



Deutsches Institut für Entwicklungspolitik

German Development Institute

Discussion Paper

35/2014

A Cartography of the New Middle Classes in Developing and Emerging Countries

Clara Brandi

Max Büge

A cartography of the new middle classes in developing and emerging countries

Clara Brandi

Max Büge

Discussion Paper / Deutsches Institut für Entwicklungspolitik ISSN 1860-0441
Die deutsche Nationalbibliothek verzeichnet diese Publikation in der Deutschen Nationalbibliografie; detaillierte bibliografische Daten sind im Internet über http://dnb.d-nb.de abrufbar.
The Deutsche Nationalbibliothek lists this publication in the Deutsche Nationalbibliografie; detailed bibliographic data is available at http://dnb.d-nb.de.
ISBN 978-3-88985-661-6
Dr Clara Brandi , Researcher in the Department "World Economy and Development Financing" at the German Development Institute / Deutsches Institut für Entwicklungspolitik (DIE).
E-mail: clara.brandi@die-gdi.de
D. M. Dii. G. II. 1.0.0" L
Dr Max Büge, Gesellschaft für Internationale Zusammenarbeit (GIZ), Advisor, and German Development Institute / Deutsches Institut für Entwicklungspolitik (DIE), Associate Researcher
E-mail: max.buege@die-gdi.de
© Deutsches Institut für Entwicklungspolitik gGmbH Tulpenfeld 6, 53113 Bonn +49 (0)228 94927-0

Tulpenfeld 6, 53113 Bonn

+49 (0)228 94927-0

+49 (0)228 94927-130

E-Mail: die@die-gdi.de

www.die-gdi.de

Abstract

The world is experiencing a structural change on an unprecedented scale: it is becoming less poor and more middle-class. The growth of emerging middle classes has profound implications for global development. Yet, although the emergence of middle classes across the globe and its potential effects are set high on the agendas of researchers and policy-makers, an often neglected fact is that middle-class characteristics vary greatly from one country to another. Upon closer look, there is not one new global middle class but a variety of very different burgeoning middle classes. This paper aims to highlight the differences in middle-class growth, size and consumption capacities in developing and emerging economies. To take account of this heterogeneousness, the paper presents a novel middle-class typology that includes nine different "types" of middle classes, ranging from small and affluent middle classes to large middle classes with low spending capacity. The typology allows for comparing different middle classes across countries and is a useful tool for more fine-grained research and policy analysis. Against that background, the paper points to fruitful avenues for future research with regards to interpreting the role of the rising middle classes in the context of economic growth, democracy and civic values as well as environmental challenges.

Acknowledgements

The authors would like to thank Johannes Wegmann for his very helpful research assistance and Kathrin Berensmann, Dominique Bruhn, Alejandro Guarín and Peter Wolff for insightful comments.

The views and opinions expressed in this paper are those of the authors and do not necessarily reflect the official policy or position of DIE or Deutsche Gesellschaft für Internationale Zusammenarbeit.

Bonn, December 2014

Clara Brandi

Max Büge

Contents

Abbreviations

I	Introduction	I
2	How to define the middle class?	3
3	A cartography of the new middle classes	6
3.1	The geographic distribution of the world's middle class	6
3.2	The size and spending capacity of today's global middle class	7
3.3	The distribution and size of the middle class by country grouping	11
3.4	Comparing middle classes across different development levels	16
4	Proposing a new middle-class typology	20
5	Middle class heterogeneousness, economic growth, civic values and environmental challenges – State of the debate and future avenues for research	23
5.1	The middle class and inclusive growth	23
5.2	The middle class, democracy and civic values and attitudes	26
5.3	The middle class, environmental challenges and responsible consumption	28
6	Conclusion	30
Biblic	ography	31

	• _			
r	19	uı	res	

Figure 1:	Joining the middle: Decade when a country (and the world) is mostly middle class instead of mostly poor	2
Figure 2:	Self-perceived middle-class status and income in nine Asian countries	4
Figure 3:	Distribution of the global middle class (%), high-income vs. non-high-income countries	6
Figure 4:	Distribution of the global middle class (%), by region	7
Figure 5:	Middle-class population in millions of people and % of the population, by region	8
Figure 6:	Middle class in the BRICS, in millions of people (left) and % of population (right), 1990–2010	12
Figure 7:	Middle class in Turkey, Mexico, Iran and Egypt in millions of people (left) and % of population (right), 1990–2010	13
Figure 8:	Middle class in Bangladesh, Indonesia, Nigeria, Pakistan, Philippines, Vietnam in millions of people (left) and % of population (right), 1990–2010	14
Figure 9:	Middle-class population in millions of people and % of the population, selected sub-Saharan countries	15
Figure 10:	Middle-class size (% of population) vs. GDP per capita (PPP US\$), 2012	16
Figure 11:	Difference between the true size of a middle class (as share of the population) and the level suggested by the country's GDP per capita (US\$), 2012	17
Figure 12:	Middle-class consumption (annual average) vs. GDP per capita (US\$), 2012	18
Figure 13:	Difference between the true consumption of a middle class (annual average) and the level suggested by the country's GDP per capita (US\$), 2012	19
Boxes		
Box 1:	The global middle class, population share: 1990, 2010, 2030	9
Box 2:	The global middle class, annual per capita consumption: 1990, 2010, 2030	10
Box 3:	Categorisation of middle classes by size and consumption capacity, relative to economic development level	20
Box 4:	The case of South Korea vs. Brazil	25
Box 5:	Democracy, democratisation and the middle class	27

Abbreviations

BC Before Christ

BRICS Brazil, Russia, India, China, South Africa

COL Colombia
CHN China

DAGI Development, Aid and Governance Indicators (Brookings Institution)

DZA Algeria EGY Egypt

GDP Gross Domestic Product IMF International Monetary Fund

MEX Mexico

OECD Organisation for Economic Co-operation and Development

PER Peru

PPP Purchasing Power Parity

RWA Rwanda TUR Turkey

UK United Kingdom

UNU-WIDER United Nation University World Institute for Development Economics Research

US United States VNM Vietnam

WBGU Wissenschaftlicher Beirat der Bundesregierung Globale Umweltveränderungen

ZAF South Africa

1 Introduction

Until recently, the world's middle classes were concentrated in industrialised, high-income countries. But this does not hold any longer. Whereas shrinking middle classes with sometimes stagnating real incomes are increasingly becoming a policy concern in many industrialised countries (Economist 2010; OECD 2011), developing and emerging countries are seeing historical reductions in poverty rates¹ and the rise of "new", "burgeoning" or "emerging" middle classes.² Following two decades of developing countries' integration into global markets and their subsequent growth, the middle class has become "global", in the sense that it is geographically diverse now: from approximately 2014 onwards, half of the world's middle class will be situated in developing and emerging countries. From around 2018 onwards, the world will be predominantly middle class for the first time in history, and no longer predominantly poor. Against the background of this overall trend, this paper asserts that these emerging middle classes display very heterogeneous characteristics: there is not a new middle class, but a variety of new middle classes.

Members of the new middle classes have the means to invest in health care, education and financial services. They can afford to buy cars, housing, smartphones, durable consumer goods as well as luxury brands. International and domestic companies cater to special preferences and tastes of this market segment. Examples are numerous and include Starbucks cafes that offers local flavours such as "Chestnut White Chocolate Mocha" or "Peach Blossom Tea Latte" to its affluent customers in China, or Godrej & Boyce Manufacturing – one of India's oldest industrial companies – which successfully produces and sells a US\$ 70 battery-run fridge called "the little cool" (Economist 2010). Today, middle-class consumption amounts to US\$ 6.9 trillion annually in developing countries alone (Court / Narasimhan 2014), which is more than the gross domestic products (GDPs) of the UK, France and Spain combined.

But it is not only the consumption capacity of the new middle classes in developing and emerging markets that matters. The middle class has always been associated with more than its disposable income. Historically, it has been seen as a social class striving for political, societal and economic liberties, as a guarantor of social stability and as pillar of democracy. Already in 350 BC, the Greek philosopher Aristotle claimed in his magnum opus *Politics: "Thus it is manifest that the best political community is formed by citizens of the middle class, and that those states are likely to be well-administered in which the middle class is large, [...] and where the middle class is large, there are least likely to be factions and dissensions."* Similarly, today many observers are pinning their hope on the burgeoning middle classes in Asia, Latin America and Africa as being gears for reform, social progress and democratisation (e.g. Fletcher 2013). Thus, a closer look at the new middle classes and their characteristics is warranted.

The share of people living on less than US\$ 2 a day fell from 57 per cent of the world population in 1981 to 35 per cent in 2010 (World Bank 2014). In absolute terms, the number of people living in poverty, measured at the US\$ 2 threshold (2005 prices) fell from 2.59 billion people (1981) to 2.4 billion people (2010) (World Bank 2014).

As discussed in more detail below in Section 2, this paper defines the "middle class" as being composed of people who dispose of a daily income of US\$ 10–100 (2005 PPP US\$) per day.

At the same time, middle-class dynamics in low- and middle-income countries are quite diverse, and the middle classes in these countries can exhibit very different features. For instance, in 2012, the middle class of India comprised 8 per cent of the country's population, and the combined middle class in sub-Saharan Africa comprised only around 2 per cent, whereas the middle class of China alone included more than 200 million people, or 16 per cent of the population. As shown in this paper, the middle classes of Algeria and Bangladesh are relatively small and have low spending capacity, even controlling for these countries' development levels, whereas the middle classes of Colombia, Rwanda and Mexico are large and affluent, given the overall economic development of these countries.

Taking a look at the concept of a "middle-class country" – defined as a country that is mostly middle class and not mostly poor – also illustrates this diversity. Although Cote d'Ivoire, Sri Lanka and Indonesia are all lower-middle-income economies, Cote d'Ivoire has been a middle-class country since the 1990s, Sri Lanka is currently becoming one and Indonesia will only become a middle-class country next decade (Figure 1). Debates on the new global middle class are thus misleading and should take this heterogeneousness into account.

Figure 1: Joining the middle: Decade when a country (and the world) is mostly middle class instead of mostly poor 1960s Jamaica, Singapore 1970s Malta, Taiwan, Cote d'Ivoire, Seychelles, South Korea 1980s Costa Rica, Uruguay 1990s Chile, Peru, Bosnia and Herzegovina, Albania, El Salvador Russia, Malaysia, Belarus, Iran, Tunisia, Kazakhstan, Venezuela, 2000s Ukraine, Dominican Republic, Brazil, Syria, Armenia, Thailand, Colombia World, Panama, Ecuador, Egypt, Turkmenistan, Georgia, Sri Lanka, 2010s Botswana, Moldova, Paraguay, Gabon, Jordan, China Indonesia, South Africa, India, Azerbaijan, Cambodia, Vietnam, Fiji, Bangladesh, Philippines, Tajikistan, Uzbekistan, Guatemala, Morocco, Sudan

Note: Poverty is defined as a daily income of US\$ 5 (2005 US\$ PPP) or less. Middle class is defined as a daily income of US\$ 10–100 (2005 US\$ PPP). Only countries are listed that had more poor than middle-class citizens in the first year of the database (1965). When the threshold is passed several times, the latest year is used.

Source: Authors' calculations; data from Kaufman, Kharas and Penciakova (2012)

The paper is structured as follows: it begins by presenting various definitions of the middle class and explains and justifies the definition we are using in this paper (Section 2). In Section 3, the paper provides a cartography of the new middle classes, based upon data from the Brookings Institution's Development, Aid and Governance Indicators, in

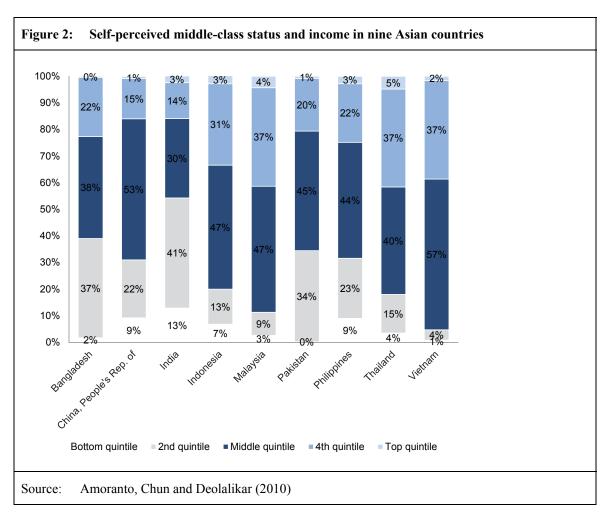
order to illustrate the differences across middle classes around the world and provide the basis for a novel middle-class typology. We show how today's global middle class is composed in terms of geography and size; we then put a particular focus on countries that belong to the BRICS (Brazil, Russia, India and China, South Africa), the "Next Ten", and sub-Saharan Africa – that is, country groups that are very heterogeneous in terms of their composition, but that receive considerable attention in the context of debates on the world economy and global development. We also assess the relationship between a country's GDP per capita and the share of the middle class in the total population as well as the relationship between the spending capacity of the middle class and the respective country's level of economic development. In light of middle-class cartography set out in Section 3, Section 4 proposes a novel middle-class typology that takes account of the size and spending capacities of different types of middle classes. Section 5 suggests implications of the heterogeneousness of middle classes around the world for future avenues of research by pointing to research gaps in the context of the links between the middle class and growth, values and attitudes as well as environmental awareness and responsible consumption. Section 6, the last part of the paper, summarises the main findings and provides concluding comments.

2 How to define the middle class?

There is no consensus on how to define the middle class. In empirical studies, two approaches are in use: on the one hand, definitions that rely on individuals' self-perceived status and, on the other hand, those that rely on observable data based on, for instance, income or consumption levels.

Self-perceived social status can be a meaningful measure to compare trends in a single country over time. But since social self-perception is strongly embedded in its sociocultural context, it is a less appropriate measure for cross-country analyses. For instance, Amoranto and colleagues have studied the link between income and self-perceived middle-class status in Asia (Amoranto / Chun / Deolalikar 2010). They find, first, that the correlation between self-perceived middle-class status and income is low and, second, that strong differences across countries occur in this regard. This is shown in Figure 2. The figure displays the self-perceived middle class (total=100%) of nine Asian countries, with different colours indicating the respective income group (in quintiles of the country's total distribution). For instance, the light blue on the top of each column shows how much of a country's self-perceived middle class belongs to the top quintile of income distribution (i.e. the 20 per cent of the population with the highest income). Those in the "middle" of the income bracket (i.e. the median quintile) are shown in dark blue. Across countries, strong differences appear. For instance, 57 per cent of the members of the (self-perceived) middle class in Vietnam belong to this income group, but only 30 per cent in India; 5 per cent of Thailand's middle class, according to this definition, belong to the country's top earners, but only 1 per cent in China.

For this reason, the most common approach to identify the middle class is on the basis not of self-perception but on the basis of levels of income or consumption, either in *relative* or *absolute* terms. The *relative* approach defines the middle class on the basis of a middle



share of income or consumption relative to the rest of the population. For instance, Birdsall and her colleagues Graham and Pettinato (2000) identify those belonging to the middle class as having an income that amounts to 75 to 125 of the median income within the country. Easterly (2001) identifies the three middle quintiles of the per capita distribution of consumption within a country as being the middle class.

Yet, identifying the middle class on the basis of *relative* levels of income or consumption is less appropriate for comparative cross-country studies, since it can mask substantial differences between middle-class consumption capacities. We therefore opt for a definition based on income in absolute terms and not relative to the rest of the country.

In order to identify the middle class on the basis of *absolute* levels of income or consumption, different thresholds are used. For instance, a number of scholars use the low threshold of US\$ 2 per capita per day as the absolute lower bound of their definition of persons who belong to the middle class, in order to distinguish them from the poor. Banerjee and Duflo (2008) count those who spend US\$ 2 to US\$ 10 per capita per day as being part of the middle class. Similarly, Ravallion (2009) uses the US\$ 2 and the US\$ 13 thresholds. The African Development Bank (2011) and the Asian Development Bank (Chun 2010) utilise the US\$ 2 threshold as well.

At the same time, various scholars and commentators caution against using a low threshold of US\$ 2 per day to define the middle class because income at this level does not

safeguard economic security (e.g. Birdsall 2014; Donnan / Bland / Burn-Murdoch 2014). Today, 40 per cent of the world population, or 2.8 billion people, live on US\$ 2–10 a day in 2005 purchasing power parity (PPP)³ terms, which is just above the World Bank's poverty threshold (Donnan / Bland / Burn-Murdoch 2014). The critics argue that the middle class should be distinguished from this large group of people in developing and emerging economies who are above the international poverty line but still vulnerable to falling back into poverty, and therefore do not belong to the secure middle class. They can be referred to as the "vulnerable", the "strivers", the "fragile middle" on a "slippery ladder" (Donnan / Bland / Burn-Murdoch 2014) or the "strugglers" (Birdsall / Lustig / Meyer 2013).

The "strugglers" do not suffer the hardships of extreme poverty as many of their fellow citizens and can afford sufficient caloric intake, maybe a scooter or motorcycle, schooling for their children, a mobile phone and can occasionally send remittances to their families in rural areas. But their discretionary spending remains low and they can hardly put money aside. Personal misfortune, a long drought or monsoon, or any other form of economic shock can easily throw them back into poverty. For instance, survey results show that 55 per cent of the poor in Indonesia used to live above the poverty threshold a year before the survey was done (Donnan / Bland / Burn-Murdoch 2014). They are not poor, but given their income insecurity, correspondingly low levels of consumption and a lack of financial stability, their lifestyle is not the one typically associated with the middle class (Birdsall / Lustig / Meyer 2013).

In this paper, we therefore define the global middle class as being comprised of those households with daily expenditures between US\$ 10 and US\$ 100 per person in PPP terms. By using this definition, we follow Kharas (2010) and Kharas and Gertz (2010). The aim of using these thresholds is to exclude those who are regarded as rich in the richest advanced country (using twice the median income of Luxemburg) and those who are regarded as poor in the poorest advanced countries (using as reference the average poverty lines in Portugal and Italy, the two European countries with the strictest definitions of poverty) (Kharas / Gertz 2010). Moreover, we use US\$ 10 a day as the defining lower threshold in order to distinguish members of the middle class from the "strugglers" who are at a substantial risk of falling back into poverty. For Latin America, Lopez-Calva and Ortiz-Juarez (2011) show that, at an income of around US\$ 10 a day in PPP terms, people only have a 10 per cent chance of falling back into poverty. They are thus sufficiently secure to consume, to be able to save for the future and to have aspirations for a better life for themselves and their children; their lifestyle is a middle-class one.

For quantitative information on the size and spending capacities of middle classes in the Global South, we rely on the Development, Aid and Governance Indicators (DAGI) from the Brookings Institution. The data is constructed by Daniel Kaufman, Homi Kharas and Veronika Penciakova (2012) and based on country household surveys and information derived from national accounts.⁴

_

³ The PPP base year in this text is always 2005 and 2011 for information on GDP per capita, except if otherwise noted.

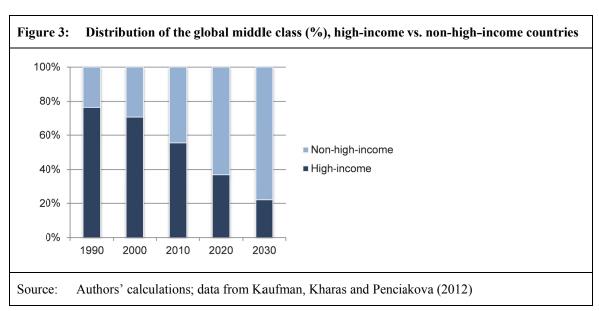
⁴ For data and methodology, see: http://www.brookings.edu/research/interactives/development-aid-governance-indicators.

3 A cartography of the new middle classes

3.1 The geographic distribution of the world's middle class

The spatial distribution of world income has substantially shifted during the last decades, and this trend can be expected to continue. If a geographer in 1980 had plotted economic activity on a globe to identify the point that represents the mean-location – the world's "economic centre of gravity" – in terms of production, this point would unsurprisingly have been between Europe and the US, somewhere in the middle of the Atlantic. By the late 2000s the same undertaking would have led to a very different result – the world's economic centre of gravity would have shifted 4,800 km eastwards to a location close to the Turkish city of Izmir, mirroring the increasing economic weight of Asia. Extrapolating growth rates to 2050, the projected global economic centre of gravity will move another 4,500 km further to the east – to a location between India and China (Quah 2011).

A cartography of the world's middle-class populations reflects this shift. Until recently, the world's middle class was predominantly congruent with rich, industrialised nations: in 1990 three-fourths of the global middle class was concentrated in high-income countries (by today's standards), which represented a mere third of the world's population at that time. Since then, the world's middle class has become much more diverse in terms of geography. From approximately 2014 onwards, emerging and developing markets will represent more than half of the global middle class. By 2020 these countries will represent two-thirds of the global middle class and more than three-fourths by 2030 (Figure 3).



Most of the increasing share of non-high-income countries is driven by South Asia and the East Asia and Pacific region. Both regions represented, respectively, less than 1 per cent and 2 per cent of the world's middle class in 1990. Today, South Asia accounts for circa 5 per cent of the global middle class and the East Asia and Pacific region, thanks to China, roughly for 15 per cent. In 2030, each of these two regions will have more middle-class citizens than all of today's high-income countries combined (Figure 4). The middle class will also expand in sub-Saharan Africa; the Middle East and North Africa; Latin America; and Europe and Central Asia. But with lower growth rates and less favourable demographics, the share of these regions that comprise the global middle class will

Figure 4: Distribution of the global middle class (%), by region 100% 80% Sub-Saharan Africa South Asia 60% Middle East & North Africa Latin America & Caribbean 40% ■ High-income countries Europe & Central Asia 20% ■ East Asia & Pacific 0% 1990 2000 2010 2020 2030 Source: Authors' calculations; data from Kaufman, Kharas and Penciakova (2012)

increase only at the margins, or will even decline in the cases of Latin America and Europe and Central Asia (Figure 4).

3.2 The size and spending capacity of today's global middle class

In absolute terms, the middle class of high-income countries (measured by global standards) includes more than a billion people today, representing roughly 90 per cent of the citizens in these countries. This number still dwarfs the count of middle-class citizens in other regions, taken individually: 246 million people in the East Asia and Pacific region (less than 20 per cent of the national population on average) are middle-class; 144 million in Eastern Europe and Central Asia (47 per cent); 276 million in Latin America (36 per cent); 80 million in the Middle East and North Africa (25 per cent); and only a tiny fraction of the population – less than 1 per cent – in South Asia and sub-Saharan Africa with, respectively, 76 million and 31 million middle-class consumers. Thus, sub-Saharan Africa combined still has fewer middle-class citizens today than Spain or South Korea alone (Figure 5).

Nonetheless, the underlying structural change in developing and emerging countries is truly remarkable. The emerging middle class grew by more than half a billion people during the last two decades. As illustrated above, this trend is being powered considerably by South Asia and the East Asia and Pacific region, which together contributed half of this number. The middle classes in both regions grew, starting from very low levels, by a factor of 9 and a factor of 13, respectively, during the 1990–2010 period, compared to a factor of between 1.8 and 3.4 for the other non-high-income regions. In the future, the contribution of Asia to the emerging middle class will even be higher. By 2030, an estimated 2.3 billion out of 2.7 billion new middle-class consumers in developing or emerging countries will be from Asia: the emerging middle class of the last two decades has been global, but the emerging middle class of the next two decades will be mostly Asian.

A global overview and timeline are given in Boxes 1 and 2. Box 1 shows the share of the middle class as percentage of a country's population, and Box 2 its annual per capita consumption capacity for the years 1990, 2010 and 2030. Data is ordered by quartiles of

Figure 5: Middle-class population in millions of people and % of the population, by region 1400 90% 1200 80% 1000 70% 60% 800 50% 600 40% 30% 400 20% 200 10% Europe & High-income Latin America Middle East & & Caribbean | North Africa countries ■ Middle-class population, mnl (left axis) • Middle-class population, % (right axis) Authors' depiction; data from Kaufman, Kharas and Penciakova (2012) Source:

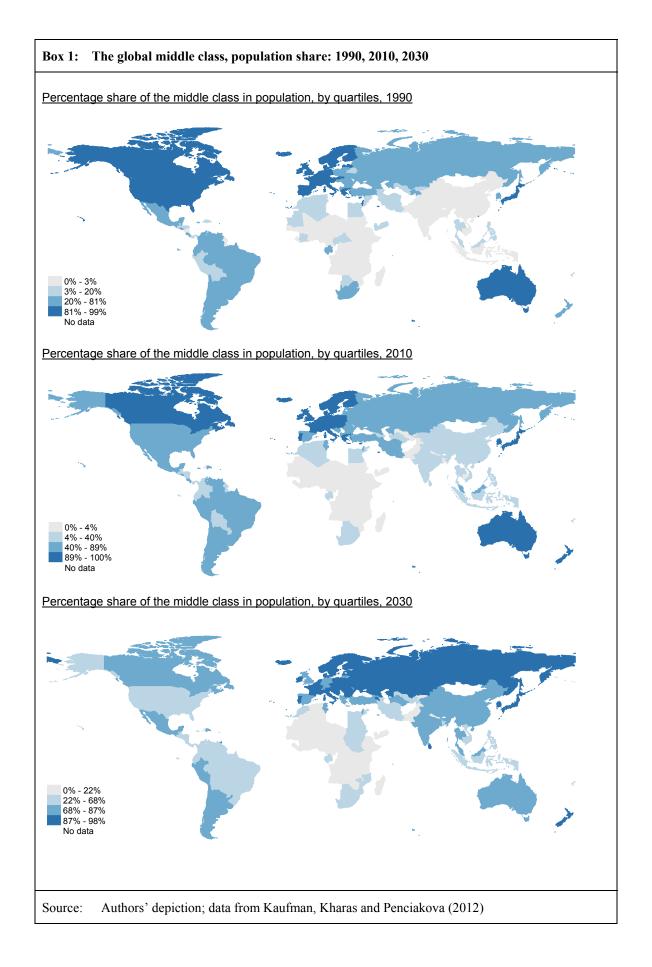
the respective year.⁵ The maps underline that the rise of the middle classes is particularly pronounced in many Asian countries.

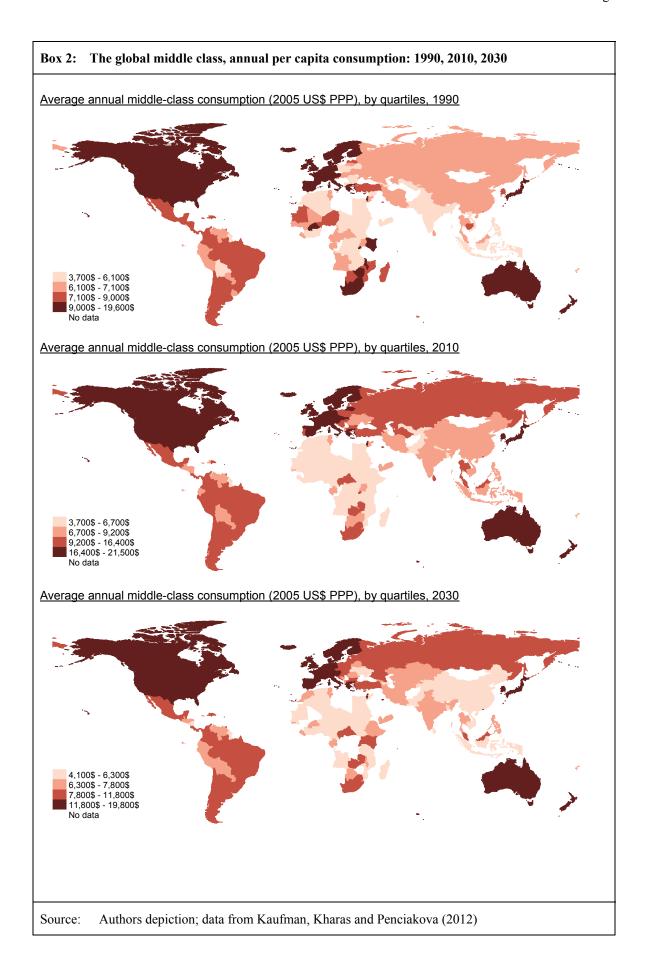
The growth of the middle classes around the world is, evidently, a consequence of increased income. Increased income, in turn, modifies consumption patterns, wherein there is a shift from acquiring basic goods to buying discretionary goods. For example, this becomes apparent in the context of food consumption: the share of income spent on food goes systematically down as income rises (Engel's law). Several studies illustrate that consumption patterns in China, India and Brazil have considerably changed, with a reduced proportion of expenditures being spent on food and more on housing, transport, recreation, education, clothing and luxury goods (Beinhocker / Farrell / Zainulbhai 2007; Calicchio / Francis / Ramsay 2007; Artigas / Calicchio 2007; Hansakul 2010).

Although the middle class is growing in most places, albeit at different paces, its consumption capacity varies. For instance, the average middle-class consumer in Latin America and the Caribbean has a budget that is circa 20 per cent higher than in sub-Saharan Africa and almost 40 per cent higher than in South Asia.

Next, we take a closer look at the countries of three different groups of emerging and developing countries: the BRICS, the Next Ten and sub-Saharan Africa. Whereas each category comprises very different countries in terms of the economy, the political system and – with the exception of sub-Saharan Africa – the geographic region, each country group is regularly studied in global development and economy analyses and each plays an important role in the context of development policy.

Note that the four different colours in Box 1 and Box 2 depict the four quartiles respectively. Across years, the same colour can, while referring to the same quartile, therefore refer to different percentage shares or consumption levels.





3.3 The distribution and size of the middle class by country grouping

The BRICS countries

The emerging middle class is often associated with the BRICS, the well-known acronym coined by Goldman Sachs economist Jim O'Neill, standing for Brazil, Russia, India and China, plus South Africa. And indeed, the potential market of middle-class consumers in these countries more than quintupled, from US\$ 451 billion⁶ in 1990 to US\$ 2.43 trillion in 2010.

Yet, when it comes to the dynamics of their middle-class expansion, there are considerable differences among these countries. Brazil, Russia and South Africa already had substantial middle classes in the 1990s, representing 25 per cent or more of these countries' populations. The middle classes in India and China, in contrast, represented only a tiny fraction of the populations (less than 3 per cent) in the 1990s. Since then, most of the BRICS countries have been able to substantially increase the share of their middle classes, both in absolute numbers and relative to the overall population (Figure 6). Only South Africa's middle class did not expand considerably, relative to the rest of the population, and even dropped in the early 2000s below the levels of the early 1990s. However, South Africa has the most affluent middle class among the BRICS, with an average annual consumption of circa US\$ 10,000. This is considerably higher than in Russia (US\$ 8,800), Brazil (US\$ 8,300), India (US\$ 6,300) or China (US\$ 6,100).

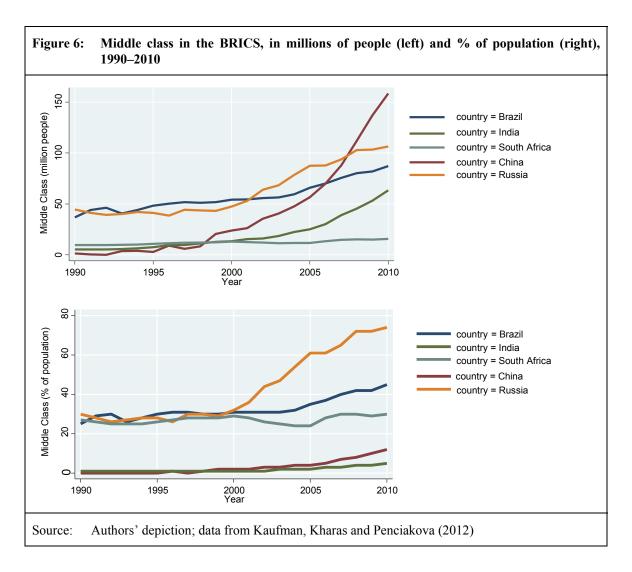
Among the BRICS, only Brazil and Russia are "middle-class countries", which is defined here as countries having more middle-class members than very poor ones. Thus, the term "middle-class country" does not mean that these countries do not have to tackle important problems of poverty or inequality but simply that the middle class is more populous than the income group at the very bottom. In Russia, which has been classified as a high-income country by the World Bank since 2012, circa three-fourths of the population is middle-class; since 2006, Brazil has more middle-class citizens than poor citizens.

On the opposite end, China and India today are still far from being labelled middle-class countries – a fact that is sometimes forgotten in current debates about the emerging middle classes. The share of the middle class in both nations is well below 20 per cent (12 per cent in China and only 5 per cent in India, in 2010), and thus lower than levels in the other BRICS countries more than two decades ago. It is estimated that China will only join the ranks of middle-class countries in 2018 and India in 2021. In addition, and as shown above, average middle-class spending is lowest among those citizens living in the BRICS countries.

However, given the gigantic sizes of their populations, the middle classes of India and particularly China already outnumber those of most industrialised nations. In 2010, more than 60 million people were middle-class in India and almost 160 million in China (Figure 6). When the world's countries are ranked by the size of their middle class, China comes second (after the US) and India eighth. This is particularly impressive given that two decades earlier, India's middle classes had fewer than 6 million citizens and China's middle class fewer than 1.5 million citizens, which corresponds roughly to the sizes of the middle-classes in Bulgaria and Bangladesh today. Furthermore, both nations will be the middle-class powerhouses of tomorrow, with more than an estimated 590 million (China) and 280 million (India) middle-class consumers by 2020.

7 Below the US\$ 5 a day poverty line.

^{6 2005} US\$ in PPP terms.



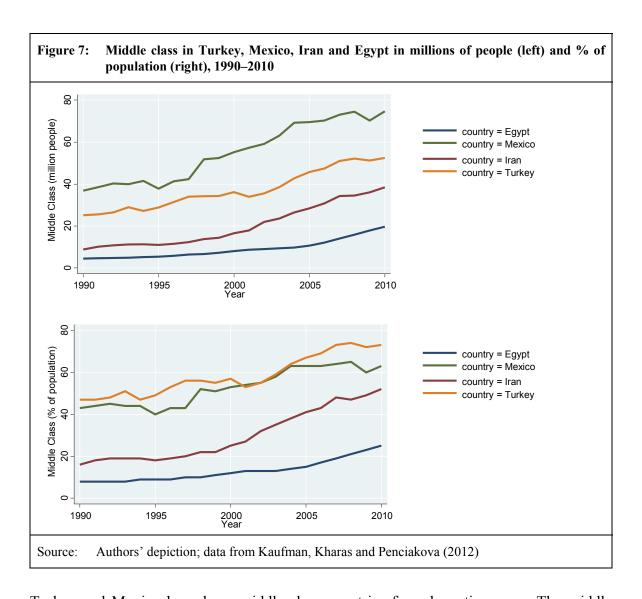
The Next Ten

The Next Ten is a group of countries that comprises nations with very different levels of GDP per capita – varying between low-income status and OECD membership – and thus with very different development challenges. Yet, what these countries have in common is that, given their demographics and economic growth rates, they will be amongst the world's largest economies within the next decades. The following paragraphs highlight the major trends and characteristics of the middle classes in the Next Ten, namely Bangladesh, Egypt, Indonesia, Iran, Mexico, Nigeria, Pakistan, Philippines, Turkey and Vietnam.⁸

Broadly speaking, the Next Ten can be differentiated into three categories: first, current middle-class countries (Turkey, Mexico, Egypt and Iran); second, aspiring middle-class countries (Bangladesh, Indonesia, Philippines, Vietnam); and third, countries with middle classes that make up only a small share of the population but are still substantial in absolute numbers (Nigeria and Pakistan).

_

A Goldman Sachs report (Wilson / Stupnytska 2007) drew attention to the "Next Eleven", a fast-prospering group of countries other than the BRICS countries, including South Korea. We describe in the following the countries belonging to this group. However, since Korea has been a middle-class country since 1979 and a high-income country since 1995, we ignore it here.



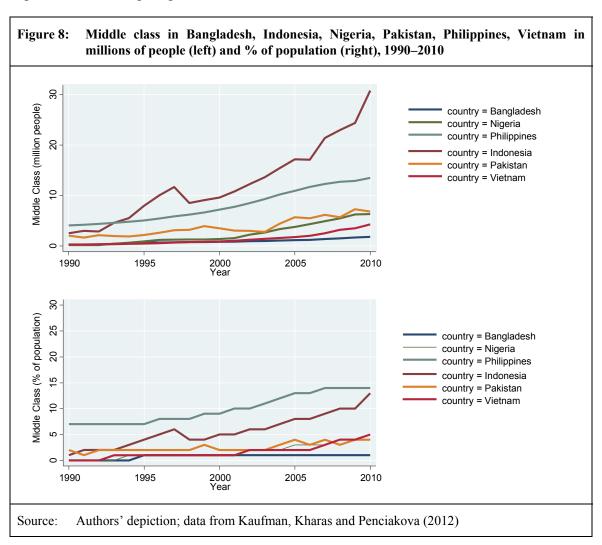
Turkey and Mexico have been middle-class countries for a long time now. The middle class in both countries – three-fourths and two-thirds of the population, respectively – reflects the presence of a vivid civil society with affluent consumers (per capita consumption ca. US\$ 9,000°). The middle classes in Iran and Egypt are smaller – circa 50 per cent and 25 per cent of the population, respectively – and have a lower consumption capacity (ca. US\$ 7,000 and US\$ 6,000¹0) but they have grown considerably (by a factor of 4) in both countries during the last two decades (Figure 7). Iran has had a higher share of middle-class citizens than poor ones in its population since 2002, and Egypt since 2012. Arguably, this growth of the middle class has resulted not only in changing economic circumstances but it has also accentuated political preferences in both countries. Important examples of this are Iran's demonstrations following the re-election of Mahmoud Ahmadinejad in 2009 and the revolution against and overthrow of Husni Mubarak in Egypt in 2011 (e.g. Graham / Chattopadhyay 2014).

The "aspiring middle-class countries" have small middle classes today, but these have the potential to rapidly expand. In particular, Indonesia is noteworthy: its middle class

^{9 2005} US\$ in PPP terms.

¹⁰ Idem.

skyrocketed from 1 per cent of the population in 1990 (2.5 million people) to more than 13 per cent (30.8 million people) in 2010, a level similar to the one in the Philippines (Figure 8). In the 2020s, the middle class in each country will be larger than the number of very poor citizens there, and the same holds for Bangladesh and Vietnam (Figure 8). The latter two countries have a very small middle class today (1 per cent and 5 per cent of the population, respectively), but the extrapolation of previous growth rates promises a rapid expansion of the "aspiring middle class" in the two decades to come.



In contrast, Nigeria and Pakistan will, in the foreseeable future, continue to have more poor people than middle-class citizens. However, due to the sizes of these countries, they will have a substantial middle class, even if the country overall remains poor. Currently, the middle class in each country amounts to 4 per cent of the population, or somewhat more than 6 million people in each country.

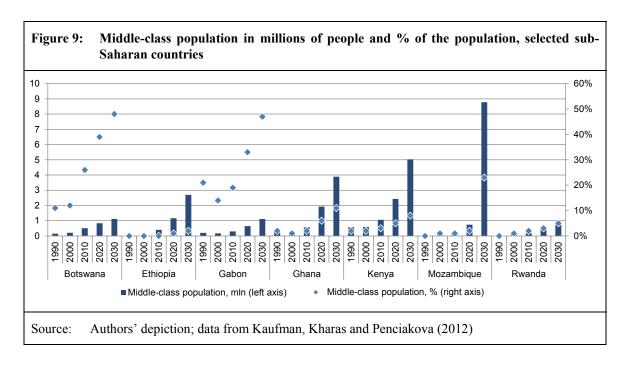
Sub-Saharan Africa

From a global economic perspective, sub-Saharan Africa barely registers. The last time the region contributed more than 2 per cent of world GDP was 1983 (World Bank 2014). It is more often associated with poverty, and often conflict, than with economic success. However, economic success does exist and sub-Saharan Africa has been experiencing a

period of high growth since the mid-1990s. Although *The Economist* labelled Africa "The hopeless continent" in 2000, a decade later it stated that "The sun shines bright" (Economist 2011). In 2011, the region's GDP grew by more than 4 per cent, and a dozen of the region's countries had experienced growth of more than 6 per cent for six or more consecutive years. Labour productivity grew by 2.7 per cent, on average, and the manufacturing sector in countries such as Ethiopia, Kenya, Mozambique and Tanzania is developing. Countries such as Kenya and Mauritius are becoming more integrated into regional value chains, and trade between Africa and the rest of the world grew by 200 per cent between 2000 and 2011 (World Bank 2014; IMF 2012; Economist 2011). Sub-Saharan Africa's middle class, though still small compared to other regions, mirrors this trend.

The middle class of sub-Saharan Africa expanded more than twofold between 1990 and 2010, from 14 million to 31 million people. Of course, the middle classes of these countries are as diverse as the countries themselves (Figure 9). For instance, in Botswana and Gabon, 25 per cent and 20 per cent of the population, respectively, belongs to the middle class. The middle class has an annual per capita consumption budget of US\$ 7,800 and US\$ 6,500, respectively, which is more than in China (US\$ 6,100) or Algeria (US\$ 5,100), for example.

In contrast, the middle classes in countries such as Rwanda, Ethiopia, Kenya, Mozambique and Ghana are still tiny and comprise only between 0 and 3 per cent of their respective population (Figure 9). Whereas Botswana and Gabon are expected to have more middle-class consumers than very poor people by 2017, this will not be the case for these countries in the near future. However, as shown in Figure 9, the middle class in countries such as Kenya and Mozambique is expected to grow considerably until 2030 in absolute numbers, generating a large market potential and, at the same time, challenges for urbanism, infrastructure and the local environment. In addition, we will show in the following that the middle classes of some of these countries can be considered relatively affluent and large when their overall economic development is taken into account.

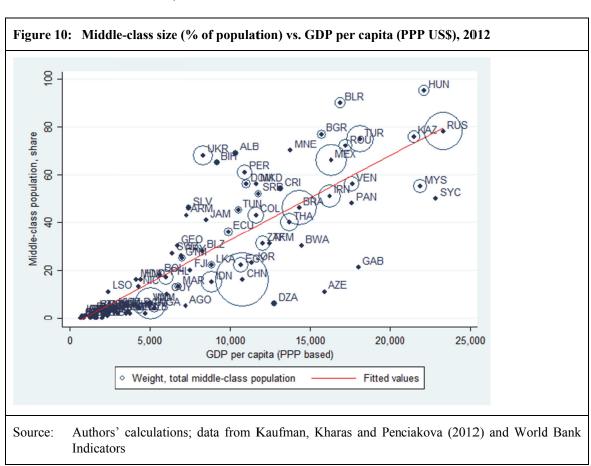


3.4 Comparing middle classes across different development levels

Domestic macroeconomic or structural policies that target the middle class are likely to be of increasing relevance in emerging economies and fast-growing developing countries. For instance, policy objectives might be geared towards fostering middle-class growth or reducing the income gap between the middle class and the poor. Thus, from a policy perspective, it may not only matter how large or affluent a country's middle class is in absolute terms but also – similar to context-dependent measures of poverty – relative to the country's economic development level.

Of course, the level of economic development is closely interlinked with the size and the consumption of a country's middle class: richer countries tend to have a bigger middle class with a presumably higher spending capacity. However, as shown below, average per capita GDP is far from being a perfect predictor of the share of the middle class in the total population or its purchasing power.¹¹

Figure 10 illustrates the relationship between a country's GDP per capita (horizontal axis) and the share of the middle class in the total population (vertical axis). Data is used for 2012 and non-high-income countries. The size of the middle-class population in absolute numbers is indicated by the radius of the circles; the line of fit, highlighting the correlation between the two variables, is shown in red.

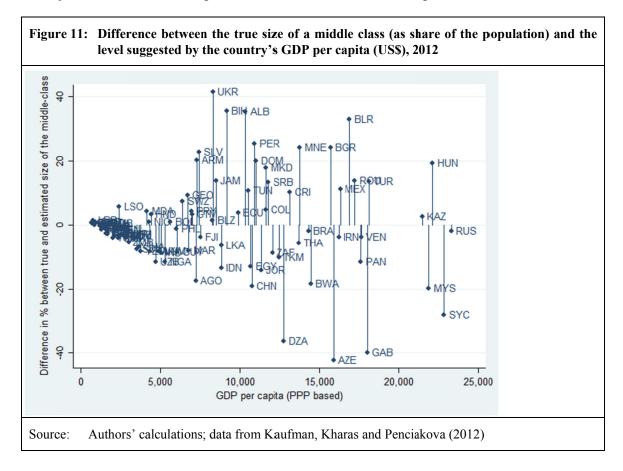


¹¹ If not indicated otherwise, GDP per capita in PPP US\$ (base year 2011) is used in the following.

As the figure illustrates, the line goes from the bottom left to the upper right corner, showing the strong positive correlation between both variables (correlation coefficient: 0.8). However, many countries are quite far from the red line of fit, which means that their middle class is considerably larger (above the line) or smaller (below the line) than suggested by their per capita GDP level. Indeed, the latter explains only 71 per cent of the variability in the sizes of the middle-classes across countries.

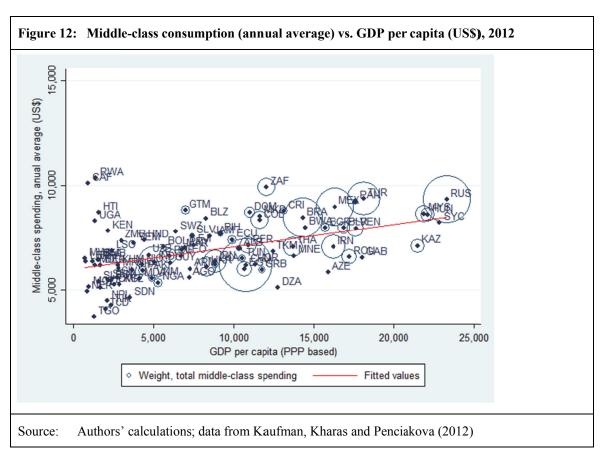
The same pattern can be more clearly illustrated in Figure 11, which shows, on the vertical axis, how much a country's middle-class size deviates from a simple prediction based on its per capita GDP in purchasing power parities. Countries are ordered by GDP per capita levels (horizontal axis). Countries with a value above (below) zero have a larger (smaller) middle class than predicted by their economic development levels. For example, Peru (PER) has a middle class that is 25 percentage points larger than what the country's economic development level, measured in GDP per capita, would suggest. On the other hand, the middle class in China (CHN) is small compared to what the country produces in terms of goods and services. There is a difference of 19 percentage points between the true size of China's middle class (16 per cent of the population) and a simple prediction based upon its average GDP per capita (35 per cent). It is also noteworthy that many of the poorest countries, as can be seen on the far left side of Figure 11, have particularly small middle classes (with values below zero) – even when their low level of economic development is taken into account.

What does this imply? There are important differences in the emerging middle classes across countries; to put it differently, there is not a single emerging middle class but a variety of them, even at comparable levels of economic development.



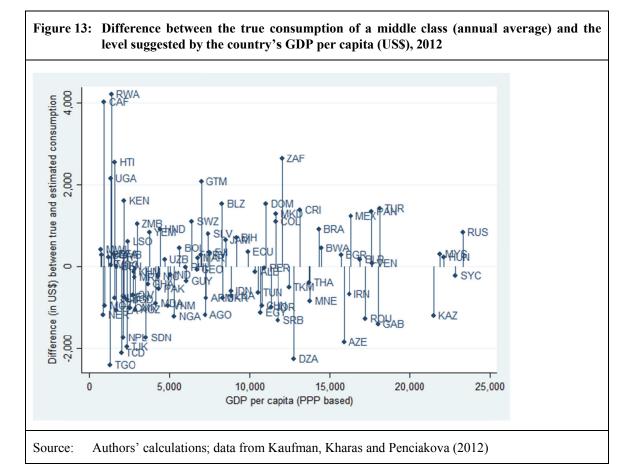
A similar exercise can be conducted by illustrating the relationship between the spending capacity of a middle-class citizen and her country's level of economic development. Figure 12 shows average middle-class consumption (vertical axis) compared to GDP per capita (horizontal axis). The total volume of a country's middle-class expenditure is indicated by the size of the circles, and the line of fit is shown in red. Again, the correlation between both variables is positive (correlation coefficient: 0.5).

Yet, GDP per capita levels alone cannot explain middle-class expenditure extraordinarily well (R²=0.2), which means that countries at the same or similar levels of economic development can show very different patterns of middle-class consumption capacity. Countries above the line have a middle class that is disproportionally affluent, for instance Rwanda (RWA), Turkey (TUR), Mexico (MEX) and South Africa (ZAF). By contrast, countries below the line have a comparably low middle-class capacity to consume, such as Egypt (EGY), Vietnam (VNM) and China (CHN). In particular, the variability among poorer countries (on the left side of the graph) is high, suggesting important differences in the middle-class characteristics of these countries when it comes to income and purchasing power.



This is also illustrated in Figure 13. This figure highlights on its vertical axis the difference between actual middle-class spending and the level predicted by the country's economic development stage. The horizontal axis shows GDP per capita levels. A country with a value above zero has a more affluent middle class than suggested by the level of economic development measured in terms of GDP per capita. Countries with a negative value, and hence a dot below zero, have a middle class that is relatively less affluent. Thus, the figure allows for distinguishing between rather "affluent" and rather "poor" middle classes across development stages.

Figure 13 reveals a very heterogeneous picture, again underlining the presence of various types of middle classes, rather than the emergence of one homogeneous global type. For instance, South Africa (ZAF) and Colombia (COL) have similar levels of development (annual GDP per capita: US\$ 12,041 and US\$ 11,636, respectively) and both countries have a relatively affluent middle class, with values above zero in this figure. This means that much of the total income in both countries is concentrated in the middle class. Also, South Africa's middle class has a somewhat higher spending capacity than the one in Colombia (annual average expenditure: US\$ 9.907 and US\$ 8.327, respectively). ¹² On the other hand, there are countries such as Algeria (DZA). In terms of development levels, Algeria (annual GDP per capita: US\$ 12,778) is comparable to South Africa or Colombia. But the average middle-class consumption in Algeria is much lower (US\$ 5,098) than what this upper-middle-income country's GDP per capita level would suggest (US\$ 7,353). Consequently, much of the incomes in these countries at the bottom half of the graph are earned by other income groups. Either the gap between the middle class and poorer income groups is not very large or the gap between the middle class and the rich is big – or both.



¹² It is noteworthy that no information about the distribution of expenditures within the middle class is available and that this information concerns average consumption.

4 Proposing a new middle-class typology

The findings of the previous section can be used for generating a middle-class typology across economic development stages. As Figure 11 has shown, some countries have a larger middle class than predicted when looking at their GDP per capita, whereas others have a smaller one. And as Figure 13 depicts, whereas several countries have a considerably more affluent middle class than predicted by their GDP per capita, others have a less affluent one.

Combining the main findings of the last section allows for categorising the middle classes according to their relative size and purchasing power. Countries can be assigned to cells in a 3x3 matrix that arrays middle classes by size (small / average / large) and consumption capacity (poor / average / affluent). "Small" and "poor" is defined as a middle-class population ratio and annual average consumption that is below 90 per cent of what is predicted by GDP per capita levels. "Large" and "affluent" refer to values above 110 per cent of what is suggested by such a simple model. "Average" refers to the rest (90–110 per cent) and relates to values that come closest to the line of fit in Figures 10 and 12.

Box 3: Categorisation of middle classes by size and consumption capacity, relative to economic development level				
	M	iddle-class size (relative to econo	mic development level)	
		Small	Average	Large
		Algeria (35.4)	Kazakhstan (41.4)	Armenia (40)
Q.		Angola (42.7)	(Average Gini coefficient 41.4)	Moldova (32.7)
leve		Azerbaijan (50.8)		Montenegro (29.8)
nent		Bangladesh (34.1)		Mozambique (47.3)
dop		Cameroon (44)		Serbia (38.8)
dev		China (46.9)		Ukraine (41)
omic		Cote d'Ivoire (44.5)		(Average Gini coefficient 40.0)
con		Egypt (34.4)		
e to e		Gabon (44.1)		
ative	Poor	Jordan (38.8)		
' (rel	Pc	Kyrgyzstan (39.7)		
acity		Nepal (47.2)		
cab		Nigeria (43.7)		
ding		Senegal (41.3)		
pen		Sierra Leone (39)		
ass s		Sri Lanka (46.9)		
le-cl		Sudan (42.2)		
Middle-class spending capacity (relative to economic development level)		Tajikistan (33.6)		
~		Tanzania (36.7)		
		Vietnam (36.8)		
		(Average Gini coefficient 41.0)		

Box 3 (cont.): Categorisation of middle classes by size and consumption capacity, relative to economic development level					
Middle-class size (relative to economic development level)					
		Small	Average Large		
		Benin (36.5)	Bolivia (50.5)	Albania (31.1)	
		Botswana (53.9)	Nicaragua (52.3)	Belarus (27.9)	
		Burkina Faso (39.5)	Philippines (47.9)	Bulgaria (31)	
		Cambodia (41.7)	Russia (40.1)	Ecuador (53.4)	
		Ethiopia (33.6)	Venezuela (47.6)	Gambia (47.1)	
		Fiji (49)	(Average Gini coefficient 47.7)	Georgia (40.8)	
		Ghana (40.7)	Bolivia (50.5)	Hungary (26.2)	
		Guyana (44.2)		Lesotho (60)	
(je	ege e	India (36.8)		Liberia (43)	
t leve	Average	Indonesia (39.4)		Paraguay (53.9)	
men	Y	Madagascar (47.4)		Peru (47.7)	
elop		Malaysia (40.3)		Tunisia (40.6)	
dev		Mauritania (39)		(Average Gini coefficient 41.9)	
omic		Morocco (39.4)			
соис		Pakistan (31.2)			
e to e		Seychelles (46)			
ative		Thailand (42)			
y (re		Turkmenistan (26.5)			
spending capacity (relative to economic development level)		Uzbekistan (39.7)			
cap		(Average Gini coefficient 40.3)			
ding		Kenya (55.6)	Brazil (56.4)	Bosnia and Herzegovina (35.8)	
spen		Panama (54.8)	(Average Gini coefficient 56.4)	Central African Republic (55)	
		South Africa (56.5)		Colombia (55.3)	
Middle-class		Uganda (45.7)		Costa Rica (49.2)	
Aidd		Yemen (37.7)		Dominican Republic (51.9)	
~		Zambia (50.8)		El Salvador (48.4)	
	ınt	(Average Gini coefficient 50.2)		Guatemala (49.4)	
	Affluent			Haiti (50.9)	
	A			Honduras (55.3)	
				Macedonia (39.4)	
				Mexico (51)	
				Rwanda (55.4)	
				Swaziland (50.4)	
				Turkey (45)	
- 1	,			(Average Gini coefficient 49.4	
Source: Authors' calculations; data from Kaufman, Kharas and Penciakova (2012) and World Income					
Inequality Database					

The resulting matrix is shown in Box 3. It illustrates the different "types" of middle classes in different countries and allows for distinguishing between nine categories: for example, *small and poor middle classes* (in the upper left corner); *small and affluent middle classes* (in the left corner at the bottom); *large middle classes with a low spending capacity* (in the right corner at the top); *average-sized middle classes with a high spending capacity* (in the middle at the bottom); etc.

This typology represents a tool for comparing the middle classes of countries across economic development levels. For instance, both Sierra Leone (low-income country) and Algeria (upper-middle-income country) have a relatively weak middle class, in the sense that it is small and has a low spending capacity, given these countries' GDP per capita levels. At the other end of the typology, the Dominican Republic, Turkey and Rwanda are examples of countries with a relatively strong, that is, large and affluent, middle class.

Interestingly, many of the BRICS countries, namely China, India and South Africa, are found in the left column of the matrix. They have thus smaller middle classes than would be predicted by looking at their GDP per capita. Brazil has an average-sized middle class. While China has a poorer middle class than is predicted by its GDP per capita, the spending capacity of India's middle class falls into the average category, whereas Brazil and South Africa have middle classes that are more affluent than predicted by per capita income levels.

The relative size and consumption capacity of a middle class says much, of course, about how income is distributed in a country, since it relates by definition to the other income groups. Where information was available, the country's Gini coefficient – an indicator for inequality – is indicated in parentheses. The Gini coefficient has a value of 0 in the case of perfect equality (each individual in a society has the same income) and a value of 100 in the case of perfect inequality (one individual has all the income). As the matrix above illustrates, not surprisingly, the higher the middle class's income is relative to the rest of the population, the higher – on average – the inequality is in the country. Thus, debates about inequality and middle-class growth in developing and emerging economies are closely interconnected and should consider country-specific characteristics of the middle class in question.

What is the purpose of the middle-class typology set out above? Often, the middle class is considered by academics and policy-makers alike to hold a particular role when it comes to, among other things, economic growth, democracy and civic attitudes. For example, Kenny (2011, 1–2) summarises the current perception of the middle class:

[i]t is the middle class that stands for family, country, and hard work. [...] Those in the middle have the patience to invest in their education and save for rainy days. They have the entrepreneurial spirit to build new companies and industries, and they demand a quality of services and goods that spurs government reform.

Yet, we lack analytical tools for more detailed research that distinguishes between different types of middle classes and reflects on the implications these differences might have on the effects of the rise of middle classes around the world, their roles as potential

-

¹³ The source of the data for the Gini coefficient is the United Nation University World Institute for Development Economics Research report "World Income Inequality Database" (UNU-WIDER 1994).

drivers and problem-solvers regarding global development challenges and the relevant implications for policy debates.

Because there is currently a lot of debate on the implications of the rise of middle classes around the world and in light of the attention that the emerging middle classes are currently receiving from policy-makers and academics alike, we argue that a much more detailed understanding of middle-class idiosyncrasies across developing countries is warranted.

5 Middle class heterogeneousness, economic growth, civic values and environmental challenges – State of the debate and future avenues for research

In what follows, we propose that the typology presented in the last section should be the basis for more in-depth research and policy analysis in the context of debates about the role of the rise of the emerging middle classes around the world. Key debates in that context focus on economic growth, democracy as well as civic values and environmental challenges. Firstly, with regards to sustained economic growth, the role of the middle class has been a long-standing topic for debate. Secondly, the middle class – with its outlook on democracy, its civic values and other types of attitudes – is often regarded as a driver of social progress. Thirdly, the middle class is both a strong contributor to environmental degradation and at the same time a key player for solving environmental challenges and for the transformation towards more sustainable societies.

In light of the ongoing debates on the impacts of the emerging middle classes across the globe, in the following, we discuss the state of the debate on their role in (Section 5.1) economic growth, (Section 5.2) democracy and civic values as well as (Section 5.3) environmental awareness and responsible consumption, and we indicate the need for more fine-grained research on these issues.

5.1 The middle class and inclusive growth

The idea of the middle class being a foundation and prerequisite for sustained economic growth and development has been a subject in the social sciences for a long time. According to the work of economic historians such as, *inter alia*, Adelman and Morris (1967) or Landes (1998), the key driver of economic development in 19th-century continental Europe and the United Kingdom was a relatively large middle class in these countries, which set the institutional and economic foundations for the industrial revolution.

According to the "middle-class growth" conjecture, countries with large gaps between income groups (or ethnicities), i.e. strong social cleavages, display a higher degree of political economy polarisation and more potential for social conflict (Alesina / Rodrik 1994). Compromise-finding in economic policy-making then becomes costly and instable, and economic governance is characterised by redistribution and short-term and/or targeted growth objectives. As a result, public investment in long-term growth strategies (e.g. in

the form of human capital or infrastructure investments), which benefit the majority of society, remains suboptimal. In contrast, countries with large middle classes experience political economy dynamics that are characterised by fractionalisation less often. Their governments can more easily pursue coherent mid- or long-term economic policies, including the provision of public goods. "Middle-class economic governance" is thus conducive to economic prosperity and development – also for other strata of the society.

Often times the middle class is understood to be a class of entrepreneurs. Thus, middle-class entrepreneurship could be yet another driver of growth. However, Banerjee and Duflo (2008) use household surveys from 13 developing countries to study, among other things, middle-class entrepreneurship, and they cannot unequivocally confirm this hypothesis. In contrast to the "entrepreneurial middle class" hypothesis, having a stable, salaried job appears to be a key characteristic of the middle class; the authors argue that "having a regular, well paying salaried job, may thus be the most important difference between the poor and the middle class."

There is considerable empirical evidence for the middle-class growth argument. For instance, Partridge (2005) found that a "more vibrant middle class [...] increased long-run economic growth." Easterly (2001) also found that a strong middle class generates higher levels of growth. He has coined a term to describe a situation that is characterised by the absence of strong social cleavages between income groups or ethnicities as a "middle-class consensus" and tested its impact on economic development and progress. He finds strong and robust evidence – controlling for reverse causality – for a positive link between a country's share of middle class and:

- per capita income
- growth
- human capital accumulation (secondary and tertiary enrolment)
- health (life expectancy, immunisation rates, infant mortality and health)
- infrastructure (roads, sanitation, telephone communication)
- pro-growth policies instead of redistributive policies (financial depth, lower inflation, lower likelihood of overvalued exchange rates)
- urbanisation
- democracy and political stability

This is of relevance also for the poor, since they can strongly benefit from middle-class-induced growth. In this regard, a paradigm change has recently taken place. International donor agencies have focussed since the 1990s on "pro-poor growth". The latter is defined as economic growth that benefits the poorest (usually defined as people living on less than US\$ 1 or US\$ 2 per day) more than – or at least as much as – the rest of the society (e.g. World Bank 1990). Policies to foster pro-poor growth include, for example, conditional cash transfers to the poorest or a focus on primary as opposed to higher education. Yet, pro-poor policies can entail trade-offs regarding the promotion of long-term growth.

Against this background, some researchers and politicians focus on the more recent and broader concept of "shared" or "inclusive growth". Birdsall (2010) suggests that inclusive

growth should be defined as an increase in the share of the middle class in a country's population and income, and thereby go beyond an exclusive focus on the poor. Two main lines of reasoning corroborate the "inclusive growth" argument: first, growth benefiting the middle class exhibits a higher probability of being sustained because this type of growth reduces the problems of rent-seeking that is common in the case of strongly concentrated growth; second, racial and ethnic inequalities are more manageable when a large share of the population is benefiting from growth (Birdsall 2010). Birdsall thus suggests that the middle class is the backbone of democracy (see also below), fostering social and political stability by improving social cohesion and reducing tensions between the poor and the rich; according to her, the expansion of the middle class is both an input to and an outcome of growth.

While debates on the quality of growth are ongoing and often consider the potential role of the middle class, the latter is often treated as a black box. Existing studies do not take adequate account of the heterogeneousness of the world's middle classes outlined above. More research and policy analysis is hence required to explore the link between middle-class characteristics on the one hand and growth and development on the other. Since a strong middle class tends to be conducive to economic development, this seems to suggest that policy-makers should keep an eye on supporting the middle class. But does the middle-class consensus hold similarly for a small and affluent middle class as well as for a larger one with lower purchasing power? And to which degree do patterns of policy-making — for example with regards to the provision of infrastructure or economic decision-making — vary when presented with different features of a country's middle class? Are specific middle-class characteristics more conducive to pro-poor growth than others? These are questions both policy-makers and researchers should address in order to better understand the role of different types of middle classes for economic development.

Box 4: The case of South Korea vs. Brazil

The catch-up processes of developing countries during the 20th century can also teach lessons about economic governance in the 21st century. For instance, Kharas and Geertz (2010) illustrate the different growth paths of Brazil and South Korea. Both countries grew at a similar pace during the 1960s and 1970s, with average growth of 5.6 per cent (Brazil) and 6.5 per cent (South Korea). Both countries became middle-income countries during the 1980s (Brazil: 1980; South Korea: 1986) with comparable levels of per capita income (Brazil: US\$ 7,600 PPP, South Korea: US\$ 7,700 PPP). Yet, the subsequent growth structure in both countries was fundamentally different. Korea was characterised as containing a middle-class consensus and experienced middle-class growth. In the 1980s more than half of the country's population belonged to the middle class and the Korean economy was able to capitalise on its high domestic demand. In addition, it could build upon domestic knowledge-capital, necessary for becoming integrated into and climbing up value chains and creating comparative advantages in services and high-quality technologies. As a consequence, South Korea also experienced very high growth rates for the next two decades (5.5 per cent on average). Today, 94 per cent of the population is middle-class and the country ranks amongst the world's most advanced economies. Brazil, as Kharas and Geertz (2010) show, could not manage this transformation to an innovation-based economy – its middle class was too small. Characterised by a high degree of inequality, the country had a small middle class in the early 1980s, which represented only 28 per cent of the population. Domestic demand remained low in the following decades, the skills necessary for product upgrading were lacking and the economy continued to rely on commodity exports. As a consequence, annual growth rates after the 1980s were much lower in Brazil (0.7 on average) than in Korea; today's GDP per capita is less than half that of Korea's (South Korea: US\$ 30,000 PPP; Brazil: US\$ 11,700 PPP); the country's middle class grew only at the margins and still represents less than half of the population (45 per cent); and inequality is high.

5.2 The middle class, democracy and civic values and attitudes

Is the middle class a driver of social progress? Democratic and progressive values and attitudes, for instance regarding individual liberties or social and economic issues, are often suggested to be highly esteemed by members of the middle class. Recent empirical work examines the values of middle-class members from around the world – but again it tends to treat the middle class as a black box without taking its heterogeneousness sufficiently into consideration.

Regarding support for democracy, several studies suggest that middle classes strongly value democracy. For instance, a recent study by the OECD (2011), which uses data based on self-perception from the Latinobarómetro survey from 2008, finds that Latin Americans who perceive themselves as being middle-class are the strongest supporters of democracy. A study conducted by the Pew Research Center (2009) also finds support for the thesis that members of the middle class regard democratic values, among others, as being particularly important. According to the study, compared to the poor, members of the middle class – defined as persons having an annual income greater than US\$ 4,268 in PPP terms (circa US\$ 12 a day) – view democratic institutions and individual liberties such as honest elections and free speech as being more important.

What about the links between the middle class and values beyond approval of democracy? Existing empirical analyses suggest that values do seem to shift with rising income. But they do not offer unambiguous support for the thesis that the middle class holds particular values that are more liberal or more progressive. The study of the Pew Research Center (2009), for instance, supports the view that values change with income by providing data suggesting that the members of the middle class regard religion as being less important, exhibit more liberal social values and have a higher degree of life satisfaction than the poor. A recent study by Amoranto, Chun and Deolalikar (2010), who use information on self-perceived class status and data from the World Values Surveys, finds that individuals that view themselves as belonging to the middle class hold significantly more progressive values than individuals from the lower class, but less liberal values than individuals from the higher class across a wide array of issues. For example, members of the middle class support market competition more strongly than the poor but slightly less than the upper

Of course, a caveat here and in other studies based upon self-perception is that – related to the above discussion on self-perceived status – causalities can often not be identified clearly: Do middle-class status and specific attitudes develop together? Or do people identify themselves as being middle-class because of their values and attitudes, respective of their support for democracy in this case? Thus, where available, studies based on real incomes instead may be more conclusive.

Often the differences are substantial. In half of the responses, there is on average a difference of 5 percentage points or more between the answers of the middle class and the poor (Economist 2009). For example, 74 per cent of middle-class respondents in Venezuela said that elections are very important, compared to 66 per cent among the poor. 63 per cent of the survey participants in India judged freedom of speech as being very important, compared to 52 per cent of those with lower incomes. And only 50 per cent of poor survey participants in South Africa said that an impartial judicial system is very important, compared to 68 per cent of middle-class respondents. Disparities between the answers of the two income groups were particularly high in Chile, Russia, Bulgaria and South Africa. Fewer differences have been observed in some of the poorest countries of the sample: Egypt, Brazil, India and Ukraine (Pew Research Center 2009, 7).

Box 5: Democracy, democratisation and the middle class

Insofar as members of the middle class tend to value democracy strongly, what does this imply for democracy and democratisation? The literature on the relation between the middle class and democracy and democratisation encompasses two major approaches. The first approach, which can be referred to as "unilinear" (Hattori / Funatsu 2003), builds on modernisation theory and contends that socio-economic development gives rise to a middle class that aspires to democracy (e.g. Lipset 1959; Dahl 1971; Glassman 1997). This approach asserts that socio-economic development generates not only higher levels of income but also increases individuals' education levels, socio-economic mobility and valuation of freedom, which in turn supports democratic institutions or the democratisation of authoritarian societies. The approach contends that it is the middle class in particular that has the above-mentioned characteristics, and that it usually acts as a strong promoter and spearhead of democratisation and democracy. Proponents of the unilinear approach assert that members of the middle class tend to support democracy because, in comparison to the lower classes, they have better education and more leisure time to understand and participate in politics (Lane 1959; Mills 1953). Compared to members of the upper class, on the other hand, individuals in the middle class have fewer economic resources and fewer ties with political elites in the government, and therefore tend to promote a democratic system, in which their rights and private property is best safeguarded from potential infringement by the government and the upper class (Glassman 1997).

The second approach, which may be considered as the "contingent" approach, questions the unilinear causality between socio-economic development and democracy and the clear-cut favourable orientation of the middle class towards democracy. In contrast, the contingent approach contends that the stance of the middle class towards democracy depends on certain factors that vary across countries, including the middle class's dependence on the state, its perception of socio-economic well-being, its political alliance with other classes, its cohesiveness and its fear of political instability. For example, proponents of the contingent approach assert that the middle class is less likely to promote democracy and democratisation when it is dependent upon – or closely associated with – the authoritarian state, socially and materially satisfied, fragmented as a class and/or concerned about political instability (e.g. Englehart 2003; Rueschemeyer / Stephens / Stephens 1992).

class. ¹⁶ They also have a stronger perception of upward mobility and exhibit stronger values regarding gender equality or trust than the poor but appear to be less market-oriented and socially progressive than the rich. ¹⁷

Another recent study assesses the degree to which income-based measures – rather than the self-reported status of the middle class – correlate with values (Lopez-Calva / Rigolini / Torche 2012). Their data suggest that values seem to change with income but that "middle class values lie between the ones of poorer and richer classes." Thus, the study does not support the hypothesis of so-called middle-class particularism. Moreover, and importantly, the respective middle classes of the countries surveyed display very different attitudes. Hence, it may be misleading to speak of "middle-class values". For example,

_

Another recent study supports the hypothesis that the middle class value economic policies that entail free competition. The study assesses the values of the middle class in Peru, defined by a daily per capita income between US\$ 10 and \$100, by analysing data from the World Values Survey. The analysis indicates that the middle class in Peru shows particularly strong support for free markets and free competition. See Cárdenas, Kharas and Henao (2011).

¹⁷ Yet, the results of the authors suggest one exception to this linear connection between income and attitudes: the middle class appears to be more politically active than both the upper and the lower classes.

¹⁸ The study defines the middle class as having a spending capacity of US\$ 10–100 and uses data from the 2007 Eco-social values survey for Latin America.

almost three-fourths (72 per cent) of the middle-class respondents in Argentina said that honest elections are important, compared to only half (51 per cent) of the respondents in Russia. For 70 per cent of middle-class participants in Mexico, homosexuality is a way of life that should be accepted by society, whereas only 16 per cent of respondents in Malaysia believe this (Lopez-Calva / Rigolini / Torche 2012).

Hence, it appears that there is no single emerging middle class when it comes to attitudes and values but rather several – and very different – emerging middle classes that are anchored in their socio-cultural, political and economic contexts when it comes to values and attitudes (Guarín et al. 2013). Moreover, it is not only middle-class growth that contributes to changing values and attitudes, but a variety of broader and more general cultural trends and dynamics (Kenny 2011). For instance, according to the World Value Survey, in 1990, 86 per cent of Indians felt that homosexuality was unjustifiable – the number dropped to 48 per cent by 2006. The respective numbers for Argentina are 58 and 26 per cent. The disapproval rates thus fell by half even though both countries exhibit very different middle-class development trends. This underlines the important insight that values are changing dynamically – both among the middle class and beyond it. Overall, there is no clear-cut support for the thesis that the members of the global middle classes hold particular "middle-class" values, for instance regarding individual liberties or social and economic issues.

At the same time, in much of the existing research on the values and attitudes of the middle class, it is usually treated as a homogeneous group without taking note of the different types of middle classes, for instance as outlined in the typology set out above. There is hence a need for more research and policy analysis on the relationship between middle-class characteristics, values and attitudes, and the potential role of the middle class as a driver of reforms and social progress. Against this background, the above-mentioned typology might help to offer new perspectives on this issue by raising more fine-grained questions. For instance, it might help to raise questions such as: Do we find sets of "middle-class" values across countries once we take account of the fact that there are larger and smaller – as well as more- or less-affluent – middle classes? Research that builds on the typology introduced in this paper could help to address these types of questions.

5.3 The middle class, environmental challenges and responsible consumption

Which role does the middle class play in the context of environmental challenges? Does the middle class exhibit stronger values regarding the environment and more environmental awareness? These are key questions in light of the assertion that the growth of middle classes around the world is strongly contributing to environmental degradation and putting a strain on planetary boundaries. At the same time, members of the middle class can be a potential driving force for the transformation towards more sustainable societies. The role of the emerging middle classes around the world is thus key for addressing environmental issues, both at the local level, for instance with regards to air pollution, and at the global level, for example regarding climate change and ocean acidification (WBGU 2014).

So far, there is little research on the links between middle classes around the world and environmental awareness. One study suggests that middle-class members in several countries, for example, Ukraine, India and Argentina, are more prone to regarding climate change as a very serious concern and to view pollution as a very big problem for their country than less affluent respondents (Pew Research Center 2009).

In light of current environmental challenges, responsible consumer behaviour, that is, behaviour that takes environmental or social issues into account while making purchasing decisions (Peattie 1992), plays an essential role. Will the rise of the new middle classes lead to more or less "green" or "responsible" consumption? Although there are a number of empirical studies that examine responsible consumer behaviour in different countries, there are hardly any analyses that focus specifically on the "green" or "responsible" purchasing decisions of the middle class.

A recent review of existing research on such consumer behaviour in emerging economies displays a mixed picture (Mittelman 2013). According to several studies, consumers in India, Egypt, Malaysia, Pakistan and Taiwan have positive attitudes towards the environment and are modifying their behaviour accordingly (Ahmad / Shah / Ahmad 2010; Chen 2009; Ismail / Ali 2008; Sehrawet / Kundu 2007; Tantawi et al. 2009). At the same time, a number of other studies find a significant difference between "green" attitudes and actual behaviour, for example because of the higher cost of green products (e.g. Ali / Khan / Ahmed 2011; Bhate 2002), their quality (e.g. Ali / Khan / Ahmed 2011) and their availability (e.g. Bhate 2002; Chan 2001). Another recent study finds that although national income does not seem to increase the inhabitants' willingness to pay a premium for environmental products, there does appear to be some positive correlation between income and the actual purchase of environmentally-friendly goods (Guarín / Knorringa 2013).

Overall, however, there seems to be a lack of empirical research with regard to environmental values and their implications for purchasing decisions and also policy preferences. It is contested whether, and to what extent, the consumption behaviour of middle classes around the world is becoming more "responsible" or "green", thereby partially reducing the environmental challenges that future consumption patterns give rise to. Our typology may contribute to future research on this question by emphasising that it might not be possible to give the same answer to this question for all members of the middle classes around the world because we have to take different types of middle classes into account. This gives rise to research questions that are highly relevant for learning more about the role of emerging middle classes for the transformation towards sustainability. To which degree do consumption patterns and patterns of policy-making – with regard to the environment – vary when taking different features of a country's middle class into account? Are specific middle-class characteristics more supportive of environmentally sensitive consumption patterns and policies than others? Both policymakers and researchers should tackle these questions in order to learn more about the role of different types of middle classes as drivers towards a sustainability-oriented transformation; the typology introduced in this paper can be an analytical tool to address these questions.

6 Conclusion

The objective of this paper was to map key trends and dynamics of the emerging middle class in developing and emerging economies. The cartography of the world's middle-class populations shows that the spatial distribution of the middle classes has substantially shifted east, driven by particularly strong and continued growth in South Asia and the East Asia and Pacific region, and the new middle class will continue to grow in most places, albeit at different paces.

With regard to consumption capacities, middle classes can be very diverse and will remain so in the future. Of course, a country's economic development level is closely related to the size and spending capacity of its middle class. Yet, as shown in this paper, GDP per capita is far from being a perfect predictor of these middle-class characteristics. In some countries, the middle class is considerably larger or smaller than suggested by its per capita GDP level. Moreover, countries at the same or similar levels of economic development can exhibit very different patterns of middle-class consumption capacity.

The findings of this paper were used to generate a middle-class typology that takes account of the different "types" of middle classes in different countries and allows for differentiating between nine categories, ranging from *small* and *affluent* middle classes to *large* middle classes with a *low* spending capacity. The typology allows for comparing different middle classes across countries and is a useful tool for more fine-grained research and policy analysis. As indicated above, this typology – and the heterogeneousness it illustrates – points to fruitful avenues for future research.

First, there is a need for additional research and policy analysis on the relation between middle-class characteristics, on the one hand, and growth and development on the other. Second, there is a need for more research and policy analysis on the relationship between middle-class characteristics and values and attitudes. Although existing research illustrates that values do seem to shift with rising incomes, it does not offer unambiguous support for the thesis that the members of the middle classes hold particular – and perhaps more progressive or liberal – "middle-class" values, for example regarding individual liberties or social and economic issues. The above-mentioned typology might help to shed new light on this issue. Third, it is not clear to what degree consumption by the global middle classes is becoming more "responsible" or "green". As outlined above, our typology may open up future research paths by underlining that it might not be adequate to offer just one particular answer because it requires taking into account the various types of middle classes around the world.

Overall, the paper cautions against an unambiguous interpretation of the rise of *the* global middle class. The paper illustrates that there is not one single global middle class but rather a variety of middle classes that are emerging, and that the implications of this emergence may be more ambiguous than is often suggested. So far, we know too little about the implications of this boom in middle classes around the world as well as their role in key future issues such as economic development, social progress and global environmental change. More research and policy analysis on these issues is thus warranted

Bibliography

- Adelman, I. / C. T. Morris (1967): Society, politics & economic development : a quantitative approach, Baltimore: Johns Hopkins Press
- Ahmad, H. / I. A. Shah / K. Ahmad (2010): Factors in environmental advertising influencing consumer's purchase intention, in: European Journal of Scientific Research 48 (2), 217–226
- Alesina, A. / D. Rodrik (1994): Distributive politics and economic growth, in: Quarterly Journal of Economics 109 (2), 465–490
- Ali, A. / A. A. Khan / I. Ahmed (2011): Determinants of Pakistani consumers' green purchase behaviour: some insights from a developing country, in: *International Journal of Business and Social Science* 2 (3), 217–227
- Amoranto, G. / N. Chun / A. B. Deolalikar (2010): Who are the middle class and what values do they hold? Evidence from the World Values Survey, Manila: Asian Development Bank
- Aristotle (2014): Politics, in: J. Arkenberg (ed.), Internet ancient history sourcebook; online: http://www.fordham.edu/Halsall/ancient/Aristotle-politics-polis.asp (accessed 20 Oct. 2014)
- Artigas, M. / N. Calicchio (2007): Brazil: fashion conscious, credit ready, in: McKinsey Quarterly (4), 76-79
- Banerjee, A. V. / E. Duflo (2008): What is middle class about the middle classes around the world?, in: Journal of Economic Perspectives 22 (2), 3–28
- Beinhocker, E. / D. Farrell / A. Zainulbhai (2007): Tracking the growth of India's middle class, in: The McKinsey Quarterly (3), 51–61
- Bhate, S. (2002): One world, one environment, one vision: are we close to achieving this? An exploratory study of consumer environmental behaviour across three countries, in: Journal of Consumer Behaviour 2 (2), 169–184
- *Birdsall, N.* (2010): The (indispensable) middle class in developing countries; or, The rich and the rest, not the poor and the rest, in: R. Kanbur / M. Spence (eds.), Equity and growth in a globalizing world, Washington, DC: World Bank, 157–189
- (2014): Who you callin' middle class? A plea to the development community; online: http://www.cgdev.org/blog/who-you-callin%E2%80%99-middle-class-plea-development-community (accessed 17 Oct. 2014)
- -/C. Graham / S. Pettinato (2000): Stuck in the tunnel : is globalisation muddling the middle class?, (Centre on Social and Economic Dynamics Working Paper 14)
- -/N. Lustig / C. J. Meyer (2013): The strugglers: the new poor in Latin America? (CGD Working Paper 337)
- Calicchio, N. / T. Francis / A. Ramsay (2007): How big retailers can serve Brazil's mass-market shoppers, in: McKinsey Quarterly (2), 51–57
- Cárdenas, M. / H. Kharas / C. Henao (2011): Latin America's global middle class, Washington, DC: Brookings Institution
- Chan, R. (2001): Determinants of Chinese consumers' green purchase behaviour, in: *Psychology & Marketing* 18 (4), 389–413
- Chen, M. F. (2009): Attitude toward organic foods among Taiwanese as related to health consciousness, environmental attitudes, and the mediating effects of a healthy lifestyle, in: *British Food Journal* 111 (2), 165–178
- *Chun, N.* (2010): Middle class size in the past, present, and future : a description of trends in Asia, Manila: Asian Development Bank
- Court, D. / L. Narasimhan (2014): Capturing the world's emerging middle class, in: McKinsey Quarterly; online:
 - http://www.mckinsey.com/insights/consumer_and_retail/capturing_the_worlds_emerging_middle_class (accessed 17 Oct. 2014)
- Dahl, R. A. (1971): Polyarchy: participation and opposition, New Haven, CT: Yale University Press

- Donnan, S. / B. Bland / J. Burn-Murdoch (2014): A slippery ladder: 2.8bn people on the brink, in: The Financial Times, 13 April; online: http://www.ft.com/cms/s/2/e8f40868-c093-11e3-a74d-00144feabdc0.html#axzz2yyIwyyik (accessed 17 Oct. 2014)
- Easterly, W. (2001): The middle class consensus and economic development, in: Journal of Economic Growth 6 (4), 317–335
- Englehart, N. A. (2003): Democracy and the Thai middle class, in: Asian Survey 43 (2), 253-279
- Fletcher, P. (2013): Africa's emerging middle class drives growth and democracy, Reuters; online: http://www.reuters.com/article/2013/05/10/us-africa-investment-idUSBRE9490DV20130510 (accessed 17 Oct. 2014)
- Glassman, R. M. (1997): The new middle class and democracy in global perspective, London: MacMillan
- Graham, C. / S. Chattopadhyay (2014): The decade of public protest and frustration with lack of social mobility; online: http://www.brookings.edu/blogs/social-mobility-memos/posts/2014/03/07-frustrated-achievers-mobility-attitudes-public-protest-graham (accessed 21 Oct. 2014)
- Guarin, A. et al. (2013): Wirtschaftliche, politische und soziale Auswirkungen des Aufstiegs neuer Mittelschichten, in: A. Nölke / C. May / S. Claar (eds.), Die großen Schwellenländer: Ursachen und Folgen ihres Aufstiegs in der Weltwirtschaft, Wiesbaden: Springer, 21–41
- Guarin, A. / P. Knorringa (2013): New middle-class consumers in rising powers: responsible consumption and private standards, Oxford Development Studies
- Hansakul, S. (2010): Understanding China's consumers, Frankfurt: Deutsche Bank Research
- Hattori, T. / T. Funatsu (2003): The emergence of the Asian middle classes and their characteristics, in: Developing Economies 41 (2), 140–160
- *IMF (International Monetary Fund)* (2012): Sub-Saharan Africa. Maintaining growth in an uncertain world; online: http://www.imf.org/external/pubs/ft/reo/2012/afr/eng/sreo1012.pdf (accessed 17 Oct. 2014)
- Ismail, H. B. / K. P. Ali (2008): Consumer perceptions on the consumerism issues and its influence on their purchasing behaviour: a view from Malaysian food industry, in: Journal of Legal, Ethical & Regulatory Issues 11 (1), 43–64
- Kaufman, D. / H. Kharas / V. Penciakova (2012): Development, aid and governance indicators (DAGI); online: http://www.brookings.edu/research/interactives/development-aid-governance-indicators (accessed 17 Oct. 2014)
- *Kenny, C.* (2011): Where is the virtue in the middle class?; online: http://www.cgdev.org/content/publications/detail/1425646 (accessed 17 Oct. 2014)
- Kharas, H. (2010): The emerging middle class in developing countries, OECD Development Centre, (Working Paper 285)
- / G. Gertz (2010): The new global middle class: a cross-over from West to East, in: C. Li (ed.), China's emerging middle class: beyond economic transformation, Washington, DC: Brookings Institution
- Landes, D. S. (1998): The wealth and poverty of nations: why some are so rich and some so poor, London: Little, Brown and Co.
- Lane, R. E. (1959): Political life: why people get involved in politics, Glencoe, IL: Free Press
- *Lipset, S. M.* (1959): Some social requisites of democracy : economic development and political legitimacy, in: *American Political Science Review* (53), 69–105
- Lopez-Calva, L. F. / E. Ortiz-Juarez (2011): A vulnerability approach to the definition of the middle class, Washington, DC: World Bank (Policy Research Working Paper 5902)
- -/J. Rigolini / F. Torche (2012): Is there such a thing as middle-class values? Class differences, values and political orientations in Latin America, Washington, DC: World Bank (Policy Research Working Paper 5874)
- Mills, C. W. (1953): White collar: the American middle classes, Oxford: Oxford University Press
- Mittelman, R. (2013): Green consumer behaviour in emerging markets: a review of research; online: https://www.academia.edu/2136336/Green_Consumer_Behaviour_in_Emerging_Markets_A_Review_of_Research (accessed 17 Oct. 2014)
- OECD (Organisation for Economic Co-operation and Development) (2011): Latin American outlook 2011. How middle-class is Latin America?, Paris: OECD

- Partridge, M. D. (2005): Does income distribution affect U.S. state economic growth?, in: Journal of Regional Science 45 (2), 363–394
- Peattie, K. (1992): Green marketing, London: Pitman
- Pew Research Center (2009): The global middle class. Views on democracy, religion, values, and life satisfaction in emerging nations, Washington, DC: Pew Research Center
- Quah, D. (2011): The global economy's shifting centre of gravity, in: Global Policy 2 (1), 3–9
- Ravallion, M. (2009): The developing world's bulging (but vulnerable) "middle class", Washington, DC: World Bank (Policy Research Working Paper 4816)
- Rueschemeyer, D. / E. H. Stephens / J. D. Stephens (1992): Capitalist development and democracy, Chicago: University of Chicago Press
- Sehrawet, M. / S. Kundu (2007): Buying behaviour of rural and urban consumers in India: the impact of packaging, in: International Journal of Consumer Studies 31 (6), 630–638
- *Tantawi*, *P*. et al. (2009): Green consciousness of consumers in a developing country: a study of Egyptian consumers, in: *Contemporary Management Research* 5 (1), 29–50
- The Economist (2009): Bourgeoning bourgeoisie. A special report on the new middle classes in emerging markets; online: http://www.economist.com/sites/default/files/special-reports-pdfs/13092764.pdf (accessed 17 Oct. 2014)
- (2010): First break all the rules; online: http://www.economist.com/node/15879359 (accessed 17 Oct. 2014)
- (2011): The sun shines bright. Africa's hopeful economies; online: http://www.economist.com/node/21541008 (accessed 17 Oct. 2014)
- UNU-WIDER (United Nation University World Institute for Development Economics Research) (1994): World Income Inequality Database; online: http://www.wider.unu.edu/research/Database/en_GB/wiid/ (accessed 17 Oct. 2014)
- WBGU (Wissenschaftlicher Beirat der Bundesregierung Globale Umweltveränderungen) (2014): Human progress within planetary guardrails : a contribution to the SDG debate, Berlin: WBGU
- Wilson, D. / A. Stupnytska (2007): The N-11: more than an acronym, New York: Goldman Sachs Economic Research Group (Global Economics Paper 153); online: http://www.chicagobooth.edu/~/media/E60BDCEB6C5245E59B7ADA7C6B1B6F2B.pdf (accessed 17 Oct. 2014)
- World Bank (1990): World Development Report 1990 : poverty, Washington, DC: World Bank (2014): World Development Indicators; online: http://data.worldbank.org/products/wdi

Publications of the German Development Institute/ Deutsches Institut für Entwicklungspolitik (DIE)

Studies

- 86 *Hampel-Milagrosa, Aimée:* Micro and small enterprise upgrading in the Philippines: the role of the entrepreneur, enterprise, networks and business environment, 169 pp., Bonn 2014, ISBN 978-3-88985-640-1
- 85 Zelli, Fariborz / Daniela Erler / Sina Frank / Jonas Hein / Hannes Hotz / Anna-Maria Santa Cruz Melgarejo: Reducing emissions from deforestation and forest degradation (REDD) in Peru: a challenge to social inclusion and multi-level governance, 178 pp., Bonn 2014, ISBN 978-3-88985-651-7
- Fues, Thomas / Jiang Ye (eds.): The United Nations Post-2015 Agenda for Global Development: perspectives from China and Europe, 373 pp., Bonn 2014, ISBN 978-3-88985-649-4
- 83 *Horstmann, Britta / Günther Schulz-Heiss:* Providing international adaptation finance for vulnerable communities: a study on potentials and limits of social investment funds, 106 pp., Bonn 2014, ISBN 978-3-88985-647-0

[Price: EUR 10.00; publications may be ordered from the DIE or through bookshops.]

Discussion Papers

- 34/2014 *Chan, Sander / Pieter Pauw:* A global framework for climate action, Orchestrating non-state and subnational initiatives for more effective global climate governance, 41 pp., Bonn 2014, ISBN 978-3-88985-660-9
- 33/2014 *Berensmann, Kathrin / Peter Wolff:* The role of international financial institutions in macroeconomic crises: improving the architecture of the World Bank and the IMF for managing shocks in developing countries, 49 pp., Bonn 2014, ISBN 978-3-88985-659-3
- 32/2014 Dai, Yixin / Yuan Zhou / Di Xia / Mengyu Ding / Lan Xue: The innovation path of the Chinese wind power industry, 38 pp., Bonn 2014 ISBN 978-3-88985-658-6
- 31/2014 *Holzapfel, Sarah:* Boosting or hindering aid effectiveness? An assessment of systems for measuring agency results, 41 pp., Bonn 2014, ISBN 978-3-88985-657-9
- 30/2014 Brandt, Hartmut / Michael Brüntrup: Erfahrungen und Perspektiven nachhaltiger Intensivierung der Landwirtschaft in subsaharischen Ländern, 80 pp., Bonn 2014, ISBN 978-3-88985-656-2
- 29/2014 *Altenburg, Tilman:* From combustion engines to electric vehicles: a study of technological path creation and disruption in Germany, 44 pp., Bonn 2014, ISBN 978-3-88985-654-8

[Price: EUR 6.00; publications may be ordered from the DIE or through bookshops.]

For a complete list of DIE publications: www.die-gdi.de