
Comment

On the ‘Arab Inequality Puzzle’: A Comment

Vladimir Hlasny  and Paolo Verme

ABSTRACT

This Comment responds to the critical review by Gilbert Achcar published in this journal (May 2020) which concludes that the protagonists of the ‘Arab Inequality Puzzle’ debate exhibit a systematic neoliberal bias. We counter that Achcar’s conclusion is based on a misleading and selective interpretation of evidence, false grouping of scholars and an inadequate understanding of the measurement of income inequality. Achcar’s article politicizes and dismisses years of thorough research which is unfair to the numerous scholars who made a genuine effort to understand the true level of income inequality and its evolution in Egypt. This Comment argues that it is essential to keep the debate on a technical level and leave speculations and conspiracy theories aside.

INTRODUCTION

Gilbert Achcar’s critical review in this journal¹ concludes that the research of the protagonists of the ‘Arab Inequality Puzzle’ debate exhibits a systematic neoliberal bias and a wilful blindness to the fact that ‘their recipes were responsible ... for the formidable socio-political explosion of the Arab Spring and the protracted destabilization of the region’ (p. 768). We argue that Achcar’s conclusion is erroneous and based on a misleading interpretation of evidence, selective review of existing studies, false grouping of scholars and an inadequate understanding of the measurement of income inequality. The review appears to be an attempt to politicize what has otherwise been a healthy technical debate on income inequality in Egypt. In doing so, it dismisses years of research on income inequality in Egypt with

This Comment accompanies an article by Achcar, *Development and Change*, 51(3): 746–70, <https://doi.org/10.1111/dech.12585>, and rejoinder by Achcar, *Development and Change* 2020, <https://doi.org/10.1111/dech.12625>.

1. ‘On the “Arab Inequality Puzzle”: The Case of Egypt’, *Development and Change* 51(3): 746–70 (May 2020).

one stroke. This is unfair to the numerous scholars, of Egyptian and non-Egyptian origin, who made a genuine effort to understand the true level of income inequality and its evolution in Egypt.

One may agree with the view that the Arab region is characterized by a high degree of social injustice, inequities and inequalities across several dimensions and that the Arab Spring brought existing social discontent to the fore. There is also a consensus that this sense of social injustice is at odds with the level of income inequality that is portrayed in national surveys measuring income or consumption. The study by Verme et al. (2014) was one of the first to highlight this paradox, questioning the validity of findings on income inequality, and the study by Hlasny and Verme (2013, 2018) was the first to undertake a thorough investigation of the Egyptian data to uncover the nature of the measurement problem. Indeed, the initial hypothesis, and the motivation for these studies, was that the official data of the Central Agency for Public Mobilization and Statistics (CAPMAS) were severely underestimating the degree of income inequality. Both studies, however, concluded that the CAPMAS data were of good quality by international standards, and that income inequality was underestimated by only approximately 1.5 percentage points.

These findings cannot be taken as evidence that the authors provide a false international finance institutions (IFIs) narrative on income inequality. These views are not World Bank views. Only two of the seven authors involved in the two studies worked for the World Bank at the time of writing, and among scholars who worked with the national data, there is unanimous consensus that income inequality in 2000–10 was low and possibly declining. This consensus is also strongly endorsed by Egyptian scholars who worked on income inequality (Al-Shawarby, 2014). This is not an IFIs view but that of all scholars who engage closely with national income or consumption data.

Achcar criticizes the use of national survey data on income or consumption as biased and inappropriate to measure income inequality. These data are in fact the gold standard for measuring income inequality and the main instrument used by national statistics offices and inequality scholars to measure income inequality anywhere. The official national and international measures of income inequality and of inequality trends are all based on these surveys, and Egypt is no exception in this regard. These surveys have several issues, particularly among top incomes, which have been the object of close scrutiny. However, no serious statistical agency or scholar would measure income inequality with real estate data, national accounts, tax data, or other dimensions of social inequality. These data may be used to complement, validate or test existing information obtained from survey data, but they suffer from multiple issues themselves and therefore cannot be used as a primary measure of income inequality. The studies by Alvaredo and Piketty (2014) and van der Weide et al. (2016a, 2018) are welcome attempts to complement survey data, but they are by no means eligible substitutes.

THE AUTHORS PROVIDE A FALSE NARRATIVE ON INEQUALITY

According to Achcar, Hlasny and Verme (2013) provide a false narrative of the story of income inequality in Egypt through the use of statistical artefacts to adhere to the alleged IFIs' view on the matter. He claims that Hlasny and Verme (2013) 'devote the bulk of their paper to the purpose of establishing the credibility of the low inequality figures ... the authors take a statistical plausibility for an economic one, thus asserting the credibility of Egypt's particularly low Gini' (p. 755).

The finding that income inequality in Egypt was low relative to other countries, and that it declined during the decade that preceded the Arab Spring, is neither new nor much disputed among scholars who work with national income or consumption data, the primary instruments to measure income inequality in any country. Al-Shawarby (2014) reviewed all the literature on income inequality in Egypt since the 1950s, including the period 2000–10. She reports that 'Kheir-El-Din and El-Laithy (2006) showed a decline in Gini (from 0.45 to 0.35) between 1990/91 and 1995/96, an increase in 1999/00 (to 0.36) and then a decline in 2004/05 (0.32)' (ibid.: 14), and that this is in line with all the other studies conducted during the period. Despite Achcar's comments on El-Laithy² (p. 767), her research on the surveys preceding 2011 consistently found a low level of income inequality by international standards. This low inequality and declining trend are also not unique to Egypt. A similar pattern has been observed for Tunisia and Morocco in North Africa and for other developing regions in the world, including Latin America and large transitional economies (Cornia, 2014; OECD, 2013), and there is evidence that this trend started even earlier, sometime in the 1990s (Ferreira et al., 2016). This is not a new or intentionally distorted narrative but the predominant findings on income inequality in Egypt and other similar countries by those using widely accepted instruments to measure income inequality (i.e. national survey data).

At the heart of Achcar's thesis lies his custom delineation of what constitutes 'official' research of IFIs, and research conducted independently. He criticizes the 'remarkable and still more striking ... discrepancy that may exist between working papers by individual researchers at intergovernmental institutions and these institutions' official output' (p. 764). In Achcar's topology, Verme et al. (2014), Ianchovichina (2018) and Hlasny and Verme (2013) are official IFI publications displaying a neoliberal bias, whereas van der Weide et al. (2016a, 2018), Alvaredo and Piketty (2014) and the UN (ECLAC, 2018; ESCWA, 2018) represent unbiased independent views. In fact, Ianchovichina, Verme and van der Weide are all World Bank staff who have expressed diverging views publicly and consistently in all their

2. Citing the interview by Kassab (2019).

publications. Hlasny is not a World Bank employee (and in fact has been affiliated with ESCWA since 2015) and four of the authors in Verme et al. (2014) are Egyptian and non-World Bank staff.

All protagonists have been involved in a healthy debate on income inequality in Egypt. All authors have acknowledged their diverging views, and a lively debate on the merits of the respective analyses took place on and off public portals, including the World Bank blog ‘Let’s Talk Development’ and *VoxEU*, the policy portal of the Centre for Economic Policy Research (Alvaredo et al., 2018; Verme and Hlasny, 2014, 2016; van der Weide et al., 2016b, 2016c). The Economic Research Forum (ERF) published these studies in its Working Paper series. The topology constructed by Achcar is an artificial construct and the argument that World Bank staff have different private and public views is not borne out by the facts. These are all published studies, none of which claims to represent the World Bank’s or IFIs’ views on inequality in Egypt.

According to Achcar, post-Arab Spring research ‘saw a clear tilt towards a critique of the low and declining inequality thesis, [but] this body of research was not enough for the IFIs to depart from their long-held views on inequality in Egypt’ (p. 764). It is unclear what Achcar is referring to here. Inequality continued to stagnate around the time of the revolution and the low estimates of inequality were not a response to the Arab Spring, but were a continuation of a trend that started in the early 2000s. The understanding of the trend leading up to the Arab Spring has not changed among academics or international governmental bodies. Besides the studies cited by Achcar and those mentioned above we can also refer to studies by Belhaj Hassine (2015) and Ramadan et al. (2018), affiliated with the World Bank and ESCWA, respectively. ElGindi (2017) and Assaad et al. (2018) enrich the discussion by alluding to other dimensions of inequality, but they do not disprove the story of income or consumption inequality falling in the 2000s.

It is also unclear what the rationale of the IFIs would be for supporting the view that income inequality in Egypt prior to the Arab Spring was low. This does not help to explain the Arab Spring, and, in the case of Egypt, low inequality was not an indicator of a healthy economy (as Achcar suggests). On the contrary, low inequality in Egypt was a symptom of widespread poverty, stagnant salaries and low social mobility. Therefore, it is hard to see how IFIs would gain from maintaining such a stance on income inequality in Egypt. Achcar stops short of offering insight into this point.

FINDINGS AT ODDS WITH OTHER STUDIES ON SOCIAL INEQUALITY

Achcar argues that declining income inequality ‘contradicts the popular perception, also expressed in some official reports, of high social inequality’ (p. 747). This is true and the very motivation for the studies undertaken by

Verme and colleagues, and other scholars from 2013 to this day. However, these differences are plausible, and they do not constitute evidence per se that income inequality is mismeasured. The trends in income inequality do not always match trends in other indicators of social standing, such as the level and quality of education, health, wealth or access to opportunities for self-improvement. Indeed, it was Verme (2014) and Verme et al. (2014) who, through the use of household-level data that provided initial explanations for this phenomenon, popularized the notion that people's perceptions of inequality are not aligned with the objective measurement of income inequality.

However, it is erroneous to use the broad concept of social inequality as a substitute for the narrower, more precise and well-established concept of income inequality and argue that income inequality is high because social inequality is high. Confounding these two concepts does not help the discussion. Achcar writes that 'it did not occur to Verme ... that the rise of inequality aversion during the first decade of the 21st century, correlated with a perception of rising inequality, might have been a reason for the decline in inequality reported in household surveys' (p. 757). That is, Verme 'did not consider whether the "evident sharp rise in inequality aversion" ... could have increased the top strata's propensity to either understate their income expenditure or dodge the survey altogether' (ibid.). In fact, the possibility of underreporting was the primary motivation for Hlasny and Verme's study, for providing advisory assistance to the CAPMAS, and for undertaking a three-year investigation of the Egyptian data, resulting in several alternative estimations of the top tail. The fact that we did not find major underestimations of the Gini index cannot be taken as a proof that we support an alleged IFIs view. There is no counter-evidence to our study based on national survey data, and there is no IFIs view on this matter either.

Prior to 2011, Achcar writes, there were 'very few studies dedicated' to inequality (p. 747). In fact, Al-Shawarby (2014) reviewed the long-standing literature on inequality in Egypt dating as far back as the 1950s. As Achcar himself acknowledges, it has already been 40 years since Abdel-Fadil (1980) discussed the condensed shape of the upper tail of Egyptian personal income distribution. On the eve of the Arab Spring uprisings, Bibi and Nabli (2010) concluded that Arab states fall within the range of countries with moderate inequality, following a thorough review of the available evidence of inequality in the region. Similarly, a worldwide historic study (Pinkovskiy and Sala-i-Martin, 2009) concluded that over the prior decades the Arab region had seen progress in reducing poverty rates and converging toward the world average welfare level and contributing to the creation of a 'global middle class'. This study by two US academics did not rely on household surveys, but used parametric distributions anchored in national accounts statistics. Achcar does not cite the study by Pinkovskiy and Sala-i-Martin. He cites the study of Bibi and Nabli in support of his argument that literature was

sparse prior to 2011, but neglects to mention their central conclusion that income inequality was modest.

The tests conducted by Verme et al. (2014), Ianchovichina (2018) and Hlasny and Verme (2018) were as official an effort of the World Bank as the study by van der Weide et al. (2018). These were not isolated cases either; Alvaredo and Piketty (2014) and Alvaredo et al. (2017) estimated inequality in the Arab region using a mix of parametric distributions for top and bottom incomes and parameter estimates from Hlasny and Verme (2013), and derived national estimates — in Egypt as well as in other Arab countries — that were marginally higher but still moderate. Their allusion to the high levels of inequality region-wide (that is, cross-country) is a message that drowned out their confirmation that national income inequalities appear moderate. Achcar fails to mention this conclusion and instead uses these same references to argue against findings in Hlasny and Verme (2013).

Across the region at large, Achcar points out data paucity as affecting the measurement of inequality. That is a fair point, particularly historically, but Achcar's critique in this respect is outdated. He cites complaints of the United Nations Development Programme and the Arab Fund for Economic and Social Development (UNDP and AFSD, 2003) about data quality in the early 1990s (p. 752). The point of selective availability, restricted access and poor quality of data in the Arab region historically — often with the notable exception of Egypt — has been highlighted in policy papers, including by the World Bank (Atamanov et al., 2020). However, this data paucity is gradually abating. Since the mid-2000s, a great leap in data coverage, availability and transparency has taken place in the region, with the Egyptian CAPMAS and the ERF at the forefront (Verme, 2013).

THE DATA USED ARE BIASED AND CANNOT MEASURE INEQUALITY

Achcar argues that data used by IFIs 'are either limited to consumption inequality or based, at best, on household surveys' (p. 747). This is true, but it is not a selective choice of IFIs. It is the internationally recognized standard practice for measuring income inequality which is used by any national government or specialist working on income inequality for any institution, or independently. The reported Gini coefficients for any country are based on national survey income or consumption data, and household budget surveys remain the instrument of choice for measuring the distribution of incomes in industrialized and developing countries (Deaton, 1997).

Of course, these instruments, as they are currently designed, are not suited to measure perceptions of income inequality, social injustice or various other dimensions of social inequality. As discussed in Verme et al. (2014), this is the main reason why IFIs largely failed to anticipate people's remonstrations and the destabilization that erupted with the Arab Spring

starting in 2011. IFIs were largely monitoring income inequality — which was relatively stable — whilst other forms of social injustice and inequality, such as inequality of opportunities, fuelled the growing perception of social injustice among the population ex-post, which was clearly visible in the World Values Surveys³ conducted in Egypt in the decade prior to the Arab Spring. The problem is not that household budget surveys are the wrong instrument to measure income inequality but that these instruments are not usually designed to measure social justice or perceptions of income inequality, and are therefore, at times, a poor instrument to measure social injustice and predict societal discontent.

Household budget surveys are also known to underestimate income inequality in rich and poor countries alike, but the study by Hlasny and Verme (2013) showed that the Egyptian data are of good quality in comparison to other countries. The Egyptian CAPMAS documents the careful processes of stratified sample design, fieldwork and post-survey corrections, all of which meet the standards seen in industrialized nations. The household budget survey was also examined for the presence of various problems in the distribution of income or consumption — including unit and item non-response, top coding and deviations in the shape of the upper tail from patterns observed worldwide. Only unit non-response was found to be a problem which, when properly addressed using out-of-survey information on response rates of various socio-economic groups, led to a systematic upward correction of inequality (Hlasny and Verme, 2013). Mischaracterization of the top end of the distribution which has been noted in surveys worldwide is not particularly glaring in Egypt (see, for example, Burkhauser et al., 2012; Hlasny et al., 2020; Jenkins, 2017; Van Kerm, 2007).

The Egyptian survey does, like most of the advanced household surveys worldwide, deliberately omit from its sampling frame the extremely wealthy individuals, who represent rare order statistics and whose presence would unduly influence results. However, applying a correction for this using a battery of advanced parametric replacing techniques led to marginal increases in the estimated inequality in Egypt (Hlasny, 2019; Hlasny and Intini, 2015; Hlasny and Verme, 2015). These omissions are also standard across the world, and measures of income inequality should be compared using the same omissions or corrections. When this is done, income inequality in Egypt remains very low by international standards. Finally, it is worth noting that correcting the bottom of the income distribution for misreporting also yields small corrections to inequality, this time downward (Hlasny et al., 2020). These robustness tests cannot be brushed aside as selective or inadequate.

Achcar decries a 'major flaw in international comparisons of inequality published by the IFIs: they end up comparing apples and oranges by

3. See Verme et al. (2014: Chap 8, part II).

including in one and the same list figures based on different calculation modes, ranging from household consumption surveys to income taxation data' (p. 747). This criticism is unfounded and has been addressed in a series of blogs (Verme and Hlasny, 2014, 2016). Hlasny and Verme (2018) compare income and consumption Ginis in Egypt to those in surveys worldwide, carefully noting country groupings and welfare aggregates used, not to a selection of 'global North' (p. 747) statistics. This is in stark contrast with Achcar's broad choice of references cited to dispute the existing evidence on inequality, ranging from findings based on various notions of social inequality to various data including real estate listings or tax data. This, indeed, is comparing apples and oranges.

CONCLUSIONS AND RECOMMENDATIONS

Gilbert Achcar concluded in his critical review that the position of the protagonists of the 'Arab Inequality Puzzle' debate exhibits a systematic neo-liberal bias and therefore a wilful blindness to their role in destabilizing the region. In this Comment we argued that Achcar's conclusion is misguided in that it is based on a misinterpretation of facts, a false grouping of scholars, a partial review of existing studies and a rather poor understanding of the measurement of income inequality. We emphasized that the modest estimates of income inequality evidenced in household surveys in Egypt have been validated by various independent scholars through the use of advanced methodological approaches correcting for an assortment of problems, including non-survey data. Achcar's review does not do justice to this technical literature, and brushes it aside without offering more plausible estimates or explanations. Achcar's view is not unique among regional commentators, and speaks to the degree of non-transparency, traditional data paucity, and contamination of available evidence with hearsay in the region. As scholars working on income inequality, we find it essential to keep the debate on a technical level and leave speculations and political conspiracy theories aside. A decade after the Arab Spring, scholars on all sides should recommit to engage in a careful, informed dialogue on the interpretation of existing evidence.

REFERENCES

- Abdel-Fadil, M. (1980) *The Political Economy of Nasserism: A Study in Employment and Income Distribution Policies in Urban Egypt, 1952–72*. Cambridge: Cambridge University Press.
- Al-Shawarby, S. (2014) 'The Measurement of Inequality in the Arab Republic of Egypt: A Historical Survey', in P. Verme et al. (eds) *Inside Inequality in the Arab Republic of Egypt: Facts and Perceptions across People, Time and Space*, pp. 1–20. Washington, DC: World Bank.

- Alvaredo, F. and T. Piketty (2014) 'Measuring Top Incomes and Inequality in the Middle East: Data Limitations and Illustration with the Case of Egypt'. ERF Working Paper No. 832. Cairo: Economic Research Forum.
- Alvaredo, F., L. Assouad and T. Piketty (2017) 'Measuring Inequality in the Middle East 1990–2016: The World's Most Unequal Region?'. Centre for Economic Policy Research Discussion Paper DP12405. London: Centre for Economic Policy Research.
- Alvaredo, F., L. Assouad and T. Piketty (2018) 'Inequality in the Middle East', VoxEU 13 August. <https://voxeu.org/article/inequality-middle-east> (accessed 15 October 2020).
- Assaad, R., C. Krafft, J. Roemer and D. Salehi-Isfahani (2018) 'Inequality of Opportunity in Wages and Consumption in Egypt', *Review of Income and Wealth* 64(s1): S26–S54.
- Atamanov, A. et al. (2020) 'Measuring Monetary Poverty in the Middle East and North Africa (MENA) Region: Data Gaps and Different Options to Address Them'. Policy Research Working Paper No. WPS 9259. Washington, DC: World Bank.
- Belhaj Hassine, N. (2015) 'Economic Inequality in the Arab Region', *World Development* 66: 532–56.
- Bibi, S. and M. Nabli (2010) 'Equity and Inequality in the Arab Region'. ERF Report No. 33. Cairo: Economic Research Forum Policy Research.
- Burkhauser, R.V., S. Feng, S.P. Jenkins and J. Larrimore (2012) 'Recent Trends in Top Income Shares in the United States: Reconciling Estimates from March CPS and IRS Tax Return Data', *Review of Economics and Statistics* 94(2): 371–88.
- Cornia, G.A. (ed.) (2014) *Falling Inequality in Latin America: Policy Changes and Lessons*. Oxford: Oxford University Press.
- Deaton, A. (1997) *The Analysis of Household Surveys: A Microeconometric Approach to Development Policy*. Washington, DC: World Bank.
- ECLAC (2018) *The Inefficiency of Inequality*. Santiago: Economic Commission for Latin America and the Caribbean.
- ElGindi, T. (2017) 'The Inequality Puzzle in Egypt: What Do We Really Know?', *Arab Studies Journal* 25(2): 100–43.
- ESCWA (2018) *Inequality, Autonomy and Change in the Arab Region*. Beirut: Economic and Social Commission for Western Asia.
- Ferreira, F.H.G., C. Lakner and A.R. Silwal (2016) 'Inequality Increasing Everywhere? Conflicting Evidence from an Updated Global Database of Household Surveys'. Background paper for the World Bank's Poverty and Shared Prosperity Report 2016: Taking on Inequality. Washington, DC: World Bank. www.ecineq.org/ecineq_nyc17/FILESx2017/CR2/p104.pdf (accessed 26 October 2020).
- Hlasny, V. (2019) 'Top Expenditure Distribution in Arab Countries and the Inequality Puzzle', *Journal of Economic and Social Measurement* 44: 177–201.
- Hlasny, V. and V. Intini (2015) 'Representativeness of Top Expenditures in Arab Region Household Surveys'. ESCWA Working Paper No. 11. Beirut: Economic and Social Commission for Western Asia/Economic Development and Integration Division.
- Hlasny, V. and P. Verme (2013) 'Top Incomes and the Measurement of Inequality in Egypt', Policy Research Working Paper No. 6557. Washington, DC: World Bank.
- Hlasny, V. and P. Verme (2015) 'Top Incomes and the Measurement of Inequality: A Comparative Analysis of Correction Methods Using EU, US and Egyptian Survey Data'. ECINEQ Working Paper No. 145. Rome: Society for the Study of Economic Inequality (ECINEQ).
- Hlasny, V. and P. Verme (2018) 'Top Incomes and the Measurement of Inequality in Egypt', *World Bank Economic Review* 32(2): 428–55.
- Hlasny, V., L. Ceriani and P. Verme (2020) 'Bottom Incomes and the Measurement of Poverty and Inequality'. Global Labour Organization Discussion Paper No.

519. <https://glabor.org/bottom-incomes-and-the-measurement-of-poverty-and-inequality-a-new-glo-discussion-paper/> (accessed 15 October 2020).
- Ianchovichina, E. (2018) *Eruptions of Popular Anger: The Economics of the Arab Spring and its Aftermath*. MENA Development Report. Washington, DC: World Bank.
- Jenkins, S.P. (2017) 'Pareto Distributions, Top Incomes and Recent Trends in UK Income Inequality', *Economica* 84(334): 261–89.
- Kassab, B. (2019) 'Austerity Measures a Major Cause of Poverty Increase, Statistics Agency Advisor Says', Mada Masr 4 September. www.madamasr.com/en/2019/09/04/feature/economy/austerity-measures-a-major-cause-of-poverty-increase-statistics-agency-advisor-says/ (accessed 20 October 2020).
- Kheir-El-Din, H. and H. El-Laithy (2006) 'An Assessment of Growth, Distribution and Poverty in Egypt: 1990/01–2004/05'. CES Working Paper No. 115. Cairo: Egyptian Centre for Economic Studies.
- OECD (2013) *Tackling Inequalities in Brazil, China, India and South Africa: The Role of Labour Market and Social Policies*. Paris: Organization for Economic Cooperation and Development. www.oecd-ilibrary.org/social-issues-migration-health/tackling-inequalities-in-brazil-china-india-and-south-africa-2010_9789264088368-en (accessed 20 October 2020).
- Pinkovskiy, M. and X. Sala-i-Martin (2009) 'Parametric Estimations of the World Distribution of Income'. NBER Working Paper No. 15433. Cambridge, MA: National Bureau of Economic Research.
- Ramadan, R., V. Hlasny and V. Intini (2018) 'Inter-group Expenditure Gaps in the Arab Region and their Determinants: Application to Egypt, Jordan, Palestine and Tunisia', *Review of Income and Wealth* 64(s1): S145–S188.
- UNDP and AFSD (2003) *Arab Human Development Report 2003: Building a Knowledge Society*. New York: UNDP. http://hdr.undp.org/sites/default/files/rbas_ahdr2003_en.pdf (accessed 20 October 2020).
- Van Kerm, P. (2007) 'Extreme Incomes and the Estimation of Poverty and Inequality Indicators from EUSILC'. CEPS Working Paper No. 2007-01. Luxembourg: Centre d'Etudes des Populations, de la Pauvreté et des Politiques Socio-Economiques.
- Verme, P. (2013) 'A Silent Data Revolution in the Arab World', World Bank Arab Voices blog 1 July. <https://blogs.worldbank.org/arabvoices/silent-data-revolution-arab-world> (accessed 15 October 2020).
- Verme, P. (2014) 'Facts and Perceptions of Inequality', in P. Verme et al. (eds) *Inside Inequality in the Arab Republic of Egypt: Facts and Perceptions across People, Time and Space*, pp. 21–58. Washington, DC: World Bank.
- Verme, P. and V. Hlasny (2014) 'Reviewing the Facts on Top Incomes and Inequality in Egypt', World Bank Let's Talk Development blog 9 June. <https://blogs.worldbank.org/developmenttalk/reviewing-facts-top-incomes-and-inequality-egypt> (accessed 10 February 2020).
- Verme, P. and V. Hlasny (2016) 'Top Incomes, Inequality and the Egyptian Case', World Bank Let's Talk Development blog 11 November. <https://blogs.worldbank.org/developmenttalk/top-incomes-inequality-and-egyptian-case> (accessed 10 February 2020).
- Verme, P. et al. (eds) (2014) *Inside Inequality in the Arab Republic of Egypt: Facts and Perceptions across People, Time and Space*. Washington, DC: World Bank.
- van der Weide, R., C. Lakner and E. Ianchovichina (2016a) 'Is Inequality Underestimated in Egypt? Evidence from House Prices'. Policy Research Working Paper No. 7727. Washington, DC: World Bank.
- van der Weide, R., C. Lakner and E. Ianchovichina (2016b) 'Underestimating Inequality in Egypt: Evidence from House Prices', VoxEU 11 August. <https://voxeu.org/print/61021> (accessed 20 October 2020).
- van der Weide, R., C. Lakner and E. Ianchovichina (2016c) 'Is Inequality Underestimated in Egypt? Evidence from Housing Prices', World Bank Let's Talk Development blog 27

September. <https://blogs.worldbank.org/developmenttalk/inequality-underestimated-egypt-evidence-housing-prices> (accessed 15 October 2020).

van der Weide, R., C. Lakner and E. Ianchovichina (2018) 'Is Inequality Underestimated in Egypt? Evidence from House Prices', *Review of Income and Wealth* 64(s1): S55–S79.

Vladimir Hlasny (vhlasny@gmail.com) is an Economic Affairs Officer with the United Nations Economic and Social Commission for Western Asia (ESCWA) in Beirut, Lebanon. Prior to joining ESCWA, he was Associate Professor of Economics at Ewha Womans University, Seoul.

Paolo Verme (pverme@worldbank.org) is the Head of Research and Impact Evaluations in the Fragility, Conflict and Violence group of the World Bank. Prior to joining the World Bank, he was Visiting Professor at the University of Turin and Bocconi University in Milan, Italy.