Supplementary materials:
Emigration and Rising Wages in Myanmar: Evidence from Mon State

Figure S1: Distribution of the year migrants left (current and returned migrants)

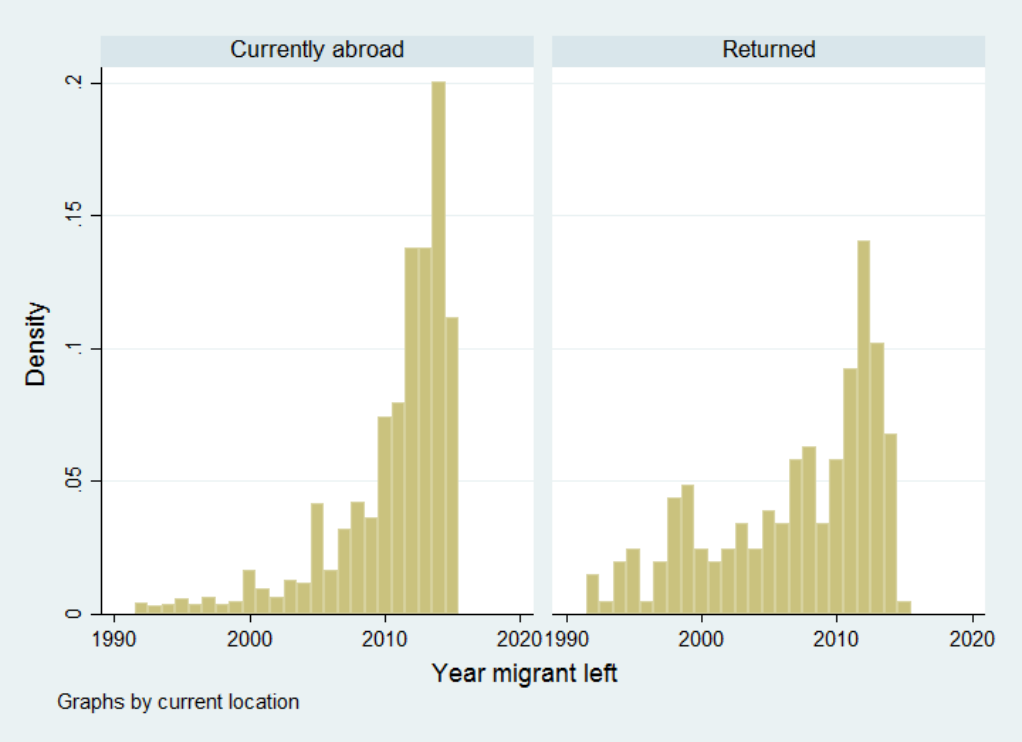
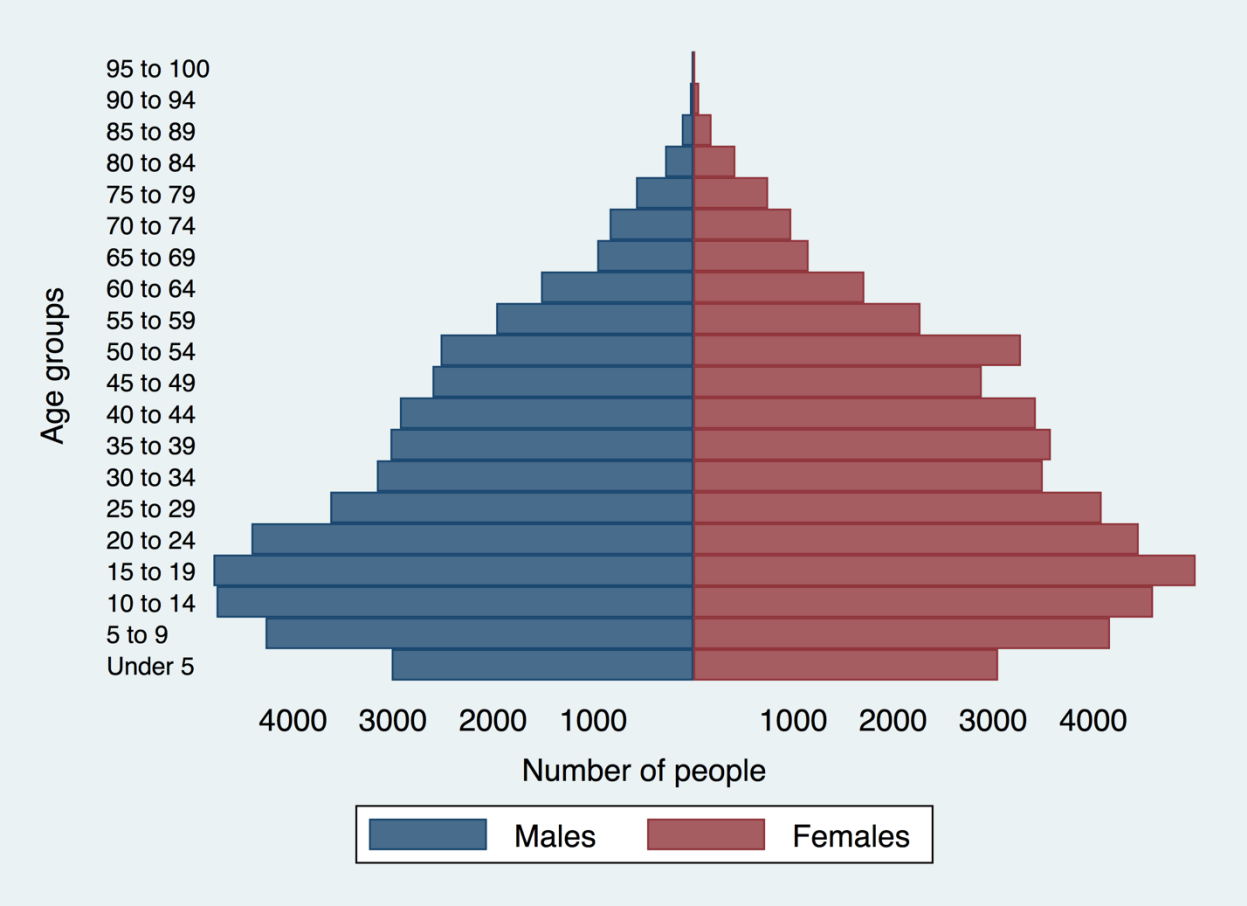


Figure S2: Population pyramid for all of Myanmar, 2010



Source: 2010 ILHCA dataset, author calculations. Note: A similarly shaped pyramid is obtained when restricting the sample to rural areas only.

Table S1: Allocation of sample EAs and households for Rural Mon State Household Survey, by strata

Stratum	Predominant activity	Total		1-Low substratum		2-High substratum	
		Sample EAs	Sample households	Sample EAs	Sample households	Sample EAs	Sample households
1	Marine fishing	35	420	18	216	17	204
2	Orchards	35	420	12	144	23	276
3	Rubber	35	420	4	48	31	372
4	Rice	35	420	3	36	32	384
Total		140	1,680	37	444	103	1,236

Table S2: Migration flows in South-East Asia, 2005-2010

	Population	In	Out	Net
Myanmar		0	498	-499
Thailand		508	15	493
Vietnam		19	448	-430
Cambodia				
Lao		0	75	-75
Malaysia		696	610	85
Singapore		721		721
Philippines				
Indonesia		0	1276	-1277

Source: http://www.global-migration.info/VID_Global_Migration_Datasheet_web.pdf
Also see: http://www.global-migration.info/

Table S3: Largest expenses made using remittances (% of responses)

	All migrants	Males	Females
House construction	26.4%	28.5%	24.1%
Purchase agricultural land	19.3%	14.6%	24.1%
Pay medical expenses	13.2%	11.4%	15.0%
Purchase land for housing	9.3%	11.4%	7.2%
Donations to monasteries	7.9%	9.2%	6.6%
Purchase agricultural assets / fishing equipment	6.4%	5.2%	7.7%
Pay debts	5.8%	5.1%	6.5%
Pay for ceremonies	5.6%	5.7%	5.5%
Purchase durable assets	2.5%	3.6%	1.4%
Other	3.7%	5.4%	1.9%
TOTAL	**100%**	**100%**	**100%**

Table S4: OLS regressions of wages on share of households with migrants and covariates

	(1)	(2)	(3)	(4)	(5)	(6)
	Peak wage	Peak wage	Peak wage	Slack wage	Slack wage	Slack wage
Pct. of hh with international migrants	15.79***	13.79***	13.17***	11.58***	10.18**	8.879**
	(6.42)	(5.01)	(4.61)	(4.04)	(3.19)	(3.00)
Gender	-1260.7***	-1267.0***	-1280.1***	-1183.2***	-1186.4***	-1188.4***
	(-11.83)	(-11.96)	(-12.12)	(-9.66)	(-9.67)	(-10.88)
Distance to urban center (miles)	-7.660	-5.455	-7.531	-6.229	-6.528	-12.94
	(-1.24)	(-0.87)	(-1.13)	(-0.86)	(-0.88)	(-1.82)
Public transport to urban center	-154.5	-271.5*	-228.8	71.64	16.80	60.24
	(-1.23)	(-2.09)	(-1.60)	(0.49)	(0.11)	(0.40)
Lowland	-280.7	-301.8*	-353.6*	234.6	207.2	33.25
	(-1.87)	(-1.98)	(-2.03)	(1.36)	(1.16)	(0.18)
Upland	-297.5*	-305.7*	-310.0	3.290	-38.91	-112.9
	(-2.05)	(-2.04)	(-1.72)	(0.02)	(-0.22)	(-0.61)
Publicly provided electricity within the village		260.0*	208.2		-36.13	-162.3
		(2.12)	(1.60)		(-0.25)	(-1.22)
Infrastructure for processing		84.90	145.2		375.8*	404.5**
		(0.59)	(0.98)		(2.32)	(2.70)
Pct. of hhs in community without ag land		-646.8**	-627.6**		-405.6	-544.1*
		(-2.89)	(-2.66)		(-1.55)	(-2.25)
Access to large farm equipment		-24.26	13.94		87.00	102.0
		(-0.14)	(0.08)		(0.43)	(0.52)
Access to mechanical services		-70.26	-28.48		-32.56	301.6
		(-0.43)	(-0.16)		(-0.17)	(1.63)
Constant	5646.5***	6056.5***	6030.7***	4889.6***	5135.4***	5315.7***
	(22.98)	(19.73)	(18.53)	(17.28)	(14.21)	(15.65)
Observations	245	243	241	251	249	247

Table S5: OLS regressions of wages on migrants-to-workforce ratio and covariates - weighted

	(1)	(2)	(3)	(4)	(5)	(6)
	Peak wage	Peak wage	Peak wage	Slack wage	Slack wage	Slack wage
Migrants-to-workforce ratio	11.67***	10.36***	10.21***	5.016*	4.191	5.028*
	(6.79)	(5.70)	(5.36)	(2.44)	(1.91)	(2.41)
Gender	-1295.2***	-1299.7***	-1305.2***	-1195.8***	-1197.1***	-1193.9***
	(-12.70)	(-12.95)	(-13.02)	(-9.91)	(-9.94)	(-11.02)
Distance to urban center (miles)	-7.703	-5.406	-8.121	-4.483	-5.007	-11.31
	(-1.39)	(-0.96)	(-1.33)	(-0.67)	(-0.73)	(-1.66)
Public transport to urban center	-153.4	-282.0*	-263.9	-2.177	-70.43	-40.86
	(-1.21)	(-2.17)	(-1.89)	(-0.01)	(-0.45)	(-0.27)
Lowland	-77.07	-161.9	-217.3	233.7	198.9	-41.55
	(-0.49)	(-1.03)	(-1.21)	(1.29)	(1.05)	(-0.22)
Upland	-31.09	-71.68	-106.8	7.327	-43.31	-188.1
	(-0.19)	(-0.45)	(-0.56)	(0.04)	(-0.22)	(-0.94)
Publicly provided electricity within the village		314.2**	239.0		-24.11	-138.6
		(2.69)	(1.90)		(-0.17)	(-1.03)
Infrastructure for processing		93.08	180.5		307.3	358.1*
		(0.68)	(1.27)		(1.93)	(2.37)
Pct. of hhs in community without ag land		-676.7**	-674.9**		-442.2	-490.3*
		(-3.06)	(-2.88)		(-1.66)	(-1.97)
Access to large farm equipment		33.43	53.48		189.5	201.2
		(0.20)	(0.30)		(0.91)	(1.01)
Access to mechanical services		-8.185	75.21		-14.68	360.7
		(-0.05)	(0.44)		(-0.08)	(1.90)
Shock dummies			Yes			Yes
Observations	245	243	241	251	249	247

Table S6: OLS Robustness checks – weighted

	Peak Wage	Slack Wage
Distance to nearest border crossing	-5.568***	-9.405***
	(0.805)	(0.634)
Distance to nearest point on border	-2.271	-10.45***
	(1.935)	(1.658)
Migrants-to-workforce ratio	11.05***	5.766***
	(2.152)	(1.121)
Pct. of hh with international migrants	13.17***	8.879***
	(1.385)	(1.241)
Pct. of hh who receive remittances	14.00***	9.421***
	(1.927)	(1.247)
Pct. of hh with migs incl shortterm and local	11.34***	6.453***
	(1.443)	(1.152)
Pct. of hh who had international migrant prior to 2000	32.23***	21.20***
	(5.401)	(4.163)
Pct. of hh who had international migrant prior to 2005	21.06***	11.42***
	(3.006)	(2.413)
Pct. of hh who had migs return more than 2 years ago	22.87***	16.38***
	(3.073)	(4.277)
Pct. of hh with migs that returned within 2 years	27.41***	47.15***
	(5.129)	(3.706)
Number of hhs in community with migrant member abroad	0.662***	0.621***
	(0.117)	(0.0936)
Observations	241	247

Table S7: IV regression results under "plausibly exogenous" instruments assumption

	(1)	(2)	(3)	(4)	(5)	(6)
Instrumental variable (proxy for networks)	Share of households who had migrants prior to 2000		Share of households with migrants who retuned over 2 years ago		Share of households with migrants who returned within the past 2 years	
	Peak	Slack	Peak	Slack	Peak	Slack
δ (Deviation from exclusion restriction)	19.9	14.9	15.0	11.6	11.0	41.0
Migrants-to-workforce ratio	22.56***	14.77*				
	(5.353)	(5.765)				
Pct. of hh with international migrants			35.92***	25.52*		
			(10.04)	(11.93)		
Pct. of hh who receive remittances					21.87**	42.22***
					(8.081)	(10.73)
Gender	-1279.5***	-1189.0***	-1279.9***	-1189.9***	-1275.3***	-1188.8***
	(105.0)	(107.6)	(112.9)	(110.4)	(101.1)	(129.3)
Distance to urban center (miles)	-7.627	-14.71*	1.660	-8.560	-8.317	-14.19
	(7.192)	(6.121)	(8.219)	(7.452)	(6.989)	(9.320)
Public transport to urban center	-182.3	65.16	-62.32	147.4	-154.7	238.1
	(140.7)	(141.1)	(159.2)	(156.8)	(145.7)	(186.0)
Publicly provided electricity within the village	129.4	-221.8	142.7	-189.6	245.5*	-176.4
	(119.0)	(136.8)	(139.6)	(136.0)	(123.0)	(160.7)
Infrastructure for processing	249.2	492.5**	161.4	423.3**	198.9	579.7**
	(156.6)	(150.1)	(168.9)	(153.2)	(138.9)	(187.9)
Pct. of hhs in community without ag land	-236.8	-286.1	-163.9	-215.6	-645.6**	-178.4
	(256.3)	(261.9)	(295.0)	(306.1)	(225.3)	(342.9)
Access to large farm equipment	7.696	51.10	-148.8	-36.48	-45.30	-248.9
	(209.0)	(199.9)	(211.6)	(202.6)	(197.8)	(264.5)
Access to mechanical services	-203.0	314.0	-343.0	149.0	-170.1	128.7
	(209.0)	(182.3)	(264.2)	(235.4)	(219.8)	(222.6)
Shock dummies	Yes	Yes	Yes	Yes	Yes	Yes
Observations	241	247	241	247	241	247

Note: δ is estimated from regressions of the outcome variable (wages) on the inctrument, the endogenous variable, and all controls. Constant and shock variables not reported in interest of space. Shock dummies include: weather community experienced the following in the previous year: flooding, drought, cyclone, crop disease, fire, declining fish stocks, other natural disaster; or ever experienced erosion, soil salinization, declining fish stocks, conflict, control by a non-governmental armed group.

Table S8: IV regression with township-level migrant share as the instrument

	(1)	(2)	(3)	(4)	(5)	(6)
Instrumental variable (proxy for networks)	Township-level share of households who had migrants in 2005					
	Peak	Slack	Peak	Slack	Peak	Slack
Endogenous variable:						
Migrants-to-workforce ratio	14.95*	12.36				
	(6.049)	(7.548)				
Pct. of hh with international migrants			14.54*	11.67		
			(5.770)	(7.201)		
Pct. of hh who receive remittances					15.68*	12.83
					(6.453)	(7.754)
Controls:						
Gender	-1279.1***	-1188.8***	-1279.0***	-1188.6***	-1276.2***	-1187.9***
	(98.60)	(105.5)	(99.45)	(103.0)	(99.43)	(102.6)
Distance to urban center (miles)	-8.836	-14.91*	-6.003	-12.56*	-9.137	-15.40**
	(6.227)	(5.905)	(6.075)	(5.950)	(6.294)	(5.857)
Public transport to urban center	-210.1	52.34	-182.7	60.05	-185.8	62.94
	(137.3)	(142.7)	(144.3)	(140.8)	(146.1)	(142.0)
Publicly provided electricity within the village	160.8	-206.9	190.2	-157.5	239.0*	-144.5
	(117.7)	(143.3)	(119.7)	(129.0)	(117.9)	(126.9)
Infrastructure for processing	209.0	476.7**	142.8	408.3**	179.4	451.5**
	(146.1)	(162.0)	(130.7)	(138.6)	(134.1)	(148.4)
Pct. of hhs in community without ag land	-466.7	-356.5	-613.3*	-488.6	-723.0**	-554.4*
	(294.1)	(339.3)	(255.9)	(284.7)	(238.2)	(262.5)
Access to large farm equipment	20.98	77.16	-32.21	97.85	-19.15	71.27
	(188.9)	(215.2)	(179.1)	(202.5)	(186.5)	(208.7)
Access to mechanical services	-89.47	324.6	-59.25	273.8	-84.14	302.9
	(190.4)	(168.8)	(177.5)	(165.5)	(193.4)	(160.6)
Shock dummies	yes	yes	yes	yes	yes	yes
Constant	5814.3***	5080.5***	6020.0***	5307.5***	6091.4***	5355.7***
	(488.9)	(622.9)	(452.6)	(521.3)	(438.7)	(489.7)
Observations	241	247	241	247	241	247
r2	0.517	0.485	0.506	0.508	0.507	0.512
F statistic for weak identification (Kleibergen-Paap)	26.780	20.305	44.986	38.092	46.307	38.160
Anderson-Rubin chi-sq test of significance of endogenous regressors	0.020	0.111	0.020	0.111	0.020	0.111
LM test statistic for underidentification (Anderson or Kleibergen-Paap)	18.545	14.368	27.011	23.048	24.837	20.615

Table S9: Impacts of migration on agricultural practices – second-stage of IV

Outcome	Coefficient on migrant dummy
Agriculture - Rice	
Household hired workers (locals or migrants) for rice production	-0.461***
Household uses animals for land preparation in rice production	-0.440***
Household uses machinery for farm to barn transport in rice production	0.423***
Agriculture - Rubber	
Household owns rubber trees	0.430***
Household used urea fertiliser for rubber production	0.353***
Household hired workers for rubber production	-0.446***
Other	
Household engages in resource extraction	-0.164**
Household owns land motorised transportation asset	0.485***

Source: Author calculation. All specifications include a constant and the following controls at the household level: household head characteristics (age, gender education, local birth), whether household experienced a natural disaster, death, major health event, income disruption, conflict, land loss, price shocks; and at the community level: distance to urban center, agro-processing infrastructure, access to large farm equipment, access to mechanised services, flooding in past year, declining fish stocks, violent conflict, armed group control, and agro-ecological zone