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International Migrations as Determinant of the Urbanisation Rate

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International migrations as determinant of the urbanisation rate

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Abstract

In this work the impact of international migration processes on urbanisation rates is analysed. Using a panel of almost 200 countries over the 1960-2010 period, the estimates signal for a significant impact of international immigration on urbanisation rates, while international emigration harms urbanisation only in less developed countries. In the 1990-2010 period the impact of international migration on urbanisation is stronger than in previous decades.

ENC countries display a significantly different picture compared to other regions in the world. There, international emigration has competed with smaller cities in attracting migrants. There exists an important space for structural change in these countries by the enlargement of a more balanced urban structure, what will happen for sure as the push factors in these countries, underdevelopment compared to their neighbours, vanishes over time.

Keywords

Urbanisation; international migration; urban concentration

JEL Classification

R00, R23, F22

1. INTRODUCTION

In 1960 one third of world's population lived in cities. By 2010 that figure is more than 50%. At that speed of growth, in 2050 around two thirds of the world population would be living in cities. The urbanisation process is related with the process of economic development, as assumed by a large literature (Lewis, 1954; Ranis and Fei, 1961; Harris and Todaro, 1970; Todaro, 1976). In some of these models migration occurs between lagged rural areas and developed urban areas, as the latter exhibit higher wages due to higher productivity, which comes from agglomeration economies. This is in line also with the model proposed by Simon Kuznets (1955) which, in turn, assumes that economic growth is likely to be associated with increasing urbanization. After all, labour mobility is the human side of the agglomeration story.

In this work I analyse together the increase of cities all over the world and the importance of international migrations. As the World Development Report (World Bank, 2009) stresses, "an important insights of the agglomeration literature – that human capital earns higher returns where it is plentiful – has been ignored by the literature of labour migration" (WDR, 2009, p. 158), and that novel understandings come from considering agglomeration economies and labour migration. Despite the largest flows of people are between places in the same country, international migration is particularly important in developed countries (around 12% of population in OECD countries), which are the more urbanised ones. Today, the number of persons who live outside their country of birth is about 200 million people, three per cent of the world population.

Using a wide data base of 197 countries over the 1960-2010 period, I analyse tentatively the relationship between international migration and urbanisation rates. Bivariate and multivariate correlation analysis point out to a strong impact of immigration rates on urbanisation rates, particularly in small and median cities. On the contrary, emigration rates have a negative impact in urbanisation rates, but this result only applies to less developed countries. We also find that the impact of international migration in urbanisation rates is stronger in the more recent decades.

ENC countries and Russia deserve a particular attention in this study. As we will see below, these countries have singular demographic and migration trends and, interestingly, the general patterns observed in the world cannot be applied for them.

The paper is structured in five sections. After this introduction I inspect the current trends in urbanisation rates and international migration (section 2). Then I propose a brief correlation analysis between these two concepts, both bivariate (section 3) and multivariate (section 4). Finally I conclude with the main findings.

2. BACKGROUND

In this section I describe the main trends in migration and in urban agglomeration all over the world. Regarding migration, our data sources are the World Bank Bilateral Migration Database 1960-2000 and the World Bank Bilateral Migration Matrix 2010.[1] It includes 197 countries for the years 1960, 1970, 1980, 1990, 2000 and 2010.[2] The variables on population and urbanisation belong to the World Bank World Development Indicators.

Table 2 presents the main urbanisation trends of continents and world subregions. As was stressed above, urban world population has increased from 33% in 1960 to 51% in 2010 (16 percentage points over 50 years). All regions in the world have increased their urbanisation rate by 20 points (but Oceania, that already had a large rate in 1960). In 2010 in 15 regions more than half of people live in cities, while in 8 regions the figure is below 50%. Urban concentration has also risen in the last 50 years (6 percentage points), being more important in America, Oceania, and in several other subregions, such as Southern Africa and Western Asia. But the global urbanisation trend has a deeper source in small and median cities (below one million inhabitants), that has risen from 20% of total world population in 1960 to 32% in 2010. It means 12 percentage points, double of the increase in larger cities. In two regions, Central Asia and Northern Europe, large cities lost weight, while small and median cities were responsible for the entire increase in urbanisation rates. In fact, in Europe we can see that more than 80% of the increase in urbanisation rates was due to the enlargement of small and median cities.

Overall, among all urban people in the world, around 38% live in larger cities and this proportion has been decreasing over the last 50 years (39% in 1960 and 37% in 2010).

[1] These databases can be respectively accessed at http://data.worldbank.org/data-catalog/global-bilateral-migration-database and http://go.worldbank.org/JITC7NYTT0

[2] The list of countries displayed by continents and world subregions is displayed in annex 1.

Table 1b presents the urbanisation rates of ENC countries and Russia. As in other world regions, there is an increase in urbanisation rates in all countries, but the distribution between large and small and median cities is heterogeneous. In Armenia, Israel, Lebanon and Syria more than one third of total population live in large cities, while in Azerbaijan, Algeria and Jordan large cities have lost weight since 1960. As in other parts of the world, the increase in urban rates was mainly driven by small and median cities (curiously 90% of the increase in the urbanisation rate in Egypt was due to smaller cities).

Finally, the weight of larger cities over total urban population in ENC countries and Russia has slightly increased (28% to 29% over the period), but strong differences are found between ENC-South countries (-9%), ENC-East countries (+2%) and Russia (-1%).

Table 2 shows the main demographics trends in the world regions. Population growth has slowed down over the last 40 years, although several World regions still have in 2010 annual growth rates over 2%, mainly in Africa and Western Asia and Melanesia. Interestingly these areas do not show particularly high rates of emigration. Finally immigration is particularly important in more developed areas, such as Europe, North America, and Oceania, while emigration affects developed countries (Europe) and regions close to developed countries (Caribbean, Central America, Central Asia, Europe, Micronesia and Polynesia).

Table 2b focuses on the ENC countries. The more strinking fact is that ENC-East countries and Russia display a demographic decline in the last two decades. In fact, Eastern Europe is the only subregion in the World with aggregate population losses. On the contrary, ENC-South countries show high population growth rates, that caused that the population in these countries has tripled from 1960 (65 million) to 2010 (203 million). The emigration rates are particularly large in ENC-East countries (15% all over the years, a very large figure compared to other world regions), while the immigration rate, being large as well, is much below and is decreasing over the years. In ENC-South we see as well higher emigration than immigration rates. Finally, Russia has reversed the sign of these rates, as since 2000 immigrants are more than emigrants.

Table 1. World urbanisation trends

	Urban Population						People living in cities with more than 1 million						People living in small and median cities					
	1960	**1970**	**1980**	**1990**	**2000**	**2010**	**1960**	**1970**	**1980**	**1990**	**2000**	**2010**	**1960**	**1970**	**1980**	**1990**	**2000**	**2010**
Africa	**18%**	**23%**	**28%**	**32%**	**36%**	**40%**	**7%**	**9%**	**10%**	**11%**	**12%**	**13%**	**12%**	**15%**	**18%**	**21%**	**24%**	**28%**
Central Africa	14%	19%	29%	38%	45%	52%	3%	6%	9%	11%	13%	17%	10%	14%	20%	26%	32%	36%
Eastern Africa	7%	10%	15%	18%	21%	24%	2%	3%	4%	5%	6%	6%	5%	7%	10%	13%	15%	18%
Northern Africa	31%	37%	41%	45%	49%	52%	13%	15%	16%	16%	16%	15%	19%	22%	26%	30%	33%	37%
Southern Africa	42%	44%	45%	49%	54%	59%	21%	23%	23%	24%	26%	29%	21%	21%	21%	24%	28%	30%
Western Africa	15%	21%	27%	33%	39%	45%	4%	7%	9%	11%	13%	14%	11%	15%	18%	22%	26%	30%
America	**59%**	**64%**	**69%**	**72%**	**77%**	**80%**	**29%**	**33%**	**34%**	**35%**	**37%**	**38%**	**29%**	**32%**	**34%**	**37%**	**40%**	**42%**
Caribbean	39%	44%	51%	55%	61%	66%	13%	16%	18%	19%	21%	23%	26%	29%	33%	36%	39%	43%
Central America	46%	54%	60%	65%	69%	72%	19%	24%	28%	29%	30%	30%	27%	29%	32%	36%	39%	41%
Northern America	70%	74%	74%	75%	79%	82%	38%	41%	40%	41%	43%	45%	32%	33%	34%	34%	36%	38%
South America	51%	60%	68%	75%	79%	84%	24%	28%	32%	34%	35%	38%	27%	31%	36%	41%	44%	46%
Asia	**20%**	**23%**	**26%**	**32%**	**37%**	**43%**	**9%**	**10%**	**12%**	**13%**	**15%**	**17%**	**11%**	**12%**	**15%**	**19%**	**22%**	**26%**
Central Asia	39%	43%	45%	45%	42%	42%	6%	6%	7%	6%	6%	6%	33%	36%	38%	38%	36%	37%
East Asia	20%	23%	26%	33%	40%	48%	11%	12%	13%	14%	18%	22%	9%	11%	13%	19%	22%	27%
South Asia	17%	20%	23%	26%	29%	32%	7%	8%	9%	11%	12%	13%	11%	12%	14%	16%	17%	19%
Southeast Asia	18%	21%	25%	32%	40%	48%	8%	9%	10%	11%	11%	11%	10%	12%	15%	21%	29%	37%
Western Asia	36%	45%	52%	61%	64%	67%	16%	21%	24%	26%	28%	28%	20%	24%	28%	35%	36%	39%
Europe	**57%**	**63%**	**68%**	**71%**	**72%**	**73%**	**14%**	**15%**	**15%**	**16%**	**16%**	**16%**	**43%**	**48%**	**53%**	**55%**	**56%**	**57%**
Eastern Europe -ENC	51%	59%	67%	71%	71%	71%	12%	13%	15%	15%	16%	17%	39%	46%	52%	56%	55%	54%
Eastern Europe - EU	45%	51%	58%	62%	62%	62%	7%	8%	8%	8%	8%	8%	38%	43%	50%	53%	54%	54%
Northern Europe	71%	73%	82%	83%	84%	85%	24%	22%	21%	20%	21%	21%	47%	51%	61%	62%	63%	64%
Southern Europe	52%	59%	63%	65%	66%	69%	15%	19%	20%	19%	20%	20%	37%	40%	44%	45%	46%	49%
Western Europe	68%	71%	73%	74%	75%	77%	14%	14%	14%	14%	14%	15%	54%	57%	59%	60%	61%	62%
Oceania	**67%**	**71%**	**71%**	**71%**	**70%**	**71%**	**38%**	**41%**	**43%**	**42%**	**41%**	**40%**	**29%**	**30%**	**29%**	**29%**	**29%**	**31%**
Australia and New Zealand	80%	85%	85%	85%	87%	89%	48%	51%	54%	54%	55%	54%	33%	33%	31%	31%	32%	35%
Melanesia	9%	15%	18%	20%	19%	19%	0%	0%	0%	0%	0%	0%	9%	15%	18%	20%	19%	19%
Micronesia	27%	35%	41%	48%	52%	52%	0%	0%	0%	0%	0%	0%	27%	35%	41%	48%	52%	52%
Polynesia	26%	32%	35%	37%	36%	38%	0%	0%	0%	0%	0%	0%	26%	32%	35%	37%	36%	38%
World	**33%**	**36%**	**39%**	**43%**	**47%**	**51%**	**13%**	**14%**	**15%**	**16%**	**18%**	**19%**	**20%**	**22%**	**24%**	**27%**	**29%**	**32%**

Table 1b. European Neighbouring Countries urbanisation trends

		Urban Population						People living in cities with more than 1 million						People living in small and median cities					
		1960	**1970**	**1980**	**1990**	**2000**	**2010**	**1960**	**1970**	**1980**	**1990**	**2000**	**2010**	**1960**	**1970**	**1980**	**1990**	**2000**	**2010**
AM	Armenia	51%	60%	66%	68%	65%	64%	29%	31%	34%	33%	36%	36%	23%	29%	32%	34%	29%	28%
AZ	Azerbaijan	48%	50%	53%	54%	51%	52%	26%	25%	26%	24%	22%	22%	22%	25%	27%	29%	29%	30%
BY	Belarus	32%	44%	57%	66%	70%	74%	7%	10%	14%	16%	17%	20%	26%	34%	43%	50%	53%	55%
GE	Georgia	42%	48%	52%	55%	53%	53%	20%	23%	24%	25%	25%	25%	23%	25%	27%	30%	28%	28%
MD	Moldova	23%	32%	40%	47%	45%	41%	0%	0%	0%	0%	0%	0%	23%	32%	40%	47%	45%	41%
UA	Ukraine	47%	55%	62%	67%	67%	68%	8%	10%	12%	12%	13%	14%	39%	45%	50%	54%	54%	54%
Total ENC- East		**44%**	**52%**	**59%**	**64%**	**64%**	**65%**	**10%**	**12%**	**14%**	**15%**	**15%**	**16%**	**34%**	**40%**	**45%**	**49%**	**49%**	**48%**
DZ	Algeria	31%	40%	44%	52%	60%	67%	8%	9%	9%	7%	7%	8%	22%	30%	35%	45%	52%	59%
EG	Egypt	38%	42%	44%	44%	43%	43%	19%	21%	22%	21%	20%	19%	19%	21%	22%	22%	22%	24%
IL	Israel	77%	84%	89%	90%	91%	92%	47%	45%	46%	56%	58%	57%	30%	39%	42%	34%	34%	35%
JO	Jordan	51%	56%	60%	72%	78%	79%	26%	26%	29%	27%	21%	18%	25%	30%	31%	45%	57%	60%
LB	Lebanon	42%	60%	74%	83%	86%	87%	29%	37%	58%	44%	40%	46%	13%	22%	16%	39%	46%	41%
LY	Libya	27%	50%	70%	76%	76%	78%	13%	20%	22%	20%	20%	17%	14%	30%	48%	56%	57%	60%
MA	Morocco	29%	35%	41%	48%	53%	57%	13%	15%	18%	18%	19%	19%	17%	19%	24%	30%	34%	37%
SY	Syria	37%	43%	47%	49%	52%	55%	27%	30%	32%	31%	32%	34%	10%	14%	15%	18%	20%	21%
TN	Tunisia	38%	44%	51%	58%	63%	67%	0%	0%	0%	0%	0%	0%	38%	44%	51%	58%	63%	67%
Total ENC-South		**36%**	**43%**	**47%**	**51%**	**54%**	**56%**	**16%**	**19%**	**20%**	**20%**	**20%**	**20%**	**20%**	**24%**	**27%**	**32%**	**35%**	**37%**
Total ENC		**40%**	**47%**	**52%**	**56%**	**57%**	**59%**	**13%**	**16%**	**18%**	**18%**	**18%**	**19%**	**27%**	**31%**	**34%**	**38%**	**39%**	**40%**
RU	Russia	54%	63%	70%	73%	73%	73%	14%	15%	16%	17%	17%	18%	40%	47%	53%	57%	56%	55%
Total ENC + Russia		**47%**	**54%**	**60%**	**63%**	**63%**	**63%**	**13%**	**15%**	**17%**	**17%**	**18%**	**18%**	**33%**	**39%**	**42%**	**45%**	**45%**	**45%**

Note: Palestinian territory is not considered due to the lack of data

Table 2. World Demographic trends

	Population Growth - annual rates					Emigrants as % of local population						Immigrants as % of local population					
	1960-1970	1970-1980	1980-1990	1990-2000	2000-2010	1960	1970	1980	1990	2000	2010	1960	1970	1980	1990	2000	2010
Africa	**2.5%**	**2.7%**	**2.8%**	**2.5%**	**2.3%**	**2.9%**	**2.9%**	**2.9%**	**2.6%**	**2.5%**	**2.9%**	**2.9%**	**2.2%**	**2.0%**	**1.5%**	**1.5%**	**1.5%**
Central Africa	2.1%	2.6%	2.9%	2.8%	2.7%	2.0%	1.8%	2.2%	1.9%	1.8%	2.4%	2.6%	2.0%	1.5%	1.5%	1.1%	1.5%
Eastern Africa	2.8%	2.9%	3.0%	2.7%	2.6%	3.5%	2.8%	2.1%	1.8%	1.7%	2.2%	3.5%	2.7%	1.8%	1.3%	1.2%	1.2%
Northern Africa	2.6%	2.7%	2.6%	1.9%	1.7%	3.1%	3.9%	4.1%	4.1%	3.6%	4.5%	2.1%	1.0%	0.8%	0.7%	0.7%	0.7%
Southern Africa	2.4%	2.3%	2.5%	2.3%	1.3%	2.6%	2.2%	2.1%	2.4%	2.0%	2.5%	4.9%	4.2%	3.4%	3.5%	2.3%	3.5%
Western Africa	2.3%	2.7%	2.7%	2.6%	2.6%	2.4%	2.5%	2.9%	2.4%	2.6%	2.8%	2.3%	2.4%	2.8%	2.1%	2.2%	2.0%
America	**2.0%**	**1.8%**	**1.6%**	**1.5%**	**1.1%**	**1.3%**	**1.5%**	**2.0%**	**2.5%**	**3.4%**	**3.8%**	**4.7%**	**4.0%**	**4.2%**	**4.6%**	**5.5%**	**5.8%**
Caribbean	2.0%	1.6%	1.4%	1.2%	0.9%	7.0%	9.4%	11.2%	13.4%	15.4%	16.3%	2.5%	2.8%	2.6%	2.5%	2.6%	2.1%
Central America	3.0%	2.8%	2.1%	1.8%	1.4%	1.7%	2.0%	3.5%	5.6%	9.0%	10.0%	0.9%	0.6%	0.5%	0.6%	0.8%	0.9%
Northern America	1.3%	1.1%	1.0%	1.2%	0.9%	1.0%	1.1%	1.1%	1.0%	1.1%	1.0%	6.8%	6.6%	7.9%	9.8%	12.7%	13.7%
South America	2.6%	2.3%	2.1%	1.6%	1.2%	0.9%	0.9%	1.2%	1.5%	1.9%	2.5%	3.4%	2.4%	1.9%	1.4%	1.2%	1.1%
Asia	**2.3%**	**2.1%**	**1.9%**	**1.5%**	**1.1%**	**1.8%**	**1.5%**	**1.5%**	**1.5%**	**1.6%**	**1.7%**	**1.9%**	**1.6%**	**1.3%**	**1.3%**	**1.2%**	**1.2%**
Central Asia	3.1%	2.2%	2.0%	0.9%	1.1%	7.3%	8.3%	7.9%	10.2%	12.0%	10.7%	14.9%	16.3%	14.5%	13.3%	9.4%	7.4%
East Asia	2.0%	1.8%	1.4%	1.0%	0.5%	0.8%	0.6%	0.6%	0.6%	0.7%	0.8%	0.4%	0.3%	0.3%	0.3%	0.4%	0.3%
South Asia	2.4%	2.4%	2.4%	1.9%	1.5%	3.2%	2.4%	2.0%	1.7%	1.5%	1.6%	3.1%	2.2%	1.6%	1.1%	0.8%	0.6%
Southeast Asia	2.6%	2.4%	2.2%	1.6%	1.3%	0.6%	0.6%	0.9%	1.4%	1.8%	2.1%	1.8%	1.3%	0.7%	0.6%	0.9%	1.0%
Western Asia	2.7%	2.8%	2.7%	2.2%	2.3%	3.0%	4.2%	5.9%	6.0%	6.2%	5.5%	5.3%	5.7%	6.6%	8.7%	8.4%	9.4%
Europe	**0.8%**	**0.5%**	**0.4%**	**0.1%**	**0.2%**	**7.8%**	**8.0%**	**7.6%**	**7.7%**	**7.2%**	**7.4%**	**4.9%**	**5.8%**	**6.3%**	**7.2%**	**7.7%**	**9.2%**
Eastern Europe	0.9%	0.7%	0.5%	-0.2%	-0.3%	10.3%	10.2%	9.6%	10.2%	9.1%	9.1%	5.9%	6.2%	6.2%	7.0%	6.8%	6.8%
Northern Europe	0.7%	0.3%	0.2%	0.2%	0.5%	7.4%	8.3%	7.8%	7.8%	7.8%	7.3%	4.0%	5.9%	6.7%	7.6%	8.3%	10.7%
Southern Europe	0.8%	0.8%	0.3%	0.1%	0.8%	7.9%	9.3%	8.3%	7.6%	7.5%	8.5%	0.8%	1.3%	1.9%	2.9%	4.5%	9.9%
Western Europe	0.9%	0.3%	0.3%	0.4%	0.3%	3.7%	3.4%	3.5%	3.5%	3.7%	3.9%	6.7%	8.4%	9.7%	10.4%	11.2%	11.5%
Oceania	**2.0%**	**1.7%**	**1.6%**	**1.4%**	**1.7%**	**1.8%**	**2.0%**	**2.7%**	**3.3%**	**4.3%**	**4.1%**	**13.3%**	**15.3%**	**15.0%**	**15.5%**	**15.5%**	**17.9%**
Australia and New Zealand	1.9%	1.5%	1.4%	1.2%	1.5%	2.0%	2.1%	2.6%	3.2%	4.1%	3.9%	15.9%	18.4%	18.5%	19.6%	20.0%	23.8%
Melanesia	2.4%	2.7%	2.4%	2.4%	2.3%	0.6%	0.8%	1.4%	2.0%	2.7%	2.9%	2.2%	2.7%	1.9%	1.4%	1.2%	0.9%
Micronesia	2.7%	2.1%	3.7%	1.9%	0.4%	6.9%	4.8%	10.8%	8.5%	14.7%	12.5%	8.0%	6.5%	6.2%	12.8%	16.8%	16.5%
Polynesia	3.0%	1.7%	1.2%	1.2%	0.9%	4.1%	5.2%	17.5%	20.0%	26.7%	25.9%	2.1%	3.2%	5.5%	6.5%	6.7%	5.5%
World	**2.0%**	**1.9%**	**1.7%**	**1.4%**	**1.2%**	**3.0%**	**2.8%**	**2.7%**	**2.6%**	**2.7%**	**2.8%**	**3.0%**	**2.8%**	**2.7%**	**2.6%**	**2.7%**	**2.8%**

Table 2b. ENC countries demographic trends

		Population Growth - annual rates					Emigrants as % of local population						Immigrants as % of local population					
		1960-1970	1970-1980	1980-1990	1990-2000	2000-2010	1960	1970	1980	1990	2000	2010	1960	1970	1980	1990	2000	2010
AM	Armenia	3.0%	2.1%	1.4%	-1.4%	0.1%	20.9%	16.9%	13.8%	13.2%	27.7%	25.7%	12.0%	14.8%	12.8%	7.5%	9.5%	10.3%
AZ	Azerbaijan	2.9%	1.8%	1.5%	1.2%	1.2%	10.3%	10.9%	12.0%	14.2%	18.7%	14.2%	9.7%	8.1%	6.3%	5.6%	3.2%	1.2%
BY	Belarus	1.0%	0.6%	0.6%	-0.2%	-0.5%	23.8%	25.3%	24.1%	24.8%	17.5%	16.9%	13.0%	12.5%	13.4%	16.0%	11.4%	11.4%
GE	Georgia	0.9%	1.2%	0.7%	-0.8%	0.1%	1.9%	10.8%	12.7%	17.9%	25.8%	21.6%	9.4%	8.7%	7.3%	7.3%	5.0%	3.7%
MD	Moldova	1.8%	1.1%	0.8%	-0.2%	-0.2%	16.2%	14.9%	13.0%	16.1%	17.7%	19.9%	12.8%	13.8%	14.4%	15.8%	13.1%	10.8%
UA	Ukraine	1.0%	0.6%	0.4%	-0.5%	-0.7%	14.6%	13.4%	12.7%	13.8%	12.0%	13.1%	9.4%	11.5%	12.2%	13.3%	10.6%	10.8%
Total ENC- East		**1.2%**	**0.8%**	**0.6%**	**-0.4%**	**-0.4%**	**15.1%**	**14.8%**	**14.1%**	**15.6%**	**15.1%**	**15.0%**	**10.1%**	**11.4%**	**11.7%**	**12.5%**	**9.7%**	**9.3%**
DZ	Algeria	2.4%	3.2%	3.0%	1.9%	1.5%	7.9%	12.3%	8.5%	6.2%	4.4%	3.4%	4.0%	1.2%	0.7%	0.4%	0.3%	
EG	Egypt	2.6%	2.3%	2.4%	1.8%	1.8%	0.5%	1.0%	2.2%	3.3%	3.2%	4.2%	0.7%	0.5%	0.3%	0.2%	0.2%	0.2%
IL	Israel	3.5%	2.7%	1.9%	3.0%	1.9%	2.3%	2.8%	3.7%	4.4%	3.7%	3.6%	56.0%	47.3%	36.8%	34.8%	35.5%	35.7%
JO	Jordan	6.0%	3.8%	3.8%	4.2%	2.3%	6.2%	15.7%	22.7%	25.4%	17.3%		0.8%	1.2%	3.0%	4.8%	5.2%	
LB	Lebanon	2.6%	1.3%	0.5%	2.4%	1.2%	7.1%	7.6%	15.5%	20.0%	17.7%	15.1%	0.6%	0.5%	0.3%	6.8%	8.1%	
LY	Libya	4.0%	4.4%	3.5%	1.9%	2.0%	3.9%	3.6%	2.2%	1.5%	2.1%	1.7%	3.5%	5.6%	9.3%	9.7%	9.6%	8.1%
MA	Morocco	2.8%	2.5%	2.4%	1.5%	1.0%	5.7%	5.3%	6.2%	6.5%	5.5%	9.4%	3.4%	0.8%	0.4%	0.2%	0.2%	
SY	Syria	3.4%	3.4%	3.3%	2.6%	2.5%	2.7%	2.6%	3.3%	3.7%	3.5%	4.2%	1.1%	3.2%	0.5%	0.5%	0.5%	
TN	Tunisia	2.0%	2.2%	2.5%	1.6%	1.0%	5.5%	6.8%	8.0%	6.9%	5.9%	6.0%	3.9%	1.0%	0.6%	0.5%	0.4%	0.2%
Total ENC-South		**2.7%**	**2.6%**	**2.6%**	**1.9%**	**1.7%**	**3.5%**	**4.6%**	**5.2%**	**5.4%**	**4.7%**	**5.2%**	**3.8%**	**2.7%**	**2.0%**	**1.9%**	**2.1%**	**2.7%**
Total ENC		**2.0%**	**1.8%**	**1.8%**	**1.2%**	**1.1%**	**9.2%**	**9.3%**	**8.9%**	**9.1%**	**7.9%**	**7.8%**	**6.9%**	**6.6%**	**6.0%**	**5.8%**	**4.5%**	**4.5%**
RU	Russia	0.8%	0.6%	0.6%	-0.1%	-0.3%	7.0%	8.1%	8.4%	8.9%	7.1%	7.1%	5.1%	5.6%	5.9%	7.1%	8.2%	8.3%
Total ENC + Russia		**1.5%**	**1.3%**	**1.3%**	**0.7%**	**0.6%**	**8.1%**	**8.7%**	**8.7%**	**9.0%**	**7.6%**	**7.6%**	**6.0%**	**6.2%**	**6.0%**	**6.3%**	**5.9%**	**5.8%**

Note: Palestinian territory is not considered due to the lack of data

3. CORRELATION BETWEEN URBANISATION AND MIGRATION RATES

As the main objective of this paper is to analyse the relationship between urbanisation and international migration I next analyse the correlation between these concepts. Table 3 display the correlation coefficients between migration and urbanisation rates considering the raw data and the information once time and/or country effects are removed.[3]

Population growth is positively correlated with immigration rates and negatively correlated with emigration rates. The sign and significance persists when the time effect is removed, but disappears when country effects are not present. Consequently, the observed correlation is a country-effect issue: countries with higher population growth are the ones with less emigration and more immigration.

Table 3. Correlation coefficients between migration and urbanisation rates

	Emigration rate at Origin				Immigration rate at Destination			
	Raw data	Removing time effects	Removing country effects	Removing time and country effects	Raw data	Removing time effects	Removing country effects	Removing time and country effects
Population Growth	-0.1236*	-0.1161*	-0.0437	-0.0246	0.2325*	0.2536*	-0.0675*	-0.0154
Urbanisation rate	0.0945*	0.0859*	0.0336	-0.0119	0.5024*	0.5095*	0.1384*	0.0383
Urbanisation rate - 1 Million	-0.0823*	-0.0865*	0.0265	0.0035	0.2034*	0.1998*	-0.0591*	-0.1406*
Urbanisation rate - Small and median cities	0.1657*	0.1605*	0.0288	-0.0144	0.4122*	0.4129*	0.1830*	0.1138*
Urbanisation Growth rate	-0.0542	-0.0505	-0.0286	-0.0213	-0.0964*	-0.0874*	-0.0963*	-0.0534
Urbanisation rate - 1 Million - Growth rate	-0.038	-0.0373	-0.0019	-0.0002	-0.0817*	-0.0761*	-0.0067	0.0186
Urbanisation rate - Small and median cities - Growth rate	-0.0356	-0.0312	-0.0275	-0.0205	-0.0559	-0.0479	-0.0925*	-0.0612

Note: asterisks indicate statistical significance at 5%.

Urbanisation rates are positively correlated with both emigration and immigration rates and again the country effect dominates. More urbanised countries are the ones with higher propensity to migration, and this is particularly true for countries with higher urbanisation rates in small and median cities. Interestingly, the significance of the correlation

[3] In order to remove country and time effects I regressed every variable against time and/or country fixed effects. The residuals of every regression are used to compute the new correlations.

coefficient only holds when removing time and country effects for the immigration rate for different urbanisation rates, and displaying conflicting signs: the urbanisation rate in cities of more than one million displays a negative sign, while the urbanisation rate in small and medium cities is positively correlated with the immigration rate. In other words: it looks like international immigration is being directed to smaller cities than to bigger cities.

We finally have looked also at the growth in urbanisation rates. The correlations are generally not significant, with the only exception of the urbanisation rate in large cities and the immigration rate: countries with a bigger growth in large cities are the ones experiencing a smaller international immigration rate.

These results are in line of what we found in the previous tables: more developed countries, that are usually the more urbanised ones, are the ones with higher migration rates, particularly the immigration ones. We also see a quick growth in small and median cities all over the world, while in several developed countries the proportion of people in large cities remained almost constant. Overall it can be argued that urbanisation is more a pull than a push factor, as it is more correlated with immigration rates.

In order to see if there are different patterns all over the world we have divided the sample into developed and developing regions and we have computed again the correlation coefficients.[4] Table 4 presents these results.

The basic figures are generally similar to the global ones, as can be expected, particularly when we look at the raw data. Consequently, I focus the next analysis in the correlations once country and time effects are removed. Firstly, in more developed countries population growth is significantly correlated with immigration rates. On the contrary, the urbanisation rates are negatively correlated with immigration rates in more developed countries while positively correlated in less developed countries. The main driver of these differences is the urbanisation rate in small and median cities, negatively correlated in

[4] In order to classify every country as developed or developing, we have followed the United Nations composition of economic regions, available at http://unstats.un.org/unsd/methods/m49/m49regin.htm#ftnc. Developed countries are the ones included in the following regions: Europe, North America, Japan, Autralia and New Zealand.

more developed countries and positively correlated with immigration in less developed countries ones, for which larger cities display a negative correlation.

How can be read these negative signs? The statistical meaning of the results is that immigration is taking place in countries with higher urbanisation rates (positive and significant coefficients when looking at the raw data) but the increase in urbanisation rates is negatively correlated with increases in urbanisation under several circumstances. Consequently we assume that a multivariate analysis is needed in order to account for additional factors and this is what is performed in the next section.

Table 4. Correlation coefficients between migration and urbanisation rates, by level of development

	Emigration rate at Origin				Immigration rate at Destination			
More developed countries	Raw data	Removing time effects	Removing country effects	Removing time and country effects	Raw data	Removing time effects	Removing country effects	Removing time and country effects
Population Growth	-0.087	-0.0377	-0.1727*	-0.0759	0.1867*	0.2758*	0.0031	0.2587*
Urbanisation rate	-0.1602*	-0.2072*	0.1749*	0.0653	0.3731*	0.3432*	0.2478*	-0.2070*
Urbanisation rate – 1 Million	-0.3273*	-0.3332*	0.0495	-0.0177	-0.0378	-0.0486	0.1674*	-0.0447
Urbanisation rate - Small and median cities	0.0932	0.0694	0.1771*	0.0749	0.3590*	0.3336*	0.2218*	-0.1905*
Urbanisation Growth rate	0.0308	0.0811	-0.0442	0.0446	-0.0437	0.0053	-0.0757	0.107
Urbanisation rate - 1 Million - Growth rate	-0.019	-0.013	0.0733	0.0926	-0.0538	-0.0346	-0.1265	-0.0494
Urbanisation rate - Small and median cities - Growth rate	0.0393	0.0863	-0.071	0.0113	-0.0241	0.0198	-0.0375	0.1252

	Emigration rate at Origin				Immigration rate at Destination			
Less developed countries	Raw data	Removing time effects	Removing country effects	Removing time and country effects	Raw data	Removing time effects	Removing country effects	Removing time and country effects
Population Growth	-0.1348*	-0.1285*	-0.0393	-0.0231	0.3202*	0.3408*	-0.0768*	-0.0464
Urbanisation rate	0.1148*	0.1079*	0.0281	-0.016	0.5365*	0.5530*	0.1234*	0.0695*
Urbanisation rate – 1 Million	-0.0674*	-0.0716*	0.0262	0.0045	0.2433*	0.2408*	-0.0848*	-0.1518*
Urbanisation rate - Small and median cities	0.1903*	0.1874*	0.0225	-0.0194	0.4336*	0.4423*	0.1783*	0.1545*
Urbanisation Growth rate	-0.0627	-0.0607	-0.0304	-0.0264	-0.0985*	-0.0941*	-0.1025*	-0.0818*
Urbanisation rate – 1 Million - Growth rate	-0.0389	-0.0384	-0.0048	-0.0036	-0.0784*	-0.0743*	0.0077	0.0263
Urbanisation rate - Small and median cities - Growth rate	-0.0425	-0.0402	-0.0272	-0.0235	-0.0573	-0.0543	-0.1043*	-0.0927*

4. MULTIVARIATE CORRELATION BETWEEN URBANISATION AND INTERNATIONAL MIGRATION

This section analyses the correlation between migration rates and urbanisation once other factors have been considered. We claim now that we do not aim to perform a causality analysis but rather to inspect the correlation between urbanisation and migration once other factors have cleared. In order to do that I take advantage of the panel structure of the database and perform a set of regression analysis in which I introduce a list of controls.

As stressed in Kasarda and Crenshaw (1991), the growth of urban population can be due to three aspects: the natural increase of urban population; boundary redefinition through annexation of surrounding areas; and migration, both intranational (rural-urba and urban-urban) and international. But overall, urbanisation is seen a manifestation of development processes, and "migration is a contributor of development, a corrector of regional imbalances, and a conqueror of the tyranny of space" (Firebaugh, 1979, p.199), as it is an equalizator of the marginal productivity of labour between rural and urban spaces, and between countries.

Given the tentative nature of this work, I avoid surveying the literature on the determinants of urbanisation and consequently I refer the reader to the standard literature on the topic (Gugler, 1982, Brueckner, 1990, Ades and Glaeser, 1995, Davis and Henderson, 2003, Barrios et al., 2006, Henderson and Wang, 2007).

In order to find if the migration variables are correlated with urbanisation we propose to estimate a model in which the urbanisation rate [urban] is regressed against immigration rate at destination [immigr], the emigration rate at origin [emigr], plus a list of controls in which we include two economic variables, GDP per capita [GDPpc] and telephones per capita [telph_pc], three demographic variables, total population [pop_total] the proportion of young [pop_0_14] and older people [pop_m65] and two development variables, life expectancy at birth [life_exp] and infant mortality rate [mort_inf]. The empirical model introduces all variables in logs, but the ones expressed as percentages, and is summarised in the following equation:

$$Urban_{it} = \beta_0 + \beta_1 immigr_{it} + \beta_2 emigr_{it} + \beta_3 \ln GDPpc_{it} + \beta_4 \ln telph\_pc_{it} + \beta_5 \ln pop\_total_{it} + \beta_6 pop\_0\_14_{it} + \beta_7 pop\_m65_{it} + \beta_8 \ln life\_exp_{it} + \beta_9 \ln mort\_inf_{it} + \varepsilon_{it}$$

In concrete, we perform the between estimates (BE), that can be interpreted as measuring the long-run effects on urbanisation rates, and fixed effects (FE), that capture how time-series changes within a country affect changes in its urbanisation rate over time (given that the coefficient only reflect within-country time-series variation, they can be interpreted as short-run effects) and the pooled estimation (Pool), that can be interpreted as an average result of BE and FE estimations. As can be seen in table 5, most of the information on urbanisation rates is cross sectional, similarly to the immigration rates at destination. Consequently, we expect that the BE estimates will capture a substantial part of the variation of the urbanisation variables, while the FE results will explain the variations observed in the last 50 years.

Table 5. Descriptive statistics

	Mean	Standard Deviation		
		overall	between	within
Emigration rate at Origin	0.091	0.237	0.128	0.199
Immigration rate at Destination	0.073	0.115	0.106	0.046
Population Growth	1.870	1.444	1.122	0.913
Urbanisation rate	47.78	25.01	23.28	9.27
Urbanisation rate - 1 Million	11.62	16.38	16.12	3.07
Urbanisation rate - Small and median cities	36.16	22.40	20.96	8.00
Urbanisation Growth rate	4.361	4.315	2.789	3.297
Urbanisation rate - 1 Million - Growth rate	0.840	2.209	1.484	1.639
Urbanisation rate - Small and median cities - Growth rate	3.521	4.209	2.600	3.314

The estimates have relaxed the usual requirement that the observations are independent, and the standard errors allow for intragroup correlation: the observations are independent across groups (clusters) but not necessarily within groups. The considered groups are the world's subregions. The results are displayed in table 6.

Table 6. Regression results. Full database

	Urbanisation rate			Urbanisation rate - 1 Million			Urbanisation rate - Small and median cities		
	Pooled OLS	Between	Fixed Effects	Pooled OLS	Between	Fixed Effects	Pooled OLS	Between	Fixed Effects
Immig	35.416***	37.302***	29.926***	2.881	26.782**	-1.519	27.904***	10.521	31.445***
Emig	-10.652	-24.006	-2.007	1.113	2.035	1.098	-11.896	-26.042	-3.105
GDP pc	3.871***	7.530***	1.894	0.66	3.936**	0.015	2.232	3.594*	1.879
Telph_pc	2.702***	6.126***	2.219**	0.19	2.896	0.203	2.500***	3.229	2.016**
Pop_total	2.844***	1.164	12.531***	3.586***	4.737***	4.202**	-0.432	-3.573***	8.329***
pop_0_14	-0.17	-0.299	-0.096	-0.007	0.578	-0.017	-0.175*	-0.877**	-0.079
pop_m65	-0.132	0.143	0.307	0.242**	-0.287	0.358**	-0.319	0.43	-0.05
life_exp	20.571***	1.949	6.91	5.124*	3.348	3.899	13.827**	-1.399	3.01
mort_inf	2.792	7.714**	1.489	-0.394	0.29	-0.447	3.030**	7.424*	1.936
1970	1.905		0.807	0.478		0.538	1.687*		0.269
1980	2.920*		1.083	0.121		0.203	3.267***		0.88
1990	4.997**		1.748	-0.311		-0.29	5.828***		2.037
2000	5.411*		0.952	-0.996		-1.127	6.893***		2.078
2010	6.213**		1.144	-1.645		-1.759	8.520***		2.903
Constant	-121.9***	-59.58	-200.1***	-69.06***	-129.18	-68.41**	-43.186*	69.592	-131.74***
N	739	739	739	739	739	739	739	739	739
R2	0.650	0.701	0.744	0.251	0.396	0.352	0.443	0.505	0.664
Adj R2	0.639	0.684	0.739	0.234	0.362	0.339	0.425	0.477	0.657

Note: asterisks indicate statistical significance at 1% (***), 5% (**) and 10% (*).

From the obtained results several conclusions can be obtained:

1. There is a global trend in urbanisation that is independent of other factors and statistically significant in small and median cities. The trend does not exist for large cities.
2. Economic development matter for explaining differences in urbanisation between countries, but not over time (fixed effect estimates are never significant). Only telephones per capita display significant result in small and median cities, what would call for an important role of connectivity for smaller cities.
3. Population size is significant in almost all estimates. The positive parameter in the fixed effects specification indicates that faster growing countries are the ones that experience faster increasing urbanisation rates. We find that on average (between estimation) larger countries have a smaller proportion of small and median cities, what can be associated to the trend of growing megacities in large developing countries.
4. On the contrary, the demographic structure plays a minor role. Small and median cities display a negative and significant sign in the between estimates for the

proportion of older people: as these cities increase the proportion of older people, they diminish their importance.

5. Development variables, when significant, show a positive sign. Again, urbanisation and development are linked at the cross section level.
6. Immigration rates, as expected, display a positive and significant parameter in all estimates (pooled, between and fixed effects) for the global urbanisation rate, and also for the pooled and fixed effects for the small and median cities urbanisation rate, and for the between estimate for larger cities. Consequently, immigration is clearly linked with the increase of urbanisation rates, particularly for the one of smaller cities.
7. Emigration rates, as one could expect, display a negative sign, but it is never significant, as was found for bivariate correlation. In other words: expulsing countries do not experience smaller or decreasing levels of urbanisation.

Together with this result we have divided the full sample of countries in several sets. As most estimates show similar results for the control variables, table 7 only displays the parameters related with migration. The results confirm that larger international immigration rates are linked with higher urbanisation rates, particularly for small and median cities, but also for larger cities (between estimate). Contrary to what was found at the bivariate correlation, immigration is not significantly negatively associated with urbanisation in larger cities.

Regarding emigration, it is only significantly negative for less developed countries. In our view it means that developed countries display both high levels of emigration and immigration, as was found above. In these countries emigration is probably directed to other developed countries, and particularly to large cities as well. Consequently it would not be harming large-cities urbanisation. On the contrary, in less developed countries, when an individual has decided to emigrate, he/she faces a new decision: doing it at a local city or to a foreign city. Our results suggest then, at least in several estimates, that international emigration in less developed countries is done at the expense of local urbanisation. This is actually not surprising, on the contrary. Finally, regarding larger versus smaller cities, our results display significantly negative parameters for the smaller cities urbanisation rate, what would be saying that larger cities suffer less of the competition with international migration.

The sample for the 1960-1980 period displays less significant results than the one for the 1990-2010 period. Thus, the impact of international migration on urbanisation is more pronounced in the more recent decades than it was before. And it is true for both immigration and emigration, and for larger and smaller cities.

Table 7. Regression results. Subsamples

	Urbanisation rate			Urbanisation rate - 1 Million			Urbanisation rate - Small and median cities		
	Pooled OLS	Between	Fixed Effects	Pooled OLS	Between	Fixed Effects	Pooled OLS	Between	Fixed Effects
More developed countries									
Immg. rate	37.23***	6.622	30.16***	-1.781	19.932	-6.37	37.82***	-13.31	36.53***
Emigr rate	9.558	-39.393	13.376	2.745	13.762	3.034	8.276	-53.156	10.342
Less developed countries									
Immg. rate	40.16***	43.16***	34.49***	6.606	39.24***	-0.073	27.92***	3.925	34.56***
Emigr rate	-16.256	-34.078*	-8.572	-0.697	-25.758	-2.871	-15.922*	-8.32	-5.702
All countries. 1960-1980									
Immg. rate	40.407**	21.846	30.074	9.446	23.115	-0.671	27.924**	-1.269	30.745*
Emigr rate	0.435	-7.304	14.938	1.89	7.551	1.136	-0.631	-14.855	13.802
All countries. 1990-2010									
Immg. rate	24.842***	39.185***	15.720***	2.795	24.184**	-0.973	16.887**	15.01	16.694***
Emigr rate	-4.216	-27.752*	2.208	3.085	0.592	1.012	-6.848	-28.34*	1.196

Note: asterisks indicate statistical significance at 1% (***), 5% (**) and 10% (*).

Finally, table 8 displays the results for ENC countries and Russia. We firstly see that there is an increasing urbanisation trend since 1990, and after that moment these countries experience a decreasing path, particularly in small and median cities. As was shown in table 1b, it is particularly true for the ENC-East countries, while for the ENC-South countries there is a small increase in this rate for the more recent period. As was showed in section 2, the resurgence of international migration processes since 1990 has been accompanied by a faster increase in the urbanisation rates. Consequently there is a marked difference between the ENC countries with the full sample.

An additional aspect to be highlighted is that in several estimates economic and development variables are negatively associated with urbanisation rates, particularly telephones per capita and life expectancy at birth. The intuition behind this result is that some of these countries have experienced a dramatic structural change since 1990, and

consequently several urbanisation processes would have been accompanied by temporary losses of well-being.

Table 8. Regression results for ENC countries

	Urbanisation rate			Urbanisation rate - 1 Million			Urbanisation rate - Small and median cities		
	Pooled OLS	Between	Fixed Effects	Pooled OLS	Between	Fixed Effects	Pooled OLS	Between	Fixed Effects
Immigr	13.798	-39.167	4.722	-3.337	-78.402	-22.73*	26.778**	39.235	27.456***
Emigr	-30.62*	94.388	-28.079	11.294	-57.744	19.923	-45.06***	152.133	-48.002*
GDP pc	0.952	12.235**	-2.457	6.362***	10.996	3.109**	-2.894	1.239	-5.565
Telph_pc	1.86	3.764	1.337	3.563***	47.866**	-1.812*	1.377	-44.102*	3.149
Pop_total	-3.206	3.449	4.063	-2.496	-5.03	-4.043	-0.009	8.479	8.106
pop_0_14	-0.966	0.427	-1.208	0.649	4.461**	0.017	-1.152**	-4.034**	-1.225
pop_m65	-0.912	-0.701	-0.305	1.103	7.691**	-0.648	-1.147	-8.392*	0.342
life_exp	-5.853	41.273	-13.481	-2.381	-182.715	-22.53*	10.653	223.98	9.047
mort_inf	-0.579*	-10.72	-1.089	2.041	25.801*	-0.907	0.18	-36.52**	-0.182
1970	11.201		10.656	1.885		7.073*	5.847		3.583
1980	11.559		11.249	0.056		10.674*	4.994		0.575
1990	15.93		14.119	1.815		15.29	6.531		-1.17
2000	13.647		8.429	3.174		18.053	3.26		-9.624
2010	9.447		3.963	3.217		19.493	-1.021		-15.53
Constant	155.234	-248.328	104.163	-21.559	419.426	153.419	56.731	-667.754	-49.256
N	60	60	60	60	60	60	60	60	60
R2	0.459	0.919	0.887	0.474	0.819	0.576	0.248	0.722	0.860
Adj R2	0.406	0.797	0.852	0.443	0.548	0.445	0.198	0.306	0.816

Note: asterisks indicate statistical significance at 1% (***), 5% (**) and 10% (*).

The urbanisation rate in small and median cities is positively associated with immigration, as we could expect. Nevertheless, the opposite is found for larger cities: increasing international immigration rates is associated with *decreasing* larger cities, what can be labelled as a puzzling result. Several comments on this. First, the proportion of immigrants over local population has decreased in global terms in ENC countries, from 6.9% in 1960 to 4.5% in 2010, while Russia has experienced the opposite result. Consequently, ENC countries are less and less a destination country, while the emigration rate has remained roughly constant. It has been observed in a markedly heterogeneous population growth pattern (demographic explosion in ENC-South and demographic decline in ENC-East and Russia). Consequently the decrease in immigration rates (probably linked to the decolonization and political independence in some countries) has been associated with the increase in urbanisation in larger cities. What is surprising, though, is the different sign between larger and smaller cities. We have to remember in

this line that the weight of larger cities over total population in ENC countries + Russia slightly increased (28% to 29% over the considered period), but strong differences are found between ENC-South countries (-9%), ENC-East countries (+2%) and Russia (-1%).

In any case, these countries are characterised by larger emigration than immigration rates. This variable is negatively associated with urbanisation (pool estimate), and particularly for small and median cities (pool and FE estimate). Consequently international emigration in these countries has stopped the urbanisation process. This evidence would support the fact that migrants consider not only local cities as potential destinations, but also foreign countries. The result is found in smaller cities, but not in the larger ones, and consequently international migration would not be slowing down over-urbanisation in large agglomerations.

3. CONCLUSIONS

Individual case studies and regional comparisons analysing the impact of international migration on local cities are usual in the literature. Cross-national research, as the one developed here, allow for testing general trends in the topic. Given the wide extension of our data base (almost 200 countries over 50 years) the global conclusions deserve particular attention.

Both urbanisation and international migration are global trends all over the world, but, as the WDR (2009) stressed, traditionally they have not been considered together. Our findings using panel estimations point out that immigration is associated with increasing urbanisation, while emigration is only negatively associated with urbanisation in less developed countries. Small and median cities are more influenced by international migrations than larger cities, and the process has been more pronounced in recent decades.

ENC countries and Russia are a particular case all over the world: ENC-South experienced a population decline together with strong emigration rates and increasing urbanisation. ENC-South countries have a huge population growth associated to increasing urbanisation particularly in smaller cities. In these countries international emigration has competed with smaller cities in attracting migrants.

Overall, international migration and urbanisation are obviously linked. The analysis performed here show that these migration flows are particularly associated with the current increase of smaller and median cities all over the world. This result is in line with recent OECD results, stressing that median and small agglomerations enjoy strong levels of development. The OECD 2009 Report highlights the idea that growth opportunities are both significant in big urban areas as well as in smaller more peripheral agglomerations. In this line, some authors have recently highlighted that economic growth does not need to depend exclusively on increasing urban concentration: "mega-urban regions are not the only possible growth pattern... context and institutions do matter when we consider economic geography" (Barca et al. 2012).

ENC countries have experienced a large increase in the urbanisation rate of small and median cities. Nevertheless, it would have been even larger if international emigration would have not been as large as it is. Consequently, in my view there exists an important space for structural change in these countries by the enlargement of a more balanced urban structure, what will happen for sure as the push factors in these countries, underdevelopment compared to their neighbours, vanishes over time.

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Annex 1. Considered countries, classified by continents and geographical regions

The countries classification by geographical regions corresponds to the United Nations Geoscheme, that can be accessed at http://unstats.un.org/unsd/methods/m49/m49.htm

Africa

Central Africa
- Angola
- Cameroon
- Central African Republic
- Chad
- Congo
- Equatorial Guinea
- Gabon
- Sao Tome and Principe

Northern Africa
- Algeria
- Egypt
- Libya
- Morocco
- Sudan
- Tunisia

Eastern Africa
- Burundi
- Comoros
- Djibouti
- Eritrea
- Ethiopia
- Kenya
- Madagascar
- Malawi
- Mauritius
- Mozambique
- Rwanda
- Seychelles
- Somalia
- Tanzania
- Uganda
- Zambia
- Zimbabwe

Southern Africa
- Botswana
- Lesotho
- Namibia
- South Africa
- Swaziland

Western Africa
- Benin
- Burkina Faso
- Cape Verde
- Cote d'Ivoire
- Gambia
- Ghana
- Guinea
- Guinea-Bissau
- Liberia
- Mali
- Mauritania
- Niger
- Nigeria
- Senegal
- Sierra Leone
- Togo

America

Caribbean
- Antigua and Barbuda
- Aruba
- Bahamas
- Barbados
- Cayman Islands
- Cuba
- Dominica
- Dominican Republic
- Grenada
- Haiti
- Jamaica
- Puerto Rico
- St Kitts and Nevis
- St Lucia
- St Vincent and the Grenadines
- Trinidad and Tobago
- Turks and Caicos Islands

Central America
- Belize
- Costa Rica
- El Salvador
- Guatemala
- Honduras
- Mexico
- Nicaragua
- Panama

Northern America
- Bermuda
- Canada
- Greenland
- United States

South America
- Argentina
- Bolivia
- Brazil
- Chile
- Colombia
- Ecuador
- Guyana
- Paraguay
- Peru
- Suriname
- Uruguay
- Venezuela

Asia

Central Asia	**East Asia**	**Western Asia**
Kazakhstan	China	Armenia
Kyrgyzstan	Hong Kong	Azerbaijan
Tajikistan	Japan	Bahrain
Turkmenistan	Korea, North	Cyprus
Uzbekistan	Korea, South	Georgia
South Asia	Macao	Iraq
Afghanistan	Mongolia	Israel
Bangladesh	**Southeast Asia**	Jordan
Bhutan	Brunei	Kuwait
India	Cambodia	Lebanon
Iran	Indonesia	Oman
Maldives	Laos	Qatar
Nepal	Malaysia	Saudi Arabia
Pakistan	Myanmar	Syria
Sri Lanka	Philippines	Turkey
	Singapore	United Arab Emirates
	Thailand	Yemen, North
	Vietnam	

Europe

Eastern Europe	**Northern Europe**	**Southern Europe**
Belarus	Denmark	Albania
Bulgaria	Estonia	Bosnia and Herzegovina
Czech Republic	Faroe Islands	Croatia
Hungary	Finland	Gibraltar
Moldova	Iceland	Greece
Poland	Ireland	Italy
Romania	Latvia	Macedonia
Russia	Lithuania	Malta
Slovakia	Norway	Portugal
Ukraine	Sweden	San Marino
Western Europe	United Kingdom	Slovenia
Austria		Spain
Belgium		
France		
Germany		
Luxembourg		
Netherlands		
Switzerland		

Oceania

Australia and New Zealand	**Micronesia**	**Polynesia**
Australia	Kiribati	French Polynesia
New Zealand	Marshall Islands	Samoa
Melanesia	Micronesia	Tonga
Fiji	Northern Mariana Islands	Tuvalu
New Caledonia	Palau	
Papua New Guinea		
Solomon Islands		
Vanuatu		