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FROM OIL RENTS TO INCLUSIVE GROWTH:
LESSONS FROM THE MENA REGION

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Abstract

A copious literature on resource curse correlates oil rents with poor economic outcomes in resource-rich economies. The common yardstick for evaluating economic performance in these countries is generally GDP growth rates. This paper focuses on the broader question of whether the oil-exporters in the MENA region in general and in the GCC states in particular have been successful in turning their hydrocarbon wealth for the benefit of their population at large. To find out if their experience has been conducive to 'inclusive growth', we compute a novel Inclusive Growth Index and its associated rankings for 154 countries to shed light on their performance both over time and in a comparative context. The results show a marked deterioration in the case of MENA's oil-exporting countries over the period 2001-5 and 2006-10 particularly marred by a poor record in job creation, especially for their young population.

Keywords: Inclusive growth; oil-exporting economies; resource curse; oil rents; GCC States; growth and equity; single composite index.

JEL Classifications: F63, O5, O53, D63.

1. Introduction

The burgeoning resource curse literature is focused on the link between oil rents and poor economic performance in resource-rich countries.³ The yardstick for evaluating economic performance in oil-exporting countries, such as those in the MENA region, has largely been GDP growth. Little attention has been devoted to whether the experience of economic development in these countries has been inclusive and, if not, why not? This is at odds with the fact that the relationship between growth and equity has a long tradition and deep roots in economics thinking and development policy.

Inclusive growth can be broadly conceived of as policies that benefit ‘the widest’ social and economic groupings. There is no universally agreed definition of this concept, however, which has also complicated attempts at operationalising it.

Despite this, recent interest in ensuring that growth is inclusive has been on the rise bolstered by a desire to understand the economic performance of the Arab countries in the period leading to the uprisings that brought down several autocratic regimes after 2010/11 (Hakimian, 2011 and 2013). The fact that the decade before these uprisings also coincided with unprecedentedly buoyant international oil prices and highly favourable oil incomes for oil-exporters has extended the habitual curiosity about the relationship between richness in oil endowments and performance in this period.

This paper focuses on the experience of economic development in oil-exporting countries in the MENA region in the period 2001-15 and addresses whether their experience in this period has been ‘inclusive’ in the sense of benefitting ‘the widest’ social and economic sections of the population.

We construct a single composite index for measuring inclusive growth for a dataset comprising 154 countries drawing from a wide range of indicators (15 in all). These pertain to such broad components of inclusive growth as economic, social, political and environmental aspects. We use a comparative approach to rank all countries for which consistent and reliable data are available grouped in three five-year periods: 2001-05, 2006-10 and 2011-15. The choice of the period – and sub-periods within it – reflects an interest in the period before the Arab uprisings. The results, in particular for oil-exporting economies, offer new insights to the resource curse debates and literature.

In the next section, we discuss the meaning and significance of inclusive growth and examine its broader implications before turning to its measurement and application in the MENA region.

³ See for instance, Sachs and Warner (1995); Ross (1999).

2. What is Inclusive Growth?

Recent interest in inclusive growth has led to a flourishing literature addressing a wide range of issues from conceptual and analytical complexities of the subject to its measurement difficulties and specific country experiences.⁴ To a large extent, this reflects the fact that growth is deemed as a necessary, but not sufficient, condition for a country's ability to improve the welfare of its population. The quality of growth, its sustainability as well as the degree to which its benefits may extend to the widest sections of the society too have attracted increasing attention (Hakimian 2013). This interest has permeated recent policy debates with equal vigour and inclusive growth has been adopted as a common objective for international development agencies as well.⁵

Despite growing calls for growth to be made more inclusive, there is not yet a universally agreed notion of 'inclusive growth'. While growth is easier to define and measure, specifying what makes it 'inclusive' is much more contentious. There is broad agreement that inclusive growth is growth for 'the benefit of most and not just the poor', but ambiguities and disagreements abound beyond this general idea.

Taking a somewhat narrow approach, for instance, Rauniar and Kanbur (2010) characterise inclusive growth as 'growth plus declining income disparities.' In this formulation, inclusive growth stretches the Pro-Poor-Growth (PPG) approach by adopting a wider notion of who constitutes the poor. This definition, it must be noted, excludes non-income considerations and, therefore, lends itself much more easily to measurement (Klasen 2010: 10).

At the opposite extreme, inclusive growth is also sometimes loosely referred to as 'growth that benefits everyone'. But as Klasen points, in this and its broadest sense, the concept seems to imply that growth should 'benefit all stripes of society, including the poor, the near-poor, the middle-income groups, and even the rich' (*Ibid.*: 2). This is equally problematic and highlights the fact that it is not just *who* is to benefit from growth but the *extent* and *distribution* of such benefits (any implicit trade-offs) should not be overlooked.

Both the narrow and broad definitions, however, focus on income and are concerned with outcomes only. By contrast, more recent formulations of inclusive growth seek to incorporate non-income elements and depict it as a *process* and not just an *outcome*.

⁴ See, *inter alia*: Ali (2007), Rauniar and Kanbur (2010), Klasen (2010), Felipe (2010), and Ianchovichina and Lundstrom (2009).

⁵ In 2008, the Asian Development Bank's *Strategy 2020* adopted inclusive growth as one of its strategic development agenda (the other two being environmentally sustainable growth and regional integration (ADB, 2008). The African Development Bank too has adopted it as one of its two strategic objectives for 2013-22 to broaden access 'to economic opportunities for more people, countries and regions, while protecting the vulnerable' (the other strategic priority being green growth 'to make growth sustainable', AfDB, 2013: 10).

For instance, some contributors have stressed the role of *opportunities* in generating inclusive growth.⁶ But there is some ambiguity over the main drivers that would oversee or bring about improved access to opportunities, particularly in relation to the role of state and public policy. For instance, are we to rely on market forces to bring about the desired improvements in opportunities for all or is state intervention justified to improve access to these? The former approach, which is arguably a ‘trickle down’ version of the inclusive growth approach, is seen in the World Bank’s 2006 Development Report on ‘Equity and Development’, which defines equity broadly as ‘equal opportunities to pursue a life of one’s choosing.’ In a similar light, Ianchovichina and Lundstrom emphasise that inclusive growth is about ‘raising the pace of growth and enlarging the size of the economy’ and not about ‘redistributing resources’ (2009: 3).

Safety nets and social protection as well as the provision of public and social goods too are considered important elements of the inclusive growth package. Ali and Son (2007) refer to the provision of social opportunities (such as access to health and education) and how these may vary with income levels. Similarly, the World Bank’s Commission on Growth and Development talks of inclusiveness as encompassing ‘equity, equality of opportunity, and protection in market and employment’ (World Bank, 2008).

Focus on *process* helps to broaden the scope of the debate to include social and institutional aspects of growth and development. But it also throws up new challenges. One of these is how to deal with a trade-off between processes and outcomes (Hakimian, 2013). For instance, is growth more – or less – inclusive when improved processes result in poorer economic outcomes? This can happen, for instance, when improvements in civil rights and greater mass participation in social and political affairs (such as following a revolution or popular uprising) lead to short-term setbacks to economic outcomes by stoking greater instability and turmoil. A converse scenario is equally conceivable: if better outcomes are secured in the absence of any commensurate improvements in inclusivity as a process, does that make the experience of overall growth less inclusive? This can happen, for instance, with an economic boom under an autocratic regime in the absence of any real reforms or improvements in governance.

Such issues could be better addressed if we had a commonly agreed indicator for measuring inclusive growth. Unsurprisingly, some of the conceptual challenges discussed above are also mirrored in measurement difficulties and problems (McKinley, 2010). Measurement is generally easier if our focus is on material outcomes alone (for instance, better income and/or access to social goods and safety net), since such outcomes are more readily quantifiable. However, when access to, and benefits from, growth are envisaged in terms of *processes*, measurement becomes harder and more complex. According to Klasen the absence of a

⁶ ADB’s Eminent Persons Group refers to inclusive growth as ‘economic opportunities’ that are ‘available to all – particularly the poor – to the maximum possible extent’ (ADB 2007: 13-14). Others have been equally specific in stating ‘inclusive growth focuses on both creating opportunities and making the opportunities accessible to all’ (Ali and Zhuang, 2007: 10).

universally agreed notion of inclusive growth has led to a wide range of measurement indicators which varies from ‘unclear’ to ‘straightforward’ to ‘technically difficult’ (2010: 9).

It can thus be seen that growing interest in the subject has not been matched by success over a universal definition of inclusive growth that can help both implement and monitor relevant policies. A variety of approaches have emerged with emphases on different aspects of the concept. Narrower concepts stress outcomes (e.g., growth plus equity) and are easier to measure and monitor. Wider concepts are multi-dimensional and hence more ambitious in scope: they stress improved opportunities for achieving better outcomes; they differentiate between processes and outcomes and they widen outcomes to include non-income aspects (social goods and safety nets). An implicit risk is that an overambitious notion of inclusive growth becomes both meaningless and impractical if it comes close to advocating ‘everything for everyone’ (Hakimian, 2013: 8).

We now proceed to a proposed measurement of the concept and examine its application in the MENA context.

3. Measuring Inclusive Growth

A composite index synthesises information conveyed by a large number of indicators into a single number or score, which allows ready comparisons of performance for each country across multiple dimensions. A wide range of these indices is now used to measure performance in such disparate areas as human development, environmental sustainability, social progress, gender inequality, water poverty and governance, to name but a few (Hakimian, 2015; Barr, 2013).

Reflecting this interest a number of methodological manuals have sought to guide the construction and use of these indicators (OECD, 2008; Nardo *et al.*, 2005). Key challenges relate to (a) the need for conceptual clarity in constructing an index (this relates to the broad dimensions or ‘pillars’ of the phenomenon being measured); (b) choice of indicators (common concerns are measurability, country coverage and availability, relevance and relationship to each other); (c) missing values (these need to be considered and addressed as they can affect the aggregation methodology); (d) weighting and aggregation methods (these need to be clearly stated); and (e) normalisation (this would be required to make ranking of indicators comparable, for instance, when country data coverage is not uniform for different indicators).

The choice of a single measure or indicator for inclusive growth is still in infancy stages (McKinley, 2010; Barr, 2013; Ncube *et al.*, 2013; ADB, 2011; and Hakimian, 2013 and 2015). In what follows, we offer a methodology for measuring a composite index for Inclusive Growth (IG) and use the results to compare the performance of oil-exporting nations both over time and in comparative terms.⁷

⁷ The discussion here draws from the approach developed in Hakimian (2013 and 2015).

3.1 Data and Methodology

The first issue one encounters in constructing an index is the choice of the broad categories, components or ‘pillars’ that define the phenomenon being measured. From this then follows the choice of specific sub-indicators that are used to capture each dimension.

In AfDB’s formulation, inclusive growth is formulated in terms of four broad components: economic, social, spatial and political (AfDB, 2013). Similarly, the ADB (2014: 22) has classified its inclusive growth concept within the following thematic construct or pillars: (a) income and non-income poverty and inequality; (b) creation-of-opportunities; (c) access-to-opportunities; (d) social protection; and (e) good governance and institutions.

In our approach, we have adopted eight components and used fourteen sub-indicators to construct our index. The choice of these indicators reflects both relevance to the task at hand as well as considerations of data availability:

Macroeconomic Performance: To take account of economic performance, we include two macro indicators: Real per capita GDP Growth and Inflation. The choice of the former implies we do not control for GDP size as such but consider instead its growth performance net of population growth. The inclusion of inflation (measured by annual % change in consumer prices) reflects a belief that inflation is a tax on future generations (it favours long-term borrowers) as well as its regressive distributional effects on the current generation (distributes purchasing power against those with fixed incomes). This is why – along with unemployment rate – it is banded together as one of the two elements of what is commonly referred to as the ‘Misery Index’.

Health and Demographics: Here three indicators are included. Life Expectancy at birth, Under-five Mortality and Public Health Expenditure as % of GDP. Unlike the other indicators which are outcome or output indicators, the latter is an input indicator. Its inclusion is, however, justified as a proxy for access to public health. This rests on the assumption that increased public health expenditure is likely to improve access to health facilities in general.

Labour Force & Employment: Three indicators are included here. Wage & Salaried as % of Total Employment and Employment-to-Population Ratios both for adults (% of those aged 15+) and youth (% of those aged 15-24). The first one of these reflects on the structure of the labour market and the extent to which formal – subject-to-contracts – employment is prevalent in each country’s labour market, and the latter two reflect the extent of job creation (or indirectly the prevalence of unemployment) in each.

Education: Two indicators are used. The first – Educational Parity Index – is the deviation from parity in gender access to secondary education. Here we take the ratio of females as a % of male students in secondary enrolments, reflecting the extent to which girls and boys progress

past primary education in public and private schools (a figure of one indicates complete parity). The second indicator – public spending on education as % of total spending on education – is again an input indicator which is included as a proxy for efforts to widen public access to education.

Table 1: Selected Indicators for Computing an Inclusive Growth Index

Components (C_k)	Individual Indicators (s_j)	No of countries for which data are available (m_j)			Data Source
		2001- 05	2006-10	2011-15	
Macroeconomic Performance	1. Real per capita GDP Growth	154	154	153	WDI
	2. Inflation	138	146	147	WDI
Health & Demographics	3. Life Expectancy at Birth	154	154	154	WDI
	4. Mortality Rate Under-5 (per 1,000)				
	5. Public Health Expenditure (% GDP)	154	154	154	WDI
		152	153	153	WDI
Labour Force & Employment	6. Wage & Salaried (% of Total Employment)	154	154	154	WDI
	7. Employment-to-Population Ratios (% of 15+)	154	154	154	WDI
	8. Employment-to-Population Ratios (% of 15-24)	153	154	154	WDI
Education	9. Educational Parity Index	134	137	133	WDI
	10. Public Spending on Education (% of total)	127	139	127	WDI
Gender	11. Gender Inequality Index (GII)	139	145	148	GII
Environment	12. Environmental Performance Index (EPI)	153	153	154	EPI
Inequality & Poverty	13. Gini Index	115	121	119	WDI
	14. Poverty Gap at \$3.2 a day	115	120	118	WDI
Governance	15. Corruption Perception Index (CPI)	145	153	151	CPI
Total Number of Countries in the Dataset		154	154	154	

Sources: World Bank, World Development Indicators; GII (The Gender Inequality Index); EPI (Environmental Performance Index) and Transparency International for the CPI (Corruption Perception Index).

Gender: To capture the gender aspects of inclusivity, we rely on a composite index – Gender Inequality Index (GII) provided by the UNDP. This index shows ‘the loss to potential achievement in a country due to gender inequality’. It uses a number of carefully chosen indicators to ‘reflect women’s reproductive health status, their empowerment and labour market participation relative to men’s’ (GII 2017).⁸

⁸ Due to data limitations, we have used back-casted data for the years 2000 and 2005 to obtain an average for the period 2000-2005 and data for 2005 and 2010 to get an average for the period 2005-10, respectively.

Environment: Here too we use a composite index – Environmental Performance Index (EPI) – to capture the various and multi-faceted aspects of a country’s environmental performance. EPI is preferred to other composite indicators available due to its focus on performance (rather than selected aspects of climatic change or environmental risk) and concern with outcomes rather than policies or inputs.⁹

Inequality and Poverty: Inequality is here measured by the Gini index and poverty by poverty gap at \$3.2 a day (2011 PPP). The latter reflects the depth as well as incidence of poverty and is measured as the mean shortfall in income or consumption from the poverty line, expressed as a percentage of the poverty line (the nonpoor are counted as having zero shortfall). Both measures are available from the World Bank’s Development Indicators although coverage is limited to 115-121 countries only in our dataset (see Table 1).

Governance: Finally, governance is also represented through a composite index – the Corruption Perception Index (CPI) – which is produced annually by Transparency International. This index ranks countries according to perception of corruption in the public sector based on different assessments and business opinion surveys relating to the administrative and political aspects of corruption.¹⁰

3.1.1 Missing Values

The selection of indicators as well as countries included in our dataset (154 in total)¹¹ reflects careful consideration of data availability. As shown in Table 1, most indicators are readily available from standard sources (such as the World Bank’s Development Indicators). However, availability decreases noticeably for some indicators such as the Gini index and Poverty Gap (and for the Education Parity Index to a lesser extent).

Availability also varies over time with data missing for certain periods for different countries. This applies in the case of some MENA countries. For oil-exporting countries, gaps are most serious for the UAE followed by Oman, Iraq and Saudi Arabia. By contrast Egypt, Tunisia and Morocco have full datasets in this regard.¹² In general, missing data reduce the estimation’s accuracy. This is specially an issue for the Inclusive Growth index since the gaps for ‘Poverty

⁹ EPI uses a number of detailed indicators to measure performance across two broad categories of: *Environmental Health* (with a weight of 40%) and *Ecosystem Vitality* (with a weight of 60%); see Hsu *et al.* (2013) for methodology and weights used. Due to data limitations, we have used an average for the period 2002-05 for the first sub-period. Data for the period 2002-10 are from the 2014 back-casted data and those for 2011-15 are from the 2016 back-casted data (EPI, 2014c and 2016).

¹⁰ In earlier years, scores were assigned on a scale from 10 (very clean) to 0 (highly corrupt). In 2012 Transparency International revised the methodology used to construct the index to allow for comparison of scores from one year to the next. Period averages for 2001-05 and 2006-10 use historical data available from earlier estimations and for 2012-15 from the new dataset. For 2011 figures are not available (Transparency International, 2019).

¹¹ See Appendix Table 1 for a full list of the countries included in the dataset.

¹² For a detailed discussion of this and its application, see Hakimian (2105).

& Inequality' indicators seem widest, which are very important for any such computations. The results therefore must be interpreted carefully.

3.1.2 Aggregation

Additive or multiplicative aggregation methods have been much discussed in the literature and are widely used (Garriga and Foguet, 2010; Sullivan and Jemmali, 2014). A multiplicative method computes an overall inclusive score for each country (IG_i) as a geometric mean of all its different indicators rescaled into standardised values.¹³ This method is, however, less intuitive than the arithmetic mean approach especially when many indicators are involved.

An arithmetic mean can be more simply computed by averaging the sum of the normalised values for each indicator s_j for country i as follows:

$$IG_i = \sum_{j=1}^m w_j \cdot s_{ji} \quad (1)$$

where:

($i = 1, \dots, m$: country i included in the dataset),

($j = 1, \dots, n$: indicator j included in the dataset).

As stated above and shown in Table 1, we have $m=154$ countries and $n=15$ indicators in our dataset.

s_j is a standardised score for the rankings obtained in respect of indicator j for country i . Standardised scores are obtained using the following formula:

$$s_{ji} = 100 \cdot \left(\frac{m_j - r_j}{m_j - 1} \right)_i \quad (2)$$

where r_j is a country's rank in respect of indicator j in (descending order) and m_j is the total number of countries for which data for indicator s_j is available (maximum is 154). This takes into account the variable number of countries for which data is available for specific indicators. The standardised values thus obtained lie between a minimum of 0 and a maximum of 100 (lower values indicate lower rank).

In our estimation, we apply equal weights to all indicators. This yields an equal weight of $w_j = \frac{1}{15} = 0.0666$ for all 15 indicators used. It is important to realise that under this assumption, un-weighted (or more accurately equally-weighted) indicators assign greater weight to some 'components.' For instance, this is the case with 'Health & Demographics' and 'Labour Force & Employment' which receive a total weight of 20% each followed by

¹³ The Human Development Indicator (HDI), for instance, switched to geometric mean in 2010. For another example of this method, see Hakimian (2013).

‘Education’ and ‘Inequality & Poverty’ with a weight of 13.3% (this is because weights *de facto* depend on the number of indicators within each component).¹⁴

3.2 Results

Table 2 presents a summary of our estimated scores for the ‘Inclusive Growth Index’ (IG_i) for MENA countries for the three periods of 2001-05, 2006-10 and 2011-15 along the lines explained above. It also shows the results for the MENA oil-exporters and compares them with other oil-exporting peers outside the region. A number of interesting patterns emerge here.

First, among oil-exporters in the Middle East smaller GCC states (Bahrain, Kuwait, Qatar, the UAE and to a lesser extent Oman) attain the highest IG indices: with scores around or exceeding 60 (on a scale of 0 to 100) they appear in the top median globally (only Israel surpasses them in the MENA region with an IG over 70). Saudi Arabia, by contrast, appears to be least inclusive in all three periods with an IG index which is on par with other more populous oil-exporters such as Algeria: with IG scores of around 47 in 2011-15, both are in the bottom median globally.

Second and among the wider MENA nations, only Tunisia scores in the top half (with an IG index exceeding the 50-score mark). Jordan and Lebanon show a sharp contrast in behaviour: Jordan starts off in the top median but moves down subsequently, whereas Lebanon starts lower and ends much higher. All other MENA countries are typically bunched in the 40-45 range indicating that as a group they underperform internationally.¹⁵ At the bottom end, however, Yemen and Iraq stand out as serious underperformers with the lowest scores both regionally and internationally (Yemen among the bottom five worldwide and Iraq ranked around 120; see Table 1 and Appendix Table 1).¹⁶

Examining performance over time too reveals interesting patterns especially in the periods before and after 2010 (a threshold level capturing changes before and after the global financial crisis and the Arab uprisings). With the exception of the UAE, the GCC oil-exporters indicate a deterioration in their IG performance before 2010: Kuwait, Saudi Arabia, Qatar and Bahrain (in that order) show the biggest deterioration followed by Oman (-1.4%). After 2010, however, with the exception of Qatar (-7.6%) all follow an improved trajectory (with the UAE’s improvement consolidating significantly).

For other MENA oil-exporters – Algeria, Iran and Libya – too the period before 2010 is marked with a similar deterioration. After 2010, Algeria reversed the trend (with a significant improvement of almost 20%), but both Iran and Libya progressed further along a declining trajectory. Only Iraq showed a marked and consistent improvement in both periods: a more

¹⁴ Hakimian (2015) considers an alternative weighting method where each *component* is given equal weight.

¹⁵ For broader, global, comparisons of the IG indices across all 154 countries in the dataset, see Appendix Table 1.

¹⁶ The West Bank and Gaza are not included in this dataset due to data limitations.

serious improvement in 2006-10 over 2001-2005 (35.5%) followed by a more modest one in 2011-15 over 2006-10 (in both cases indicating perhaps a low base pertaining to the aftermath of the 2003 invasion).

Table 2: Estimated Inclusive Growth Scores, 2001-05 and 2006-10, Normalised Ranks (min=0; max=100)^(a)

	<u>2001-05</u>	<u>2006-10</u>	<u>2011-15</u>	<u>Change, %</u> <u>2006-10</u> / <u>2001-05</u>	<u>Change, %</u> <u>2011-15</u> / <u>2006-10</u>
<u>Oil Exporters</u>					
- GCC Countries					
- Bahrain	64.4	59.3	64.5	-8.0	8.8
- Kuwait	67.3	53.6	52.2	-20.4	-2.5
- Oman	56.9	56.1	59.1	-1.4	5.3
- Qatar	66.5	60.8	56.2	-8.5	-7.6
- Saudi Arabia	55.2	47.1	47.8	-14.7	1.4
- UAE	62.1	65.7	73.8	5.8	12.4
Other MENA Oil Exporters					
- Algeria	40.8	39.3	46.9	-3.6	19.5
- Iran	41.2	38.0	34.6	-7.7	-9.1
- Iraq	24.9	33.8	35.7	35.5	5.7
- Libya	45.6	43.6	41.6	-4.4	-4.5
<u>Other Oil Exporters</u>					
- Angola	23.9	27.7	26.4	15.9	-4.7
- Ecuador	48.7	50.0	49.9	2.7	-0.2
- Gabon	31.5	28.2	29.8	-10.3	5.6
- Indonesia	49.6	54.7	55.9	10.3	2.2
- Kazakhstan	49.6	54.7	55.9	10.3	2.2
- Mexico	49.6	50.3	48.9	1.5	-2.8
- Nigeria	23.9	21.7	17.7	-9.1	-18.5
- Russia	55.9	53.0	52.7	-5.2	-0.4
- Venezuela	40.6	41.0	36.9	1.0	-9.9
<u>Other Middle East</u>					
- Egypt	42.4	42.1	36.0	-0.5	-14.7
- Israel	73.1	74.1	72.8	1.4	-1.8
- Jordan	55.8	51.9	43.7	-7.0	-15.8
- Lebanon	40.6	53.1	49.2	30.9	-7.3
- Morocco	39.3	44.7	43.0	13.7	-3.8
- Syria	49.7	42.9	30.9	-13.6	-27.9
- Tunisia	55.9	53.5	52.1	-4.2	-2.7
- Turkey	39.2	42.8	49.4	9.3	15.2
- Yemen	30.7	21.7	14.3	-29.4	-33.9

<u>Top 5 Countries</u>	<u>2001-05</u>	<u>2006-10</u>	<u>2011-15</u>
1	Iceland	Norway	Iceland
2	Norway	Denmark	Norway
3	Denmark	Netherlands	Denmark
4	Sweden	Sweden	Netherlands
5	Switzerland	Iceland	Sweden

<u>Bottom 5 Countries</u>	<u>2001-05</u>	<u>2006-10</u>	<u>2011-15</u>
154	Liberia	Congo, Dem. Rep.	Yemen, Rep.
153	Congo, Dem. Rep.	Guinea	Central African Republic
152	Guinea	Sierra Leone	Nigeria
151	Gambia	Yemen, Rep.	Congo, Dem. Rep.
150	Congo, Rep.	Nigeria	Afghanistan

Note: ^(a) Based on Normalised Country Rankings for indicators specified in Table 1. Mean values are arithmetic means with equal weights used for each of the 15 indicators used in Table 1.

Sources: Author's estimates based on data indicated in Appendix Table 1.

Beyond the region the experience of other oil-exporters seems mixed: in the first period Gabon, Nigeria and Russia seem to have followed the experience of the small GCC states exhibiting deterioration during 2001-10. This contrasts with Angola, Ecuador, Indonesia, Kazakhstan and – to a much smaller extent – Mexico and Venezuela, which improved their indices over the same period. After 2010, the picture outside MENA is mixed again with four countries deteriorating: Nigeria, Venezuela, Angola and Mexico (in that order); and three improving (Gabon, Indonesia, Kazakhstan); and two almost stationary (Ecuador and Russia). Amongst this group, the biggest decline belongs to Nigeria followed by Venezuela.

The poor performance of oil exporters in the pre-2010 period has to be seen in the context of generally buoyant international oil prices during much of this period: between the Iraq invasion in March 2003 and July 2008 when oil prices hit an all-time high of \$132 per barrel, oil prices doubled with an average of around \$60 per barrel. This trend was reversed after the onset of the international financial crisis though by 2011 a recovery phase had begun which continued until June 2014: oil prices averaged \$110.3 per barrel between January 2011 and June 2014. After this the downward trend set in with an average of almost half to the end of 2015.¹⁷ The point is that those countries with less diversified economies which are more dependent on oil rents, the poor IG index performance has reflected the wider impact of the oil price trends beyond GDP alone.

Turning to non-oil-exporters in the MENA region, the deteriorating trends for Syria and Yemen stand out: both record some of the heaviest declines over the five-year periods before and after

¹⁷ Oil prices data are based on the US Energy Information Administration data (EIA) available online from: <https://www.eia.gov/dnav/pet/hist/LeafHandler.ashx?n=PET&s=RB RTE&f=M>

2010. By contrast, consistent improvers in MENA are: Turkey, Iraq and the UAE (they record improvements both before and after 2010).

Another interesting pattern emerging from Table 2 is that both Tunisia and Egypt – the two countries that led the Arab ‘Spring’ in 2010-11 – show modest deterioration in their IG index in the two quinquennial periods before these popular uprisings. Before 2010, Egypt did better than Tunisia with an IG contraction of only -0.5% in contrast to the latter’s -4.2%. After 2010, the order was reversed with Tunisia suffering a deterioration of -2.7% in contrast with Egypt’s whopping -14.7% loss.

To sum up: our findings indicate that oil economies experienced a deterioration in their IG scores over the period 2001-05 and 2006-10. Amongst these the most notable ones are: Algeria, Iran, Libya, Bahrain, Kuwait, Iran in MENA followed by Angola, Gabon and Nigeria in Africa.

At the high end of the IG index, the same table also indicates that Scandinavian countries dominated the top 3 positions (Iceland, Norway, Denmark and Sweden). At the bottom end of rankings, African countries dominated along with Yemen in 2006-10 and 2011-15. One oil exporter – Nigeria – too had joined the ranks of the bottom five after 2006.

3.2.1 Sensitivity Analysis

To ascertain the relative influence of each of the specific indicators used on the overall IG performance of the oil-exporting countries, we offer sensitivity analysis below. Appendix Figures 1(a) and 1(b) offer sensitivity analysis for the 15 indicators we have used in the construction and estimation of the IG indices for each of the three sub-periods, respectively (2001-05, 2006-10 and 2011-15). In these figures, a baseline of 100% indicates no change and each data point shows the re-estimated IG if a particular indicator were to be excluded from the calculations (as if they were given a weight of zero). Figures above 100% (baseline) indicate the indicator has a negative effect on the overall index since its elimination (as shown in these figures) improves the index. The opposite is true of figures below 100% (i.e., they have an overall positive effect in the IG index make up since their elimination lowers the IG score).

The results here are reported for four large MENA oil-exporters, all OPEC members: Algeria, Iran, Libya and Saudi Arabia (the smaller GCC states are left out as they are in many ways untypical in general). Each figure also highlights the indicator which has the largest sensitivity impact (see the % figures shown on each figure).

This analysis shows unemployment and youth unemployment have the largest (negative) impact on the IG index in all four countries. These are measured by ‘employment-to-population ratios 15+’ and ‘employment-to-population ratios 15-24’ in our dataset. It can be seen that in all three periods, employment creation was a challenge for these four countries. In the case of Libya and Saudi Arabia youth employment creation (15-24) proved to be the most significant factor impacting on the final IG index. In the case of Saudi Arabia (2001-10), the Gender

Inequality Index (GII) too has a big (negative) influence, an influence similar to that of inflation in the case of Iran.¹⁸

While employment challenges of the populous oil economies are well-known, the policy implications of these results should be drawn with care. As we shall see below, critics of composite indicators are wary of hasty conclusions based on ‘mechanically constructed’ composite indicators as they can be misleading for policy purposes. The value-added of such composite indicators is, ultimately, in their ability to capture real performances. With regards to our findings above, two points stand out with policy implications in oil-exporting countries.

First, as is widely known, labour market issues (job creation and lowering especially youth unemployment) remain a key challenge and the principal route to achieving inclusive growth. Second, the performance of these countries (with the exception of the smaller GCC states) is consistently lack-lustre across a wide range of dimensions and it would require a concerted effort to improve their inclusive growth track record. A focus on one or two selective dimensions will not be sufficient to improve their comparative ranks.

3.3 Limitations

We should recall that our methodology for computing a single composite index for IG is based on an aggregate average ranking of 153 countries in 14 selected areas over the two periods of 2001-05 and 2006-10. The chosen indicators combined growth (real GDP per capita growth) with other dimensions such as health and demographics, labour markets, gender, environment and governance. The choice of the two sub-periods was informed by two factors: (a) buoyancy of international oil prices (especially 2002-2008) and (b) a desire to understand the relative performance outcomes of these countries in the period before and after the Arab uprisings. The results for the MENA countries in general and the oil-exporters, in particular, were presented in Section 3.2 above.

The perceived advantages of a composite index are mainly to do with the parsimony in the use of data and its presentation: they help summarise complex data by providing a short cut to many separate indicators. On the other hand, they make the task of assessing and monitoring performance, across countries and/or over time, easier. They can thus be used for setting targets and communicating easily and effectively with the public over holistic topics. But there are limitations too.

On one hand, there is concern with the near obsession with country rankings (the so-called ‘tyranny of international index rankings’) that emanates from the estimation and use of composite indicators in a wide range of fields. From this perspective, too much faith should not be placed on the accuracy of these rankings. Allowing for uncertainty, for instance,

¹⁸ Given the low coverage of the poverty and inequality indicators in the dataset, the results for these indicators have to be used with caution (see Section 3.1.1 on ‘Missing Values’ above).

Høyland *et al.* (2012) have shown that the link between rankings and indicators on one hand and real performance on the other might in fact be quite ‘fuzzy’ (2012: 2).¹⁹

Another line of criticism has been articulated by those concerned with the value-added of these ‘mashed up’ indices in offering real policy insight. Ravallion warns that their ‘meaning, interpretation and robustness are often unclear’ (2010: 2) especially compared to monitoring the components of what has been termed ‘a large and eclectic dashboard’ of separate indicators (Stiglitz *et al.*, 2009: 62).²⁰

Despite these legitimate concerns, however, even the hardest critics of composite indicators do not favour their complete abandonment. As articulated by Ravallion, the main lesson is probably ‘that the current enthusiasm for new mashup indices needs to be balanced by clearer warnings for, and more critical scrutiny from, users’ (2010: 30). This applies with equal vigour to our exercise here in estimating the Inclusive Growth Index for MENA countries and using it to reflect on the performance of the oil-exporting economies in the region.

4. Conclusion

This paper has addressed whether the recent growth experience of the oil-exporting countries of the MENA region in the ten-year period 2001-10 has been ‘inclusive’ in the sense of benefitting ‘the widest’ social and economic part of the population.

We constructed a single composite index for measuring inclusive growth for each country based on a wide range of indicators (14 in all) pertaining to such broad components of inclusive growth as economic, social, political and environmental aspects. We used a comparative approach to rank all countries (153 in our database) for which consistent and reliable data were available for the two five-year periods of 2001-05 and 2006-10. Our results for the oil-exporting economies of the region have offered new insights to the resource curse debate.

We found that despite generally buoyant international oil prices in this period, both large and small oil exporters – Algeria and Iran, on one hand, and Libya, Bahrain and Kuwait (Qatar to a lesser extent) on the other – suffered a deterioration in their experience of inclusive growth over this period. On further examination, our analysis also showed that the IG index for the four largest oil-exporters (Algeria, Iran, Libya and Saudi Arabia) was highly sensitive to these countries’ track record and ability in job creation. This seems to confirm that labour market

¹⁹ Their discussion of three common and widely used composite indicators (Doing Business, the Human Development Index and Freedom House) shows that the rankings in the top and bottom ends are more stable but the middle 80% are subject to considerable uncertainty (2012: 8).

²⁰ To use a familiar analogy, each one of the key indicators on a car’s dashboard (for instance, fuel level, oil pressure and battery level) convey important data about the car’s roadworthiness and safety in their own right. Hence, mashing up all of these into a single index as a general indication of a car’s ‘well-being’ would not be helpful (Ncube *et al.*, 2013: 14).

issues remain a key challenge and a principal route to achieving inclusive growth for these economies. This aspect is also reflected in their alarmingly low rankings for unemployment in general and youth unemployment in particular (Saudi Arabia, for instance, ranked last amongst 153 countries in the dataset for youth unemployment during 2006-10). Our analysis also shows that other development indicators such as gender and environment drag down their performance (data on poverty and inequality are unfortunately patchy).

Our study underscores perhaps one overriding economic lesson of the decade which saw an unprecedented surge in oil prices: the need to examine outcomes not just in terms of growth but also the quality of that growth, its sustainability as well as the degree to which its benefits may extend to the wider sections of the society. To achieve this a concerted effort is required to improve their inclusive growth track record. A focus on one or two selective dimensions – important though they may be – is not sufficient to improve their comparative ranks.

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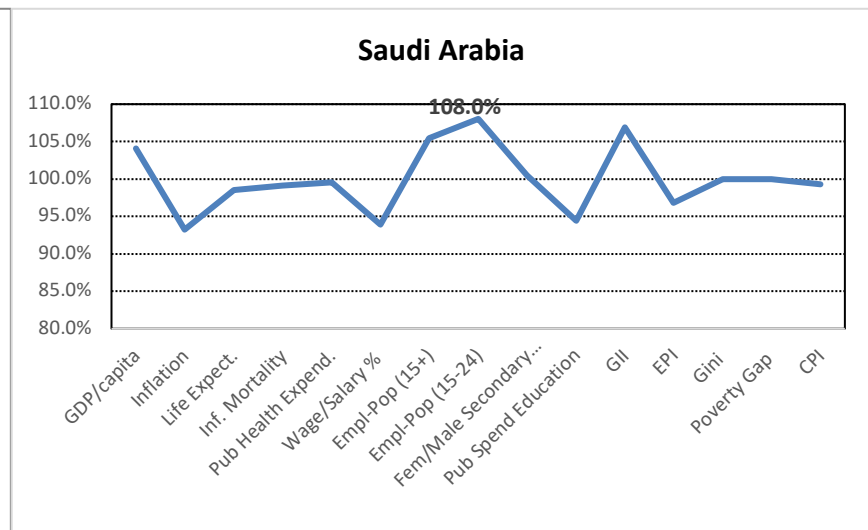
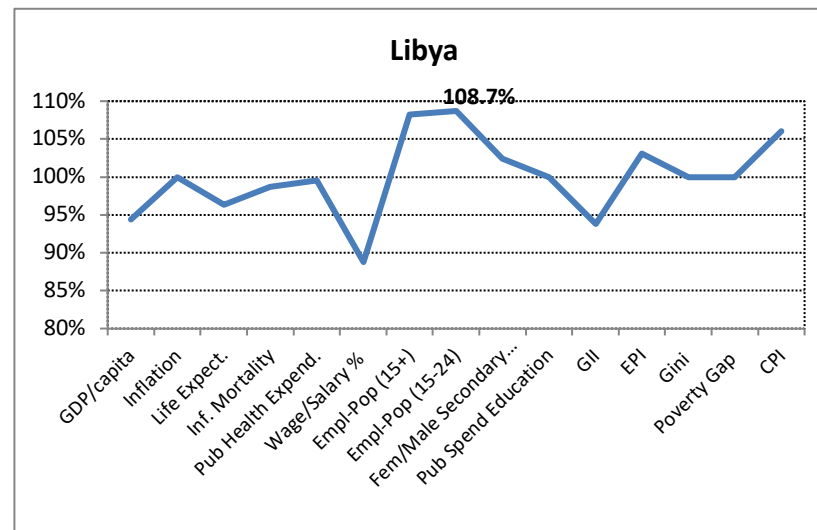
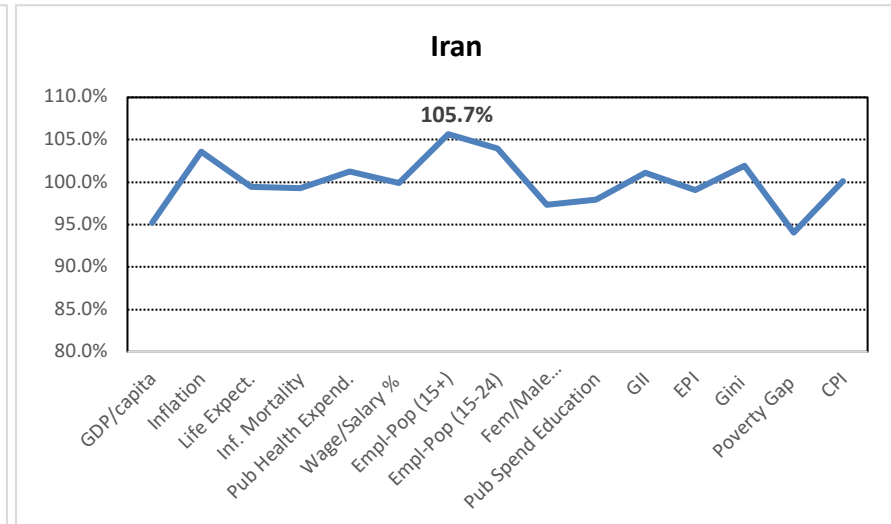
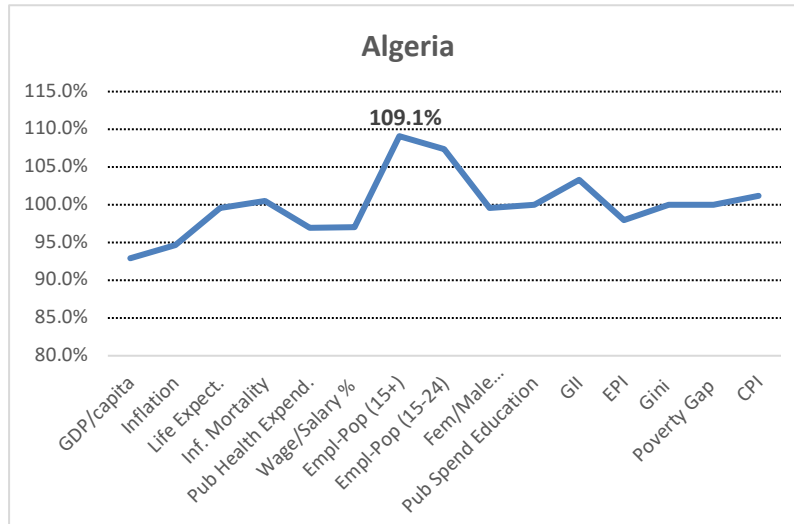
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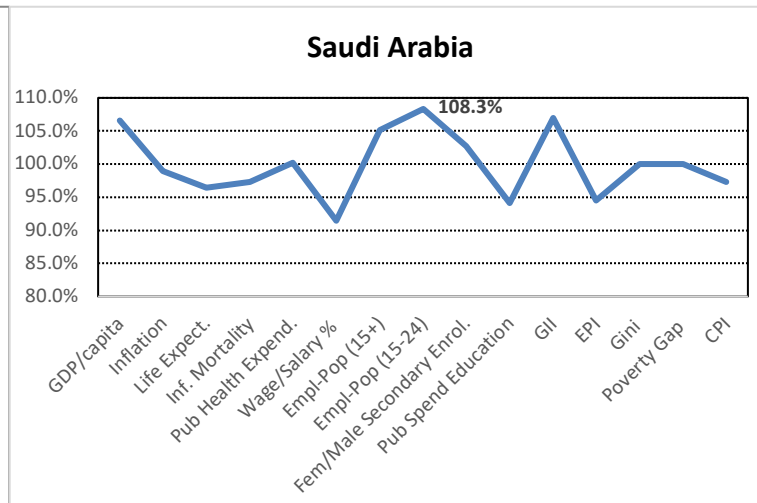
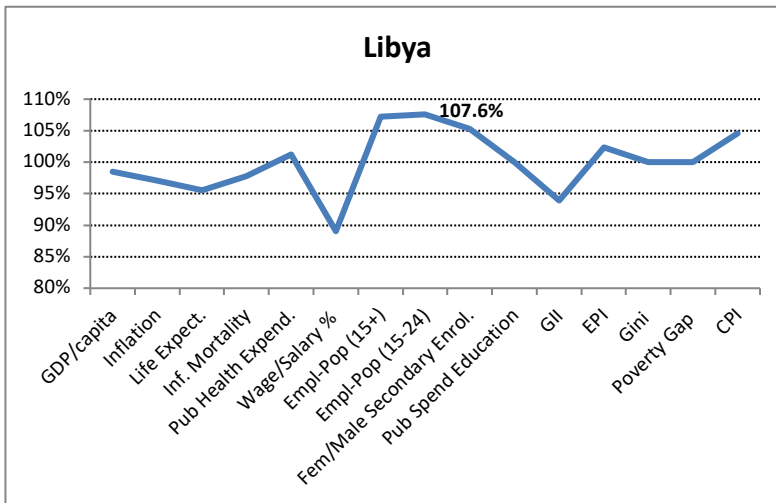
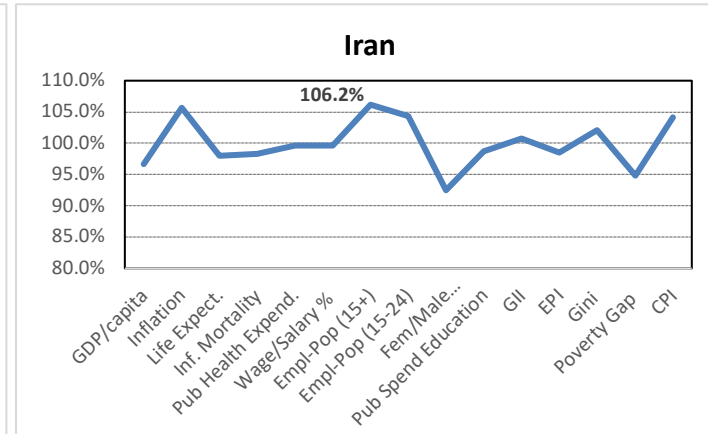
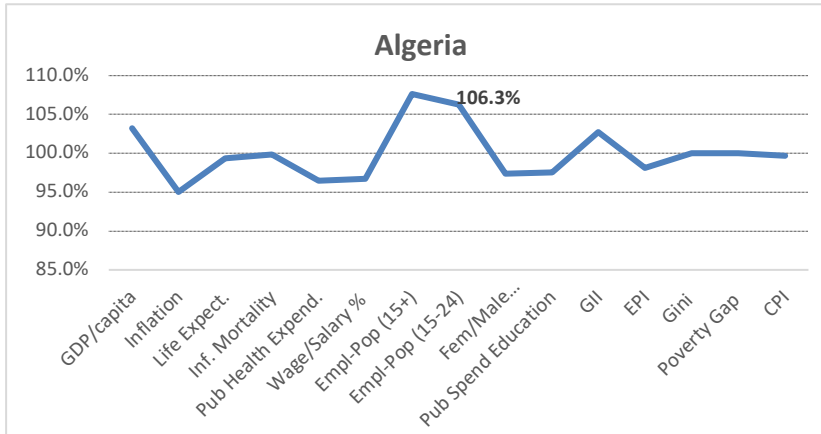
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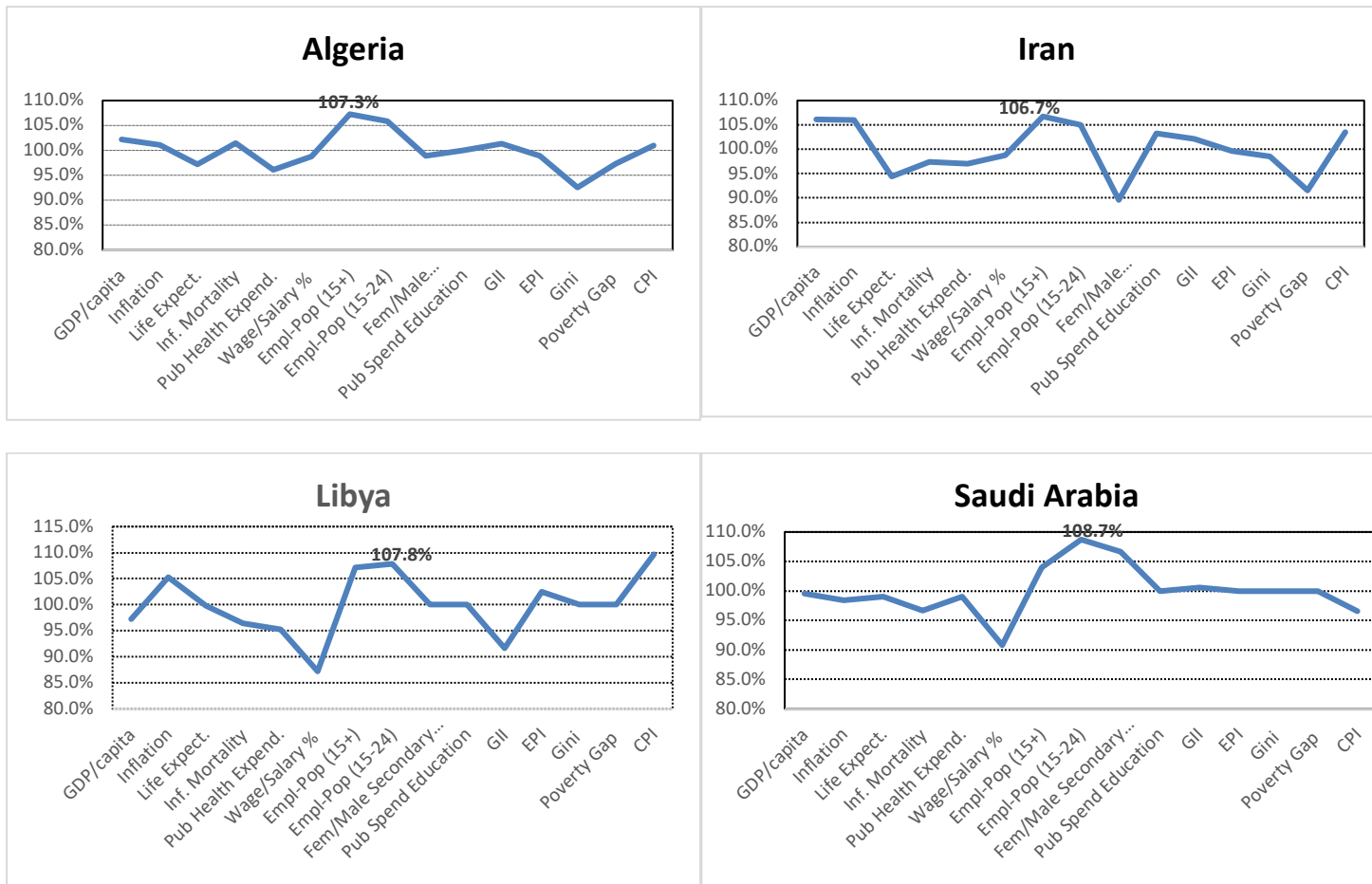
Appendix Figure 1(a): Inclusive Growth Sensitivity Analysis (2001-05)



Appendix Figure 1(b): Inclusive Growth Sensitivity Analysis (2006-10)



Appendix Figure 1(c): Inclusive Growth Sensitivity Analysis (2011-15)



Source: Author's calculations.

Appendix Table 1: Inclusive Growth Index and Overall Rankings: 2001-15

	IG (2001-05)	Rank	IG (2006-10)	Rank	IG (2011-15)	Rank
1. Afghanistan	24.0	146	27.0	143	21.6	150
2. Albania	53.3	65	56.8	52	48.2	80
3. Algeria	40.8	98	39.3	104	46.9	85
4. Angola	23.9	149	27.7	141	26.4	143
5. Argentina	47.0	83	52.0	70	52.6	65
6. Armenia	46.3	87	50.4	76	47.1	84
7. Australia	77.2	13	77.0	14	71.0	24
8. Austria	79.1	11	78.4	9	74.9	17
9. Azerbaijan	47.5	80	39.2	106	38.4	109
10. Bahrain	64.4	42	59.3	45	64.5	37
11. Bangladesh	30.9	135	31.5	132	27.5	139
12. Barbados	67.9	29	61.9	37	55.9	53
13. Belarus	65.7	39	67.1	32	63.1	38
14. Belgium	69.9	25	69.8	26	68.6	29
15. Belize	54.3	63	51.7	73	52.3	66
16. Benin	31.0	134	31.8	129	28.6	136
17. Bhutan	50.5	69	52.2	69	46.1	88
18. Bolivia	43.3	91	47.7	81	49.9	73
19. Bosnia & Herzegovina	56.4	55	56.7	54	59.5	46
20. Botswana	41.1	95	40.9	99	41.6	102
21. Brazil	47.0	82	52.0	71	48.8	78
22. Bulgaria	56.9	53	57.3	49	55.8	54
23. Burkina Faso	36.5	117	35.6	118	35.5	121
24. Burundi	28.5	140	33.2	123	28.6	137
25. Cabo Verde	53.7	64	51.4	74	47.7	82
26. Cambodia	40.1	104	38.1	110	42.7	100
27. Cameroon	32.0	126	28.6	137	28.9	135
28. Canada	79.2	10	77.6	12	78.8	7
29. Central African Rep.	24.9	145	23.1	148	15.4	153
30. Chad	31.3	130	26.2	144	21.7	149
31. Chile	59.5	47	57.0	51	59.4	47
32. China	57.4	51	59.2	46	59.8	45
33. Colombia	46.8	84	47.6	82	49.5	74
34. Congo, Dem. Rep.	19.0	153	17.0	154	20.2	151
35. Congo, Rep.	22.6	150	31.3	135	26.9	141
36. Costa Rica	57.9	50	60.0	42	60.5	42
37. Cote d'Ivoire	27.7	141	25.8	145	28.5	138
38. Croatia	62.7	43	60.4	40	59.9	44
39. Cuba	72.4	23	74.2	18	69.5	26
40. Cyprus	73.8	20	74.2	19	69.3	28
41. Czech Republic	74.9	18	72.7	23	72.6	21
42. Denmark	84.1	3	84.5	2	82.7	3
43. Dominican Republic	36.0	118	39.6	102	42.7	99

	IG (2001-05)	Rank	IG (2006-10)	Rank	IG (2011-15)	Rank
44. Ecuador	48.7	76	50.0	78	49.9	72
45. Egypt	42.4	93	42.1	95	36.0	119
46. El Salvador	46.1	88	49.5	80	52.2	67
47. Eritrea	30.8	136	27.1	142	36.0	117
48. Estonia	65.9	38	66.5	33	72.9	19
49. Eswatini (Swaziland)	37.3	114	34.2	119	38.8	108
50. Ethiopia	41.1	96	38.4	109	37.2	112
51. Fiji	52.0	67	44.4	88	45.6	90
52. Finland	80.2	7	79.3	7	77.5	9
53. France	76.4	14	77.1	13	75.3	14
54. Gabon	31.5	128	28.2	139	29.8	133
55. Gambia, The	20.2	151	28.0	140	25.1	145
56. Georgia	43.2	92	44.4	89	45.2	92
57. Germany	79.2	9	78.4	8	77.4	10
58. Ghana	37.3	115	39.9	101	39.8	106
59. Greece	66.2	36	59.6	43	56.5	50
60. Guatemala	39.5	107	39.5	103	38.8	107
61. Guinea	19.4	152	18.5	153	23.7	147
62. Guyana	40.1	103	36.6	116	41.2	104
63. Honduras	41.0	97	38.6	108	41.2	103
64. Hungary	67.6	30	63.7	36	65.3	36
65. Iceland	87.0	1	81.6	5	86.6	1
66. India	33.9	122	31.8	128	34.2	126
67. Indonesia	39.6	106	41.9	96	43.0	97
68. Iran	41.2	94	38.0	112	34.6	125
69. Iraq	24.9	144	33.8	120	35.7	120
70. Ireland	74.8	19	74.4	17	77.2	11
71. Israel	73.1	21	74.1	21	72.8	20
72. Italy	66.8	34	65.3	35	60.9	41
73. Jamaica	48.4	78	45.0	86	45.3	91
74. Japan	76.0	16	75.4	15	75.3	15
75. Jordan	55.8	59	51.9	72	43.7	94
76. Kazakhstan	49.6	72	54.7	59	55.9	52
77. Kenya	31.2	131	31.3	134	32.3	128
78. Korea, Rep.	66.1	37	69.5	29	70.2	25
79. Kuwait	67.3	31	53.6	61	52.2	68
80. Kyrgyz Republic	46.7	85	46.7	84	52.8	63
81. Lao PDR	39.3	108	37.5	113	35.1	122
82. Latvia	64.4	41	60.1	41	67.1	31
83. Lebanon	40.6	102	53.1	65	49.2	76
84. Lesotho	31.0	133	31.7	130	32.3	129
85. Liberia	13.8	154	22.6	149	24.3	146
86. Libya	45.6	89	43.6	91	41.6	101
87. Lithuania	66.9	32	61.7	38	65.5	35

	IG (2001-05)	Rank	IG (2006-10)	Rank	IG (2011-15)	Rank
88. Luxembourg	72.2	24	75.0	16	69.4	27
89. Madagascar	33.2	123	33.7	121	31.1	130
90. Malawi	28.8	139	32.9	126	34.6	124
91. Malaysia	61.5	45	56.8	53	60.0	43
92. Maldives	48.8	75	57.1	50	53.4	58
93. Mali	32.2	125	28.3	138	26.7	142
94. Malta	68.6	28	71.8	24	76.7	12
95. Mauritania	24.0	147	25.7	146	25.3	144
96. Mauritius	54.8	62	53.2	63	53.1	61
97. Mexico	49.6	73	50.3	77	48.9	77
98. Moldova	49.9	70	52.8	68	56.9	49
99. Mongolia	47.3	81	42.4	94	46.6	87
100. Montenegro	57.9	49	59.5	44	61.0	40
101. Morocco	39.3	109	44.7	87	43.0	98
102. Mozambique	35.7	119	31.5	133	33.0	127
103. Namibia	40.7	99	37.2	114	36.1	116
104. Nepal	34.6	121	39.2	105	40.7	105
105. Netherlands	80.9	6	84.3	3	81.2	4
106. New Zealand	79.2	8	77.9	11	78.5	8
107. Nicaragua	37.4	113	40.5	100	45.7	89
108. Niger	26.1	142	33.0	125	38.4	110
109. Nigeria	23.9	148	21.7	150	17.7	152
110. North Macedonia	48.1	79	49.5	79	53.1	60
111. Norway	86.1	2	85.0	1	84.7	2
112. Oman	56.9	52	56.1	56	59.1	48
113. Pakistan	31.4	129	25.5	147	27.0	140
114. Panama	56.7	54	54.4	60	51.9	71
115. Paraguay	40.0	105	43.7	90	46.9	86
116. Peru	51.4	68	55.7	57	54.1	57
117. Philippines	38.8	112	37.1	115	43.5	96
118. Poland	65.0	40	69.5	28	68.1	30
119. Portugal	66.9	33	68.6	30	67.0	32
120. Qatar	66.5	35	60.8	39	56.2	51
121. Romania	49.6	74	52.8	67	52.2	69
122. Russia	55.9	58	53.0	66	52.7	64
123. Rwanda	40.6	100	41.0	97	44.4	93
124. Saudi Arabia	55.2	61	47.1	83	47.8	81
125. Senegal	33.0	124	33.1	124	38.3	111
126. Serbia	56.4	56	59.2	47	54.5	56
127. Sierra Leone	25.5	143	19.6	152	22.0	148
128. Singapore	72.9	22	71.2	25	71.1	23
129. Slovak Republic	68.7	27	69.5	27	66.3	33
130. Slovenia	76.2	15	78.1	10	75.7	13
131. South Africa	38.8	111	38.6	107	36.9	113

	IG (2001-05)	Rank	IG (2006-10)	Rank	IG (2011-15)	Rank
132.Spain	69.2	26	67.6	31	65.8	34
133.Sri Lanka	46.6	86	46.2	85	43.5	95
134.Sweden	81.6	4	83.2	4	80.9	5
135.Switzerland	81.1	5	81.4	6	80.5	6
136.Syria	49.7	71	42.9	92	30.9	131
137.Tajikistan	30.0	138	31.7	131	36.5	115
138.Tanzania	43.5	90	35.9	117	34.8	123
139.Thailand	60.0	46	56.4	55	55.7	55
140.Togo	31.6	127	31.9	127	36.0	118
141.Trinidad & Tobago	55.8	60	53.2	64	47.5	83
142.Tunisia	55.9	57	53.5	62	52.1	70
143.Turkey	39.2	110	42.8	93	49.4	75
144.Uganda	35.1	120	33.2	122	29.1	134
145.Ukraine	58.3	48	55.3	58	52.9	62
146.UAE	62.1	44	65.7	34	73.8	18
147.UK	77.2	12	74.1	20	75.1	16
148.USA	75.1	17	73.0	22	71.3	22
149.Uruguay	48.5	77	57.7	48	61.4	39
150.Venezuela	40.6	101	41.0	98	36.9	114
151.Vietnam	52.7	66	50.9	75	53.3	59
152.Yemen	30.7	137	21.7	151	14.3	154
153.Zambia	31.2	132	29.1	136	30.4	132
154.Zimbabwe	36.6	116	38.1	111	48.6	79
Max	87.0		85.0		86.6	
Min	13.8		17.0		14.3	
Average	50.2		50.0		49.8	

Source: Author's estimations.