Cities in the 21st century: A view from the developing world

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Abstract. In this (introductory) paper, we present i) some basic figures about the rise of cities in the developing world, and ii) the four papers of this special issue. This paper and the other four papers in the issue intend to bring the reality of cities of the developing world in the 21st century to the frontline, hoping to motivate further and much needed research.

JEL classification: O1, O4, R1

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1 Introduction

Internal disparities within countries are sometimes as important, or even more, as international ones. Consequently, our capacity to influence people’s welfare depends on our understanding not only of international and national dynamics, but also of what happens between and within regions and cities. Accordingly, research on regional and urban economics has become fundamental for the design of sound policies aimed at increasing prosperity for all.

In recent years and decades, research in the fields of regional and urban economics has gained momentum. This trend follows the reality of a new urban world: the percentage of the world population living in urban areas has increased from around 30 in 1950 to around 54 in 2015, and is expected to reach 66 by 2050 (United Nations 2015). But the focus of research has in most cases been put on the analysis of dynamics of the developed world. By contrast, our understanding of regional and urban dynamics in the developing world remains very limited. Developing countries will by 2030 host more than 85% of the world population, and more than 90% of the new urban residents of the world will live in cities in the developing world (United Nations 2015).

The rise of cities in developing countries becomes evident by looking at some figures. Figure 1 shows urbanisation across different income groups since 1960. In the 1960s, cities in low and lower-middle income countries concentrated between 12 and 20% of their total population, while the figure was 54% in high income countries. Since then, in low and lower-middle income countries urban population has grown by 174% and 125%, respectively. By contrast, in upper-middle and high income countries urban population has grown by 78% and 47%, respectively. Although, in the last two decades the pace
has decelerated considerably in all countries, the process of urbanisation in developing countries continues to be strong.

This rapid urbanisation worldwide implies an increase in the number as well as in the size of cities. Worldwide, the number of urban agglomerations of more than 300 thousand inhabitants has increased from 304 in 1950 to 1729 in 2015. And the average size of these urban agglomerations has gone from 253 thousand inhabitants in 1950 to 1.268 million in 2015. While in 1950 around 300 million people in the world lived in urban agglomerations of more than 300 thousand inhabitants, this figure exceeds 2.2 billion in 2015, which is almost a third of the total world population, and 57% of the world urban population. And among all urban agglomerations, today the cities of more than 10 million inhabitants concentrate alone more than 12 per cent of the world urban population.

This increase in the number and size of cities has been specially marked in the developing world. In 1975, there were 178 large cities – those with more than one million inhabitants – and 9 megacities – those with more than 10 million inhabitants – in developing countries. In 2015, only a generation after, the number of large cities in developing countries reached 396 (of 494 worldwide), and the number of megacities reached 26 (of 32 worldwide). Twelve of these megacities of the developing world already have more than 20 million inhabitants. In terms of size, 17 out of the top 20 countries with higher average city size are developing countries.

The role of large cities in developing countries is also clear when we look at primate cities (i.e., the largest city in each country). Primate cities in developing countries are, on average, larger than their counterparts in developed countries: in 2010, primate cities in developing countries had on average 3.4 million inhabitants, one million more than their developed counterparts. In developing countries, these cities also concentrate a larger percentage of the urban population. On average, while in developed countries the population in the largest city is nowadays around 35% of the urban population, in the developing world the figure is 43%. For low income countries, as shown in Figure 2, the percentage of urban population living in the largest city is especially high, reaching 56% in 1980. However, since then the figure has decreased, suggesting that new or existing

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1Using World Urbanisation Prospects data (United Nations 2015), and considering urban agglomerations that had at least 300 thousand inhabitants in 1990.

2Acknowledging the potential limitations of UN data in what refers to the size of large cities, in these figures we rely on novel data by the Urban Platform of the European Commission. Data refers to “urban areas”.

3Being Guangzhou, Cairo, Jakarta, Delhi and Calcutta being the 5 largest. In the developed world, only Tokyo has more than 20 million inhabitants.
cities beyond the primate city are gaining importance in the last decades in low-income countries.

While this rapid urbanisation and city growth comes with great opportunities, in the form of agglomeration economies (Duranton 2016), it also represents great challenges for sustainable development. Urban residents in developing countries currently face great deficiencies in terms of access to basic services, like access to water, sanitation facilities and electricity (see for instance Graham 2010, Castells-Quintana 2017a,b). As an example, Figure 3 displays the percentage of urban population that has access to electricity. Low income countries still face a huge deficiency in this crucial aspect, which could mean barriers to take advantage of the benefits of urbanisation. Low income countries, and to some extent most developing countries, also face high levels of urban segregation and inequality (Sabatini 2006, López-Morales et al. 2016), and high levels of informality (see for instance Perry et al. 2007, Herrera-Idárraga et al. 2016, García 2017, García, Badillo 2018), among other problems. Our understanding of how these problems evolve, and therefore our capacity to address them, is still very limited.

What becomes evident is that urban patterns have become a key element if we are to understand, and properly address, some of the greatest challenges that developing countries are facing in the 21st century. With this purpose in mind, we have put together this special issue on cities in the 21st century, with a focus on the developing world.

In the next section of this introductory paper we present and connect the four papers in the special issue.

2 The special issue

The rest of this special issue is composed of four papers. They all study aspects of the reality of developing countries in the 21st century, always from a spatial perspective. Each paper focuses on a different topic, but they nicely complement each other. Likewise, while three papers focus on Latin America and the fourth one on the reality of Eastern Europe and Central Asia, they all have broader implications for the developing world in general. Moreover, by taking a close look at specific cases, these papers provide interesting insights into the developing world, too often missing in the urban and regional economics literature. In this section, we briefly discuss each of these four papers.

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4This special issue was born as an outcome of the PUJ/Banrep: First Workshop in Urban and Regional Economics, held in the Pontificia Universidad Javeriana, in Bogotá in June 2017, where more than 40 papers were presented and discussed.
Defining urban areas, in a consistent and comparable way, is a challenging task. In developing countries, almost by definition, urban areas are changing constantly and rapidly. Understanding how urban areas grow is fundamental for policy makers, for instance in what refers to the planning of infrastructure and the design of sound socio-economic policies. In developed countries, efforts have been put forward to better and more consistently define urban areas. The OECD has defined metropolitan areas using a functional approach based on labour markets and commuting patterns: Functional Urban Areas- FUAs (OECD 2012). In developing countries these efforts have been much more limited. Moises Obaco and Juan-Pablo Díaz-Sánchez (2018) are up to the challenge. They look at urbanisation in Ecuador for more than half a century. Using census data, they reassess the level of urbanisation considering the idea of functional urban areas. They show how urban population in Ecuador today, as probably in many other developing countries, is mainly concentrated in FUAs of metropolitan size above 1.5 million inhabitants.

In their paper, Tania Torres-Gutierrez and Jessica Ordóñez (2019), also focusing on Ecuador, look at how agglomeration economies have acted to enhance industrial productivity. They do this using census data and studying the evolution of the urban rates and their connection with labour productivity at the municipality level during the last 2 decades of the 20th century and the first one of the 21st. Their study provides evidence on how, under the adequate conditions, urbanisation can be a force for higher productivity in developing countries, as it also has traditionally been in developed countries. However, their results also warn about the risks of congestion in urban areas when urban density becomes too high, something in line with recent papers in the urban economics literature.

As shown by the previous two papers, increasing urbanisation in developing countries can lead to larger urban areas, and this brings with it potential benefits in the form
of agglomeration economies, but also important challenges and costs. One of the great challenges that large urban areas in developing countries face is the provision of (basic) public services. Alejandra Trejo-Nieto, José-Luis Niño-Amezquita and María-Luisa Vásquez (2018), study the provision of public services looking at three major metropolitan areas of Latin America, namely Bogotá, Lima and Mexico City. They analyse how different types of metropolitan governance, in particular jurisdictional fragmentation, influence the performance of these metropolitan areas to provide public services. Their study gives deep insights into how higher fragmentation can represent a challenge for efficient provision of public services. This result is in line, and complements, previous work for OECD metropolitan areas (see for instance Ahrend et al. 2014).


Luis Quintero and Paula Restrepo (2018) apparently depart from the other three papers in the issue to study economic activity in declining cities. They study what happens to agglomeration economies in a context of negative population growth. Although most developing countries still face high rates of population growth (mainly in Africa and Asia), other developing countries (for instance in Eastern Europe and Central Asia) are now in later stages of their demographic transition where population growth has gone down substantially. A very interesting result from Quintero and Restrepo’s analysis is that in a system of cities facing population loss people will tend to move from small to large cities, increasing concentration in large cities. In this regard, this paper actually connects with the other papers in the issue, where the challenges of increasing urban areas is studied.

All in all, this special issue highlights some of the challenges that developing countries face today, and how in the 21st century these challenges are reflected mostly in (large) urban areas. As our understanding of urban dynamics in these areas is still very limited, more research in this regard is urgently needed.

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