

# Ireland, Famine, Migration :

## Analysis and Implications

Preliminary: don't cite without consulting author

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*Moscow, 26 November 2018*

# Famine as History

- Peacetime famines in the past—*for now*
- Famine -> Hunger -> Malnutrition
- Horrors of famine recede
- But famine may return...

1960 – 1980s



- Famine
- Rattling Tins
- Lenten fasts
- Private Charity
- Independent

Since

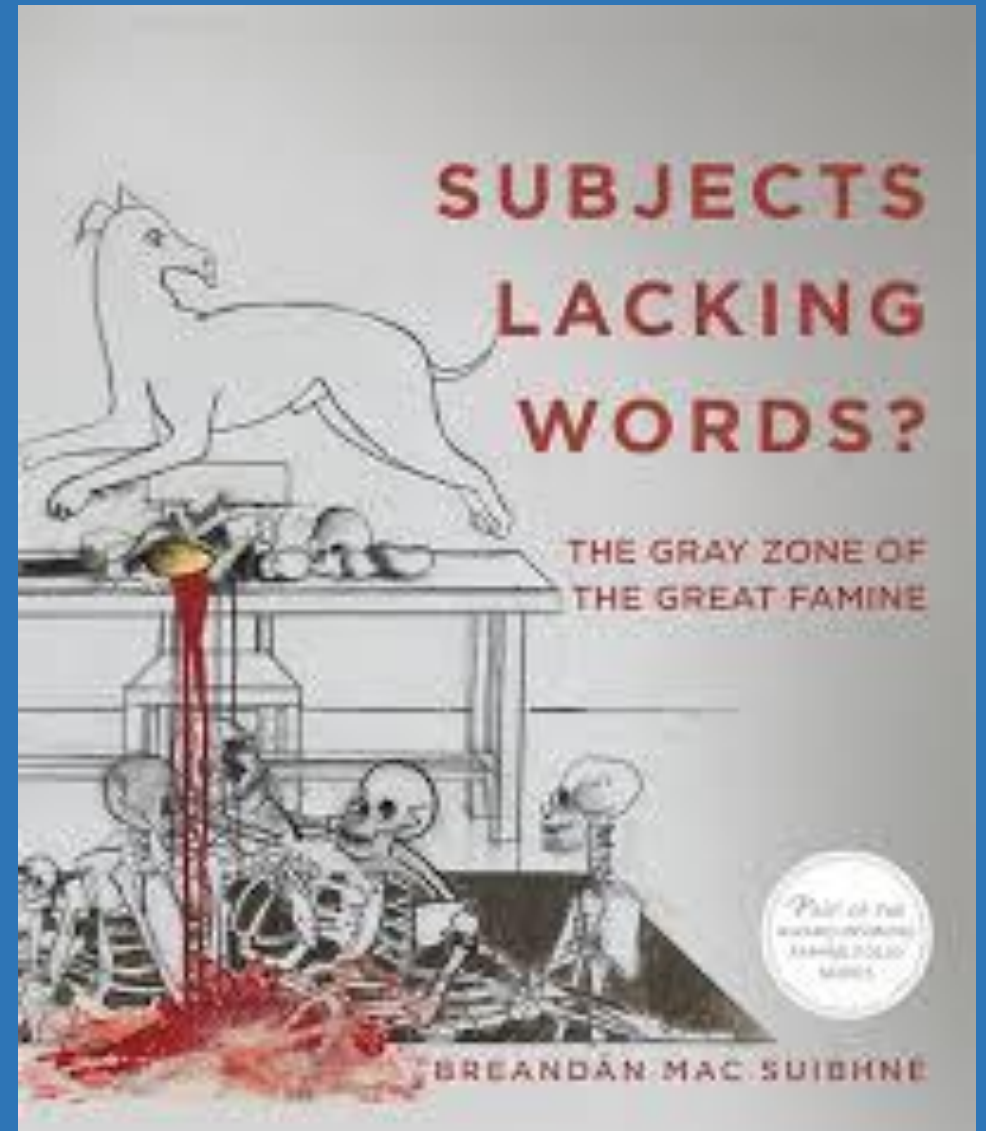


Development  
Direct debit  
On-street fundraisers  
Public Funding  
Agent of State

# Famine as 'Gray Zone'

[Primo Levi, *I sommersi e i salvati*, 1986]

- Cruelty, terror
- Obsessive self-absorption
- Anti-social behaviour
- Suicide
- Infanticide
- Cannibalism



George O'Brien [1921]:  
“The destiny of Ireland in  
the early 19th century  
was very largely  
moulded by the ideas of  
two great economists,  
Adam Smith and  
Malthus, and of the two,  
the latter was probably  
the more influential.”

Joel Mokyr [1983]:  
“At least as far as  
pre-famine Ireland  
is concerned,  
Malthusian  
models seem to  
have little  
explanatory  
power.”

# MALTHUS AND PRE-FAMINE POVERTY

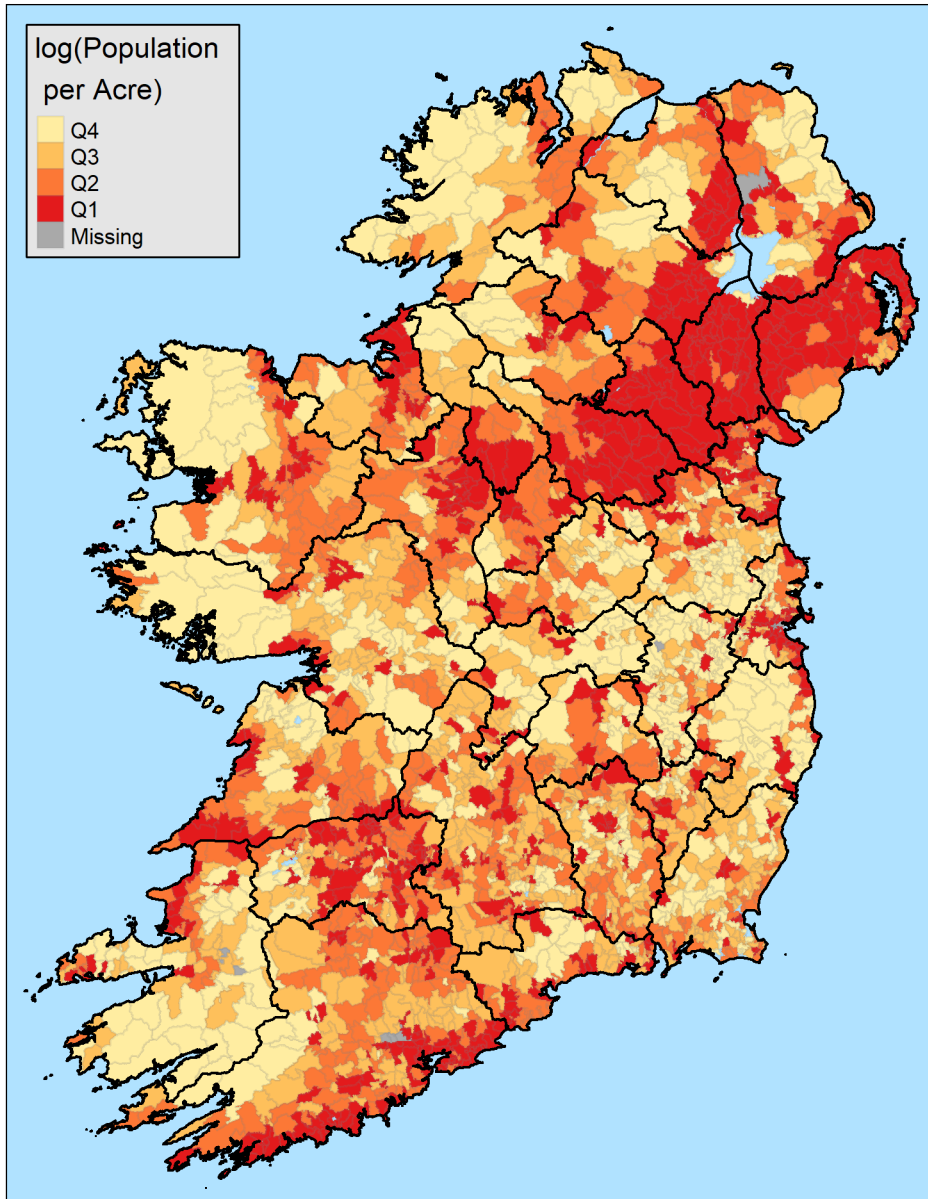
- Connell [1950]; Mokyr [1985]
- Cross-section approach,  $n > 2,000$  [Fernihough and Ó Gráda 2018]
- PLV proxies land quality
- POP/PLV; geography; institutions



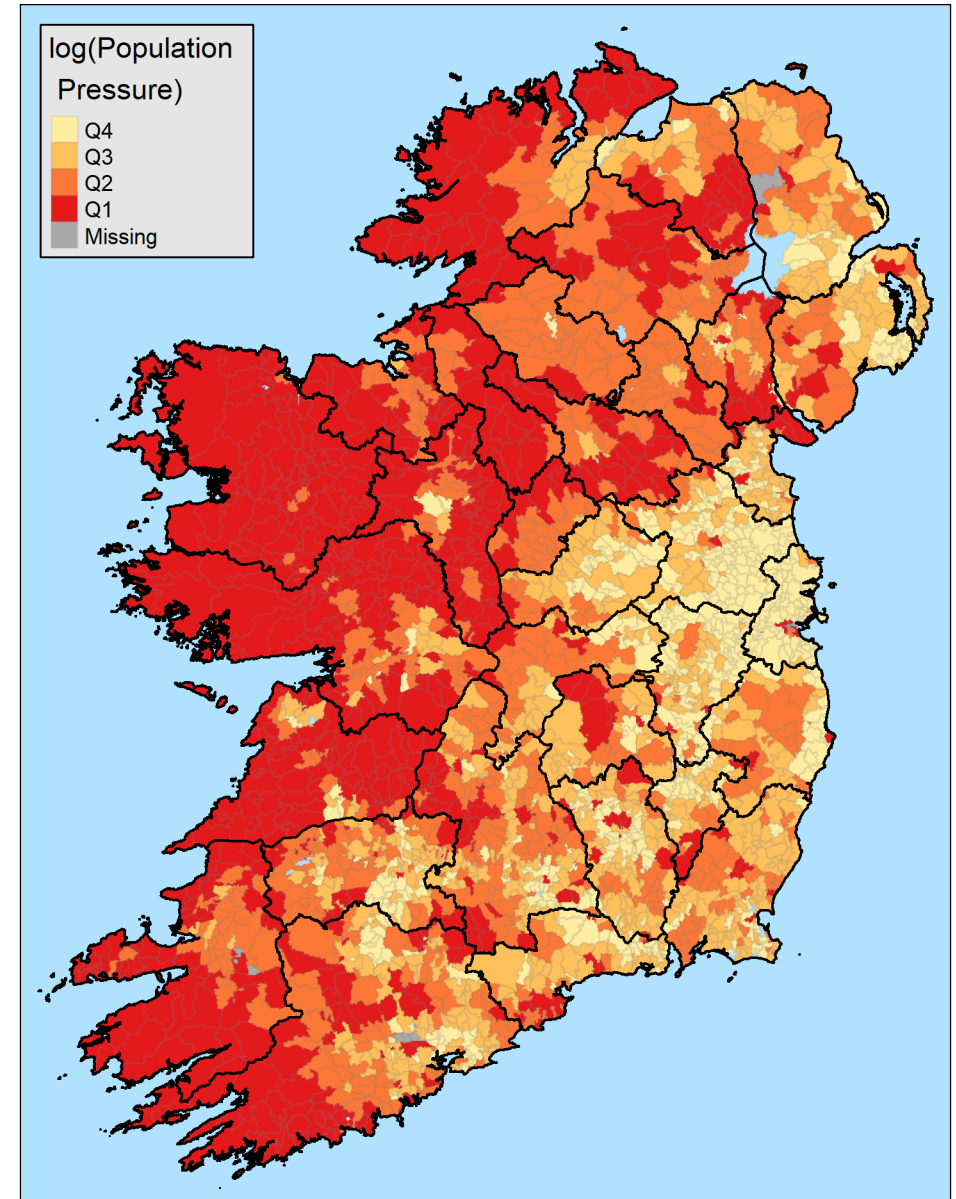
TESTING MALTHUS: MOKYR, <i>Why Ireland Starved</i> [1985: 50]					
Dep. variable	Wage	Income per capita	Wage	Income per capita	Wage
<i>Land quality index</i>	<i>Proportion cultivated</i>	<i>Altitude variance</i>	<i>Rent per acre</i>	<i>Proportion unimprovable</i>	<i>Mean altitude</i>
Constant	2.17***	5.29***	0.77*	5.22***	1.80***
PPV [efficiency units]	-0.23***	0.022	0.13***	0.05	-0.063
CAPLAB	0.24***	0.92***	0.21***	0.73	0.14
Literacy	1.14	0.84	0.75	1.66	0.63
housing quality	-2.37***	-3.31***	-0.72	-2.47***	-1.56***
large industry			3.28***		
no LF in Man.	1.26	1.91		1.81*	1.93***
Urban	1.97***	5.04***	1.81***	4.94***	2.21***
F	30.7	49.6	63.2	69.1	25.3



# Population per Acre

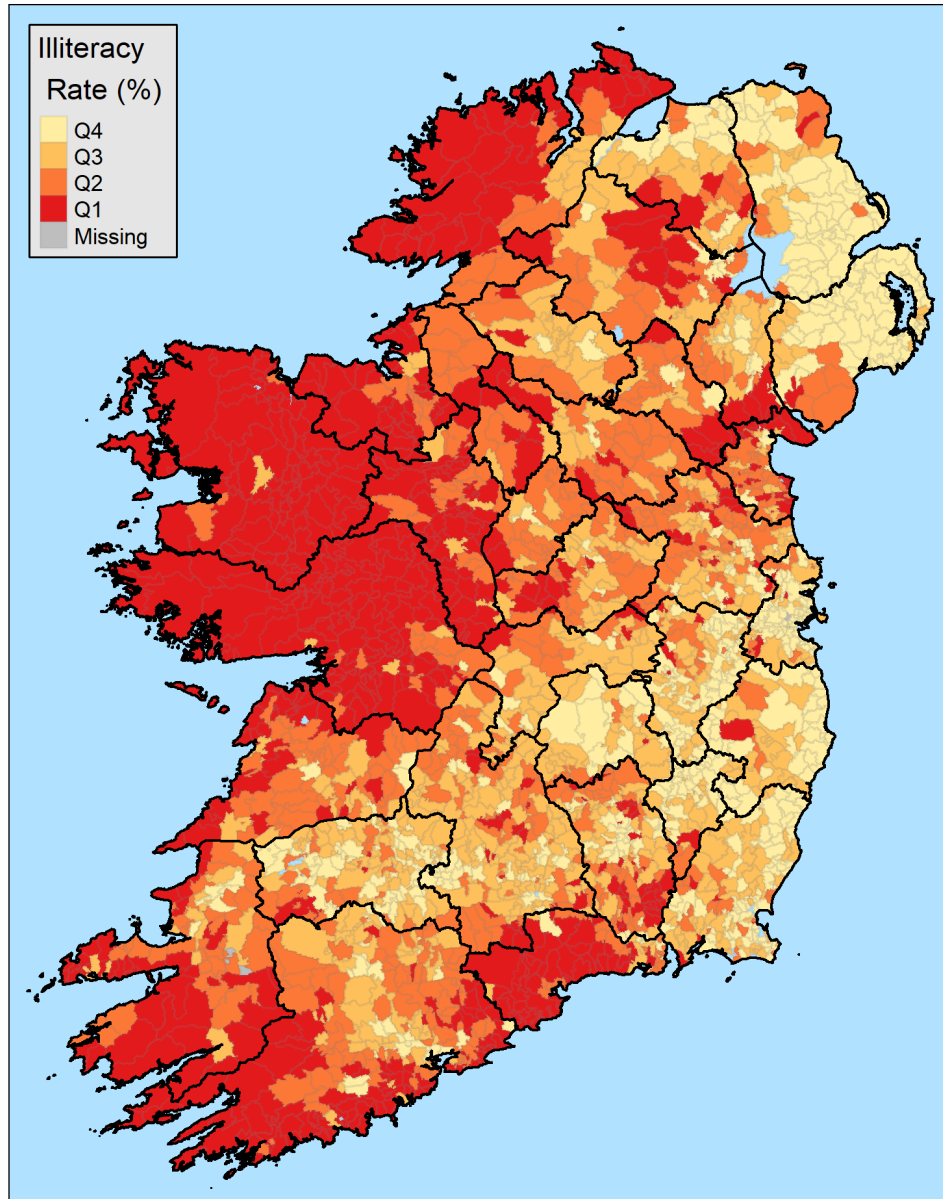


# Population per Value

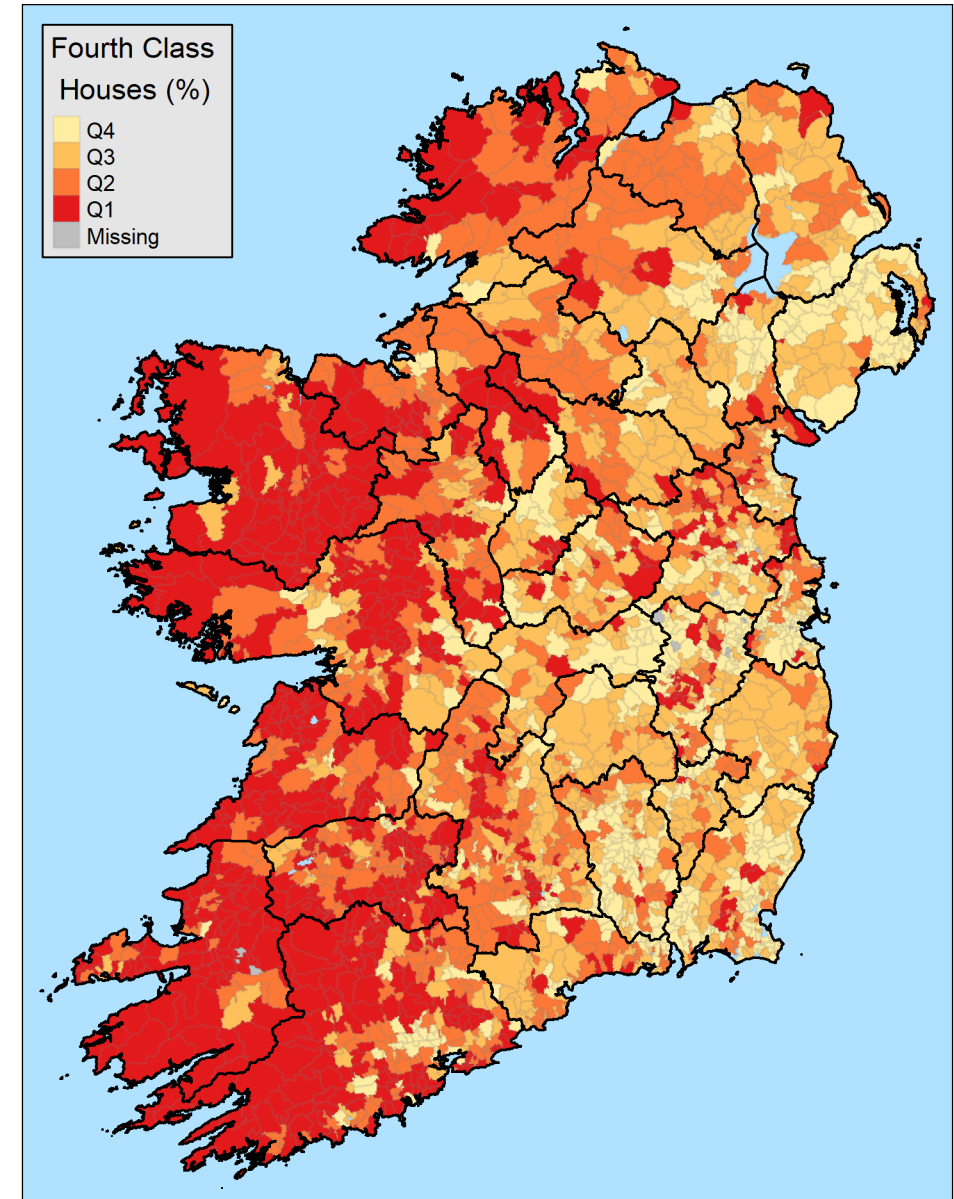




# Illiteracy



# Bad Housing



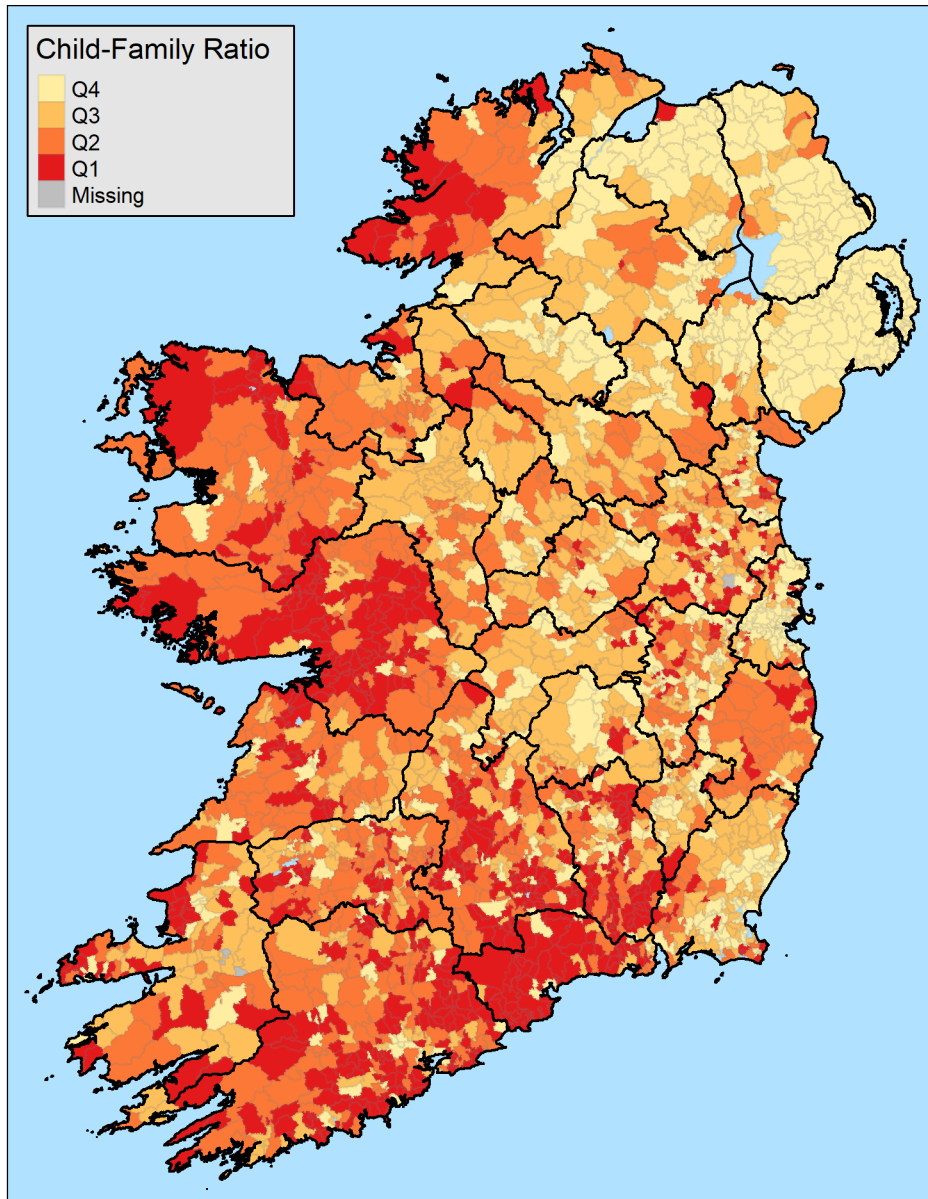
Regressions of SOL on Population Pressure [PP]				
	% 4th Class Houses		% Illiteracy	
Constant	36.235***	36.235***	72.986***	72.986***
PP	3.840***	2.952***	3.445***	2.681***
Coast		1.440***		0.123
Agriculture		1.686***		1.680***
Catholic		0.032		2.673***
Par Town Pop		-1.623***		-0.961***
Distance Town		-1.499***		0.354***
Vested Means		-1.203***		-1.548***
City		12.556***		4.302***
Enc. Estates		-0.105		0.020
C17 <sup>th</sup> Road		-0.031		-0.051
Sex Ratio		-0.158		-0.551***
Latitude		-0.797		2.763***
Longitude		5.045**		-0.522
N	2,387	2,387		2,387

# MALTHUS and MOKYR

Re. second equation: *'The results are disappointing, to say the least. The majority of all exogenous variables have coefficients not significantly different from zero... Those that are not are sensitive to specification...'* [1985: 52]

Exception: Low quality of housing variable explains/follows population growth

# Fertility c. 1840



Significant  
regional  
[N-S]  
variation

# Fertility (Child-Family Ratio) Regressions

	1	2	3
Population Pressure	-0.033	-0.179***	-0.211***
Literacy (%)		0.369***	0.298***
Agriculture (%)		0.338***	0.337***
Catholic (%)		0.001	0.068**
Parish Town Population		-0.091***	-0.098***
Encumbered Estates (%)		0.053	0.007
Latitude		-0.229***	-0.247
County FE	N	N	Y
Observations	2,387	2,387	2,387
Adjusted R <sup>2</sup>	0.001	0.549	0.595

Notes: All columns regress the fertility (Z-score) variable on the indicated covariates. All covariates are expressed in terms of Z-scores and thus the coefficients are comparable. The reported standard errors are spatial HAC standard errors as outlined in Piras (2010) wherein a parish’s neighbours is made up of all parishes less than the median of the distribution of all distances between parishes. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1.



# *Child-family ratio as function of PP and other variables*

N = 2,387

Raw correlation between PP and fertility weak

- Adding explanatory variables -> PP *negatively* connected to fertility
- Result counters view of no preventive check before famine
- Also counters 'Princeton result'



# OLS Regressions with Fertility and Population Growth 1821–41 as Outcomes

	Fertility		Pop. Growth 1821-41	
	1	2	3	4
Intercept	2.201 ***	2.201 ***	21.63 **	21.63 **
Pop Pressure	-0.013 ***	-0.024 ***	10.62 ***	8.92 ***
Coast	0.003	0.003	2.98 ***	3.07 ***
Manufacturing %	-0.025 ***	-0.019 ***	-2.02	-1.15
Other %	-0.030 ***	-0.027 ***	0.20	0.88
Catholic %	0.021 ***	0.009 ***	-1.13	-2.42
Par Town Pop %	-0.017 ***	-0.013 ***	-0.90	-0.24
Distance Town	0.002	0.001	1.15	0.60
Vested Means %	0.003 *	0.010 ***	0.19	0.73
Distance City	0.036 ***	0.022 *	-39.60 ***	-41.07 **
EE [%]	-0.000	-0.000	0.78	0.84
Distance 17 <sup>th</sup> Road	0.003	0.003	-0.06	0.00
Sex Ratio	0.004 **	0.007 ***	1.17	1.59
Lat	0.007	-0.006	-11.95 ***	-12.76 **
Long	0.008	0.012	-22.46 ***	-21.18 **
Illiteracy %		0.042 ***		4.00 **
4 <sup>th</sup> Class Hsng %		-0.007 ***		3.313 ***
Observations	2,387	2,387	1,519	1,519

Notes: Columns (1) and (2) regress logged fertility (child-family ratio) and columns (3) and (4) regress population growth between 1821 and 1841 (%) on the indicated covariates. All covariates are expressed in terms of Z-scores and thus the coefficients are comparable. Residual autocorrelation was addressed in all models by transforming the outcome and all regressors via the eigenvector spatial filtering method detailed in Murakami (2018). \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

# MALTHUS AND THE PRE-FAMINE ECONOMY

- Population pressure mattered
- So did remoteness, presence of elites
- Evidence of preventive check
- Malthus *half* right

# Great Irish Famine of 1840s

- Western Europe's 2<sup>nd</sup>-last peacetime famine
- 1 m. dead, 1 m. emigrated
- Product of *ecological shock*



Nassau Senior to de Tocqueville:

*'experiments made on so large a scale, and pushed to their extreme consequences in the sufferings they inflict, that they give us results as precious as those of Majendie'*



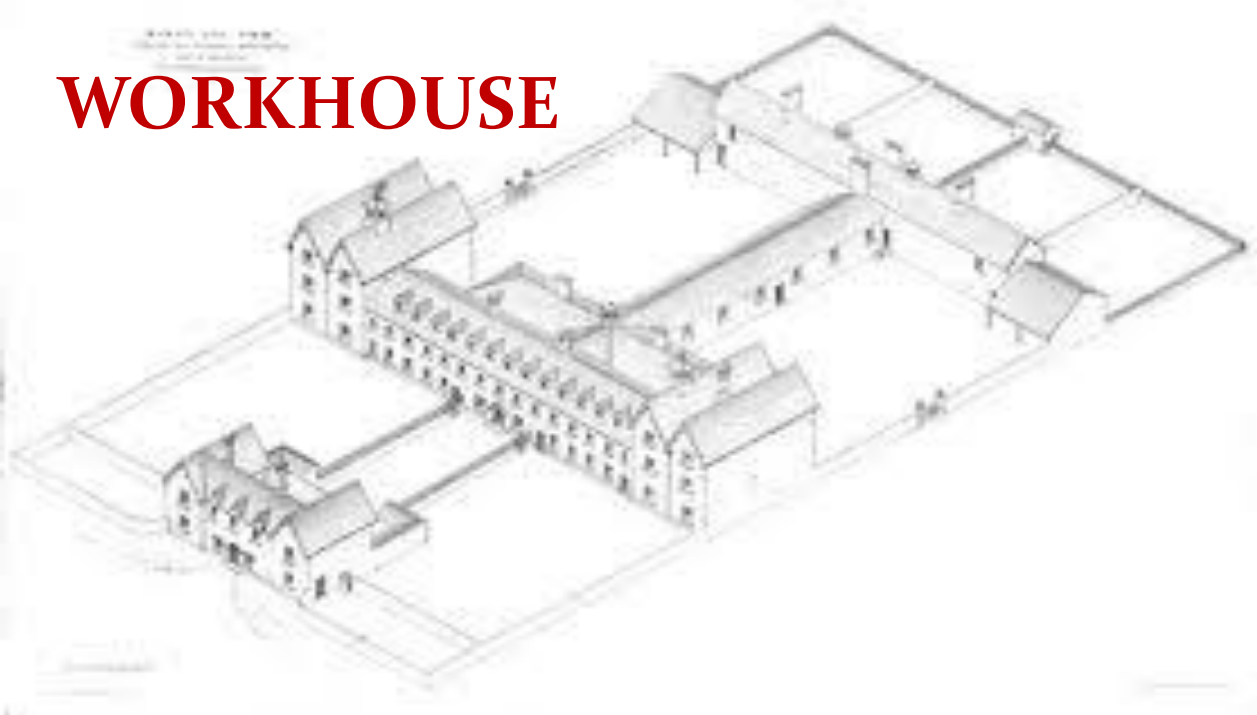
**PUBLIC WORKS**



**SOUP**



**WORKHOUSE**



**ASSISTED MIGRATION**



# Writing on the Wall

*The circulating Medium of Ireland for agricultural Purposes is to a great Extent the Potato ... the Labourers are paid in Potato by the Farmer who would be utterly unable to pay them in any other Manner. The Failure, therefore, of the Potato ... The Farmers of Ireland have no Means of replacing the Potato Currency, so to speak, with any other.*

Aubrey de Vere, 19 July 1847



# Emigration or DEATH:

*After the destruction of the potato crop, it became evident that... the amount of the population and the amount of food were no longer adequate to each other, and that the former must be diminished or the latter increased before the country could be restored to a state of safety. The diminution of the population had gone on. It was impossible to deny but that many persons had died... But, in addition to this, emigration had gone on to a considerable extent, to nearly half a million in two years, principally to America.*

Charles Wood, 7 February 1849



And Again...

*Nothing can effectually and immediately save the country **without an extensive emigration.** And I have not met in Town, or in Country, a reflecting man who does not entertain more or less the same opinion.*

Ulick de Burgh, Earl of Clanricarde, 8 January 1847

# Migration as Famine Relief

- Classic coping mechanism
- Provides relief, reduces pressure on land
- But disease, anti-migrant sentiment
- Internal; temporary

# Migration as Famine Relief

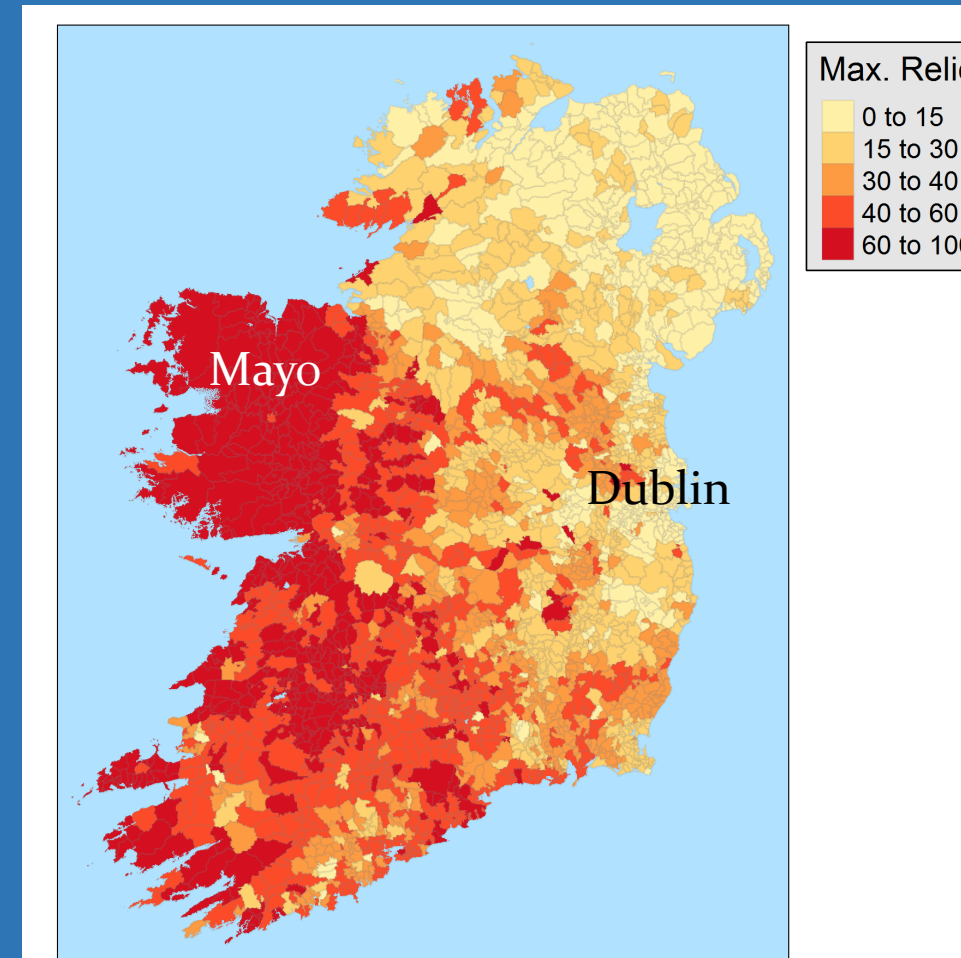
China in 1959-61:  
Restricted, but still  
common

Bengal in 1943:  
mass migration  
into urban areas



# Internal Migration in Ireland

- Economic backwardness => small before Famine
- Number of Mayo-born (pop. 0.4 m) living in Dublin rose by 422 in 1841-51
- Distance and income mattered
- No panacea
- But de Burgh meant *emigration*





# Context: Golden Age of Mass Migration

- Unprecedented, once-off
- 1840-1914: >50 million
- Win, win [?]
- Poorest in Ireland, Italy benefitted significantly. BUT



# Irish Emigration During the Famine

- Part of tragedy, *part of solution*
- Outflow to GB/NA rose in 1820s and 1830s
- No Mexican Walls
- Networks
- Persistence
- Safety valve
- Saved *many* lives





# Pre-Famine Migration: Too Little, Too Late

Irish-born 1.8% of English population in 1841

Migration to US **before Famine** constrained by cost

More leaving would have meant:

- Lower population, more remittances
- More famine migration

# The Highlands and Ireland

*It is likely that the Highlands came very close indeed to the margin that would have produced an Irish-type catastrophe: one estimate put the numbers who might have died in 1836-7 without external relief at 80,000, and it would have been even higher in the 1840s. Had there been more people - had there been no clearances or earlier outmigration - could the situation have been saved?*

Flinn et al. [1977]

# The [Scottish] Highland Clearances

Late c18 and early c19

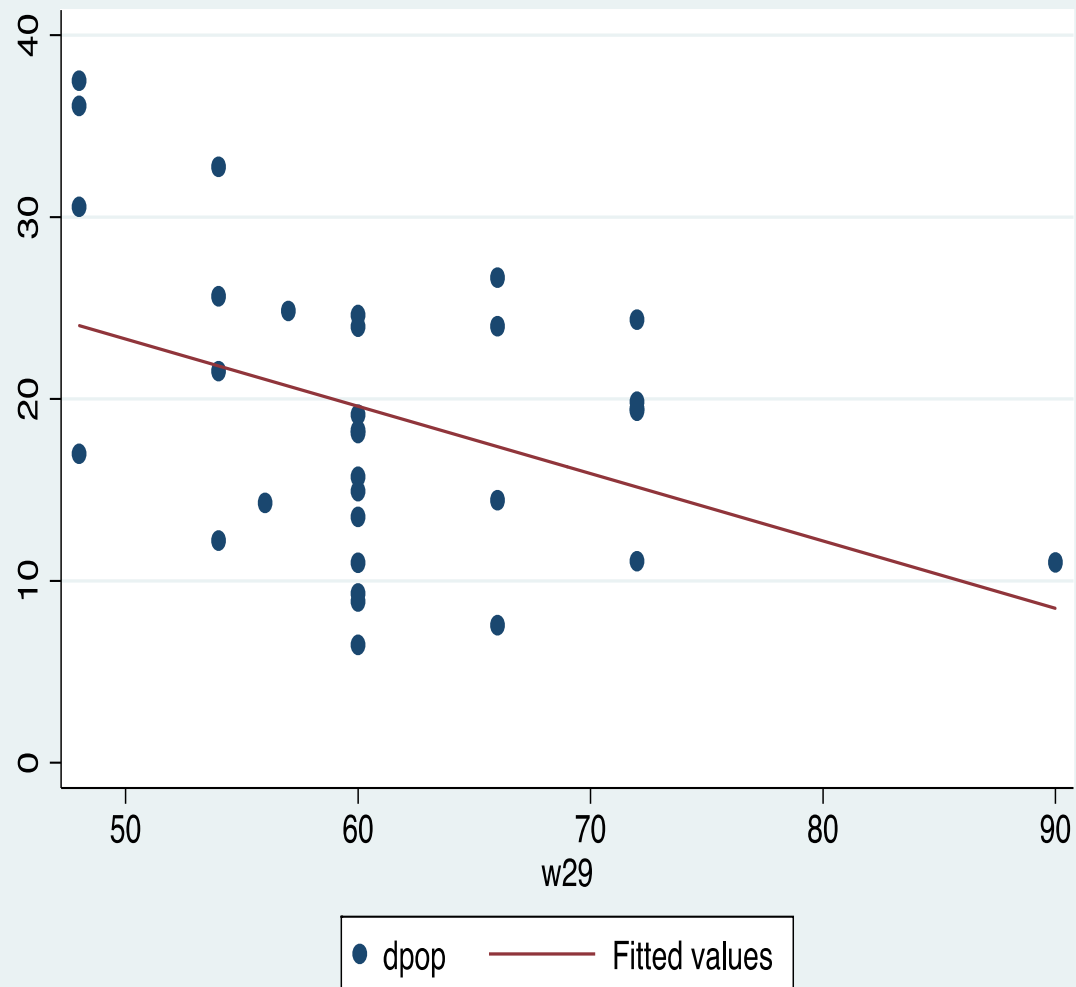
Part of Scottish Agricultural Revolution

Creditors could foreclose;  
tenants had no legal rights

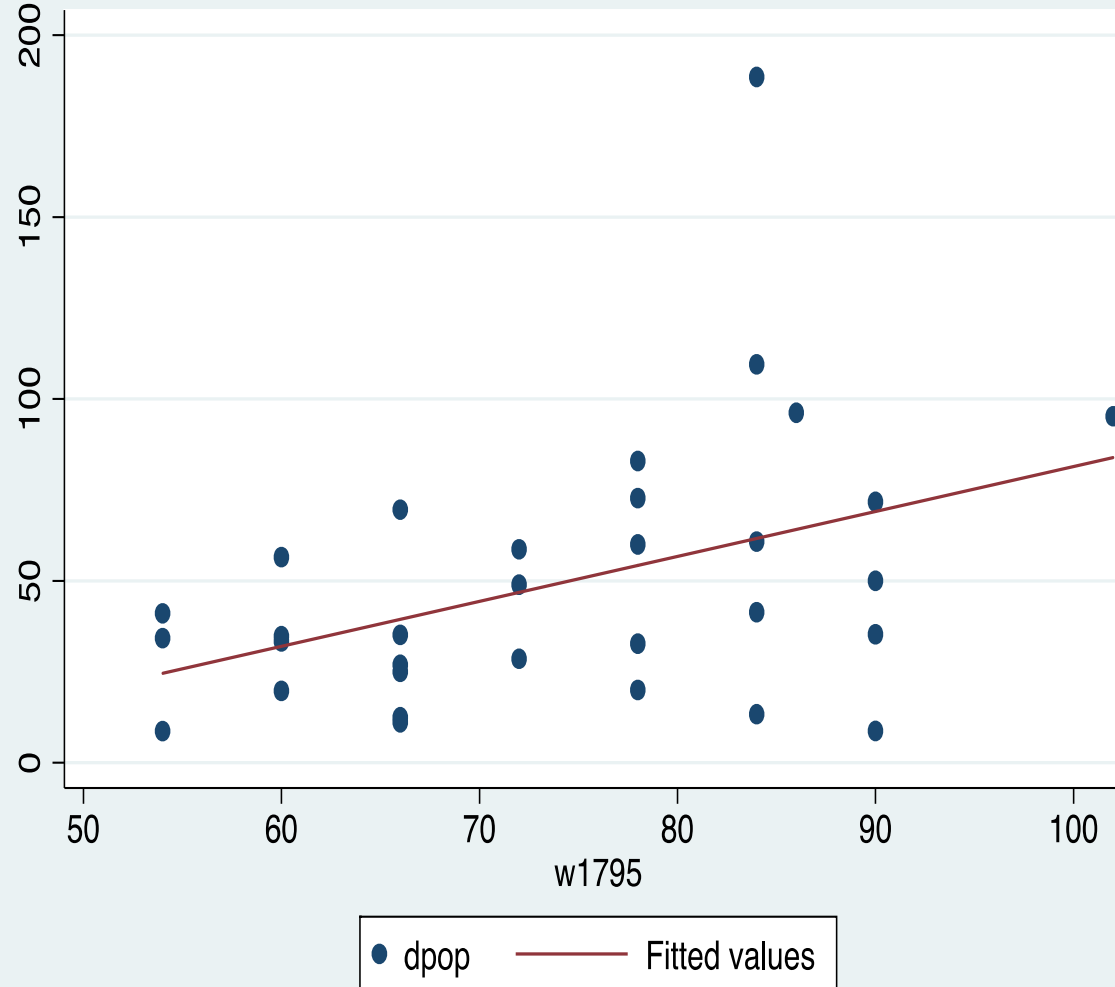


Population in Highland Counties and in Irish Provinces, c. 1750-1841 (1,000s)					
	Year			Change [%]	
<i>County</i>	<i>c. 1755</i>	<i>1801</i>	<i>1841</i>	<i>1755-1801</i>	<i>1801-41</i>
Argyle	66	81	97	22	20
Inverness	60	73	98	22	34
Ross & Cromarty	48	56	79	17	41
Sutherland	21	23	25	10	9
	<i>1749</i>	<i>1790</i>	<i>1841</i>	<i>1749-1790</i>	<i>1790-1841</i>
Leinster	720	1,180	1,969	64	67
Munster	580	1,200	2,394	107	100
Ulster	570	1,430	2,395	151	68
Connacht	260	610	1,417	135	132

# IRELAND

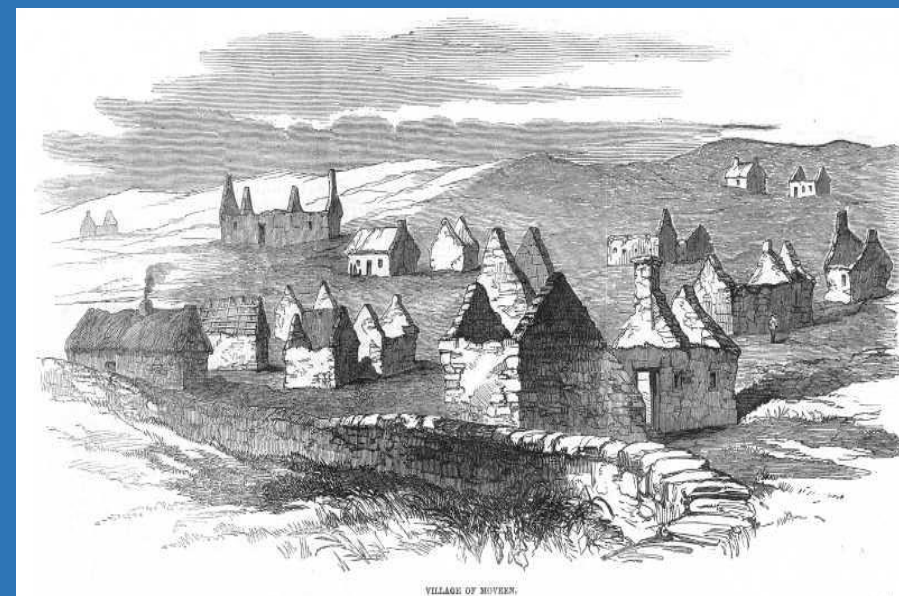
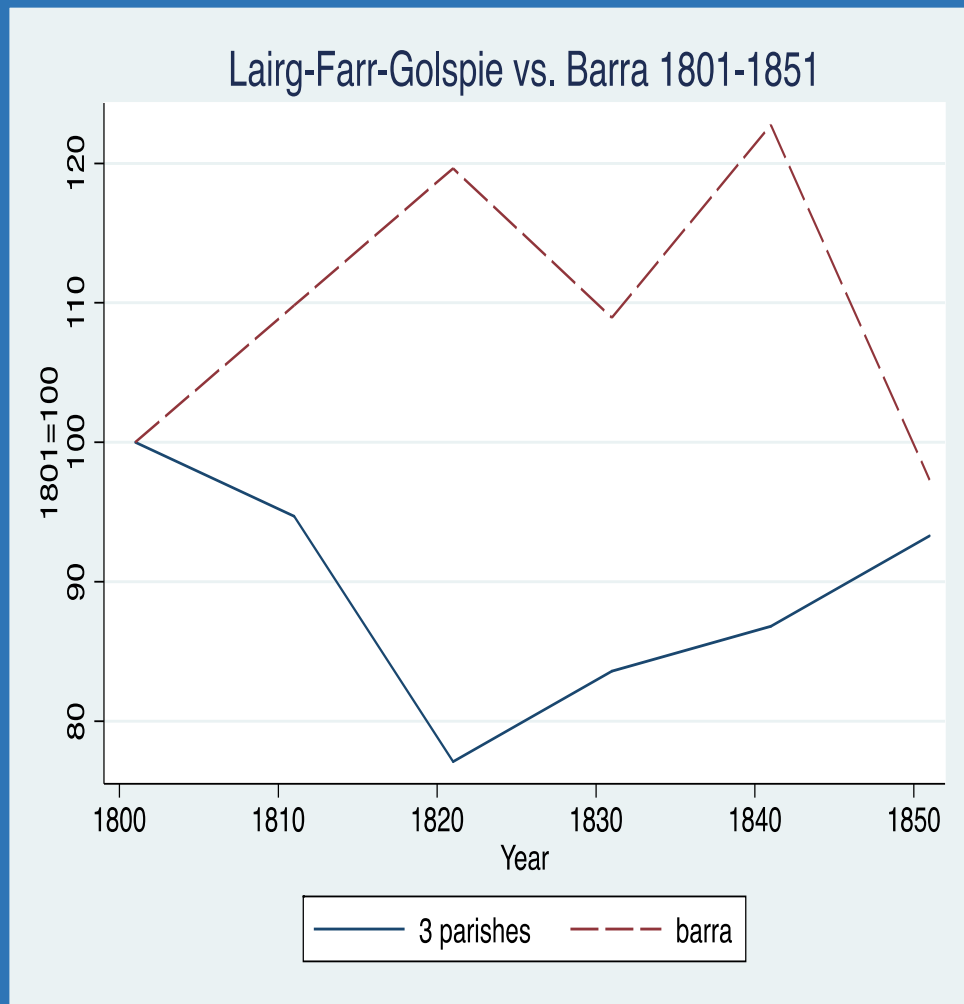


# SCOTLAND



Population growth and wage levels in Ireland and Scotland c. 1800-45





Population Change 1801-1851 in Barra and Lairg-Farr-Golspie



# Migration from IRL to GB during Famine:

- Significant [0.3-0.4 million]
- Overseas Migration:
- A boon! But poverty trap constraint

# Assisted Migration [1]

*The population of Ireland having been created by the potato, ... without the potato it cannot exist ... A large portion of that population ... will be destroyed by famine and disease if they are not provided with means to emigrate.*

William Monsell, Irish landlord, 23 June 1847

# Case Study [1]: Earl Grey Orphans 1848-50

- Shortage of females in Australia
- Scheme financed by colonies
- N= 4,100
- Most workhouses contributed
- Selection within selection
- Melbourne, Sydney, Adelaide
- Discontinued 1850

Surname WIFE "Earl Grey" Vessel & Date of Arrival: 10/48 "Earl Grey" Vessel & Date of Arrival: 1/38 COROMANDEL		Name(s) Catherine ARCHIBALD		Annex 10/5/47 - 7/7/47 10/7/47 - 24/5/48 C Occupation Wife Nursemaid Wife's father Husband Baker, Farmer, miller Husband's father	
Foy Religion: RC				Daughter Parnick Fanny Son Peter	
HUSBAND GRAHAM Religion: CE					

MARRIAGE NO. 1st 2nd	SOLEMNISED AT: C/E SYDNEY	AGE AT MARRIAGE:	14.10 20.11.52 DATES MARRIAGE	END OF UNION	CAUSE OF DEATH	OCCUPATION AT TIME OF DEATH	LENGTH	AGE AT END OF UNION	REMARriage	NAME OF 2ND SPOUSE
born at KEADY HUSBAND ARMAGH	residing at widower P. St. Phillips	[39]	baptism 3/13 c 1814	death 7.5.93		Miller	Age [80]	Age	WIDOWHOOD (months)	Buried at: Wollongong
KILLYMAN WIFE ARMAGH	Sydney	21	c 1831	29.1.1920			90			Catholic Cemetery, Field, Mass

Age Groups	Years Married	No. of Births	Age of Mother	Inter-val (months)	Occupation & residence of birth of each child	Sex	Births		Deaths			Marriages		Name(s)	Name of Spouse
							rank	date	date	status	age	Date	Age		
15-19			22	(6) 6	Baker, George St, Sydney	m	1	13.5.53	1920					Archibald	
20-24		2	24	22	Settler, Dapto	m	2	12.3.55	1915					Thomas	
25-29		2	26	30		m	3	5.9.57	1925					Alexander	
30-34		3	28	21	Farmer Dapto	f	4	13.6.59	1919					Catherine	
35-39		2	30	22		m	5	7.4.61	.86					George	
40-44		2	32	26		m	6	7.6.63	1918					Henry J	
45-49			34	22		m	7	20.4.65						Parnick S.	
			37	34		f	8	8.2.68	28.12.70	Diphtheria	2y 10m			Margaret	
			38	20	Miller Dapto	m	9	19.10.69	89					Alfred E	
			41	36	Wollongong	m	10	13.10.72	1930					Fredrick C	
			43	15		f	11	22.1.74	1952					Florence E	
							12								

CHILDREN

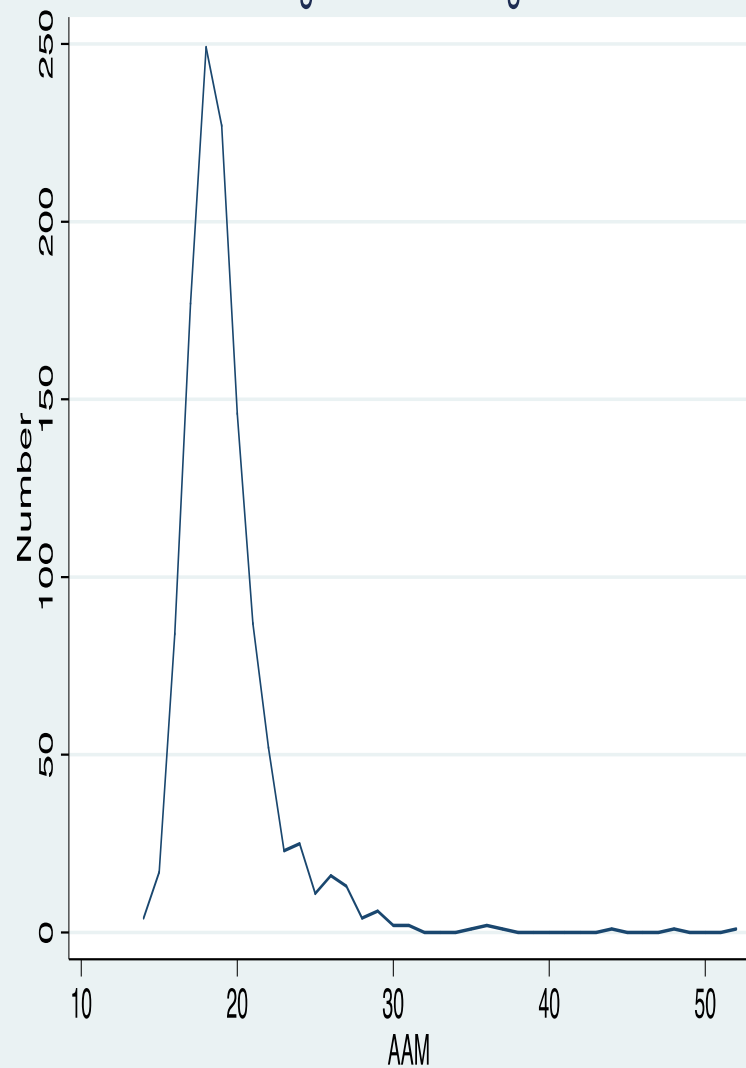
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3k

map D

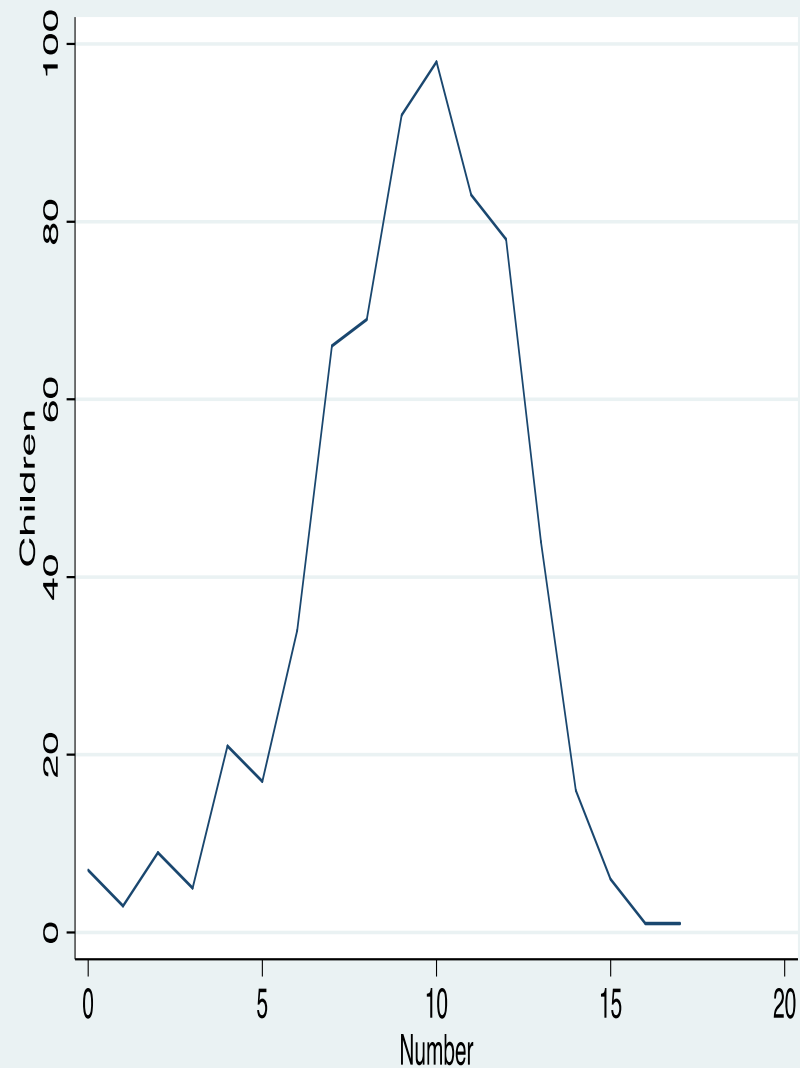




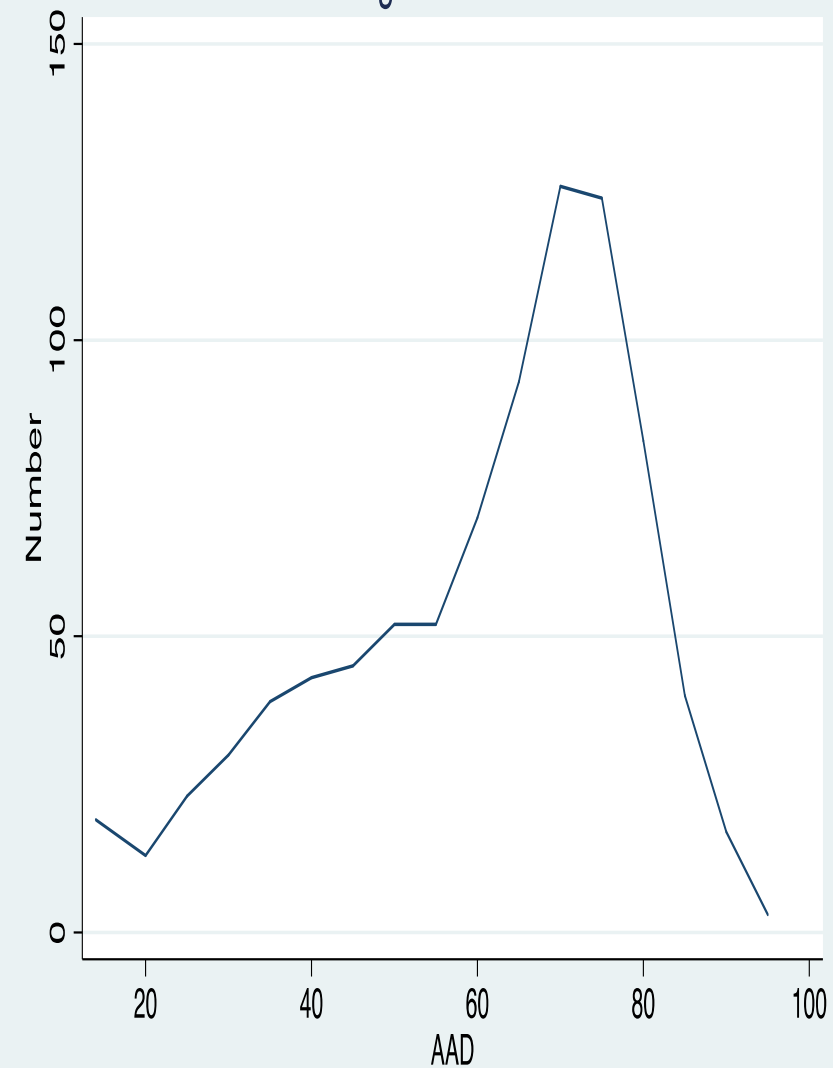
Age at First Marriage



Number of Children



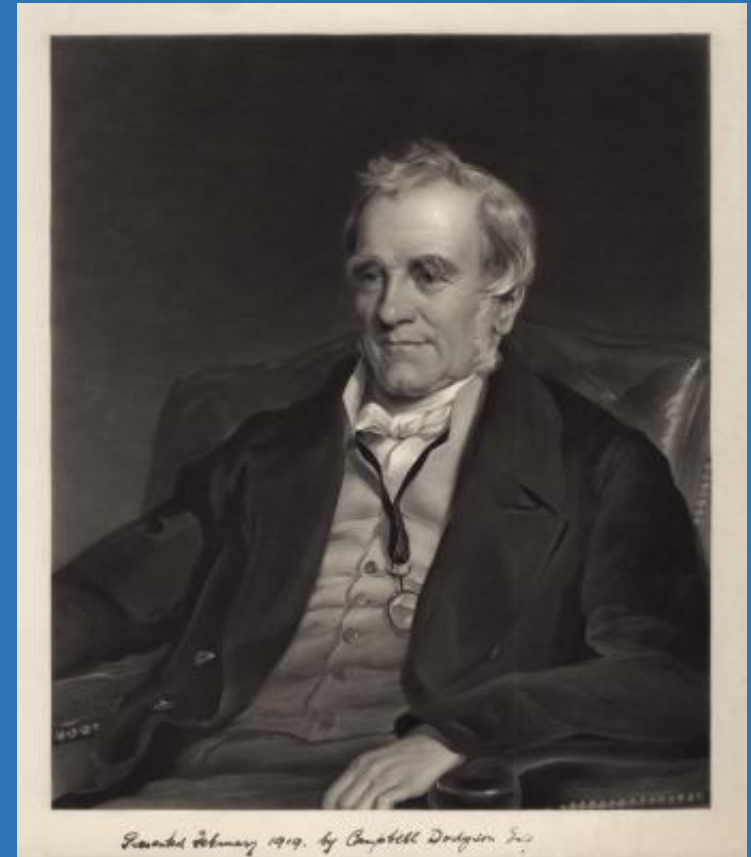
Ages at Death



# Earl Grey's Orphans: Marriage, Fertility, and Death

# Case Study [2]: Lansdowne Emigrants and their Bank

- About 4,000 assisted
- Arrived with little/nothing
- 300 opened accounts in EISB
- Concentrated in 6<sup>th</sup> Ward
- Savings impressive
- Modest progress by 1860



3<sup>rd</sup> Marquess of Lansdowne

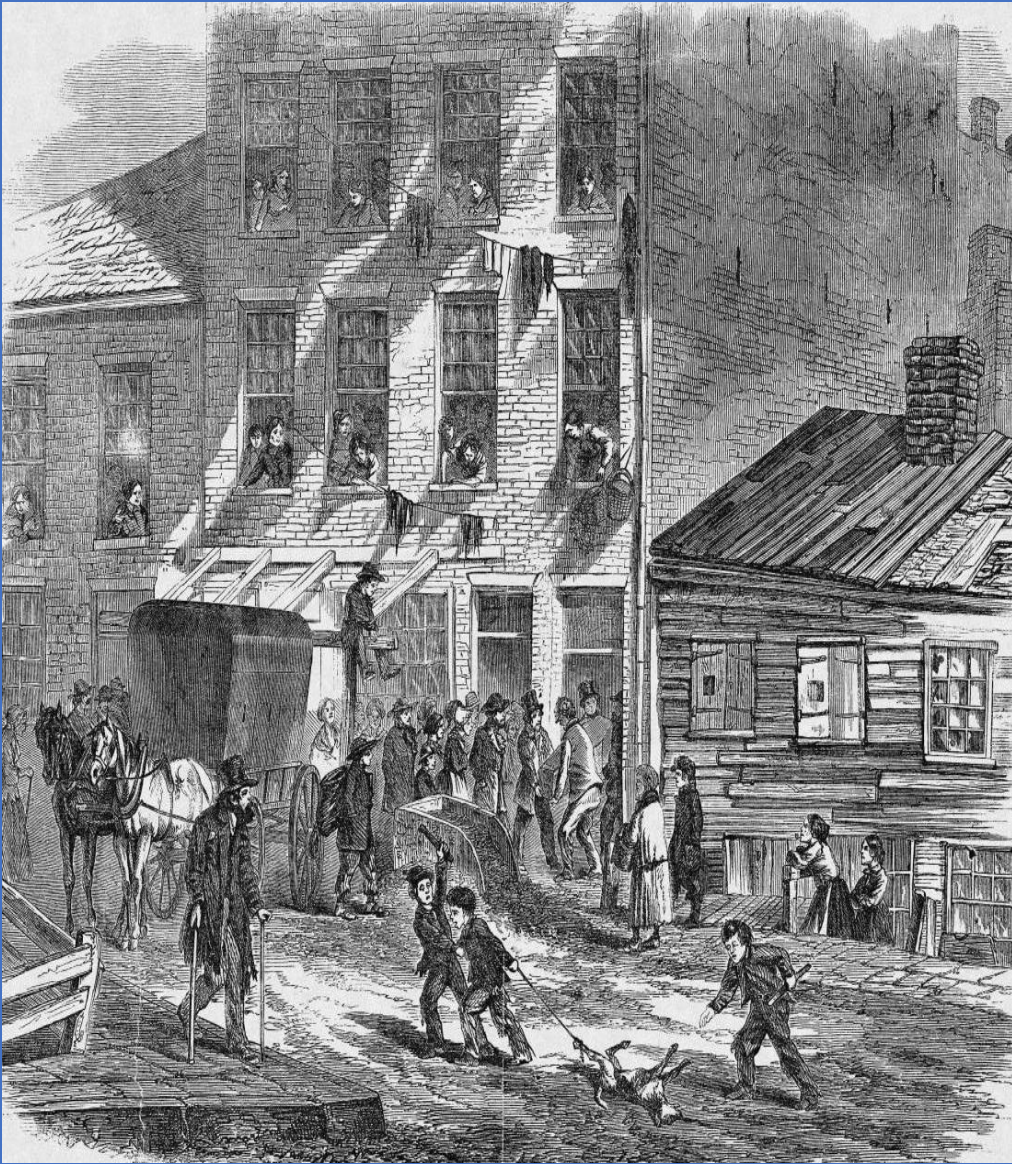


NEW YORK CITY.—DRAW DEPOSITORS OF THE SAVINGS BANK WITHDRAWING MONEY TO SEND TO THEIR OFFERING SOCIETIES IN THE OLD COUNTRY.

# Conditions in Kenmare Estate Parishes

Place	% Illiterate [M1841]	% Illiterate [F1841]	% One- room Housing	Pop. 1841	Pop. 1851	PLV (£) per capita 1841
Kenmare	64.8	71.2	48.6	5,839	7,495	0.62
Kilcaskan	56.7	78.1	69.0	1,379	1,101	0.54
Tuosist	67.9	83.4	72.4	7,495	4,034	0.33
Kerry	52.9	72.4	57.6	295,000	238,254	1.14
Ireland	58.7	69.5	35.1	8.18 m.	6.55 m.	1.60





31 Baxter Street in 1857 and in 1871

# Occupational Adjustments, 1850-1860 [Males only]

	Irish			Kerry Parishes		
Occupational Category	On arrival	On arrival, matched	1860, matched	On arrival	On arrival, matched	1860, matched
Laborer/ Unskilled	52.6	40.7	38.4	75.2	78.7	70.2
Skilled	26.9	33.7	31.4	9.4	14.9	17.0
Trade	10.2	16.2	17.8	8.1	4.3	12.8
White-collar /Professional	7.2	5.5	7.4	0.7	0.0	0.0
Police/Military	0.3	1.0	1.6	0.0	0.0	0.0
Other	2.7	2.8	3.4	1.3	2.1	0.0
Number	3,221	1,250	1,250	149	47	47

Source: EISB database



Another 0.2M-0.3M?

Problems:

- Shipping Capacity
- Nativism
- Cost

**AMERICAN CITIZENS!**

We appeal to you in all calmness. Is it not time to pause? Already the enemies of our dearest institutions, like the foreign spies in the Trojan horse of old, are within our gates. They are disgorging themselves upon us, at the rate of HUNDREDS OF THOUSANDS EVERY YEAR! They aim at nothing short of conquest and supremacy over us.

A PAPER ENTITLED 'THE

**AMERICAN PATRIOT.**



**IN FAVOR OF**

- The protection of American Mechanics against Foreign Pauper Labor.
- Foreigners having a residence in the country of 21 years before voting.
- Our present Free School System.
- Carrying out the laws of the State, as regards sending back Foreign Paupers and Criminals.

**OPPOSED TO**

- Papal Aggression & Roman Catholicism.
- Foreigners holding office.
- Raising Foreign Military Companies in the United States.
- Nunneries and the Jesuits.
- To being taxed for the support of Foreign paupers millions of dollars yearly.
- To secret Foreign Orders in the U. S.

We are burdened with enormous taxes by foreigners. We are corrupted in the morals of our youth. We are interfered with in our government. We are forced into collisions with other nations. We are tampered with in our religion. We are injured in our labor. We are assailed in our freedom of speech.

**The PATRIOT is Published by J. E. Farwell & Co., 32 Congress St., Boston, And for Sale at the Periodical Depots in this place. Single copies 4 Cents.**

Know-Nothing Newspaper [1852]

# Migration and Globalization

- Not like pre-1914
- But big rise in remittances as % of GDP
- Potential fillip to development
- But poorest economies gain less



Immigrant Remittances as Median Percentage of GDP 1980 and 2015				
	1980		2015	
y [\$1,000]	%	N	%	N
<0.5	1.7	18	1.8	8
.5-0.9	1.3	12	3.8	18
1-1.9	3.9	14	4.7	20
2-4.9	1.9	11	6.7	41
5-9.9	0.9	8	2.1	29
10-19.9	0.2	11	1.4	23
20+			0.3	37
Source: World Bank				

## Median Ratio of Remittances to FDI, 2007

*y* [\$1,000]

Ratio

*N*

<1

0.7

*12*

1-1.9

1.4

*23*

2-4.9

1.4

*31*

5-9.9

0.6

*25*

10-19.9

0.2

*26*

20+

0.1

*32*

Source: UNHDA

MSF on 1992: *‘In the town of Baidoa ... it feels like you’re in a concentration camp, the people are that wasted away... We saw people reach Baidoa then fall like flies...’*

Roni Brauman [MSF] on 2011-12: *‘We saw refugees arriving at Dadaab at that time in relatively good nutritional shape ...’*

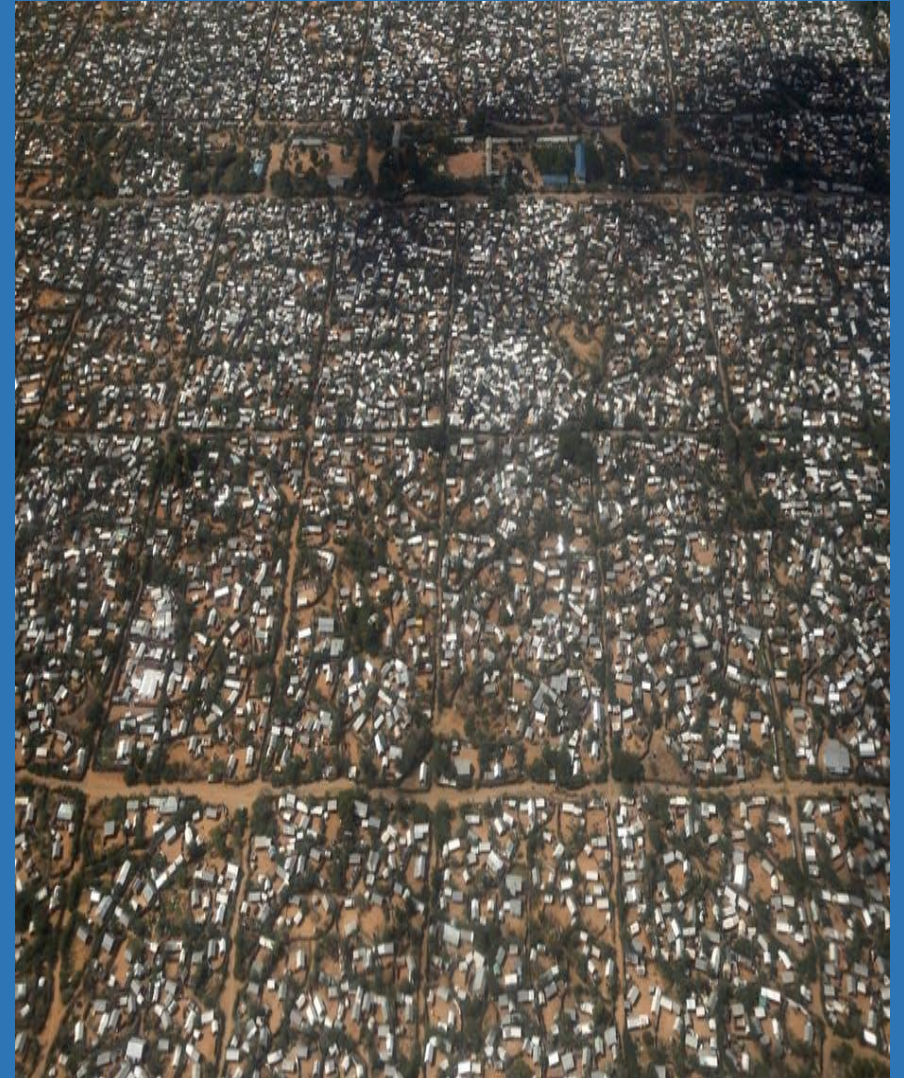
# Somali Famine and Migration

[1] *Impact of earlier migration:*

- Remittances better than aid
- Hawala payments system
- 23% of GDP [2016]

[2] *For those outside networks:*

- >0.5 m. in Dadaab,  
nearly 0.2 m. in Dollo Ade at end of famine



# Migration during Great Leap Famine

## Officially prohibited

=> *“The scale and impact of migration during the famine has been little explored. However, it appears that the controls on migration imposed by the Party Centre helped to intensify the scale of mortality”*  
[Bramall 2011]



# Migration during Great Leap Famine

- BUT: *“As famine escalated, so mass exodus grew into nationwide movement. Apart from those too ill to leave, almost the entire rural population was on the move”* [Zhou 2103: 228]
- Routes mentioned: Gansu to Henan; Shandong and Henan to NE; Hunan to Yunnan far SW; Guangxi to Guangdong
- *chuang guandung* [*“brave the journey to the northeast”*]

## *Migration mattered in Ireland*

- Huge outmigration
- But lack of assistance constrained benefit

## *Previous migration mattered in Somalia*

- 300K in Europe, 150K in US
- *Reduced* outmigration

## *Relieving famine*

- Normally food aid enough
- Migration crucial if there is war