipset (1959) conceptualized modernization as changes in the factors of industrialization, urbanization, wealth, and education which are so closely interrelated as to form one common factor. The positive association between income and democracy (Barro, 1999; Bollen, 1979; Epstein, Bates, Goldstone, Kristensen, & O'Halloran, 2006; Glaeser *et al.*, 2007; Lipset, 1994; Londregan & Poole, 1996; Papaioannou & Siourounis, 2008), and a country's average education level and democracy (Barro, 1999; Feng & Zak, 1999; Glaeser *et al.*, 2007; Lutz, Cuaresma, & Abbasi-Shavazi 2010; Papaioannou & Siourounis, 2008; Persson & Tabellini, 2009) is an empirical regularity in the democratization literature. However, the effect of urbanization on democratization appears to be negligible or negative (Barro, 1999; Epstein *et al.*, 2006; Ross, 2001), except when established democracies are removed from the analyses (Castelló-Climent, 2008), then urbanization has a positive effect.¹

Despite strong evidence supporting the modernization theory, others argue that income and education have no *causal* effect on democracy. Acemoglu, Johnson, Robinson, and Yared (2005, 2008) found no evidence of a *causal* relationship between income and democracy or between total education and democracy, once country fixed effects were controlled for. However, others questioned their statistical methods and argued that the Blundell-Bond system GMM estimator was more appropriate to use when variables were highly persistent, rather than the Arellano-Bond first difference GMM estimator (Bobba & Covello, 2007; Castelló-Climent, 2008). In doing so, these authors found that total education was causally related to democracy. Moreover, in a seminal piece of work Przeworski and Limongi (1996) argued that the main effect of income on political change was to sustain democracies once they transitioned via other means.² However, subsequent critiques of Przeworski *et al.*'s findings and further analyses by Boix and Stokes (2003) and Epstein *et al.* (2006) showed that the modernization theory still held. Hadenius and Teorell (2005) found that while income had a positive effect among the more democratic countries and countries still in transition, their results showed that income had no significant effect on regime change in fully autocratic countries. This suggests that other factors over and above eco-

nomic development are required for democratic development to occur in these countries.

Recent studies suggest that in countries where total increases in wealth results in a more equal distribution of education and or income, democracy is more likely to emerge (Boix & Stokes, 2003; Castelló-Climent, 2008; Muller, 1995). Moreover, a study by Lutz *et al.* (2010) showed that while total education attainment was significant, increases in female education was also a core driver of democracy. Thus, while total levels of income and education are associated with higher levels of democracy, it appears that transitions out of autocracy may require a more equal distribution of economic and social resources between socio-economic groups and between genders. This suggests a possible role for gender equality and female empowerment in advancing democracy.

3. GENDER EQUALITY AND DEMOCRACY

Inglehart and Baker (2000) and Inglehart and Welzel (2009, 2010) make an important contribution to the democratization literature by attempting to explain the causal mechanism through which modernization creates the desire or demand for democracy. They propose that gains in economic security and development shift people's focus from survival to self-expression values, such as trust, tolerance, political activism, support for gender equality, and emphasis on freedom of expression. Rather than being a consequence of democratic transition, these authors suggest that gender equality is an important part of the broad cultural changes taking place that supports the spread of democracy (Inglehart, Norris, & Welzel, 2002). Implicit in these studies is the presumption that both gender equality and democratic development occur as a consequence of economic development. However, others have argued that economic development does not always improve the status of women (Boserup, 1970; Marchand & Parpart, 1995), particularly where patriarchal institutions still exist and where cultural norms, laws, and traditions restrict women's access to resources (Morrisson & Jütting, 2005).

Studies which test these assumptions are scarce. Using cross-sectional data to examine the causal link between Islam and authoritarianism, Fish (2002) identified the subordinate status of women as a factor contributing to the democratic deficit in Muslim countries. Specifically, gender literacy gaps, sex ratio imbalances (more males than females in the population), low percentages of women in government and a low gender empowerment score (GEM)³ were significantly correlated with more authoritarian regimes. Moreover, all these factors reduced the association between Islam and authoritarianism. Donno and Russett (2004) first replicated and then expanded Fish's study (Fish, 2002), using a more sophisticated model to test the causal link between women's status and democracy. They found that the indicators of women's rights (excluding the proportion of women in government) had no causal or independent effect on regime type. Additionally, their results showed that the negative impact of Islam on democracy was attributed to being an Arab country, rather than being an Islamic country. Both studies include democratic and nondemocratic countries and thus have difficulty (as Fish concedes) in identifying the direction of causation between gender equality and democracy. Donno and Russett's findings are further limited to the period of time toward the end of the 1990s and many of the countries included in their sample were already democratic prior to this period. Finally, studies linking modernization, democracy, and gender equality (Beer, 2009; Donno and Russett (2004), Fish, 2002; Inglehart *et al.*, 2002) are further complicated by the lack of consensus over the mean-

ings and measurement of democracy, women's status, and female empowerment. Accordingly, we address these issues next.

(a) *Conceptualizing democracy*

Democracy is a highly complex, multi-faceted concept that is contested at many levels. Firstly, there is disagreement as to whether democracy is a binary concept (Alvarez, Cheibub, Limongi, & Przeworski, 1996; Boix & Stokes, 2003) or a continuous concept (Bollen & Jackman, 1989; Jagers & Gurr, 1995). Others call for the recognition of the hybrid regime where countries may have elements of both democratic and autocratic regimes (Diamond, 2002; Epstein *et al.*, 2006). In the democratization literature the definition and measurement of democracy largely follows Dahl's narrow view of "polyarchy" rather than democracy. Its key characteristics are the existence of free, fair, and competitive elections, and the ability of its citizens to formulate and signify their preferences (Dahl, 1971). While narrow definitions of democracy have been criticized for being too minimalist and not including other attributes, such as measures of social and economic equality, it has also been argued that using an all-encompassing measure of democracy makes it difficult to separate social or economic progress from political progress (Di Palma, 1990; Munck & Verkuilen, 2002), and to test the effects of one element on another.

As the focus of this study is the causal effect of female empowerment on democratic development a narrow definition of democracy is used to separate political rights from social or economic rights. Consequently, democracy is conceptualized as a system of governance that allows free and fair elections, where there are constraints on executive power, and where there is universal suffrage. It is viewed as being on a continuum with countries embracing some or all of the elements of this system of governance.

(b) *Conceptualizing female empowerment*

The Beijing Declaration and Platform for Action set an agenda for the empowerment of women, and reaffirmed "women's rights as human rights." This document stresses that the empowerment of women and the equalization of men and women's rights are of critical concern for "achieving political, social, economic, cultural, and environmental security among all peoples" (United Nations, 1995). Since then, the term "empowerment" has been freely used, with many attempts to conceptualize and define this term. Ibrahim and Alkire (2007) identified more than 20 definitions of "empowerment" in the literature. The commonality in these descriptions is the relationship between a woman's individual agency and the macro-social structures or institutions that enhance or restrict a woman's ability to exercise that agency. Furthermore, empowerment is generally conceptualized as a process, where, over time, an individual moves from a lesser state to higher one (Kabeer, 1999; Rowlands, 1995).

This study is particularly interested in the transformative power of agency or "enabling factors" (Kishor, 2000) that challenge existing structures of patriarchy, particularly in authoritarian regimes. These include female education, female labor force participation, and fertility rates. We concede that aggregate measures fail to capture the efficacy of each of these items as tools for empowerment in different contexts and at different points in a woman's life course (Mason, 1986). However, the value of these three aggregate measures is that they enable us to measure female empowerment as a process because they are readily available for many countries over a long period of time, making cross-country comparisons possible. Moreover, the

inclusion of all three variables together represents a significant cultural shift in gender roles within a country and enables us to examine if and how deficits in one or more areas may hinder democratic development.

4. FEMALE EMPOWERMENT AND DEMOCRATIC DEVELOPMENT

Intuitively, the relationship between gender equality and democracy appears axiomatic. Since the UN Decade for Women (1975–85) international strategies and conventions, such as the Convention on the Elimination of All Forms of Discrimination against Women (CEDAW) and the Millennium Development Goals, have created a strong mandate to ensure that gender equality and women's empowerment are an essential component of development and democracy. But what is the *causal* mechanism underpinning such a relationship and why would female empowerment in particular, promote democratic development?

The preamble from the Universal Declaration of Rights (1948) declares that democracy is based on the "freely expressed will of the people to determine their own political, economic, social, and cultural systems, and their full participation in all aspects of their lives." However, as women bear a disproportionate level of the world's poverty (UNDP, 1995), women's ability to shape their own lives and that of society is limited unless women gain access to and control over resources that are tools for empowerment. These include, but are not limited to, education, reproduction, and employment.⁴ As women become less burdened by childbearing and childrearing, are more educated and as they enter the work force, they become increasingly conscious of the gender inequalities that exist in society. Over time, women realize that their demands for gender equality are linked to a political regime that is more responsive to their needs (Arat, 1994), thus a push for *both* gender equality and democracy ensues.⁵

Empowering women through education and employment may have a causal effect on democratic development by raising the benefits of political participation and expanding the broad base of support for democracy. "It is more appealing to participate in a collective activity the more educated a person is, and the more educated the other participants are" (Glaeser *et al.*, 2007, p. 8). These authors suggest that *anything* that promotes collective action will also promote democracy. In 2006 the "*One Million Signatures Campaign*" was established in Iran to achieve two main goals. The first was to raise women's awareness of their individual human rights; the second was to demand legal changes to discriminatory laws against women. At the same time, the campaign strengthened the democratic reform agenda as women raised their voices with men advocating for change (Jahanshahrad, 2012). Hence, we argue that the increased participation of women in education will motivate *both* women and men to be more involved in grass roots political activism, thus expanding the broad base of support for democracy.

(a) *Female education*

Educating both boys and girls is acknowledged as a universal human right with benefits for individuals and society. However, educating girls indirectly advances democratic development by producing other socio-economic gains, above and beyond educating boys. These include reduced fertility, (Lehr, 2009; Lena & London, 1993), lower child mortality (Cleland & van Ginneken, 1988), and increased female labor force participation (Bloom, Canning, Fink, & Finlay, 2009).

Likewise, educating girls builds the human capital of the current and future generations of one half of the population, which in turn reduces the fertility rate of the next generation (Blumberg, 1989), and promotes long-term economic growth (Galor & Weil, 1996; Psacharopoulos & Patrinos, 2004). Educating girls also reduces gender inequalities as educated women are also more likely than noneducated women to educate their sons and daughters, thus increasing the overall distribution of education (Basu, 2002).

(b) *Female labor force participation*

The expansion of economic rights for women is an important tool for female empowerment and raising women's status (Blumberg, 1984, 2007; Chafetz, 1990; Collins, Chafetz, Blumberg, Coltrane, & Turner, 1993). While others have questioned its validity as a tool for empowering women in developing countries, particularly within the domestic sphere (Malhotra & Mather, 1997), female labor force participation, like education, appears to play an important role in raising women's political consciousness (Iversen & Rosenbluth, 2008; Ross, 2006; Staeheli & Cope, 1994). Women's entry into the work force creates the impetus for democratic transition as women are increasingly exposed to gender discrimination, and try to juggle the demands of both work and home. Regular association with other women at work creates opportunities to share grievances and discusses strategies to overcome them. This may be lobbying unions to improve their working conditions or forming organizations to protest against discriminatory laws and practices. Concomitantly, working women's policy interests change as their challenges become increasingly disparate to those of the males in their family (Iversen & Rosenbluth, 2006). Conversely, women in the traditional role of wife and mother are less likely to agitate for change or mobilize politically. Women's exclusion from the labor force appears to be a key factor in explaining the persistence of autocratic regimes in Muslim countries (Ross, 2008).

Women's participation in the labor force is also important for democratic development because it gives women individual autonomy and disperses the concentration of power from men in society. The importance of women's struggle for full citizenship—that is participation across all domains—contributes to changes in the relationship between the state and the citizen (Moghadam, 2007). The presence of more women in formal employment, in parliament, in the judiciary, and in leadership positions ensures that women's struggle for equal rights becomes highly visible as it is played out in the public sphere (Kazemi, 2000). This weakens the strength of the elites and creates opportunities for democratic development to occur.

Finally, women's economic participation is important for democratic development because it changes the social structure of society from a pyramid, with a large lower class, to a diamond with a growing middle class. Additionally, women are more likely than men to save and to reinvest their earnings back in to the health and education of their families (Jowett, 2000; Sinha, Raju, & Morrison, 2007), further expanding the human capital base of the middle class in the current and future generations. Consequently, a stronger middle class emerges, creating a greater impetus for political change.

(c) *Fertility rates*

There is scant theoretical and empirical literature on the direct relationship between fertility rates and political regimes. Przeworski, Alvarez, Cheibub, and Limongi (2000, p. 233) found that falling birth rates are associated with transitions

from dictatorships to democracies, and rising birth rates are associated with democratic reversals. Moreover, they found that stable dictatorships record higher rates of fertility than stable democracies. In a recent, longitudinal study examining the effect of demography and education on democratization, Lutz *et al.* found that fertility declines had an *independent and direct* effect on democratic development (Lutz *et al.*, 2010).⁶ These authors concluded that a falling fertility rate affects the population age structure by decreasing the youth dependency ratio. This favorable demographic constellation is referred to as a "demographic gift" where the working population will grow much faster than the overall population and enhance economic growth through increased savings, capital accumulation, and productivity, (Bloom & Canning, 2003; Bloom & Williamson, 1998). These factors are believed to be conducive to democratic development.

We argue that the main effect of fertility declines on democratic development is by directly transforming the lives of women. As falls in fertility are generally accompanied by falls in mortality rates and increases in life expectancy, women's lives are no longer solely devoted to childbearing and childrearing (Malhotra, 2012). This frees women to pursue other activities outside the home, such as further education and employment, particularly in countries where these opportunities exist. Furthermore, smaller families reduce the domestic workload, giving women the time and space to engage in other informal political activities, such as voluntary associations and women's movements (Huber, 1991), thus contributing to democratic development. In contrast, high fertility rates impair women's health and their capacity for education, employment, and participation in decision-making in both the family and the community (Blumberg, 1989; UNDP, 1995).⁷ The social, cultural, economic, and political contexts of women's lives are critical in determining the extent to which fertility declines have the capacity to transform gender relations and thus improve women's lives (Blumberg, 2007). However, it appears that, overall, achieving low fertility rates is an important determinant of a female's life prospects and consequently her society's advancement.

(d) *Civil society, NGOs, INGOs, and women's movements*

Globally, civil society has increased substantially with an explosion of Non Government Organizations (NGOs) and social movements of varying sizes and causes.⁸ A strong civil society has been credited in the struggle against authoritarian regimes (Mainwaring, 1989) and is considered an essential part of a democratic state (Diamond, 1994). Waylen (1994), Baldez (2003), and Moghadam (2003) have highlighted the role of women's movements in Latin America, Europe, and throughout the Middle East in advancing democracy in the 1970s and 1980s. By demanding equality and greater opportunities, women recognized that a more liberal political regime was needed to guarantee and protect the freedoms they were campaigning for (Arat, 1994; Safa, 1990). Women's participation and influence in these organizations and movements has risen as women become less burdened with childbearing, more educated and as they enter the formal work force. Concomitantly, support from transnational networks has legitimized their concerns (Safa, 1990). This widening of the informal political space in civil society creates an important link between female empowerment and democratic development.

This paper contributes to the existing literature in several aspects. Firstly, it introduces a gendered perspective to democratic development theory. We hypothesize that female empowerment as represented by female education, female labor force participation, and fertility rates, was a core driver

of democratic development during 1980–2005. Secondly, we investigate the causal effect of these indicators on regime status using the most sophisticated modeling techniques. Finally, we examine the interplay between women’s productive and reproductive activities and its influence on democratic development by estimating interactions between female education, fertility rates, and female labor force participation.

5. METHODS

(a) *Dependent variable—Levels of democracy*

The Polity IV dataset was used to measure the level of democracy for each country from 1980 to 2005 annually (Marshall & Jaggers, 2009). It consists of six components that measure executive recruitment, constraints on executive authority, and political competition. Executive recruitment reflects how the governments are elected and how regulated, open, and competitive this process is. Constraints on executive authority refer to the extent of institutionalized constraints on the decision-making powers of chief executives. Finally, political competition reflects the extent to which citizens can influence the decisions of the elite through political participation and competition. Implicit in these measures is a degree of civil interaction so countries where all citizens are excluded from the political process will score poorly on both components.

The Polity data were developed to examine the authority patterns that characterize any social units, including national political systems. Dahl (1971, p. 1) states that one of the key characteristics of democracy is, “the continuing responsiveness of the government to the preferences of its citizens, considered as political equals.” Thus, the relationship between a democratic government and its citizens should be one of mutual reciprocity and equality. Thus, while the Polity database has been criticized for weighting heavily the constraints on executive power (Gleditsch & Ward, 1997), we feel that this is one of the most important factors reflecting a more equal relationship between the state and its citizens.

We use the Polity2 indicator in the Polity IV dataset (Marshall & Jaggers, 2010) because it is a composite measure of both democracy and autocracy. It is a continuous variable on a 21 point scale, where 10 represents a full democracy and –10 a full autocracy. The value of using this continuous measure is that it enables us to look at gradations in political regime type instead of categorical measures that tell us very little about the degree of democratic development in a country.

The ongoing debate about the definition and measurement of democracy has resulted in the construction of many political datasets. Paxton (2008) highlights the way that universal suffrage is implied in various definitions of democracy, but argues that participation or inclusion is often not measured, for example, the Polity IV database. However, the developers of the Polity database state that, “competitive political participation and regulation of political participation are intended to measure participation, but are neutral on the issue of suffrage.”⁹ As this study focuses on the period from 1980 onwards the omission of universal suffrage in this dataset has no impact on the Polity2 scores.

Together with the Polity IV dataset the Freedom House Political Rights Index is the most widely used dataset in the democratization literature (Acemoglu *et al.*, 2005, 2008; Barro, 1999; Castelló-Climent, 2008; Donno & Russett, 2004; Fish, 2002). However, some of the methods of coding regimes have been criticized for not being transparent (Hadenius & Teorell, 2005) and for favoring some regions (Bollen, 1993).

The Freedom House Index has also been criticized for including measures of socioeconomic rights (Gastil, 1991, pp. 32–33; Ryan, 1994, pp. 10–11, in Munck and Verkuilen (2002)). These measures may be linked with other aspects of development, rather than political development. Other datasets widely used in the literature were rejected because they use categorical measures and thus fail to consider “mixed” or “hybrid regimes.” They include Gasiorowski’s Political Regime Change Dataset (PRCD), Vanhanen’s Index of Democratization (ID), and Przeworski *et al.*’s dichotomous measure (PACL) (Przeworski *et al.*, 2000).¹⁰

(b) *Independent variables*

Several indexes try to distill female empowerment into neat composite measures. They include the Gender Development Index, the Gender Empowerment Index, and the Global Gender Gap Index. These three indexes are unavailable for many countries over a long period of time, which makes them unsuitable for this study.

(i) *Female education*

The average level of total female educational attainment (aged over 15) was accessed from the Barro and Lee dataset, (Barro & Lee, 2011). Previous studies have used adult literacy rates,¹¹ school enrollment rates for girls and gender gaps in education (Barro, 1999; Donno & Russett, 2004; Fish, 2002; Lutz *et al.*, 2010; Ross, 2001; Wejnert, 2005). However, adult literacy rates do not take into account other aspects of education such as numeracy, logical, and analytical reasoning (Barro & Lee, 1993) nor capture the social benefits that occur just by attending school (Glaeser *et al.*, 2007). School enrollment statistics are collected at the beginning of the year so they do not reflect accurately the number of children who actually attended school throughout the year. This is particularly relevant in developing countries as large numbers of children repeat grades or are late entrants (UNESCO, 1983). Enrollment figures may also be inflated to obtain more resources and supplies for the schools (Barro & Lee, 1993) and are also a reflection of the expansion of education rather than actual educational achievement (Benavot, 1996). While gender gaps in education reflect the inequalities in educational achievement between men and women it is not suitable for this study as it does not measure the number of years of education achieved. The focus of this study is female education as a tool for social and political transformation, independently and in conjunction with fertility rates and female labor force participation. We interpolated the 5 year education data to create annual female educational attainment data from 1980 to 2005.

(ii) *Fertility rates*

Total fertility rates is defined as “the average number of children that a woman gives birth to in her lifetime, assuming that the prevailing birth rate for each age category remains unchanged” (World Bank, 2011). Annual total fertility rates for all countries in our study were accessed from the World Development Indicators Database (World Bank, 2011) and were available for every year.

(iii) *Female labor force participation*

The data for female labor force participation were accessed from the World Development Indicators Database and contains the most comprehensive cross-national information since 1980. Female labor force participation rate is defined as “the proportion of the female population aged 15 and older that is economically active: all females who supply labor for the

production of goods and services during a specified period” (World Bank, 2011). In practice labor force participation refers to women in paid employment.

(iv) *Control variables*

The models were adjusted for widely used measures of modernization including urbanization, level of economic development in 1980, economic growth, and population density. Urbanization is the percentage of the population living in urban areas accessed from the World Development Indicators (World Bank, 2011). To measure income and compare living standards across countries the log of GDP per capita adjusted for Purchasing Power Parity (PPP) was used (World Bank, 2011). GDP in each country is measured in current international dollars and the PPP adjustment is made to avoid the bias in the GDP comparison caused by exchange rate fluctuations (Central Intelligence Agency (CIA), 2008). The level of initial GDP is taken from 1980 or the first available time point. Economic growth is measured by calculating the percentage change in GDP, which is mathematically equivalent to the first difference in the log of GDP.¹² Population density measures the number of people per sq. km of land area and was accessed from the World Development Indicators (World Bank, 2011). Total education as a measure of modernization was also examined together with female employment and fertility rates but separately from female education due to their high correlation.

(c) *Statistical analyses*

(i) *Sample*

All sovereign countries were included for which Polity2 data were available for the period from 1980 to 2005.¹³ Taiwan had no fertility or female labor force participation data so it was removed from the analyses. Germany was removed as West Germany was a democracy the entire period and Yemen was also removed as it was unclear whether data collected for the explanatory variables reflected North or South Yemen. This left 155 countries. For the descriptive statistics 24 countries with no education data for this period were also removed, leaving a total of 131 countries. These countries were Angola, Bhutan, Burkina Faso, Chad, Comoros, Democratic Republic of Korea, Djibouti, Eritrea, Equatorial Guinea, Ethiopia, Guinea, Guinea-Bissau, Lebanon, Macedonia, Madagascar, Nigeria, Oman, Solomon Islands, and Somalia (19). Additionally, five of the post-Soviet countries were also without education data. They were Azerbaijan, Belarus, Georgia, Turkmenistan, and Uzbekistan.

Using the recommendations for regime classification (Marshall & Jaggers, 2009), we then categorized countries with a Polity2 score of -10 to -6 as being autocratic, those with a score of -5 to 5 as being anocratic, and countries with Polity2 score of $6-10$ as being democratic. Descriptive statistics were obtained to assess the nature of the longitudinal data and to examine the trends over the 25-year period. Each country’s Polity2 change was then tracked over the 25 year period, and then classified as follows:

- (1) Not democratic—countries that remained autocratic or anocratic over the period from 1980 to 2005 ($n = 51$)
- (2) Democratic transition—countries that developed democratically over this period, that is they began the period as nondemocratic but recorded a Polity2 score of six and above by 2005 ($n = 46$)
- (3) Democratic—countries that began and finished the period with a Polity2 score above six ($n = 34$)

Each category was then graphed against each of the female empowerment variables to show the changes that occurred

from 1980 to 2005. All graphs are reported with 95% confidence intervals. See Appendix, Table 4 for the full list of countries by category.

(ii) *Dynamic panel model*

To control for reverse causation in the regression analyses we removed all countries that recorded a Polity2 score of six and above in every time period.¹⁴ These countries include Australia, Austria, Belgium, Botswana, Canada, Colombia, Costa Rica, Cyprus, Denmark, Dominican Republic,¹⁵ Ecuador, Finland, France, Greece, India, Ireland, Israel, Italy, Jamaica, Japan, Mauritius, Netherlands, New Zealand, Norway, Portugal, Spain, Sweden, Switzerland, Trinidad, United Kingdom, United States, and Venezuela ($n = 32$). We also removed three countries with large amounts of missing Polity2 data (Lebanon, Cambodia, and Afghanistan). This resulted in a strongly balanced panel of 97 countries with 26 time periods from 1980 to 2005 and a total of 2,522 observations. See Appendix, Table 5 for a full list of countries. The analyses were run again with an extended sample, including the aforementioned countries with missing education and Polity2 data. This resulted in a strongly balanced panel of 123 countries with 26 time periods and a total of 3198 observations. See Appendix, Table 6 for a full list of countries. Summary statistics are available for both samples. See Appendix, Tables 7 and 8.

The following dynamic model was estimated:

$$\text{Democracy}_{i,t} = a\text{Democracy}_{i,t-T} + \beta \text{Xit-T} + \varepsilon_{i,t} \quad (1)$$

$$\begin{aligned} \beta \text{Xit} = & \beta 1 \text{femeduc}_{i,t-T} + \beta 2 \text{fertility}_{i,t-T} + \beta 3 \text{labor}_{i,t-T} \\ & + \beta 4 \text{urban}_{i,t-T} + \beta 5 \text{d.lngdp}_{i,t} + \beta 6 \text{lngdp80} \\ & + \beta 7 \ln(\text{pop})_{i,t-T} \end{aligned}$$

$$\varepsilon_{i,t} = \mu_i + \nu_{i,t}$$

where i is the country, t is the time period, and x is the vector of the explanatory variables and the controls. The coefficient of interest is β which reflects whether female educational attainment, fertility rates, or female labor force participation had any causal effect on political status over a 25 year period during 1980–2005, independent of modernization. The error term consists of the fixed effects (μ_i) and idiosyncratic shocks ($\nu_{i,t}$). The advantage of using a dynamic panel model is that it allows for each additional time period to be independent of previous time periods by adjusting the standard errors (Cameron & Trivedi, 2009), and we can control for unobserved country-specific characteristics (Castelló-Climent, 2008). We chose the System Generalized Method of Moments (GMM) estimator as it accommodates multiple endogenous variables (Roodman, 2008). This estimator also controls for fixed effects, as recommended by Acemoglu *et al.* (2005), and it shows better performance than the first difference estimator when variables are highly persistent (Castelló-Climent, 2008). To be able to capture the causal relationships in question a lag structure was employed. The dependent variable, Polity2, was lagged by 1 year to capture the persistency of democracy (Bobba & Coviello, 2007), and the independent variables were lagged by 5 and 10 years to acknowledge that the effects of these variables may take time to manifest. Time dummies were also included in the model to prevent contemporaneous correlation (Roodman, 2006, p. 33) and to take into account any common variations in the dependent variable (Sarafidis & Robertson, 2009).

Multivariate analyses were run with the independent variables lagged by 0, 5 and then 10 years. Next, interactions were run between the three female empowerment variables to high-

light the importance of the interplay between women’s productive and reproductive activities for democratic development. These models were run again with an extended sample, including countries with no female education data and some missing Polity2 data to see if the exclusion of these countries would affect our results.

6. RESULTS

There was a substantial shift toward democracy from 1980 to 2005. In 1980, 73 countries were classified as being autocratic; in 2005 this had fallen to 19. In 1980 there were 37 democracies; in 2005 the number had increased to 80 and the number of anocracies increased by 11, with most of the shift being from autocratic countries. Only two countries suffered democratic reversal by the end of the period. These were Sri Lanka (−6 to −5) and Gambia (8 to −5). Iran recorded a reversal from anocracy to autocracy (−2 to −6).

The following graphs (Figures 1–3) show that countries that transitioned from being “autocratic” or “anocratic” to “democratic” reported, on average, higher female educational attainment and lower fertility rates than countries that did not develop democratically. Countries that did complete the democratic transition had on average 7.7 years of female education, a fertility rate of 2.75 and female labor force participation of 43% by 2005, whereas countries that did not make the transition had on average 5.6 years of female education, a fertility rate of 3.69, and female labor force participation of 37% by 2005. These differences were statistically significant. The mean difference between countries that transitioned to more democratic regimes and those that did not was not significant for urbanization and initial level of GDP. There was a significant difference between the two groups (those that transitioned and those that did) for the income variable in 2005, $p < 0.10$. These graphs are not shown here but are available upon request.

Table 1 displays the results of our analyses and the diagnostic tests to determine the validity of our instruments. The p values of the AR(2) test, the Sargen test and the Hansen difference test suggest that the instruments are valid. Increases in female education and female labor force participation had a

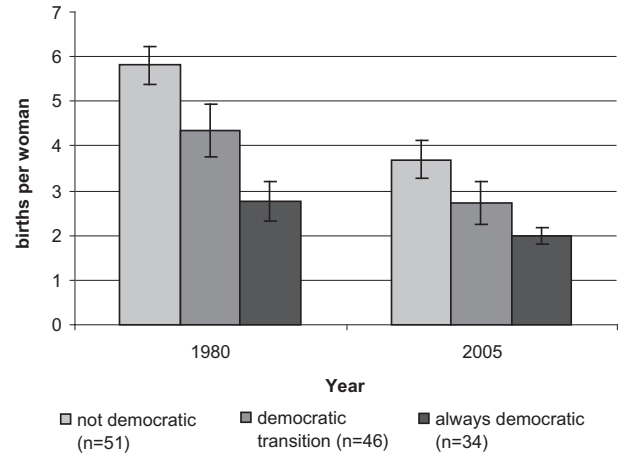


Figure 2. Mean fertility rates from 1980 to 2005 by Polity change.

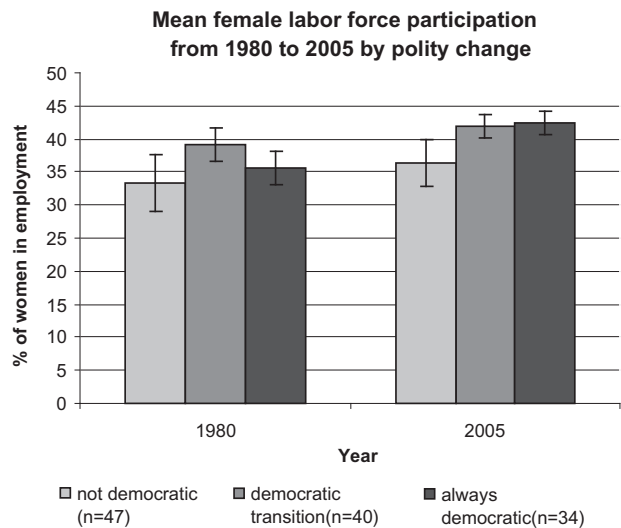


Figure 3. Mean female labor force participation from 1980 to 2005 by Polity change.

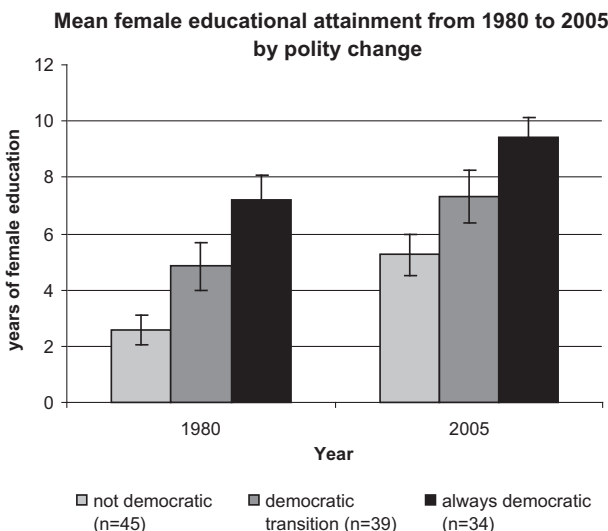


Figure 1. Mean female educational attainment from 1980 to 2005 by Polity change.

positive and causal effect on democratic development over this period, their positive effect increasing with 5 and 10 year lags. The interactions demonstrated a positive and significant interaction between female education and labor force participation on democratic development (Figure 4). There was also a negative and significant relationship between fertility rates and female labor force participation. As the level of female labor force participation increased and the fertility rate decreased, the level of democracy also increased (Figure 5). Even though the interaction model between female education and fertility was not significant, a distinct pattern emerged when plotted. With high education levels and low fertility countries are more likely to be democratic than countries where both education and fertility is high (Figure 6).

(a) Robustness

To test for the robustness of our results we re-ran all the models presented in Table 1 with an extended sample including countries that had missing education and Polity2 data. The results remain unchanged in the extended sample (Table 2). We

Table 1. System GMM dynamic panel model; a fully balanced sample with 97 countries ($N = 2,522$ country-year observations)

Polity2	(i) β (s.e)	(ii) β (s.e)	(iii) β (s.e)	(iv) β (s.e)	(v) β (s.e)	(vi) β (s.e)	(vii) β (s.e)	(viii) β (s.e)	(ix) (s.e)
Polityt-1	0.873*** (0.048)	0.860*** (0.052)	0.876*** (0.047)	0.876*** (0.049)	0.862*** (0.052)	0.811*** (0.052)	0.881*** (0.047)	0.882*** (0.047)	0.884*** (0.047)
Female education	0.168** (0.060)			0.079* (0.047)			0.075* (0.044)	0.073 (0.046)	0.071 (0.045)
Fertility rates		-0.278** (0.113)		-0.113 (0.089)			-0.149 (0.093)	-0.085 (0.083)	-0.092 (0.083)
% Female labor Force participation			0.032** (0.012)	0.020** (0.009)			0.016** (0.008)	0.027** (0.009)	0.024** (0.009)
Female education t-5					0.089* (0.053)				
Fertility rates t-5					-0.162 (0.109)				
% Female labor Force t-5					0.019** (0.009)				
Female education t-10						0.134** (0.068)			
fertility rates t-10						-0.220 (0.155)			
% Female labor Force t-10						0.027** (0.011)			
Urbanization	0.007 (0.006)	0.001 (0.006)	0.009 (0.006)	0.006 (0.005)	-0.006 (0.006)	-0.006 (0.007)	0.006 (0.004)	0.007 (0.005)	0.007 (0.005)
Economic growth	-0.130 (0.993)	-0.345 (0.972)	0.121 (0.984)	-0.230 (0.985)	-0.477 (1.066)	-0.287 (1.153)	-0.240 (0.979)	-0.233 (0.985)	-0.221 (0.987)
lnGdp80	-0.296* (0.159)	-0.166 (0.163)	0.052 (0.121)	-0.169 (0.137)	-0.219 (0.154)	-0.339* (0.199)	-0.189 (0.132)	-0.174 (0.126)	-0.185 (0.134)
lnpop	-0.032 (0.050)	-0.086 (0.061)	0.002 (0.061)	-0.052 (0.053)	-0.063 (0.062)	-0.111 (0.083)	-0.059 (0.053)	-0.037 (0.049)	-0.038 (0.049)
Femeduc * fertility							-0.026 (0.016)		
Femeduc * labor								0.005** (0.002)	
Fertility * labor									-0.008** (0.004)
Time dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
No of observations	2,127	2,104	2,127	2,104	1,807	1,413	2,104	2,104	2,104
No of countries	94	94	94	94	94	94	94	94	94
No of instruments	53	53	53	55	48	38	56	56	56
AR(1)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
AR(2)	0.271	0.258	0.278	0.262	0.473	0.560	0.263	0.263	0.263
Sargen test	0.546	0.471	0.547	0.440	0.401	0.727	0.451	0.454	0.450
Hansen diff test	0.415	0.378	0.405	0.288	0.270	0.431	0.292	0.265	0.270

(i) Bivariate analysis female education; (ii) bivariate analysis fertility rates; (iii) bivariate analysis female labor force participation; (iv) multivariate analyses—contemporaneous; (v) lagged explanatory variables t-5; (vi) lagged explanatory variables t-10; (vii) femeduc * fertility; (viii) femeduc * labor; (ix) fertility * labor.
 * $p < 0.10$ robust standard errors are reported in parentheses.
 ** $p < 0.05$ robust standard errors are reported in parentheses.
 *** $p < 0.01$ robust standard errors are reported in parentheses.

also adjusted our multivariate models for other covariates including level of foreign aid, debt servicing, and Muslim majority countries. Typically, Islamic countries have more conservative attitudes toward women’s role in society (Inglehart & Norris, 2003), thus it is likely that women’s level of empowerment in these countries is lower. A dummy variable was created for countries where more than 50% of the population is Muslim (Pew Research Centre, 2009). See Appendix, Table 9 for list of Muslim majority countries. Further analyses were run substituting alternative measures of female education such as the gap between male and female education and female secondary enrollments. Moreover, to provide further evidence of the significance of increases in female education, rather than male education or overall education, we also tested for the effect of

total education, male education, and male secondary enrollments on democratic development.¹⁶ Adjusting for foreign aid, debt servicing, and Muslim majority reduced the size of the female education coefficient slightly, but its positive and significant effect still held when female education was lagged by 5 and 10 years. However, the effect of female labor force participation on democracy was reduced and was no longer significant (Table 3 models i–iii). Female secondary enrollment had a positive and significant effect on democratic development when it was lagged by 10 years. Also, it had a significant interaction with female labor force participation, but not with fertility rates, consistent with the results when female education was used (see the main findings in Table 1).

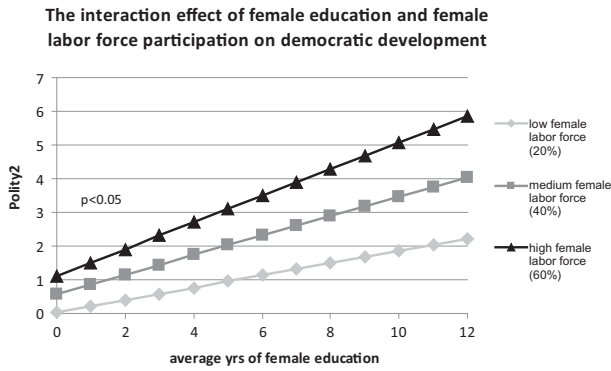


Figure 4. *The interaction effect of female education by percentage of women in the labor force on democratic development.*

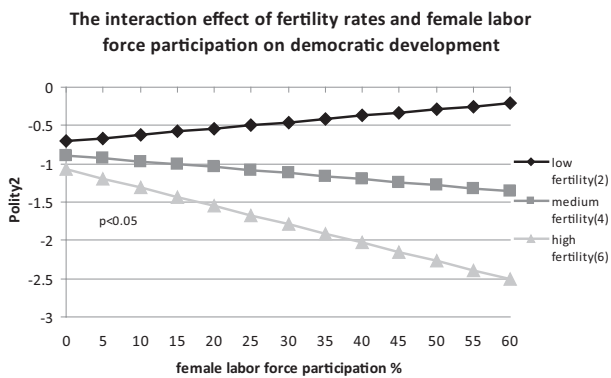


Figure 5. *The interaction effect of fertility rates and female labor force participation on democratic development.*

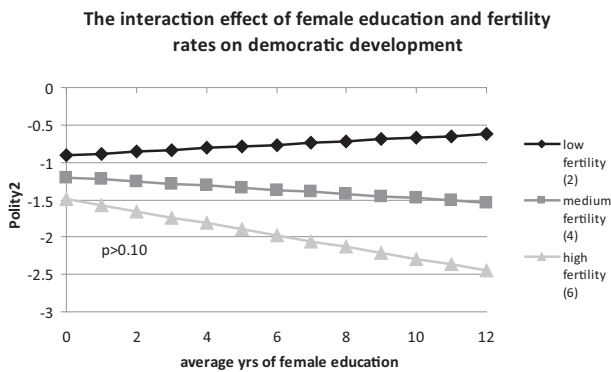


Figure 6. *The interaction effect of female education and fertility rates on democratic development.*

The results from the interactions between male education and the female empowerment measures on democratic development suggest that male education on its own was insufficient to promote democratic development, and high levels of female education and female labor force participation must occur before male education can move a country toward democracy (Table 3 and Figures 7–9). Further, at low to medium levels of female education or at medium to high levels of fertility rates, male education was negatively associated with democratic development. The gender gap in education was not significant in any model. Further analysis showed that total

education did not have a significant effect on democratic development, except when it was lagged by 10 years (results available upon request). Whereas, female education was significant even when not lagged and displayed larger coefficients than total education, indicating a stronger and a more immediate influence on democratic development.

All models in Table 3 were re-run with an extended sample including countries with missing education and Polity2 data. The results were very similar when controlling for foreign aid, debt, and Muslim majority. None of the alternative measures of female education was significant. To address the potential bias caused by the exclusion of the countries with missing education data (24 countries), we ran the three multivariate models (iv, v, vi) in Table 1 again, removing female education from the analyses. Both fertility rates and female labor force participation remained significant at the 5% level across all three models.¹⁷

It is possible that the countries that made the greatest progress in female empowerment were already moving toward democracy in the period leading up to the 1980s, or had prior experience of democracy. Consequently, further models were run lagging Polity2 by 2, 3, 5, and 10 years. Female education and female labor force participation remained significant with these lagged Polity variables. However, from a statistical point of view lagging Polity2 by more than 1 year was problematic as it rendered the tests of autocorrelation and the Sargen test invalid. Furthermore, once we lagged Polity2 by 3 years or more it became negatively associated with the dependent variable, Polity2. Accordingly, we created graphs showing the level of Polity2 annually from 1960 onward for the 32 countries that transitioned from autocracy in 1980 to democracy by 2005. Only five countries had some prior experience of democracy. They were Uruguay (1960–70), Chile (1964–72), Argentina (1973–75), Ghana (1979–80), and Lesotho (1966–69). The remainder of countries recorded low Polity2 scores throughout the 1970s and 1980s. Two countries from each continent were graphed as an example (Appendix, Figures A1–A8). The remaining graphs are available upon request. Out of the 14 countries that transitioned from anocracy to democracy only Brazil and Turkey had any prior experience of democracy.

7. DISCUSSION

(a) Main findings

This study has demonstrated that improvements in female empowerment were strongly associated with democratic development during this period. Specifically, increases in female education and female labor force participation had a positive and causal effect on movement toward democracy. Moreover, the effect of female education increased with lags of 5 and 10 years, suggesting that democracy is more likely to occur in countries with a history of educating girls and possibly a longer experience of the social and economic conditions that may have occurred because of this investment. The descriptive statistics show that countries that began the period with higher levels of female educational attainment and female labor force participation, and lower fertility rates made greater political gains than countries that made such improvements later in the period. It appears that all three empowerment variables needed to be strong for a country to develop democratically over this period. This was confirmed with results from the dynamic panel models testing the multivariate interactions between the three empowerment variables: female education had

Table 2. *Robustness—an extended sample including countries with no education data and missing polity data with 123 countries (N = 3,198 country-year observations)*

Polity2	(i) β (s.e)	(ii) β (s.e)	(iii) β (s.e)	(iv) β (s.e)	(v) β (s.e)	(vi) β (s.e)	(vii) β (s.e)	(viii) β (s.e)	(ix) β (s.e)
Polityt-1	0.876*** (0.048)	0.854*** (0.049)	0.874*** (0.045)	0.878*** (0.049)	0.864*** (0.052)	0.813*** (0.052)	0.883*** (0.047)	0.884*** (0.047)	0.886*** (0.047)
Female education	0.165** (0.060)			0.077* (0.046)			0.073* (0.043)	0.072* (0.046)	0.070 (0.044)
Fertility rates		-0.249** (0.098)		-0.113 (0.088)			-0.148 (0.092)	-0.084 (0.082)	-0.092 (0.082)
% Female labor Force participation			0.030** (0.011)	0.019** (0.009)			0.015** (0.008)	0.026** (0.009)	0.024** (0.009)
Female education t-5					0.087* (0.052)				
Fertility rates t-5					-0.163 (0.108)				
% Female labor Force t-5					0.019** (0.009)				
Female education t-10						0.129* (0.067)			
Fertility rates t-10						-0.225 (0.152)			
% Female labor Force t-10						0.027** (0.011)			
Urbanization	0.007 (0.006)	0.003 (0.006)	0.010 (0.006)	0.006 (0.005)	0.006 (0.006)	0.006 (0.007)	0.006 (0.005)	0.007 (0.005)	0.007 (0.005)
Economic growth	-0.158 (0.995)	0.089 (0.797)	0.465 (0.800)	-0.261 (0.979)	-0.512 (1.059)	-0.337 (1.146)	-0.187 (0.130)	-0.173 (0.125)	-0.253 (0.982)
lnGDP80	-0.293* (0.157)	-0.187 (0.153)	0.031 (0.117)	-0.169 (0.135)	-0.218 (0.153)	-0.338* (0.197)	-0.267 (0.974)	-0.265 (0.980)	-0.184 (0.132)
lnpop	-0.032 (0.053)	-0.041 (0.060)	0.036 (0.062)	-0.052 (0.052)	-0.063 (0.061)	-0.112 (0.082)	-0.059 (0.052)	-0.037 (0.048)	-0.038 (0.048)
Femeduc * fertility							-0.025 (0.016)		
Femeduc * labor								0.005** (0.002)	
Fertility * labor									-0.008** (0.004)
Time dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
No of observations	2,139	2,545	2,568	2,116	1,819	1,425	2,116	2,116	2,079
No of countries	95	117	117	95	95	95	95	95	93
No of instruments	53	53	53	55	48	38	56	56	56
AR(1)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
AR(2)	0.390	0.266	0.280	0.380	0.621	0.768	0.381	0.380	0.381
Sargen test	0.582	0.493	0.539	0.478	0.438	0.755	0.489	0.492	0.487
Hansen diff test	0.410	0.462	0.425	0.281	0.264	0.420	0.285	0.260	0.264

(i) Bivariate analysis female education; (ii) bivariate analysis fertility rates; (iii) bivariate analysis female labor force participation; (iv) multivariate analyses—contemporaneous; (v) lagged explanatory variables t-5; (vi) lagged explanatory variables t-10; (vii) femeduc * fertility; (viii) femeduc * labor; (ix) fertility * labor.

* $p < 0.10$ robust standard errors are reported in parentheses.

** $p < 0.05$ robust standard errors are reported in parentheses.

*** $p < 0.01$ robust standard errors are reported in parentheses.

the largest positive effect on democratic development when female labor participation was also high; only at high levels of female labor force participation did low fertility contribute to democratic development.

Further scrutiny of the causal link between female empowerment and democratic development using longer lags of Polity2 in the multivariate analyses and graphing the Polity2 status of each country prior to the study period give us greater confidence with our findings. Moreover, they are largely robust to adjustment for additional covariates, alternative measures of female education, and extended samples. One caveat is that the effect of female labor force participation on the dependent variable was no longer statistically significant in

models which adjusted for foreign aid, debt servicing, or Muslim majority, partly due to the correlation between Muslim and female labor force participation ($r = -0.60$). In many Muslim countries throughout the Middle-East, cultural and social norms prevent women from participating in the service, retail, and nursing sectors. Consequently, there are low numbers of women in the work force, and they are mainly concentrated in professional or technical roles requiring tertiary education (Moghadam, 2003). The weakening of the effect of female labor force in the models adjusting for foreign aid and debt service may also be attributed to missing cases in these variables, thus reducing the statistical power of the female labor force variable. Both covariates had correlations

Table 3. Robustness—fully balanced sample with additional covariates, alternative measures for female education and their interactions (97 countries, $N = 2,522$ country-year observations)

Polity2	(i) β (s.e)	(ii) β (s.e)	(iii) β (s.e)	(iv) β (s.e)	(v) β (s.e)	(vi) β (s.e)	(vii) β (s.e)	(viii) β (s.e)	(ix) β (s.e)	(x) β (s.e)	(xi) β (s.e)	(xii) β (s.e)
Polityt-1	0.908*** (0.047)	0.884*** (0.038)	0.871*** (0.050)	0.870*** (0.050)	0.784*** (0.095)	0.791*** (0.092)	0.798*** (0.087)	0.876*** (0.049)	0.879*** (0.047)	0.879*** (0.047)	0.881*** (0.048)	0.801*** (0.089)
Female education	0.063 ^{b,c} (0.040)	0.051 ^c (0.046)	0.055 ^d (0.041)						-0.019 (0.010)			
Fertility rates	-0.070 (0.076)	-0.017 (0.083)	-0.134 (0.094)	-0.188 ^{a,**} (0.094)	-0.242 (0.186)	-0.072 (0.205)	-0.039 (0.141)	-0.144 ^{b,d} (0.086)	-0.116 (0.087)	0.022 (0.115)	-0.124 (0.082)	-0.202 (0.159)
% Female labor	0.012 (0.007)	0.009 (0.008)	0.007 (0.008)	0.023 ^{**} (0.010)	0.039 [*] (0.021)	0.028 (0.020)	-0.033 (0.020)	0.022 ^{a,**} (0.009)	0.017 ^{**} (0.008)	0.018 ^{**} (0.008)	-0.021 (0.016)	0.023 (0.016)
Force participation												
Urbanization	0.008 (0.005)	0.010 (0.006)	0.005 (0.005)	0.006 (0.006)	0.008 (0.010)	0.008 (0.009)	0.013 (0.009)	0.005 (0.005)	0.007 (0.005)	0.006 (0.005)	0.006 (0.005)	0.009 (0.009)
Economic growth	-0.290 (1.1169)	0.428 (1.225)	-0.236 (0.972)	-0.250 (0.975)	-0.773 (1.323)	-0.789 (1.312)	-0.670 (1.309)	-0.215 (0.981)	-0.241 (0.984)	-0.239 (0.976)	-0.200 (0.981)	-0.902 (1.323)
Ingdp80	-0.204 (0.133)	-0.009 (0.209)	-0.156 (0.137)	-0.103 (0.138)	-0.111 (0.197)	-0.159 (0.184)	-0.098 (0.152)	-0.117 (0.132)	-0.183 (0.131)	-0.144 (0.128)	-0.139 (0.124)	-0.167 (0.175)
Inpop	-0.046 (0.045)	0.046 (0.066)	-0.056 (0.052)	-0.056 (0.059)	-0.038 (0.100)	-0.057 (0.100)	0.053 (0.077)	-0.060 (0.054)	-0.056 (0.054)	-0.067 (0.054)	-0.045 (0.050)	-0.064 (0.100)
Foreign aid	-0.001 (0.001)											
Debt		0.031 (0.037)										
Muslim			-0.503 ^{**} (0.243)									
Gender gap in education				-0.056 (0.082)								
Female secondary enrollments					0.002 ^c (0.008)	0.001 (0.008)	0.006 (0.008)					-0.027 ^c (0.014)
Female secondary enroll * fertility						-0.004 (0.003)						
Female secondary enroll * labor							0.001 ^{***} (0.000)					
Male education								0.058 (0.044)	-0.109 (0.087)	0.057 (0.042)	0.043 (0.043)	-0.071 (0.096)
Maled * female education									0.016 [*] (0.010)			
Male education * fertility										-0.027 [*] (0.016)		
Male education * labor											0.007 ^{***} (0.003)	
Male education * female secondary enroll												0.004 ^{**} (0.002)
Time dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
No of observations	1,802	1,672	2,104	2,104	1,355	1,355	1,355	2,104	2,104	2,104	2,104	1,355
No of countries	83	77	94	94	93	93	93	94	94	94	94	93
No of instruments	56	56	56	55	55	56	56	55	57	56	56	57
AR(1)	0.000	0.000	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000
AR(2)	0.484	0.210	0.261	0.261	0.255	0.258	0.270	0.262	0.262	0.263	0.263	0.260
Sargen test	0.415	0.531	0.455	0.449	0.608	0.620	0.645	0.440	0.453	0.450	0.446	0.620
Hansen diff test	0.203	0.158	0.318	0.316	0.825	0.831	0.835	0.280	0.285	0.288	0.258	0.823

(i) Adjusted for foreign aid; (ii) adjusted for debt; (iii) adjusted for Muslim; (iv) gender gap in education; (v) female secondary enrollments; (vi) female secondary enroll * fertility; (vii) female secondary enroll * labor; (viii) male education; (ix) male education * female education; (x) male education * fertility; (xi) male education * labor; (xii) male education * secondary enrollments.

*Male secondary enrollments was also substituted for female education in the models. It was not significant in any model.

^a Sig at 5% when lagged by 5 and 10 years.

^b Sig at 10% level when lagged by 5 years.

^c Sig at 5% level when lagged by 10 years.

^d Sig at 10% level when lagged by 10 years.

^e Sig at 5% when lagged by 5 years.

* $p < 0.10$ robust standard errors are reported in parentheses.

** $p < 0.05$ robust standard errors are reported in parentheses.

*** $p < 0.01$ robust standard errors are reported in parentheses.

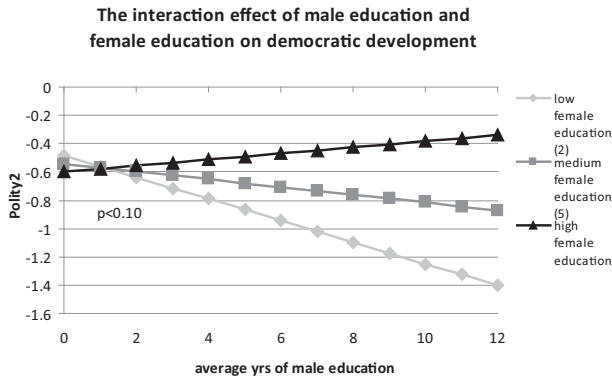


Figure 7. The interaction effect of male and female education on democratic development.

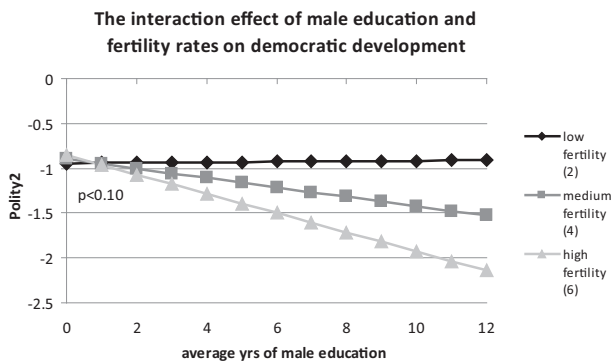


Figure 8. The interaction effect of male education and fertility rates on democratic development.

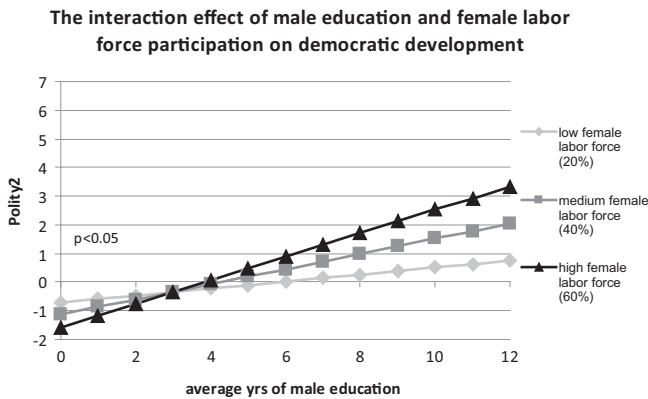


Figure 9. The interaction effect of male education and female labor force participation on democratic development.

with Polity2 close to zero and low correlations with female labor force participation.

(b) Why and how does female education drive democratic development?

One of the main outcomes from educating girls is to delay marriage as women seek alternative pathways outside the home in the form of further education or employment. With increased education girls are exposed to democratic values such as equality, freedom, and tolerance. However, the ability

to challenge political institutions may not take full effect until they leave school and reach voting age. Through work and other informal networks women are then able to develop and practice the necessary cognitive and communication skills that enable them to agitate for political change. With two incomes parents have surplus income to invest back into their families, thus building the human capital of the next generation. Moreover, families where both parents are educated are more likely to educate their sons and daughters, again building the human capital of the next generation and expanding support for democracy.

Our results also highlight the interplay between women’s productive and reproductive activities. Typically, fertility is high in regimes where human capital is low, but low in regimes where investment in human capital is high (Becker, Murphy, & Tamura, 1990). However, when we look more closely at the temporality of these two factors across different regions a different story emerges. Countries commencing their demographic transition report smaller differentials in fertility rates between the most highly educated and the least educated groups than countries in the middle stages of transition. Also, education does not reduce fertility rates where only a few years of primary education have been achieved (Lehr, 2009). Perhaps there is a tipping point where a certain number of years of schooling reduce fertility rates substantially in order for significant transformations in women’s lives to occur. Our results show that countries that did develop democratically began the period with a higher level of female education (5.2 years) and lower fertility rates (4.34 births per woman). By the end of the period these countries had achieved on average 7.7 years of female education, and a fertility rate of 2.75. This suggests that over and beyond economic development, there is an optimal level of female empowerment that countries need to achieve before political transformation occurs. Further research is required to test this theory.

Over the last 25 years, the majority of nondemocratic countries that invested early in all three domains of female empowerment and achieved progress in all these domains, that is at or above the threshold, developed democratically by 2005; whereas countries that failed in one or more of these elements remained autocratic or anocratic. Almost all countries that began the period with very high rates of both female education and low fertility rates achieved Polity2 scores of six and above by 2005, and these were represented mainly by the former communist and socialist countries (with the exception of South Korea, Panama, and Uruguay). Two countries (China and Cuba) remained persistently autocratic, and Kazakhstan experienced varying periods of political instability and political progress. Armenia’s trajectory has also been unstable, but in recent years the political regime has liberalized.

There was another group of countries that were strong on all three female empowerment indicators by the end of the study period, but did not develop democratically. One of these countries, Gabon has made recent democratic progress with a change in Polity2 score from -9 to 3 in 2009–10. This seems to hold promise for continual political progress in the future. Another country, Malaysia became democratic in 2010; and three other countries remain nondemocratic today (Singapore, Swaziland, and Zimbabwe). Persistent cultural factors such as Confucianism and royal nepotism, the HIV/AIDS epidemic, and wide spread poverty may have prevented these countries from making greater democratic progress. See Table 10 in the Appendix for a comparison of these three groups.

The significant interaction between female education and female labor force participation (Figure 4) shows that a more

highly educated female work force is important for advancing democracy. Previous research shows that greater numbers of women in the skilled sectors is associated with higher levels of democracy (Ross, 2001). However, highly educated women may be excluded from the work force, as a result of cultural and social expectations about family composition or women's roles. This may be exacerbated in countries where unemployment levels are high and opportunities for work are limited. For example, in Jordan, women and men report low rates of labor force participation (Spierings & Smits, 2007). In contrast, women with only a few years of education are less likely to be in the work force (Psacharopoulos & Tzannatos, 1992), or be employed in work that is of low status and is low paid (Nisha & Ravi, 2010). In this scenario the opportunity cost of bearing children may be higher than the income a woman earns (Galor & Weil, 1996).

Therefore, while improvements in female education confer significant benefits to women and society, we must not rely on educating females as the only solution for solving all of society's problems, including democratic development. Education on its own may not equip girls and women with the ability to question the second class status assigned to them and to mobilize politically, if they are still excluded from public life because of childrearing and domestic duties (Kabeer, 2005). Consideration must be given to the different cultural or social structures across societies that restrict women's participation in the economic or political sphere and keep women's status low.

Our results also show that, on its own, an increase in male education was insufficient for countries to develop democratically over this period. However, increases in male education together with high levels of female empowerment were important. It appears that in countries where men are highly educated and where women's lives have also improved political progress is greater. In contrast, some countries, despite being financially able to do so may not invest in their girls. Cultural barriers to women accessing education, permission to work in certain industries, and son preference impact on women's ability to take advantage of opportunities. When a country's income is high and women's education and labor force participation is low, this suggests that a country's income distribution skews toward the men of these countries. As a result men have a disproportionate level of power and prestige (Friedl, 1975). These findings further emphasize the importance of investing in the education of girls to advance both gender equality and democracy.

(c) *Importance of female empowerment to early democratizers*

While female empowerment was important for countries developing democratically during this period, a recent study shows that female empowerment was also important for the early democratizers. Woodberry (2012) highlights the role of the conversionary Protestant missionaries who played an important role in the early democratization of Western Europe through mass education, including educating women despite resistance from the elites. By being involved in the running of religious organizations, women gained valuable skills and developed networks that could be translated to other types of grass roots movements. Together with expanded religious liberty these factors laid a foundation for democracy that was then copied by other religions, particularly Catholicism, post World War II. Bollen (1979) first highlighted the cultural differences between the early democratizers and late democratizers. These early democratizers were from a similar western cultural heritage, whereas the late democratizers represented a more heterogeneous cultural group. Therefore, it

is possible that gender inequalities are more entrenched in the family and other social institutions in this latter group compared with the early democratizers. Consequently, explicit efforts to address gender inequalities at a social institutional level, that is deeply embedded social and cultural norms, may be required to move countries toward democracy in the future.

(d) *Factors contributing to improvements in female empowerment*

Our results showed that economic development did not have a significant impact on democratic development during this period. Moreover, the majority of countries that developed democratically had little prior experience of democracy, particularly in the preceding decade. So what could explain the increased participation of women in education and employment and fertility declines over this period? The role of the UN Decade for Women (1975–85) as a major force for advancing both women's rights and democracy cannot be underestimated. It championed women's rights and promoted the incorporation of women into development activities when many states were governed by nondemocratic regimes. It also facilitated opportunities for women to meet at conferences and triggered a proliferation across the globe of women's movements. This increased global focus legitimizes women's movements pressing for equality and democratic reform at a national level (Safa, 1990). We envisage that INGOs will continue to encourage governments to expand and strengthen national gender machineries as an integral part of the democratic reform process.

(e) *Female empowerment as a dimension of modernization*

We consider female empowerment to be an important aspect of modernization, a dimension that to date has not received adequate attention in the democratization literature. The purpose of this study was to provide a gendered lens to both theoretical and empirical research in democratic development. We believe that change in all three aspects of female empowerment (female education, female employment, and fertility) represents a significant cultural shift in gender roles within countries, rather than reflecting a country's overall level of development. By including all three indicators in the analysis, we were able to empirically demonstrate that this shift has had a causal effect on democratic development in the last 25 years, independent of the conventional indicators of modernization (economic growth, GDP, urbanization, and population density).

(f) *Anomalies*

This study demonstrates that female empowerment played an important role in advancing democracy during 1980–2005. Despite being a cross-national study we are careful to acknowledge the uniqueness of every country within each time period and recognize that there are a handful of countries that have not developed democratically despite achieving high levels of female empowerment, including Singapore, China, and Cuba.¹⁸ There is evidence of other discriminatory practices toward women in these countries. A recent report into "Trafficking in Persons" (US Dept, 2011) reveal that these three governments still have a long way to go to eliminate sex trafficking of women and children for prostitution and forced labor in their countries. Additionally, it is expected that by 2020 China will record over 33 million "missing women," as a result of infanticide, son preference, and discrimination toward girls and women (Hudson & den Boer, 2002).

In contrast, there are also other countries that did attain high Polity2 scores without achieving primary school completion for women, high female labor force participation, and low fertility rates, in particular, Guatemala and Mali. In Guatemala the negotiations and signing of the Peace Accords in 1996 to end 36 years of civil war opened up the political space for a transition to democracy. However, since then, the extreme social and economic poverty in Guatemala continues to threaten the strength and sustainability of democracy in this country (Jonas, 2000). Mali has been a democracy for the last 20 years and this may be explained partly, by a history of cultural norms conducive to democracy, including tolerance, trust, pluralism, separation of powers, and the government's accountability to its people (Smith, 2001). However, recent political events in Mali have seen the government overthrown by the military. There is some evidence that the recent neo-liberal policies of the government have contributed to the current weak economic conditions and democratic instability (County & Peterson, 2012). These recent events suggest that moving beyond a minimum level of economic and social development is important for democracy to consolidate and deepen. Nevertheless, despite these few anomalies this study has highlighted that overall the transformation of women's lives made a significant contribution to democratic development at the end of the last century. As women's social and economic rights continue to improve we expect to see more countries move toward democracy and existing democracies strengthen and deepen.

(g) *Study strengths and limitations*

The strength of this study is that it is based on longitudinal data and advanced modeling techniques, thus it demonstrates temporality and causation between female empowerment and democratic development. It also provides descriptive data and qualitative information to offer an adequate explanation of countries lying outside this pattern. The main limitation in this study is the use of secondary data, rather than primary data to inform the analyses. Firstly, the variability across countries in the process of data collection affects the consistency and comparability of international data. For example, in many countries female labor force measure fails to capture women engaged in unpaid family work or those who work a few hours

per week or to distinguish women engaging in agriculture from those employed in high status occupations. Also, there are often cultural aspects that determine whether women are classified as paid workers or not (Psacharopoulos & Tzannatos, 1989).¹⁹ While we acknowledge that some types of work have a greater capacity to confer more power, for example, managerial and professional positions, this was the most comprehensive variable available to us over this period. Further research would benefit from a more comprehensive database detailing different occupational statuses. Secondly, as this is a cross-national study it is difficult to capture the variability of women's lives within countries or regions.

8. CONCLUSION

Neither the modernization theory nor the neo-modernization theory explicitly views gender equality or female empowerment as playing an *active* role in the modernization process. Implicit in the neo-modernization theory is the presumption that *both* gender equality and democracy occur as a consequence of economic development. We argue that female empowerment plays an active but not a passive role in democratic development and consider it to be an important aspect of modernization that has not received adequate attention in the democratization literature to date. This study has shown that female empowerment, particularly female education, was a core driver of democratic development during the latter part of the 20th century. Our findings provide a different lens to view democratic development and broaden our understanding of what drives this process. Rather than being a natural consequence of economic development, we have shown empirically that female empowerment has a causal effect on democratic development, independent of the commonly used measures of modernization, and as such it deserves much greater attention in future democracy research. The findings suggest that a gendered approach to democratic development has the potential to explain some of the variability in the quality and stability of current and future democracies, thus underscoring the importance of a multi-disciplined approach to future research in this area.

NOTES

1. We could find no study that specifically used a measure of industrialization since Lipset's original study in 1959, except for the share of agricultural output in total output in Lutz *et al.* (2010). Typically, urbanization is seen as a proxy for industrialization (see Castelló-Climent, 2008).

2. A per-capita income of \$6055 was achieved by Argentina in 1976 when it reverted to an autocracy. It is the only country with a per capita income over \$6000 to reverse its standing as a democracy (Przeworski and Limongi, 1996).

3. The Gender Empowerment Measure consists of % of women in parliamentary seats, % of female legislators, senior officials and managers, % of female professional and technical workers, and ratio of estimated female to male earned income (UNDP, 2011).

4. Other measures include socio-demographic, bodily integrity and health, cultural participation and rights, and the ratification of international legal frames for women's rights (Moghadam & Senftova, 2005).

5. Rizzo, Abdel-Latif, and Meyer (2007) found that support for gender equality was not related to support for democracy in Egypt, Algeria, Morocco, Saudi Arabia, and Jordan. The authors concluded that supporters of gender equality were worried that democracy may bring with it deeply conservative opposition parties committed to eroding individual rights, in particular women's rights.

6. In situations where women have been forced to choose a small family size through national policies e.g. in Korea (Hyoung, 1997) and China (Li, 2004) then the reduction in fertility rates may not always be an accurate representation of female empowerment.

7. Sub-Saharan Africa is the only region in the world where falls in fertility have not followed the same path as other regions in the last 30 years. This is largely because of a cultural preference for large families (Caldwell & Caldwell, 1987).

8. At present the UN consults with over 3,500 NGOs (United Nations, 2012).

9. "The Polity data series is largely neutral to the issue of suffrage. It only records issues regarding restrictions on identity group participation rights which may be incorporated in formal or informal restrictions on electoral enfranchisement. Polity does not track issues relating to male/female suffrage nor does it record information on suffrage specifically." (Personal comm: Marshall, 2010).
10. See Gleditsch and Ward (1997) for a discussion about the Polity data being more of categorical measure than a continuous one.
11. In 1978, UNESCO's General Conference adopted a definition of functional literacy which is still in use today. It states that 'A person is functionally literate who can engage in all those activities in which literacy is required for effective functioning of his group and community and also for enabling him to continue to use reading, writing and calculation for his own and the community's development (see Education for all Global Monitoring Project, Chapter 6 for a comprehensive discussion on the meaning of literacy) (UNESCO, 2011).
12. Several countries do not have GDP data—these include Myanmar, Cuba, and Zimbabwe. The baseline level of economic development was taken from 1980 or from the first year that data was available. (Czech Republic—1990; Cambodia—1988; Croatia—1990; Haiti—1991; Iraq—1997; Laos—1984; Libya—1999; Mongolia—1981; Poland—1990; Qatar—2000; Romania—1981; Slovak Republic—1984; Slovenia—1990; Tanzania—1988; Uganda—1982; Vietnam—1985). For the post-Soviet nations the initial GDP was taken from 1990.
13. Sovereign country is defined as "an independent member of the international system that had a population greater than 500,000"—Gurr, Jagers, & Moore, 1990).
14. Countries may be categorized as being fully democratic if they score above seven throughout the entire time period (Epstein *et al.*, 2006). A score of eight and above means that a country attains a maximum score on at least one of the three main components; measures of executive constraints, political competition, and the quality of political participation.
15. Dominican Republic had a polity score of 6 and above for every period except for 2 years in 1994–95 so it was coded as being democratic for the entire period.
16. Total education and male education, over 15 was accessed from the Barro and Lee dataset (2011) and gaps in education was obtained by subtracting female education from male education. Secondary enrolment rates reflect the gross percentage students enrolled in school and were accessed from the World Development Indicators (World Bank, 2011). Level of foreign aid and level of debt servicing (% of interest paid on Gross National Income (GNI)) were also accessed from the World Development Indicators (World Bank, 2011).
17. These results are not presented but are available upon request.
18. Data out of Cuba are limited, hence it is difficult to know the true extent of the problem (US Dept, 2011) The formation of the Federation of Cuban women of which 85% of Cuban women are members (4 million women) has tackled equal rights for women in education, employment, reproductive health, and violence. As a result, women in Cuba enjoy some of the highest levels of equality and opportunity in the world. http://www.cuba-solidarity.org/cubasi_article.asp?ArticleID=30.
19. India, Pakistan, and Bangladesh have very high rates of unpaid work (Psacharopoulos & Tzannatos, 1989).

REFERENCES

- Acemoglu, D., Johnson, S., Robinson, J. A., & Yared, P. (2005). From education to democracy?. *American Economic Review*, 95(2), 44–49.
- Acemoglu, D., Johnson, S., Robinson, J. A., & Yared, P. (2008). Income and democracy. *American Economic Review*, 98(3), 808–842.
- Alvarez, M., Cheibub, J. A., Limongi, F., & Przeworski, A. (1996). Classifying political regimes. *Studies in Comparative International Development*, 31(2), 3–36.
- Arat, Y. (1994). Toward a democratic society: The women's movement in Turkey in the 1980s. *Women's Studies International Forum*, 17(2–3), 241–248.
- Baldez, L. (2003). Women's movements and democratic transition in Chile, Brazil, East Germany, and Poland. *Comparative Politics*, 35(3), 253–272.
- Baldez, L. (2010). The gender lacuna in comparative politics. *Perspectives on Politics*, 8(1), 199–205.
- Barro, R. J. (1999). Determinants of democracy. *Journal of Political Economy*, 107(6), S158–S183.
- Barro, R. J., & Lee, J.-W. (1993). International comparisons of educational attainment. *Journal of Monetary Economics*, 32(3), 363–394.
- Barro, R. J., & Lee, J.-W. (2010). *A new data set of educational attainment in the world, 1950–2010 NBER Working paper series*. National Bureau of Economic Research. Cambridge, MA. <http://www.nber.org/papers/w15902> (Accessed 05.09.10).
- Basu, A. M. (2002). Why does education lead to lower fertility? A critical review of some of the possibilities. *World Development*, 30(10), 1779–1790.
- Becker, G. S., Murphy, K. M., & Tamura, R. (1990). Human capital, fertility, and economic growth. *The Journal of Political Economy*, 98(5), S12–S37.
- Beer, C. (2009). Democracy and gender equality. *Studies in Comparative International Development (SCID)*, 44(3), 212–227.
- Benavot, A. (1996). Education and political democratization: Cross-national and longitudinal findings. *Comparative Education Review*, 40(4), 377–403.
- Bloom, D. E., & Canning, D. (2003). Contraception and the Celtic tiger. *Economic and Social Review*, 34(3), 229–247.
- Bloom, D. E., Canning, D., Fink, G., & Finlay, J. (2009). Fertility, female labor force participation, and the demographic dividend. *Journal of Economic Growth*, 14(2), 79–101.
- Bloom, D. E., & Williamson, J. G. (1998). Demographic transitions and economic miracles in emerging Asia. *World Bank Economic Review*, 12(3), 419–455.
- Blumberg, R. L. (1984). A general theory of gender stratification. *Sociological Theory*, 2, 23–101.
- Blumberg, R. L. (1989). Making the case for the gender variable: Women and the wealth and well-being of nations. Agency for International Development, Office of Women in Development.
- Blumberg, R. L. (2007). *How mother's economic activities and empowerment affect early childhood care and education (ECCE) for boys and girls: A theory-guided exploration across history, cultures and societies*. A background paper prepared for the Education or All Global Monitoring Report 2007: Strong Foundations: Early childhood care and education.
- Bobba, M., & Coviello, D. (2007). Weak instruments and weak identification, in estimating the effects of education, on democracy. *Economics Letters*, 96(3), 301–306.
- Boix, C., & Stokes, S. C. (2003). Endogenous democratization. *World Politics*, 55(4), 517–549.
- Bollen, K. A. (1979). Political democracy and the timing of development. *American Sociological Review*, 44(4), 572–587.
- Bollen, K. A. (1993). Liberal democracy—Validity and method factors in cross-national measures. *American Journal of Political Science*, 37(4), 1207–1230.

- Bollen, K. A., & Jackman, R. W. (1989). Democracy, stability, and dichotomies. *American Sociological Review*, 54(4), 612–621.
- Boserup, E. (1970). *Woman's role in economic development*. London: Allen & Unwin.
- Cameron, A. C., & Trivedi, P. K. (2009). *Microeconometrics using Stata*. Texas: Stata Press.
- Caldwell, J. C., & Caldwell, P. (1987). The cultural context of high fertility in sub-Saharan Africa. *Population and Development Review*, 13(3), 409–437.
- Castelló-Climent, A. (2008). On the distribution of education and democracy. *Journal of Development Economics*, 87(2), 179–190.
- Central Intelligence Agency (CIA). (2008). *The world factbook*. <https://www.cia.gov/library/publications/the-world-factbook/rankorder/2001rank.html> (Accessed 04.04.11).
- Chafetz, J. S. (1990). *Gender equity. An integrated theory of stability and change*. California: Sage Publications.
- Cleland, J., & van Ginneken, J. (1988). Maternal education and child survival in developing countries: The search for pathways of influence. *Social Science & Medicine*, 27(12), 1357–1368.
- Collins, R., Chafetz, Janet Saltzman, Blumberg, R. L., Coltrane, S., & Turner, J. H. (1993). Toward an integrated theory of gender stratification. *Sociological Perspectives*, 36(3), 185–216.
- County, B., & Peterson, B. (2012). *Mali: Hungry for democracy—The peasantry and the coup*. <http://allafrica.com/stories/201204030227.html> (Accessed 06.05.12).
- Dahl, R. A. (1971). *Polyarchy: Participation and opposition*. New Haven: Yale University Press.
- Di Palma, G. (1990). *To craft democracies: An essay on democratic transitions*. Berkeley: University of California Press.
- Diamond, L. (1994). Toward democratic consolidation. *Journal of Democracy*, 5(3), 4–17.
- Diamond, L. (2002). Thinking about hybrid regimes. *Journal of Democracy*, 13(2), 21–35.
- Donno, D., & Russett, B. (2004). Islam, authoritarianism, and female empowerment—What are the linkages?. *World Politics*, 56(4), 582.
- Epstein, D. L., Bates, R., Goldstone, J., Kristensen, I., & O'Halloran, S. (2006). Democratic transitions. *American Journal of Political Science*, 50(3), 551–569.
- Feng, Y., & Zak, P. J. (1999). The determinants of democratic transitions. *The Journal of Conflict Resolution*, 43(2), 162–177.
- Fish, M. S. (2002). Islam and authoritarianism. *World Politics*, 55(1), 4–37.
- Friedl, E. (1975). *Women and men: An anthropologist's view*. New York: Holt, Rinehart and Winston.
- Galor, O., & Weil, D. N. (1996). The gender gap, fertility, and growth. *The American Economic Review*, 86(3), 374–387.
- Gastil, R. D. (1991). The comparative survey of freedom: Experiences and suggestions. *On Measuring Democracy: Its Consequences and Concomitants*, 21–46.
- Glaeser, E. L., Ponzetto, G. A. M., & Shleifer, A. (2007). Why does democracy need education?. *Journal of Economic Growth*, 12(2), 77–99.
- Gleditsch, K. S., & Ward, M. D. (1997). Double take: A reexamination of democracy and autocracy in modern polities. *The Journal of Conflict Resolution*, 41(3), 361–383.
- Gurr, T., Jagers, K., & Moore, W. (1990). The transformation of the western state: The growth of democracy, autocracy, and state power since 1800. *Studies in Comparative International Development (SCID)*, 25(1), 73–108.
- Hadenius, A., & Teorell, J. (2005). Cultural and economic prerequisites of democracy: Reassessing recent evidence. *Studies in Comparative International Development*, 39(4), 87–106.
- Huber, J. (1991). *Macro-micro links in gender stratification. Macro-micro linkages in sociology*. Newbury Park, CA: Sage Publications, pp. 11–25.
- Hudson, V. M., & den Boer, A. M. (2002). A surplus of men, a deficit of peace: Security and sex ratios in Asia's largest states. *International Security*, 26(4), 5–38.
- Hyung, C. (1997). Fertility control, reproductive rights, and women's empowerment in Korea. *Asian Journal of Women's Studies*, 3(1), 103–132.
- Ibrahim, S., & Alkire, S. (2007). Agency and empowerment: A proposal for internationally comparable indicators. *Oxford Development Studies*, 35(4), 379–403.
- Inglehart, R., & Baker, W. E. (2000). Modernization, cultural change, and the persistence of traditional values. *American Sociological Review*, 65(1), 19–51.
- Inglehart, R., & Norris, P. (2003). The true clash of civilizations. *Foreign Policy*, 135, 62–70.
- Inglehart, R., Norris, P., & Welzel, C. (2002). Gender equality and democracy. *Comparative Sociology*, 1(3–4), 321–346.
- Inglehart, R., & Welzel, C. (2009). How development leads to democracy. *Foreign Affairs*, 88(2), 33–48.
- Inglehart, R., & Welzel, C. (2010). Changing mass priorities: The link between modernization and democracy. *Perspectives on Politics*, 8(2), 551–567.
- Iversen, T., & Rosenbluth, F. (2006). The political economy of gender: Explaining cross-national variation in the gender division of labor and the gender voting gap. *American Journal of Political Science*, 50(1), 1–19.
- Iversen, T., & Rosenbluth, F. (2008). Work and power: The connection between female labor force participation and female political representation. *Annual Review of Political Science*, 11, 479–495.
- Jagers, K., & Gurr, T. (1995). Tracking democracy's 3rd wave with the polity-III data. *Journal of Peace Research*, 32(4), 469–482.
- Jahanshahrad, H. (2012). A genuine civil society and its implications for the Iranian women's movement. *Women's History Review*, 21(2), 233–252.
- Jonas, S. (2000). Democratization through peace: The difficult case of Guatemala. *Journal of InterAmerican Studies & World Affairs*, 42(4), 9.
- Jowett, M. (2000). Safe motherhood interventions in low-income countries: An economic justification and evidence of cost effectiveness. *Health Policy*, 53(3), 201–228.
- Kabeer, N. (1999). Resources, agency, achievements: Reflections on the measurement of women's empowerment. *Development and Change*, 30(3), 435–464.
- Kabeer, N. (2005). Gender equality and women's empowerment: A critical analysis of the third Millennium development goal. *Gender and Development*, 13(1), 13–24.
- Kazemi, F. (2000). Gender, Islam, and politics. *Social Research*, 67(2), 439–474.
- Kishor, S. (2000). Empowerment of women in Egypt and links to the survival and health of their infants. In Harriet Presser, & Gita Sen (Eds.), *Women's empowerment and demographic processes: Moving beyond Cairo*. New York: Oxford University Press.
- Lehr, C. S. (2009). Evidence on the demographic transition. *Review of Economics and Statistics*, 91(4), 871–887.
- Lena, H. F., & London, B. (1993). The political and economic determinants of health outcomes: A cross-national analysis. *International Journal of Health Services*, 23(3), 585–602.
- Li, J. (2004). Gender inequality, family planning, and maternal and child care in a rural Chinese county. *Social Science and Medicine*, 59(4), 695–708.
- Lipset, S. M. (1959). Some social requisites of democracy—Economic development and political legitimacy. *The American Political Science Review*, 53(1), 69–105.
- Lipset, S. M. (1994). The social requisites of democracy revisited—1993 Presidential address. *American Sociological Review*, 59(1), 1–22.
- Londregan, J. B., & Poole, K. T. (1996). Does high income promote democracy?. *World Politics*, 49(1), 1–30.
- Lutz, W., Cuaresma, J. C., & Abbasi-Shavazi, M. J. (2010). Demography, education, and democracy: Global trends and the case of Iran. *Population and Development Review*, 36(2), 253–281.
- Mainwaring, S. (1989). *Transitions to democracy and democratic consolidation: Theoretical and comparative issues*. Working paper—Helen Kellogg Institute for International Studies, p. 130.
- Malhotra, A. (2012). *Remobilizing the gender and fertility connection: The case for examining the impact of fertility control and fertility declines on gender equality*. International center for research on women fertility and empowerment work paper series, 001-2012-ICRW-FE, pp. 1–38.
- Malhotra, A., & Mather, M. (1997). Do schooling and work empower women in developing countries? Gender and domestic decisions in Sri Lanka. *Sociological Forum*, 12(4), 599–630.
- Marchand, M. H., & Parpart, J. L. (1995). *Feminism/postmodernism/development*. London: Routledge.

- Marshall, M.G., & Jagers, K. (2009). *Polity IV project. Political regime characteristics and transitions, 1800–2008*. <http://www.systemicpeace.org/polity/polity4.htm> (Accessed 11.05.09).
- Mason, K. O. (1986). The status of women: Conceptual and methodological issues in demographic studies. *Sociological Forum*, 1(2), 284–300.
- Moghadam, V. M. (2003). *Modernizing women: Gender and social change in the Middle East* (2nd ed.). London: Lynne Rienner Publishers.
- Moghadam, V. M. (2007). *Governance and women's citizenship in the Middle East and North Africa*. Paper presented at the IDRC MENA regional consultation, women's rights and citizenship, Cairo, Egypt.
- Moghadam, V. M., & Senftova, L. (2005). Measuring women's empowerment: Participation and rights in civil, political, social, economic, and cultural domains. *International Social Science Journal*, 57(184), 389–412.
- Morrisson, C., & Jütting, J. P. (2005). Women's discrimination in developing countries: A new data set for better policies. *World Development*, 33(7), 1065–1081.
- Muller, E. N. (1995). Economic determinants of democracy. *American Sociological Review*, 60(6), 966–982.
- Munck, G. L., & Verkuilen, J. (2002). Conceptualizing and measuring democracy: Evaluating alternative indices. *Comparative Political Studies*, 35(1), 5–34.
- Nisha, S., & Ravi, S. (2010). Women, work, and employment outcomes in rural India. *Economic and Political Weekly*, 45(28), 49–60.
- Papaioannou, E., & Siourounis, G. (2008). Economic and social factors driving the third wave of democratization. *Journal of Comparative Economics*, 36(3), 365–387.
- Paxton, P. (2008). Gendering democracy. In A. M. Goetz, & A. Mazur (Eds.), *Politics, gender and concepts*. Cambridge: Cambridge University Press.
- Persson, T., & Tabellini, G. (2009). Democratic capital: The nexus of political and economic change. *American Economic Journal*, 1(2), 88–126.
- Przeworski, A., Alvarez, M. E., Cheibub, J. A., & Limongi, F. (2000). *Democracy and development: Political institutions and well-being in the world, 1950–1990*. New York: Cambridge University Press.
- Przeworski, A., & Limongi, F. (1996). Modernization: Theories and facts. *World Politics*, 49(2), 155–183.
- Psacharopoulos, G., & Patrinos, H. A. (2004). Returns to investment in education: A further update. *Education Economics*, 12(2), 111–134.
- Psacharopoulos, G., & Tzannatos, Z. (1989). Female labor force participation: An international perspective. *The World Bank Research Observer*, 4(2), 187–201.
- Psacharopoulos, G., & Tzannatos, Z. (1992). *Latin American women's earnings and participation in the labor force*. World Bank. http://www.wds.worldbank.org/servlet/WDSContentServer/WDSP/IB/1992/02/01/000009265_3961002093302/Rendered/PDF/multi_page.pdf. (Accessed 20.07.11).
- Rizzo, H., Abdel-Latif, A. H., & Meyer, K. (2007). The relationship between gender equality and democracy: A comparison of Arab versus non-Arab Muslim societies. *Sociology—The Journal of the British Sociological Association*, 41(6), 1151–1170.
- Roodman, D. (2006). *How to do xtabond2: An introduction to "Difference" and "System" GMM in Stata*. Centre for Global Development. Working paper 103. http://www.cgdev.org/sites/default/files/11619_file_HowtoDoxtabond8_with_foreword_0.pdf (Accessed 27.01.11).
- Roodman, D. (2008). *A note on the theme of too many instruments*. Center for Global Development. Working paper no. 125. http://www.cgdev.org/sites/default/files/14256_file_Instruments.pdf (Accessed 27.01.11).
- Ross, M. L. (2001). Does oil hinder democracy?. *World Politics*, 53(3), 325–361.
- Ross, M. L. (2006). Is democracy good for the poor?. *American Journal of Political Science*, 50(4), 860–874.
- Ross, M. L. (2008). Oil, Islam, and women. *American Political Science Review*, 102(1), 107–123.
- Rowlands, J. (1995). Empowerment examined. *Development in Practice*, 5(2), 101–107.
- Ryan, J. E. (1994). Survey methodology. *Freedom Review*, 25(1), 9–13.
- Safa, H. I. (1990). Women's social movements in Latin America. *Gender & Society*, 4(3), 354–369.
- Sarafidis, V., & Robertson, D. (2009). On the impact of error cross-sectional dependence in short dynamic panel estimation. *Econometrics Journal*, 12(1), 62–81.
- Sinha, N., Raju, D., & Morrison, A. R. (2007). *Gender equality, poverty and economic growth*. World bank policy research working paper no. 4349. <http://ssrn.com/abstract=1014233>. (Accessed 11.03.12).
- Smith, Z. K. (2001). Mali's decade of democracy. *Journal of Democracy*, 12(3), 73–79.
- Spierings, N., & Smits, J. (2007). *Women's labour market participation in Egypt, Jordan, Morocco, Syria & Tunisia: A three-level analysis*. Paper prepared for the IZA-world bank conference on employment and development, June 8th/9th in Bonn. <http://www.genderclearinghouse.org/upload/Assets/Documents/pdf/women%27%27s%20labour%20market%20participation%20in%20egypt.pdf> (Accessed 30.04.12).
- Staheli, L. A., & Cope, M. S. (1994). Empowering women's citizenship. *Political Geography*, 13(5), 443–460.
- UNDP. (1995). *Human development report 1995*. http://hdr.undp.org/en/media/hdr_1995_en_overview.pdf (Accessed 18.08.11).
- UNDP. (2011). *Measuring inequality: Gender-related development index (GDI) and gender empowerment measure (GEM)*. http://hdr.undp.org/en/statistics/indices/gdi_gem/ (Accessed 17.02.12).
- UNESCO (1983). *Training seminars on education statistics. Statistics of education in developing countries. Book 3. An introduction to their collection and analysis*. <http://unesdoc.unesco.org/images/0005/000548/054881eo.pdf> (Accessed 23.11.11).
- UNESCO (2011). *Education for all global monitoring project, Chapter 6: Understandings of literacy*. http://www.unesco.org/education/GMR2006/full/chapt6_eng.pdf (Accessed 23.11.11).
- United Nations. (1995). *Beijing Declaration and Platform for Action, fourth World Conference on Women*, Beijing, China, 4–15 September 1995. NY: United Nations <http://www.un.org/womenwatch/daw/beijing/platform/plat1.htm#statement> (Accessed 03.10.10).
- United Nations. (2000). *World's women 2000: Trends and statistics* (Vol. 16). New York: United Nations Publications.
- United Nations. (2012). *NGO branch, department of economic and social affairs*. <http://csonet.org/> (Accessed 25.09.12).
- U.S. Department of State. (2011). *Trafficking in persons report 2011*. <http://www.state.gov/j/tip/rls/tiprpt/2011/index.htm> (Accessed 16.03.12).
- Waylen, G. (1994). Women and democratization: Conceptualizing gender relations in transition politics. *World Politics*, 46(3), 327–354.
- Wejnert, B. (2005). Diffusion, development, and democracy, 1800–1999. *American Sociological Review*, 70(1), 53–81.
- Woodberry, R. D. (2012). The missionary roots of liberal democracy. *American Political Science Review*, 106(2), 244–274.
- Statistical Sources*
- Barro, R. J., & Lee, J.-W. (2011). *Barro-Lee educational attainment dataset*. <http://www.barrolee.com/> (Accessed 16.11.11).
- Pew Research Centre. (2009). *A report on the size and distribution of the world's Muslim population*. [http://www.pewforum.org/Muslim/Mapping-the-Global-Muslim-Population\(18\).aspx](http://www.pewforum.org/Muslim/Mapping-the-Global-Muslim-Population(18).aspx) (Accessed 18.11.11).
- Marshall, M. G., & Jagers, K. (2010). *Polity IV Project. Political Regime Characteristics and Transitions, 1800–2010*. <http://www.systemicpeace.org/polity/polity4.htm>.
- World Bank. (2011). *World development indicators*. <http://databank.worldbank.org/data/views/variableSelection/selectvariables.aspx?source=world-development-indicators> (Accessed 17.11.11).

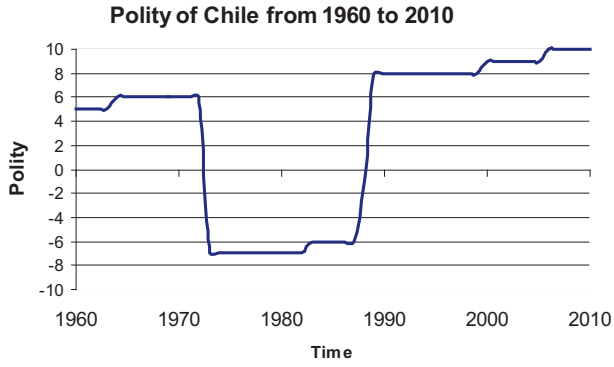


Figure A1. Latin America—Chile.

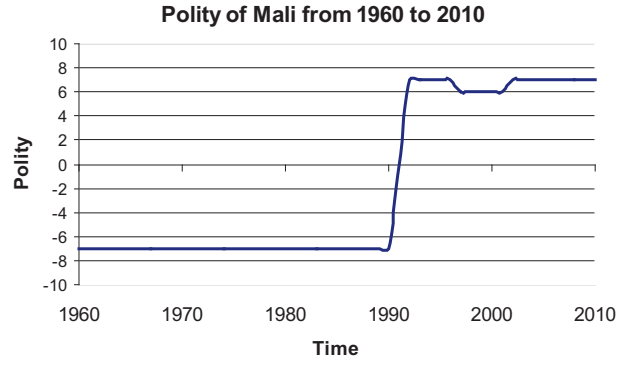


Figure A5. Sub-Saharan Africa—Mali.

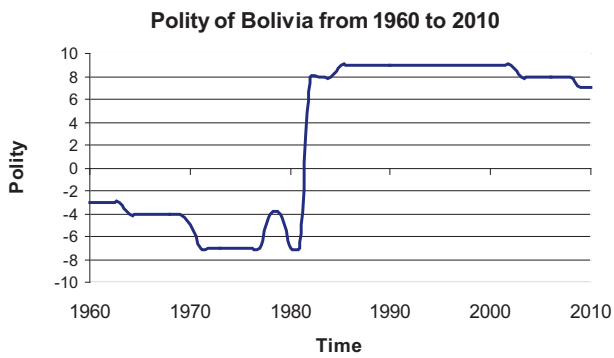


Figure A2. Latin America—Bolivia.

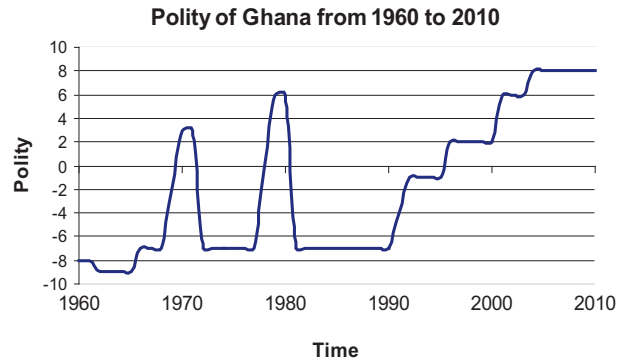


Figure A6. Sub-Sahara—Ghana.

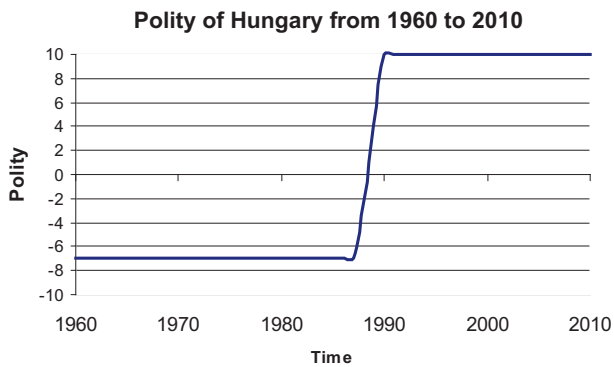


Figure A3. Eastern Europe—Hungary.

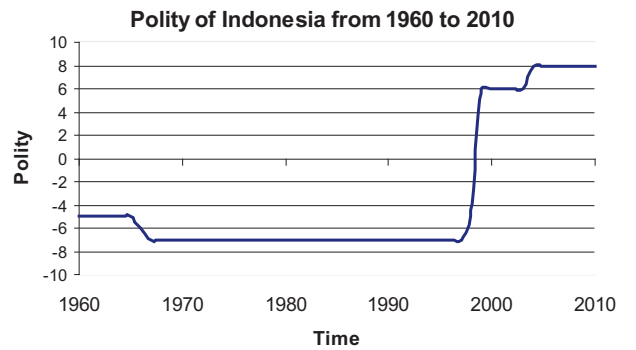


Figure A7. Asia—Indonesia.

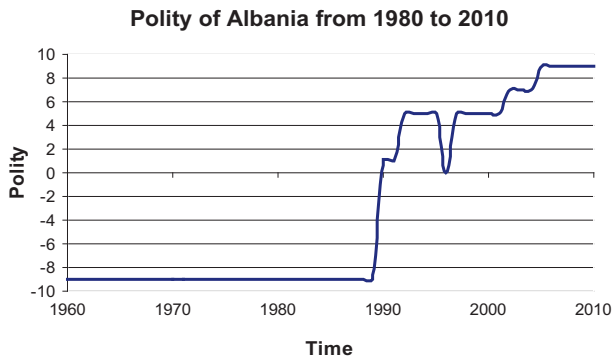


Figure A4. Eastern Europe—Albania.

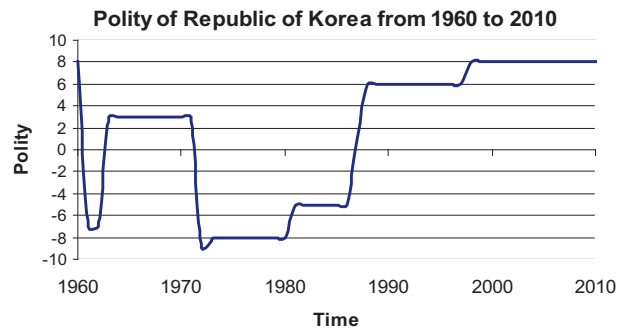


Figure A8. Asia—Republic of Korea.

Table 4. *List of countries by regime type**Always autocratic or anocratic*

Afghanistan, Algeria, Armenia, Bahrain, Cambodia, Cameroon, Central African Republic, China, Cote d'Ivoire, Cuba, Democratic Republic of Congo, Egypt, Arab Rep., Gabon, Gambia, Haiti, Iran, Iraq, Jordan, Kazakhstan, Kuwait, Kyrgyzstan, Lao PDR, Liberia, Libya, Malaysia, Mauritania, Morocco, Mozambique, Myanmar (Burma), Nepal, Pakistan, Papua New Guinea, Qatar, Republic of the Congo, Rwanda, Saudi Arabia, Sierra Leone, Singapore, Sri Lanka, Sudan, Swaziland, Syrian Arab Republic, Tajikistan, Tanzania, Togo, Tunisia, Uganda, United Arab Emirates, Vietnam, Zambia, Zimbabwe (51)

Transition to democratic

Albania, Argentina, Bangladesh, Benin, Bolivia, Brazil, Bulgaria, Burundi, Chile, Croatia, Czech Republic, El Salvador, Estonia, Ghana, Guatemala, Guyana, Honduras, Hungary, Indonesia, Kenya, Korea South, Latvia, Lesotho, Lithuania, Malawi, Mali, Mexico, Moldova, Mongolia, Namibia, Nicaragua, Niger, Panama, Paraguay, Philippines, Poland, Romania, Russia, Senegal, Slovak Republic, Slovenia, South Africa, Thailand, Turkey, Ukraine, Uruguay (46)

Democratic at the beginning and at the end of the period

Australia, Austria, Belgium, Botswana, Canada, Colombia, Costa Rica, Cyprus, Denmark, Dominican Rep, Ecuador, Fiji, Finland, France, Greece, India, Ireland, Israel, Italy, Jamaica, Japan, Mauritius, Netherlands, New Zealand, Norway, Peru, Portugal, Spain, Sweden, Switzerland, Trinidad, United Kingdom, United States, Venezuela (34)

Table 5. *All countries included in the dynamic panel models—fully balanced*

Armenia, Albania, Algeria, Argentina, Bahrain, Bangladesh, Benin, Bolivia, Brazil, Bulgaria, Burundi, Cameroon, Central African Republic, Chile, China, Cote D'Ivoire, Croatia, Cuba, Czech Republic, Democratic Republic of Congo, Egypt, El Salvador, Estonia, Fiji, Gabon, Gambia, Ghana, Guatemala, Guyana, Haiti, Honduras, Hungary, Indonesia, Iran, Iraq, Jordan, Kazakhstan, Kenya, Kyrgyzstan, Kuwait, Laos, Latvia, Lesotho, Liberia, Libya, Lithuania, Malawi, Malaysia, Mali, Mauritania, Mexico, Moldova, Mongolia, Morocco, Mozambique, Myanmar (Burma), Namibia, Nepal, Nicaragua, Niger, Pakistan, Panama, Papua New Guinea, Paraguay, Peru, Philippines, Poland, Qatar, Republic of Congo, Republic of Korea, Romania, Russia, Rwanda, Saudi Arabia, Senegal, Sierra Leone, Singapore, Slovak Republic, Slovenia, South Africa, Sri Lanka, Sudan, Swaziland, Syria, Tanzania, Thailand, Togo, Tunisia, Turkey, Turkmenistan, Uganda, Ukraine, United Arab Emirates, Uruguay, Vietnam, Zambia, Zimbabwe (97)

Table 6. *All countries included in the dynamic panel models—extended sample*

Afghanistan, Albania, Angola, Algeria, Argentina, Armenia, Azerbaijan, Bahrain, Bangladesh, Belarus, Benin, Bhutan, Bolivia, Brazil, Bulgaria, Burkina Faso, Burundi, Cambodia, Cameroon, Central African Republic, Chad, Chile, China, Comoros, Cote D'Ivoire, Croatia, Cuba, Czech Republic, Democratic Republic of Congo, Democratic Republic of Korea, Djibouti, Egypt, El Salvador, Equatorial Guinea, Eritrea, Estonia, Ethiopia, Fiji, Gabon, Gambia, Georgia, Ghana, Guatemala, Guinea, Guinea-Bissau, Guyana, Haiti, Honduras, Hungary, Indonesia, Iran, Iraq, Jordan, Kazakhstan, Kenya, Kuwait, Kyrgyzstan, Laos, Latvia, Lebanon, Lesotho, Liberia, Libya, Lithuania, Macedonia, Madagascar, Malawi, Malaysia, Mali, Mauritania, Mexico, Moldova, Mongolia, Morocco, Mozambique, Myanmar (Burma), Namibia, Nepal, Nicaragua, Niger, Nigeria, Oman, Pakistan, Panama, Papua New Guinea, Paraguay, Peru, Philippines, Poland, Qatar, Republic of Congo, Republic of Korea, Romania, Russia, Rwanda, Saudi Arabia, Senegal, Sierra Leone, Singapore, Slovak Republic, Slovenia, Solomon Islands, Somalia, South Africa, Sri Lanka, Sudan, Swaziland, Syria, Tajikistan, Tanzania, Thailand, Togo, Tunisia, Turkey, Turkmenistan, Uganda, Ukraine, United Arab Emirates, Uruguay, Uzbekistan, Vietnam, Zambia, Zimbabwe (123)

Table 7. *Fully balanced sample—summary statistics*

Variable		Mean	Std. Dev.	Min	Max	Observations
Polity2	Overall	-1.023	6.68	-10.00	10.00	$N = 2,518$
	Between		4.69	-10.00	7.54	$n = 97$
	Within		4.79	-15.75	10.86	$T\text{-bar} = 25.959$
Female education	Overall	5.434	2.91	0.25	12.61	$N = 2,522$
	Between		2.79	0.58	10.93	$n = 97$
	Within		0.88	2.27	8.21	$T = 26$
Fertility rates	Overall	4.105	1.82	1.08	8.31	$N = 2,484$
	Between		1.69	1.44	7.75	$n = 97$
	Within		0.72	1.90	6.81	$T\text{-bar} = 25.608$
Female labor force	Overall	38.385	10.86	5.05	53.76	$N = 2,519$
	Between		10.79	10.38	52.87	$n = 97$
	Within		1.69	30.92	44.21	$T\text{-bar} = 25.969$
Urbanization	Overall	47.757	22.75	4.34	100.00	$N = 2,522$
	Between		22.56	6.76	100.00	$n = 97$
	Within		3.70	31.30	61.65	$T = 26$
Economic growth	Overall	0.037	0.07	-0.66	0.67	$N = 2,130$
	Between		0.02	-0.04	0.11	$n = 94$
	Within		0.07	-0.61	0.75	$T\text{-bar} = 22.660$

Variable		Mean	Std. Dev.	Min	Max	Observations
lngdp80	Overall	7.355	1.15	5.32	10.96	$N = 2,240$
	Between		1.21	5.32	10.96	$n = 94$
	Within		0.00	7.35	7.35	$T\text{-bar} = 23.830$
log (population density)	Overall	3.760	1.39	0.09	8.74	$N = 2,519$
	Between		1.38	0.34	8.50	$n = 97$
	Within		0.17	3.02	4.45	$T\text{-bar} = 25.970$
Muslim	Overall	0.309	0.46	0.00	1.00	$N = 2,522$
	Between		0.46	0.00	1.00	$n = 97$
	Within		0.00	0.31	0.31	$T = 26$
Foreign aid	Overall	38.101	54.79	-21.50	799.22	$N = 2,061$
	Between		38.67	0.23	231.43	$n = 87$
	Within		38.21	-198.97	790.57	$T\text{-bar} = 23.690$
Interest on debt servicing	Overall	2.433	2.47	0.00	43.73	$N = 1,778$
	Between		1.64	0.33	11.06	$n = 78$
	Within		1.81	-7.30	35.10	$T\text{-bar} = 22.795$
Gender gap in education	Overall	1.001	1.00	-2.08	3.81	$N = 2,522$
	Between		0.96	-1.75	3.33	$n = 97$
	Within		0.30	-0.95	2.37	$T = 26$
Female secondary enrollment	Overall	53.908	32.67	1.63	117.00	$N = 1,550$
	Between		32.10	3.81	110.08	$n = 96$
	Within		9.26	13.76	94.91	$T\text{-bar} = 16.146$
Male education	Overall	6.435	2.52	0.88	12.90	$N = 2,522$
	Between		2.41	1.32	11.51	$n = 97$
	Within		0.78	3.71	9.08	$T = 26$
Male secondary enrollment	Overall	57.584	28.45	3.40	119.54	$N = 1,550$
	Between		27.88	5.24	100.06	$n = 96$
	Within		0.782	3.711	9.077	$T = 26$
Total education	Overall	5.931	2.68	0.615	12.749	$N = 2,522$
	Between		2.57	1.000	11.211	$n = 97$
	Within		0.82	3.16	8.411	$T = 26$

Table 8. *Extended sample—summary statistics*

Variable		Mean	Std. Dev.	Min	Max	Observations
Polity2	Overall	-1.527	6.526	-10	10	$N = 3,143$
	Between		4.632	-10	7.538	$n = 123$
	Within		4.605	-16.258	10.358	$T\text{-bar} = 25.553$
Female education	Overall	5.384	2.922	0.250	12.609	$N = 2,574$
	Between		2.804	0.577	10.935	$n = 99$
	Within		0.868	2.224	8.157	$T = 26$
Fertility rates	Overall	4.306	1.877	1.080	8.310	$N = 3,156$
	Between		1.748	1.444	7.787	$n = 123$
	Within		0.703	1.855	7.007	$T\text{-bar} = 25.658$
Female labor force	Overall	38.853	10.535	5.048	55.108	$N = 3,195$
	Between		10.463	10.382	52.868	$n = 123$
	Within		1.606	31.391	44.690	$T\text{-bar} = 25.976$
Urbanization	Overall	45.642	22.652	4.339	100.000	$N = 3,198$
	Between		22.433	6.765	100.000	$n = 123$
	Within		3.720	28.185	59.700	$T = 26$
Economic growth	Overall	0.038	0.074	-0.662	0.674	$N = 2,593$
	Between		0.025	-0.036	0.145	$n = 118$
	Within		0.070	-0.613	0.748	$T\text{-bar} = 21.975$
lngdp80	Overall	7.281	1.139	5.325	10.959	$N = 2,733$
	Between		1.183	5.325	10.959	$n = 118$
	Within		0.000	7.281	7.281	$T\text{-bar} = 23.161$

(Continued on next page)

Variable		Mean	Std. Dev.	Min	Max	Observations
log (population density)	Overall	3.709	1.335	0.086	8.744	$N = 3,195$
	Between		1.329	0.336	8.497	$n = 123$
	Within		0.170	2.974	4.404	$T\text{-bar} = 25.976$
Muslim	Overall	0.333	0.471	0	1	$N = 3,198$
	Between		0.473	0	1	$n = 123$
	Within		0.000	0.333	0.333	$T = 26$
Foreign aid	Overall	41.098	55.018	-21.498	799.215	$N = 2,645$
	Between		39.893	0.232	231.429	$n = 113$
	Within		37.168	-195.977	793.567	$T\text{-bar} = 23.407$
Interest on debt servicing	Overall	2.217	2.352	0.002	43.728	$N = 2,195$
	Between		1.577	0.331	11.057	$n = 100$
	Within		1.688	-7.516	34.888	$T\text{-bar} = 21.95$
Gender gap in education	Overall	1.017	1.006	-2.077	4.371	$N = 2,574$
	Between		0.962	-1.747	3.328	$n = 99$
	Within		0.307	-0.933	2.695	$T = 26$
Female secondary enrollment	Overall	50.548	33.485	0.000	116.998	$N = 1,848$
	Between		32.945	3.808	110.080	$n = 120$
	Within		9.234	10.399	91.550	$T\text{-bar} = 15.4$
Male education	Overall	6.401	2.516	0.879	12.899	$N = 2,574$
	Between		2.404	1.317	11.512	$n = 99$
	Within		0.781	3.677	9.043	$T = 26$
Male secondary enrollment	Overall	54.760	29.322	2.966	124.497	$N = 1,848$
	Between		28.778	5.237	100.062	$n = 120$
	Within		8.362	15.961	91.501	$T\text{-bar} = 15.4$
Total education	Overall	5.889	2.68	0.615	12.749	$N = 2,574$
	Between		2.57	1.000	11.211	$n = 97$
	Within		0.81	3.11	8.369	$T = 26$

Table 9. *Muslim majority countries*

Albania, Algeria, Azerbaijan, Bahrain, Bangladesh, Egypt, Gambia, Indonesia, Iran, Iraq, Jordan, Kazakhstan, Kuwait, Kyrgyzstan, Libya, Malaysia, Mali, Mauritania, Morocco, Niger, Pakistan, Qatar, Saudi Arabia, Senegal, Sierra Leone, Sudan, Syria, Tajikistan, Tunisia, Turkey, Turkmenistan, United Arab Emirates, Uzbekistan (33)

Table 10. *Comparison of countries that developed democratically by their level of female education and low fertility[§]*

Countries that did develop democratically (Polity2 scores 6–10)		
Began period with female education over 6 years	Over 6 years of education achieved during this period	Below 6 years of education achieved during this period
A	B	C
Albania, Bulgaria, Chile, Croatia, Czech Republic, Estonia, Guyana, Hungary, South Korea, Latvia, Lithuania, Moldova, Panama, Russia, Slovak Republic, Slovenia, Ukraine, and Uruguay	Bolivia, Brazil, El Salvador, Honduras, Lesotho, Mongolia, Mexico, Namibia, Paraguay, South Africa, and Thailand	Bangladesh (4.85), Nicaragua (5.27), and Turkey* (5.5)
Countries that did not develop democratically (Polity2 score less than 6)		
Began period with female education over 6 years	Over 6 years of education achieved during this period	Below 6 years of education achieved during this period
D	E	F
Armenia, China, Cuba, and Kazakhstan	Algeria*, Bahrain*, Gabon*, Iran*, Jordan*, Kuwait*, Libya*, Malaysia, Qatar*, Saudi Arabia*, Singapore, Swaziland, UAE*, and Zimbabwe	Cambodia, Egypt*, Haiti, Laos, Morocco*, Myanmar, Nepal, Pakistan*, Syria*, Tunisia*, Vietnam

[§]All countries in the table achieved a low fertility rate (<4 children per woman).

*These countries have very low female labor force participation rates below 30%. Countries without * had achieved female labor force participation above 30%.