

**ONLINE APPENDICES FOR**  
**INTERNATIONAL SCRUTINY AND PRE-ELECTORAL FISCAL MANIPULATION**

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Table A1: Included Countries

|                    |                    |                     |
|--------------------|--------------------|---------------------|
| Albania            | Guatemala          | Paraguay            |
| Algeria            | Guinea-Bissau      | Peru                |
| Argentina          | Guyana             | Philippines         |
| Azerbaijan         | Haiti              | Poland              |
| Belarus            | Honduras           | Romania             |
| Bolivia            | Hungary            | Russia              |
| Botswana           | India              | Rwanda              |
| Brazil             | Indonesia          | Serbia              |
| Bulgaria           | Iran               | Sierra Leone        |
| Burkina Faso       | Jordan             | Singapore           |
| Burundi            | Kazakhstan         | Slovakia            |
| Cambodia           | Kenya              | Slovenia            |
| Cameroon           | Korea, Republic of | South Africa        |
| Chad               | Kuwait             | Sri Lanka           |
| Chile              | Kyrgyz Republic    | Swaziland           |
| China              | Lesotho            | Syria               |
| Colombia           | Lithuania          | Thailand            |
| Congo              | Madagascar         | Togo                |
| Costa Rica         | Malawi             | Trinidad and Tobago |
| Cote D'Ivoire      | Malaysia           | Tunisia             |
| Croatia            | Mali               | Turkey              |
| Czech Republic     | Mauritius          | Uganda              |
| Dominican Republic | Mexico             | Ukraine             |
| Ecuador            | Moldova            | Uruguay             |
| Egypt              | Mongolia           | Venezuela           |
| El Salvador        | Morocco            | Yemen               |
| Estonia            | Namibia            | Zambia              |
| Ethiopia           | Nepal              | Zimbabwe            |
| Fiji               | Nicaragua          |                     |
| Gabon              | Nigeria            |                     |
| Gambia             | Pakistan           |                     |
| Georgia            | Panama             |                     |
| Ghana              | Papua New Guinea   |                     |

Table A2: Country-Year Observations by Election Category  
Monitored Elections, Not Under IMF Agreement

| Country            | Year |
|--------------------|------|
| Albania            | 1997 |
| Belarus            | 2000 |
| Belarus            | 2001 |
| Bulgaria           | 1990 |
| Cambodia           | 1998 |
| Czech Republic     | 2002 |
| Dominican Republic | 1990 |
| Dominican Republic | 1996 |
| Dominican Republic | 2000 |
| Georgia            | 2000 |
| Hungary            | 2002 |
| Indonesia          | 2004 |
| Kazakhstan         | 2004 |
| Mexico             | 1994 |
| Nigeria            | 1999 |
| Nigeria            | 2003 |
| Paraguay           | 1993 |
| Romania            | 1990 |
| Serbia             | 2000 |
| Slovakia           | 1998 |
| Slovakia           | 1999 |
| Slovakia           | 2002 |
| Sri Lanka          | 2000 |
| Togo               | 1999 |
| Venezuela          | 1998 |
| Venezuela          | 2000 |
| Zambia             | 1991 |

Table A2: Country-Year Observations by Election Category, cont'd  
Monitored Elections, Under IMF Agreement

| Country            | Year | Country         | Year |
|--------------------|------|-----------------|------|
| Albania            | 1996 | Kyrgyz Republic | 2000 |
| Azerbaijan         | 1998 | Lithuania       | 1996 |
| Bulgaria           | 1991 | Mali            | 2002 |
| Bulgaria           | 1994 | Mexico          | 1997 |
| Bulgaria           | 1996 | Mexico          | 2000 |
| Bulgaria           | 1997 | Moldova         | 1996 |
| Bulgaria           | 2001 | Moldova         | 1998 |
| Burundi            | 1993 | Moldova         | 2001 |
| Cambodia           | 2003 | Mongolia        | 2004 |
| Cameroon           | 1992 | Nicaragua       | 1996 |
| Croatia            | 1995 | Nicaragua       | 2001 |
| Croatia            | 1997 | Pakistan        | 1990 |
| Croatia            | 2000 | Pakistan        | 1993 |
| Dominican Republic | 1994 | Pakistan        | 1997 |
| El Salvador        | 1999 | Pakistan        | 2002 |
| Estonia            | 1995 | Panama          | 1994 |
| Estonia            | 1999 | Peru            | 2000 |
| Georgia            | 1999 | Peru            | 2001 |
| Georgia            | 2003 | Rumania         | 1992 |
| Georgia            | 2004 | Rumania         | 1996 |
| Ghana              | 1992 | Romania         | 2000 |
| Ghana              | 1996 | Russia          | 1996 |
| Guatemala          | 1990 | Russia          | 1999 |
| Guatemala          | 2003 | Russia          | 2000 |
| Guyana             | 1992 | Rwanda          | 2003 |
| Haiti              | 1990 | Serbia          | 2002 |
| Hungary            | 1990 | Sierra Leone    | 2002 |
| Hungary            | 1994 | Sri Lanka       | 2001 |
| Hungary            | 1998 | Sri Lanka       | 2004 |
| Indonesia          | 1999 | Togo            | 1993 |
| Kazakhstan         | 1999 | Togo            | 1998 |
| Kenya              | 1997 | Yemen           | 1997 |
| Kenya              | 2002 | Zambia          | 1996 |
| Kyrgyz Republic    | 1995 |                 |      |

Table A2: Country-Year Observations by Election Category, cont'd  
Unmonitored Elections, Not Under IMF Agreement

| Country            | Year | Country          | Year | Country           | Year |
|--------------------|------|------------------|------|-------------------|------|
| Belarus            | 1994 | India            | 1999 | Poland            | 1997 |
| Botswana           | 1999 | Indonesia        | 1992 | Poland            | 2000 |
| Botswana           | 2004 | Iran             | 1998 | Poland            | 2001 |
| Brazil             | 1994 | Iran             | 2000 | Singapore         | 2001 |
| Chile              | 1993 | Iran             | 2001 | Slovenia          | 1996 |
| Chile              | 1997 | Iran             | 2004 | Slovenia          | 1997 |
| Chile              | 1999 | Korea            | 1992 | Slovenia          | 2000 |
| Colombia           | 1990 | Korea            | 1996 | Slovenia          | 2002 |
| Colombia           | 1991 | Lesotho          | 1998 | Slovenia          | 2004 |
| Colombia           | 1994 | Malaysia         | 1990 | South Africa      | 1994 |
| Colombia           | 1998 | Malaysia         | 1995 | South Africa      | 1999 |
| Congo              | 1993 | Malaysia         | 1999 | Sri Lanka         | 1999 |
| Costa Rica         | 1998 | Mauritius        | 1991 | Syria             | 1990 |
| Costa Rica         | 2002 | Mauritius        | 1995 | Syria             | 1994 |
| Czech Republic     | 1996 | Mauritius        | 2000 | Syria             | 1998 |
| Czech Republic     | 1998 | Mongolia         | 1990 | Thailand          | 1992 |
| Czech Republic     | 2000 | Morocco          | 1997 | Thailand          | 1995 |
| Czech Republic     | 2004 | Morocco          | 2002 | Thailand          | 1996 |
| Dominican Republic | 1998 | Namibia          | 1994 | Thailand          | 2001 |
| Ecuador            | 1998 | Namibia          | 1999 | Trinidad & Tobago | 1995 |
| Egypt              | 1990 | Nepal            | 1991 | Tunisia           | 1994 |
| Egypt              | 2000 | Nepal            | 1999 | Tunisia           | 1999 |
| Fiji               | 1994 | Panama           | 1991 | Turkey            | 1991 |
| Fiji               | 1999 | Papua New Guinea | 2002 | Turkey            | 1999 |
| Gambia             | 1992 | Paraguay         | 1998 | Uruguay           | 1994 |
| Guatemala          | 1995 | Paraguay         | 2000 | Yemen             | 1993 |
| Guatemala          | 1999 | Peru             | 1990 | Zambia            | 1994 |
| Haiti              | 2000 | Peru             | 1992 | Zimbabwe          | 1990 |
| India              | 1996 | Philippines      | 2001 | Zimbabwe          | 1996 |
| India              | 1998 | Philippines      | 2004 |                   |      |

Table A2: Country-Year Observations by Election Category, cont'd  
Unmonitored Elections, Under IMF Agreement

| Country       | Year | Country            | Year | Country          | Year |
|---------------|------|--------------------|------|------------------|------|
| Argentina     | 1997 | El Salvador        | 2000 | Mexico           | 1991 |
| Argentina     | 1999 | Estonia            | 1992 | Mongolia         | 1992 |
| Argentina     | 2001 | Gabon              | 1990 | Mongolia         | 1993 |
| Argentina     | 2003 | Gabon              | 1991 | Mongolia         | 1996 |
| Belarus       | 1995 | Guatemala          | 1994 | Mongolia         | 1997 |
| Bolivia       | 1997 | Guyana             | 1997 | Mongolia         | 2000 |
| Bolivia       | 2002 | Haiti              | 1995 | Mongolia         | 2001 |
| Brazil        | 1998 | Haiti              | 1997 | Morocco          | 1993 |
| Bulgaria      | 1992 | Honduras           | 1993 | Nepal            | 1994 |
| Burkina Faso  | 1992 | Honduras           | 1997 | Panama           | 1999 |
| Burkina Faso  | 1997 | Honduras           | 2001 | Papua New Guinea | 1992 |
| Burkina Faso  | 1998 | India              | 1991 | Papua New Guinea | 1997 |
| Burkina Faso  | 2002 | Indonesia          | 1997 | Peru             | 1995 |
| Chad          | 1996 | Jordan             | 1993 | Philippines      | 1992 |
| Chad          | 1997 | Jordan             | 1997 | Philippines      | 1995 |
| Chad          | 2001 | Kazakhstan         | 1995 | Philippines      | 1998 |
| Colombia      | 2002 | Kenya              | 1992 | Poland           | 1995 |
| Costa Rica    | 1990 | Kenya              | 1994 | Sierra Leone     | 1996 |
| Costa Rica    | 1994 | Korea, Republic of | 1997 | Sri Lanka        | 1994 |
| Cote D'Ivoire | 1995 | Lesotho            | 1993 | Thailand         | 2000 |
| Cote D'Ivoire | 1996 | Lesotho            | 2002 | Togo             | 1994 |
| Ecuador       | 1990 | Lithuania          | 1997 | Turkey           | 1995 |
| Ecuador       | 1992 | Lithuania          | 2000 | Uruguay          | 1999 |
| Ecuador       | 1994 | Lithuania          | 2002 | Uruguay          | 2004 |
| Ecuador       | 1996 | Madagascar         | 1992 | Venezuela        | 1993 |
| Egypt         | 1995 | Madagascar         | 1996 | Yemen            | 1999 |
| El Salvador   | 1991 | Madagascar         | 1998 | Zambia           | 1995 |
| El Salvador   | 1994 | Mali               | 1992 | Zimbabwe         | 1995 |
| El Salvador   | 1997 | Mali               | 1997 |                  |      |

## **Appendix B**

### **Data Definitions and Sources for Elections and Election Monitors**

All election data were compiled from two existing datasets on election events between 1990 and 2004. Because the election event data are not annual, they were converted to annual observations if any election in a given country-year met the criteria described below.

#### ***Election***

The *Election* variable represents a dichotomous indication of whether or not an election for national level office took place, and in which multiparty competition was technically possible. It was coded from three questions from the \_\_\_\_ data that serve as a competitive election screen. Elections with no opposition political parties allowed or competing, or with no choice of candidates on the ballot are not considered competitive elections. This competitive elections screen is intentionally not based on evaluations of the relative “closeness” of the vote share or aggregate democracy scores such as Polity or Freedom House, and allows for the possibility of elections with very popular incumbent parties as well as competitive elections in regimes with low levels of democracy or restricted political and civil rights.

*Inter-coder reliability.* The election data were coded by a team of undergraduate RAs. Approximately 16% percent of the election events were coded twice by different RAs to assess the rate of inter-coder reliability. For the three questions used in this paper, rates of inter-coder agreement were consistently high.

Q3. Was opposition allowed? For yes/no coding, 94% agreement between coders. For yes/no/unknown/unclear coding, 91% agreement.

Q4. Was more than one party legal? For yes/no coding, 97% agreement between coders. For yes/no/unknown/unclear coding, 96% agreement.

Q5. Was there a choice of candidates on the ballot? For yes/no coding, 98% agreement between coders. For yes/no/unknown/unclear coding, 97% agreement.

### ***Monitored Election***

Data on monitored elections were coded by the author, as presented in \_\_\_\_\_. For all elections, *Monitored Election* is coded as one if an official delegation of foreign observers was present to observe and report on the electoral process. In this paper, “friendly” international observers who are extremely unlikely to criticize any election fraud or manipulation are excluded, as these rubber stamp delegations are unlikely to constrain the ability of governments to manipulate elections (as our theory requires). Therefore, for an election to count as internationally monitored in these data, the organization must have previously observed and criticized an election. Once an international observer organization has condemned a fraudulent election, this coding assumes that from that point forward, their reputation should be known to other leaders who invite them.



## Appendix C

### Robustness Checks

Table C1: Alternative Model Specifications

|                                    | Model 1 | Model 2       | Model 3    | Model 4         |
|------------------------------------|---------|---------------|------------|-----------------|
|                                    | Random  | Country Fixed | Year Fixed | Panel Corrected |
|                                    | Effects | Effects       | Effects    | Standard Errors |
| Government Balance, lagged         | -0.53 * | -0.59 *       | -0.52 *    | -0.38 *         |
|                                    | (0.03)  | (0.03)        | (0.03)     | (0.08)          |
| Election                           | -0.49   | -0.45         | -0.49      | -0.54           |
|                                    | (0.36)  | (0.37)        | (0.37)     | (0.37)          |
| Election x Monitors                | -1.56 * | -1.39         | -1.61 *    | -1.58 *         |
|                                    | (0.69)  | (0.71)        | (0.69)     | (0.72)          |
| Election x IMF Agreement           | 0.42    | 0.32          | 0.38       | 0.53            |
|                                    | (0.51)  | (0.52)        | (0.52)     | (0.49)          |
| Election x Monitors x IMF Agreemen | 1.13    | 1.00          | 1.23       | 1.26            |
|                                    | (0.84)  | (0.87)        | (0.85)     | (0.86)          |
| GDP per capita (logged)            | 0.47 *  | -1.25         | 0.46 *     | 0.33 *          |
|                                    | (0.23)  | (1.19)        | (0.22)     | (0.17)          |
| GDP Growth                         | 0.09 *  | 0.10 *        | 0.09 *     | 0.09 *          |
|                                    | (0.02)  | (0.02)        | (0.02)     | (0.02)          |
| Trade (logged)                     | 0.51    | 0.55          | 0.42       | 0.51 *          |
|                                    | (0.34)  | (0.67)        | (0.33)     | (0.22)          |
| Population between 15 and 64       | 0.01    | 0.01          | 0.01       | 0.01            |
|                                    | (0.05)  | (0.08)        | (0.05)     | (0.03)          |
| Population over 65                 | -0.10   | -0.29         | -0.09      | -0.09           |
|                                    | (0.07)  | (0.31)        | (0.07)     | (0.06)          |
| Under IMF Agreement                | 0.07    | 0.07          | 0.06       | 0.03            |
|                                    | (0.27)  | (0.30)        | (0.27)     | (0.21)          |
| Constant                           | -6.86 * | 5.04          | -6.53 *    | -5.83 *         |
|                                    | (2.29)  | (6.82)        | (2.34)     | (2.03)          |
| Adjusted R2                        | 0.24    | 0.42          | 0.25       | 0.24            |
| Observations                       | 978     | 978           | 978        | 978             |

\*p < 0.05. Standard Errors in parentheses.

Table C2: Point Predictions and Confidence Intervals for Models Reported in Table C1

|   | Point<br>Prediction | Lower 95%<br>Confidence Interval | Upper 95%<br>Confidence Interval |
|---|---------------------|----------------------------------|----------------------------------|
| Table C1 Model 1                              |                     |                                  |                                  |
| Unmonitored Election, Not Under IMF Agreement | -0.49               | -1.20                            | 0.22                             |
| Unmonitored Election, Under IMF Agreement     | -0.07               | -0.79                            | 0.65                             |
| Monitored Election, Not Under IMF Agreement   | -2.05               | -3.28                            | -0.82                            |
| Monitored Election, Under IMF Agreement       | -0.50               | -1.30                            | 0.31                             |
| Table C1 Model 2                              |                     |                                  |                                  |
| Unmonitored Election, Not Under IMF Agreement | -0.45               | -1.18                            | 0.27                             |
| Unmonitored Election, Under IMF Agreement     | -0.13               | -0.87                            | 0.60                             |
| Monitored Election, Not Under IMF Agreement   | -1.85               | -3.12                            | -0.58                            |
| Monitored Election, Under IMF Agreement       | -0.52               | -1.35                            | 0.30                             |
| Table C1 Model 3                              |                     |                                  |                                  |
| Unmonitored Election, Not Under IMF Agreement | -0.49               | -1.21                            | 0.23                             |
| Unmonitored Election, Under IMF Agreement     | -0.11               | -0.84                            | 0.61                             |
| Monitored Election, Not Under IMF Agreement   | -2.11               | -3.35                            | -0.86                            |
| Monitored Election, Under IMF Agreement       | -0.50               | -1.30                            | 0.31                             |
| Table C1 Model 4                              |                     |                                  |                                  |
| Unmonitored Election, Not Under IMF Agreement | -0.54               | -1.26                            | 0.18                             |
| Unmonitored Election, Under IMF Agreement     | -0.01               | -0.69                            | 0.67                             |
| Monitored Election, Not Under IMF Agreement   | -2.12               | -3.43                            | -0.81                            |
| Monitored Election, Under IMF Agreement       | -0.33               | -1.09                            | 0.42                             |

Table C3: Alternative Dependent Variables

|                                     | Model 1               | Model 2               |
|-------------------------------------|-----------------------|-----------------------|
| Dependent Variable:                 | IMF IFS               | Brender & Drazen      |
| Election Monitors Variable:         | High Quality Monitors | High Quality Monitors |
| Dependent Variable, lagged          | -0.61 *               | -0.76 *               |
|                                     | (0.03)                | (0.05)                |
| Election                            | -0.47                 | -0.31                 |
|                                     | (0.40)                | (0.37)                |
| Election x Monitors                 | -1.26                 | -1.30                 |
|                                     | (0.76)                | (0.77)                |
| Election x IMF Agreement            | 0.19                  | 0.00                  |
|                                     | (0.57)                | (0.53)                |
| Election x Monitors x IMF Agreement | 1.02                  | 1.01                  |
|                                     | (0.93)                | (0.93)                |
| GDP per capita (logged)             | -1.75                 | 0.57                  |
|                                     | (1.27)                | (1.72)                |
| GDP Growth                          | 0.10 *                | 0.11 *                |
|                                     | (0.02)                | (0.03)                |
| Trade (logged)                      | -0.04                 | 0.15                  |
|                                     | (0.74)                | (0.85)                |
| Population between 15 and 64        | -0.13                 | -0.04                 |
|                                     | (0.11)                | (0.21)                |
| Population over 65                  | -0.39                 | -0.67                 |
|                                     | (0.36)                | (0.40)                |
| Under IMF Agreement                 | 0.22                  | 0.60                  |
|                                     | (0.32)                | (0.35)                |
| Constant                            | 17.81 *               | 0.55                  |
|                                     | (9.08)                | (17.78)               |
| Adjusted R2                         | 0.44                  | 0.48                  |
| Observations                        | 927                   | 447                   |

\*p< 0.05. Standard Errors in parentheses.

TableC 4: Point Predictions and Confidence Intervals for Models Reported in Table C3

|   | Point<br>Prediction | Lower 95%<br>Confidence Interval | Upper 95%<br>Confidence Interval |
|---|---------------------|----------------------------------|----------------------------------|
| Table C3 Model 1                              |                     |                                  |                                  |
| Unmonitored Election, Not Under IMF Agreement | -0.47               | -1.26                            | 0.31                             |
| Unmonitored Election, Under IMF Agreement     | -0.28               | -1.08                            | 0.52                             |
| Monitored Election, Not Under IMF Agreement   | -1.73               | -3.09                            | -0.37                            |
| Monitored Election, Under IMF Agreement       | -0.52               | -1.42                            | 0.37                             |
| Table C3 Model 2                              |                     |                                  |                                  |
| Unmonitored Election, Not Under IMF Agreement | -0.31               | -1.04                            | 0.42                             |
| Unmonitored Election, Under IMF Agreement     | -0.30               | -1.03                            | 0.43                             |
| Monitored Election, Not Under IMF Agreement   | -1.60               | -3.01                            | -0.19                            |
| Monitored Election, Under IMF Agreement       | -0.59               | -1.54                            | 0.36                             |

Table C5: Models for Marginal Effects Reported in Paper Figure 3

|  | Model A | Model B | Model C | Model D | Model E | Model F |
|--|---------|---------|---------|---------|---------|---------|
| Government Balance, lagged             | -0.62 * | -0.58 * | -0.57 * | -0.58 * | -0.61 * | -0.66 * |
|  | (0.03)  | (0.03)  | (0.03)  | (0.03)  | (0.03)  | (0.04)  |
| Election                               | -0.38   | -0.44   | -0.03   | -0.39   | -0.69   | 0.26    |
|  | (0.44)  | (0.41)  | (0.43)  | (0.38)  | (0.73)  | (0.44)  |
| Election x Monitors                    | -1.35   | -1.51 * | -1.65 * | -1.47 * | -2.23 * | -2.96 * |
|  | (0.74)  | (0.72)  | (0.69)  | (0.72)  | (0.80)  | (0.90)  |
| Election x IMF Agreement               | 0.17    | 0.25    | 0.29    | 0.25    | 0.25    | -0.65   |
|  | (0.75)  | (0.53)  | (0.53)  | (0.53)  | (0.57)  | (0.63)  |
| Election x Monitors x IMF Agreement    | 1.10    | 1.19    | 1.30    | 1.15    | 1.68    | 2.79 *  |
|  | (0.91)  | (0.87)  | (0.83)  | (0.87)  | (0.96)  | (1.10)  |
| Election x IMF Hazard Rate             | -0.16   |         |         |         |         |         |
|  | (0.50)  |         |         |         |         |         |
| IMF Hazard Rate                        | 0.08    |         |         |         |         |         |
|  | (0.26)  |         |         |         |         |         |
| Election x GDP Growth                  |         | 0.00    |         |         |         |         |
|  |         | (0.04)  |         |         |         |         |
| Election x External Debt as a % of GDP |         |         | -0.17   |         |         |         |
|  |         |         | (0.11)  |         |         |         |
| External Debt as a % of GDP            |         |         | -0.11 * |         |         |         |
|  |         |         | (0.05)  |         |         |         |
| Election x Financial Crises            |         |         |         | -0.27   |         |         |
|  |         |         |         | (0.57)  |         |         |
| Financial Crises                       |         |         |         | 0.07    |         |         |
|  |         |         |         | (0.32)  |         |         |
| Election x UN GA                       |         |         |         |         | 1.03    |         |
|  |         |         |         |         | (2.19)  |         |
| UN GA                                  |         |         |         |         | 0.90    |         |
|  |         |         |         |         | (2.54)  |         |
| Under IMF Agreement                    | 0.06    | 0.05    | -0.14   | 0.04    | -0.08   | -0.23   |
|  | (0.36)  | (0.30)  | (0.28)  | (0.30)  | (0.32)  | (0.41)  |
| GDP per capita (logged)                | 0.11 *  | -1.71   | 0.10 *  | 0.10 *  | 0.09 *  | -4.42 * |
|  | (0.02)  | (1.21)  | (0.02)  | (0.02)  | (0.02)  | (1.88)  |
| GDP Growth                             | -1.19   | 0.10 *  | -1.58   | -1.72   | -1.74   | 0.09 *  |
|  | (1.26)  | (0.02)  | (1.17)  | (1.21)  | (1.32)  | (0.03)  |
| Trade (logged)                         | -0.22   | -0.08   | 0.18    | -0.10   | 0.13    | 0.72    |
|  | (0.73)  | (0.69)  | (0.65)  | (0.69)  | (0.75)  | (0.99)  |
| Population between 15 and 64           | -0.14   | -0.12   | -0.20   | -0.12   | -0.16   | -0.41 * |
|  | (0.13)  | (0.11)  | (0.10)  | (0.11)  | (0.13)  | (0.20)  |
| Population over 65                     | -0.45   | -0.43   | -0.43   | -0.44   | -0.60   | 0.11    |
|  | (0.36)  | (0.34)  | (0.33)  | (0.34)  | (0.38)  | (0.44)  |
| Constant                               | 15.65   | 17.25 * | 20.16 * | 17.42 * | 19.24   | 45.00 * |
|  | (9.55)  | (8.63)  | (8.29)  | (8.65)  | (9.84)  | (14.62) |
| Adjusted R2                            | 0.45    | 0.43    | 0.44    | 0.43    | 0.45    | 0.43    |
| Observations                           | 917     | 978     | 906     | 978     | 879     | 514     |

\*p&lt; 0.05. Standard Errors in parentheses.

Table C6: Country Outlier Exclusions, by Election Category

|  | Model 1                       | Model 2                   | Model 3                     | Model 4                 |
|--|-------------------------------|---------------------------|-----------------------------|-------------------------|
| Category:                                  | Unmonitored,<br>Not Under IMF | Unmonitored,<br>Under IMF | Monitored, Not<br>Under IMF | Monitored,<br>Under IMF |
| Highest Government Balance                 | Botswana                      | Lesotho                   | Indonesia                   | Mongolia                |
| Lowest Government Balance Outlier:         | Congo                         | Bolivia                   | Zambia                      | Bulgaria                |
| Government Balance, lagged                 | -0.60 *                       | -0.62 *                   | -0.54 *                     | -0.58 *                 |
|  | (0.03)                        | (0.03)                    | (0.03)                      | (0.03)                  |
| Election                                   | -0.46                         | -0.39                     | -0.49                       | -0.37                   |
|  | (0.36)                        | (0.37)                    | (0.35)                      | (0.37)                  |
| Election x Monitors                        | -1.46 *                       | -1.62 *                   | -0.26                       | -1.53 *                 |
|  | (0.68)                        | (0.70)                    | (0.69)                      | (0.71)                  |
| Election x IMF Agreement                   | 0.23                          | 0.43                      | 0.32                        | 0.08                    |
|  | (0.51)                        | (0.53)                    | (0.50)                      | (0.53)                  |
| Election x Monitors x IMF Agreeemen        | 1.11                          | 1.10                      | -0.04                       | 1.24                    |
|  | (0.82)                        | (0.86)                    | (0.83)                      | (0.88)                  |
| GDP per capita (logged)                    | -0.66                         | -1.97                     | -1.37                       | -0.80                   |
|  | (1.17)                        | (1.18)                    | (1.13)                      | (1.24)                  |
| GDP Growth                                 | 0.09 *                        | 0.09 *                    | 0.10 *                      | 0.09 *                  |
|  | (0.02)                        | (0.02)                    | (0.02)                      | (0.02)                  |
| Trade (logged)                             | -0.24                         | -0.10                     | 0.08                        | -0.28                   |
|  | (0.66)                        | (0.68)                    | (0.65)                      | (0.70)                  |
| Population between 15 and 64               | -0.05                         | -0.10                     | -0.08                       | -0.14                   |
|  | (0.10)                        | (0.10)                    | (0.10)                      | (0.11)                  |
| Population over 65                         | -0.53                         | -0.49                     | -0.35                       | -0.75 *                 |
|  | (0.32)                        | (0.33)                    | (0.31)                      | (0.37)                  |
| Under IMF Agreement                        | 0.21                          | -0.10                     | 0.13                        | 0.06                    |
|  | (0.28)                        | (0.29)                    | (0.28)                      | (0.29)                  |
| Constant                                   | 7.92                          | 18.26 *                   | 12.48                       | 14.65                   |
|  | (8.36)                        | (8.48)                    | (8.18)                      | (8.83)                  |
| Adjusted R2                                | 0.45                          | 0.44                      | 0.44                        | 0.43                    |
| Observations                               | 958                           | 952                       | 953                         | 948                     |
| *p < 0.05. Standard Errors in parentheses. |                               |                           |                             |                         |

Table C7: Point Predictions and Confidence Intervals for Models Reported in Table C6

|   | Point<br>Prediction | Lower 95%<br>Confidence Interval | Upper 95%<br>Confidence Interval |
|---|---------------------|----------------------------------|----------------------------------|
| Table C6 Model 1                              |                     |                                  |                                  |
| Unmonitored Election, Not Under IMF Agreement | -0.46               | -1.16                            | 0.25                             |
| Unmonitored Election, Under IMF Agreement     | -0.22               | -0.93                            | 0.48                             |
| Monitored Election, Not Under IMF Agreement   | -1.92               | -3.13                            | -0.70                            |
| Monitored Election, Under IMF Agreement       | -0.58               | -1.36                            | 0.20                             |
| Table C6 Model 2                              |                     |                                  |                                  |
| Unmonitored Election, Not Under IMF Agreement | -0.39               | -1.11                            | 0.33                             |
| Unmonitored Election, Under IMF Agreement     | 0.04                | -0.71                            | 0.79                             |
| Monitored Election, Not Under IMF Agreement   | -2.01               | -3.27                            | -0.76                            |
| Monitored Election, Under IMF Agreement       | -0.48               | -1.29                            | 0.33                             |
| Table C6 Model 3                              |                     |                                  |                                  |
| Unmonitored Election, Not Under IMF Agreement | -0.49               | -1.17                            | 0.20                             |
| Unmonitored Election, Under IMF Agreement     | -0.16               | -0.86                            | 0.53                             |
| Monitored Election, Not Under IMF Agreement   | -0.75               | -1.99                            | 0.49                             |
| Monitored Election, Under IMF Agreement       | -0.46               | -1.24                            | 0.31                             |
| Table C6 Model 4                              |                     |                                  |                                  |
| Unmonitored Election, Not Under IMF Agreement | -0.37               | -1.09                            | 0.35                             |
| Unmonitored Election, Under IMF Agreement     | -0.29               | -1.05                            | 0.46                             |
| Monitored Election, Not Under IMF Agreement   | -1.90               | -3.18                            | -0.62                            |
| Monitored Election, Under IMF Agreement       | -0.59               | -1.43                            | 0.25                             |

### Discussion of IMF Selection Model

The selection model for *IMF Hazard Rate* builds upon Nooruddin and Simmons' (2006) model of IMF program participation. The dependent variable is *Under IMF Agreement*. The independent variables are one period lags of *Under IMF Agreement*, *GDP per capita*, *GDP Growth*, *Current Account Balance*, *Government Balance*, and *POLITY*. Current Account Balance is from World Bank (2007). Regime type data are from the POLITY IV dataset (Marshall and Jaggers 2002). Following common practice, the analysis uses the 21 point scale ranging from -10 (strongly autocratic) to 10 (strongly democratic), with higher scores indicating more democratic political institutions.

Nooruddin and Simmons include a lag of IMF program participation in their model to account for IMF program recidivism. IMF recidivism is a key theoretic argument for increased future IMF program participation, and one of the strongest empirical findings in the IMF literature (Conway 2007). For substantive reasons (rather than to control for temporal dependence), including a variable for past IMF participation is the preferred modeling strategy in the field (see, for example, IMF 2003, Nooruddin and Simmons 2006, Pop-Eleches 2008, Przeworski and Vreeland 2000, Stone 2008, and Vreeland 2002). Based on recent literature, failing to account for past IMF program participation would result in a model that is not reflective of the field's understanding of the causes of IMF program participation. We present three different versions of this model to account for the potential problem of temporal dependence found in time-series data with a binary dependent variable. In model 1, we follow Nooruddin and Simmon's specification and do not explicitly model temporal dependence. In



model 2, we adopt Beck, Katz and Tucker's (1998) recommendation to take time seriously by including a three cubic splines in our analysis. In model 3, we include *Count*—which is an annual count variable coded 1 in 1990, 2 in 1991, etc., *Count*<sup>2</sup>, and *Count*<sup>3</sup>, which captures Carter and Signorino's (2007) recommendation that models with temporal dependence and binary dependent variables include variables that capture time, time squared, and time cubed, which they argue represent a flexible and transparent method for dealing with temporal dependence and binary data.

A probit estimator is used to estimate the hazard rate instead of the linear probability model used by Nooruddin and Simmons. Nooruddin and Simmons (2006) adopt a linear probability estimator to replicate the results presented in IMF (2003). Their results hold when estimated with dynamic probit and dynamic bivariate probit with partial observability models (Nooruddin and Simmons 2006, 1017 fn57).

Table D1: IMF Selection Models

|                                 | Model 1           | Model 2           | Model 3<br>(Used in Paper)                     |
|---------------------------------|-------------------|-------------------|--|
| Resulting IMF Hazard Rate:      | 1                 | 2                 | 3  |
| Temporal dependence correction: |                   | Cubic Splines     | Year, Year <sup>2</sup> ,<br>Year <sup>3</sup> |
| Under IMF Agreement, lagged     | 2.10 **<br>(0.10) | 1.82 **<br>(0.13) | 2.11 **<br>(0.10)                              |
| GDP per capita, lagged          | -0.14 *<br>(0.05) | -0.10 ^<br>(0.06) | -0.13 *<br>(0.06)                              |
| GDP Growth, lagged              | -0.02 ^<br>(0.01) | -0.02 ^<br>(0.01) | -0.02 ^<br>(0.01)                              |
| Current Account, lagged         | -0.02 *<br>(0.01) | -0.02 *<br>(0.01) | -0.02 **<br>(0.01)                             |
| Government Balance, lagged      | 0.00<br>(0.01)    | -0.01<br>(0.01)   | 0.00<br>(0.01)                                 |
| POLITY, lagged                  | 0.01<br>(0.01)    | 0.01<br>(0.01)    | 0.02 ^<br>(0.01)                               |
| Spline 1                        |                   | 0.12 *<br>(0.06)  |  |
| Spline 2                        |                   | 0.03 **<br>(0.01) |  |
| Spline 3                        |                   | -0.27 *<br>(0.13) |  |
| Year                            |                   |                   | -0.13<br>(0.14)                                |
| Year <sup>2</sup>               |                   |                   | 0.01<br>(0.02)                                 |
| Year <sup>3</sup>               |                   |                   | 0.00<br>(0.00)                                 |
| Constant                        | -0.13<br>(0.40)   | -0.09<br>(0.40)   | 0.19<br>(0.47)                                 |
| Pseudo R2                       | 0.44              | 0.46              | 0.45   |
| Obs                             | 993               | 993               | 993  |

\*p< 0.05. Standard Errors in parentheses.

Table D2: Alternative Second Stage IMF Hazard Models

|   | Model 1 | Model 2 |
|---|---------|---------|
| IMF Hazard Rate:                          | 1       | 2       |
| Government Balance, lagged                | -0.62 * | -0.62 * |
|   | (0.03)  | (0.03)  |
| Election                                  | -0.36   | -0.37   |
|   | (0.44)  | (0.44)  |
| Election x Monitors                       | -1.34   | -1.34   |
|   | (0.74)  | (0.75)  |
| Election x IMF Agreement                  | 0.21    | 0.19    |
|   | (0.75)  | (0.75)  |
| Election x Monitors x IMF Agreeemen       | 1.10    | 1.10    |
|   | (0.91)  | (0.91)  |
| Election x IMF Hazard Rate                | -0.20   | -0.18   |
|   | (0.50)  | (0.50)  |
| IMF Hazard Rate                           | 0.09    | 0.09    |
|   | (0.26)  | (0.27)  |
| GDP per capita (logged)                   | 0.11 *  | 0.11 *  |
|   | (0.02)  | (0.02)  |
| GDP Growth                                | -1.20   | -1.19   |
|   | (1.26)  | (1.26)  |
| Trade (logged)                            | -0.22   | -0.23   |
|   | (0.73)  | (0.73)  |
| Population between 15 and 64              | -0.14   | -0.14   |
|   | (0.13)  | (0.13)  |
| Population over 65                        | -0.45   | -0.45   |
|   | (0.36)  | (0.36)  |
| Under IMF Agreement                       | 0.05    | 0.05    |
|   | (0.36)  | (0.36)  |
| Constant                                  | 15.66   | 15.63   |
|   | (9.55)  | (9.58)  |
| Adjusted R2                               | 0.45    | 0.45    |
| Observations                              | 917     | 917     |
| *p< 0.05. Standard Errors in parentheses. |         |         |

Table D3: Point Predictions and Confidence Intervals for Models Reported in Table D2

|   | Point<br>Prediction | Lower 95%<br>Confidence Interval | Upper 95%<br>Confidence Interval |
|---|---------------------|----------------------------------|----------------------------------|
| Table D2 Model 1                              |                     |                                  |                                  |
| Unmonitored Election, Not Under IMF Agreement | -0.36               | -1.23                            | 0.51                             |
| Unmonitored Election, Under IMF Agreement     | -0.15               | -1.78                            | 1.47                             |
| Monitored Election, Not Under IMF Agreement   | -1.70               | -3.16                            | -0.24                            |
| Monitored Election, Under IMF Agreement       | -0.39               | -2.12                            | 1.34                             |
| Low IMF Hazard Rate                           | -0.39               | -1.19                            | 0.40                             |
| High IMF Hazard Rate                          | -0.74               | -2.35                            | 0.86                             |
| Table D2 Model 2                              |                     |                                  |                                  |
| Unmonitored Election, Not Under IMF Agreement | -0.37               | -1.23                            | 0.49                             |
| Unmonitored Election, Under IMF Agreement     | -0.19               | -1.81                            | 1.44                             |
| Monitored Election, Not Under IMF Agreement   | -1.71               | -3.17                            | -0.24                            |
| Monitored Election, Under IMF Agreement       | -0.43               | -2.16                            | 1.30                             |
| Low IMF Hazard Rate                           | -0.39               | -1.21                            | 0.44                             |
| High IMF Hazard Rate                          | -0.70               | -2.27                            | 0.87                             |