Online Appendix for Who Decides Who Gets In? Diplomats, Bureaucrats, and Visa Issuance

David Lindsey

June 24, 2024

1 Appendix

1.1 Sun-Abraham Correction for Table 3

Table A1 below replicates Table 3 using the correction for staggered treatment timing from Sun and Abraham (2021). The table shows average treatment effects for each model using the correction. Note that it is not possible to replicate Models 3 and 5 because of colinearity between the fixed effects and the components of the corrected estimator. The table maintains the numbering of the one in the main text.

Table A1: Regression of Logged Issuance by Country-Quarter Using Sun-Abraham Correction

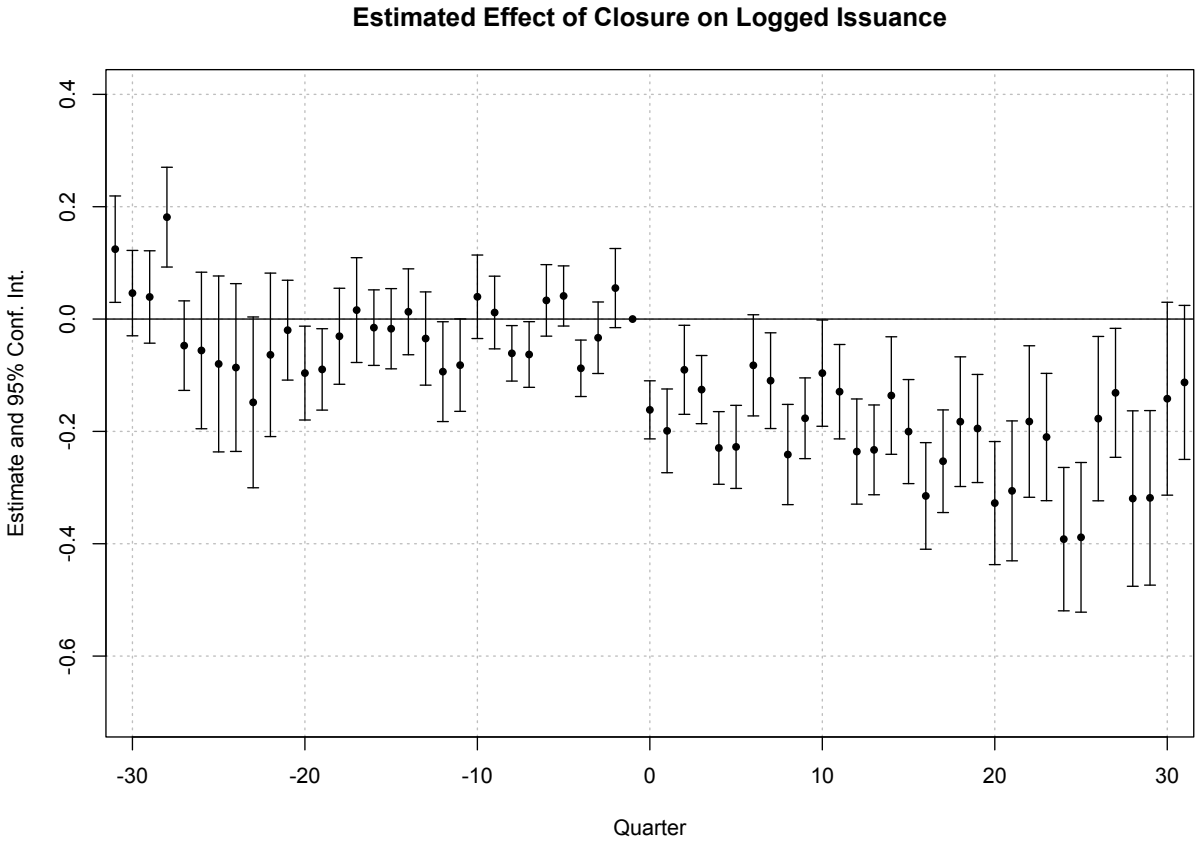
Sample:	All Visas		
	(1)	(2)	(4)
DMC Closed?	-0.195^{***}	-0.244^{***}	-0.152^{*}
(Yes = 1)	(0.034)	(0.058)	(0.058)
(Sun-Abraham ATT)			
Country Effects	Yes	Yes	Yes
Quarter Effects	No	Yes	–
Country-Year Effects	No	No	No
Region-Quarter Effects	No	No	Yes
Countries	153	153	153
Quarters	60	60	60
N	9,117	9,117	9,117

$^{*}p < 0.05$, $^{**}p < 0.01$, $^{***}p < 0.001$

Note: Standard errors in parentheses with two-way clustering for quarter and nationality.

1.2 Event Study Plot for Model 1 of Table A1

Figure 1: Plot of estimated effects of closure over time, using the specification in Model 1 of Table A1. Note that quarter 0 indicates the quarter in which a DMC closes; thus negative numbers indicate pre-closure quarters and positive numbers indicate post-closure quarters.



1.3 Replication of Table 3 Using Issuance Rate

Table A2 replicates Table 3 using the share of decisions resulting in issuance, rather than logged issuance as the dependent variable. That is, the dependent variable is now the number of visas issued divided by the number of decisions reached (visas either issued or refused). Given this, the coefficients are directly interpretable as percentage points. To account for the heteroskedasticity associated with the differing number of decisions per post, I weight by the square root of the total number of decisions.

Table A2: Regression of Issuance Rate by Country-Quarter

Sample:	All Visas				
	(1)	(2)	(3)	(4)	(5)
DMC Closed?	-0.031^{**}	-0.036^{***}	-0.014^{*}	-0.036^{***}	-0.014
(Yes = 1)	(0.010)	(0.009)	(0.007)	(0.008)	(0.008)
Country Effects	Yes	Yes	–	Yes	–
Quarter Effects	No	Yes	Yes	–	–
Country-Year Effects	No	No	Yes	No	Yes
Region-Quarter Effects	No	No	No	Yes	Yes
Countries	153	153	153	153	153
Quarters	60	60	60	60	60
N	8,724	8,724	8,724	8,724	8,724

$^{*}p < 0.05$, $^{**}p < 0.01$, $^{***}p < 0.001$

Note: Standard errors in parentheses with two-way clustering for quarter and nationality. All specifications are weighted by the square root of the number of decisions.

Across all specifications, I estimate a drop in the issuance rate. This is significant at the 95% level in all but the final specification, where the drop is significant only at the 90% level. Note, however, that the magnitudes here are substantially smaller than the estimated magnitudes in **??**. For example, given the base rate of approvals (just over 80%), a 3.1 percentage point drop as estimated in Model 1, corresponds to only a 4% drop in issuance (about 1/3 of the effect magnitude estimated in **??**). This is because the overall effect estimated in the main text represents two separate components – this drop in the issuance rate *and* a reduction in the total number of applications (see next section).

1.4 Application Volume and DMC Closures

Table A3 uses the same specifications as Table 3, but replaces the logged number of visas issued with the logged number of visa applications submitted as the dependent variable. That is, rather than looking at decisions, this looks at the number of applications *submitted* by visa seekers in each quarter. Thus, a negative coefficient on the closure variable would mean that individuals from a country are less likely to submit visa applications after a closure.

Table A3: Regression of Logged Applications by Country-Quarter

Sample:	All Visas				
	(1)	(2)	(3)	(4)	(5)
DMC Closed?	−0.113	−0.103	−0.151***	−0.143**	−0.113*
(Yes = 1)	(0.063)	(0.055)	(0.043)	(0.051)	(0.045)
Country Effects	Yes	Yes	–	Yes	–
Quarter Effects	No	Yes	Yes	–	–
Country-Year Effects	No	No	Yes	No	Yes
Region-Quarter Effects	No	No	No	Yes	Yes
Countries	153	153	153	153	153
Quarters	60	60	60	60	60
N	9,118	9,118	9,118	9,118	9,118

$^{*}p < 0.05$, $^{**}p < 0.01$, $^{***}p < 0.001$

Note: Standard errors in parentheses with two-way clustering for quarter and nationality.

Across all specifications, I find a drop in application volume after a closure. This is significant at the 95% level in Models 3 -5, and is significant at the 90% level in Models 1 and 2. That is, individuals from a given country are less likely to seek visas after a local DMC closes, and this is a substantial contributor to the overall drop in visa issuance after closure.

The available data do not allow me to test the reasons behind this drop, but strategic behavior by potential applicants and sponsors or advisors (e.g. hiring agencies, tour companies, universities, large employers, and/or immigration lawyers) likely explains the tendency. Merely applying for a visa is expensive and time consuming – applicants must gather documents, pay fees, and take the time to travel to a visa application center (often involving a multi-day journey for those living outside of major urban centers). Thus, there is a very strong incentive for applicants not to apply for a visa if they anticipate a rejection. Thus, a tightening of criteria will likely lead to a drop in applications, especially for those marginal applicants who are least likely to be approved. Correspondingly, potential sponsors will also shift their behavior; for example, by moving events attracting foreign visitors out of the UK.

Qualitative evidence supports this interpretation. While individual applicants might or might not be attuned to changes in visa processing, these are highly salient to firms and organizations that facilitate or rely on visits and migration. For example, in its inquiry into the impact of visa centralization on relations with Africa, the All-Party Parliamentary Group for Africa notes a number of instances where companies or organizations stopped inviting African visitors to UK-based events or moved these events to third country locations in response to difficulties past visitors had experienced in obtaining visas after the closure of local DMCs (All-Party Parliamentary Group, 2019, pp. 31-32).

1.5 Closure Effects Estimated by Panel Matching

In this section, I apply the panel matching method developed of Imai, Kim and Wang (2023) to estimate the effects of closing a DMC. Matching reduces model-dependence, and I present several different specification using different covariates to refine the matches. I begin with unrefined matches, then present specifications that refine on the basis of 4 lags of the dependent variable, another specification using refinement based on imports and exports to the UK, and a final specification that combines these. In each specification, I estimate the average treatment effect on the treated units ("ATT") and pool this across the 4 quarters subsequent to closure.

Table A4: Matching Estimate of ATT of Closure

Sample:	All Visas			
	(1)	(2)	(3)	(4)
DMC Closed?	-0.168^{***}	-0.148^{***}	-0.144^{**}	-0.143^{***}
(Yes = 1)	(0.048)	(0.046)	(0.048)	(0.047)
(Matching-Based ATT)				
Refined with 4 lags	No	Yes	No	Yes
Refined with Exports/Imports	No	No	Yes	Yes
Countries	153	153	153	153
Quarters	60	60	60	60

$^{*}p < 0.05$, $^{**}p < 0.01$, $^{***}p < 0.001$

Note: Standard errors in parentheses computed via block bootstrap with 10,000 iterations. All estimates pooled for 4 quarters after closure.

Note that across all specifications, I estimate a statistically significant reduction in logged issuance, and the magnitude of the point estimates is generally consistent with those in **??**.

1.6 Sun-Abraham Correction for Table 4

Table A5 replicates Table 4 using the Sun-Abraham correction for potentially heterogenous treatment effects. The results are largely consistent with those in the main text, though it is worth noting that the effects estimated for Visitors and Students are somewhat larger, while the effects for work and family visas are no longer statistically significant at the 95% level.

Table A5: Regression of Logged Issuance by Country-Quarter Split by Visa Type Using Sun-Abraham Correction

Sample:	Visitors		Students		Work and Family	
	(1)	(2)	(3)	(4)	(5)	(6)
DMC Closed?	-0.294^{***}	-0.198^{***}	-0.311^{***}	-0.176^{*}	-0.106	-0.090
(Yes = 1)	(0.076)	(0.057)	(0.066)	(0.067)	(0.056)	(0.051)
(Sun-Abraham ATT)						
Onshored?	-0.172	0.008	-0.069	-0.033	-0.141	-0.084
(Yes = 1)	(0.112)	(0.118)	(0.105)	(0.103)	(0.072)	(0.096)
Country Effects	Yes	Yes	Yes	Yes	Yes	Yes
Quarter Effects	Yes	–	Yes	–	Yes	–
Region-Quarter Effects	No	Yes	No	Yes	No	Yes
Countries	100	100	153	153	153	153
Quarters	60	60	60	60	60	60
N	5,938	5,938	9,118	9,118	9,118	9,118

$^{*}p < 0.05$, $^{**}p < 0.01$, $^{***}p < 0.001$

Note: Standard errors in parentheses with two-way clustering for quarter and nationality.

1.7 Alternative Specifications for Table 4

Table A6 extends Table 4 using alternative fixed effects specifications.

Table A6: Regression of Logged Issuance by Country-Quarter Split by Visa Type

Sample:	Visitors			Students			Work and Family		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
DMC Closed?	−0.109	−0.144**	−0.114*	−0.183	−0.086	−0.080	−0.326***	−0.028	−0.023
(Yes = 1)	(0.072)	(0.050)	(0.046)	(0.135)	(0.065)	(0.070)	(0.067)	(0.044)	(0.045)
Onshored?	0.051	−0.095*	0.006	0.020	0.017	−0.088	0.055	0.012	0.012
(Yes = 1)	(0.010)	(0.042)	(0.069)	(0.191)	(0.110)	(0.073)	(0.049)	(0.042)	(0.043)
Country Effects	Yes	–	–	Yes	–	–	Yes	–	–
Quarter Effects	No	Yes	–	No	Yes	–	No	Yes	–
Region-Quarter Effects	No	No	Yes	No	No	Yes	No	No	Yes
Country-Year Effects	No	Yes	Yes	No	Yes	Yes	No	Yes	Yes
Countries	100	100	100	153	153	153	153	153	153
Quarters	60	60	60	60	60	60	60	60	60
N	5,938	5,938	5,938	9,118	9,118	9,118	9,118	9,118	9,118

$^{*}p < 0.05$, $^{**}p < 0.01$, $^{***}p < 0.001$

Note: Standard errors in parentheses with two-way clustering for quarter and nationality.

1.8 Use of Extensions as a Control Variable

Table A7 replicates Table 3 while incorporating logged visa extension issuance as a control variable. Note that the extensions data is available only for a shorter timeframe (beginning in 2010), so the sample here is smaller.

In all but the first model (which lacks the full set of effects necessary for the design), I estimate a large and statistically significant drop in issuance following a DMC closure after controlling for extensions. Generally, the magnitude is comparable to the initial estimates without the control.

Table A7: Regression of Logged Extension Grants by Country-Quarter

Sample:	All Visas				
	(1)	(2)	(3)	(4)	(5)
DMC Closed?	-0.017	-0.133^{*}	-0.216^{***}	-0.148^{**}	-0.195^{***}
(Yes = 1)	(0.070)	(0.057)	(0.047)	(0.047)	(0.049)
Logged Extensions	0.082	0.092^{**}	0.050	0.107^{***}	0.072^{*}
	(0.046)	(0.032)	(0.041)	(0.029)	(0.033)
Country Effects	Yes	Yes	–	Yes	–
Quarter Effects	No	Yes	Yes	–	–
Country-Year Effects	No	No	Yes	No	Yes
Region-Quarter Effects	No	No	No	Yes	Yes
Countries	153	153	153	153	153
Quarters	40	40	40	40	40
N	6,108	6,108	6,108	6,108	6,108

$^{*}p < 0.05$, $^{**}p < 0.01$, $^{***}p < 0.001$

Note: Standard errors in parentheses with two-way clustering for quarter and nationality.

References

All-Party Parliamentary Group. 2019. *Visa Problems for African Visitors to the UK.* London: Royal African Society.
URL: *http://www.afox.ox.ac.uk/wp-content/uploads/2019/07/APPG-Report-on-Visa-problems-for-African-visitors-to-the-UK_v1.57.pdf*

Imai, Kosuke, In Song Kim and Erik H. Wang. 2023. "Matching Methods for Causal Inference with Time-Series Cross-Sectional Data." *American Journal of Political Science* 67(3):587–605.

Sun, Liyang and Sarah Abraham. 2021. "Estimating dynamic treatment effects in event

studies with heterogeneous treatment effects." *Journal of Econometrics* 225(2):175–199. Themed Issue: Treatment Effect 1.