

Gender equality, good governance, and peace

Margit Bussmann
University of Konstanz

Draft version

Prepared for presentation at the General PAC meeting, Gaillac (France), June 7-9, 2007

Introduction

Large bodies of literature on civil war deal with ethnic and religious polarization or economic inequality as sources of violence. Another form of discrimination in society, gender inequality is not on the forefront of studies of armed conflict. True, examples of direct military confrontation between women and men are hard to come about in history. The amazons so far belong to the realm of Greek myths as archeological evidence of their existence is still missing. Still, some first empirical studies support the peacefulness of societies with less gender discrimination.

Why this is so still needs to be explored. Most explanations refer to the general pacifism of women as a result either of nature or socialization. This study suggests an indirect link between the two concepts: Gender equality leads to peace through the promotion of development and good governance. The pacifying effect of gender equality is not the result of higher moral standards of women but rather due to structural explanations. With more participation in the formal labor market and more educational equality and thus more competition though women corruption and rent-seeking is inhibited and good governance promotes peace. The insignificant results of parliamentary representation do not support the claim that with more peacefully minded women in power the use of force will decline.

Gender equality, good governance, and conflict

A few studies link gender equality directly to more peace. For international conflicts Regan and Paskeviciute (2003) find that a pair of states that have low birthrates and a high percentage of women in parliament are less likely to become involved in a military dispute with each other. High fertility rates also contributed to the escalation of conflicts. Similarly, Caprioli (2003) using a gender index that combines the fertility rate and labor force participation attested less aggression in the international sphere to states with more gender

equality. In a study of internal conflicts she finds that a high fertility rate and low female labor force participation increase the risk of domestic conflict (Caprioli 2005). A study on human rights abuse also showed that states with more gender equality in terms of more political presentation, i.e. the percentage of women in parliament, are more inclined to follow human rights (Melander 2005).

The main theoretical explanation for this relationship argues that it is in the nature of women to be more peaceful. This is reflected in various studies on public opinion (citations). Consequently, if more women were in positions of power, the world would be more peaceful. Whereas some rely on biological differences and the women's reproductive role in explaining female pacifism, a constructivist version emphasizes the gender identity and more widespread norms about gender equality. Boys and men are socialized to be tough and warlike, whereas girls and women are socialized to empathy and subordination. Femininity is linked to nonviolence, emotion, and harmony and masculinity to aggression and reason (Caprioli 2003, Melander 2005). Caprioli (2005) sees structural violence, and its characteristics according to Galtung, namely exploitation, penetration, fragmentation, and marginalization, against women and gendered nationalism and the way it defines women's role as caretaker as a force for intrastate violence. Both versions, however, conclude that with more female political representation states would be more peaceful regardless if women are more peaceful by nature or by socialization.

More equal representation of women in economic and political life could thus be a constraint for the government to use force. The arguments about the peacefulness of women is not fully convincing as female heads of states are not necessarily more reluctant to use military force (e.g., Margaret Thatcher). Empirical tests of this claim look at female head of states and the percentage of women in the legislative. Detecting peacefulness of female leaders is somewhat problematic as female chief executives are a quite rare event and thus does not show a statistically significant impact (Caprioli 2003, Melander 2005). Besides, it is

argued that only female leaders that adapt to the male ways of doing politics can rise to the top in a world dominated by men. However, a non-significant finding could also be a sign that female leaders are not more reluctant to use force than male leaders. Other studies focus on the percentage of women in parliament as a constraint.

Still, studies show that gender inequality is linked to conflict. The explanation could be structural instead of biological or psychological. With a large minority group of women and their exclusion from political and economic life a state abandons a large pool of human resources and thus reduces competition for political and economic posts. This hurts economic development, leads to corruption and ultimately increases domestic conflict. Thus a fruitful avenue could be the exploration of indirect effects, specifically gender equality's impact on good governance and development. If gender equality contributes to a society's development and its government following good practice, factors that in turn provide for more peaceful conflict resolutions, it indirectly promotes peace. The focus is less on women in positions of power but rather considers the involvement of women as a constraint to misuse power. Thus female participation in public life would constrain the government as potential voters. Women who are more educated and are active in professional life are more likely to vote. The ruling elite will be more attentive to this public and to its preferences.

Gender equality and development

Whether gender inequality is good or bad for development is still somewhat disputed in the literature. Several studies find a growth reducing effect of gender inequality. Denying educational opportunities to girls reduces the average human capital and thus not just growth directly (Dollar & Gatti, 1999; Tzannatos, 1999) but also indirectly through lower investment and lower fertility rates. In the long run educated mothers can improve the quality of their children's human capital and thus contribute to growth in the future (Klasen, 2002). Dollar and Gatti (1999) found evidence that gender inequality in secondary education slows

economic growth in middle and high income industrial countries where human capital is more important and it is less of a distortion in poor agricultural societies. In turn, increases in per capita income reduce gender inequality in education and health (Brown, 2004). Dollar and Gatti (1999) confirm in their empirical study that “good times are good for women” (21) as increasing income per capita is positively related to indicators of gender equality in education and health. However, with regard to gender inequality in secondary education, there is only minor improvement among very poor countries but the effect gets strong when countries move from middle to high income levels. The explanation they offer points to a market failure in developing countries that leads to low investment in the education of girls. This market failure diminishes in more developed countries. Instead of being simply an efficient economic choice, they attribute a large share of the variance in gender inequality to religious preferences (see also Tzannatos, 1999). Klasen (2002) finds the female-male ratio of schooling to be positively related to economic growth directly and to higher investment rates in developed and developing countries with even a stronger effect in sub-Saharan Africa. Whereas in Barro’s (1997) study female primary and secondary school enrolment rates do not directly influence economic growth, he finds an indirect effect. Female primary education has a significant negative impact on fertility rates and infant mortality. Investing in women’s education is thus particularly beneficial for general health. A healthy population is a significant factor in attracting foreign investment inflows to developing countries (Alsan, Bloom, & Canning, 2006).

For other scholars, the assertion is exactly the opposite, that is to say that gender inequality leads to higher economic growth rates treating it thus as an efficient choice. In a study of semi-industrialized states with an export-orientation in female-dominated manufacturing industries, Seguino (2000) supports the hypothesis that wage differentials stimulate growth and investment. This could mean that states with an export-orientation might not be interested to advance a policy that invests in the human capital of women because the

economy is interested in them as cheap workers. Seguino (2000) argues that the distribution of work cannot be exclusively explained by education but also by the structure of the economy. Due to the fact that women are crowded in low paying jobs in sectors that produce price elastic goods influences the trade pattern. Wage discrimination can boost investment in female-dominated industries and thus create a comparative advantage for export. Busse and Spielmann (2006) showed that gender inequality in wages could improve a country's comparative advantage in labor-intensive goods. On the other hand, the study revealed weak indication that a smaller gender inequality in the labor force participation and education enhance the comparative advantage. This means that whereas female education and labor force participation are advantageous for a country's economy (i.e., if women are better educated and more skilled), the downside is that for the economy it could also be beneficial to exploit cheap female labor.

In several middle-income countries, women's participation in the labor force has been increasing with more economic development (Horton, 1999). Tzannatos (1999) also detects that female labor force participation rises relatively to men's; the gap narrows even much faster in developing countries. This could be the result of a declining male participation because of more schooling and availability of pensions or the result of a rise in female participation rates. One reason for the rising participation in the labor force is also the higher demands of women for more bargaining power in the marriage and more financial independence, demands that are also enhanced by the feminist movement (Beneria, 2003). Labor force participation is an important component as an outside-option when it comes to bargaining the distribution of household work within a marriage (Iversen & Rosenbluth, 2006). Working women contribute to the household income. This reduces the pressure on the male bread winner who might turn to rebel movements or the join the military as income source if alternative options are missing. The improved bargaining position of working women makes them more assertive and facilitates the enforcement of her position at home. In

most cases, a woman will prefer a working and assisting husband at home than a fighting husband away.

On the other hand higher female labor force participation could leave young males unemployed, thus increasing the main source for rebel recruitment. With reference to developing countries, the literature speaks of a “feminization” of many jobs that were previously dominated by men (Standing, 1989). A key question in this context is whether the narrowing gender gap in employment and remuneration presents a “harmonizing down” or a “harmonizing up” (Elson, 1999), whether male employment and wages decrease while women win or whether both win in absolute terms and women just win a little more.

Interestingly, in Reagan and Paskeviciute’s (2003) study the percentage of women in the workforce is positively related to the onset of a dyadic international dispute. This could be an indication also of reverse causality, that with a looming military conflict many jobs will be taken over by women. As a matter of fact, World War II gave a boost to female employment and once the war was over a higher share of women remained in the formal labor market than before the war.

Investment in human capital is important for women to compete for skilled jobs, especially as countries become more developed. Economic development also increases educational opportunities for girls and women. This reduces fertility rates (Barro 1997) in the first place but also educated mothers will have more educated children which reduces the pool of uneducated young males from which the rebels can recruit.

Gender equality and good governance

In addition to the advantages for development, studies point to a positive effect of female participation and gender equality for democracy. Primary school attainment of women is positive for democracy. Moreover especially equal educational opportunities (i.e. a higher ratio of female to male school attainment) are good for democracy (Barro 1997). In

democracies, women are better able to organize and express their preferences. Elections are important channels of communication. Politicians have an interest to assure electoral support of women, for example by providing the public goods education and health care. Furthermore, political systems with an open and competitive recruitment process allow access for more female politicians who in turn will champion more educational opportunities for women but who also serve as an example to other women (Brown, 2004; Thomas, 1991).

Repeatedly the literature points to higher moral standards of women. Women are portrayed to act rather in the common interest and men in their own interest or pocket. Increased female participation in political and economic life increases competition, thus could reduce corruption and lead to good governance. Empirical studies did indeed detect that if women hold a larger share of seats in parliament and in government, and participate more in working life, there are lower levels of corruption in a country (Swamy, Knack, Lee, & Azfar, 2001; Dollar, Fisman, & Gatti, 2001). Swamy et al. present additional evidence based on the World Value Survey that more women than men reject the hypothetical acceptance of bribery. Furthermore, they analyze enterprises in Georgia where they find that firms headed by men give bribes more than twice as often that companies headed by women.

Good governance and conflict

The positive effect of economic development on peace is one of the few robust statistical findings in the civil war literature (Hegre & Sambanis 2006). The explanation for this can reach from grievance, resentment and dissatisfaction in the population of poor countries. Recent studies point to state capacity as one major mechanism linking development and peace. States with low levels of per capita income are unable to monopolize the use of force and are less successful in counter-insurgency (Fearon and Laitin 2003). For Fearon and Laitin the level of development is interpreted as an indicator for state capacity, the capacity of a state to generate income and thus a government's strength. Using the ICRG index, a

measure that better assesses good governance Bussmann & de Soysa (2006) find it to be only significantly related to conflict onset when GDP per capita is excluded as the two are highly correlated.

In sum, this article will explore whether gender equality contributes to peace because it promotes development and good governance, factors that are conflict-impeding. This is an alternative explanation to the more direct relationship that sees the benefit of female political participation because women are more peaceful either by nature or by socialization.

Research design

The empirical tests will evaluate the effect of various indicators for gender equality first on good governance and then directly on the onset of armed conflict while holding good governance constant. The data cover more than 100 countries over the years 1985 to 2000. Methods of estimation are the panel fixed-effects regression models in the model of good governance. The model of conflict onset is estimated with a pooled time-series cross-section logit model with White-corrected robust standard errors. Most independent variables are lagged by one year.

The main independent variables are various indicators for gender inequality. First, I analyze the effect of political representation of women. The Inter-Parliamentary Union provides information on the percentage of parliamentary seats that are held by women in single or the lower chamber in case of bicameral assemblies. Data is available for the years 1995 and 1999 only from the United Nations Statistics Division (2005). This data set also contains information on the date when the voting right for women was introduced. Based on this information, a variable is calculated that accounts for the number of years since female have the voting right. Besides of voting being a form of political participation in itself, presumably, political participation on all levels will be more anchored the longer women have the right to vote.

With regard to the participation of women in professional life, this study examines the effect of female labor force participation, the number of women that are active in the labor force as a percentage of the total labor force. The female life expectancy at birth reflects health aspect or the physical quality of life. Alternatively, the fertility rate is also an indication of how much time women have to devote for caretaking activities. Female life expectancy, and to assess inequality more directly, the ratio of female to male life expectancy will be tested. In a similar way, inequality in education will be assessed. Education can be defined with a variety of operational definitions. Some tests use the adult literacy rate, the percentage of women that are older than 15 years who can read and write. As this variable does not undergo strong yearly fluctuations, the observations are inter- and extrapolated to reduce missing values. The data set does not contain information of several of the industrialized countries. Alternatively, the operational definition of education is the primary, secondary, or tertiary school enrollment rates of females, using the gross ratio which is the number of children enrolled in school. The school enrollment rates are also interpolated to reduce missing values. Again, the absolute level, but also the ratio between female and male education levels will be analyzed. Data on the various education variables, the labor force participation and life expectancy are available from World Development Indicators 2004.

The model of good governance:

The composite international country risk guide (ICRG) index as a measure of good governance is an overall index based on 22 components that rate political, financial, and economic risk. Ranging from 0 as highest risk to 100 as lowest risk high values are standing for good governance. Good governance should be influenced by a country's level of development, democracy, and integration into the world economy. With increasing economic development the capacity of states improve through more tax income enabling states to provide infrastructure and social services to its citizens. The tax collecting system needs an

efficient bureaucracy. The level of development is measured as the logarithmic transformation of real GDP per capita on a purchasing power parity basis in constant 1995 international dollars with data from the Penn World Tables 6.1. Democracies are typically attributed for following the rule-of-law. The widely used measure from Polity IV accounts for regime type combining various institutional characteristics of a political system to an index ranging from -10 for autocracies to +10 for pure democracies (Jagger & Gurr, 1995). A frequently used measure for economic integration is trade openness. The operational definition of trade openness is the sum of exports and imports in relation to GDP with data from the Penn World Tables version 6.1. (Heston et al., 2002).

The model of conflict onset: The onset of civil war is taken from the Uppsala/PRIO data set on armed conflict (Gleditsch et al.). One central control in most studies is the level of economic development. It will be not included in the present model as it highly correlates with and captures similar mechanisms as the ICRG index. Instead, I include the yearly growth rate of GDP per capita to account for the notion that prosperous countries are less likely to become involved in a domestic conflict. Democracy and its square term (with data from Polity IV) account for the curvilinear relationship as suggested by Hegre and colleagues (2001). Furthermore, the logarithm of population controls for the heterogeneity of large countries and thus an increased risk of civil war. Finally trade openness is expected to have a stabilizing effect (Bussmann and Schneider 2007). Data from WDI 2004. Other variables are excluded for the moment, such as civil war in the neighborhood or years of peace as I do not expect them to be intervening variables.

Results

This study first will analyze the effect of various indicators of gender inequality on the ICRG index, the measure for good governance. As reported in Table 1, the control variables,

per capita income, democracy, and trade openness, all improve a state's quality of governance. In the first column the share of women in parliament has no significant impact. This variable is only available for the years 1995 and 1999; the results reflect thus rather a cross-sectional analysis. The variable has no significant impact in the 1995 sample but significantly increases the ICRG index in the 1999 sample. The years since women acquired the right to vote is significantly contributing to good governance. The results support the claim that political participation of women reduces political and economic risk. The same is true for female labor force participation (column 3). As expected, higher female, as well as male, literacy rates improve the quality of governance. However, not just the absolute rise in literacy is good but also if female literacy rises relative to men's. When substituting the literacy rates with primary, secondary, or tertiary school enrolment rates, the positive results for education hold up. Absolute and relative improvements in female school enrolment are highly significantly and positive related to the ICRG index. This is also the case for male primary and secondary school enrolment rates but not for male enrolment in higher education, where the coefficient is positive but not significant. Overall, the results clearly support the argument that gender equality is beneficial for good governance. This is consistent with findings from others (Dollar et al. 2001, Swamy et al. 2001).

In the next step we need to investigate the effect on the onset of civil war. In Table 2, we see in the first column that the control variables have the expected signs and are largely significant. Growth is significant at $p < .09$ and trade openness with $p < .07$ in a one-tailed test. The attention, however, needs to be on the ICRG index which is negatively and significantly related to the onset of armed conflict. If the variables for gender inequality work through their effect on good governance, we would expect them to be not significant when the ICRG index is included. In the second column the share of women in parliament is not significantly related to the onset of conflict, neither is the ICRG index and several of the control variables in this small sample. Better conclusions can be drawn from the years of female suffrage. It is

negative but statistically not significant. Instead the ICRG index remains a conflict-inhibiting factor. In a test on the sample but without the ICRG the variable for female suffrage reaches a significance of $p < .06$ (one-tailed). This implies that it is not the political participation that directly influences conflict but rather their effect through good governance. The female labor force participation in column 4 shows also an insignificant result. However, without the ICRG index in the model, labor force participation still has no significant influence. Other variables, not reported here, like a high fertility rate and low female life expectancy are also associated with a higher risk of conflict.

In Table 3, the effects of female and male literacy, as well as the relative effect of female to male literacy rates have all conflict-reducing effects. All three variables show highly significant results. The insignificance of ICRG index is, however, partly a result of the smaller sample. As data for literacy rates are missing for many developed countries, I additionally test the effect of school enrolment rates. Primary and tertiary school enrolment rates of females and males were significantly related to less conflict onset. The secondary enrolment rates of both sexes were, albeit with a negative coefficient, statistically not significant. This is somewhat surprising. For all levels of schooling however, an improvement in the relative enrolment rates of girls was related to less conflict. In all tests with the enrolment rates, the variable for good governance remains, at least marginally significant, a conflict-reducing variable. Thus, in case of education, gender equality appears to have an effect on the risk of conflict onset, independent from its indirect effect on good governance.

Conclusion

Besides an advocacy of gender equality in its own right, the advantages of gender equality are manifold. On the individual level, participation of women increases their bargaining position in the household and improves the welfare of children (Tzannatos, 1999). Women playing a more important role in economic and political life is not just advantageous

to the female population but to society as a whole (Elson, 1999). The results of this analysis indicate that gender inequality does indeed improve good governance and through this channel promotes peace. However, gender equality in education appears to have, in addition, an independent effect. A next version needs to consider gender discrimination's effect on economic development and take potential reverse effects more appropriately into account.

Whereas economic development and democracy can help to improve the situation of women and reduce the gender gap (Brown, 2004, Dollar & Gatti, 1999) additional efforts are required. Several studies point to cultural and religious country characteristics as explanation of gender inequality (Tzannatos 1999). For this reason and to speed up the process the state needs to actively pursue policies that provide public goods such as sufficient education not just to girls but also to adult women.

References

- Alsan, M., Bloom, D. E. & Canning, D. (2006). The effect of population health on foreign direct investment inflows to low- and middle-income countries. *World Development* 34(4), 613-630.
- Barro, R. J. (1997). *Determinants of Economic Growth*, Cambridge, MA: The MIT Press.
- Beneria, L. (2003). *Gender, Development, and Globalization*. New York: Routledge.
- Brown, D. S. (2004). Democracy and gender inequality in education: a cross-national examination, *British Journal of Political Science* 34 (1), 137-192.
- Busse, M. & Spielmann, C. (2006). Gender inequality and trade. *Review of International Economics* 14(3), 362-379.
- Caprioli, Mary. 2003. Gender equality and state aggression: The impact of domestic gender equality on state first use of force. *International Interactions* 29: 195-214.
- Caprioli, Mary. 2005. Primed for Violence: the role of Gender Inequality in Predicting Internal Conflict. *International Studies Quarterly* 49: 161-178.
- Dollar, D., Fisman, R., & Gatti, R. (2001). Are women really the “fairer” sex? Corruption and women in government. *Journal of Economic Behavior & Organization* 46, 423-429.
- Dollar, D. & Gatti, R. (1999). Gender inequality, income, and growth: Are good times good for women? *Policy Research Report on Gender and Development Working Paper Series*, Working Paper No. 1, Washington, DC: World Bank.
- Dollar, D. & Kraay, A. (2002). Growth is good for the poor. *Journal of Economic Growth* 7, 195-225.
- Elson, D. (1999). Labor markets as gendered institutions: equality, efficiency and empowerment issues. *World Development* 27(23), 611-627.
- Gray, M. M., Kittilson, M. C., & Sandholtz, W. (2006). Women and globalization: a study of 180 countries, 1975-2000. *International Organization* 60, 293-333.
- Heston, A., Summers, R., & Aten, B. (2002). Penn World Table, Version 6.1. Center for International Comparisons at the University of Pennsylvania.
- 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.
- Jagger, K. & Gurr, T. (1995). Tracking democracy’s third wave with the Polity III data, *Journal of Peace Research* 32 (4), 469-482.
- 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. *World Bank Economic Review* 16, 345-373.
- Kraay, A. (2006). When is growth pro-poor? Evidence from a panel of countries. *Journal of Development Economics* 80, 198-227.
- Melander, Erik. (2005). Political Gender Equality and State Human Rights Abuse. *Journal of Peace Research* 42(2): 149-166.
- Regan, Patrick M. & Aida Paskeviciute. 2003. Women’s Access to Politics and Peaceful States. *Journal of Peace Research* 40(3): 287-302.
- Seguino, S. (2000). Gender inequality and economic growth: a cross-country analysis. *World Development* 28 (7), 1211-1230.
- Standing, G. (1989). Global feminization through flexible labor. *World Development* 17, 1077-1095.
- Swamy, A., Knack, S., Lee, Y., & Azfar, O. (2001). Gender and corruption. *Journal of Development Economics* 64, 25-55.
- Thomas, S. (1991). The impact of women on state legislative policies. *The Journal of Politics* 53(4), 958-976.
- Tzannatos, Z. (1999). Women and labor market changes in the global economy: growth helps, inequalities hurt and public policy matters. *World Development* 27(3), 551-569.

World Bank. (2004). World Development Indicators 2004 CD-ROM. Washington, DC:
World Bank.

Table 1. The effect of gender equality on good governance

	(1) ICRG	(2) ICRG	(3) ICRG	(4) ICRG	(5) ICRG	(6) ICRG
GDP per capita, $t-1$	8.986 (1.85)*	2.571 (2.02)**	6.562 (5.21)***	12.049 (8.20)***	13.013 (8.90)***	14.262 (9.58)***
Democracy, $t-1$	-0.603 (1.64)	0.405 (8.49)***	0.611 (13.36)***	0.364 (6.43)***	0.353 (6.19)***	0.399 (6.84)***
Trade open, $t-1$	-0.032 (0.83)	0.049 (4.09)***	0.072 (5.83)***	0.059 (3.90)***	0.071 (4.71)***	0.076 (4.89)***
Women in parliament	-0.138 (0.98)					
Years of female suffrage		0.614 (15.04)***				
Labor force participation, $t-1$			1.558 (10.78)***			
Female literacy, $t-1$				0.707 (13.54)***		
Male literacy, $t-1$					0.980 (13.31)***	
Ratio female/male literacy, $t-1$						78.548 (11.27)***
Constant	6.907 (0.17)	4.392 (0.43)	-64.058 (6.56)***	-93.478 (7.99)***	-131.287 (10.75)***	-129.604 (10.26)***
Observations	171	1376	1385	939	939	939
Number of states	98	111	113	82	82	82
R-squared	0.08	0.39	0.34	0.43	0.42	0.40

Absolute value of t statistics in parentheses

* significant at 10%; ** significant at 5%; *** significant at 1%

Table 2. The effect of gender equality on the onset of civil war

	(1) onset	(2) onset	(3) onset	(4) onset	(5) onset
Democracy, $t-1$	0.332 (1.81)*	1.737 (1.72)*	0.327 (1.76)*	0.336 (1.83)*	0.267 (1.18)
Democracy sq., $t-1$	-0.014 (1.80)*	-0.068 (1.72)*	-0.014 (1.66)*	-0.015 (1.84)*	-0.012 (1.27)
Growth	-3.566 (1.34)	1.477 (0.30)	-3.549 (1.38)	-3.538 (1.30)	-10.690 (2.14)**
Log (population)	-0.015 (0.12)	0.816 (3.04)***	-0.010 (0.08)	-0.034 (0.29)	0.376 (2.23)**
Trade open, $t-1$	-0.012 (1.54)	-0.006 (0.51)	-0.013 (1.70)*	-0.012 (1.54)	-0.011 (1.09)
ICRG, $t-1$	-0.034 (2.00)**	-0.045 (0.55)	-0.029 (1.73)*	-0.032 (1.75)*	-0.004 (0.13)
Women in parliament		-0.123 (0.74)			
Years of female Suffrage			-0.014 (1.10)		
Labor force Participation, $t-1$				-0.016 (0.67)	
Fertility rate, $t-1$					0.367 (2.09)**
Constant	-1.508 (0.69)	-22.674 (2.30)**	-1.261 (0.59)	-0.671 (0.31)	-11.143 (2.50)**
Observations	1280	169	1270	1280	813

Robust z statistics in parentheses

* significant at 10%; ** significant at 5%; *** significant at 1%

Table 3. The effect of educational gender equality on the onset of civil war

	(1) onset	(2) onset	(3) onset
Democracy, $t-1$	0.301 (1.66)*	0.284 (1.57)	0.331 (1.80)*
Democracy sq., $t-1$	-0.012 (1.59)	-0.012 (1.56)	-0.014 (1.74)*
Growth	-1.720 (0.74)	-1.888 (0.83)	-1.325 (0.57)
Log (population)	-0.084 (0.58)	-0.022 (0.15)	-0.097 (0.68)
Trade open, $t-1$	-0.015 (1.52)	-0.013 (1.31)	-0.016 (1.62)
ICRG, $t-1$	0.001 (0.06)	0.002 (0.10)	-0.005 (0.20)
Female literacy, $t-1$	-0.023 (2.66)***		
Male literacy, $t-1$		-0.029 (3.13)***	
Ratio female/male literacy, $t-1$			-2.690 (2.62)***
Constant	-0.866 (0.30)	-1.161 (0.41)	0.282 (0.10)
Observations	863	863	863

Robust z statistics in parentheses

* significant at 10%; ** significant at 5%; *** significant at 1%