Cultural and creative industries as a catalyst for growth in BRICS economies

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OUTLINE

- BACKGROUND TO THE CREATIVE INDUSTRY ECONOMY
- THE ROLE OF CREATIVE INDUSTRIES
- THE CREATIVE ECONOMY AND THE BRICS ECONOMIES
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• The United Nations (UN) Conference on Trade and Development (2010) refers to creative economy as the use of creative assets to potentially foster economic growth and development.

• Creative industry is made up industry participants such as graphic design; advertising, film and video, music, performing arts, fashion and jewellery, product and surface design, industrial design, news media, publishing, radio and television, visual art, architecture and crafts.

• Across the world the creative economy contributions to GDP ranging from 2-6% depending on the definitions and sectors studied.
• The BRICS economies have not yet unlocked the full economic potential and benefits of the creative economy.

• The economic contribution of the creative industries to the GDP of BRICS’ countries is recorded between 1-6 percent compared to advanced economies recording 11 percent (such as United States).
• Creativity and innovation - driving the new economy
• Leading component of economic growth, employment, trade, innovation and social cohesion.
• Creative goods and services registered 8 percent of total global exports in 2008.
• UNCTAD valued the total global trade in creative goods and services for 2011 at $624 billion.
• The largest proportion of this global trade consists of creative goods exports which were valued at $454 billion in 2011.
THE CREATIVE ECONOMY AND THE BRICS ECONOMIES

• The creative economy is today at the heart of modern economic development and growth.

• All BRICS countries have a rich history of creativity and creative output with all countries having particular strengths in certain areas or creative sectors.

• For example, the Indian film industry is the largest in the world producing over 1,000 movies annually.
THE CREATIVE ECONOMY AND THE BRICS ECONOMIES

• Figure 1: Exports of creative goods in BRICS countries, 2010

<table>
<thead>
<tr>
<th>Country</th>
<th>Art Crafts</th>
<th>Audio Visuals</th>
<th>Design</th>
<th>New Media</th>
<th>Performing Arts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brazil</td>
<td>3%</td>
<td>1%</td>
<td>3%</td>
<td>7%</td>
<td>86%</td>
</tr>
<tr>
<td>Russia</td>
<td>1%</td>
<td>1%</td>
<td>15%</td>
<td>11%</td>
<td>72%</td>
</tr>
<tr>
<td>India</td>
<td>2%</td>
<td>8%</td>
<td>11%</td>
<td>2%</td>
<td>88%</td>
</tr>
<tr>
<td>China</td>
<td>6%</td>
<td>5%</td>
<td>11%</td>
<td>2%</td>
<td>76%</td>
</tr>
<tr>
<td>South Africa</td>
<td>34%</td>
<td>13%</td>
<td>3%</td>
<td>42%</td>
<td>8%</td>
</tr>
</tbody>
</table>

Nelson Mandela Metropolitan University
The composition of creative goods exports is similar for all BRICS countries, with the exception of Russia and South Africa.

The design export category dominated in China, Brazil, South Africa, India recorded 76%, 86%, 88% and 42% respectively.

Design category consist of, fashion, interior and jewellery.

Publishing category dominates the Russian exports recording 72%.
• Figure 2: Exports of creative services in BRICS countries, 2010

Source: Communications Department of CISAC, 2014

• Brazil and Russia export more creative services than they export creative goods.
• China’s exports of creative services, are significantly smaller than Russia’s, Brazil’s, India’s and is little when compared to its total exports of creative goods.

• South Africa’s export performance on creative service is very low comparing to other BRICS countries, recording only personal, cultural and recreational services.
ARDL PROCEDURES

• ARDL cointegration technique is preferable when dealing with variables that are integrated of different order, I(0), I(1) or combination of the both

• Granger (1981) and, Engle and Granger (1987), Autoregressive Distributed Lag (ARDL) cointegration technique or bound test of cointegration (Pesaran and Shin 1999 and Pesaran et al. 2001) and, Johansen and Juselius (1990) cointegration techniques have become the solution to determining the long run relationship between series that are non-stationary, as well as reparameterizing them to the Error Correction Model (ECM).
ARDL PROCEDURES

• The reparameterized result gives the short-run dynamics and long run relationship of the underlying variables.

• If a series has a unit root; differencing of such series is necessary to make it stationary

• After conducting a stationarity test we use de-trended the series and we model the de- trended series as stationary distributed lag or autoregressive distributed lag (ARDL) model (Pesaran and Shin, 1997).
The ARDL / Bounds Testing methodology of Pesaran and Shin (1999) and Pesaran et al. (2001) has a number of features that many researchers feel give it some advantages over conventional cointegration testing. For instance:

- It can be used with a mixture of I(0) and I(1) data.
- It involves just a single-equation set-up, making it simple to implement and interpret.
- Different variables can be assigned different lag-lengths as they enter the model.
ARDL MODEL

• general simple ARDL \((p,q)\) model

\[
\Phi(L)y_t = \varphi + \Theta(L)x_t + u_t
\]

with

\[
\Phi(L) = 1 - \Phi_1 L - \cdots - \Phi_p L^p,
\]

\[
\Theta(L) = \beta_0 - \beta_1 L - \cdots - \beta_q L^q.
\]

Hence, the general ARDL\((p,q^1,q^2\ldots q_k)\) model;

\[
y_t = \beta_0 + \beta_1 y_{t-1} + \cdots + \beta_k y_{t-p} + \alpha_0 x_t + \alpha_1 x_{t-1} + \alpha_2 x_{t-2} + \cdots + \alpha_q x_{t-q} + \varepsilon_t,
\]
Using the lag operator $L$ applied to each component of a vector, $L^k y = y_{t-k}$, is convenient to define the lag polynomial $\Phi(L,p)$ and the vector polynomial $\beta(L,q)$.

As long as it can be assumed that the error term $u_t$ is a white noise process, or more generally, is stationary and independent of $x_t, x_{t-1}, \ldots$ and $y_t, y_{t-1}, \ldots$, the ARDL models can be estimated consistently by ordinary least squares.
• The ADF test is a stricter version of the DF test. The ADF test estimates three models for each of the variable as shown below;
The equation with no constant and no trend is represented by:

$$\Delta y_t = \gamma y_{t-1} \sum_{i=2}^{p} \beta_i \Delta y_{t-1+1} + \mu_t \tag{1}$$

The equation with a constant and no trend is represented

$$\Delta y_t = a_0 + \gamma y_{t-1} + \sum_{i=2}^{p} \beta_i \Delta y_{t-1+1} + \mu_t \tag{2}$$

The equation with both a trend and a constant is given by;

$$\Delta y_t = a_0 + \gamma y_{t-1} a_2 \sum_{i}^{p} \beta_i \Delta y_{t-1+1} + \mu_t \tag{3}$$
• stationarity tests.docx
ARDL RESULTS

• ARDL RESULTS.docx
• Cultural and creative are two important growing sectors.
• Creativity and the creative economy is emerging as a key driver of economic growth and prosperity.
• It is evident that the creative economy and creative sectors are an integral part of the BRICS economies.
• All these countries have a rich history of culture, creativity and creative output.
• However, it was also apparent that all countries could be benefiting even more from their creative sectors.
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Thank You!