ERF Working Papers Series

The Nationwide Camp Closure Policy in Iraq and the Welfare of Displaced Populations

Dahab Aglan

ECONOMIC RESEARCH FORUM
منتدى البحوث الاقتصادية

Working Paper No. 1807
December 2025

THE NATIONWIDE CAMP CLOSURE POLICY IN IRAQ AND THE WELFARE OF DISPLACED POPULATIONS

Dahab Aglan

Working Paper No. 1807

December 2025

This paper was presented in 2024 at the RHUL-Essen RTG Workshop, Royal Holloway PhD Annual Conference, the University of Brighton School of Business and Law seminar, AReena and EconNect Africa. I am grateful to my supervisors Michael Spagat and Arnaud Chevalier for their guidance, feedback and support. I thank Thomas Bauer for very helpful and detailed discussion and feedback. I thank the International Organization for Migration (IOM) for their support with the data. I am grateful to Dr. Michael Izady for kindly granting consent to use his data on ethnoreligious composition in Iraq. I am grateful for conversations with anonymous local human rights advocates in Iraq which complemented my analysis. I sincerely thank Jean-François Maystadt and Alice Mesnard for a very insightful and memorable discussion. I am very grateful to Caroline Krafft for comments and guidance. I thank Pierre Nguimkeu, Ismael Mourifie, Koomla Ulrich Hounyo, Tihitina Andarge, Cinzia Rienzo, Shahabeddin Gharaati, Hani Mansour, Adam Osman, Samuel Bazzi, Dalia Ghanem, participants from the University of Brighton School of Business and Law, the Centre for the Economics of the Household at Royal Holloway, University of London, AReena and EconNect Africa for their comments.

Send correspondence to:
Dahab Aglan
University of Oxford
dahabaglan@gmail.com

First published in 2025 by
The Economic Research Forum (ERF)
21 Al-Sad Al-Aaly Street
Dokki, Giza
Egypt
www.erf.org.eg

Abstract

After the end of their conflict with the Islamic State of Iraq and the Levant (ISIL), the Iraqi government initiated a policy to close all camps across Iraq housing individuals affected by conflict and facilitate their return to their areas of origin. At these areas of origin, millions of internally displaced people (IDPs) were also displaced by the ISIL conflict and already living outside of the camps, meaning both groups now co-exist outside of the camps. Using a novel dataset on movements of camp residents from closed camps, I leverage district-level variation in the population shares of inflows from the closed camps to estimate their effects on the welfare of IDP households already living outside the camps. Fearing ISIL-related stigma and targeting, inflows from the camps may not disclose their movements, while others faced barriers to returning to their areas of origin and moved to other districts. To overcome the resulting endogeneity in the inflows from camps, I use an instrumental variables strategy which leverages policy-driven inflows from closed camps while being orthogonal to local district conditions. Contrary to the debate on the camp closures policy, I do not find evidence that overall, inflows from camps affect the welfare of IDP households already living outside of camps. The difference in characteristics between inflows from the camps and IDP households receiving them outside of the camps appears to primarily mitigate the effects of the policy. However, compared to maleheaded IDP households outside of camps, female-headed IDP households are more vulnerable to the inflows, highlighting the necessity of tailored policy interventions to address their specific welfare needs, especially their access to healthcare.

Keywords: camps, internal displacement, IDPs, welfare, Islamic State, conflict, Iraq
JEL Classifications: D74, I30, J15, J18, R23

ملخص

بعد انتهاء صراعها مع تنظيم الدولة الإسلامية في العراق والشام، بدأت الحكومة العراقية سياسة لإغلاق جميع المخيمات في جميع أنحاء العراق التي تؤوي الأفراد المتضررين من النزاع وتسهيل عودتهم إلى مناطقهم الأصلية. وفي هذه المناطق الأصلية، نزح الملايين من النازحين داخليًا أيضًا بسبب الصراع مع تنظيم الدولة الإسلامية في العراق والشام ويعيشون بالفعل خارج المخيمات، مما يعني أن كلا المجموعتين تتعايشان الآن خارج المخيمات. وباستخدام مجموعة بيانات جديدة عن تحركات سكان المخيمات من المخيمات المغلقة، أستفيد من التباين على مستوى المنطقة في حصص السكان من التدفقات الداخلة من المخيمات المغلقة لتقدير آثارها على رفاهية الأسر النازحة داخلياً التي تعيش بالفعل خارج المخيمات. وخوفاً من الوصمة والاستهداف المرتبطين بتنظيم الدولة الإسلامية في العراق والشام، قد لا تكشف التدفقات من المخيمات عن تحركاتهم، في حين واجه آخرون عوائق تحول دون العودة إلى مناطقهم الأصلية وانتقلوا إلى مناطق أخرى. وللتغلب على التجانس الداخلي الناتج في التدفقات الداخلة من المخيمات، أستخدم استراتيجية المتغيرات الآلية التي تستفيد من التدفقات الداخلة القائمة على السياسات من المخيمات المغلقة مع كونها متعامدة مع ظروف المنطقة المحلية. وخلافاً للنقاش الدائر حول سياسة إغلاق المخيمات، لا أجد دليلاً على أن التدفقات الواردة من المخيمات تؤثر بشكل عام على رفاهية الأسر النازحة داخلياً التي تعيش بالفعل خارج المخيمات. ويبدو أن الاختلاف في الخصائص بين التدفقات الواردة من المخيمات والأسر النازحة داخلياً التي تستقبلها خارج المخيمات يخفف في المقام الأول من آثار هذه السياسة. ومع ذلك، بالمقارنة مع الأسر النازحة داخلياً التي يرأسها رجال خارج المخيمات، فإن الأسر النازحة داخلياً التي ترأسها نساء أكثر عرضة للتدفقات، مما يسلط الضوء على ضرورة التدخلات السياسية المصممة خصيصاً لتلبية احتياجاتها الخاصة في مجال الرعاية الاجتماعية، وخاصة قدرتها على الوصول إلى الرعاية الصحية.

A nation cannot turn into a tent… into a caravan[1]

– Dr. Karim Al-Nouri, Deputy Minister of the Iraqi Ministry of Migration and Displacement

Introduction

Although conflicts have significantly decreased in many countries, a large number of internally displaced people (IDPs) continue to remain displaced long after the conflicts have ended (IDMC 2023). This ongoing challenge also persists due to the limited enforcement of policies designed to assist IDP returns to their areas of origin in post-conflict settings. One notable exception is the nationwide camp closure policy enforced by the Government of Iraq. After the liberation of Iraqi territories previously controlled by the Islamic State of Iraq and the Levant[2] (ISIL), which launched its territorial campaign in January 2014, the Iraqi government initiated a policy in December 2017 to close camps all over Iraq housing IDPs displaced by the ISIL conflict. This nationwide policy was designed to facilitate the return of individuals displaced by conflict and living in the camps to their areas of origin and support their reintegration into their communities. The government decision to close camps in Iraq sparked a widespread debate across international media and humanitarian organizations[3], especially on the implications for those leaving the camps and the impacts on the communities that receive these populations. While the government and some media outlets described the policy as "reconstruction processes" and "recovery efforts" (Iraqi Ministry of Migration and Displacement and Iraqi Ministry of Planning 2020, 4; Associated Press 2023), humanitarian organizations warned of "further aggravated" effects for populations living outside the camps who are receiving inflows from the camps, as these inflows "increased the pressure on scarce services" in some locations (OCHA 2021b, 13; 2021a, 9).

Besides the local populations living in districts receiving inflows from the closed camps, a particularly large and vulnerable population in the same districts which *also* received these inflows includes millions of IDP households who were also displaced by the ISIL conflict and *already* living outside the camps before camp closures began (see Figure 1[4]). In particular, both inflows from the camps and IDP households outside of camps have fled the same ISIL conflict and many have experienced shared struggles, such as the destruction of assets in their areas of origin. In spite of these shared conflict-related experiences, descriptive evidence suggests that the two groups still differ in their educational profiles, which potentially limits their competition over labor market prospects and access to resources. The shared struggles yet different profiles thus raise the empirical question of whether inflows from the closed camps impacted the welfare of IDP households already living outside the camps. I focus my analysis on the impact of camp closures on IDP households displaced by ISIL between January 2014 and November 2017 who have already been living outside of the camps. This

[1] Translated from Arabic from an interview on MBC Iraq channel: https://www.youtube.com/watch?v=DfOlmhE3sw0

[2] Also known as ISIL, ISIS, or *Da'ish*.

[3] See Appendix Section A.1.2 for examples of excerpts from the media and organizations on the debate of the camp closures policy in Iraq.

[4] More details on the different populations in Figure 1 are discussed later with summary statistics for each group available in Appendix Table A.2.

period precedes the government's announced defeat of ISIL and the implementation of the nationwide camp closures policy.

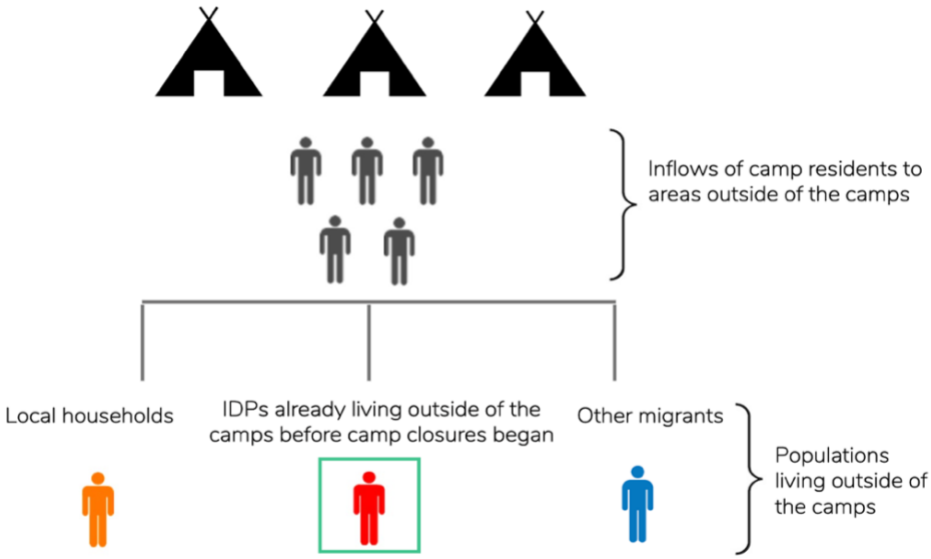

Figure 1. Camp closures in Iraq and populations living outside of the camps receiving inflows from the camps. In the green box: the IDP household population in districts receiving inflows from the camps and examined in this paper. Author's illustration.

Despite the debate on camp closures and the substantial number of IDP households already living outside camps across Iraq, there has not been any empirical evaluation to support or refute the arguments about the policy's effects on their welfare. In my paper, I provide an empirical assessment of this debate by leveraging a novel dataset on movements from the camps and examining a vast array of welfare outcomes of IDP households receiving inflows from the closed camps. I study the impact of inflows from the camps on the following welfare outcomes for IDP households receiving them outside the camps: household income, spending behavior across various categories (total expenses, food, healthcare, and rent), food security (dietary diversity and household hunger, respectively), and healthcare congestion experienced by these households.

To the best of my knowledge, my paper is the first to provide an empirical assessment of a recent controversial policy promoting the returns of IDP households in the Middle East and North Africa (MENA) region where 20 percent of all conflict IDPs in the world live (IDMC 2024). Despite their vast numbers in developing countries, and especially in Iraq, IDP households are underexplored in the literature as populations exposed to policy shocks. My first contribution is thus to examine the camp closures policy on the welfare of this large segment of the population. Second, my findings pinpoint the exact subgroup of IDP households outside of camps most vulnerable to the inflows and along which welfare dimension, namely widowed female-headed IDP households' access to healthcare.

Despite the debate on the adverse effects of the camp closures policy on IDP households outside of camps, I do not find evidence that overall, inflows from the camps adversely impact the welfare of IDP

households outside of camps, namely total spending, spending on food or rent, respectively, food security, or experience of healthcare congestion. In fact, I find some evidence of an increase in the household income of IDP households outside of camps and a reduction in their healthcare spending. The increase in household income could be partly explained by humanitarian assistance provided to IDP households outside of camps particularly in districts which received a higher share of inflows in the form of emergency cash or cash-for-work opportunities (IOM 2021b). Moreover, descriptive evidence suggests that inflows from the camps and IDP households outside of camps have different education profiles, which likely limits their competition for similar labor market opportunities and mitigates an adverse impact on the incomes of IDP households outside of camps. The reduction in healthcare spending could be explained by the provision of direct health support to IDP households outside of camps in districts with a high share of inflows. This support, which includes medical treatment and psychosocial services (IOM 2021b), likely reduces the out-of-pocket healthcare costs of IDP households outside of camps.

Additionally, the findings from my paper highlight the importance of tailored policies and humanitarian assistance to ensure equitable benefits for all IDP households. Despite humanitarian assistance to IDP households outside of camps, widowed female-headed IDP households appear to be more vulnerable to inflows from the camps than male-headed IDP households, especially regarding access to healthcare. It also appears that compared to male-headed IDP households outside of camps, female-headed IDP households outside of camps compensate for their experience of healthcare congestion through increased food spending as a form of preventive health strategy to reduce their reliance on healthcare services.

I provide four possible explanations for my overall findings. First, descriptive statistics and interviews I conducted with local human rights advocates in Iraq reveal that IDP households, on average, have higher levels of education compared to those arriving from the closed camps. As Iraqi government statistics indicate that employment in the informal sector with low pay and productivity are highest for populations with lower educational levels, potential competition between the two groups over similar resources is unlikely. Second, government assistance and humanitarian aid to the IDP households outside of camps may have mitigated the effects of the inflows from the camps. For example, through the Iraqi government's provision of nationwide social assistance programs, which provides essential food commodities to most Iraqi citizens through the Public Distribution System (PDS), or through humanitarian assistance given to IDP households outside of camps in the form of emergency cash or short-term cash-for-work opportunities (IOM 2021b). Third, the overall magnitude of the inflows from the camps to the Iraqi population is only 1.64 percent of the total Iraqi population (CCCM Cluster 2017), which may explain the limited effects of the policy. Fourth, since the household-level data in my study was collected five to seven months after the latest examined camp closures, this analysis reflects the short-term impact of the camp closures policy on the welfare of IDP households outside of camps, as the long-term effects may take more time to materialize.

To conduct my analysis, I first combine two datasets: an unexplored household-level dataset that covers IDP households living outside of camps in districts receiving the inflows from the closed camps, and a novel dataset that allows me to identify the number of inflows arriving to each district where IDP households outside of camps live. I exploit the district-level variation in the share of inflows from camps which allows me to compare the welfare of IDP households residing in districts with a higher share of inflows to those in districts with minimal or no inflows.

Although I include a battery of controls in line with the Iraqi context that can influence IDP households' outcomes, there remain two sources of potential bias in OLS estimates. First, not all individuals leaving the camps may be willing to disclose their districts of arrival for fear of being targeted, especially if they have ISIL-affiliated family members. Additionally, it is possible that operational constraints limited the scope of humanitarian actors to capture the universe of all movements from the camps to the district, especially as the policy was sudden in nature, necessitating radical operational shifts for humanitarian actors (OCHA 2021a; 2020; Global Shelter Cluster 2021). Hence, measurement error in the number of inflows can lead to attenuation bias. Second, although most individuals from the camps returned to their districts of origin, some individuals faced barriers in their returns and moved to other districts potentially due to unobserved characteristics of the district where they relocated to. For example, if these inflows from the camps relocate to districts with better local welfare provision and compete with vulnerable IDP households over resources, Ordinary Least Squares (OLS) estimates might be biased downward, in absolute terms, as districts with better welfare provision could be better equipped to cope with the inflows from the camps. Conversely, if these inflows from the camps move to districts where they have stronger social networks than IDP households already there, for example through unobserved shared tribal affiliations, these networks can help the inflows access more or higher-quality resources, leading to greater competition with IDP households for resources and potentially biasing the OLS estimates upwards, in absolute terms.

To address potential endogeneity in the inflows from the camps, I use an instrumental variables strategy in line with instruments applied in various studies on migration (Maystadt et al. 2020; Kadigo and Maystadt 2023; Chevalier et al. 2023; Del Carpio and Wagner 2015; Baez 2011; Ruiz and Vargas-Silva 2015). I leverage a third dataset detailing the pre-policy district of origin for all individuals from each closed camp and construct my instrument as follows. For a given district, I calculate the number of pre-policy camp residents who originate from that district within each camp. Then, each of these numbers is weighted by the inverse of the distance between each camp to the centroid of the given district. The instrument predicts that inflows to a given district from closed camps increase with the number of nearby camp residents who share the same origin as the given district, and the distance reflects the costs associated with relocating to a district.

The growing literature on the effects of forced displacement on local populations explores their welfare (Kadigo and Maystadt 2023; Maystadt and Duranton 2019; Maystadt and Verwimp 2014; d'Errico et al. 2022; Kreibaum 2016; Alix-Garcia et al. 2018); health (Baez 2011; Nsababera 2020); wages and employment

(Bauer, Flake, and Sinning 2013; Morales 2018; Fallah, Krafft, and Wahba 2019); food security (Alix-Garcia, Bartlett, and Saah 2012; Alix-Garcia and Saah 2010; George and Adelaja 2022; Alam et al. 2022); housing (Alhawarin, Assaad, and Elsayed 2021; Rozo and Sviatschi 2021; Depetris-Chauvin and Santos 2018) and other outcomes (see the review by Verme and Schuettler (2021)). In terms of examining welfare and the use of the instrumental variables strategy, my paper relates to the study by Kadigo and Maystadt (2023). In their study, they use a shift-share instrument based on the distance between refugee settlements and the closest border crossing points and find that Ugandan households close to refugee settlements have significant welfare benefits. The healthcare implications of my paper for female-headed IDP households, compared to male-headed households, relate to the study by Cavatorta, Janssens, and Mesnard (2023). Using a structural model and data on poor households in Nigeria, they highlight gender disparities in healthcare access in the context of price subsidy interventions. Importantly, they caution that healthcare subsidies can lead to congestion if they are not accompanied by an increase in the capacity of public facilities.

In the context of low and middle-income countries hosting the majority of IDPs, two areas in the literature are yet to be explored. First, the existence and evaluation of policies promoting returns of forcibly displaced populations. An exception, focusing on refugees, is the study by Blair and Wright (2021) which examines the United Nations High Commissioner for Refugees' (UNHCR) cash assistance program for Afghan repatriates from Pakistan. They find that sufficient cash transfers to repatriates diminishes insurgent violence by potentially increasing reservation wages and reducing the recruitment capabilities of insurgent groups in Afghanistan. Second, the effects of immigration on other pre-existing immigrant populations. A notable exception is the study by Card (1990), which finds that the Mariel Boatlift influx of low-skilled Cuban immigrants does not negatively impact the wages of similarly skilled non-Cuban immigrant workers in Miami. Another study on the United States by Fouka, Mazumder and Tabellini (2022) finds that immigrants living in areas that received more Black migrants experienced higher assimilation.

My paper is structured as follows. Section 2 provides the context of internal displacement, welfare systems and the camp closure policy in Iraq. Section 3 presents the data. Section 4 describes the econometric model. Section 5 presents the results. Section 6 conducts a series of robustness checks and Section 7 provides a discussion and concludes.

2 Context

2.1 Conflict and Internal Displacement in Iraq

Iraq suffers from a long history of internal displacement as a result of intercommunal tensions and nearly two decades of conflict including conflict with the Islamic State of Iraq and the Levant (also known as

Da'ish, the Arabic acronym for *al-Dawla al-Islamiyya fi al-'Iraq wal-Sham*[5]). Although the organization had been largely suppressed in Iraq, its campaign to capture territory intensified in July 2013, followed by its take-over of multiple cities across Iraq and Syria. The emergence of ISIL in Iraq and the subsequent war to defeat it led to one of the world's largest displacement crises (IOM 2021c). Following significant military operations in December 2017, the former Iraqi prime minister Haider al-Abadi announced the defeat of ISIL. The reconstruction costs of the ISIL conflict to Iraq are estimated by the World Bank and the Iraqi government to be USD 88 billion (Iraqi Ministry of Migration and Displacement and Iraqi Ministry of Planning 2020).

Just before the former prime minister's declaration of ISIL defeat in December 2017, Iraq was home to nearly 6 million IDPs living in camps and outside of camps, 4,112,040 of which lived across Iraq while the rest of the IDPs resided in the autonomous Kurdistan Region in the north of Iraq. For the same period, the number of camps in Iraq[6] was 51[7] and hosted 627,009 IDPs (CCCM Cluster 2017), or about 1.64 percent of the total Iraqi population.

2.2 The Camp Closures Policy

IDP camps in Iraq were managed by local governments where the camps were located, in coordination with the Iraqi Ministry of Migration and Displacement (MoMD) and international organizations (European Asylum Support Office 2020). IDMC (2020) estimates in 2019 the camp coordination and management costs for IDPs in Iraq to be approximately USD 20.9 million[8].

After ISIL was defeated by Iraqi forces in December 2017, the Iraqi government began promoting the return of IDPs to their liberated areas from ISIL and initiated a campaign to close and consolidate IDP camps. Camp closures also aimed to prevent violations experienced by IDPs living in camps, such as women and children, and to stop the exploitation of IDPs in camps for electoral purposes (Jabro 2021)[9]. The camp closures campaign intensified in the summer of 2019, paused in 2020 due to the Covid-19 pandemic and the appointment of a new prime minister, and then resumed in October 2020 (CIVIC 2021). According to OCHA (2020) and Global Shelter Cluster (2021), the camp closures process was both sudden and rapid.

To support IDPs returning to their areas of origin from the camps, in 2019 the government announced that it will offer each returning IDP family of two or more members a one-time grant of (IQD) 1.5 million

[5] Previously, the organization was called the Islamic State of Iraq (ISI), after which ISI declared its merge with the Syrian al-Qa'ida affiliate, *Jabhat al-Nusra* (the Nusra Front). However, the latter continued to exist as their leader would reject the command of ISI (Stansfield 2016).

[6] Not including the Kurdistan Region of Iraq as camps there were unaffected by the policy at the time.

[7] Note that there are camps which form part of a larger camp location. For consistency, I treat camps constituting a larger camp as one entity, namely *Amriyat al-Fallujah* (AAF), *Al-Habbaniyah* Tourist City (HTC) and *Bzeibez*.

[8] IDMC (2020) notes that cost estimates in its report do not correspond to the actual amount spent by the government or humanitarian organizations but are estimates of the total amount that would have been required to meet the needs of IDPs.

[9] Translated from an Arabic interview with the current Minister of Migration and Displacement: https://www.youtube.com/watch?v=Va-FJTsM1SA

Iraqi Dinars (around USD 1,000[10]) and IQD 0.75 million (around USD 570) for single-member families on a first-come, first-served basis upon registering with the MoMD. In addition to the return grant, returning IDP families also receive food rations and non-food items such as clothing (IOM Returns Working Group 2021).

Humanitarian aid was also directed towards IDP households already living outside of camps. In particular, the UN Humanitarian Coordinator in Iraq called upon organizations to scale up their operations and shift their focus from camp settings to assist both the inflows and the communities absorbing them (Stoddard et al. 2021). Indeed, a report by IOM (2021b) outlines the IOM's response plan to the camp closures policy by targeting the following populations: IDP households living outside of camps, host communities, and IDPs relocating from the camp. With funding of about USD 98.6 million[11], the IOM's response plan included providing cash-for-work opportunities, emergency cash, and vocational training to the targeted populations (IOM 2021b). The IOM (2021b) response plan also included funding of USD 1.6 million for direct health support to IDP households outside of camps in the form of providing treatment of illnesses or mental health and psychosocial support. Additionally, a funding of about USD 5.5 million humanitarian aid included upgrades to the shelter conditions for IDP households outside of camps (IOM 2021b).

Figure 2 depicts the number of open camps in Iraq from October 2018 till May 2023[12]. Meanwhile, in the autonomous Kurdistan Region of Iraq[13], the camp closures policy did not apply, and the camps remained operational (UNHCR 2023). In September 2020, just before the policy resumed, there were 18 camps in Iraq hosting 61,440 camp residents representing about 0.16 percent of all the Iraqi population (CCCM Cluster 2020a). By January 2021, 12 of these camps closed, 5 were later turned into informal sites[14] (where IDPs can still live but authorities would not be responsible for their administration), and the last remaining camp closed in 2023. Due to data limitations[15], I focus my analysis on the inflows from 12 camps and an additional 2 informal sites that closed in Iraq after the policy resumed from October 2020 to January 2021. Taken together, these 14 IDP sites hosted 45,599 IDPs (IOM 2020d). Figure 3 depicts the geographical location of the 14 IDP sites that closed in Iraq, excluding those in the Kurdistan Region of Iraq where the camp closures were not implemented at the time.

[10] Iraqi Dinars (IQD) are converted to USD using historical exchange rates obtained from Xe.com.

[11] This is the amount of confirmed funding.

[12] Data on the number of camps from February 2018 to September 2018 is unavailable for each month, so the figure begins from October 2018 as it the earliest date of consistent data availability.

[13] The Kurdistan Region of Iraq is an autonomous region in Iraq, consisting of 3 governorates out of 18 governorates in Iraq: Erbil, Sulaymaniyah and Duhok. A governorate, *muhafaza*, is first administrative division of Iraq, followed by the district, *qad'haa*.

[14] CCCM Cluster (2020b) defines informal sites as follows: areas not built to accommodate IDPs or returnees but serve that purpose, authorities are not responsible for their management or administration, assistance and services may be absent or irregularly provided and there is a minimum of 5 households in the site. I do not include in my analysis camps that did not close and were classified into informal sites as individuals may continue to live there.

[15] See Appendix Section A.9 for details.

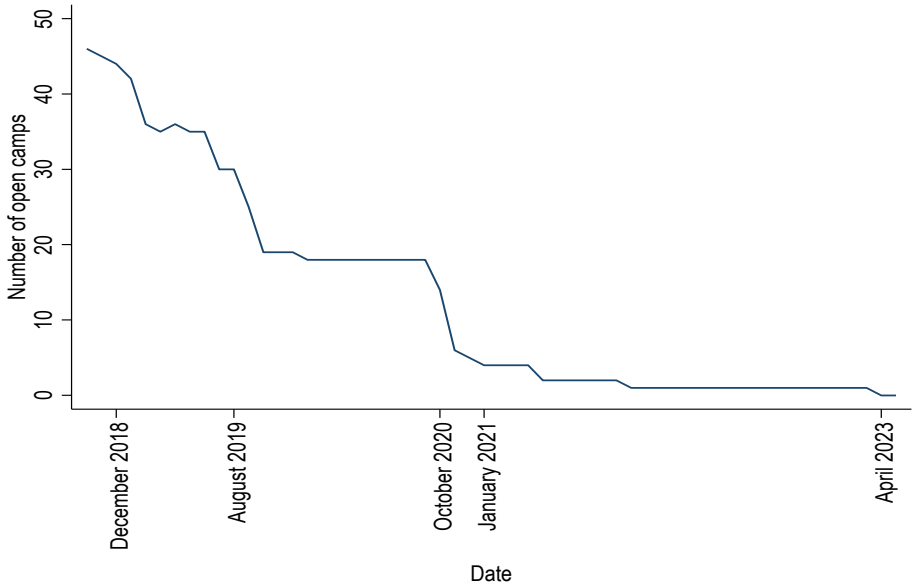

Figure 1. Number of open camps in Iraq between October 2018 and May 2023. Author's illustration. Source: CCCM.

Figure 2. Location of IDP sites that closed between October 2020 and January 2021 across districts in Iraq. The red triangles represent IDP sites. Author's illustration.

To mitigate concerns of selection bias of inflows from early camp and late camp closures to the districts, I compile data from pre-policy reports on camp residents who lived in camps that closed early before the camp closures policy pause and residents in camps that closed later after the policy resumed. I find no significant differences in their demographic, labor market, or camp infrastructure characteristics (see Appendix Table A.1). Reassuringly, this check limits the concern that observed effects of inflows from late closures on IDP households outside of camps are driven by pre-existing differences with early closures, ensuring the representativeness of the sample over time.

While the camp closures resulted in an overwhelming majority of individuals returning to their areas of origin, after the policy resumed, about a third of the inflows from the camps did not return to their areas and instead remained displaced, for example due to intracommunal tensions. To support these individuals, the Iraqi government outlined the following support strategy. First, informing those individuals about alternative locations for relocation. Second, ensuring their access to adequate shelter and assistance with essential needs such as food and third, tracking them to monitor their needs if they require additional support (Iraqi Ministry of Migration and Displacement and Iraqi Ministry of Planning 2020).

2.3 Welfare in Iraq

In this sub-section, I describe the institutional frameworks governing the labor market, food system, healthcare system, and housing system for both IDP households outside of camps and IDPs who left the camps.

2.3.1 Labor market

Just over half of the employment in Iraq is in the informal sector, which includes unregistered enterprises with employees working on a casual basis (CSO, KRSO, and ILO 2021). The informal sector is also characterized by low pay and low productivity (MoP Iraq, MoP Kurdistan Iraq, and CSO 2019). In particular, the probability of working in the informal sector in Iraq is highest for individuals with an elementary education or below, while for those with higher education, the probability appears to be null (CSO, KRSO, and ILO 2021).

Given the probabilities of informal employment provided by the statistics offices of Iraq, the Kurdistan Region of Iraq and the International Labour Organization, a comparison of the educational profiles of IDP households living outside of camps and camp IDP households suggests that the two groups are unlikely to compete for similar jobs in the labor market. Using household-level data on both groups, I find that compared to IDP households living outside of camps, an overwhelming majority of camp residents (80%) appear to have no education or only elementary education[16]. In contrast, IDP households living outside of the camps are more likely to have higher levels of education beyond elementary school, namely secondary education, professional education or higher education (see Table 1)[17].

Table 1. Education profile of camp resident IDP households and IDP households living outside of camps

	Camp resident households	IDP households outside of the camps	Difference	t
No education	0.38	0.25	0.14	$(8.31)^{***}$
Highest education: Elementary education	0.42	0.27	0.15	$(9.09)^{***}$

[16] Elementary school in Iraq is 6 years long. Students are registered in the first grade at the age of 6 (Al-Shaikhly and Cui 2017).

[17] Indeed, I conduct interviews with local human rights organizations in Iraq which confirm this descriptive evidence.

Highest education: Secondary education	0.15	0.29	-0.15	(-11.29)***
Highest education: Professional education	0.02	0.08	-0.06	(-9.41)***
Highest education: University	0.03	0.11	-0.08	(-10.66)***
Number of households	1113	3567		

Note: This table shows the education profiles of camp resident households and IDP households outside of camps who have been living in their locations since the ISIL conflict till a month before the camp closure policy implementation (till November 2017). Source: MCNA 2019, a nationwide statistically representative household survey.

2.3.2 Food security

The majority of Iraqi citizens rely on food assistance from the Iraqi government through the Public Distribution System (PDS) (UNHCR 2016). The PDS is one of the world's largest subsidy programs providing essential food commodities to most Iraqi citizens, including camp residents who left the camps and IDP households outside of the camps. Food provided through the PDS has been mostly sourced through imports (Krishnan, Olivieri, and Ramadan 2019). The mass distribution of food items through the PDS ensures that immediate international price increases for certain commodities do not directly impact the local Iraqi market (WFP 2022). Given this context, it is unlikely that inflows from the camps substantially affect demand and increase prices for essential food commodities outside of the camps.

In addition to the PDS, humanitarian organizations such as the World Food Programme (WFP) have also supported IDPs in the form of food parcels or voucher transfers to allow affected households greater control and choice. A report by the Food and Agriculture Organization of the United Nations (FAO) indicates that 16 percent of the food sourced by WFP is procured locally at an adequate quality and competitive prices (FAO 2014).

2.3.3 Healthcare system

In Iraq, the government finances most of the health sector, while a small yet expanding private sector is funded through patient out-of-pocket payments (World Bank 2017). There is no formal health insurance system in Iraq, and healthcare is provided for free through a network of hospitals and primary healthcare centers (PHCC) organized by the Ministry of Health (Mohsin, Mula-Hussain, and Gilson 2024). PHCCs offer services covering preventive and basic curative treatments, such as childhood immunization (Al Janabi 2023). If a case is severe, the patient is referred to the district's hospital (Al Janabi 2023). However, it is not uncommon for IDP households to seek private healthcare as an alternative to public healthcare. For example, a study by IOM and Georgetown University finds that about 20 percent of IDP households outside of camps displaced between 2014 and 2015 use private hospitals to access healthcare between the end of 2019 and the beginning of 2020 (Al-Shami and Davis 2020).

Before camp closures, each IDP camp had one PHCC on-site run by the directorate of health of the governorate where the camp is located, or by local and international NGOs (Khan et al. 2021). While PHCCs provide basic healthcare services, patients who required more care were referred to the nearest health facility outside of the camp (Khan et al. 2021). However, some ISIL-affiliated households are required to obtain permission from security forces to access hospitals for care (IOM 2020b; European Asylum Support Office 2020).

After camp residents left the camps, they began relying on health facilities outside of the camps, which triggered concerns of strain and competition for scarce healthcare services used by IDP households already living outside of camps

2.3.4 Housing and shelter

The vast majority of IDP households residing outside the camps lived in rented accommodation (IOM 2018). After camp closures, inflows from the camp closures arriving to areas outside the camps sought various forms of housing. A survey conducted by CCCM (2021) on camp residents who left the camps since the camp closures resumed shows that about 40 percent of them lived in rented accommodation, while the remaining 60 percent were almost equally distributed among living in their own homes, staying with family or friends, or resorting to critical shelters like abandoned or unfinished buildings. This suggests that the majority of inflows arriving from the camps do not seem to be competing with the IDP households already living outside of camps over rented accommodation. Given the distinct educational profiles of both groups, and the expected limited labor market competition between them, it is difficult to argue that the two groups would compete for similar housing resources. It is thus unlikely that inflows from the camps would increase demand and rental prices for the types of housing inhabited by IDP households outside of camps.

3 Data

I use three main datasets to conduct my analysis. First, to determine the inflows arriving to the districts where IDP households live outside of camps, I use a camp movements dataset that tracks movements of individuals leaving the camps and records their districts of arrival. Second, I use a household-level dataset which includes data on IDP households living outside of camps across districts in Iraq. Third, I use data on the origins of camp residents before the policy resumption to address two potential sources of endogeneity in the inflows from camps: measurement error in the recorded inflows from the camps and omitted variable bias as some individuals leaving the camps faced barriers to their returns and moved to other districts potentially due to unobserved characteristics of those districts. In addition to these three main datasets, I compile data from multiple reports and datasets to construct geographical and pre-policy controls[18].

[18] I consider the year 2018 as the pre-policy year as the year prior to that, 2017, was a year of conflict and liberation efforts against ISIL, so it does not serve as a relatively recent indicator for my analysis given the reconstruction occurring after the conflict and corresponding changes in the districts. Also, a few camps were closed by December 2018 as the camp closures intensified the following year, which mitigates possible large shifts in the population associated with camp closures till 2018.

3.1 Camp movements data

The first dataset used in this paper is the camp movements dataset. These datasets are Emergency Tracking datasets provided by DTM (IOM Displacement Tracking Matrix) which track households that left camps in Iraq between October 2020 and January 2021 and identify the camps they moved from and the districts they arrived to. The camp movements dataset used in this study records 26,963 inflows of individuals from the 14 closed IDP sites to areas outside of camps across Iraqi districts. The majority of these movements, approximately 70 percent, are individuals returning from the camps to their districts of origin, while the remaining 30 percent are individuals who remained displaced elsewhere outside of the camps.

The map of Iraq in Figure 4 shows that the share of inflows from the closed camps relative to the pre-policy district populations appears to be minimal, suggesting that the argued adverse effects of the policy on IDP households outside of camps are likely to be mitigated. Some of the largest shares of the inflows from closed camps arrived in districts bordering the district of Mosul, where two IDP camps (*Hammam Al-Aleel 2* and *Al-Jad'ah 1*) were located. Indeed, before the camp closures, almost half of these two camps' populations originated from these bordering districts. This suggests that districts are more likely to receive inflows from nearby camps, especially when a significant share of the residents in these camps originate from those districts. Similarly, on the eastern side of the map in Figure 4, there is a relatively large share of inflows from the camps arriving to the district of Khanaqin and its neighbouring district of Al-Muqdadiya. Khanaqin itself hosted two IDP camps (*Al-Wand 1* and *Al-Wand* 2), with 100 percent of both camp populations' originating from these two districts.

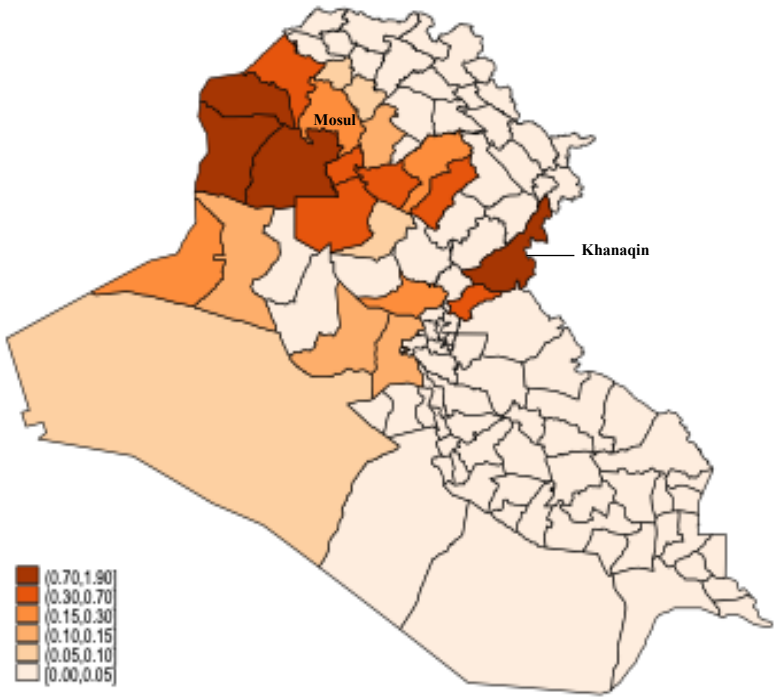

Figure 3. Share of inflows from the camps (as a percent of the population in 2018). Author's illustration using data from the IOM

3.2 Data on IDP households living outside of camps

I use household-level data from the Multi Cluster Needs Assessment (MCNA) survey, a nationwide household-level survey conducted from June to August 2021 after the camp closures. REACH, a leading humanitarian initiative offering crisis-related information, conducted this survey. According to REACH, this survey serves as a quantitative evidence base for humanitarian decision makers to inform planning in Iraq. The survey is sampled through a two-stage stratified cluster sampling approach. That is, based on the IOM population lists of households displaced by conflict, a sampling frame was developed for all districts with a minimum of 200 households displaced by conflict, and then a sample of these households is drawn from each district[19].

The dataset covers 12,090 households in Iraq, including IDP households; other migrant households which include returnee households who were previously displaced by ISIL and whose dates of return to their districts is anonymous due to confidentiality and privacy concerns; IDP households in camps mostly in the autonomous Kurdistan region; and a few local households from the host community, across 62 of 120 districts in Iraq. These 62 districts are distributed across 14 governorates out of 18 in Iraq[20]. I restrict the analysis to IDP households living outside of camps who arrived at their locations from the start of the ISIL conflict (January 2014) until the month just before the announced defeat of ISIL (November 2017). This ensures that those IDP households do not include individuals who arrived from the closed camps due to the policy, as the data does not allow me to distinguish whether IDP households arrived from camps. Appendix Figure A.1 illustrates the process through which 2,906 IDP households living outside of camps across 54 districts within 14 governorates in Iraq are selected in my paper. In addition, Appendix Table A.2 provides summary statistics which describe the characteristics of five population groups in the MCNA 2021 survey: (1) the working sample of my paper, which is IDP households outside of camps who arrived to their districts before the camp closures policy; (2) IDP households who arrived after the camp closures policy; (3) IDP households living in camps; (4) returnee households with anonymous return dates; and (5) the small sample of host community households. Appendix Table A.2 shows that, on average, IDP households living outside of camps have lower incomes compared to host community households. However, they earn higher incomes than IDP households that still resided in the few camps that remained open or in the camps that remained operational in districts in the Kurdistan Region of Iraq at the time.

Table 2 presents summary statistics for the outcome variables and household-level controls examined for IDP households living outside of camps. On average, these households earn about 60% of the average monthly income in Iraq, which is approximately USD 460 (CSO, KRSO, and ILO 2021). This income gap may be partly explained by the fact that around 70% of these households have experienced forms of violence

[19] According to REACH, locations in the districts were selected with probability proportional to size sampling. In each location, a set of geo-points was randomly generated and given to enumerators who would then interview an eligible household nearest to a given geo-point.

[20] 4 governorates in southernmost Iraq are not covered in the survey, namely Al-Basra, Maysan, Muthanna, and Thi-Qar.

which typically result in the loss of their usual sources of livelihood at their areas of origin, such as loss of land or property, or perceived presence of explosive ordnance affecting their assets in their areas of origin. Notably, an overwhelming majority of the IDP households (96%) outside of camps receive food through the government's Public Distribution System, which suggests that the effects of inflows on their food security is likely mitigated through the provision of already-existing food security mechanisms provided by the Iraqi government.

Table 1. Summary statistics: household-level controls and outcome variables

	Mean	Standard deviation
Outcome variables:		
FCS (Dietary diversity), 0-112 score	62.026	21.823
HHS (Household hunger), 0-6 scale	5.482	1.102
Monthly income (IQD)	370493.118 [USD 253.877[21]]	239697.820 [USD 164.251]
Monthly total expenses (IQD)	459045.096 [USD 314.557]	304468.226 [USD 208.634]
Monthly food expenses (IQD)	242862.529 [USD 166.419]	155523.023 [USD 106.571]
Monthly rent expenses (IQD)	101086.545 [USD 69.269]	101557.588 [USD 69.591]
Monthly healthcare expenses (IQD)	110933.930 [USD 76.017]	182884.256 [USD 125.320]
Healthcare congestion index [0,1]	0.241	0.084
Household characteristics:		
Female-headed household	0.106	0.308
Household head age: 18-24	0.020	0.139
Household head age: 25-49	0.708	0.455
Household head age: 50-59	0.167	0.373
Household head age: 60+	0.106	0.307
Location is household's first place of displacement	0.546	0.498
Household attempted return but remained displaced	0.107	0.309
Arrived at location in 2014	0.463	0.499
Arrived at location in 2015	0.174	0.380
Arrived at location in 2016	0.184	0.387
Arrived at location in 2017	0.179	0.383
First displacement in 2014	0.826	0.379
First displacement in 2015	0.097	0.296
First displacement in 2016 or 2017	0.077	0.267
Receives PDS	0.958	0.201

[21] Iraqi Dinars (IQD) are converted to USD using historical exchange rates obtained from Xe.com.

Has more than 6 household members	0.347	0.476
Faces movement restrictions	0.145	0.352
At least 1 adult has missing civil documentation	0.971	0.167
Affected by any violence	0.691	0.462
Number of households	2906	

Note: This table shows the average share and standard deviations for the outcome variables and household-level characteristics for the sample of IDP households living outside of camps who arrived at their locations before the camp closure policy. Author's calculations using MCNA 2021 survey.

3.3 Data to construct the instrument

To overcome endogeneity concerns, I leverage data from the IOM on the origins of camp populations just before the policy was resumed in October 2020 to construct my instrument. The data was collected between July and August 2020 and allows me to identify the exact district of origin of the camp population for each of the 14 IDP sites that closed. Using this data, I can determine the number of IDPs in each camp who originate from the same district as the district of residence for IDP households surveyed outside of camps. This data thus enables me to compute the predicted share of inflows from the camps to each district (see Section 4 for details on the empirical strategy).

3.4 Pre-policy controls and geographic data

I include various pre-policy and geographic variables that, in the Iraqi context, can affect the welfare of IDP households outside of camps, and may also influence movements from the camps. The pre-policy and geographic controls are as follows:

- Violence per 1,000 inhabitants in 2018, which I define as the number of violent deaths in a district divided by the district's pre-policy 2018 population (multiplied by 1000). Violence data is obtained from the Uppsala Georeferenced Event Dataset (UCDP-GED) (Davies et al. 2024; Sundberg and Melander 2013). Safer communities can facilitate the livelihoods of IDP households and can thus contribute to better welfare.
- Whether a district has an Arab Muslim Sunni majority in 2015, using the Atlas of the Islamic World and Vicinity (Dr. M. Izady, 2006-present). I define districts as having an Arab Sunni majority if Arab Sunnis constitute more than half of the district's population. Since the majority of IDPs are generally of Sunni background (Khaleel 2019), we can expect many of the inflows from the camps to return primarily to majority Sunni areas where they share common religious rituals and networks which can help improve their welfare.
- Light intensity in 2018 as a proxy for local economic activity in each district using VIIRS data (Elvidge et al. 2021) and extracted using GeoQuery (Goodman et al. 2019). Increased economic activity can help offer livelihood prospects and facilitate access to markets.

- Population of a district in 2018 using data archives from the Central Statistical Organization of Iraq. Populated districts may be more likely to have improved access to services, which in turn can improve IDP households' welfare.
- Remoteness of a district. I control for the nearest distance from each district centroid to the nearest river in Iraq (Tigris or Euphrates rivers). Historically, many current cities and towns in Iraq were built on the Tigris and Euphrates rivers as their populations used irrigation for livelihoods (Al-Jamil 2008). Consequently, districts that are farther away from either river are considered relatively more remote.

Table 2. Summary statistics: inflows, pre-policy and geographic district-level controls

District-level control	Mean	Standard deviation
Share of inflows from camps (%)	0.141	0.382
Fatalities (per 1,000 inhabitants)	0.202	1.002
Districts with Arab Muslim Sunni majority (%)	22.222	41.964
Nighttime lights (normalized by population)	0.245	0.473
Population	447475.222	467296.655
Log (nearest distance to closest river, Tigris or Euphrates rivers)	2.601	1.556
Number of districts	54	

Note: This table shows the average share and standard deviations of inflows arriving from the camps, pre-policy and geographic district-level characteristics.

Table 3 presents the district-level summary statistics for the share of inflows from the camps, pre-policy district-level controls and geographic controls. The average share of the inflows from closed camps arriving outside of camps across the 54 districts is only about 0.14 percent. This small figure, together with the different education profiles between both groups, inflows of humanitarian aid to both groups and the presence of government welfare mechanisms such as the Public Distribution System (PDS), suggests that in contrast to the debate on camp closures, the overall impact of inflows from the closed camps on the welfare of IDP households is likely to be minimal.

4 Empirical Strategy

To examine the effect of the camp closures policy on the welfare of IDP households already living outside of camps, I exploit the district-level variation in their exposure to inflows from camps that closed between October 2020 and January 2021. This allows me to compare the welfare of IDP households living outside of camps in districts with higher shares of inflows from camps to those in districts with lower shares of inflows. The welfare outcomes examined are as follows and are for the respective month prior to an interview: household income, total spending, spending on food, healthcare, and rent, respectively, two measures capturing food security (dietary diversity and household hunger, respectively) and experience of healthcare congestion.

Specifically, I estimate the following equation separately for each of the outcomes:

$$Y_{hd} = \alpha + \beta \frac{Inflows_d}{Population_{d,2018}} + \gamma X_{hd} + \rho Z_d + u_{hd} \quad (1)$$

where Y_{hd} represents the logarithm of household income, household spending (total spending, food spending, rent spending and health spending, respectively); standardized measures of food security (the Food Consumption Score and the Household Hunger Scale, respectively), an index constructed for each household's experience of healthcare congestion using principal components analysis for an IDP household outside of camp h in district d. $\frac{Inflows_d}{Population_{d,2018}}$ is the main independent variable and represents the share of inflows arriving from the closed camps to district d. The variable is then multiplied by 100 to facilitate interpretation. X_{hd} represents household-level variables controlling for household-head gender; household-head age indicators (18-24, 25-49, 50-50, 60+ years old); whether a household has more than 6 household members; whether a household receives food assistance from the PDS; indicators for year of first-ever displacement (ISIL conflict years: 2014, 2015, 2016 or 2017); indicators for year of arrival to the current location (during ISIL conflict years: 2014, 2015, 2016 and 2017); whether the location of residence is the IDP household's first place of displacement; whether the household attempted to return but remained in displacement; whether a household has been exposed to at least one of the following conflict measures: conflict-related injury; housing, land or property was damaged during the conflict or perceived presence of explosive ordnance. I also control for whether a household faces movement restrictions due to Covid-19 or other conflict-related reasons[22] and whether any member above the age of eighteen in the household has missing civil documentation[23].

Considering the description in Section 3.4, I include Z_d, a vector of pre-policy district-level and geographic variables. These variables capture the district-level fatalities per 1,000 inhabitants; a binary variable of whether the district has an Arab Sunni majority ethnoreligious composition; economic activity (proxied by the sum of nighttime lights normalized by the population of a district); population; and a measure of district remoteness which is captured by nearest distance from a given district to the nearest of the Tigris or Euphrates rivers in Iraq.

While I include a battery of district-level and geographic controls in line with the Iraqi context that can influence IDP households' welfare, two sources of endogeneity are possible. First, not all individuals leaving the camps may be willing to reveal their movements and districts of arrival for fear of being targeted, especially if they have ISIL-affiliated family members. It is also possible that operational constraints limited the ability of humanitarian actors to capture the universe of movements from the camps, especially as the policy was sudden in nature. Hence, measurement error in the number of inflows can lead to attenuation bias.

[22] Several IDP women and children reported facing movement restrictions if their family members are ISIL-affiliated (Jimenez-Damary 2020).

[23] Missing civil documentation due to conflict or for other reasons may hinder individuals from accessing livelihood opportunities or basic services.

Second, although most individuals leaving the camps returned to their districts of origin, some individuals faced barriers to their returns and moved to other districts potentially due to unobserved characteristics of the district where they relocated to. For example, if some inflows from the camps relocate to districts with better local welfare provision and compete for resources with IDP households outside of camps, the OLS estimates might be biased downward, in absolute terms, as districts with better welfare provision may be more equipped to cope with inflows from the camps. Conversely, if these inflows relocate to districts where they have strong social networks, such as unobserved shared tribal affiliations, these networks can facilitate their access to more or higher-quality resources. This in turn can increase competition for resources with IDP households who may lack such networks and bias the OLS estimates upward, in absolute terms.

To address this potential endogeneity, I use an instrumental variables strategy in line with instruments used in various studies on migration (Maystadt et al. 2020; Kadigo and Maystadt 2023; Chevalier et al. 2023; Del Carpio and Wagner 2015; Baez 2011; Ruiz and Vargas-Silva 2015). The instrument is based on the observation that inflows to a given district from camps increase with the number of nearby camp residents who share the same origin as the given district, and the distance reflects the costs associated with moving to a district from the closed camp. I define the instrumental variable as the number of camp residents living within each camp *c* before the policy resumption who originate from district *d*, each weighted by the inverse of the distance from the centroid of district *d* to camp *c*, respectively. The sum is then weighted by the pre-policy population of district *d*. Formally, the instrumental variable which predicts the share of inflows arriving from closed camps to a given district is constructed as follows:

$$Predicted\ Inflow\ Share_d = \left(\sum_c \frac{Camp\ residents_{d,c}}{Distance_{d,c}}\right) * \frac{1}{Pop_{d,2018}} * 100 \quad (2)$$

Given the nature of the camp closures policy, the instrument predicts the share of individuals who return to a district and the distance provides the costs of moving to it.

The instrument is based on camp closures being orthogonal to the local conditions of the districts where individuals from the closed camps relocate to. That is, the decision to close camps and the outflows resulting from the camp closures should not be influenced by specific characteristics of the districts receiving individuals from the camps. Based on several UN and humanitarian reports, there are various reasons to believe why this is the case. First, reports by the United Nations indicate that the camp closures were sudden and rushed in nature, necessitating radical operational shifts for humanitarian actors (OCHA 2021a; 2020; Global Shelter Cluster 2021). Second, the policy was widely implemented at a national level during the period October 2020 till January 2021 and largely independent of the local conditions at the districts in Iraq. This is evidenced by some individuals from the camps not able to return back to their areas of origin due to the unwelcoming attitudes of the tribes and communities at their districts of origin. Therefore, the rapid nature of the policy and the diverse experiences of individuals arriving from the camps with the communities at districts of arrival serve to reinforce the policy's orthogonality in relation to the conditions at the districts of arrival.

Figure 5 illustrates the correlation between the observed and predicted share of inflows from the camps across the districts where the sample of IDP households live outside of camps. Not surprisingly, many of the districts have minimal predicted and observed shares because as described previously, the overall share of inflows from the closed camps to the total Iraqi population is small. While the predicted share of inflows appears to be lower in some cases than the observed share, the correlation between the two variables is high and statistically significant, which suggests that overall, the two variables reflect similar trends. In the next section, I show that the first-stage relationship between the observed and predicted shares of inflows from the camps to the districts is also strong and robust to various specifications.

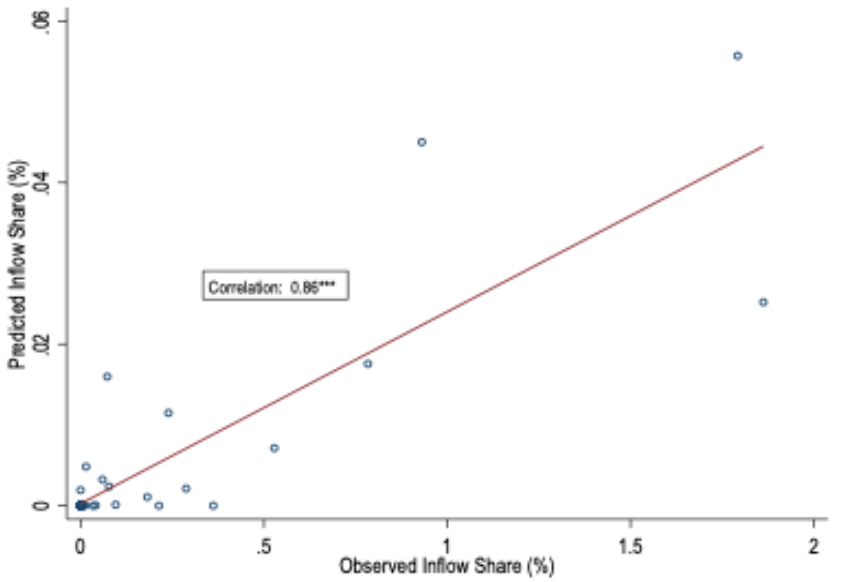

Figure 4. Correlation between the observed inflow share and the predicted inflow share using a scatterplot of 54 districts in Iraq. *** denotes significance at the 1% level.

The exclusion restriction condition for instrument validity requires that the instrument affects the outcome variables only through the share of inflows from the closed camps. A possible challenge to this restriction is that the predicted share of inflows could be correlated with district proximity to the Tigris or Euphrates rivers, as some of the returning inflows originate from these districts. Historically, many districts were established along these two rivers, where there is higher economic activity which could enable these districts to absorb the inflow shock differently compared to more remote districts. To address this concern, I directly control for the nearest distance from each district centroid to the Tigris or Euphrates rivers.

5 Results

5.1 First-stage estimates

Table 4 shows that the instrument is a strong predictor of the observed inflows from the camps. A 1 percentage point increase in the predicted share of inflows from the camps to districts is associated with an increase in the observed share of inflows from camps by about 23.9 percentage points. The F-statistics (to be shown with the second-stage results as there are multiple outcomes examined) in Section 1.5.2 indicate that

the instrument is strong, sufficiently exceeding the Stock and Yogo (2005) critical value of 16.38 (10% maximal IV size) across all regressions. Furthermore, Appendix Table A.3 shows that the first-stage estimates in Table 4 are consistent in sign and magnitude when all controls are excluded from the model, and when key district-level controls of violence, remoteness and ethnoreligious Arab Sunni majority are excluded from the model at a time or all at once, suggesting that the relationship between the predicted and observed share is insensitive to their omission.

Table 3. First-stage estimates

	Observed inflow share
Predicted inflow share	23.897***
	(3.780)
Controls	Yes
Observations	2906

Note: Regressions include the following household-level controls: an indicator for whether a household is reported as male-headed; household-head age indicators; whether a household has more than 6 household members; whether a household receives food assistance from the PDS; indicators for year of first-ever displacement; indicators for year of arrival to the current location; whether the location of residence is the IDP household's first place of displacement; whether the household attempted to return but remained in displacement; whether a household has been exposed to conflict; whether a household faces movement restrictions due to Covid-19 or other conflict-related reasons, and whether any member above the age of eighteen in the household has missing civil documentation. District-level controls include fatalities per 1,000 inhabitants; an indicator of whether the district has an Arab Sunni majority ethnoreligious composition; the sum of nighttime lights normalized by the population of a district; population, and the nearest distance from a given district to the nearest of the Tigris or Euphrates rivers in Iraq. ***, **, * denote statistical significance from zero at the 1%, 5%, 10% significance level, respectively. Robust standard errors in parentheses clustered at the district-level.

5.2 Effects of Camp Closures on the Welfare of IDP Households Outside of Camps

5.2.1 Household income and spending

I first begin by examining the effect of inflows from the camps on the household income and spending of IDP households living outside of the camps[24]. Table 4 shows the OLS and 2SLS estimates. The OLS estimates in Panel A Column (1) do not suggest that inflows from the camps are associated with changes in the household income of IDP households living outside of camps. Compared to the 2SLS estimates in Column (2), the magnitude of the OLS effect is smaller in absolute terms, suggesting evidence of the expected attenuation bias due to measurement error in the inflows from the camps.

As expected, I do not find evidence of a negative effect of inflows on household income of IDP households outside of camps. While the 2SLS estimates in Column (2) suggest that a 1 percentage point increase in the share of inflows from the camps increases IDP households' income by 15.6 percent, this effect is weakly significant. This positive, yet only weakly significant effect may be partly explained by humanitarian aid to IDP households outside of camps in districts receiving a high share of inflows as a result of the camp

[24] I restrict the household income outcome to IDP households whose heads are below the retirement age (they represent 87 percent of the sample of IDP households reporting incomes), as the questionnaire asks households about total income from employment and pension.

closures policy. Specifically, in response to the camp closures policy, the UN Humanitarian Coordinator in Iraq called upon organizations to scale up their operations to assist both the inflows and the communities absorbing them (Stoddard et al. 2021). Indeed, the report by IOM (2021b) outlines that with funding of about USD 98.6 million, the IOM's response plan to the camp closures policy targets communities absorbing the inflows, including IDP households living outside of camps. This funding includes the provision of emergency cash, cash-for-work opportunities and vocational training (IOM 2021b), which could have contributed directly to an increase in the household incomes of IDP households outside of camps in districts with a larger share of inflows. Importantly, the difference in the education profiles between inflows from camps and IDP households outside of camps likely mitigates competition which suggests that the aid could have contributed to a positive net effect on the incomes of the latter group.

Table 4. Camp closures, household income and household spending of IDP households outside of camps

	(1)	(2)
	OLS	2SLS
A. Log (Household income)		
Share of inflows	0.084	0.156*
	(0.087)	(0.087)
Controls	Yes	Yes
Observations	2525	2525
Kleibergen-Paap F statistic		46.474
B. Log (Total expenses)		
Share of inflows	-0.110	-0.020
	(0.088)	(0.069)
Controls	Yes	Yes
Observations	2889	2889
Kleibergen-Paap F statistic		40.178
C. Log (Food expenses)		
Share of inflows	0.022	0.118
	(0.094)	(0.103)
Controls	Yes	Yes
Observations	2889	2889
Kleibergen-Paap F statistic		40.140
D. Log (Healthcare expenses)		
Share of inflows	-0.262	-0.413*
	(0.205)	(0.237)
Controls	Yes	Yes
Observations	2559	2559
Kleibergen-Paap F statistic		33.017
E. Log (Rent expenses)		

Share of inflows	-0.023	-0.108
	(0.090)	(0.132)
Controls	Yes	Yes
Observations	1878	1878
Kleibergen-Paap F statistic		77.547

Note: Regressions include the following household-level controls: an indicator for whether a household is reported as male-headed; household-head age indicators; whether a household has more than 6 household members; whether a household receives food assistance from the PDS; indicators for year of first-ever displacement; indicators for year of arrival to the current location; whether the location of residence is the IDP household's first place of displacement; whether the household attempted to return but remained in displacement; whether a household has been exposed to conflict; whether a household faces movement restrictions due to Covid-19 or other conflict-related reasons, and whether any member above the age of eighteen in the household has missing civil documentation. District-level controls include fatalities per 1,000 inhabitants; an indicator of whether the district has an Arab Sunni majority ethnoreligious composition; the sum of nighttime lights normalized by the population of a district; population, and the nearest distance from a given district to the nearest of the Tigris or Euphrates rivers in Iraq. ***, **, * denote statistical significance from zero at the 1%, 5%, 10% significance level, respectively. Robust standard errors in parentheses clustered at the district-level.

Due to data limitations, empirically testing the role of humanitarian aid in explaining the impact of camp closures on welfare outcomes is challenging due to the different nature of aid distribution compared to household welfare outcomes. That is, while welfare outcomes capture frequent and essential expenses incurred by IDP households for survival in the 30 days prior to the interview, the data on whether aid has been received during this same timeframe exhibits limited variation. This could be because much of the aid, particularly after the camp closures, was front-loaded or distributed as one-off payments. For example, some forms of aid given to IDP households outside of camps included emergency cash, or short-term employment through cash-for-work (IOM 2021b).

The results in Table 5 Panels B, C and E do not suggest evidence that inflows from the camps affect IDP households' total spending, food spending or rent spending. While it is statistically insignificant, the effect on food spending is positive, indicating an 11.8 percent increase in response to the inflows from camps, which could be explained by the weakly significant increase in household income.

Table 5 Panel D Column (2) suggests that a 1 percentage point increase in the share of inflows from camps decreases healthcare expenses by 41.3 percent, but the effect is weakly significant. This result could be again explained by humanitarian aid covering treatment for IDP households outside of camps. For example, the IOM (2021b) response plan included funding of USD 1.6 million for direct health support to IDP households outside of camps in the form of providing medical treatment, or mental health and psychosocial support. While the effect of inflows on rent spending for rent-paying IDP households outside of camps is statistically insignificant in Panel E, the sign of the estimate is negative. As humanitarian aid upgrades the shelter conditions for IDP households outside of camps (IOM 2021b), those previously living in substandard rental housing may reduce their rent expenses by relocating to these improved, aid-supported shelters.

5.2.2 Food security

I now turn to examining the effect of inflows from the camps on the food security of IDP households outside of camps using two measures of food security, the Food Consumption Score (FCS) and the Household

Hunger Scale (HHS). The former captures dietary diversity and the latter household hunger (see Appendix Section A.2 for a description of the construction of FCS and HHS variables). I standardize the two outcome variables to facilitate interpretation of these two variables.

Table 6 Panels A and B do not suggest evidence that inflows from the camps affect the dietary diversity or the household hunger of IDP households outside of camps, respectively. This result could be explained by the widespread coverage of the nationwide food subsidy system in Iraq (the Public Distribution System, or PDS) for IDP households outside of camps, which may have helped mitigate adverse effects on their food security. In particular, almost all of the IDP households outside of camps in the sample rely on the PDS. Since the Food Consumption Score (which measures dietary diversity) remains unchanged while food spending shows a positive (yet insignificant) estimate in Table 5 Panel C, this suggests that IDP households outside of camps could be shifting their increased incomes toward purchasing larger quantities of food rather than prioritizing their nutrition.

Table 5. Camp closures and food security of IDP households outside of camps

	(1)	(2)
	OLS	2SLS
A. Dietary diversity (FCS), standardized		
Share of inflows	-0.081	0.242
	(0.330)	(0.400)
Controls	Yes	Yes
Observations	2906	2906
Kleibergen-Paap F statistic		39.960
B. Household hunger (HHS), standardized		
Share of inflows	-0.147	-0.114
	(0.110)	(0.095)
Controls	Yes	Yes
Observations	2903	2903
Kleibergen-Paap F statistic		40.093

Note: Regressions include the following household-level controls: an indicator for whether a household is reported as male-headed; household-head age indicators; whether a household has more than 6 household members; whether a household receives food assistance from the PDS; indicators for year of first-ever displacement; indicators for year of arrival to the current location; whether the location of residence is the IDP household's first place of displacement; whether the household attempted to return but remained in displacement; whether a household has been exposed to conflict; whether a household faces movement restrictions due to Covid-19 or other conflict-related reasons, and whether any member above the age of eighteen in the household has missing civil documentation. District-level controls include fatalities per 1,000 inhabitants; an indicator of whether the district has an Arab Sunni majority ethnoreligious composition; the sum of nighttime lights normalized by the population of a district; population, and the nearest distance from a given district to the nearest of the Tigris or Euphrates rivers in Iraq. ***, **, * denote statistical significance from zero at the 1%, 5%, 10% significance level, respectively. Robust standard errors in parentheses clustered at the district-level.

5.2.3 Household experiences of healthcare congestion

Table 7 presents the OLS and 2SLS estimates using the experience of healthcare congestion as the outcome variable. Healthcare congestion is constructed as an index using principal components analysis and normalized to range from 0 to 1, with 1 indicating maximum healthcare congestion. I do not find evidence that inflows from the camps impact IDP households' experiences of healthcare congestion by straining healthcare resources located outside of camps. The negative, yet statistically insignificant sign could be partly explained by the inflow of aid for direct health support to the districts receiving a relatively high share of inflows from the camps, for example through provision of staff and medical supplies or establishing a referral system for individuals who need specialized healthcare (IOM 2021b).

Table 6. Camp closures and experiences of healthcare congestion by IDP households outside of camps

	(1)	(2)
	OLS	2SLS
Healthcare congestion index		
Share of inflows	-0.011	-0.016
	(0.009)	(0.011)
Controls	Yes	Yes
Observations	2906	2906
Kleibergen-Paap F statistic		39.960

Note: Regressions include the following household-level controls: an indicator for whether a household is reported as male-headed; household-head age indicators; whether a household has more than 6 household members; whether a household receives food assistance from the PDS; indicators for year of first-ever displacement; indicators for year of arrival to the current location; whether the location of residence is the IDP household's first place of displacement; whether the household attempted to return but remained in displacement; whether a household has been exposed to conflict; whether a household faces movement restrictions due to Covid-19 or other conflict-related reasons, and whether any member above the age of eighteen in the household has missing civil documentation. District-level controls include fatalities per 1,000 inhabitants; an indicator of whether the district has an Arab Sunni majority ethnoreligious composition; the sum of nighttime lights normalized by the population of a district; population, and the nearest distance from a given district to the nearest of the Tigris or Euphrates rivers in Iraq. ***, **, * denote statistical significance from zero at the 1%, 5%, 10% significance level, respectively. Robust standard errors in parentheses clustered at the district-level.

5.2.4 Heterogeneous effects

It is possible that more vulnerable groups of IDP households outside of camps experience different impacts from inflows resulting from the policy relative to less vulnerable IDP households. To explore this, I compare the effects on female-headed households, the majority of which are widowed (65% of female-headed IDP households in the sample), to male-headed IDP households outside of camps.

I also compare IDP households outside of camps who arrived at their locations at later phases of the conflict in 2015, 2016, and 2017, respectively, to those who arrived at the beginning of the conflict in 2014. The largest displacement wave took place in 2014, when ISIL rapidly seized numerous districts in northern and central Iraq, several of which were inhabited by ethnoreligious minorities such as the Yazidis. However,

subsequent waves of IDP households were primarily driven by military operations aimed at reclaiming ISIL-controlled territories. Notably, compared to IDPs displaced in later waves of the conflict, those displaced earlier were able to access more stable or safe locations, such as in the Kurdistan Region of Iraq (IOM, Returns Working Group, and Social Inquiry 2018). This is because governorates later imposed stricter access policies for IDPs, which limited IDPs' geographical relocation options (IOM, Returns Working Group, and Social Inquiry 2018). Moreover, governorates hosting IDPs tended to view IDPs from later waves as potential security risks (IOM, Returns Working Group, and Social Inquiry 2018). Consequently, IDP households that arrived earlier to a district may exhibit greater resilience to inflows from camps compared to those who arrived later, due to their improved access to resources in safer locations, stronger familiarity with their surroundings, and potential greater solidarity from their host communities given that some of the ethnoreligious minorities were particularly targeted during the conflict.

While Table 5 provides some evidence that overall, inflows from the camps decrease spending on healthcare by IDP households outside of camps, Appendix Table A.4 Columns (3) indicates that female-headed IDP households exposed to inflows spend more on healthcare relative to male-headed IDP households. This can be explained by Column (8), which shows that female-headed IDP households exposed to inflows from camps face greater barriers to healthcare access compared to male-headed households, likely due to reduced public healthcare referrals as indicated by examining the heterogeneous effects on each individual healthcare outcome separately in Appendix Table A.5 Column (3). As a result, female-headed IDP households may be more likely to seek relatively more costly private healthcare alternatives than male-headed IDP households. Importantly, the relative increase in female-headed IDP households' food spending in Appendix Table A.4 Column (2) could thus partly reflect a form of preventive health strategy to improve their overall health and reduce their reliance on healthcare access.

Despite the humanitarian reports on the inflows of aid to districts receiving a high share of inflows from camps, this heterogeneous analysis suggests that female-headed IDP households in these districts may not be benefiting equally from aid interventions in terms of healthcare. However, there could also be two other possible mechanisms hindering their ability to obtain referrals. First, a supply-side mechanism may hinder access to referrals if the public healthcare system does not adapt to increased demand from incoming inflows from camps. For example, there could be congestion in the provision of specific healthcare services aimed at widowed IDP households affected by ISIL and living outside of camps, such as psychosocial support. With the arrival of widowed IDPs from the closed camps seeking similar services, especially as some of them faced violations and exploitation in camps (Jabro 2021), there could be some congestion in the ability of widowed households outside of camps to obtain these particular referrals. Second, compared to male-headed IDP households, widowed female-headed IDP households may face difficulties in navigating the healthcare system, making it more challenging to obtain healthcare referrals, especially in the face of inflows. Indeed, interviews conducted by IOM (2020a) reveal that widows struggle with navigating social welfare assistance

and bureaucratic processes, with some expressing a need for a male companion to help them through these systems.

As anticipated, Appendix Table A.6 indicates that compared to IDP households that arrived at their locations during the early phase of the conflict in 2014, IDP households that arrived at their locations during the later phases of the conflict appear to be less resilient to the inflow shocks from camps as they have relatively worse welfare outcomes. Appendix Table A.6 Columns (4) and (8) suggest that the healthcare spending and experience of healthcare congestion of the IDP households who arrived at their locations during the later phases of the conflict is higher than those who arrived in 2014. Furthermore, Column (6) indicates that their food security in terms of dietary diversity (Food Consumption Score, or FCS) is lower than IDP households arriving in 2014. However, as the Kleibergen-Paap F statistic for these regressions is low, these results should be interpreted with caution.

6 Robustness checks

6.1 Spatial correlation

In all my regressions, I account for potential correlation of the error term within districts by clustering at the district level. Nevertheless, spatial correlation might extend beyond district boundaries, resulting in the underestimation of standard errors and increasing the probability of false positive results. To address this issue, I implement the method by Conley (1999) and allow for spatial correlation within a radius of 25 kilometers and 50 kilometers from the centroid of each district, respectively. The results from Appendix Table A.7 using a radius of 25 kilometers are overall consistent with the main results. Their magnitudes, however, are relatively larger. While the results in Appendix Table A.8 using a radius of 50 kilometers show some evidence of an increase in food spending, the estimate is weakly significant and overall, the results are consistent with the main results that cluster at the district-level.

6.2 Excluding districts in the Kurdistan Region of Iraq

As ISIL territorial expansion was not as extensive in districts in the Kurdistan Region of Iraq (KRI) as those in the rest of Iraq, a concern is that districts in the KRI are better equipped to cope with the inflows from the camps relocating to KRI and lead to the absence of adverse effects on the welfare of IDP households outside of camps. To address this concern, I exclude IDP households living in districts within the KRI, which represent about 17 percent of the sample of IDP households originally examined. Appendix Table A.9 shows that the results are overall consistent with the main results that include districts in the KRI. However, the weakly significant effect on healthcare spending in the main results becomes insignificant. Moreover, the weakly significant, negative effects on HHS or healthcare in Appendix Table A.9 are small in magnitude.

7 Discussion and conclusion

This paper examines the impact of the inflows resulting from the nationwide camp closure policy in Iraq on the welfare of households displaced by the ISIL conflict who were already living outside of camps. By linking a novel dataset on camp movements to a household-level survey on these households, my empirical analysis exploits district-level variations in exposure to inflows among IDP households outside of camps. To address the endogeneity of inflows arising from potential measurement error associated with the fear of disclosing movements from camps due to ISIL-related stigma, along with unobserved district characteristics which could affect the relocation of inflows, I employ an instrumental variables strategy. Specifically, I leverage an unexplored dataset on the origins of inflows from the camps to evaluate the effects of the policy on the incomes, spending behavior, food security and experiences of healthcare congestion.

Despite the debate on the adverse effects of the camp closures policy on IDP households outside of camps, I do not find evidence that overall, inflows from the camps impact their welfare. In particular, I do not find evidence of an impact on their total spending, spending on food or rent, respectively, food security, or experience of healthcare congestion. I find some evidence of an increase in the household income of IDP households outside of camps, which could be partly explained by humanitarian assistance provided to IDP households outside of camps in districts which received a higher share of inflows in the form of emergency cash or cash-for-work opportunities (IOM 2021b). Moreover, competition for similar labor market opportunities between inflows from the camps and IDP households outside of camps likely limits an adverse impact on the income of the latter, given their different education profiles. I also find some evidence of a reduction in their healthcare spending, which could be explained by the provision of direct health support to IDP households outside of camps, for example in the form of providing treatment of illnesses or mental health and psychosocial support (IOM 2021b), which likely reduces their out-of-pocket healthcare expenses.

By exploring the effects of the policy on sub-groups of IDP households, I find that compared to male-headed IDP households, female-headed IDP households who are mostly widowed and exposed to inflows from the camps experience greater healthcare congestion and are less likely to receive medical referrals when utilizing public healthcare. Moreover, it appears that compared to male-headed IDP households outside of camps, female-headed IDP households outside of camps compensate for their experience of healthcare congestion through increased food spending as a form of preventive health strategy to reduce their reliance on healthcare services.

I provide four potential explanations for the overall findings of my paper. First, descriptive statistics on the characteristics of IDP households outside of camps and inflows arriving from the camps indicate that, on average, the former are more likely to have higher levels of education. According to Iraqi government statistics, individuals with lower education are more likely to work in low-paying, low-productivity informal jobs, which suggests that competition between the two groups of IDPs is unlikely. Second, the humanitarian

assistance provided to IDP households outside of camps in response to the camp closures, combined with pre-existing government social assistance programs like the nationwide food subsidy program (PDS), could have alleviated the impact of inflows from the camps on the overall welfare and food security of these households. Third, the overall magnitude of the inflows from the camps to the Iraqi population is relatively small, standing at 1.64 percent of the total Iraqi population before the camp closures policy was initiated. Fourth, since the household-level data in my study was collected five to seven months since the latest camp closures implemented in early 2021, this analysis reflects the short-term impact of the camp closures policy on the welfare of IDP households outside of camps, as long-term effects may take more time to materialize.

To conclude, I do not find evidence that overall, the camp closure policy in Iraq is detrimental to the welfare of IDP households living outside of camps. However, from a policy perspective, highly vulnerable IDP households, particularly those led by widowed females, require targeted interventions to ensure their smooth access to healthcare resources that address their specific needs.

Appendix A: “The Nationwide Camp Closure Policy in Iraq and the Welfare of Displaced Populations”

A.1. Implementation of the Camp Closures Policy in Iraq, in the news

A.1.1 Photo of camp closures in the news

Photo: Kirkuk, December 2020 – last IDP camp closed down in Kirkuk – photo by: Karwan Salehi. Approval to use photo granted by KirkukNow News.

A.1.2. Debate on the camp closure policy in Iraq

"لا يمكن وطن أن يتحول إلى خيمة .. إلى كرافان"

"A nation cannot turn into a tent .. into a caravan.."[25] – Dr. Karim Al-Nouri, Deputy Minister of the Iraqi Ministry of Migration and Displacement

"The situation of people in informal sites and other out-of-camp locations was already of particular concern but has been further aggravated by the arrival of new IDPs from closed camps" - OCHA[26]

"Iraq's decision to shut down IDP camps too hasty, NGOs say" – Al Jazeera[27]

"Authorities began a rapid push in late 2020 to close displacement camps across the country to push forward with recovery efforts that have lagged years after the defeat of IS." – Voice of America[28]

[25] Translated from Arabic from an interview on MBC Iraq channel: https://www.youtube.com/watch?v=DfOlmhE3sw0

[26] https://www.ecoi.net/en/file/local/2055675/202105_iccg_situation_and_needs_monitoring_report_1_-_final.pdf

[27] https://www.aljazeera.com/news/2020/11/16/iraqs-decision-to-shut-down-idp-camps-is-too-rushed-ngos-say#:~:text=International%20aid%20agencies%20have%20criticised,between%20local%20and%20national%20authorities.

[28] https://www.voanews.com/a/residents-aid-workers-surprised-by-closure-of-iraqi-camp-/7056221.html

A.2. Construction of variables

A.2.1. Income

Household income refers to the IDP household's response to the following question in the questionnaire "Could you estimate your household's total income (in IQD) from employment and pension over the last 30 days?".

A.2.2. Spending

Total spending refers to the IDP household's response to the following question "Could you estimate your household's total expenditure (in IQD) over the last 30 days?"

Spending refers to the IDP household's response to the following question "During the past 30 days, how much did your household spend (in IQD) on each of the following categories?", which is categorized into a question on food spending, rent spending and medical care spending (including medicines).

A.2.3. Food security

Using the MCNA questionnaire, I construct the two outcome variables of food security, the Food Consumption Score (FCS) and the Household Hunger Scale (HHS) based on standardized methods from the World Food Programme (WFP) and the Food and Nutrition Technical Assistance (FANTA) project, respectively. The FCS is developed by the WFP to measure household food consumption and is considered by the WFP a proxy for food security highly correlated with other food security indicators of Vitamin A, Protein-rich and Hem Iron intake. It is a weighted diet diversity score computed using the frequency of consumption of different food groups consumed by a household during the 7 days before the survey. In the MCNA survey, a household is asked how many days in their last respective 7 days they have consumed the following food groups: cereals, including rice and bread; nuts and seeds; milk and dairy; meat, fish and eggs; vegetables; fruits; oils and fats; and sugar or sweets. The FCS is obtained by assigning standard weights for each of the food groups. FCS scores can range from 0 to 112 where a higher score indicates more food security. The formula for FCS is as follows:

$$FCS = (starches * 2) + (pulses * 3) + vegetables + fruit + (meat * 4) + (\,dairy * 4) + (fats * .5) + (sugar * .5) \quad \text{(A1)}$$

To address the multidimensional nature of food security measures, I complement my analysis by investigating the effect of the camp closure policy on household food hunger, measured by the Household Hunger Scale (HHS). Developed by the Food and Nutrition Technical Assistance (FANTA) which provided technical support to USAID and its partners, HHS can be used to evaluate food security and track hunger prevalence across regions.

The HHS is calculated based on three questions regarding the occurrence and frequency-of-occurrence questions of three food security experiences within the household in the preceding 30 days. The first question is "In the past 30 days, was there ever no food to eat of any kind in your house because of lack of resources

to get food?". If the household's answer is yes, it reports the frequency of occurrence of this experience: "Rarely (1-2 times)"; "Sometimes (3-10 times)"; or "Often (10+ times)". The second question is "In the past 30 days, did you or any household member go to sleep at night hungry because there was not enough food?". If the household's answers yes, the household reports the frequency of occurrence given the same options as for the first question. The third question is "In the past 30 days, did you or any household member go a whole day and night without eating anything at all because there was not enough food?", and the household then reports the frequency of occurrence if their answer is yes to this question. I construct the HHS in line with the method in Ballard et al. (2011). HHS ranges from 0 to 6 with a higher score indicating more food insecurity. For ease of interpretation between FCS and HHS, I invert HHS such that a higher score indicates more food security.

A.2.4. Healthcare congestion

This is an index constructed using principal components analysis and tetrachoric correlations and is normalized to range from 0 to 1. The variables used to construct the index are binary responses to the options for the questions: "What difficulties, if any, did you encounter when attempting to access health services or treatment in the past 3 months?" and "What barriers, if any, do women of reproductive age (15-49) face when accessing specialized reproductive health services? The options to the questions are as follows:

Cost of services and/or medicine too high; did not get access to qualified staff at the health facility; public health clinic did not provide referral; public health clinic not open; medical staff refused treatment without justification; no medicine available at health facility/pharmacy; no treatment available for my disease at the health facility; waiting time to receive service too long; health services not inclusive of people with disabilities; insufficient number of female health staff; financial constraints; no reproductive health services available.

A.3. Selection bias checks

Table A.1 Pre-policy characteristics of camp residents from early closures (camps closing before October 2020) compared to camp residents from late closures (camps closing at or after October 2020)

	Early camp closures	Late camp closures	Difference	t
Share males	50.39	50.43	-0.04	(-0.04)
Share working age (18-59 years old)	37.61	41.29	-3.68	(-2.20)*
Share over 60 years old	2.13	2.71	-0.58	(-0.85)
Share in a vulnerable group*	29.65	25.43	4.22	(1.21)
Share without income source	14.48	7.29	7.19	(1.60)
Share unskilled labor	0.61	0.86	-0.25	(-1.41)
Hours of electrical provision per day in camps	12.74	16.43	-3.69	(-1.30)
Access to PDS	47.83	42.71	5.11	(0.54)
Number of camps	23	7	30	

Note: * A vulnerable group in the report is defined by the report as having a female-headed household, a household with chronically ill individual(s), disabled individual(s), or pregnant/lactating women. The table shows the average share of camp residents from early and late camp closures for each characteristic using the report by CCCM Cluster for the period December 2017 to January 2018. Note that the report covers open camps at the time of data collection with at least 100 households and no security or accessibility constraints.

A.4. Household-level survey: selection of IDP households

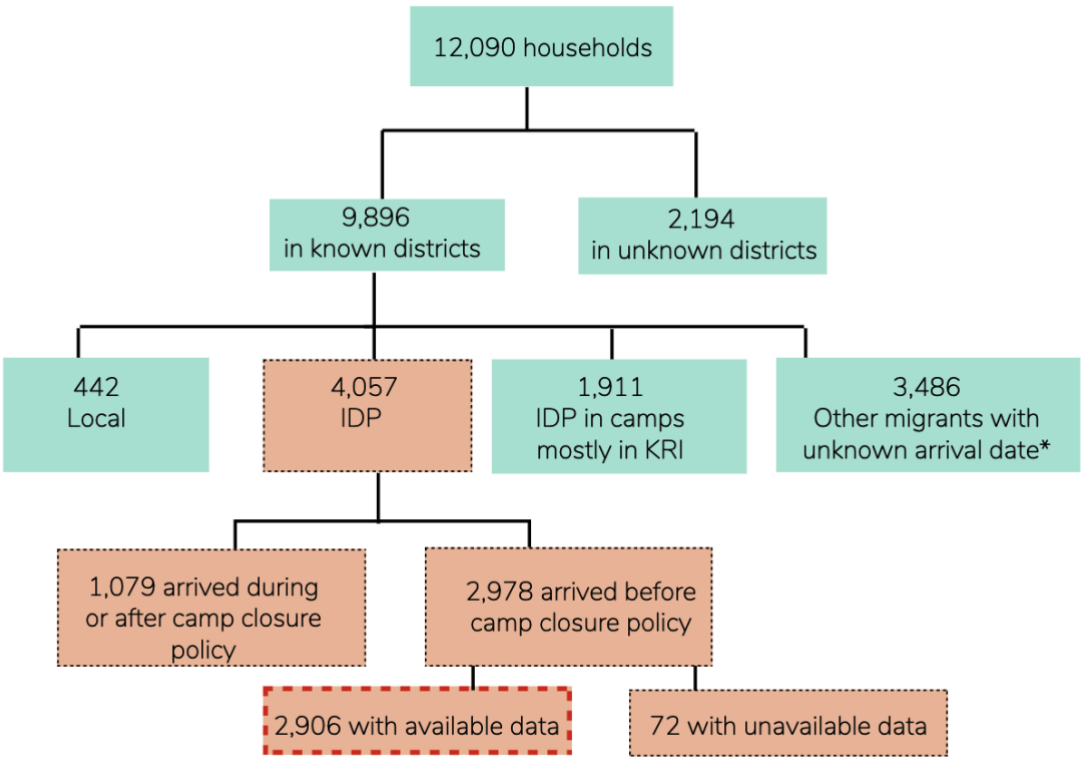

Figure A.1. Households in the MCNA 2021 survey. * According to the UNHCR Curation Team, arrival dates may be anonymous for other migrant households (returnee households) due to confidentiality and privacy concerns. KRI denotes the Kurdistan Region of Iraq which was unaffected by the camp closures policy at the time. The red dashed orange box at the bottom represents the final sample of IDP households studied in this paper. Author's illustration.

A.5. Summary statistics: Different types of households in MCNA 2021

Table A.2. Summary statistics: Mean and standard deviation of outcome variables and household characteristics by each type of household surveyed in MCNA 2021

	(1)	(2)	(3)	(4)	(5)
	IDP HH outside of camps arriving before camp closures (working sample)	**IDP HH outside of camps arriving to districts after November 2017**	**IDP HH in camps**	**Returnee HH**	**Host HH**
Outcome variables:					
FCS (Dietary diversity), 0-112 score	62.026 (21.823)	54.36 (19.93)	64.07 (16.39)	62.47 (22.00)	75.13 (16.42)
HHS (Household hunger), 0-6 scale	5.482 (1.102)	5.231 (1.399)	5.786 (0.693)	5.499 (1.125)	5.914 (0.371)
Monthly income (IQD)	370493.118 [USD 253.87] (239697.820)	350305.8 [USD 240.03] (292906.9)	320933.7 [USD 219.91] (269678.1)	420445.2 [USD 288.10] (308433.8)	513893.7 [USD 352.13] (299509.4)
Monthly total expenses (IQD)	459045.096 [USD 314.55] (304468.226)	506809.4 [USD 347.28] (603536.9)	471688.3 [USD 323.21] (374764.1)	517205.5 [USD 354.40] (441539.5)	459846.2 [USD 315.10] (246457.8)
Monthly food expenses (IQD)	242862.529 [USD 166.41] (155523.023)	238754.9 [USD 163.60] (144165.9)	265005.3 [USD 181.59] (157662.1)	306914.3 [USD 210.30] (247897.4)	319882.4 [USD 219.19] (154150.3)
Monthly rent expenses (IQD)	101086.545 [USD 69.27] (101557.588)	99204.5 [USD 67.98] (109884.4)	.	30444.7 [USD 20.86] (68759.2)	21866.5 [USD 14.98] (63640.2)
Monthly healthcare expenses (IQD)	110933.930 [USD 76.01] (182884.256)	139082.0 [USD 95.30] (484502.8)	149669.8 [USD 102.56] (290978.4)	137279.3 [USD 94.07] (207830.1)	101866.1 [USD 69.80] (151240.2)
Healthcare congestion index [0,1]	0.241 (0.084)	0.474 (0.0623)	0.482 (0.0567)	0.474 (0.0580)	0.485 (0.0793)

Household characteristics:					
Female-headed household	0.106 (0.308)	0.126 (0.332)	0.137 (0.344)	0.109 (0.312)	0.0860 (0.281)
Household head age: 18-24	0.020 (0.139)	0.0279 (0.165)	0.0326 (0.178)	0.0244 (0.154)	0.0339 (0.181)
Household head age: 25-49	0.708 (0.455)	0.673 (0.469)	0.700 (0.459)	0.630 (0.483)	0.686 (0.465)
Household head age: 50-59	0.167 (0.373)	0.189 (0.391)	0.174 (0.380)	0.202 (0.402)	0.195 (0.396)
Household head age: 60+	0.106 (0.307)	0.111 (0.314)	0.0935 (0.291)	0.143 (0.351)	0.0860 (0.281)
Location is household's first place of displacement	0.546 (0.498)	0.0843 (0.278)	0.203 (0.402)	.	.
Household attempted return but remained displaced	0.107 (0.309)	0.144 (0.351)	.	.	.
Arrived at location in 2014	0.463 (0.499)	.	.	.	.
Arrived at location in 2015	0.174 (0.380)	.	.	.	.
Arrived at location in 2016	0.184 (0.387)	.	.	.	.
Arrived at location in 2017	0.179 (0.383)	0.0195 (0.138)	.	.	.
First displacement in 2014	0.826 (0.379)	0.561 (0.497)	.	.	.
First displacement in 2015	0.097 (0.296)	0.132 (0.338)	.	.	.
First displacement in 2016 or 2017	0.077 (0.267)	0.249 (0.433)	.	.	.
Receives PDS	0.958 (0.201)	0.966 (0.182)	0.960 (0.196)	0.966 (0.182)	0.973 (0.163)
Has more than 6 household members	0.347 (0.476)	0.469 (0.499)	0.473 (0.499)	0.391 (0.488)	0.326 (0.469)
Faces movement restrictions	0.145 (0.352)	0.209 (0.407)	0.170 (0.375)	0.264 (0.441)	0.0385 (0.193)
At least 1 adult has missing civil documentation	0.971 (0.167)	0.982 (0.132)	0.977 (0.148)	0.964 (0.187)	0.991 (0.0948)

Affected by any violence	0.691 (0.462)	0.664 (0.473)	0.588 (0.492)	0.646 (0.478)	0.253 (0.435)
Number of households	2906	1079	1911	3486	442

Note: Mean of each variable for each type of population in the MCNA 2021 which reported its district of residence. Standard deviations in parentheses. Not all variables are necessarily applicable to all types of populations hence the missing cells. For example, IDP households in camps do not report rent as they live in the camps, and host households do not report their year of first displacement. IQD converted to USD using historical exchange rates obtained from Xe.com. Author's calculations using MCNA 2021.

A.6. First-stage estimates sensitivity to omission of controls

Table A.3. Sensitivity of first-stage estimates to omission of various controls

	(1)	(2)	(3)	(4)	(5)	(6)
	All controls	No controls	Without violence control	Without remoteness control	Without Arab Sunni majority control	Without violence, remoteness and Arab Sunni majority controls
Predicted inflow share	23.897***	23.789***	23.916***	23.713***	23.881***	23.719***
	(3.780)	(4.236)	(3.800)	(3.844)	(3.814)	(3.825)
All Controls	Yes	No	No	No	No	No
Observations	2906	2906	2906	2906	2906	2906

Note: Regressions include the following household-level controls: an indicator for whether a household is reported as male-headed; household-head age indicators; whether a household has more than 6 household members; whether a household receives food assistance from the PDS; indicators for year of first-ever displacement; indicators for year of arrival to the current location; whether the location of residence is the IDP household's first place of displacement; whether the household attempted to return but remained in displacement; whether a household has been exposed to conflict; whether a household faces movement restrictions due to Covid-19 or other conflict-related reasons, and whether any member above the age of eighteen in the household has missing civil documentation. All the district-level controls include fatalities per 1,000 inhabitants; an indicator of whether the district has an Arab Sunni majority ethnoreligious composition; the sum of nighttime lights normalized by the population of a district; population, and the nearest distance from a given district to the nearest of the Tigris or Euphrates rivers in Iraq. ***, **, * denote statistical significance from zero at the 1%, 5%, 10% significance level, respectively. Robust standard errors in parentheses clustered at the district-level.

A.7. Heterogeneous effects

Table A.4. Heterogeneous effects on welfare by reported gender of household head

	(1) Log(Income)	(2) Log(Total expenses)	(3) Log(Food expenses)	(4) Log(Health expenses)	(5) Log(Rent expenses)	(6) FCS	(7) HHS	(8) Healthcare congestion index
Share of inflows	0.154**	-0.031	0.096	-0.443*	-0.102	0.221	-0.146*	-0.019
	(0.075)	(0.062)	(0.097)	(0.244)	(0.123)	(0.397)	(0.086)	(0.012)
Share of inflows * Female-headed household	0.024	0.150	0.295**	0.372**	-0.074	0.289	0.432	0.043***
	(0.236)	(0.162)	(0.124)	(0.187)	(0.186)	(0.182)	(0.274)	(0.011)
Female-headed household	-0.183**	-0.233***	-0.242***	-0.196**	-0.089*	-0.331***	-0.286***	-0.013**
	(0.073)	(0.045)	(0.046)	(0.067)	(0.046)	(0.077)	(0.084)	(0.004)
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	2525	2889	2889	2559	1878	2906	2903	2906
Kleibergen-Paap F statistic	21.805	30.000	29.639	28.157	31.398	29.687	30.036	29.687

Note: Regressions include the following household-level controls: an indicator for whether a household is reported as male-headed; household-head age indicators; whether a household has more than 6 household members; whether a household receives food assistance from the PDS; indicators for year of first-ever displacement; indicators for year of arrival to the current location; whether the location of residence is the IDP household's first place of displacement; whether the household attempted to return but remained in displacement; whether a household has been exposed to conflict; whether a household faces movement restrictions due to Covid-19 or other conflict-related reasons, and whether any member above the age of eighteen in the household has missing civil documentation. District-level controls include fatalities per 1,000 inhabitants; an indicator of whether the district has an Arab Sunni majority ethnoreligious composition; the sum of nighttime lights normalized by the population of a district; population, and the nearest distance from a given district to the nearest of the Tigris or Euphrates rivers in Iraq. ***, **, * denote statistical significance from zero at the 1%, 5%, 10% significance level, respectively. Robust standard errors in parentheses clustered at the district-level.

Table A.5. Heterogeneous effects on individual healthcare outcomes by reported gender of household head

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
	Cost of services and/or medicine was too high	No access to qualified staff	Public health clinic did not provide referral	Public health clinic not open	Medical staff refused treatment without justification	No medicine available at health facility/pharmacy	No treatment available for my disease at the health facility	Health services not inclusive of people with disabilities	Insufficient number of female health staff	Waiting time to receive service too long	No reproductive health services available
Share of inflows	0.000	-0.010	-0.036***	-0.031	-0.006	0.050	-0.002	-0.016**	0.004	-0.025	-0.016
	(0.094)	(0.014)	(0.008)	(0.021)	(0.004)	(0.040)	(0.058)	(0.005)	(0.012)	(0.018)	(0.020)
Share of inflows * Female-headed household	-0.064	0.032	0.121**	0.000	0.008	0.010	-0.072	0.000	-0.019	0.007	0.141
	(0.121)	(0.039)	(0.049)	(0.018)	(0.005)	(0.060)	(0.082)	(0.009)	(0.013)	(0.019)	(0.113)
Female-headed household	0.044	-0.012	-0.023**	-0.013	-0.008**	-0.009	-0.002	-0.001	0.005	-0.012	-0.042**
	(0.036)	(0.013)	(0.008)	(0.008)	(0.003)	(0.014)	(0.018)	(0.005)	(0.005)	(0.008)	(0.015)
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	2906	2906	2906	2906	2906	2906	2906	2906	2906	2906	2906
Kleibergen-Paap F statistic	29.687	29.687	29.687	29.687	29.687	29.687	29.687	29.687	29.687	29.687	29.687

Note: Regressions include the following household-level controls: an indicator for whether a household is reported as male-headed; household-head age indicators; whether a household has more than 6 household members; whether a household receives food assistance from the PDS; indicators for year of first-ever displacement; indicators for year of arrival to the current location; whether the location of residence is the IDP household's first place of displacement; whether the household attempted to return but remained in displacement; whether a household has been exposed to conflict; whether a household faces movement restrictions due to Covid-19 or other conflict-related reasons, and whether any member above the age of eighteen in the household has missing civil documentation. District-level controls include fatalities per 1,000 inhabitants; an indicator of whether the district has an Arab Sunni majority ethnoreligious composition; the sum of nighttime lights normalized by the population of a district; population, and the nearest distance from a given district to the nearest of the Tigris or Euphrates rivers in Iraq. ***, **, * denote statistical significance from zero at the 1%, 5%, 10% significance level, respectively. Robust standard errors in parentheses clustered at the district-level.

Table A.6. Heterogeneous effects on welfare by year of arrival to displacement location

	(1) Log(Income)	(2) Log(Total expenses)	(3) Log(Food expenses)	(4) Log(Health expenses)	(5) Log(Rent expenses)	(6) FCS	(7) HHS	(8) Healthcare congestion index
Share of inflows	0.169*	0.003	0.181*	-0.756***	0.007	0.740***	-0.201*	-0.034***
	(0.102)	(0.066)	(0.103)	(0.120)	(0.074)	(0.206)	(0.118)	(0.009)
Share of inflows * Arrived in 2015	-0.008	-0.079	0.016	0.640**	-0.760	-1.053***	0.275	0.092**
	(0.277)	(0.199)	(0.191)	(0.257)	(0.684)	(0.302)	(0.394)	(0.041)
Share of inflows * Arrived in 2016	-0.076	0.017	-0.330*	0.848**	-0.038	-1.410***	0.308	0.041**
	(0.160)	(0.177)	(0.194)	(0.263)	(0.219)	(0.352)	(0.282)	(0.019)
Share of inflows * Arrived in 2017	-0.018	-0.096	-0.125	0.918***	-0.582*	-1.279**	0.150	0.027**
	(0.188)	(0.178)	(0.230)	(0.237)	(0.322)	(0.411)	(0.223)	(0.013)
Arrived in 2015	0.090	0.046	-0.014	0.024	0.066	-0.124	-0.123	-0.025**
	(0.074)	(0.048)	(0.063)	(0.093)	(0.064)	(0.134)	(0.114)	(0.009)
Arrived in 2016	0.062	-0.045	-0.093	-0.022	-0.009	0.051	-0.050	-0.017
	(0.063)	(0.070)	(0.088)	(0.090)	(0.079)	(0.136)	(0.149)	(0.012)
Arrived in 2017	0.067	-0.036	-0.073	-0.043	0.041	-0.083	-0.062	-0.016*
	(0.073)	(0.067)	(0.077)	(0.107)	(0.060)	(0.132)	(0.109)	(0.009)
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	2525	2889	2889	2559	1878	2906	2903	2906
Kleibergen-Paap F statistic	3.574	3.183	3.184	3.975	0.715	3.180	3.179	3.180

Note: Regressions include the following household-level controls: an indicator for whether a household is reported as male-headed; household-head age indicators; whether a household has more than 6 household members; whether a household receives food assistance from the PDS; indicators for year of first-ever displacement; indicators for year of arrival to the current location; whether the location of residence is the IDP household's first place of displacement; whether the household attempted to return but remained in displacement; whether a household has been exposed to conflict; whether a household faces movement restrictions due to Covid-19 or other conflict-related reasons, and whether any member above the age of eighteen in the household has missing civil documentation. District-level controls include fatalities per 1,000 inhabitants; an indicator of whether the district has an Arab Sunni majority ethnoreligious composition; the sum of nighttime lights normalized by the population of a district; population, and the nearest distance from a given district to the nearest of the Tigris or Euphrates rivers in Iraq. ***, **, * denote statistical significance from zero at the 1%, 5%, 10% significance level, respectively. Robust standard errors in parentheses clustered at the district-level.

A.8. Robustness checks

Table A.7. Using Conley standard errors, distance cutoff: 25km

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Log(Income)	Log(Total expenses)	Log(Food expenses)	Log(Health expenses)	Log(Rent expenses)	FCS	HHS	Healthcare congestion index
Share of inflows	0.345	0.166	0.285	-0.288	0.083	0.235	-0.115	-0.013
	(0.239)	(0.269)	(0.231)	(0.364)	(0.224)	(0.406)	(0.094)	(0.014)
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	2525	2889	2889	2559	1878	2906	2903	2906

Note: Regressions include the following household-level controls: an indicator for whether a household is reported as male-headed; household-head age indicators; whether a household has more than 6 household members; whether a household receives food assistance from the PDS; indicators for year of first-ever displacement; indicators for year of arrival to the current location; whether the location of residence is the IDP household's first place of displacement; whether the household attempted to return but remained in displacement; whether a household has been exposed to conflict; whether a household faces movement restrictions due to Covid-19 or other conflict-related reasons, and whether any member above the age of eighteen in the household has missing civil documentation. District-level controls include fatalities per 1,000 inhabitants; an indicator of whether the district has an Arab Sunni majority ethnoreligious composition; the sum of nighttime lights normalized by the population of a district; population, and the nearest distance from a given district to the nearest of the Tigris or Euphrates rivers in Iraq. ***, **, * denote statistical significance from zero at the 1%, 5%, 10% significance level, respectively. Robust standard errors in parentheses clustered at the district-level. Conley standard errors with distance cutoff of 25 kilometers in parentheses using the Stata command developed by Foreman (2020).

Table A.8. Using Conley standard errors, distance cutoff: 50km

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Log(Income)	Log(Total expenses)	Log(Food expenses)	Log(Health expenses)	Log(Rent expenses)	FCS	HHS	Healthcare congestion index
Share of inflows	0.345*	0.166	0.285*	-0.198	0.083	0.235	-0.115	-0.013
	(0.192)	(0.210)	(0.170)	(0.250)	(0.119)	(0.405)	(0.101)	(0.014)
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	2525	2889	2889	2559	1878	2906	2903	2906

Note: Regressions include the following household-level controls: an indicator for whether a household is reported as male-headed; household-head age indicators; whether a household has more than 6 household members; whether a household receives food assistance from the PDS; indicators for year of first-ever displacement; indicators for year of arrival to the current location; whether the location of residence is the IDP household's first place of displacement; whether the household attempted to return but remained in displacement; whether a household has been exposed to conflict; whether a household faces movement restrictions due to Covid-19 or other conflict-related reasons, and whether any member above the age of eighteen in the household has missing civil documentation. District-level controls include fatalities per 1,000 inhabitants; an indicator of whether the district has an Arab Sunni majority ethnoreligious composition; the sum of nighttime lights normalized by the population of a district; population, and the nearest distance from a given district to the nearest of the Tigris or Euphrates rivers in Iraq. ***, **, * denote statistical significance from zero at the 1%, 5%, 10% significance level, respectively. Robust standard errors in parentheses clustered at the district-level. Conley standard errors with distance cutoff of 50 kilometers in parentheses using the Stata command developed by Foreman (2020).

Table A.9. Excluding districts in the Kurdistan Region of Iraq

	(1) Log(Income)	(2) Log(Total expenses)	(3) Log(Food expenses)	(4) Log(Health expenses)	(5) Log(Rent expenses)	(6) FCS	(7) HHS	(8) Healthcare congestion index
Share of inflows	0.182*	0.049	0.119	-0.378	-0.026	0.350	-0.157*	-0.026*
	(0.093)	(0.071)	(0.108)	(0.233)	(0.126)	(0.444)	(0.087)	(0.015)
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	2161	2455	2453	2186	1557	2469	2466	2469
Kleibergen-Paap F statistic	44.885	40.106	40.064	34.072	74.482	39.814	40.011	39.814

Note: Regressions include the following household-level controls: an indicator for whether a household is reported as male-headed; household-head age indicators; whether a household has more than 6 household members; whether a household receives food assistance from the PDS; indicators for year of first-ever displacement; indicators for year of arrival to the current location; whether the location of residence is the IDP household's first place of displacement; whether the household attempted to return but remained in displacement; whether a household has been exposed to conflict; whether a household faces movement restrictions due to Covid-19 or other conflict-related reasons, and whether any member above the age of eighteen in the household has missing civil documentation. District-level controls include fatalities per 1,000 inhabitants; an indicator of whether the district has an Arab Sunni majority ethnoreligious composition; the sum of nighttime lights normalized by the population of a district; population, and the nearest distance from a given district to the nearest of the Tigris or Euphrates rivers in Iraq. ***, **, * denote statistical significance from zero at the 1%, 5%, 10% significance level, respectively. Robust standard errors in parentheses clustered at the district-level.

A.9. Additional information on datasets

In this paper, my focus is on individuals leaving camps and tracked between October 2020 and March 2021, rather than those tracked in 2019, for primarily methodological reasons. First, it is difficult to assume that the stock of individuals leaving camps to districts in 2019 is fixed until 2021, the year of data collection for the 2021 household-level survey used in this paper. Second, even if this paper were to examine the effect of lagged inflows from the camps to districts in 2019 and their subsequent effect on IDP households outside of camps in 2020, the analysis would be much less precise than the current one. This is because the household survey collected in 2020 which precedes the household survey used in this paper records only the governorate of residence for IDP households, whereas the household dataset used in this paper records their districts of residence. Subsequently, combining the two household datasets would lead to only four governorates of arrival in common between the two, which significantly limits the variation and precision of this analysis. Lastly, the camp movements dataset collected between October 2020 and March 2021 that is used in this paper precisely identifies the exact camp of origin for individuals leaving camps, whereas the camp movements dataset collected in 2019 only records their subdistricts of origin.

References

Akresh, Richard, Leonardo Lucchetti, and Harsha Thirumurthy. 2012. 'Wars and Child Health: Evidence from the Eritrean–Ethiopian Conflict'. *Journal of Development Economics* 99 (2): 330–40.

Alam, Ashraful, Indranil Dutta, M. Emranul Haque, and Ricardo Nogales. 2022. 'Impact of Rohingya Refugees on Food Prices in Bangladesh: Evidence from a Natural Experiment'. *World Development* 154: 105873.

Alhawarin, Ibrahim, Ragui Assaad, and Ahmed Elsayed. 2021. 'Migration Shocks and Housing: Short-Run Impact of the Syrian Refugee Crisis in Jordan'. *Journal of Housing Economics* 53. 101761.

Ali, Majid Hassan. 2019. 'Aspirations for Ethnonationalist Identities among Religious Minorities in Iraq: The Case of Yazidi Identity in the Period of Kurdish and Arab Nationalism, 1963–2003'. *Nationalities Papers* 47 (6): 953–67.

Alix-Garcia, Jennifer, Anne Bartlett, and David Saah. 2012. 'Displaced Populations, Humanitarian Assistance and Hosts: A Framework for Analyzing Impacts on Semi-Urban Households'. *World Development* 40 (2): 373–86.

Alix-Garcia, Jennifer, and David Saah. 2010. 'The Effect of Refugee Inflows on Host Communities: Evidence from Tanzania'. *The World Bank Economic Review* 24 (1): 148–70.

Alix-Garcia, Jennifer, Sarah Walker, Anne Bartlett, Harun Onder, and Apurva Sanghi. 2018. 'Do Refugee Camps Help or Hurt Hosts? The Case of Kakuma, Kenya'. *Journal of Development Economics* 130: 66–83.

Al-Jamil, Tariq. 2008. 'Tigris and Euphrates Rivers'. *Oxford Encyclopedia Of The Modern World*. https://works.swarthmore.edu/fac-religion/194.

Al Janabi, Taysir. 2023. 'Barriers to the Utilization of Primary Health Centers (PHCs) in Iraq'. *Epidemiologia* 4 (2): 121–33.

Al-Shaikhly, Sulaf, and Jean Cui. 2017. 'Education in Iraq'. WENR. 2017. https://wenr.wes.org/2017/10/education-in-iraq.

Al-Shami, Salma, and Rochelle Davis. 2020. 'Access to Durable Solutions Among IDPs in Iraq'. IOM and Center for Contemporary Arab Studies, Georgetown University.

Associated Press. 2023. 'Residents, Aid Workers Surprised by Closure of Iraqi Camp', 2023. https://www.voanews.com/a/residents-aid-workers-surprised-by-closure-of-iraqi-camp-/7056221.html.

Baez, Javier E. 2011. 'Civil Wars beyond Their Borders: The Human Capital and Health Consequences of Hosting Refugees'. *Journal of Development Economics* 96 (2): 391–408.

Ballard, Terri, Jennifer Coates, Anne Swindale, and Megan Deitchler. 2011. 'Household Hunger Scale: Indicator Definition and Measurement Guide'.

Bauer, Thomas K., Regina Flake, and Mathias G. Sinning. 2013. 'Labor Market Effects of Immigration: Evidence from Neighborhood Data'. *Review of International Economics* 21 (2): 370–85.

Blair, Christopher, and Austin L. Wright. 2021. 'Refugee Return and Conflict: Evidence from a Natural Experiment'. *SSRN Electronic Journal*.

Card, David. 1990. 'The Impact of the Mariel Boatlift on the Miami Labor Market'. *Industrial and Labor Relations Review* 43 (2): 245–57.

Cavatorta, Elisa, Wendy Janssens, and Alice Mesnard. 2023. 'Gendered Barriers to Formal Healthcare Utilization: Modelling Healthcare Demand in a Low-Resource Setting.' *Economic Development and Cultural Change*, October, 728096.

CCCM Cluster. 2017. 'Iraq - CCCM Settlement Status Report'.

CCCM Cluster.. 2020a. 'Iraq Camp Master List and Population Flow - September 2020'.

CCCM Cluster.. 2020b. 'Technical Guidance on Informal Site Definition v.2'.

CCCM Cluster, Protection Cluster, and Iraq Information Centre. 2020. 'Camp Departure Follow-up Survey'.

Chevalier, Arnaud, Benjamin Elsner, Andreas Lichter, and Nico Pestel. 2023. 'Forced Migration and Local Public Policies: Evidence from Post-War West Germany'. *Journal of the European Economic Association*, jvad043.

CIVIC. 2021. 'Ignoring Iraq's Most Vulnerable: The Plight of Displaced Persons'. Center for Civilians in Conflict.

Conley, T.G. 1999. 'GMM Estimation with Cross Sectional Dependence'. *Journal of Econometrics* 92 (1): 1–45.

CSO. 2024. 'Demographic Indicators'. Central Statistical Organization Iraq.

CSO, KRSO, and ILO. 2021. 'Iraq Labour Force Survey 2021'. Central Statistical Organization Iraq, Kurdistan Region Statistics Office and International Labour Organization.

Del Carpio, Ximena V., and Mathis Wagner. 2015. 'The Impact of Syrian Refugees on the Turkish Labor Market'. *World Bank Policy Research Working Paper 7402*.

Depetris-Chauvin, Emilio, and Rafael J. Santos. 2018. 'Unexpected Guests: The Impact of Internal Displacement Inflows on Rental Prices in Colombian Host Cities'. *Journal of Development Economics* 134: 289–309.

Dr. M. Izady, *Atlas of the Islamic World and Vicinity* (New York, Columbia Univ., 2006-present), @gulf2000.columbia.edu/maps.shtml, II.A.30

Elvidge, C. D., M. Zhizhin, T. Ghosh, and F-C. Hsu. 2021. 'Annual Time Series of Global VIIRS Nighttime Lights Derived from Monthly Averages: 2012 to 2019'. *Remote Sensing*.

Errico, Marco d', Rama Dasi Mariani, Rebecca Pietrelli, and Furio Camillo Rosati. 2022. 'Refugee-Host Proximity and Market Creation in Uganda'. *The Journal of Development Studies* 58 (2): 213–33.

European Asylum Support Office. 2020. 'Iraq: Treatment of Iraqis with Perceived Affiliation to ISIL'.

FAO. 2014. '2014/2015 Iraq Strategic Response Plan'. Food and Agriculture Organization.

Foreman, Tim. 2020. 'IV Regression in Stata with Spatial and Serial Correlation in the Error Term'. 2020. https://timforeman.net/2020/11/16/iv-regression-in-stata-with-spatial-and-serial-correlation-in-the-error-term/.

Fouka, Vasiliki, Soumyajit Mazumder, and Marco Tabellini. 2022. 'From Immigrants to Americans: Race and Assimilation during the Great Migration'. *The Review of Economic Studies* 89 (2): 811–42.

George, Justin, and Adesoji Adelaja. 2022. 'Armed Conflicts, Forced Displacement and Food Security in Host Communities'. *World Development* 158 (October): 105991.

Global Shelter Cluster. 2021. 'Shelter Project 8th Edition. Case Studies of Humanitarian Shelter and Settlement Responses 2019-2020'.

Goodman, S, A BenYishay, Z Lv, and D Runfola. 2019. 'GeoQuery: Integrating HPC Systems and Public Web-Based Geospatial Data Tools'. *Computers and Geosciences* 122: 103–12.

IDMC. 2020. 'Unveiling the Cost of Internal Displacement'. Internal Displacement Monitoring Centre.

IDMC. 2023. 'Internal Displacement and Food Security'. Internal Displacement Monitoring Centre.

IDMC. 2024. 'Global Report on Internal Displacement'. Internal Displacement Monitoring Centre.

IOM. 2018. 'IOM DTM Iraq December 2018 IDP Masterlist'. International Organization for Migration.

IOM 2020a. 'Cities as Home. Describing the Regulatory Landscape Around COVID-19 and Its Implications for the Local Integration of IDPs in Urban Areas of Iraq.' International Organization for Migration.

IOM. 2020b. 'Integrated Location Assessment V'. International Organization for Migration.

IOM. 2021a. 'An Overview of Displacement in Iraq'. International Organization for Migration.

IOM. 2021b. 'Iraq Crisis Response Plan 2021'. International Organization for Migration

IOM. 2021c. 'Protracted Displacement in Iraq: Revisiting Categories of Return Barriers - January 2021 - Iraq | ReliefWeb'. International Organization for Migration. 2021.

IOM Returns Working Group. 2021. 'MoMD Return Grant Update'.

Iraqi Ministry of Migration and Displacement, and Iraqi Ministry of Planning. 2020. 'The National Plan for Returning the IDPs to Their Liberated Areas'.

Jabro, Evan Faek. 2021. Al-Ashera show: Evan Faek, Minister of Displacement and Migration, Closure of some camps caused harm to the interests of some politicians. Al Iraqiya TV. https://www.youtube.com/watch?v=Va-FJTsM1SA.

Jimenez-Damary, Cecilia. 2020. ‘End of Mission Statement by the United Nations Special Rapporteur on the Human Rights of Internally Displaced Persons, Ms. Cecilia Jimenez-Damary, upon Conclusion of Her Official Visit to Iraq – 15 to 23 February 2020’. The United Nations.

Kadigo, Mark Marvin, and Jean-Francois Maystadt. 2023. ‘How to Cope with a Refugee Population? Evidence from Uganda’. *World Development* 169: 106293.

Khaleel, Ahmed. 2019. ‘The Future of the Iraqi Sunni Arabs’. In *Iraq After ISIS*, edited by Jacob Eriksson and Ahmed Khaleel, 39–55. Cham: Springer International Publishing.

Khan, Muhammad Fawad, Daniel Jeannetot, Kamal Sunil Olleri, Mirjam Bakker, Altaf Sadrudin Musani, Adham Rashad Ismail Abdel Moneim, Wael Hatahit, and Prisca Zwanikken. 2021. ‘An Assessment of the Quality of Care Provided at Primary Health Care Centres in Camps for Internally Displaced Persons in Iraq in 2018’. *Conflict and Health* 15 (1): 67.

Kreibaum, Merle. 2016. ‘Their Suffering, Our Burden? How Congolese Refugees Affect the Ugandan Population’. *World Development* 78: 262–87.

Krishnan, Nandini, Sergio Olivieri, and Racha Ramadan. 2019. ‘Estimating the Welfare Costs of Reforming the Iraq Public Distribution System: A Mixed Demand Approach’. *The Journal of Development Studies* 55 (sup1): 91–106.

Maystadt, Jean-François, and Gilles Duranton. 2019. ‘The Development Push of Refugees: Evidence from Tanzania’. *Journal of Economic Geography* 19 (2): 299–334.

Maystadt, Jean-François, Kalle Hirvonen, Athur Mabiso, and Joachim Vandercasteelen. 2019. ‘Impacts of Hosting Forced Migrants in Poor Countries’. *Annual Review of Resource Economics* 11: 439–59.

Maystadt, Jean-François, Valerie Mueller, Jamon Van Den Hoek, and Stijn Van Weezel. 2020. ‘Vegetation Changes Attributable to Refugees in Africa Coincide with Agricultural Deforestation’. *Environmental Research Letters* 15 (4): 044008.

Maystadt, Jean-François, and Philip Verwimp. 2014. ‘Winners and Losers among a Refugee-Hosting Population’. *Economic Development and Cultural Change* 62 (4): 769–809.

Mohsin, Kouther, Layth Mula-Hussain, and Richard Gilson. 2024. ‘HealthCare Access Barrier (HCAB) Framework for the Barriers to Cancer Care during Conflicts: Perspective from Iraq’. *BMJ Oncology* 3 (1)

MoP Iraq, MoP Kurdistan Iraq, and CSO. 2019. ‘Assessment of the Labour Market & Skills Analysis’. Ministry of Planning of Iraq, Ministry of Planning of the Kurdistan Region of Iraq, and Iraq Central Statistical Organization.

Morales, Juan S. 2018. ‘The Impact of Internal Displacement on Destination Communities: Evidence from the Colombian Conflict’. *Journal of Development Economics* 131: 132–50.

Nsababera, Olive. 2020. ‘Refugee Camps – A Lasting Legacy? Evidence on Long-Term Health Impact’. *Economics & Human Biology* 39: 100926.

OCHA. 2020. ‘Humanitarian Response Plan Iraq’. United Nations Office for the Coordination of Humanitarian Affairs.

OCHA 2021a. ‘Humanitarian Response Plan Iraq’. Humanitarian Programme Cycle. United Nations Office for the Coordination of Humanitarian Affairs.

OCHA. 2021b. ‘Iraq Humanitarian Needs Overview Iraq’. United Nations Office for the Coordination of Humanitarian Affairs (OCHA).

OCHA. 2021c. ‘Situation and Needs Monitoring’. 1. United Nations Office for the Coordination of Humanitarian Affairs.

Rozo, Sandra V., and Micaela Sviatschi. 2021. ‘Is a Refugee Crisis a Housing Crisis? Only If Housing Supply Is Unresponsive’. *Journal of Development Economics* 148: 102563.

Ruiz, Isabel, and Carlos Vargas-Silva. 2013. ‘The Economics of Forced Migration’. *The Journal of Development Studies* 49 (6): 772–84.

Ruiz, Isabel, and Carlos Vargas-Silva . 2015. ‘The Labor Market Impacts of Forced Migration’. *American Economic Review* 105 (5): 581–86.

Stansfield, Gareth. 2016. ‘Explaining the Aims, Rise, and Impact of the Islamic State in Iraq and al-Sham’. Edited by Jean-Pierre Filiu, Michael Weiss, Hassan Hassan, Patrick Cockburn, Abdel Bari Atwan, Jessica Stern, J.M. Berger, Charles Lister, and William McCants. *Middle East Journal* 70 (1): 146–51.

Stock, James H., and Motohiro Yogo. 2005. ‘Testing for Weak Instruments in Linear IV Regression’. In *Identification and Inference for Econometric Models: Essays in Honor of Thomas Rothenberg*, edited by Donald W. K. Andrews and James H. Stock, 80–108. Cambridge: Cambridge University Press.

Stoddard, Abby, Paul Harvey, Monica Czwarno, and Meriah-Jo Breckenridge. 2021. ‘Humanitarian Access SCORE Report: Iraq’. Coverage, Operational Reach and Effectiveness and USAID.

Sundberg, Ralph, and Erik Melander. 2013. ‘Introducing the UCDP Georeferenced Event Dataset’. *Journal of Peace Research* 50 (4).

UNHCR. 2016. ‘Iraq - Internally Displaced’. 2016. Office of the United Nations High Commissioner for Refugees.

UNHCR. 2021. ‘Iraq Fact Sheet’. Office of the United Nations High Commissioner for Refugees.

UNHCR. 2023. ‘UNHCR Iraq Factsheet’. Office of the United Nations High Commissioner for Refugees.

Verme, Paolo, and Kirsten Schuettler. 2021. ‘The Impact of Forced Displacement on Host Communities: A Review of the Empirical Literature in Economics’. *Journal of Development Economics* 150: 102606.

WFP. 2022. ‘IRAQ Market Monitor Report’. 31. World Food Programme.

WFP 2023. ‘Livelihood Coping Strategies Indicator for Essential Needs.’ World Food Programme.

World Bank. 2017. ‘Iraq Systematic Country Diagnostic’. 112333-IQ.