PAYMENTS AND PENALTIES FOR DEMOCRACY: GENDERED ELECTORAL FINANCING IN ACTION WORLDWIDE

**ONLINE APPENDIX**

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# APPENDIX 1: MATERIALS FOR THE CSQCA

## TABLE OF csQCA VALUES FOR 31 CASES OF GEF IMPLEMENTATION

KEY: TD = Top-down Approach: BU = Bottom-up Approach; State Driven Regulatory Approach of GEF (SD); Quota in Action (Q); Proportional Representation Electoral System (PR); Centralized Candidate Selection (CSS); Public Funding of Parties (PF); Minimum Level of Women MPs (WMP): PP (Party Penalties)

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | PP | App | SD | Q | PR | PF | CSS | WMPs | Success | WMPs After | % Change |
| Serbia07 | 0 | BU | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 20.40% | 12.46% |
| Croatia20 | 1 | TD | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 31.20% | 12.00% |
| France17 | 1 | TD | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 38.82% | 11.96% |
| UK97 | 0 | BU | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 18.21% | 8.99% |
| France12 | 1 | TD | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 26.86% | 8.32% |
| South Korea04 | 0 | TD | 1 | 1 | 0 | 0 | 1 | 0 | 1 | 13.04% | 7.18% |
| Italy18 | 0 | TD | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 35.71% | 7.30% |
| Italy13 | 0 | TD | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 28.41% | 7.14% |
| Ireland16 | 1 | TD | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 22.15% | 7.09% |
| Chile17 | 0 | TD | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 22.58% | 6.75% |
| Portugal09 | 1 | TD | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 27.83% | 6.53% |
| Czech Republic06 | 0 | BU | 0 | 0 | 0 | 1 | 1 | 0 | 1 | 18.52% | 6.17% |
| Australia98 | 0 | BU | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 21.62% | 6.08% |
| Malawi19 | 0 | BU | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 22.5% | 5.83% |
| Brazil | 0 | TD | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 15.20% | 5.20% |
| Canada84 | 0 | BU | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 9.57% | 4.61% |
| Success Standard Deviation |  |  |  |  |  |  |  |  |  |  | 2.22 |
| US92 | 0 | BU | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10.80% | 4.13% |
| US18 | 0 | BU | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 23.40% | 4.00% |
| Ghana12 | 0 | BU | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10.91% | 3.02% |
| South Korea12 | 0 | TD | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 16.67% | 2.96% |
| Japan00 | 0 | BU | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 7.08% | 2.48% |
| US12 | 0 | BU | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 17.97% | 1.91% |
| UK05 | 0 | BU | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 19.81% | 1.90% |
| France02 | 1 | TD | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 12.31% | 1.39% |
| US06 | 0 | BU | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 16.32% | 1.38% |
| Canada08 | 0 | BU | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 22.08% | 1.30% |
| US86 | 0 | BU | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5.29% | 0.24% |
| Romania08 | 0 | TD | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 11.38% | -0.07% |
| US10 | 0 | BU | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 16.78% | -0.92% |
| Croatia03 | 0 | TD | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 17.76% | -2.11% |
| Malawi14 | 0 | TD | 1 | 0 | 0 | 0 | 1 | 1 | 0 | 16.67% | -4.57% |
| Failure Standard Deviation |  |  |  |  |  |  |  |  |  |  | 2.34 |

## csQCA Codebook

This document contains a presentation of all instances of Gendered Electoral Financing (GEF) covered in the csQCA and the operational definitions of all conditions, the cut offs used to code each condition and the information used for each case. References cited here are at the end of Appendix 1.

### GEF Party Target

The GEF Target condition is removed from the final csQCA analysis because it had significant overlaps with the **Regulatory Approach** condition, produced too much model ambiguity, and failed to provide parsimonious paths without contradictory simplifying assumptions**.**

Target threshold is the following:

Party directed (PD) = 1: Linking the provision of public funding to parties’ effort to adopt more women or have more gender balanced nomination lists. Such provisions are either rewarding or penalizing parties through funding mechanisms based on whether parties comply or not with a certain target. To our knowledge, schemes targeting parties directly are public schemes, although it is theoretically possible that corporations and similar could tie their donations to similar conditions.

Candidate directed (CD) = 0: Schemes that target candidates directly with funding and other resources with the purpose of facilitating the electoral campaigns of candidates of the under-represented sex.

*Unit of Analysis: GEF Implementation (30 Cases) and Coding for GEF Target\**

|  |  |  |  |
| --- | --- | --- | --- |
| **Country** | **Year** | **Description** | **Coding for GEF Target** |
| Australia | 1998 | EMILY's List Australia Campaign financing (EMILY’s List Australia, 2019) | CD = 0 |
| Brazil | 2018 | 2015 electoral reform says that at least 30% of the party fund for campaign as well as the same percentage of radio and TV time should be destined to the (at least) 30% women candidates. | PD = 1 |
| Canada\_a | 1984 | Judy LaMarsh Fund in Liberal Party - to women’s campaign (UNDP/NDI 2012) | CD = 0 |
| Canada\_b | 2008 | New Democratic Party financial assistance to women (UNDP/NDI 2012; iKNOWPOLITICS 2009) | CD = 0 |
| Chile | 2017 | Legislated reward. Economic incentive to attract women candidates and the parties that endorse them. Parties have to spend their extra funds on women (Schwindt-Bayer, 2015) | PD = 1 |
| Croatia a | 2003 | By legislation parties get a reward for each elected representative of minority sex (Mataković 2011) | PD = 1 |
| Croatia b | 2020 | The 2008 Act on Gender Equality - Financial sanctions for parties: official interpretation implementation should start with parliamentary elections in 2019 (later 2020) (Dobrotić 2016: 4) | PD = 1 |
| Czech | 2006 | Fórum 50 % direct non-partisan support of women – campaigns, networking, mentoring, happenings (Fórum 50 %, 2019) | CD = 0 |
| France\_a | 2002 | Financial penalties (public funding) to encourage parties to field female candidates (Achin et al. 2020) | PD = 1 |
| France\_b | 2012 | Financial penalties (public funding) to encourage parties to field female candidates – increased rate (Achin et al. 2020) | PD = 1 |
| France\_c | 2017 | Financial penalties (public funding) to encourage parties to field female candidates – increased rate (Achin et al. 2020) | PD = 1 |
| Ghana | 2012 | Parties reduce filing fees for women candidates (Bauer and Darkwah, 2020). | CD = 0 |
| Ireland | 2016 | Quota law specifies financial penalties (public funding) to encourage parties to field female candidates (Buckley and Gregory, 2020) | PD = 1 |
| Italy\_a | 2013 | A 5% reduction of public funding to those parties whose electoral lists contained less than 30% women (Feo and Piccio, 2020) | PD = 1 |
| Italy\_b | 2017 | Provides *additional* public funding for those parties that manage to elect more than 40% of women (Feo and Piccio, 2020). | PD = 1 |
| Japan | 2000 | WIN WIN is a nonpartisan organi-zation raising funds to support women candidates (Gaunder, 2011; Eto, 2008) | CD = 0 |
| Malawi\_a | 2014 | 50:50 national campaign organized by government to women *candidates (*Wang et al, 2020). | CD = 0 |
| Malawi\_b | 2019 | 50:50 national campaign organized by independent organization to women candidates. Reimbursement of fees (The Commonwealth, 2019). | CD = 0 |
| Portugal | 2009 | Quota law imposing fines on parties with non-compliant lists (Espírito-Santo, 2019) | PD = 1 |
| Romania | 2008 | State funding will increase in proportion to the number of seats won by female candidates (Law no. 334/2006). | PD = 1 |
| Serbia | 2007 | The Women Government “Let Women Decide!” project supported women with funding campaigns (Pajvančić, 2008; Women’s Government, 2019; EMINS Online, 2007) | CD = 0 |
| S. Korea\_a | 2004 | Addition public funding to parties that nominated women above this threshold (Ohman, 2018; Yoon and Shin, 2015). | PD = 1 |
| S. Korea\_b | 2012 | Legislation. Female candidate nomination subsidies are distributed to parties based on the ration of the National Assembly seats held and the votes received (Eunyoung, 2010; Yoon and Shin, 2015) | PD = 1 |
| UK\_a | 1997 | Emily’s List supporting pro-choice women candidates’ campaigns (The Independet, 1993; Emily’s List UK, 2019. | CD = 0 |
| UK\_b | 2005 | The Women2Win campaign support conservatibe women thorugh training, funding and mentoring (The Guardian, 2005) | CD = 0 |
| US\_a | 1986 | EMILY’s list to help elect pro-choice Democratic women candidates (EMILY’s list US, 2019) | CD = 0 |
| US\_b | 1992 | Wish List is a PAC devoted to electing pro-choice Republican women (Krook and Norris, 2014; Gichohi, 2020) | CD = 0 |
| US\_c | 2006 | EmergeAmerica, nonpartisan, tools and training to run for elected office (Krook and Norris, 2014; Gichohi, 2020) | CD = 0 |
| US\_d | 2010 | Maggie’s List, focused on electing conservative women (Maggie’s List, 2019) | CD = 0 |
| US\_e | 2012 | She Should Run is a non-partisan to expand the talent pool of women politicians by providing community, resources, and growth opportunities for aspiring political leaders (Gichohi, 2020) | CD = 0 |
| US\_f | 2016 | Justice Democrats, focused on providing training and funding for progressive democrats (Justice Democrats, 2019) | CD=0 |

### Outcome: GEF Implementation Success (S) or Failure (F)

The cut-offs for successful (1) and unsuccessful (0) GEFs are determined by comparing the change in the percentage of women members of the national legislature (% of women MPs) in all elections prior to the adoption of the GEF with the % of women MPs in the election immediately following the GEF adoption. When the rate of change after GEF implementation was at least twice the average rate of change prior to GEF implementation the cases were coded as GEF Success [1] while all others were coded as [0]. Source: IPU (2019).

*Changes in women MPs (lower house) after GEF reform (source: IPU)*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Country | GEF effective year | Results election before GEF | | Results effective GEF year | Change in % |
| Australia | 1998 | | 15.54% (N 23/148) | 21.62% (N32/148) | + 6.08 % |
| Brazil | 2018 | | 9.94% (513/51) | 15.01%(N78/513) | + 5.07% |
| Canada\_a | 1984 | | 4.96% (N14/282) | 9.57% (N27/282) | + 4.61% |
| Canada\_b | 2008 | | 20.78% (N64/308) | 22.08% (N68/308) | + 1.3% |
| Chile | 2017 | | 15.83% (N19/120) | 22.58% (N35/155) | + 6.75% |
| Croatia\_a | 2003 | | 19.87% (N30/151) | 17.76% (N27/152) | - 2.11% |
| Croatia\_b | 2020 | | 19.2% (N29/151) | 31.2% (N47/151) | + 12% |
| Czech | 2006 | | 12.35% (N10/81) | 18.52% (N5/27) | +6.17% |
| France\_a | 2002 | | 10.92% (N63/577) | 12.31% (N71/577) | + 1.39% |
| France\_b | 2012 | | 18.54% (N107/577) | 26.86% (N155/577) | +8.32% |
| France\_c | 2017 | | 26.86% (N155/577) | 38.82%(N224/577) | +11.96% |
| Ghana | 2012 | | 7.89% (N18/230) | 10.91%(N30/275) | +3.02% |
| Ireland | 2016 | | 15.06% (N25/166) | 22.15% (N35/158) | +7.09% |
| Italy\_a | 2013 | | 21.27% (N134/630) | 28.41% (N179/630) | +7.14% |
| Italy\_b | 2018 | | 28.41% (N179/630) | 35.71% (N225/630) | +7.3% |
| Japan | 2000 | | 4.6% (N23/500) | 7.08% (N34/480) | +2.48% |
| Malawi\_a | 2014 | | 21.24% (N41/193) | 16.67% (N32/192) | -4.57% |
| Malawi\_b | 2019 | | 16.67% (N32/192) | 21.88%(N42/192) | +5.21% |
| Portugal | 2009 | | 21.30% (N49/230) | 27.83% (N64/230) | +6.53% |
| Romania | 2008 | | 11.45% (N38/332) | 11.38% (N38/334) | -0.07% |
| Serbia | 2007 | | 7.94% (N10/126) | 20.40% (N51/250) | +12.46% |
| S. Korea\_a | 2004 | | 5.86% (N16/273) | 13.04% (N39/299) | +7.18% |
| S. Korea\_b | 2012 | | 13.71% (N41/299) | 16.67% (N47/300) | +2.96% |
| UK\_a | 1997 | | 9.22% (N60/651) | 18.21% (N120/659) | +8.99% |
| UK\_b | 2005 | | 17.91% (N118/659) | 19.81% (N128/646) | +1.9% |
| US\_a | 1986 | | 5.05% (N22/435) | 5.29% (N23/435) | +0.24% |
| US\_b | 1992 | | 6.67% (N29/435) | 10.80% (N47/435) | +4.13% |
| US\_c | 2006 | | 14.94% (N65/435) | 16.32% (N71/435) | +1.38% |
| US\_d | 2010 | | 17.24% (N75/435) | 16.78% (N73/435) | -0.92% |
| US\_e | 2012 | | 16.78% (N73/435) | 17.97% (N78/435) | 1.19% |
| US\_f | 2018 | | 19.4% (N83/435) | 23.4 (101/435) | +4 |
| Mean |  | | 14.31 | 18.99 | 4.13 |

### Condition 1: Regulatory Approach of GEF (SD)

This condition measures whether GEF was regulated and funded by the government or private entities. Schemes are coded state-driven, if the funding scheme is mainly administered by public authorities and is financed through public funds. When international donors are involved, schemes are coded state-driven if there is a strong endorsement of public officials and when funds from international agents are channeled through public authorities.

Schemes are coded privately-driven, if the funding scheme is initiated by private actors with no official involvement or endorsement by state officials. The range of private actors includes political parties, companies, NGOs and individual persons. When funds come from international sources and are only administered by private entities outside the state, this is coded as privately drive or not state driven.

State = 1

Private (not state-driven) = 0

|  |  |  |  |
| --- | --- | --- | --- |
| **Country** | **Year** | **Explanation** | **Coding** |
| Australia | 1998 | Emily’s list | Private = 0 |
| Brazil | 2018 | Legislation – electoral law | State = 0 |
| Canada\_a | 1984 | Judy LaMarsh Fund in Liberal Party | Private = 0 |
| Canada\_b | 2008 | New Democratic Party | Private = 0 |
| Chile | 2017 | Legislation - public | State = 1 |
| Croatia\_a | 2003 | Legislation - public | State = 1 |
| Croatia\_b | 2020 | Legislation - public | State = 1 |
| Czech | 2006 | Fórum 50 % | Private = 0 |
| France\_a | 2002 | Legislation - public | State = 1 |
| France\_b | 2012 | Legislation - public | State = 1 |
| France\_c | 2017 | Legislation - public | State = 1 |
| Ghana | 2012 | National Democratic Congress and New Patriotic Party (NPP) | Private = 0 |
| Ireland | 2016 | Legislation - public | State = 1 |
| Italy\_a | 2013 | Legislation - public | State = 1 |
| Italy\_b | 2017 | Legislation - public | State = 1 |
| Japan | 2000 | WIN WIN nonpartisan  organization | Private = 0 |
| Malawi\_a | 2014 | 50:50 campaign organised by government | State = 1 |
| Malawi\_b | 2019 | 50:50 campaign independent | Private = 0 |
| Portugal | 2009 | Legislation - public | State = 1 |
| Romania | 2008 | Legislation - public | State = 1 |
| Serbia | 2007 | The Women Government “Let Women Decide!” project | Private = 0 |
| S. Korea\_a | 2004 | Legislation - public | State = 1 |
| S. Korea\_b | 2012 | Legislation - public | State = 1 |
| UK\_a | 1997 | Emily’s List | Private = 0 |
| UK\_b | 2005 | The Women2Win campaign | Private = 0 |
| US\_a | 1986 | EMILY’s list | Private = 0 |
| US\_b | 1992 | Wish List is a PAC | Private = 0 |
| US\_c | 2006 | EmergeAmerica, nonpartisan, | Private = 0 |
| US\_d | 2010 | Maggie’s List, conservative | Private = 0 |
| US\_e | 2012 | She Should Run is non-partisan | Private = 0 |
| US\_f | 2016 | Justice Democrats | Private = 0 |

### Condition 2: Quota in Action (Q)

Are there gender quotas or reserved seats for women that operate alongside GEF?

Where a GEF reform works in tandem with gender quotas or reserved seats, it is coded as a quota in action. In cases with no quotas or no reserved seats, the GEF scheme is coded as no quota in action. When a quota is used by a political party it is only counted as a quota in action if it has significant affect on women winning election from that party, usually a majority party. This was the case for the Labour Party in the UK in the 1997 elections. Source: Gender Quotas Database at International IDEA (2019)/

No Quota in Action = 1

No Quota in action = 0

|  |  |  |  |
| --- | --- | --- | --- |
| **Country** | **Year** | **Explanation** | **Coding** |
| Australia | 1998 | Only party quota at the time when GEF was introduced. In 1994, the Australian Labour Party introduced a 35 per cent quota. | No Quota in Action = 0 |
| Brazil | 2018 | The Election’s Act of 30% candidacies with women became mandatory in 2009 with an electoral reform | Quota in Action = 1 |
| Canada\_a | 1984 | The Liberal Party did not have party quotas at the time, introduced in 1993. | No Quota in Action = 0 |
| Canada\_b | 2008 | The NDP adopted a target of 50 percent women among its candidates at federal elections in 1985. Party had gender quota at the time it introduced GEF. | No Quota in Action = 0 |
| Chile | 2017 | Legislated gender quotas: In 2015, a bill on constitutional reform was passed by the Congress including a gender quota. “neither the male candidates nor the female candidates may exceed sixty percent of the respective total” (Law 18700, 2016) | Quota in Action = 1 |
| Croatia\_a | 2003 | The version of the Act on Gender Equality that was approved in 2003 did not have a legislated gender quota. | No Quota in Action = 0 |
| Croatia\_b | 2020 | Legislated candidate quota adopted in 2008,  40% minimum per sex. Sanction after three elections. | Quota in Action = 1 |
| Czech | 2006 | The Social Democrats has a party quota: 25 percent of those elected by the party must be women. | No Quota in Action = 0 |
| France\_a | 2002 | The Constitution stipulates that the law shall promote equal access of women and men to electoral mandates and elected offices, as well as professional and social responsibilities (Article 1 (2) of the Constitution). Furthermore, the Constitution recognizes the responsibility of political parties in upholding and promoting this principle (Constitution, Articles 3 and 4). | Quota in Action = 1 |
| France\_b | 2012 | Ibid. | Quota in Action = 1 |
| France\_c | 2017 | Ibid. | Quota in Action = 1 |
| Ghana | 2012 | No gender quotas | No Quota in Action = 0 |
| Ireland | 2016 | Legislated: According to the Section on State Funding of Political Parties and Gender Balance of the Electoral Act 1997, as amended in 2012, political parties will lose 50% of their state funding ‘unless at least 30 per cent of the candidates whose candidatures were authenticated by the qualified party at the preceding general election were women and at least 30 per cent were men’. | Quota in Action = 1 |
| Italy\_a | 2013 | Party penalty for not reaching a 30% women threshold (Feo and Piccio 2020) | Quota in Action = 1 |
| Italy\_b | 2017 | Legislated: The electoral law of the Chamber of Deputies and the Senate of the Republic (Law No. 165/2017 article 3, 3.1) provides that, in the first place, under penalty of ineligibility, candidates shall be listed in the rolls of multi-member districts, for both the Chamber of Deputies and the Senate, according to an alternating gender order. | Quota in Action = 1 |
| Japan | 2000 | No gender quota | No Quota in Action = 0 |
| Malawi\_a | 2014 | No gender quota. Party qutoas in UDF and MCP are not implemented. | No Quota in Action = 0 |
| Malawi\_b | 2019 | No gender quota. | No Quota in Action = 0 |
| Portugal | 2009 | Candidate lists for the elections to the National Assembly shall be composed in a way such as to promote a minimum representation of 33% of each sex (Equality Law No. 3/2006 of 21 August 2006, Articles 1 and 2 (1)). | Quota in Action = 1 |
| Romania | 2008 | Party quotas in Partidul Social Democrat Romania, Partidul Democrat, Partidul Social Democrat | No Quota in Action = 0 |
| Serbia | 2007 | For every three candidates on the electoral list there shall be at least one candidate of the under-represented sex on the list (first group of three places, second group of three places and so on until the end of the list)’(Article 40a, Law on the Election of Members of the Parliament, as amended by Law 36/2011). | Quota in Action = 1 |
| S. Korea\_a | 2004 | Electoral gender quotas were first introduced in South Korea in 2000 (Shin, 2014). | Quota in Action = 1 |
| S. Korea\_b | 2012 | Ibid. | Quota in Action = 1 |
| UK\_a | 1997 | Labour used all-women shortlists to select candidates in half of all winnable seats in 1997 ( Lovenduski 2005) | No Quota in Action = 0  Recoded in a second round = 1 |
| UK\_b | 2005 | Labour used all-women shortlists, no other party quotas. | No Quota in Action = 0 |
| US\_a | 1986 | No gender quota | No Quota in Action = 0 |
| US\_b | 1992 | No gender quota | No Quota in Action = 0 |
| US\_c | 2006 | No gender quota | No Quota in Action = 0 |
| US\_d | 2010 | No gender quota | No Quota in Action = 0 |
| US\_e | 2012 | No gender quota | No Quota in Action = 0 |
| US\_f | 2016 | No gender quota | No Quota in Action = 0 |

### Condition 3: Proportional Representation Electoral System

All countries with a type of PR electoral system are coded 1. All others are coded 0 (including SMD, mixed, two rounds).

PR = 1

Not PR = 0

|  |  |  |  |
| --- | --- | --- | --- |
| **Country** | **Year** | **Explanation** | **Coding** |
| Australia | 1998 | Majority: Direct preferential majority vote. | 0 |
| Brazil | 2018 | Proportional | 1 |
| Canada\_a | 1984 | Majority: Simple majority | 0 |
| Canada\_b | 2008 | Majority: Simple majority | 0 |
| Chile | 2017 | Proportional: List Proportional Representation | 1 |
| Croatia\_a | 2003 | Proportional | 1 |
| Croatia\_b | 2020 | Proportional | 1 |
| Czech | 2006 | Majority: Two-round system. | 0 |
| France\_a | 2002 | Majority: Single-Member Majoritarian Systems in two rounds | 0 |
| France\_b | 2012 | Majority: Single-Member Majoritarian Systems in two rounds | 0 |
| France\_c | 2017 | Majority: Single-Member Majoritarian Systems in two rounds | 0 |
| Ghana | 2012 | Majority: FPTP | 0 |
| Ireland | 2016 | Proportional: Proportional representation under the single transferable vote system | 1 |
| Italy\_a | 2013 | ‘Berlusconi’ system applied. Mainly PR, but some elements of FPTP and ‘bonuses’. Still, predominantly PR | 1 |
| Italy\_b | 2017 | Mixed: (Parallel System) | 0 |
| Japan | 2000 | Mixed | 0 |
| Malawi\_a | 2014 | FPTP | 0 |
| Malawi\_b | 2019 | FPTP | 0 |
| Portugal | 2009 | Proportional | 1 |
| Romania | 2008 | Proportional | 1 |
| Serbia | 2007 | PR | 1 |
| S. Korea\_a | 2004 | Mixed adopted in 2004 | 0 |
| S. Korea\_b | 2012 | Ibid | 0 |
| UK\_a | 1997 | Majority: Single member plurality systems | 0 |
| UK\_b | 2005 | Ibid | 0 |
| US\_a | 1986 | Ibid | 0 |
| US\_b | 1992 | Majority: Single member plurality systems | 0 |
| US\_c | 2006 | Ibid | 0 |
| US\_d | 2010 | Ibid | 0 |
| US\_e | 2012 | Ibid | 0 |
| US\_f | 2016 | Ibid | 0 |

### Condition 4: Candidate Selection System (CSS)

This condition identifies whether the candidates have to engage in adoption processes at the constituency level, like primaries, to win a nomination from a political party.

The V-Dem data from the Varieties of Democracy project (2018) is used. The V-dem question used: How centralized is legislative candidate selection within the parties? Cases where candidates are not selected through primaries at the constituency level are coded a 1 = centralized. Cases where candidates are chosen through indirect or direct primaries are coded 0 = not centralized.

*V-Dem’s Response options:*

(0-3 = 1 centralized)

0: National legislative candidates are selected exclusively by national party leaders.

1: National legislative candidate selection is dominated by national party leaders but with some limited influence from local or state level organizations.

2: National legislative candidates are chosen through bargaining across different levels of party organization.

3: National legislative candidates are chosen by regional or state-level organizations, perhaps with some input from local party organizations or constituency groups.

(4-5 = 0 not centralized)

4: National legislative candidates are chosen by a small cadre of local or municipal level actors.

5: National legislative candidates are chosen by constituency groups or direct primaries.

|  |  |  |  |
| --- | --- | --- | --- |
| **Country** | **Year** | **Explanation** | **Coding** |
| Australia | 1998 | Score below 4 | 1 = centralized |
| Brazil | 2018 | Score below 4 | 1 = centralized |
| Canada\_a | 1984 | Score above 4 | 0= decentralized |
| Canada\_b | 2008 | Score above 4 | 0= decentralized |
| Chile | 2017 | Score below 4 | 1 = centralized |
| Croatia\_a | 2003 | Score below 4 | 1 = centralized |
| Croatia\_b | 2020 | Score below 4 | 1 = centralized |
| Czech | 2006 | Score below 4 | 1 = centralized |
| France\_a | 2002 | Score below 4 | 1 = centralized |
| France\_b | 2012 | Score below 4 | 1 = centralized |
| France\_c | 2017 | Score below 4 | 1 = centralized |
| Ghana | 2012 | Score above 4 | 0= decentralized |
| Ireland | 2016 | Score above 4 | 0= decentralized |
| Italy\_a | 2013 | Score below 4 | 1 = centralized |
| Italy\_b | 2017 | Score below 4 | 1 = centralized |
| Japan | 2000 | Score below 4 | 1 = centralized |
| Malawi\_a | 2014 | Score below 4 | 1 = centralized |
| Malawi\_b | 2019 | Score above 4 | 0 = decentralized |
| Portugal | 2009 | Score below 4 | 1 = centralized |
| Romania | 2008 | Score below 4 | 1 = centralized |
| Serbia | 2007 | Score below 4 | 1 = centralized |
| S. Korea\_a | 2004 | Score below 4 | 1 = centralized |
| S. Korea\_b | 2012 | Score below 4 | 1 = centralized |
| UK\_a | 1997 | Score above 4 | 0= decentralized |
| UK\_b | 2005 | Score above 4 | 0= decentralized |
| US\_a | 1986 | Score above 4 | 0= decentralized |
| US\_b | 1992 | Score above 4 | 0= decentralized |
| US\_c | 2006 | Score above 4 | 0= decentralized |
| US\_d | 2010 | Score above 4 | 0= decentralized |
| US\_e | 2012 | Score above 4 | 0= decentralized |
| US\_f | 2016 | Score above 4 | 0 = decentralized |

### Condition 5: Public Funding of Parties (PF)

This condition identifies whether parties or candidates receive public funding for electoral campaigns.

The V-Dem data from the Varieties of Democracy project (2018). The question used: Is significant public financing available for parties' and/or candidates' campaigns for national office?

3 or above in expert responses (V-Dem) = significant public funding available = 1

Below 3 in expert responses (V-Dem) = not sufficient public funding = 0

*V-Dem’s Response options:*

(0-3 = 0 not funding)

0: No. Public financing is not available.  
1: Little. There is public financing but it is so small or so restricted that it plays a minor role in most parties' campaigns.  
2: Ambiguous. There is some public financing available but it is unclear whether it plays a significant role for parties.

(3-4 = 1 funding available)

3: Partly. Public financing plays a significant role in the campaigns of many parties.  
4: Yes. Public financing funds a significant share of expenditures by all, or nearly all parties.

|  |  |  |  |
| --- | --- | --- | --- |
| **Country** | **Year** | **Explanation** | **Coding** |
| Australia | 1998 | 3 or above | funding available = 1 |
| Brazil | 2018 | 3 or above | funding available = 1 |
| Canada\_a | 1984 | 3 or above | funding available = 1 |
| Canada\_b | 2008 | 3 or above | funding available = 1 |
| Chile | 2017 | Below 3 | not funding = 0 |
| Croatia\_a | 2003 | 3 or above | funding available = 1 |
| Croatia\_b | 2020 | 3 or above | funding available = 1 |
| Czech | 2006 | 3 or above | funding available = 1 |
| France\_a | 2002 | 3 or above | funding available = 1 |
| France\_b | 2012 | 3 or above | funding available = 1 |
| France\_c | 2017 | 3 or above | funding available = 1 |
| Ghana | 2012 | Below 3 | not funding = 0 |
| Ireland | 2016 | 3 or above | funding available = 1 |
| Italy\_a | 2013 | 3 or above | funding available = 1 |
| Italy\_b | 2017 | Below 3 | not funding = 0 |
| Japan | 2000 | Below 3 | not funding = 0 |
| Malawi\_a | 2014 | Below 3 | not funding = 0 |
| Malawi\_b | 2019 | Below 3 | not funding = 0 |
| Portugal | 2009 | 3 or above | funding available = 1 |
| Romania | 2008 | Below 3 | not funding = 0 |
| Serbia | 2007 | 3 or above | funding available = 1 |
| S. Korea\_a | 2004 | Below 3 | not funding = 0 |
| S. Korea\_b | 2012 | 3 or above | funding available = 1 |
| UK\_a | 1997 | Below 3 | not funding = 0 |
| UK\_b | 2005 | Below 3 | not funding = 0 |
| US\_a | 1986 | Below 3 | not funding = 0 |
| US\_b | 1992 | Below 3 | not funding = 0 |
| US\_c | 2006 | Below 3 | not funding = 0 |
| US\_d | 2010 | Below 3 | not funding = 0 |
| US\_e | 2012 | Below 3 | not funding = 0 |
| US\_f | 2016 | Below 3 | Not funding = 0 |

### Condition 6: Minimum Level of Women MPs:

This condition establishes a cut-off point for whether a certain minimum level of women MPs is in office prior to GEF implementation increases women’s representation. Using 15% as the cut-off, cases 15% or higher coded as [1], those under 15% coded as [0].

Source: IPU (2019).

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Country** | **GEF effective year** | | **Results election before GEF** | **Coding** |
| Australia | 1998 | 15.54% | | Above = 1 |
| Brazil | 2018 | 09.98 | | Below = 0 |
| Canada\_a | 1984 | 4.96% | | Below = 0 |
| Canada\_b | 2008 | 20.78% | | Above = 1 |
| Chile | 2017 | 15.83% | | Above = 1 |
| Croatia\_a | 2003 | 19.87% | | Above = 1 |
| Croatia\_b | 2020 | 19.2% | | Above = 1 |
| Czech | 2006 | 12.35% | | Below = 0 |
| France\_a | 2002 | 10.92% | | Below = 0 |
| France\_b | 2012 | 18.54% | | Above = 1 |
| France\_c | 2017 | 26.86% | | Above = 1 |
| Ghana | 2012 | 7.89% | | Below = 0 |
| Ireland | 2016 | 15.06% | | Above = 1 |
| Italy\_a | 2013 | 21.27% | | Above = 1 |
| Italy\_b | 2018 | 28.41% | | Above = 1 |
| Japan | 2000 | 4.6% | | Below = 0 |
| Malawi\_a | 2014 | 21.24% | | Above = 1 |
| Malawi\_b | 2019 | 16.67% | | Above = 1 |
| Portugal | 2009 | 21.30% | | Above = 1 |
| Romania | 2008 | 11.45% | | Below = 0 |
| Serbia | 2007 | 7.94% | | Below = 0 |
| S. Korea\_a | 2004 | 5.86% | | Below = 0 |
| S. Korea\_b | 2012 | 13.71% | | Below = 0 |
| UK\_a | 1997 | 9.22% | | Below = 0 |
| UK\_b | 2005 | 17.91% | | Above = 1 |
| US\_a | 1986 | 5.05% | | Below = 0 |
| US\_b | 1992 | 6.67% | | Below = 0 |
| US\_c | 2006 | 14.94% | | Below = 0 |
| US\_d | 2010 | 17.24% | | Above = 1 |
| US\_e | 2012 | 16.78% | | Above = 1 |
| US\_f | 2018 | 19.4% | | Above = 1 |

### PARTY PENALTY

This condition was not included in csQCA analysis because of lack of variation in the condition. Less than 25% of the cases had the presence of a penalty; thus it cannot be used in csQCA. Was the GEF in the form of party penalty either a direct sanction of a reduction in government funding to the party for non-compliance?

Party penalties = 1

No party penalty = 0

|  |  |  |  |
| --- | --- | --- | --- |
| **Country** | **Year** | **Description** | **Coding for GEF Target** |
| Australia | 1998 | Campaign financing | PP = 0 |
| Brazil | 2018 | Legislated reward | PP = 0 |
| Canada\_a | 1984 | Campaign financing for women candidates | PP = 0 |
| Canada\_b | 2008 | Campaign financing for women candidates | PP = 0 |
| Chile | 2017 | Legislated reward | PP = 0 |
| Croatia a | 2003 | Legislated reward | PP = 0 |
| Croatia b | 2020 | Legislated financial penalties for parties | PP = 1 |
| Czech | 2006 | Campaign financing for women candidates | PP = 0 |
| France\_a | 2002 | Legislated financial penalties for parties | PP = 1 |
| France\_b | 2012 | Legislated financial penalties for parties | PP = 1 |
| France\_c | 2017 | Legislated financial penalties for parties | PP = 1 |
| Ghana | 2012 | Reduce filing fees | PP = 0 |
| Ireland | 2016 | Legislated financial penalties for parties | PP = 1 |
| Italy\_a | 2013 | Legislated financial penalties for parties | PP = 1 |
| Italy\_b | 2017 | Legislated reward | PP = 0 |
| Japan | 2000 | Campaign financing | PP = 0 |
| Malawi\_a | 2014 | Campaign financing | PP = 0 |
| Malawi\_b | 2019 | Campaign financing | PP = 0 |
| Portugal | 2009 | Legislated financial penalties for parties | PP = 1 |
| Romania | 2008 | Legislated reward | PP = 0 |
| Serbia | 2007 | Campaign financing | PP = 0 |
| S. Korea\_a | 2004 | Legislated reward | PP = 0 |
| S. Korea\_b | 2012 | Legislated reward | PP = 0 |
| UK\_a | 1997 | Campaign financing | PP = 0 |
| UK\_b | 2005 | Campaign financing | PP = 0 |
| US\_a | 1986 | Campaign financing | PP = 0 |
| US\_b | 1992 | Campaign financing | PP = 0 |
| US\_c | 2006 | Campaign financing | PP = 0 |
| US\_d | 2010 | Campaign financing | PP = 0 |
| US\_e | 2012 | Campaign financing | PP = 0 |
| US\_f | 2016 | Campaign financing | PP = 0 |

**References**

Achin, Catherine, Sandrine Lévêque, Anja Durovic, Eléonore Lépinard, Amy Mazur. 2020. “Parity Sanctions and Campaign Financing in France: Increased Numbers, Little Concrete Gender Transformation.” In *Gendered Electoral Financing: Does Money Talk?*, eds. Ragnhild Muriaas, Vibeke Wang and Rainbow Murray, 27-54. New York: Routledge.

Bauer, Gretchen, and Akosua Darkwah. 2020. “‘Some Money Has to Be Going…’ Discounting Filing Fees to Bring More Women Into Parliament in Ghana.” In *Gendered Electoral Financing: Money, Power and Representation in Comparative Politics*, eds. Ragnhild Muriaas, Vibeke Wang and Rainbow Murray, 131-53. New York: Routledge.

Buckley, Fiona and Rachel Gregory. 2020. “Gendering Candidate Selection in Ireland: Incentivizing Parties Through State Funding.” In *Gendered Electoral Financing: Money, Power and Representation in Comparative Politics*, eds. Ragnhild Muriaas, Vibeke Wang and Rainbow Murray, 55-73. New York: Routledge.

Casal Bértoa, Fernando, Fransje Molenaar, Daniela R. Piccio, and Ekaterina R. Rashkova. 2014. “The World Upside Down: De-legitimizing Political Finance Regulation*.” International Political Science Review* 35 (3): 355–76.

Eunyoung, Soh. 2013. “Ten Years’ Experience of Gender Quota System In Korean Politics.” GEMC Journal 4, 98-104.

Doná, Alessia. 2018. “EPPUR SI MUOVE: The Toruous Adoption and Implementation of Gender Quotas in Coservative Italy.” In *Transforming Gender Citizenship*, eds. Eléonore Lépindard and Ruth Rubio-Marín, 186-215. Cambridge: Cambridge University Press.

Dobrotić, Ivana. 2016. “Position of women in political decision-making in Croatia”, EU Mutual Learning Programme in Gender Equality, Women in political decision-making. Retrieved 22 February 2021. (<http://ec.europa.eu/justice/gender-equality/files/exchange_of_good_practice_si/hr_comments_paper_si_2016_en.pdf>).

EMILY’s list Australia. 2019. "Herstory." Melbourne, Australia: EMILY's List Australia. Retrieved 23 December 2019. (<https://www.emilyslist.org.au/herstory>).

EMILY’s list UK. 2019. “About Emily’s List.” Labour Party. Retrieved 23 December 2019. (<http://emilyslist.org.uk/about-emilys-list/>)

EMILY’s list US. 2019. “Our History.” Washington, DC, United States: EMILY's List. Retrieved 23 December 2019. (<https://www.emilyslist.org/pages/entry/our-history>).

EMINS Online. 2007. “Let Women Decide!” Beograd, Serbia. European Movement in Serbia. Retrieved 23 December 2019. (http://arhiva.emins.org/emins\_english/content/02\_activities/campaigns/campaigns.html)

Espírito-Santo, Ana. 2019. “From Electoral to Corporate Boards Quotas.” In *Transforming Gender Citizenship*, eds. Eléonore Lépindard and Ruth Rubio-Marín, 216-44. Cambridge: Cambridge University Press.

Eto, Mikiko. 2008. “Vitalizing Democracy at the Grassroots: A Contribution of Post-war Women’s Movements in Japan.” *East Asia: An International Quarterly* 25 (2): 115-43.

Feo, Francesca, and Daniel Piccio. 2020. “Promoting Gender Equality through Party Funding: Symbolic Policies at Work in Italy.” *Politics & Gender* 16 (3): 903-29.

Fórum 50 %. 2019. "About Us". Prague, The Czech Republic. Retrieved 23 December 2019. (<https://padesatprocent.cz/en/about-us>)

Gaunder, Alisa. 2011. “WIN WIN’s Struggles with the Institutional Transfer of the EMILY’s List Model to Japan: The Role of Accountability and Policy.” *Japanese Journal of Political Science* 12 (1): 75-94.

Gichohi, Matthew. 2020. “For Us by Us : Women’s Training Organizations in the American Political Process.” In *Gendered Electoral Financing: Money, Power and Representation in Comparative Politics*, eds. Ragnhild Muriaas, Vibeke Wang and Rainbow Murray, 95-113. New York: Routledge.

iKNOWPOLITICS. 2009. Best Practices Used by Political Parties to Promote Women in Politics. Online Platform with contributions from International Institute for Democracy and Electoral Assistance (International IDEA), the Inter-Parliamentary Union (IPU), the United Nations Development Programme (UNDP), and the United Nations Entity for Gender Equality and Women's Empowerment (UN Women). Retrieved 23 December 2019. (<https://iknowpolitics.org/sites/default/files/cr_best_practices_used_by_political_parties_to_promote_women_in_politics.pdf>).

Inter-Parliamentary Union (IPU). 2019. PARLINE database on national parliaments. Geneva, Switzerland. Retrieved 23 December 2019. (<http://archive.ipu.org/parline-e/parlinesearch.asp>)

Justice Democrats. 2019. “About Justice Democrats”.  Knoxville, Tennessee: Justice Democrats. Retrieved 23 December 2019. (<https://www.justicedemocrats.com/about>).

Kayuni, Happy M. and Ragnhild L. Muriaas. 2014. “Alternatives to Gender Quotas: Electoral Financing of Women Candidates in Malawi.” *Representation* 50 (3): 393-404.

Krook, Mona Lena and Pippa Norris. 2014. “Beyond quotas: Strategies to promote gender equality in elected office.” *Political Studies* 62 (1): 2–20.

Law no. 334/2006. LAW on the financing of electoral campaigns and the activity of political parties. The Romanian Parliament. Official Journal no. 632 of 21 July 2006. Retrieved 23 December 2019. (<file://tjalve/Home/sspra/Downloads/Romania_PartyFinance_2006.pdf>)

Law No. 18700, Ley Organica Constitucional Sobre Votaciones Populares y Escrutinios. Congreso Nacional de Chile. Retrieved December 23, 2019. Retrieved 23 December 2019. (file://tjalve/Home/sspra/Downloads/LEY-20982\_28-DIC-2016.pdf)

Lei n. 56/VII/2010 (altera o Código Eleitoral), I Série, No 9 Sup. “B. O.” Da República De Cabo Verde, 9 De MarçO De 2010.

Lovenduski, Joni. 2005. “Party Government and Women’s Representation Debates: the UK.” In *State Feminism and Political Representation,* ed*.* Joni Lovenduski, 216-38.Cambridge: Cambridge University Press.

Maggie’s List. 2019. “2010 Candidates.” Tallahassee, Florida. Maggies’ List. Retrieved 23 December 2019. (http://maggieslist.org/about)

Matakovic, Hrvoje. 2011. Transparency in Funding of Political Parties, Technical Report · January 2011. Retrieved 23 December 2019. (<file://tjalve/Home/sspra/Downloads/Matakovic-Transparency-in-Funding-of-Political-Parties-Croatia-2011.pdf>)

Ohman, Magnus. 2018. Gender-target Public Funding for Political Parties: A comparative Analysis. Stockholm, Sweden: International IDEA.

Ohman, Magnus (2016) Political Finance and the Equal Participation of Women in Tunisia: A Situation Analysis. Stockholm and Den Haag: International IDEA/Netherlands Institute for Multiparty Democracy.

Ohman, Magnus, and Carol Lintari (2015) Political Party Financing and Equal Participation of Women in Kenyan Electoral Politics: A Situation Overview. Stockholm and Den Haag: International IDEA/Netherlands Institute for Multiparty Democracy.

Pajvančić, Marijana. 2008. Summary. Serbia's European Perspective From Women's Point of View. Belgrade, Serbia: Women’s Government. Retrieved 23 December 2019. (http://www.zenskavlada.org.rs/downloads/eng-gender-izbori-2007.pdf)

Schwindt-Bayer, Leslie. 2015. "Chile’s Gender Quota: Will It Work?" James A. Baker III Institute for Public Policy of Rice University. Retrieved 23 December 2019. (<http://www.bakerinstitute.org/research/chiles-gender-quota-will-it-work>).

Shin, Ki-Young. 2014. “Women’s sustainable representation and the spillover effect of electoral gender quotas in South Korea.” *International Political Science Review* 35 (1): 80–92.

The Commonwealth. 2019. “Malawi women reflect on political advancement.” London, United Kingdom. Online 29-10-2019. Retrieved 23 December 2019. (<https://thecommonwealth.org/media/news/malawi-women-reflect-political-advancement>).

The Guardian. 2005. “Tories urged to embrace female-friendly shortlists.” Oliver King, 23 November 2005. Retrieved 23 December 2019. (<https://www.theguardian.com/politics/2005/nov/23/conservatives.uk>).

The Independent. 1993. “Labour women hope to put more names on Emily's List.” Nicholas Timmins, 6 February 1993. Retrieved 23 December 2019. (<https://www.independent.co.uk/news/uk/politics/labour-women-hope-to-put-more-names-on-emilys-list-1471296.html>).

United Nations Development Program & National Democratic Institute for International Affairs. 2012. “Empowering Women for Stronger Political Parties: A Guidebook to Promote Women’s Political Participation”. Washington DC, United States of America. Retrieved 23 December 2019. <https://www.ndi.org/sites/default/files/Empowering-Women-Full-Case-Study-ENG.pdf>).

Varieties of Democracy. 2018. "On-line Analysis. Version 9." Gothenburg, Sweden: V-Dem Institute, Retrieved May 20, 2019. (<https://www.v-dem.net/en/analysis/VariableGraph/>).

Wang, Vibeke, Happy M. Kayuni, Asiyati Chiweza, and Samantha Soyiyo. 2020. “Malawi. Relieving Women’s Costs of Standing for Election : Malawi’s 50:50 Campaings.” In *Gendered Electoral Financing: Money, Power and Representation in Comparative Politics*, eds. Ragnhild Muriaas, Vibeke Wang and Rainbow Murray, 114-132. New York: Routledge.

Women’s Government. 2019. “About Us.” Belgrade, Serbia : Women’s Government. Retrieved 23 December 2019. (<http://www.zenskavlada.org.rs/eng/aboutus.html>).

Yoon, Jiso, and Ki-young Shin. 2015. “Mixed Effects of Legislative Quotas in South Korea.” *Politics & Gender* 11 (1): 186–95.

# APPENDIX 2. ANALYSIS CONDUCTED IN R USING “QCA” PACKAGE

## 

## Truth Table

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Q | PR | SD | PF | CSS | WMP | Out | N | Cases |
| 1 | 0 | 1 | 1 | 1 | 1 | 1 | 2 | France12, France17 |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | Croatia20, Italy13, Portugal |
| 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | Malawi19 |
| 0 | 0 | 0 | 1 | 0 | 0 | 1 | 1 | Canada84 |
| 0 | 0 | 0 | 1 | 1 | 0 | 1 | 1 | Czech Rep06 |
| 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | Australia |
| 1 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | UK97 |
| 1 | 0 | 1 | 0 | 1 | 0 | 1 | 1 | SKorea04 |
| 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | Italy18 |
| 1 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | Serbia |
| 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | Chile |
| 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | Brazil |
| 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | Ireland |
| 0 | 0 | 0 | 0 | 0 | 1 | 0 | 4 | UK05, US10, US12, US18 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | Ghana, US86, US92, US06 |
| 1 | 0 | 1 | 1 | 1 | 0 | 0 | 2 | France02, SKorea12 |
| 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | Japan |
| 0 | 0 | 0 | 1 | 0 | 1 | 0 | 1 | Canada08 |
| 0 | 0 | 1 | 0 | 1 | 1 | 0 | 1 | Malawi14 |
| 0 | 1 | 1 | 0 | 1 | 0 | 0 | 1 | Romania |
| 0 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | Croatia03 |

|  |  |
| --- | --- |
| Necessity Tests on [1] outcome (GEF Success) |  |

|  |  |  |  |
| --- | --- | --- | --- |
|  | inclN | RoN | covN |
| ---------------------------------------------------------------------------- | ------- | ------- | ------- |
| Quota+~PartyDirected | 0.938 | 0.188 | 0.536 |
| Quota+~RegulatoryApproachSD | 1 | 0.2 | 0.571 |
| Quota+PublicFunding | 0.938 | 0.75 | 0.789 |
| Quota+CandidateSelectionSystemCentralized | 0.938 | 0.625 | 0.714 |
| Quota+~PresenceofPR | 1 | 0.133 | 0.552 |
| PartyDirected+~RegulatoryApproachSD | 1 | 0.067 | 0.533 |
| PartyDirected+PublicFunding | 0.938 | 0.688 | 0.75 |
| PartyDirected+~WMPsPrior | 0.938 | 0.438 | 0.625 |
| PublicFunding+CandidateSelectionSystemCentralized | 0.938 | 0.562 | 0.682 |
| CandidateSelectionSystemCentralized+~WMPsPrior | 0.938 | 0.375 | 0.6 |
| Quota+~PublicFunding+~WMPsPrior | 0.938 | 0.188 | 0.536 |
| Quota+~CandidateSelectionSystemCentralized+WMPsPrior | 0.938 | 0.188 | 0.536 |
| ~PartyDirected+~PublicFunding+WMPsPrior | 0.938 | 0.188 | 0.536 |
| ~PartyDirected+WMPsPrior+PresenceofPR | 0.938 | 0.188 | 0.536 |
| ~RegulatoryApproachSD+~PublicFunding+WMPsPrior | 0.938 | 0.188 | 0.536 |
| RegulatoryApproachSD+PublicFunding+~WMPsPrior | 0.938 | 0.312 | 0.577 |
| RegulatoryApproachSD+PublicFunding+WMPsPrior | 0.938 | 0.375 | 0.6 |
| ~RegulatoryApproachSD+WMPsPrior+PresenceofPR | 0.938 | 0.188 | 0.536 |
| PublicFunding+~CandidateSelectionSystemCentralized+WMPsPrior | 0.938 | 0.188 | 0.536 |
| PublicFunding+WMPsPrior+~PresenceofPR | 1 | 0.067 | 0.533 |
| ~Quota+~PublicFunding+WMPsPrior+PresenceofPR | 1 | 0.133 | 0.552 |
| ~Quota+~CandidateSelectionSystemCentralized+WMPsPrior+PresenceofPR | 0.938 | 0.188 | 0.536 |
| ~PublicFunding+~CandidateSelectionSystemCentralized+WMPsPrior+PresenceofPR | 0.938 | 0.188 | 0.536 |
| ---------------------------------------------------------------------------- | ------- | ------- | ------- |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| |  |  |  |  | | --- | --- | --- | --- | | Sufficiency Tests on [1] outcome (GEF Success) | inclS | PRI | covS | | --------------------------------------------------------------------------- | ------- | ------- | ------- | | Quota\*~PartyDirected | 1 | 1 | 0.125 | | Quota\*~RegulatoryApproachSD | 1 | 1 | 0.125 | | Quota\*~PublicFunding | 1 | 1 | 0.25 | | Quota\*~CandidateSelectionSystemCentralized | 1 | 1 | 0.125 | | Quota\*WMPsPrior | 1 | 1 | 0.5 | | Quota\*PresenceofPR | 1 | 1 | 0.438 | | PartyDirected\*~RegulatoryApproachSD | 1 | 1 | 0.062 | | PartyDirected\*~CandidateSelectionSystemCentralized | 1 | 1 | 0.062 | | ~PartyDirected\*PresenceofPR | 1 | 1 | 0.062 | | RegulatoryApproachSD\*~CandidateSelectionSystemCentralized | 1 | 1 | 0.062 | | ~RegulatoryApproachSD\*PresenceofPR | 1 | 1 | 0.062 | | ~CandidateSelectionSystemCentralized\*PresenceofPR | 1 | 1 | 0.062 | | ~Quota\*PartyDirected\*~PresenceofPR | 1 | 1 | 0.062 | | ~Quota\*PublicFunding\*~WMPsPrior | 1 | 1 | 0.125 | | ~PartyDirected\*PublicFunding\*CandidateSelectionSystemCentralized | 1 | 1 | 0.188 | | ~PartyDirected\*PublicFunding\*~WMPsPrior | 1 | 1 | 0.188 | | PartyDirected\*~PublicFunding\*WMPsPrior | 1 | 1 | 0.188 | | PartyDirected\*~PublicFunding\*~PresenceofPR | 1 | 1 | 0.188 | | PartyDirected\*WMPsPrior\*~PresenceofPR | 1 | 1 | 0.25 | | ~RegulatoryApproachSD\*PublicFunding\*CandidateSelectionSystemCentralized | 1 | 1 | 0.188 | | ~RegulatoryApproachSD\*PublicFunding\*~WMPsPrior | 1 | 1 | 0.188 | | ~RegulatoryApproachSD\*CandidateSelectionSystemCentralized\*WMPsPrior | 1 | 1 | 0.125 | | PublicFunding\*~CandidateSelectionSystemCentralized\*~WMPsPrior | 1 | 1 | 0.062 | | ~PublicFunding\*WMPsPrior\*PresenceofPR | 1 | 1 | 0.062 | | PublicFunding\*~WMPsPrior\*PresenceofPR | 1 | 1 | 0.125 | | ~Quota\*PublicFunding\*CandidateSelectionSystemCentralized\*~PresenceofPR | 1 | 1 | 0.125 | | RegulatoryApproachSD\*~PublicFunding\*~WMPsPrior\*~PresenceofPR | 1 | 1 | 0.062 | | RegulatoryApproachSD\*PublicFunding\*WMPsPrior\*~PresenceofPR | 1 | 1 | 0.125 | | PublicFunding\*CandidateSelectionSystemCentralized\*WMPsPrior\*~PresenceofPR | 1 | 1 | 0.188 | | --------------------------------------------------------------------------- | ------- | ------- | ------- | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

## Necessity Tests on [0] Outcome

|  |  |  |  |
| --- | --- | --- | --- |
|  | inclN | RoN | covN |
| ------------------------------------------------------------------ | ----- | ------- | ------- |
| ~Quota+PublicFunding | 1 | 0.25 | 0.556 |
| ~Quota+~WMPsPrior | 1 | 0.5 | 0.652 |
| ~Quota+~PresenceofPR | 1 | 0.438 | 0.625 |
| ~PartyDirected+PublicFunding | 0.933 | 0.294 | 0.538 |
| PartyDirected+~PublicFunding | 0.933 | 0.294 | 0.538 |
| ~PartyDirected+~WMPsPrior | 0.933 | 0.588 | 0.667 |
| RegulatoryApproachSD+~PublicFunding | 0.933 | 0.294 | 0.538 |
| RegulatoryApproachSD+~CandidateSelectionSystemCentralized | 0.933 | 0.294 | 0.538 |
| ~PublicFunding+~PresenceofPR | 0.933 | 0.412 | 0.583 |
| ~WMPsPrior+~PresenceofPR | 0.933 | 0.353 | 0.56 |
| ~RegulatoryApproachSD+~PublicFunding+~WMPsPrior | 0.933 | 0.412 | 0.583 |
| ~PublicFunding+~CandidateSelectionSystemCentralized+~WMPsPrior | 0.933 | 0.412 | 0.583 |
| ~CandidateSelectionSystemCentralized+~WMPsPrior+PresenceofPR | 0.933 | 0.353 | 0.56 |

## 

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| |  |  |  |  | | --- | --- | --- | --- | | Sufficiency Tests on [0] outcome | ----- | ------- | ------ | | ~Quota\*RegulatoryApproachSD | 1 | 1 | 0.2 | | ~Quota\*PresenceofPR | 1 | 1 | 0.133 | | ~PartyDirected\*RegulatoryApproachSD | 1 | 1 | 0.067 | | ~Quota\*~PartyDirected\*~PublicFunding | 1 | 1 | 0.667 | | ~Quota\*PartyDirected\*PublicFunding | 1 | 1 | 0.067 | | ~Quota\*PartyDirected\*~WMPsPrior | 1 | 1 | 0.067 | | ~Quota\*~PublicFunding\*~CandidateSelectionSystemCentralized | 1 | 1 | 0.533 | | ~Quota\*~PublicFunding\*~WMPsPrior | 1 | 1 | 0.4 | | ~Quota\*~CandidateSelectionSystemCentralized\*WMPsPrior | 1 | 1 | 0.333 | | ~PartyDirected\*~PublicFunding\*CandidateSelectionSystemCentralized | 1 | 1 | 0.133 | | ~PartyDirected\*~PublicFunding\*WMPsPrior | 1 | 1 | 0.333 | | ~PartyDirected\*~CandidateSelectionSystemCentralized\*WMPsPrior | 1 | 1 | 0.333 | | ~RegulatoryApproachSD\*~CandidateSelectionSystemCentralized\*WMPsPrior | 1 | 1 | 0.333 | | ~PublicFunding\*~CandidateSelectionSystemCentralized\*WMPsPrior | 1 | 1 | 0.267 | | ~PublicFunding\*~WMPsPrior\*PresenceofPR | 1 | 1 | 0.067 | | ~CandidateSelectionSystemCentralized\*WMPsPrior\*~PresenceofPR | 1 | 1 | 0.333 | | Quota\*PublicFunding\*~WMPsPrior\*~PresenceofPR | 1 | 1 | 0.133 | | PartyDirected\*PublicFunding\*~WMPsPrior\*~PresenceofPR | 1 | 1 | 0.133 | | ~RegulatoryApproachSD\*~PublicFunding\*CandidateSelectionSystemCentralized\*~WMPsPrior | 1 | 1 | 0.067 | | RegulatoryApproachSD\*PublicFunding\*~WMPsPrior\*~PresenceofPR | 1 | 1 | 0.133 | | --------------------------------------------------------------------------------------- | ----- | ------- | ------- | |

## 

## Boolean Minimization on [1] outcome (GEF Success)

|  |  |
| --- | --- |
| Configuration | Cases |
| Q\* SD\* CSS \* WMP | Chile\_17  France\_12  France\_17  Italy\_13  Italy\_18  Portugal\_09  Croatia\_20 |
| q\*pr\*sd \*PF\*wmp | Canada\_84  Czech Republic\_06 |
| Q \*pr\* SD \*pf\* CSS | South Korea\_04  Italy\_18 |
| Q\*PR \*SD\*PF \*WMP | Ireland\_16  Italy\_13  Portugal\_09 |
| q\*pr\*sd\* CSS \*WMP | Malawi\_19 |
| Q\*pr \*sd\*pf \*css\*wmp | UK\_97 |
| Q\*PR \*PF\* CSS\*wmp | Serbia\_07, Brazil |

## 

## Boolean Minimization on [0] outcome (GEF Failure)

|  |  |
| --- | --- |
| Configuration | Cases |
| q\* pr\* sd\*pf\*wmp | Ghana\_12,  USA\_86,  USA\_92  Japan\_00 |
| q\* pr\* sd\* css \*WMP | Canada\_08  UK\_05  USA\_06,  USA\_10,  USA\_12 |
| Q\*pr \*SD \*PF \*CSS\*wmp | France\_02  South Korea\_12 |
| q \*pr \*SD \*pf\* CSS\* WMP | Malawi\_14 |
| q \*PR \*SD \*pf \*CSS\*wmp | Romania\_08 |
| q \*PR \*SD\* PF\* CSS\* WMP | Croatia\_03 |

## 

## Parsimonious Solution to 1 outcome [[1]](#footnote-1)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Path | Cases | Incls | PRI | covS | covU |
| Q\*PR | Serbia07, Chile17, Ireland13, Brazil18, Croatia20, Portugal09 and Italy13 | 1.00 | 1.00 | 0.438 | 0.062 |
| Q\*pf | Chile17, Italy18, South Korea04 and the UK97 | 1.00 | 1.00 | 0.286 | 0.143 |
| Q\*WMP | Chile17, France12 and 17, Italy13 and 18, Portugal09 and Ireland16 | 1.00 | 1.00 | .500 | 0.125 |
| sd\*PF\*wmp | Canada84, Czech Rep06 and Serbia\_07 | 1.00 | 1.00 | 0.188 | 0.125 |
| sd\*CSS\*WMP | Australia98 and Malawi19 | 1.00 | 1.00 | 0.125 | 0.062 |

## 

## Simplifying Assumptions for 1 outcome

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | Q | SD | PR | PF | CSS | WMPs |
| 12 | 0 | 0 | 1 | 0 | 1 | 1 |
| 13 | 0 | 0 | 1 | 1 | 0 | 0 |
| 15 | 0 | 0 | 1 | 1 | 1 | 0 |
| 16 | 0 | 0 | 1 | 1 | 1 | 1 |
| 34 | 1 | 0 | 0 | 0 | 0 | 1 |
| 35 | 1 | 0 | 0 | 0 | 1 | 0 |
| 36 | 1 | 0 | 0 | 0 | 1 | 1 |
| 37 | 1 | 0 | 0 | 1 | 0 | 0 |
| 38 | 1 | 0 | 0 | 1 | 0 | 1 |
| 39 | 1 | 0 | 0 | 1 | 1 | 0 |
| 40 | 1 | 0 | 0 | 1 | 1 | 1 |
| 41 | 1 | 0 | 1 | 0 | 0 | 0 |
| 42 | 1 | 0 | 1 | 0 | 0 | 1 |
| 43 | 1 | 0 | 1 | 0 | 1 | 0 |
| 44 | 1 | 0 | 1 | 0 | 1 | 1 |
| 45 | 1 | 0 | 1 | 1 | 0 | 0 |
| 46 | 1 | 0 | 1 | 1 | 0 | 1 |
| 48 | 1 | 0 | 1 | 1 | 1 | 1 |
| 49 | 1 | 1 | 0 | 0 | 0 | 0 |
| 50 | 1 | 1 | 0 | 0 | 0 | 1 |
| 54 | 1 | 1 | 0 | 1 | 0 | 1 |
| 57 | 1 | 1 | 1 | 0 | 0 | 0 |
| 58 | 1 | 1 | 1 | 0 | 0 | 1 |
| 59 | 1 | 1 | 1 | 0 | 1 | 0 |
| 61 | 1 | 1 | 1 | 1 | 0 | 0 |

## 

## Parsimonious Solution(s) to [0] Outcome

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Configuration | Models | Cases | Raw Coverage | Unique Coverage |
| q\*SD | M2 | Croatia\_03  Malawi\_14  Romania\_08 | .200 | .133 |
| q\*pf \*wmp | M2 | Ghana\_12  USA\_86  USA\_92  USA\_05  Japan\_00  Romania\_08 | .400 | .333 |
| q\*css\*WMP | M2 | UK\_05  USA\_10  USA\_12  USA\_18  Canada\_08 | .333 | .333 |
| SD \*pr\*PF\*wmp | M2 | France\_02  South Korea\_12 | .133 | .133 |

## 

## Simplifying Assumptions for [0] outcome

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | Q | PR | SD | PF | CSS | WMP |
| 9 | 0 | 0 | 1 | 0 | 0 | 0 |
| 10 | 0 | 0 | 1 | 0 | 0 | 1 |
| 11 | 0 | 0 | 1 | 0 | 1 | 0 |
| 14 | 0 | 0 | 1 | 1 | 0 | 1 |
| 17 | 0 | 1 | 0 | 0 | 0 | 0 |
| 18 | 0 | 1 | 0 | 0 | 0 | 1 |
| 19 | 0 | 1 | 0 | 0 | 1 | 0 |
| 21 | 0 | 1 | 0 | 1 | 0 | 0 |
| 22 | 0 | 1 | 0 | 1 | 0 | 1 |
| 23 | 0 | 1 | 0 | 1 | 1 | 0 |
| 24 | 0 | 1 | 0 | 1 | 1 | 1 |
| 25 | 0 | 1 | 1 | 0 | 0 | 0 |
| 26 | 0 | 1 | 1 | 0 | 0 | 1 |
| 28 | 0 | 1 | 1 | 0 | 1 | 1 |
| 29 | 0 | 1 | 1 | 1 | 0 | 0 |
| 30 | 0 | 1 | 1 | 1 | 0 | 1 |
| 31 | 0 | 1 | 1 | 1 | 1 | 0 |
| 53 | 1 | 1 | 0 | 1 | 0 | 0 |

1. The results show some model ambiguity with 2 parsimonious paths on the 1 outcome and 6 for the 0 outcome. However, parsimonious M1 of 1 outcome and parsimonious M2 of the 0 outcome were the only ones that were not created using contradictory simplifying assumptions. Thus, only these results are reported. [↑](#footnote-ref-1)