



Assessing Multilateral Trade cooperation Potential & Value Chains in the IORA region

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Introduction

- Trade and investment contribute to national and regional economic growth and job creation.
- Identifying trade potentials in the IORA region
- Value chain should be one of the aims of regional industrial strategy



Background

- IORA account 10 % of the worldwide GDP
- Intra-regional trade is 25% within the IORA
- IORA countries vary in terms of:
 - Natural endowments
 - Economic structure
 - Level of economic growth and development
- These variations could create trade and investment opportunities with the region



Objectives

- To assess trade & Investment potential & GVC relationship within IORA
- Develop a multilateral regional economic integration index for IORA to monitor progress
- Review trade performance within IORA region

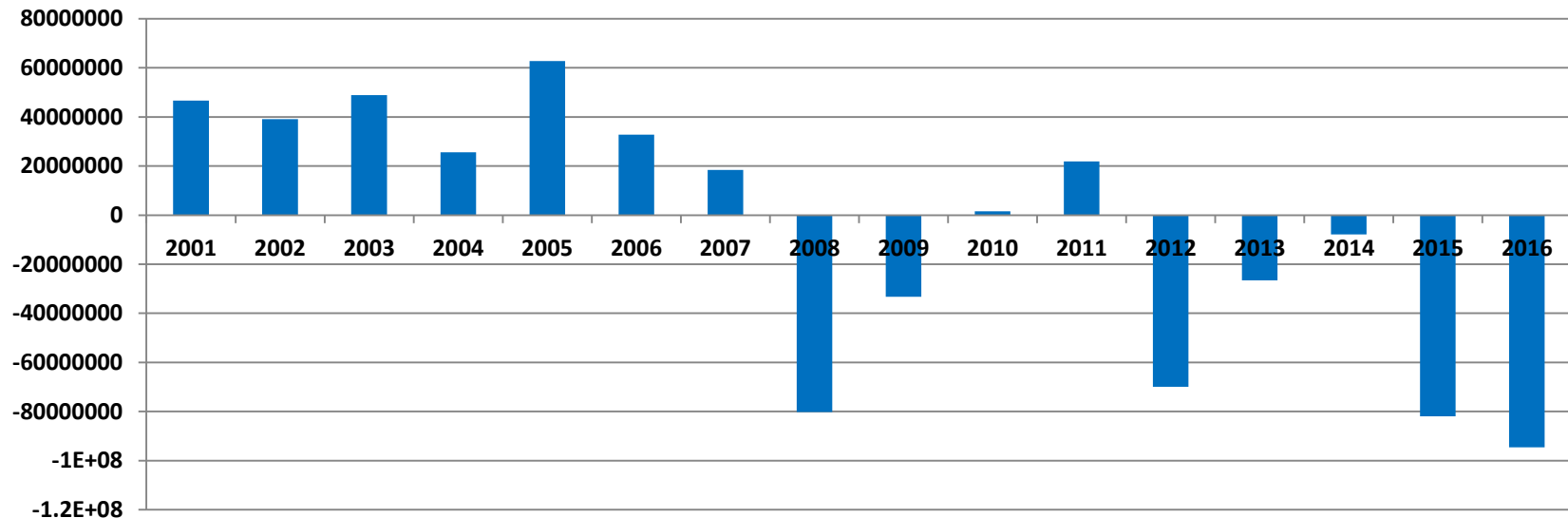


Global Value Chains (GVC) in IORA

- Nine IORA countries are part of the Tripartite Free Trade Area under negotiations between SADC, EAC and COMESA
- The negotiations adopted development approach that rests on 3 pillars:
 - Market integration
 - Infrastructure development
 - Industrialisation
- Development integration emphasizes importance of:
 - Regional industrial development policy
 - Transport and infrastructure development

Trade performance

Figure 1: Trade balance of IORA countries, 2001-2016



Source: ITC calculations based on UN COMTRADE and ITC statistics

- Some countries did not report their trade balance for the period
- Global financial crisis affected most countries badly. Some countries took time to recover, while others have not yet fully recovered



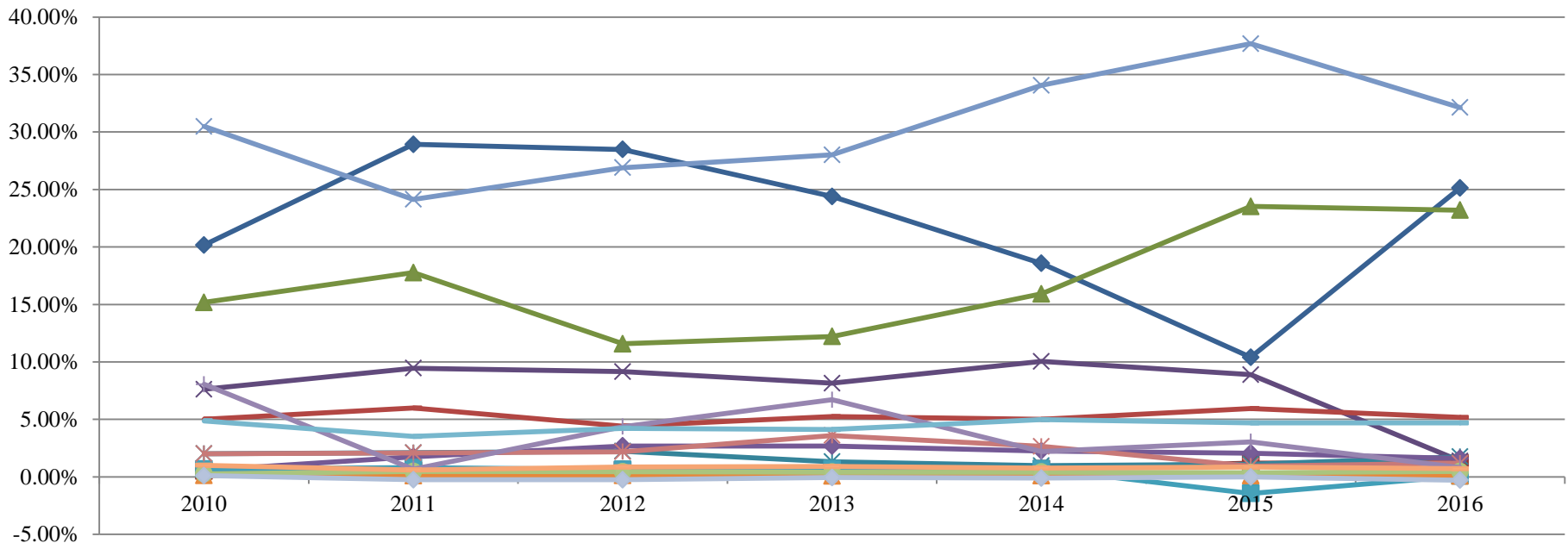
Investment in the Region

- The region has been identified as favourable for investments
- The region has investment promotion agencies and chambers of commerce to promote and facilitate inflows of FDI
- These aim at stimulating and increasing relationship among the countries
- IORA investment reached 21.6% in 2016

Investment cont..

FDI inflows to the region are mainly concentrated in four countries, namely, Australia, India, Indonesia, and Singapore.

Figure: Foreign Direct Investment, 2010-2016



- | | | | |
|------------------------------|-------------------------------|--------------|--------------|
| ◆ Australia | ■ Bangladesh | ▲ India | ✕ Indonesia |
| ✱ Iran (Islamic Republic of) | ● Kenya | ✚ Madagascar | — Malaysia |
| — Mauritius | ◆ Mozambique | ■ Oman | ▲ Seychelles |
| ✕ Singapore | ✱ South Africa | ● Sri Lanka | — Thailand |
| — United Arab Emirates | — United Republic of Tanzania | ◆ Yemen | |



Trade potentials

- The region has massive trade potentials
 - Some countries are members of G20 and BRICS countries
- Need to add to existing dialogue partners
- The existing potentials can be tapped through sectoral cooperation initiatives
- SMEs, regional value chains, information system and tourism present huge potential for trade & Investment



Multilateral regional economic integration index

- Uses secondary data
- Adopted network approach from Kali & Reyes (2007) to develop a multilateral Regional Economic Integration:
- $$C = \frac{3 * \text{Number of triangles}}{\text{Number of connected triples}} \quad 0 \leq c \leq 1$$
- C = Clustering coefficient
- c is expressed as a coefficient meaning that it will be between 0 and 1. Hence $0 \leq c \leq 1$



Benefits of IEI index for IORA

- It measures the probability that ‘the partner of my partner is also my partner’, and reveals the “neighborhood” structure of the network
- It enables the use of trade statistics to show :
 - the structure and evolution of trade, value chains, investment and
 - economic relations for the number of actual potential partners, and the influence of individual countries and groups in a multilateral network.



Network approach

- Network is set of points called nodes and vertices with connections between them
- These connections between nodes represent trading relationship
- South Africa, Indonesia, Australia, Iran and India are chosen to check the network connectivity



Network Approach

- Used data from World Integrated Trade Solution database
- The data was organized in a matrix form
- UCINET 6.0 version used for analysis
- The program functions on the basis of matrix, and it has a text-based format.

Network overview

- **Table 1: Network overview**

Network centralization	0.0065
Density	0.9794
Clustering coefficient	0.972

- Density measures possibility of trading relationships that are actually present in the network
- Density network receives values between 0 and 1 or above
- Density is 0.98, shows portion of potential connection in the network

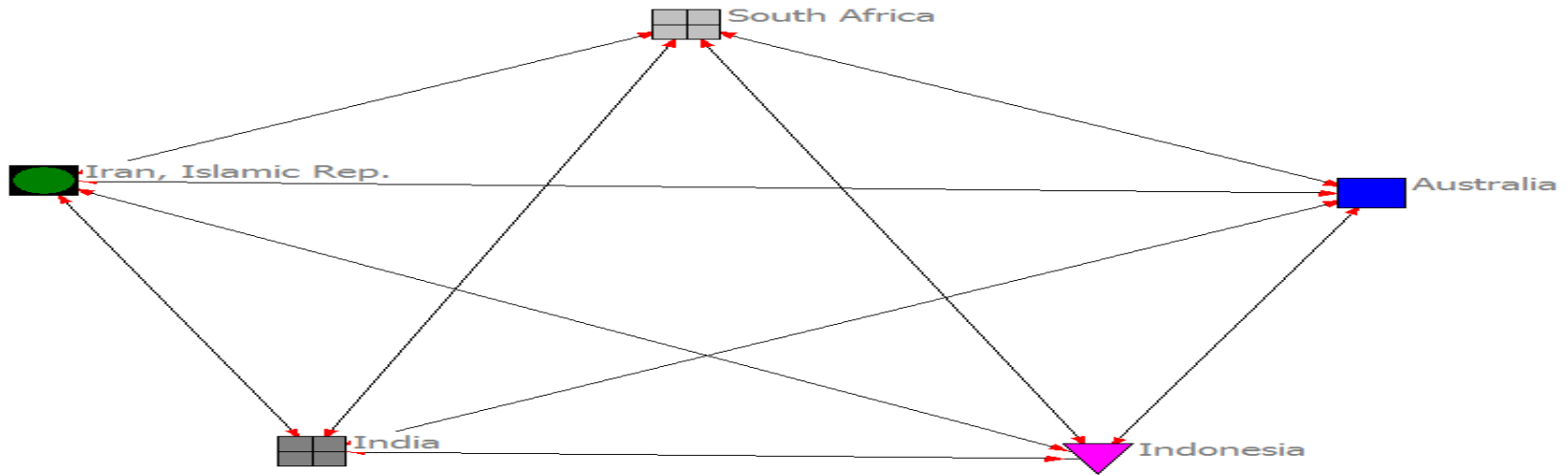


Clustering coefficient

- Clustering measures the interconnectivity of the network
- Clustering network ranges from 0 to 1
 - Close to 0 means hardly connections in the network
 - 1 means network is fully connected
- The overall graph clustering coefficient is 0.97

Visualizing network among five countries in the IORA

Figure : Visualising network



Source: Authors' own computing using World Integrated Trade Solution Data

- diagram shows the connectivity between 5 countries
- The network is highly clustered because all the nodes are connected to each other
- The first triangle shows that South Africa is connected to Australia and Australia is connected to Indonesia, which shows that South Africa is also connected to Indonesia



Conclusion

- The network shows useful application for identifying relations within the region
- There is strong possibility of multilateralism
- The region has an opportunity of attracting:
 - Trade & Investment potential
- There is slight increase in investment within the IORA