



# QUANTIFYING DIVERSITY OF MIGRANTS IN OBOR COUNTRIES

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# OBOR

- One Belt, One Road,
- Belt and Road Initiative (BRI)
- In 2013, Chinese President Xi Jinping put forward the strategic concept of the OBOR initiatives:
  - a “Silk Road Economic Belt” in Sept 2013, in Kazakhstan
  - “21st Century Maritime Silk Road”, Oct 2013, in Indonesia,

# *Silk Road Economic Belt*

- The *Silk Road Economic Belt* focuses on bringing together China, Central Asia, Russia and Europe (the Baltic);

# *21st-Century Maritime Silk Road*

- The *21st-Century Maritime Silk Road* is designed to span from China's coast to Europe through the South China Sea and the Indian Ocean in one route, and from China's coast through the South China Sea to the South Pacific in the other.
- to promote maritime cooperation, establishing the Asian Infrastructure Investment Bank (AIIB) to finance infrastructure construction and promote regional interconnectivity and economic integration.

# One Belt, One Road



Source: Cay (2017)


# OBOR can be BIG

- OBOR will connect Asia, Africa and Europe involving 65 countries, 4.5 billion people.
- Include 9 OECD countries (Czech, Estonia, Hungary, Israel, Latvia, Poland, Slovakia, Slovenia, and Turkey)

# 5 Major OBOR Goals



- Coordination of policies,
- Coordination of infrastructure projects,
- Guarantee of free trade,
- Financial coordination,
- Strengthening people-to-people ties.

- 
- OBOR initiatives consists of roads, railways, ports, pipelines and everything in between

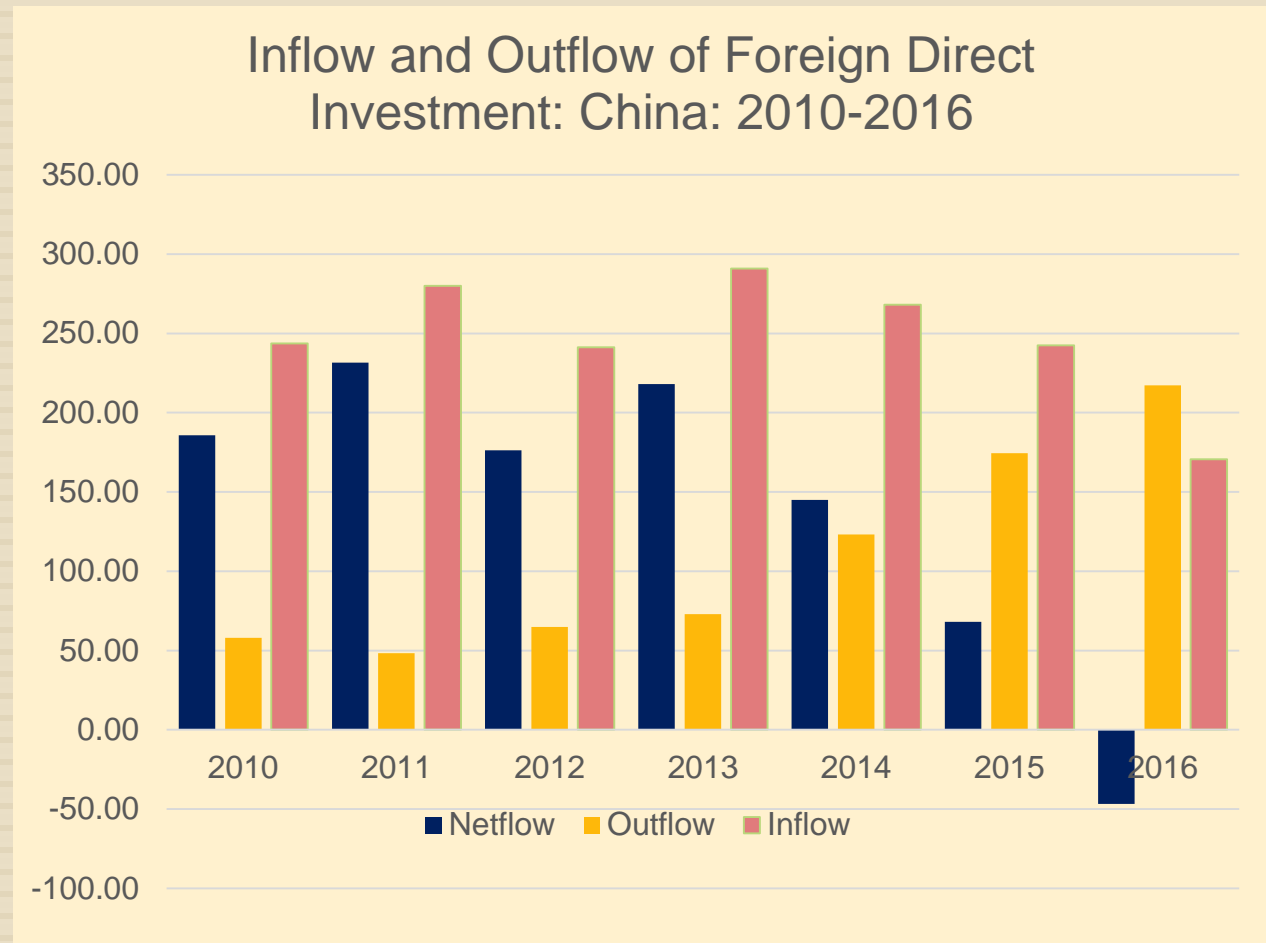


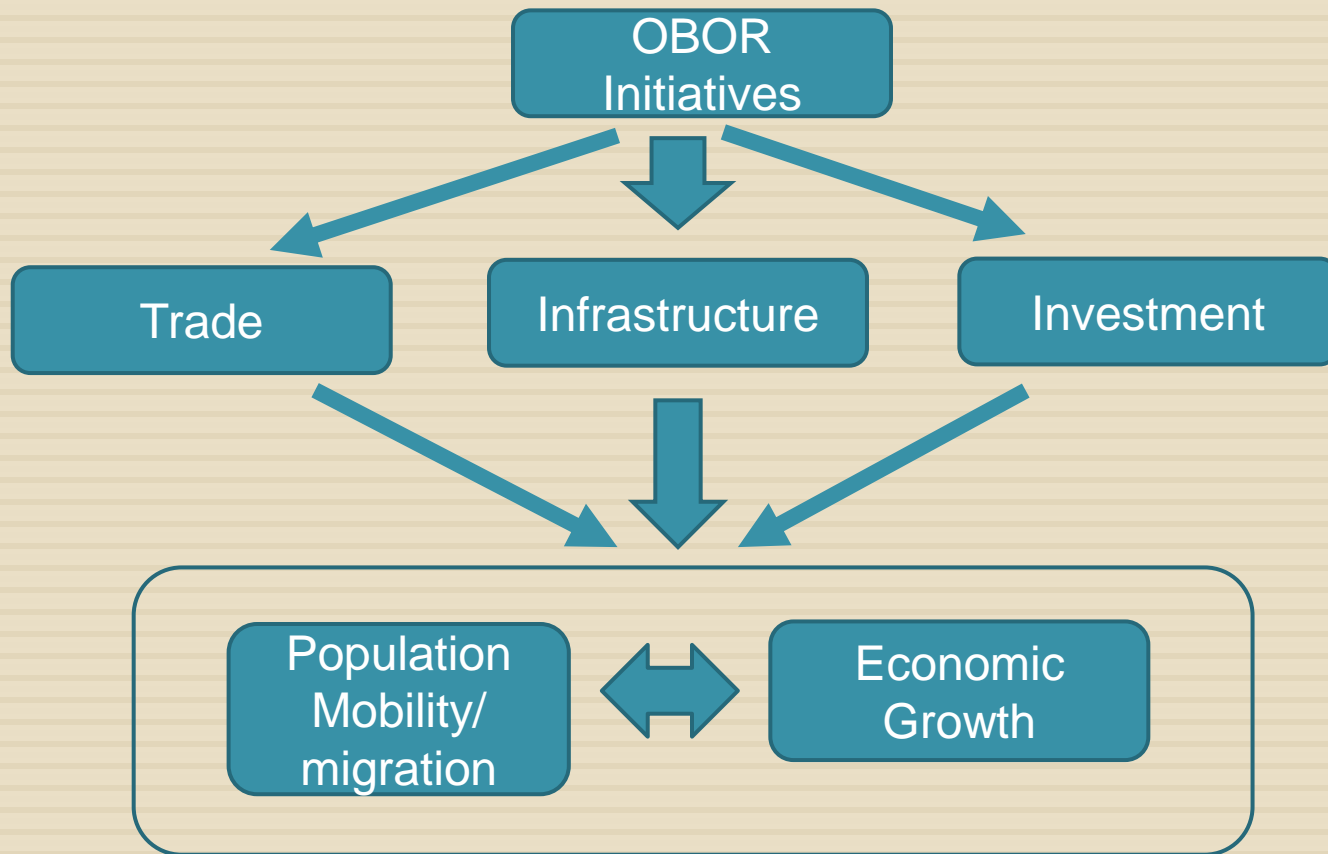
OBOR can be a new driver of mobility  
in the future

Cultural diversity can be a **liability**  
or **asset** for development

# In 2016: More Outflow than Inflow FDI

Increasing  
outflow of FDI  
from China





# Aims

- It is still difficult to predict the impacts of OBOR initiatives and precise future trend of migration.
- This paper aims to understand the current pattern and diversity of migrants in OBOR countries.
- It also quantifies the diversity of migrants among OBOR Countries

# Data



- Trends in International Migrant Stock :  
The 2015 Revision
- International Migrant Stock = foreign  
born or foreign citizens

# 3 Measurements of Diversity



1. Number of Countries :
  - by Destination
  - by Origin
2. The largest share of Migrants
  - by Destination
  - by Origin

# 3 Measurements of Diversity

## 3. Diversity Index by Destination by Origin

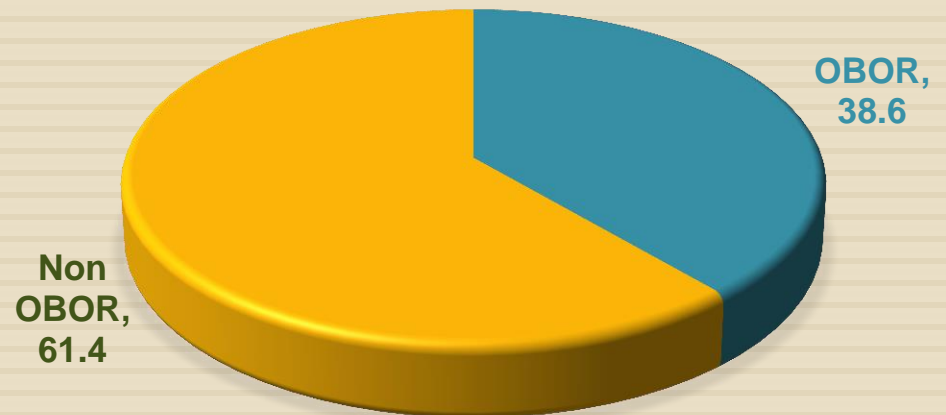
It is adopted from Herfindal index, also known as Fractionalization index

$$\textit{Diversity Index} = 1 - \sum_{i=1}^n s_i^2$$

Where  $s_i$  is the proportion of migrants from / to country  $i$

# How many migrants are in OBOR Countries?

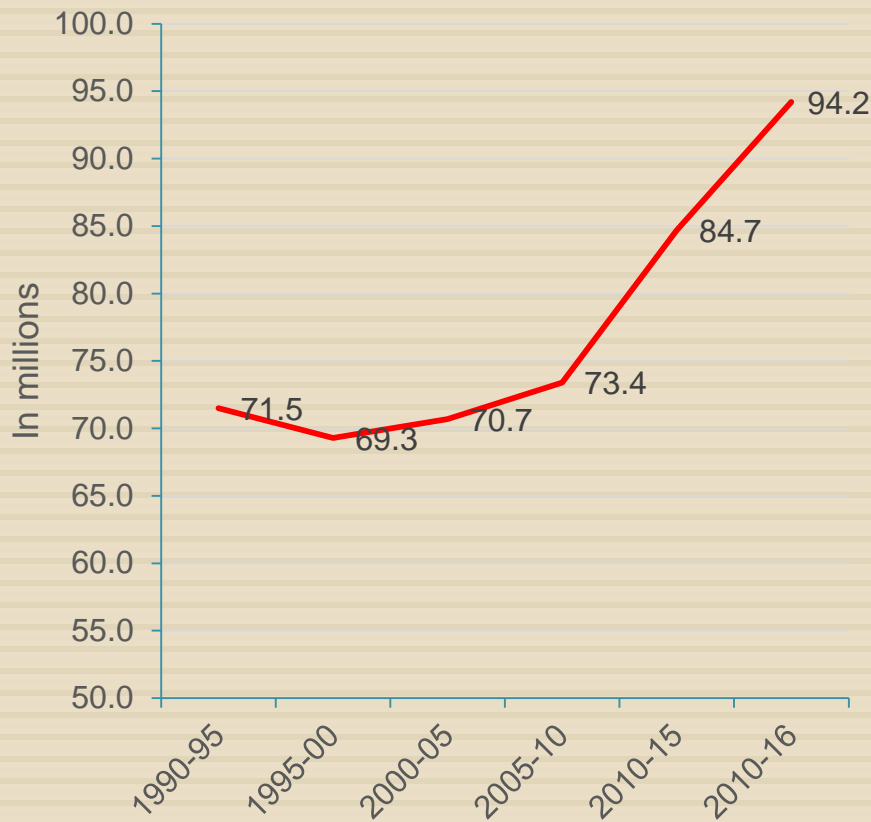
- 94.2 millions Migrants in OBOR Countries in 2015.



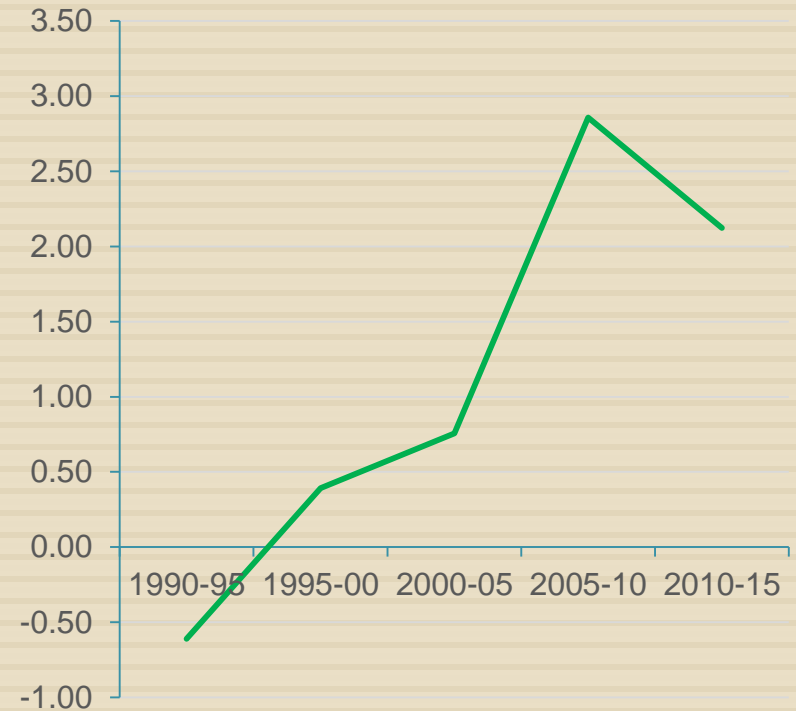


# Increasing number of migrants in OBOR Countries with an increasing rate of Growth

Increasing Number of International Migrant  
Stock in OBOR countries

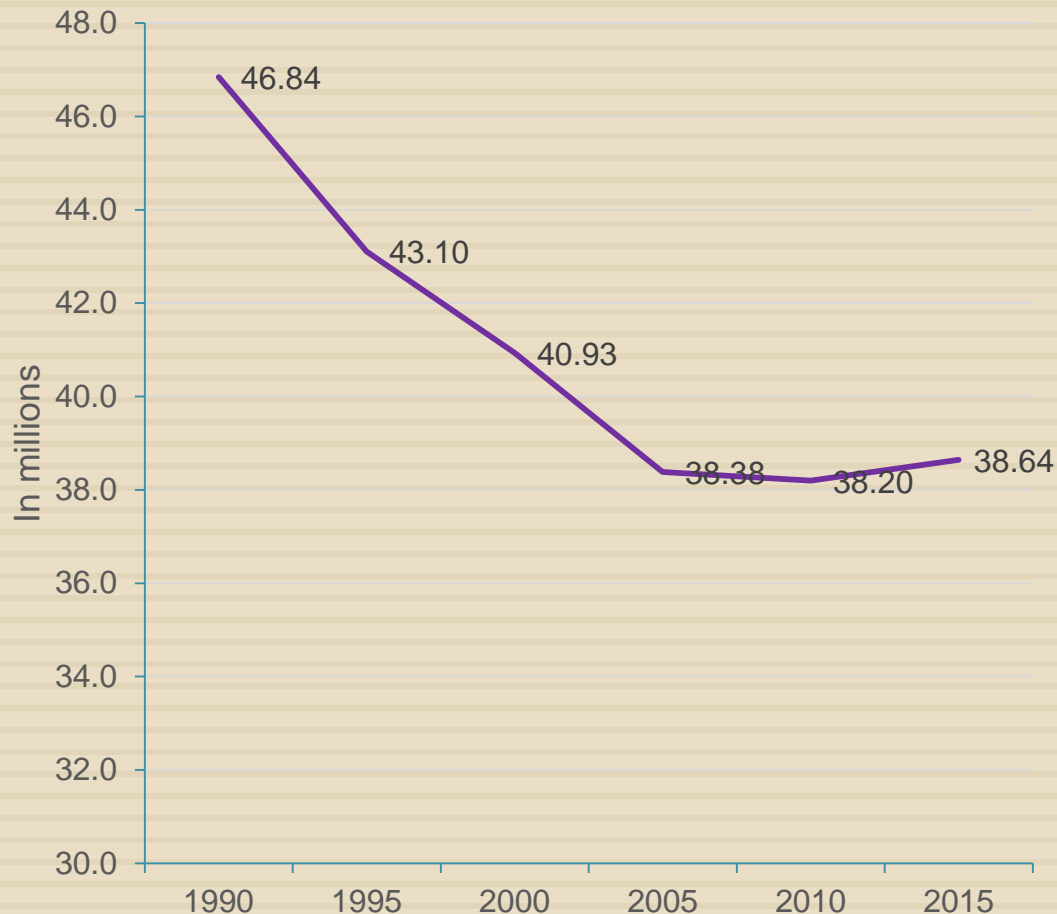


Accelerating Growth Rate of  
Migrants



# A sign of returning increased share of Migrants to the World's International migrant stock

OBOR Countries' Share to the World's International migrant stock



- A rapid decline of share from 1990-2005.
- A sign of increasing share since 2005



DIVERSITY

# 1. Number of Destinations

When they live in different countries of birth,  
where are they now?

# Number of Destinations

Rank	Origin	# of Destinations
1	China	143
2	India	128
3	Russia	102
4	Philippines	100
5	Pakistan	98
6	Lebanon	90
7	Indonesia	87
8	Rep. of Korea	86
9	Egypt	82
10	Turkey	82
11	Syria	79
12	Poland	78
13	Thailand	77
14	Ukraine	76
15	Bangladesh	75
16	Iran	75
17	Romania	71
18	Sri Lanka	71
19	Malaysia	70
20	Iraq	69
21	Israel	68
22	Jordan	67
23	Bulgaria	66

Rank	Origin	# off Destinations
24	Viet Nam	66
25	Saudi Arabia	65
26	Afghanistan	64
27	Hungary	63
28	Czech Republic	59
29	Armenia	57
30	Kazakhstan	57
31	Singapore	57
32	Belarus	55
33	Nepal	55
34	Croatia	54
35	Lithuania	53
36	Uzbekistan	53
37	Palestine	52
38	Albania	51
39	Estonia	51
40	Kuwait	51
41	Moldova	51
42	Slovakia	51
43	Georgia	49
44	Latvia	48
45	UAE	48
46	Azerbaijan	47

Rank	Origin	# of Destinations
47	Bosnia& Herzegovina	47
48	Serbia	47
49	Slovenia	47
50	Macedonia	47
51	Myanmar	45
52	Yemen	45
53	Kyrgyzstan	43
54	Tajikistan	43
55	Turkmenistan	43
56	Bahrain	40
57	Cambodia	40
58	Hong Kong	39
59	Lao PDR	37
60	Qatar	37
61	Mongolia	34
62	Oman	33
63	Montenegro	31
64	Brunei	24
65	Bhutan	23
66	Maldives	22
67	Macao	12
68	Timor-Leste	11

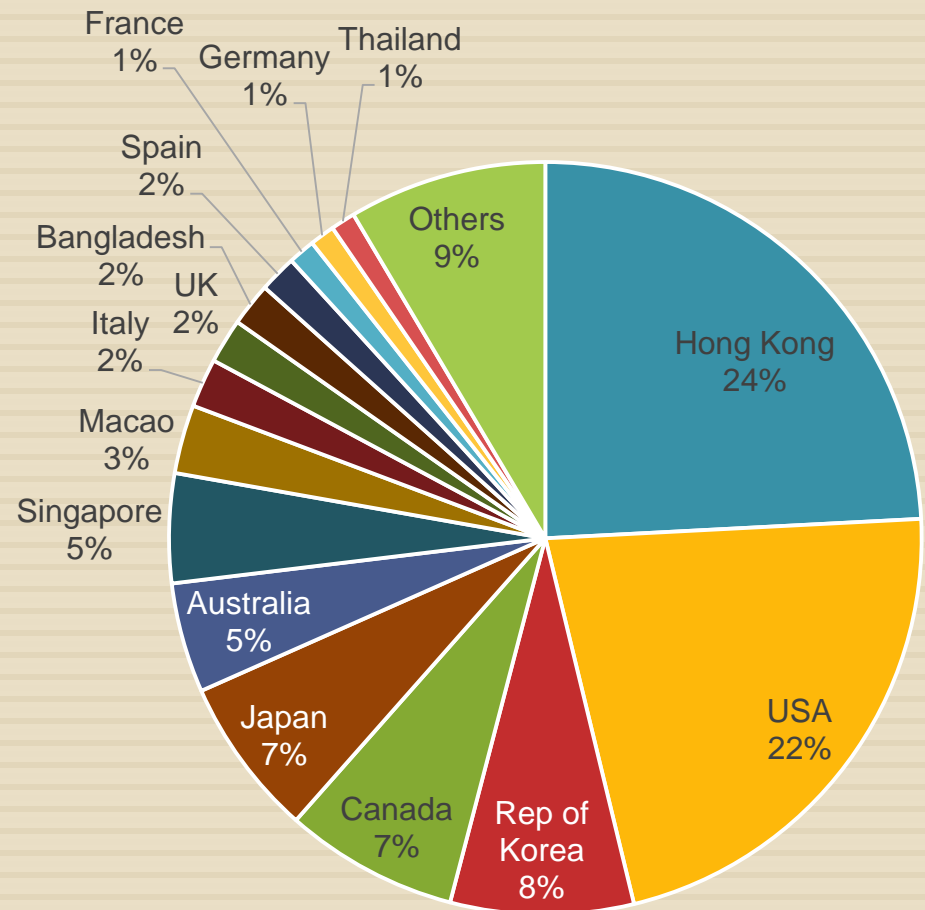
# Chinese are ubiquitous

- They migrate out to 143 countries out of 232 countries in the world (61.6%) in 2015 ranging from as large as 2.1 million in the US to as small as 11 Chinese in Greenland.
- Note: 2.3 million live in Hong Kong

# Where are the Chinese?

- In 2015, they are mostly in non-OBOR OECD countries
- 22% of the out-migrants from China live in the US

Migrants from China



# Chinese in OECD Countries

## Non-OBOR

1. Australia
2. Canada
3. France
4. German
5. Italy
6. Japan
7. Korea
8. Spain
9. UK
10. USA

## OBOR

1. Czech,
2. Estonia,
3. Hungary,
4. Israel,
5. Latvia,
6. Poland,
7. Slovakia,
8. Slovenia,
9. Turkey

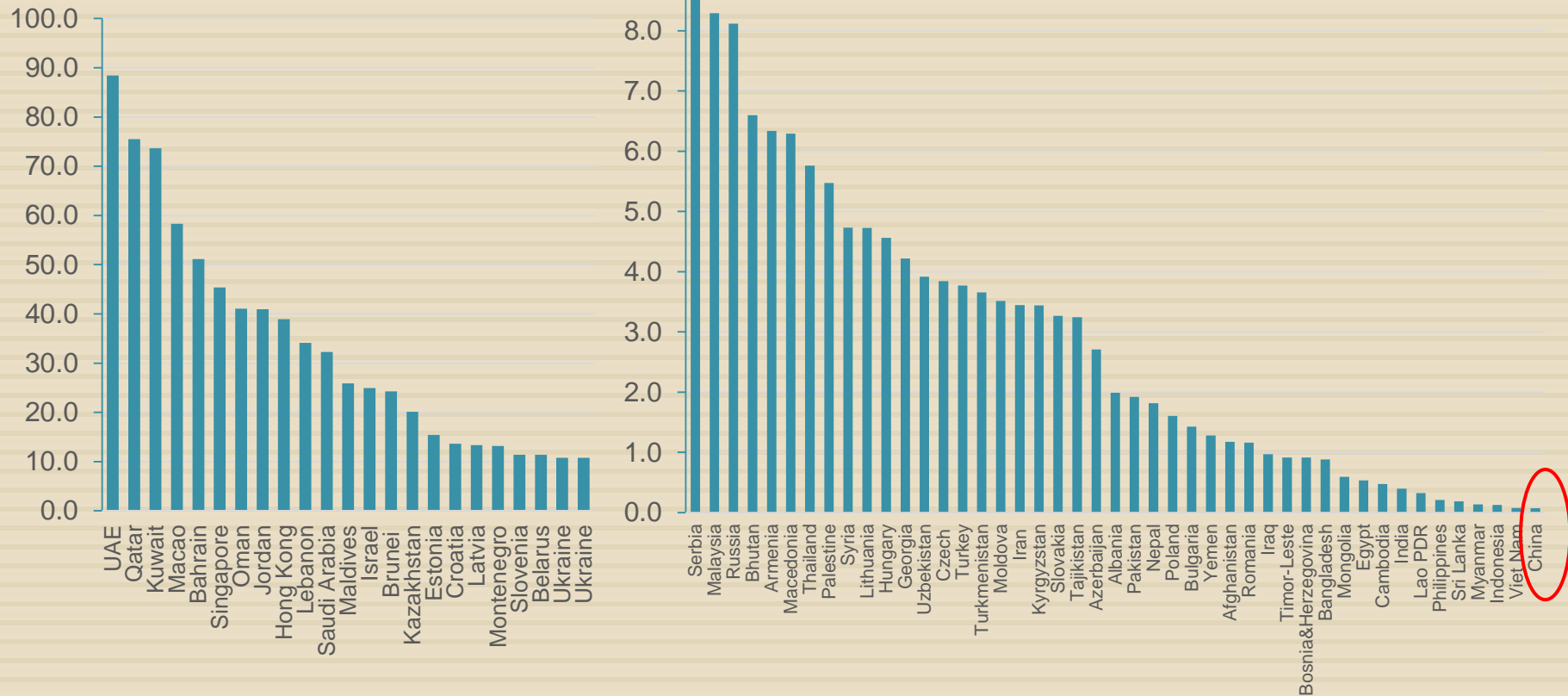




# 1. Number of Origins

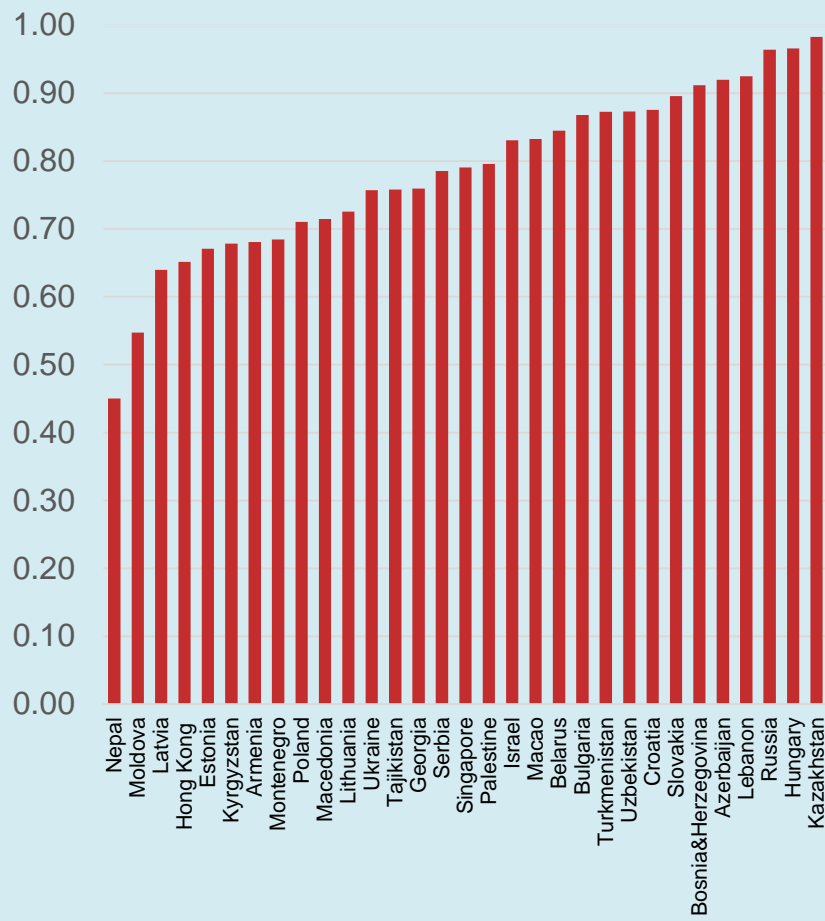
# Share of In-migrants

20 Countries + Macao and HK: The IM accounts for more than 10% in 2015

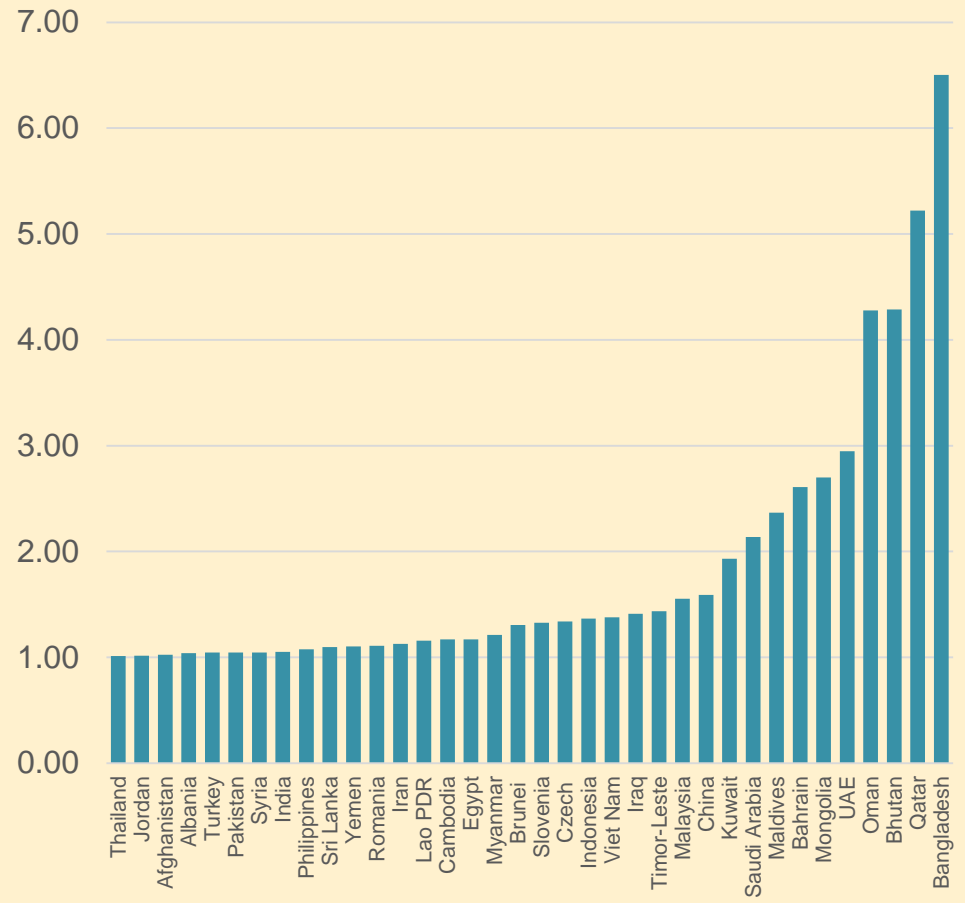


# Feminization & Masculinization

## Sex Ratio Below 1



## Sex Ratio Above 1



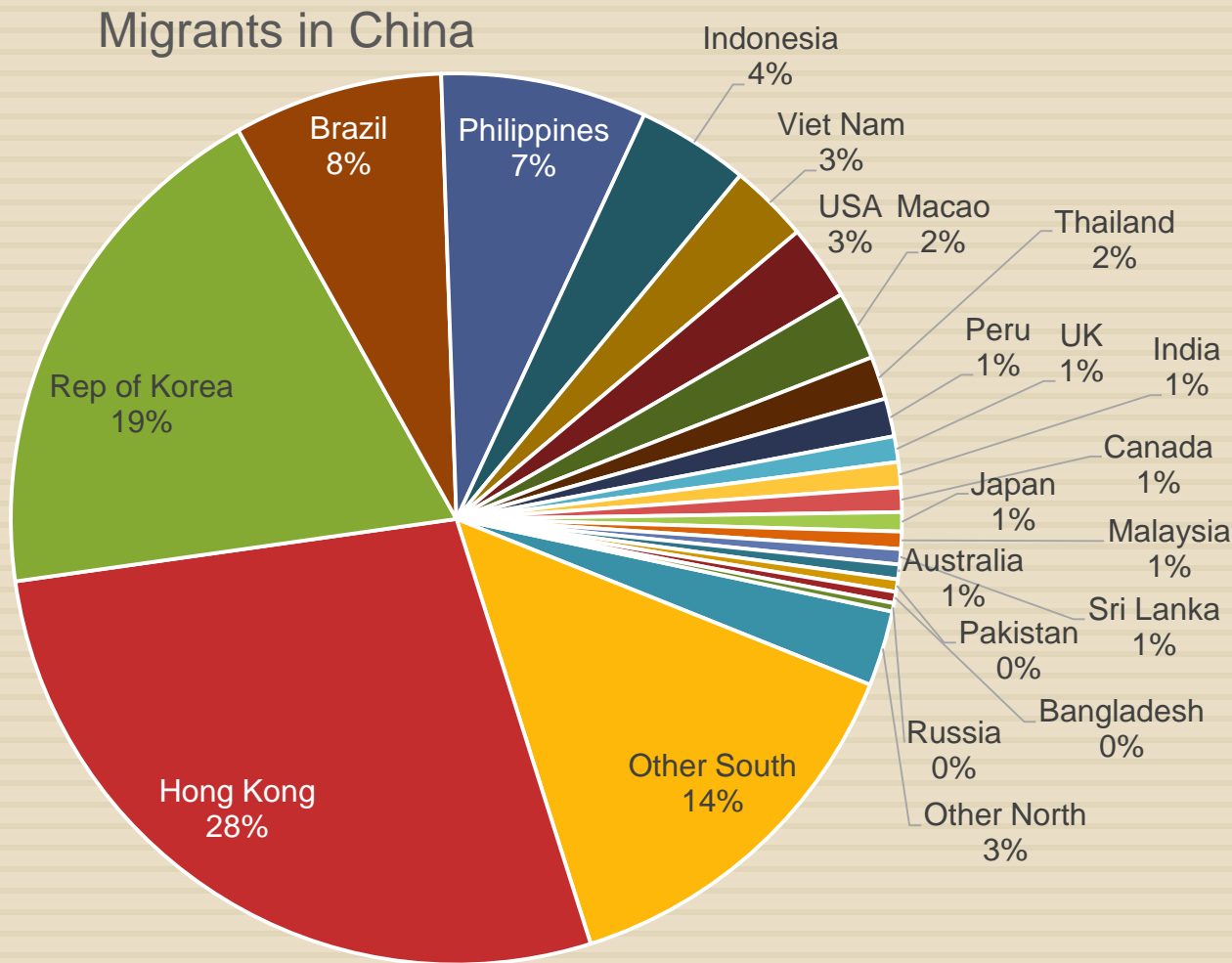
# Number of Origins

No.	Country	# of origins
1	Bulgaria	180
2	Czech	176
3	Hungary	159
4	Russia	150
5	Estonia	147
6	Egypt	134
7	Poland	119
8	Turkey	111
9	Latvia	101
10	Slovakia	95
11	Philippines	92
12	Jordan	84
13	Slovenia	80
14	Serbia	78
15	Croatia	73
16	Romania	62
17	Belarus	60
18	Israel	59
19	Lithuania	59
20	Sri Lanka	50
21	Thailand	47
22	India	38
23	Tajikistan	37

No.	Country	# of origins
24	Bahrain	35
25	Kuwait	35
26	Qatar	35
27	UAE	35
28	Lebanon	34
29	Mongolia	32
30	Ukraine	32
31	Hong Kong	31
32	Montenegro	31
33	Cambodia	28
34	Bhutan	26
35	Kyrgyzstan	25
36	Iraq	24
37	Kazakhstan	24
38	Malaysia	24
39	Maldives	24
40	Viet Nam	24
41	Georgia	23
42	China	22
43	Brunei	21
44	Indonesia	21
45	Moldova	21
46	Macedonia	21

No.	Country	# of origins
47	Bangladesh	20
48	Oman	20
49	Saudi Arabia	19
50	Azerbaijan	18
51	Singapore	17
52	Timor-Leste	17
53	Armenia	16
54	Palestine	16
	Bosnia&	
55	Herzegovina	15
56	Uzbekistan	12
57	Yemen	12
58	Turkmenistan	11
59	Pakistan	10
60	Iran	9
61	Lao PDR	9
62	Albania	8
63	Macao	8
64	Nepal	8
65	Myanmar	7
66	Syria	7
67	Afghanistan	6

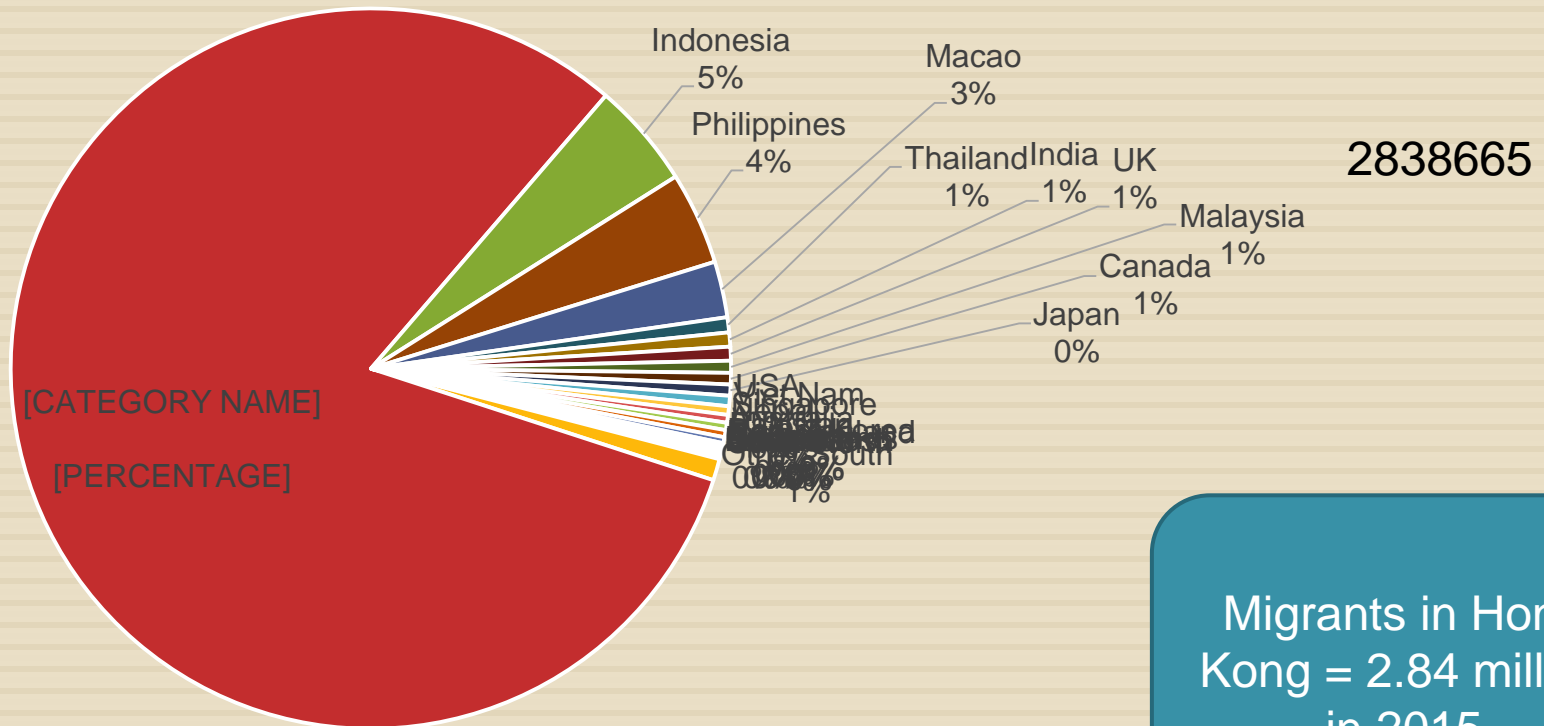
# Who are Migrants in China?



Migrants in China =  
978 thousands in  
2015

# Who are Migrants in Hong Kong?

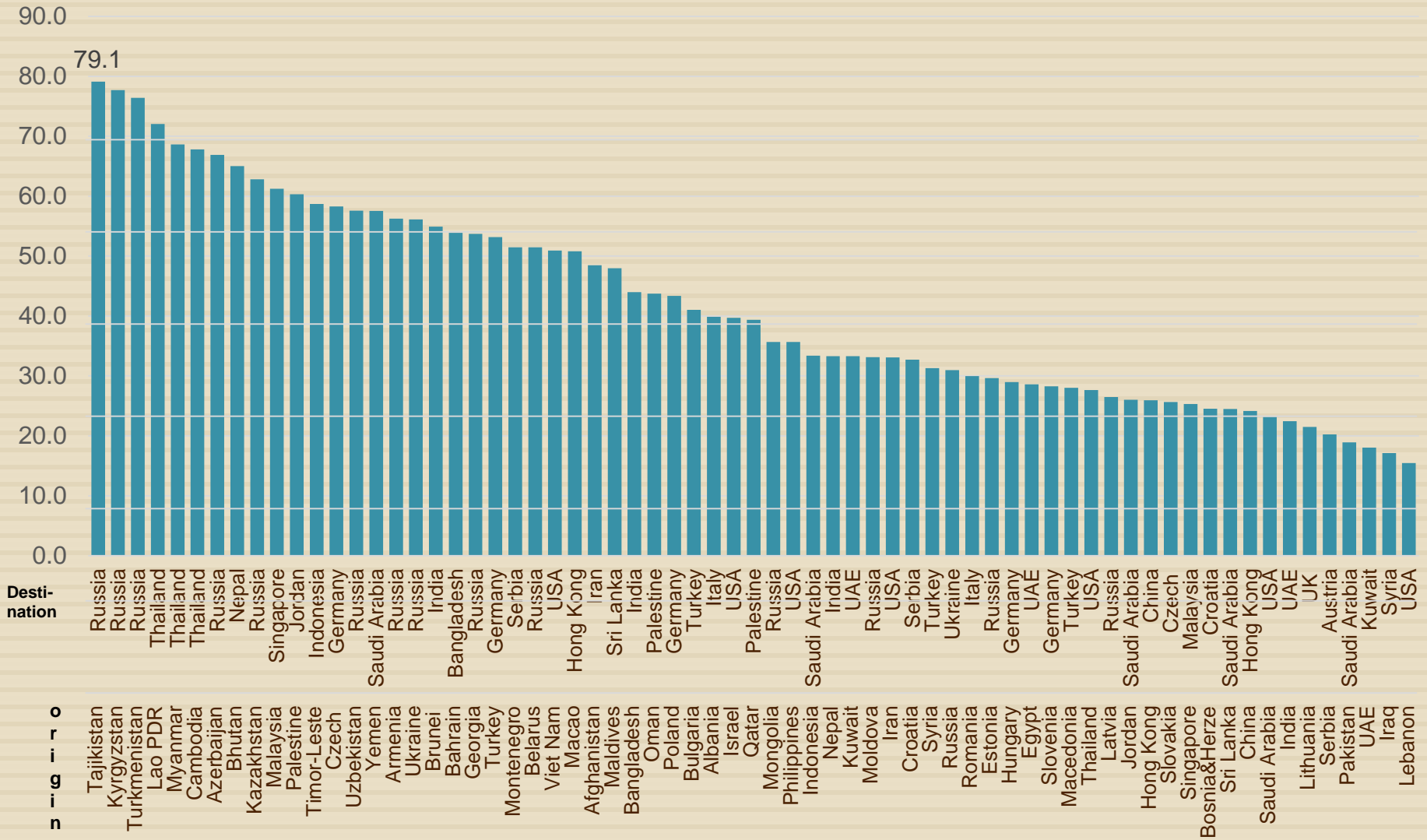
Migrants in Hong Kong





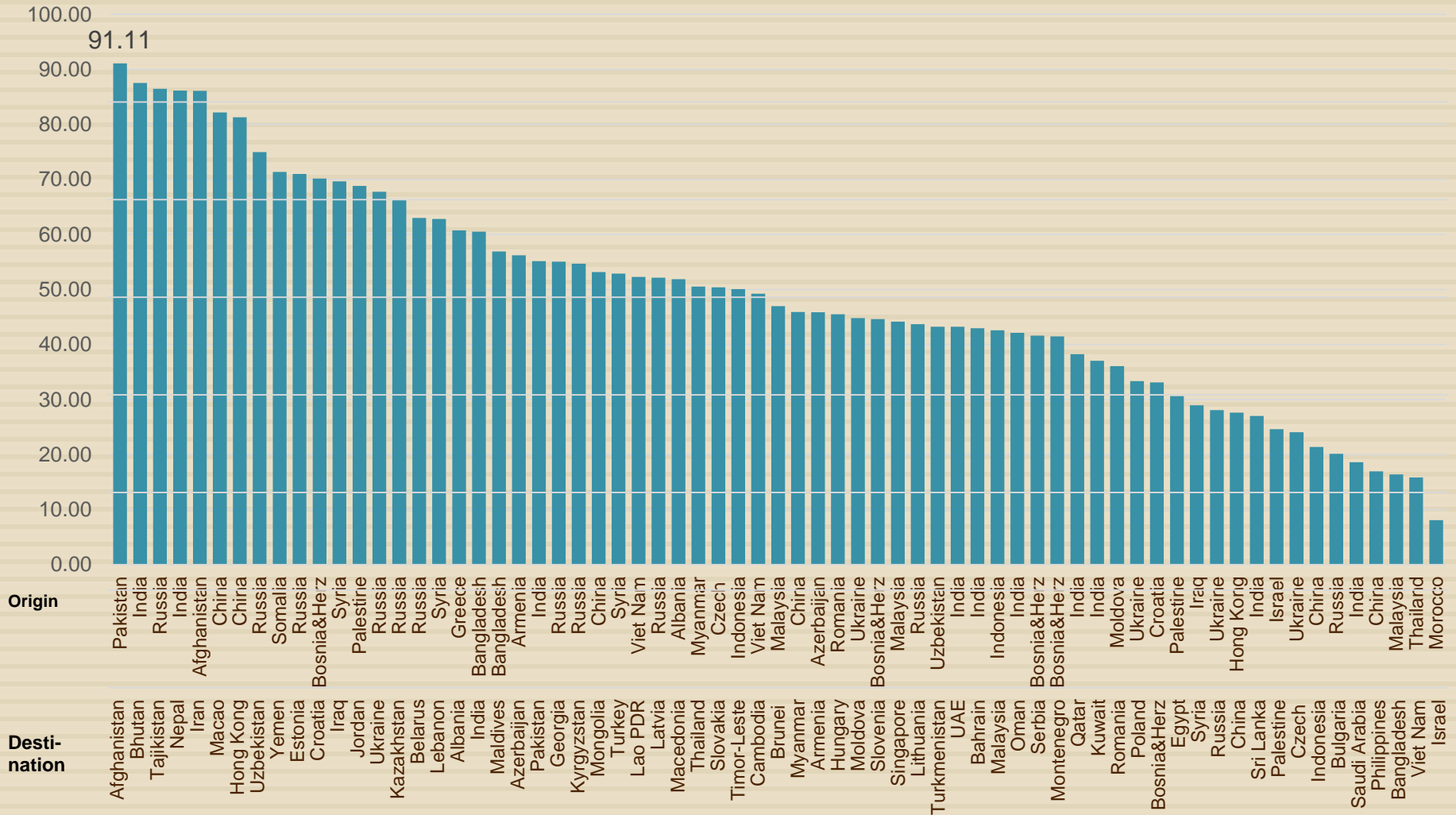
## 2. Largest Nationality

# The largest share of Out-migrants by Destination





# The largest share of In-migrants by Origin

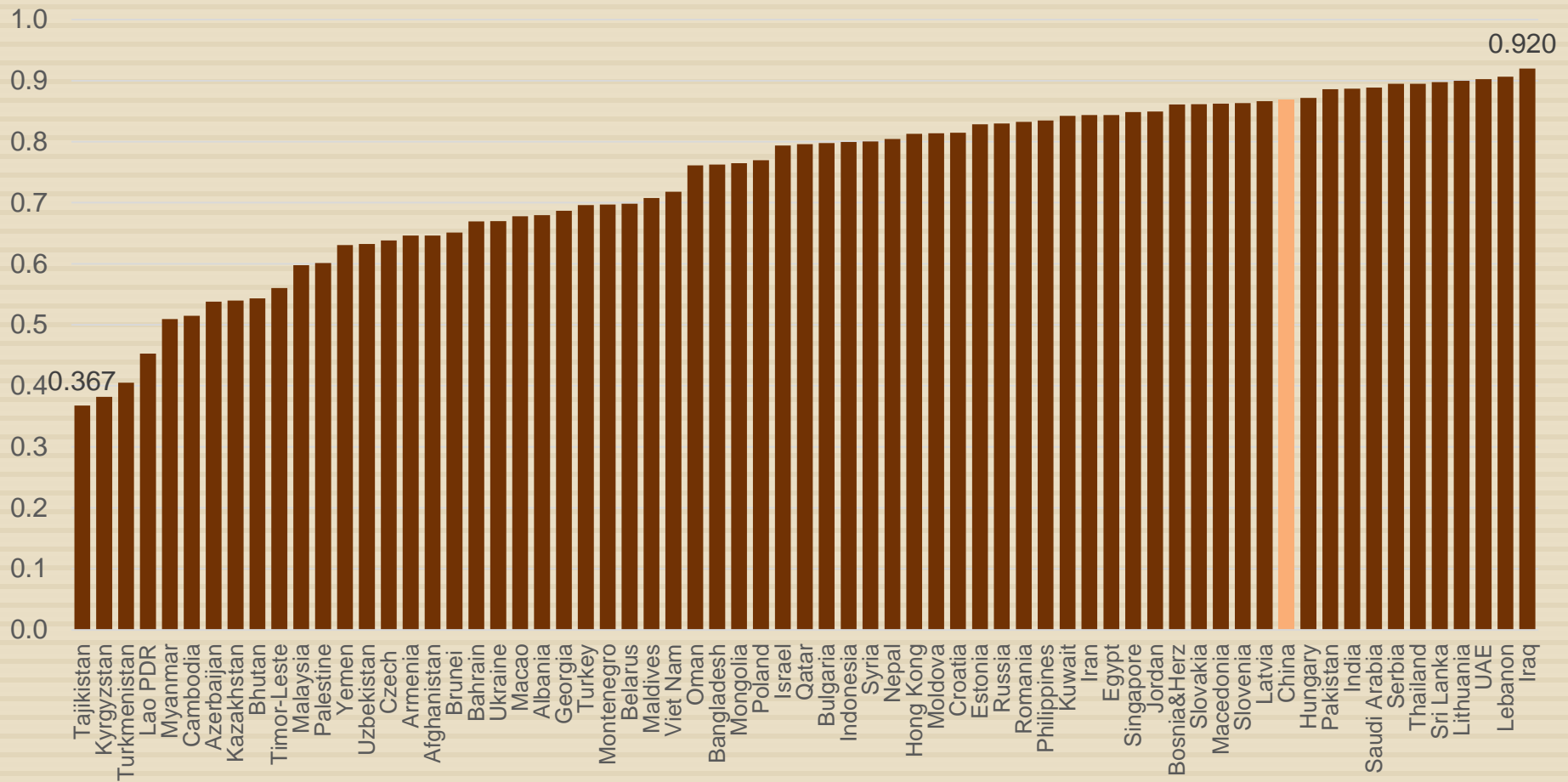


# 3. Diversity Index

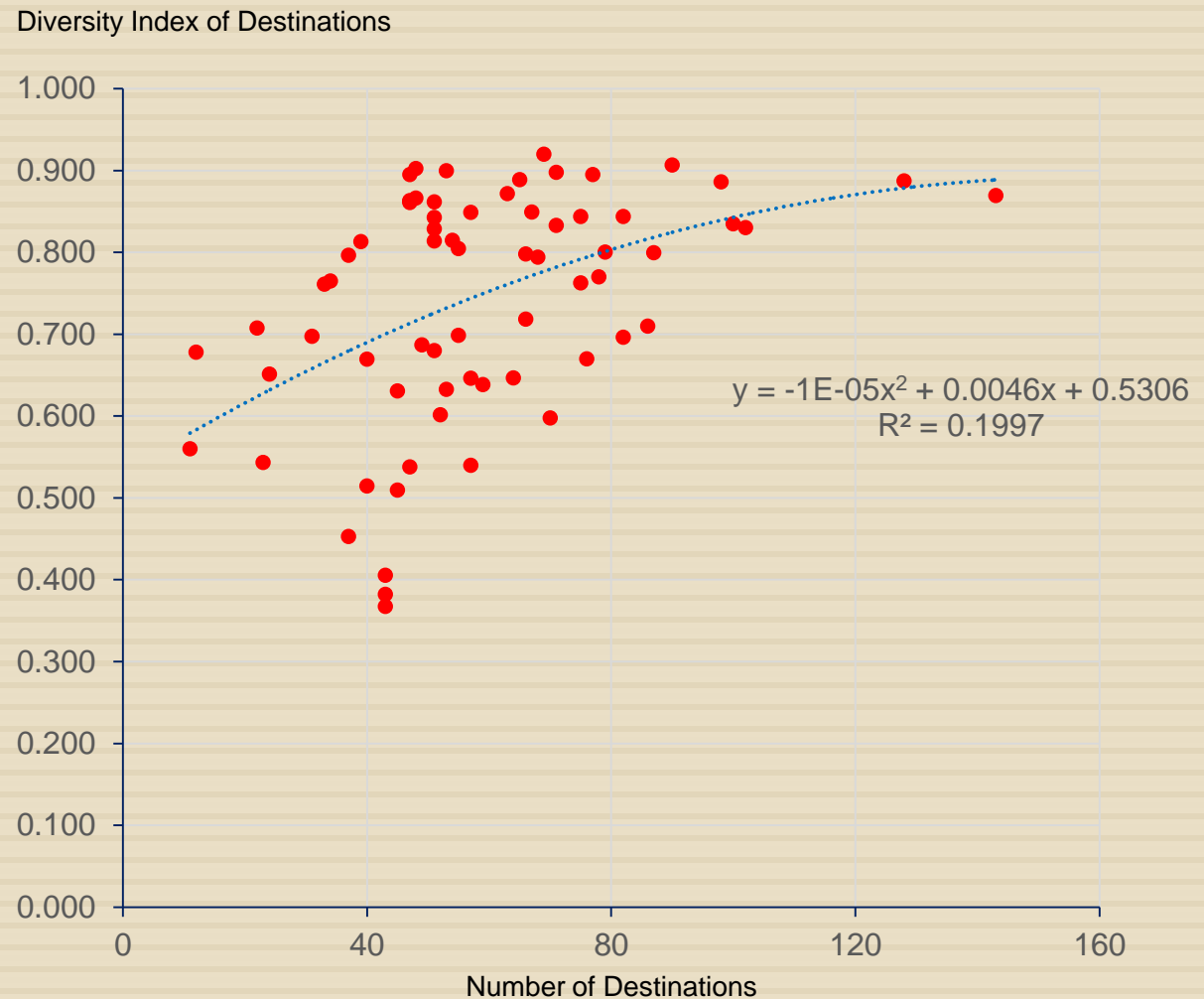
Out-migrants

In-migrants

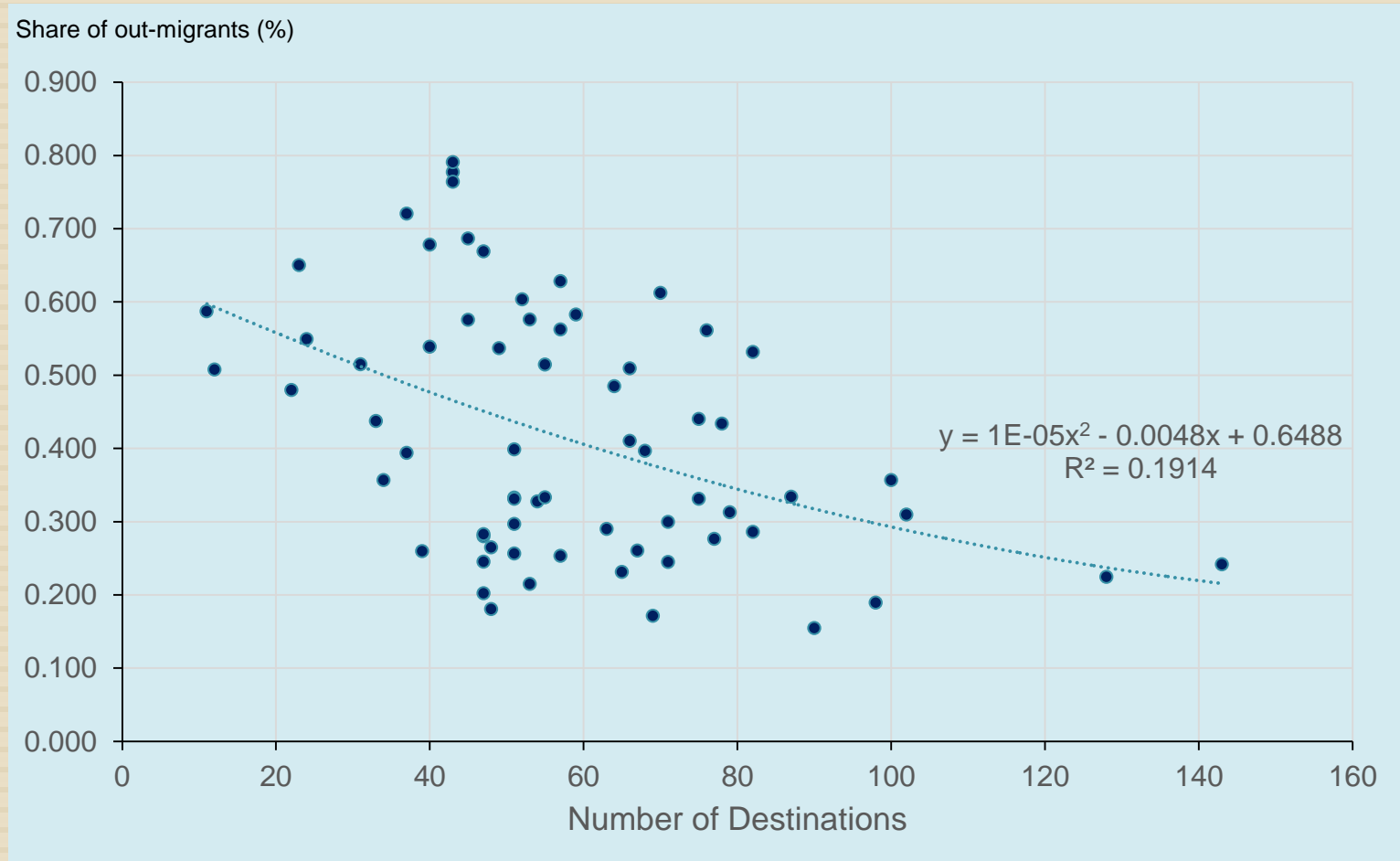
# Diversity Index of Out-migrants ranges from 0.367 (Tajikistan) to 0.920 (Iraq)



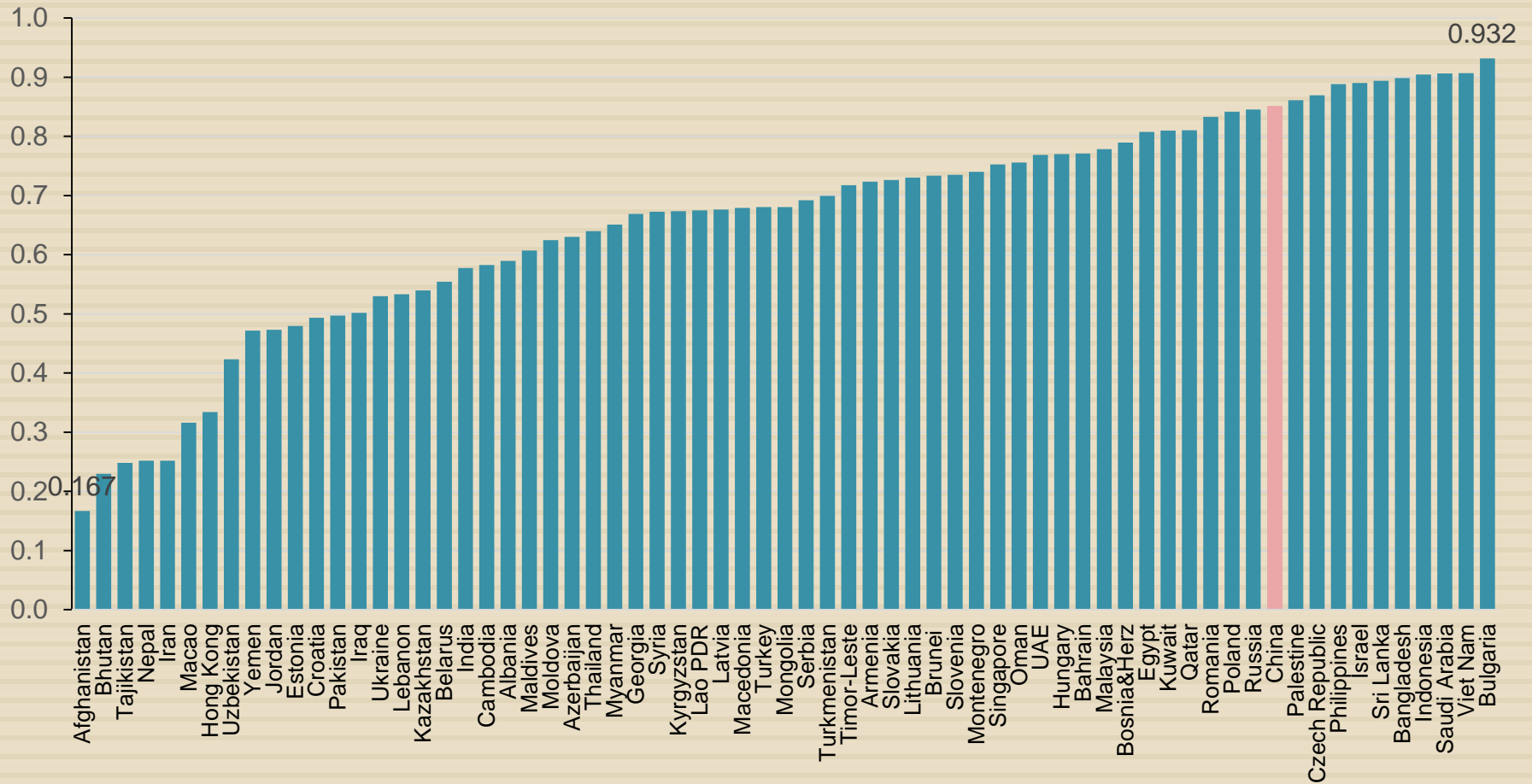
# Positive relationship between number of destinations and Diversity Index of Out-migrants



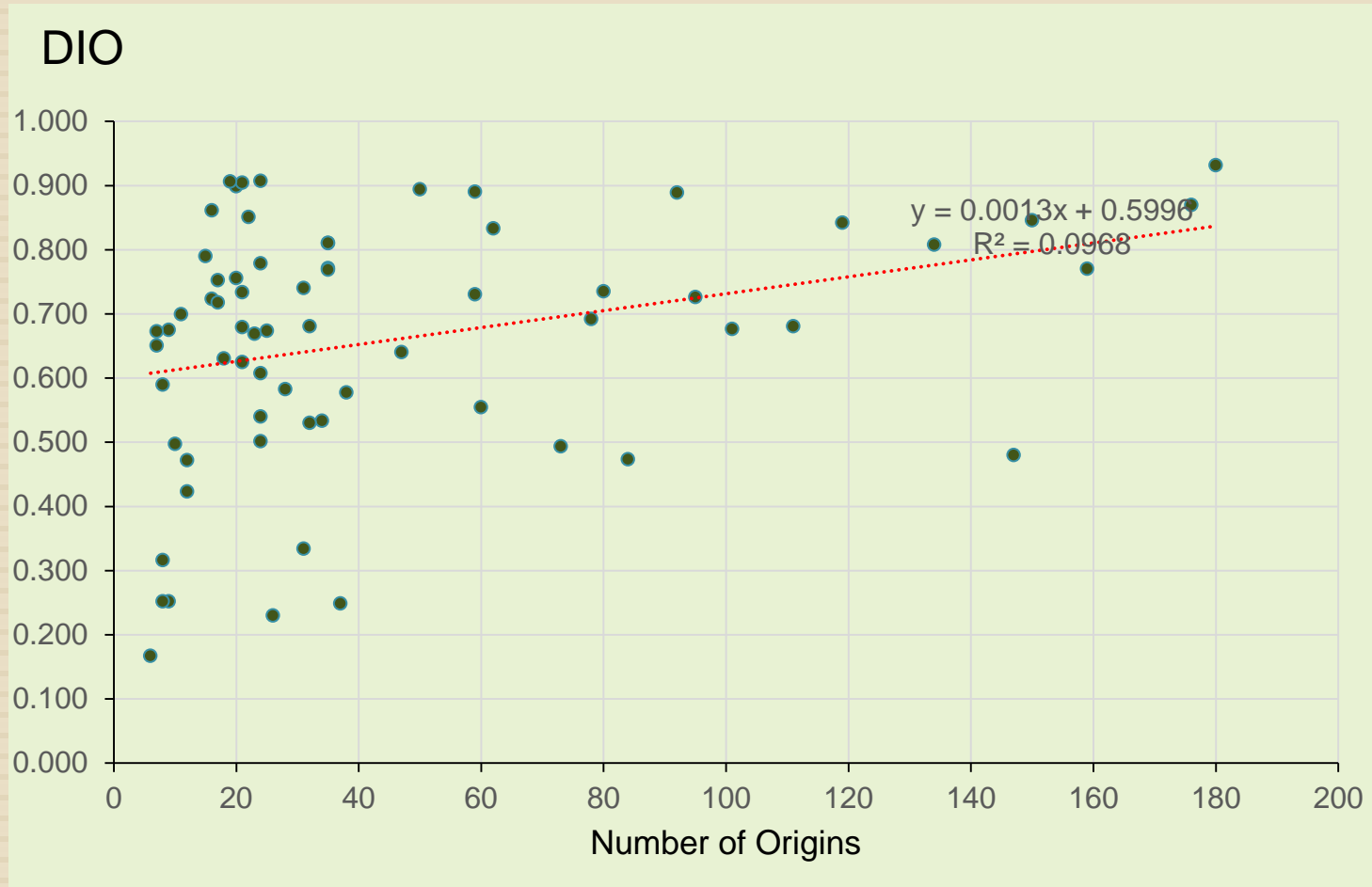
# Negative association between Number of destination and share of the largest out-migrants



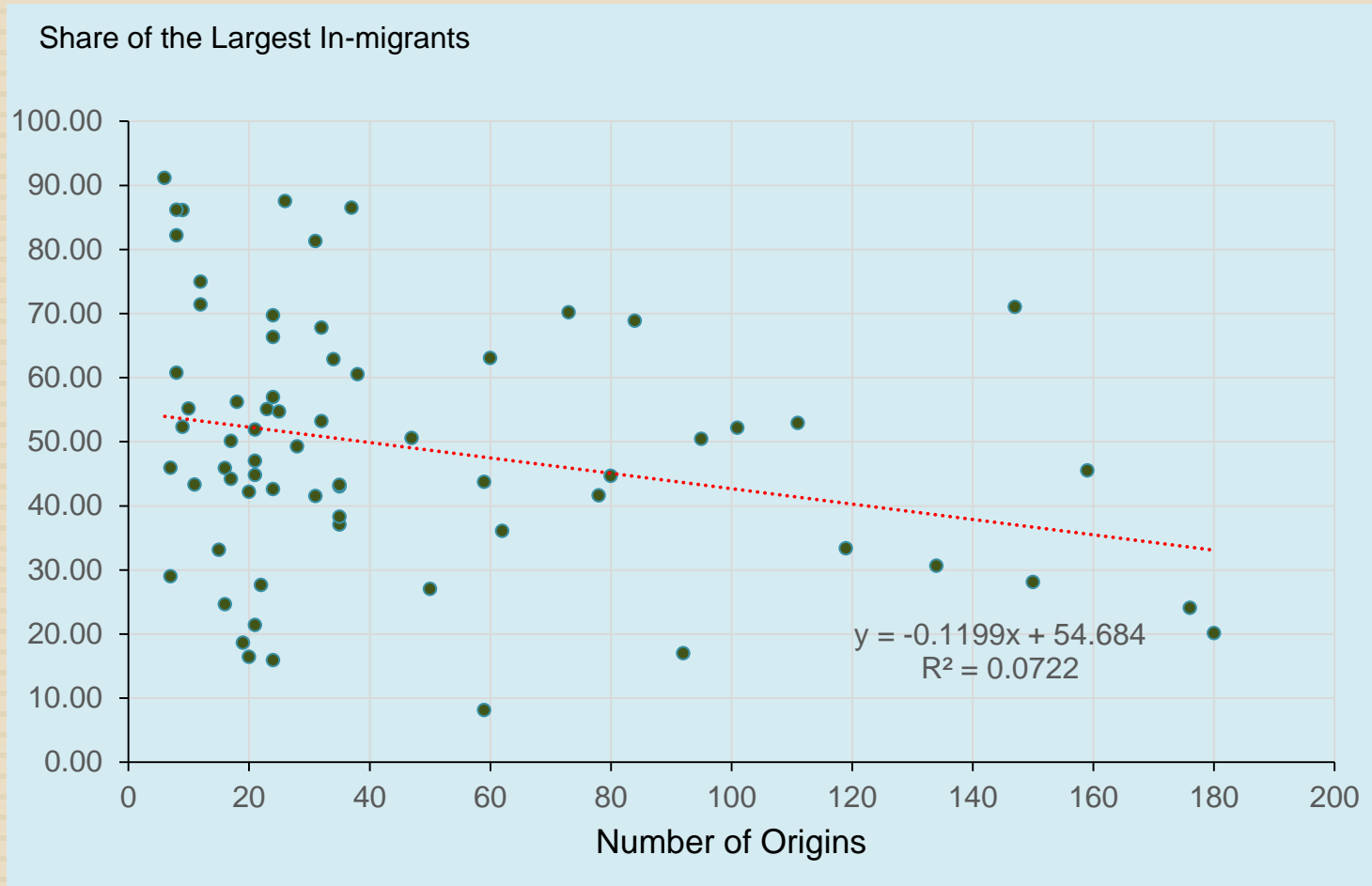
# Diversity Index of In-migrants



# Association between number of origin and Diversity Index of Origin (DIO)



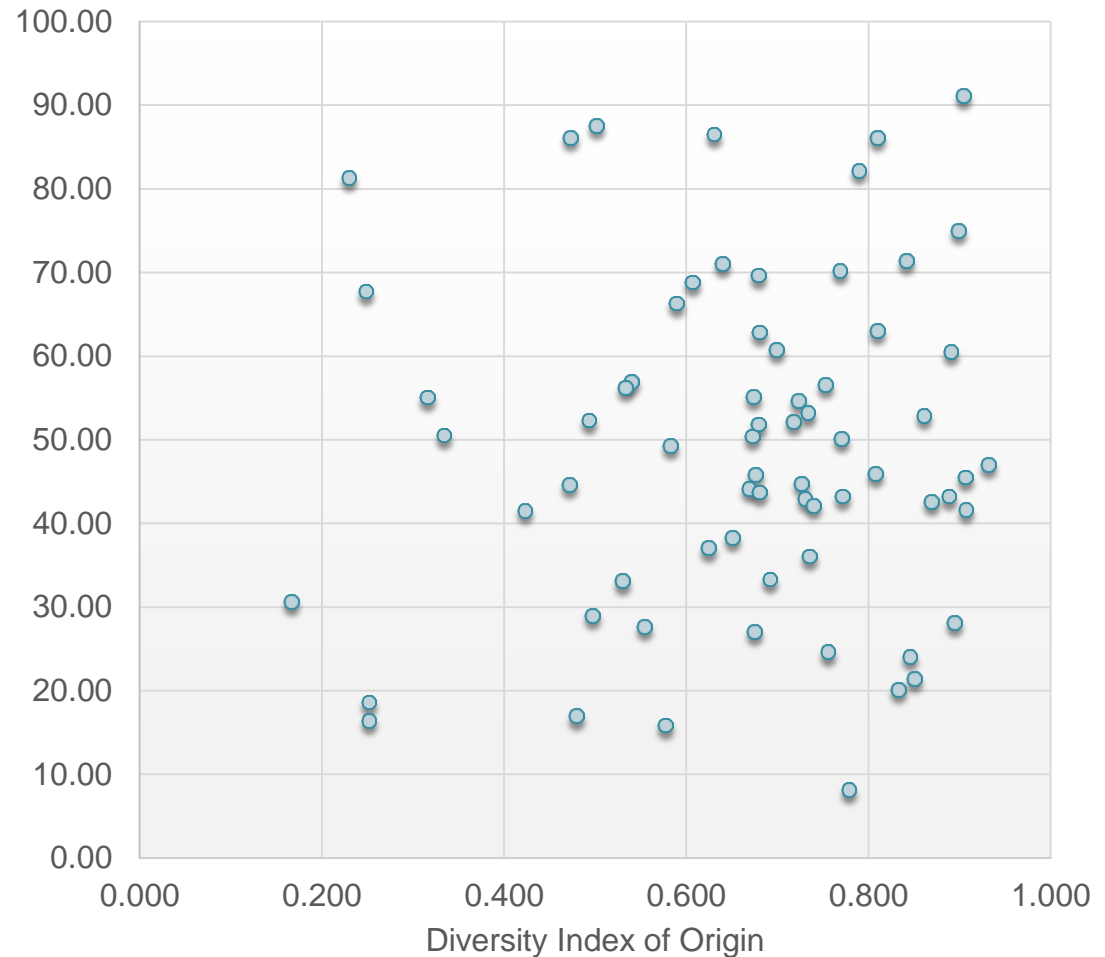
# Association between number of origin and Diversity Index of Origin



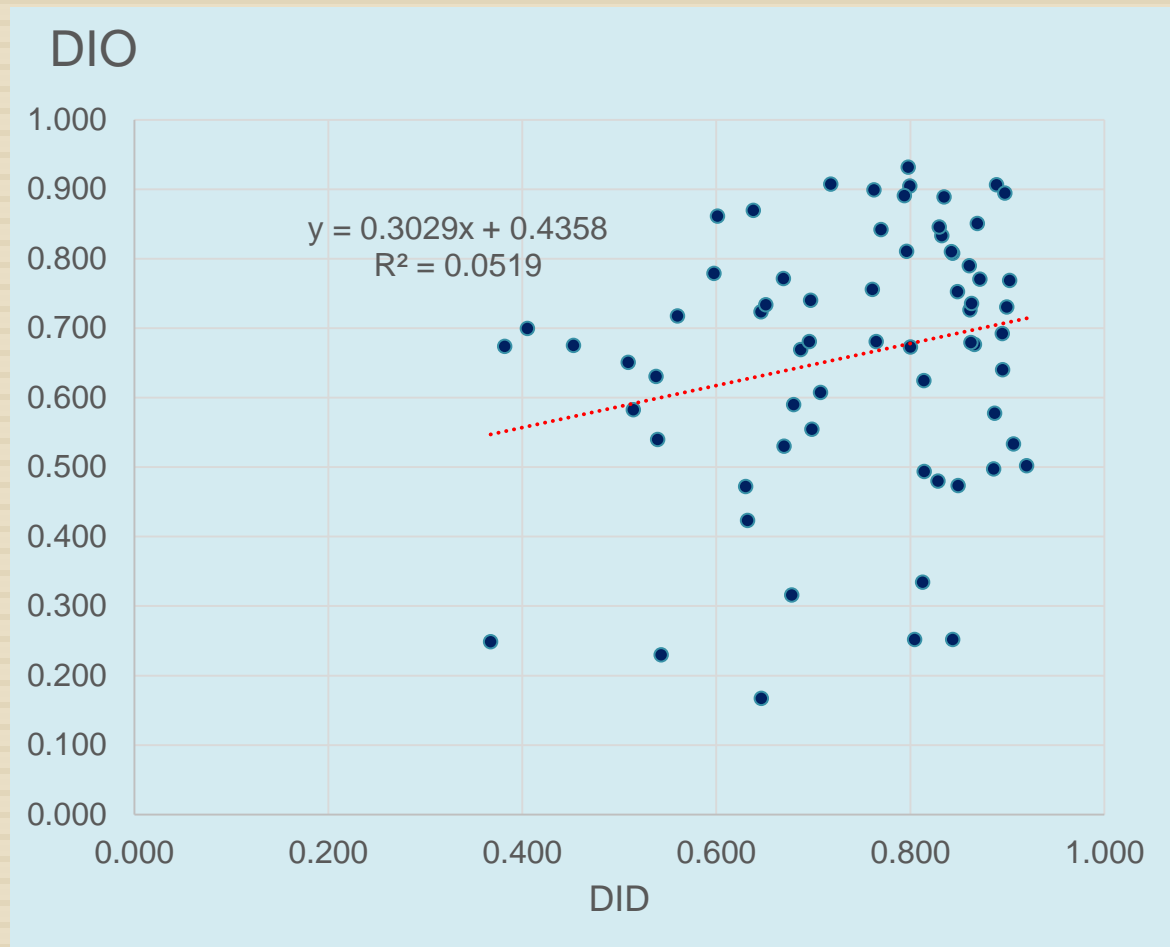


# Association between Diversity Index of Origin and the Largest In-migrants

The largest Share of In-migrants



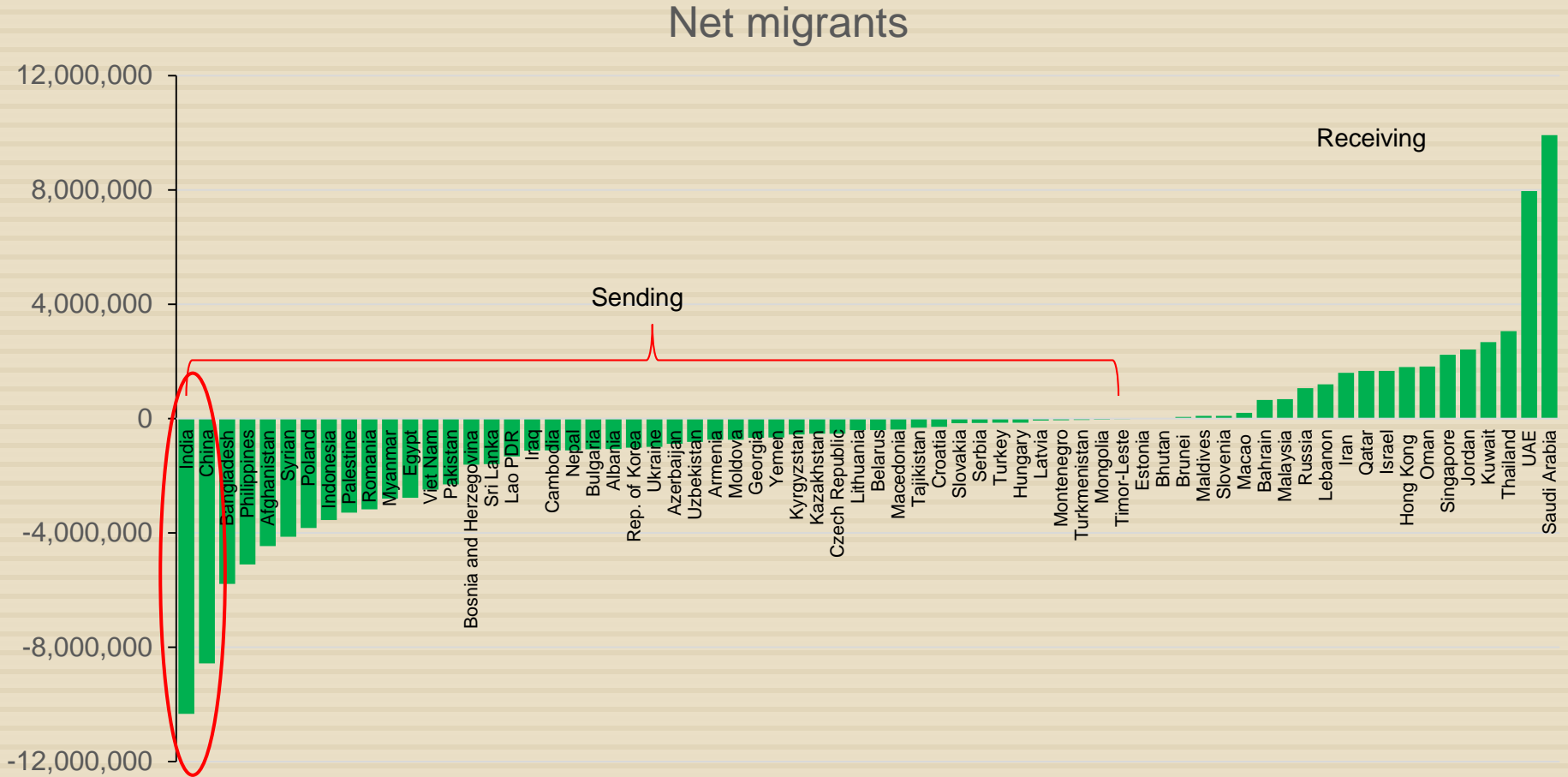
# Diversity Index of Destination and Origin





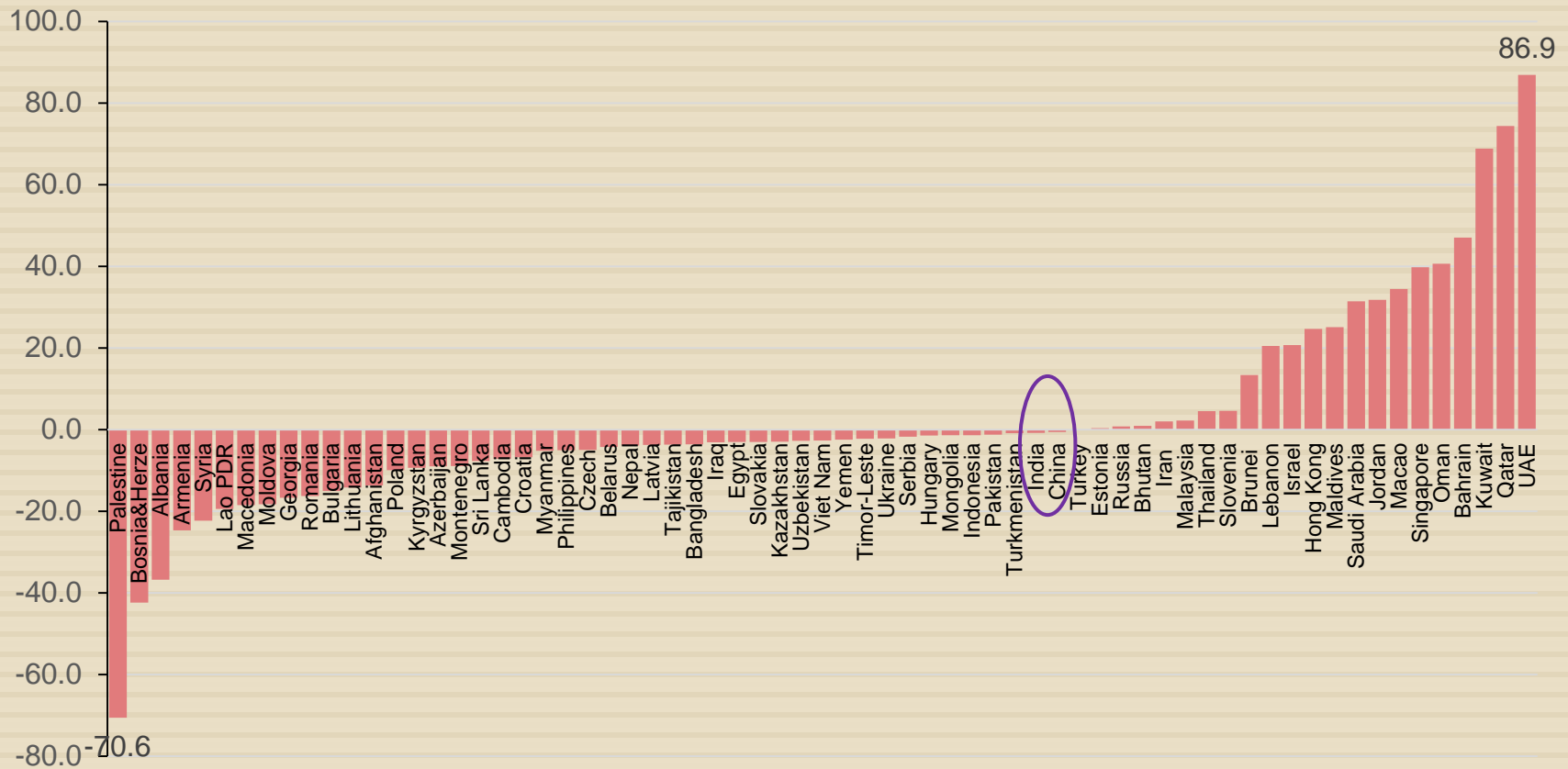
# Number and Rate of Migrants

# More sending countries than receiving countries



# More sending countries than receiving countries

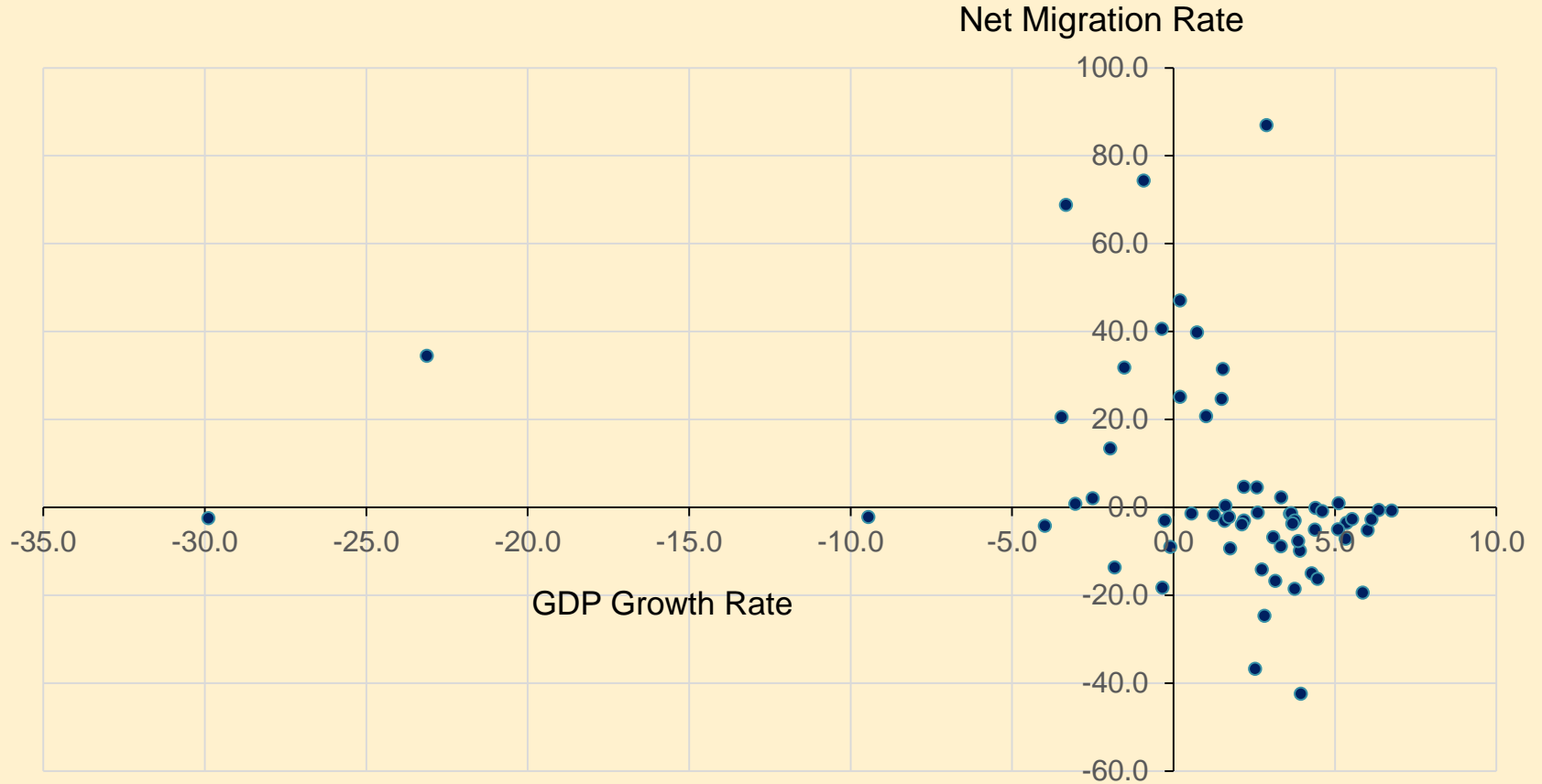
Net Migration Rate



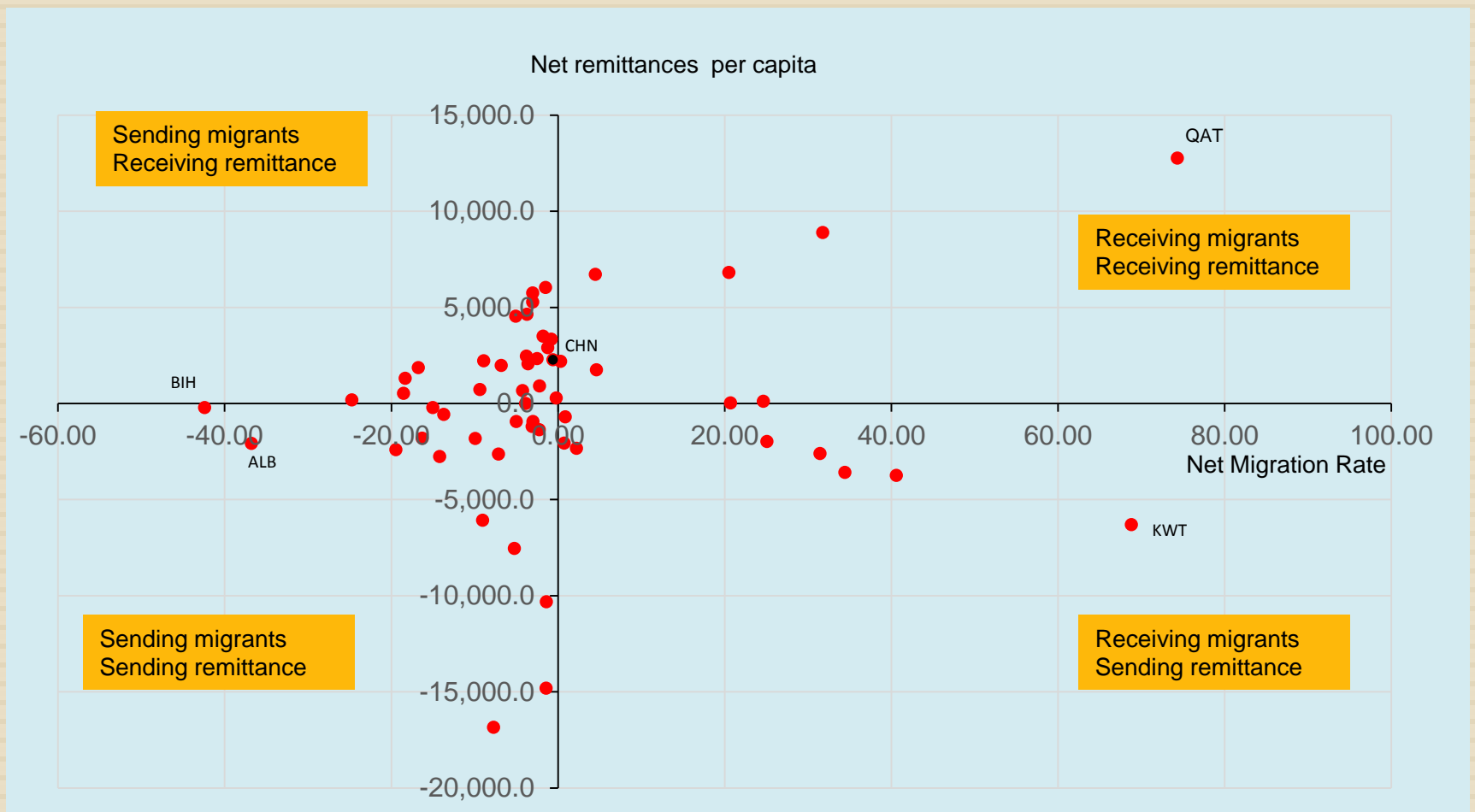


# Relationship with Economic Growth

# GDP Growth & Net migration Rate

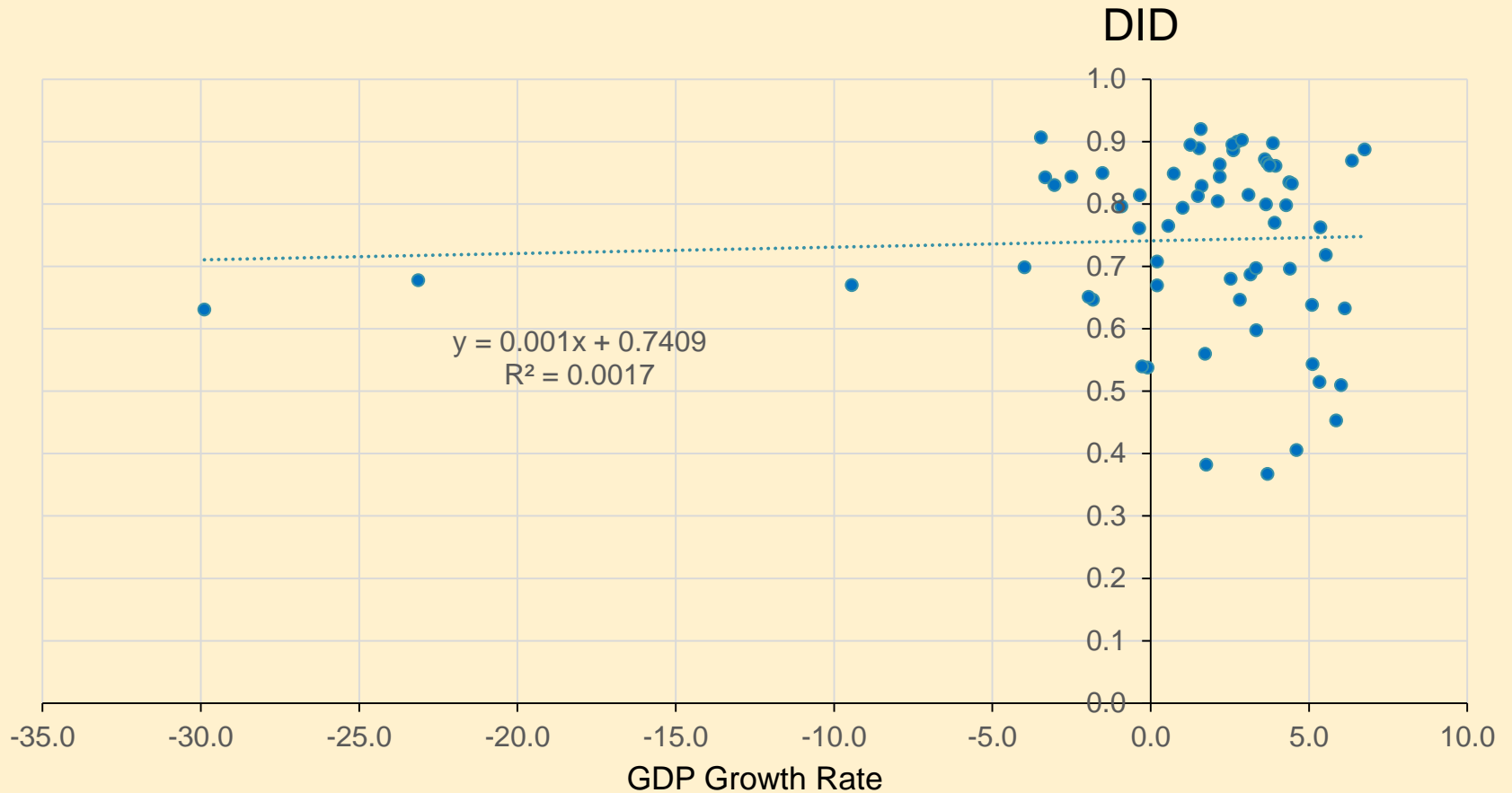


# Net Migration Rate & Net Remittances/capita

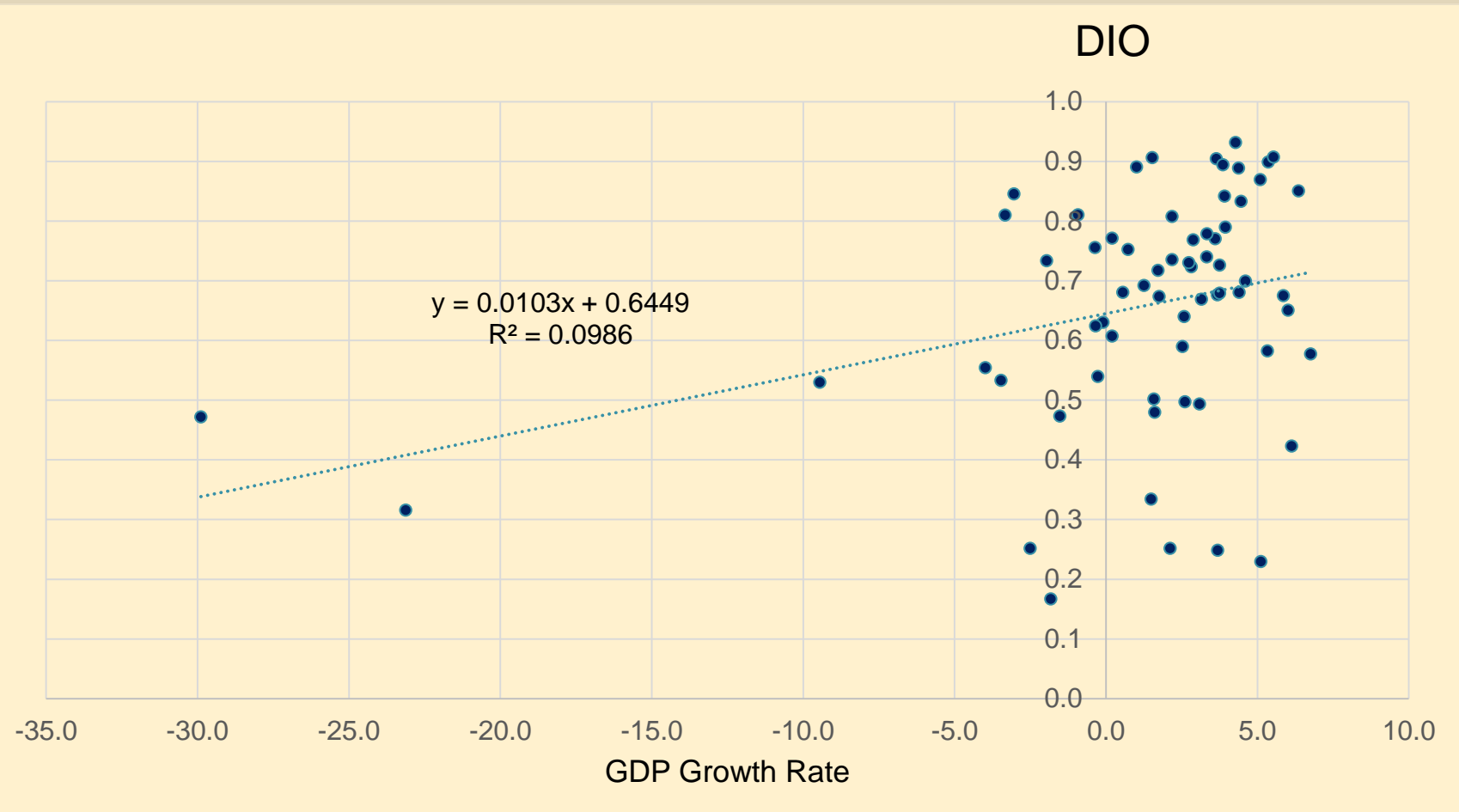




# No correlation between GDP Growth and Diversity Index of Destination (DID)



# Positive correlation between GDP growth and Diversity Index of Origin (DIO)



# Concluding Remarks

- Diversity Index among OBOR countries varies significantly
- The three measurements of diversity of migrants provide more insight of heterogeneity
- China has the most diverse destinations worldwide
- It is still difficult to understand more about the socio-economic status of the migrants, how they will integrate, and how the host will accept them.
- More migrants data are needed through collaboration with destination country
- Need to establish method to estimate and capture the non-permanent mobility



Thank You

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