Roles of industrialization in accelerating socio-economic transformation and achieving SDGs

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Role of Industrialization in Socio-Economic Transformation and Achieving SDGs

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Purposes of the Study

- To provide theoretical and empirical evidence of the role of industrialization in economic development and realization of SDGs;
- To gain insights on industrial policies and performances of Korea (Republic of) and Malaysia;
- To highlight Kenya's Recent Policy Responses

➢ Method

- Review of literature and policies
- Use secondary data to document patterns of industrial performances and contributions

Context of the Study

- **Industrialization** – Sustained structural transformation of a traditional economy into modern economy characterized by high productivity activities in manufacturing (Szirmai et al, 2013)

- Policy focus on manufacturing within the broader industrial sector (others being mining & quarrying, construction, & utilities) emanates from empirical support that manufacturing has special characteristics to drive economic development.

- EAC countries have put in place policies for industrial transformation
  - Kenya: Vision 2030 – 10% annual manufacturing growth and become an industrial hub in Africa;
  - Tanzania – Development Vision 2025- "A diversified and semi-industrialized economy with substantial industrial sector comparable to typical middle income countries" and at least 10% annual economic growth rate..

Context of the Study

- Sustainable Development Goals (SDGs) comprising 17 goals & 169 targets principally addresses twin goals of poverty and unemployment, anchored on the three dimensions of sustainable development.
  - ✓ Economic
  - ✓ Social
  - ✓ Environmental
- SDG goal 9 targets to double industry's contributions to employment & GDP in least developed countries.
- Other SDG goals with relevance to industrial sector
  - ✓ SDG 1: Address extreme poverty and cut by half proportion of people leaving in poverty in all its forms;
  - ✓ SDG 8: Sustained per capita income growth of at least 7% in least developed countries. Additionally, economic diversification and high value addition in labour intensive sectors to reduce proportion of unemployed youths;
  - ✓ SDG 10: Sustained income growth of bottom 40% of population at a rate higher than national average.

Context of the Study

- Given growing evidence of countries experiencing peak in manufacturing contribution at lower levels (Filipe et al,2014), will the African economies manage to realize envisaged industrial transformation?
- The problem is further compounded by sustained marginal declines in contribution to employment and GDP. In Kenya contribution to both formal and informal employment is declining, with share in GDP declining as well.

Findings

Theoretical

- Manufacturing provides opportunities for physical capital formation (Nelson & Pack, 1999), and has high linkages with other sectors;
- Income threshold model predicts that as income rises, demand for manufactured goods/durables rises. If not produced locally, imports will escalate.

Empirical

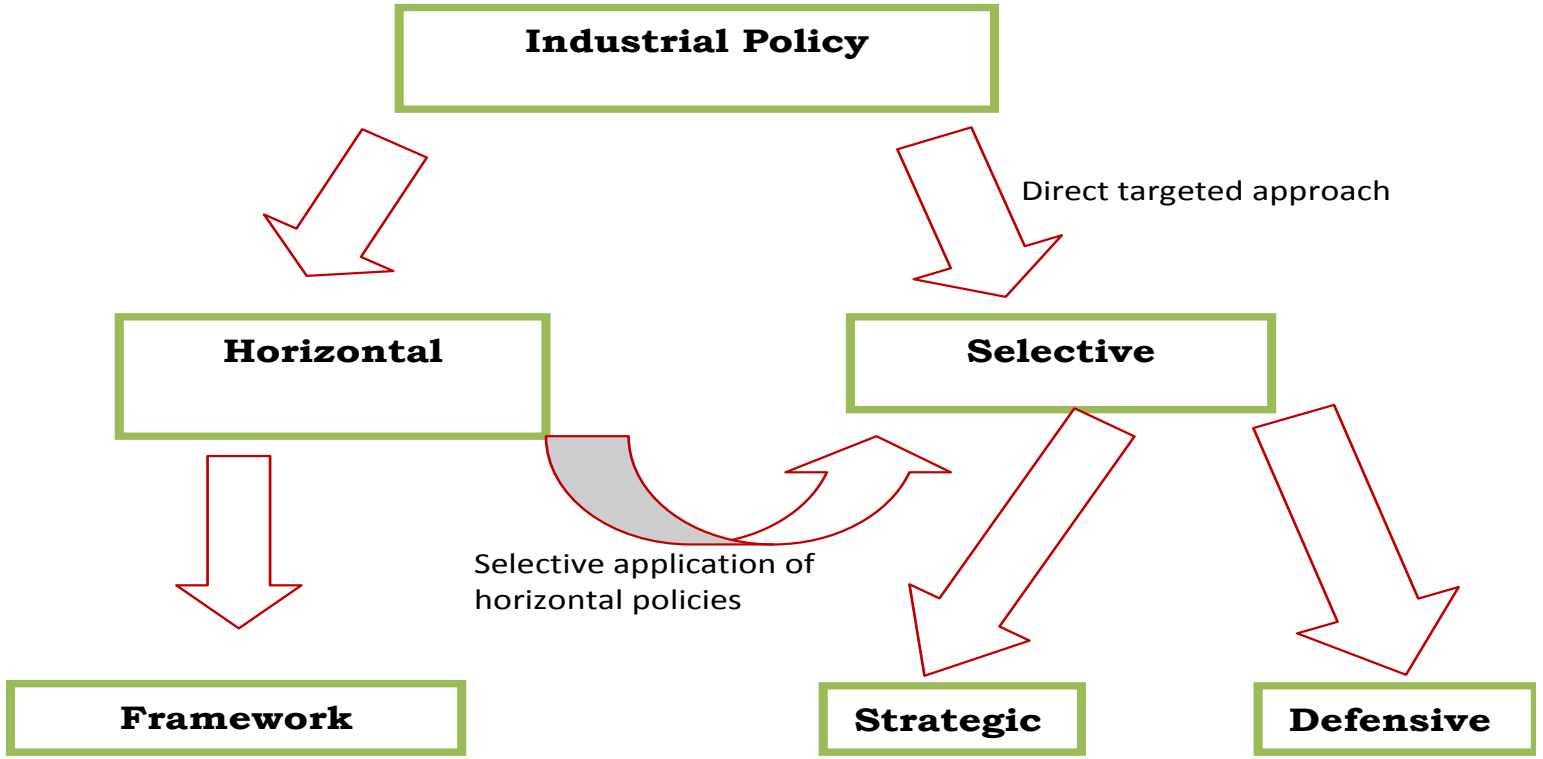
- Higher shares of manufacturing in GDP and exports accelerates economic growth and employment at low levels of development (Lavopa & Szirmai, 2012)
- Countries exporting high value products experience accelerated growth, controlling for human capital, initial income per capita and country time-invariant characteristics (Hausman, Hwang & Rodrik, 2007)
- Interaction effects between education and manufacturing: Contribution of manufacturing is higher in countries with higher education levels (Szirmai & Verspagen, 2015)

Industrial Policies – Conceptual

- Industrial Policy – Interventions intended to affect resource allocation in favour of the industry, especially manufacturing (Weiss, 2013).
- Comprises of broader blue print guiding govt. action and instruments to realize the policy goals.
- Conceptually, industrial policy can be categorized as horizontal or selective (Warwick, 2013)
  - Horizontal – General/business environment to yield benefits from economy-wide approach
  - Selective – targeted at specific industry or sub-sector
    - Can have benefits of clear outputs. Risks involved include selection of 'wrong' target, or unintended consequences of resource diversion from other high impact sub-sectors.
  - Horizontal & Selective are not always clear cut.
    - Horizontal policies may have selective elements as it may increasingly favour certain sub-sectors.

Policy Typology

Figure 1: A Typology of Industrial Policies by Policy Orientation



Source: Warwick (2013)

Some Lessons from Korea and Malaysia

- Export driven industrial policy – Incentives tied to performance
- Linkages of SMEs with large MNEs
- Strong R&D institutions
- Largely selective strategic industrial policies in strategic sectors – HCI, E&E
- Competitive Industrial clusters
- At early stages some protection of infant industries with exports performance

Comparative Patterns in Industrial Performances

Manufacturing Share in GDP; and GDP Per Capita (Current US$)

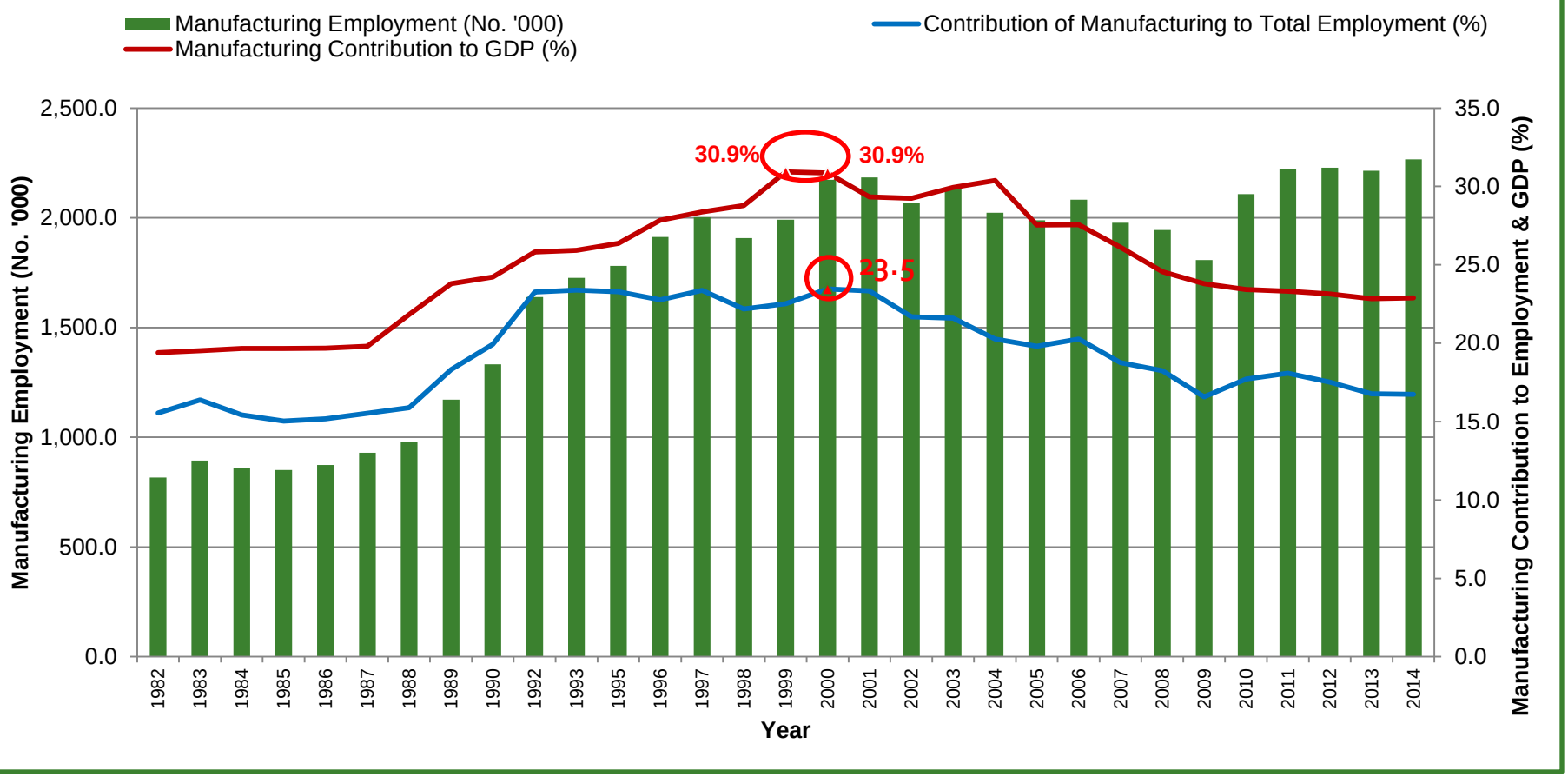
	Kenya	Korea, Republic of	Malaysia	Tanzania
1965 Manufacturing Share in GDP (%)	11.5	14.3	10.2	9.5
1965 GDP Per Capita (US$)	105.0	105.1	308.9	n.a.
1965-1970s: Manufacturing Share in GDP (%)	11.7	18.7	15.7	n.a
1965-1970s: GDP Per Capita (US$)	203.7	582.4	645.8	n.a
1980s Manufacturing Share in GDP (%)	12.0	25.4	20.7	n.a
1980s GDP Per Capita (US$)	366.4	3,031.5	1,948.3	n.a
1990s Manufacturing Share in GDP (%)	11.5	24.8	27.0	8.3
1990s GDP Per Capita (US$)	363.7	9,802.4	3,550.0	210.3
2000s Manufacturing Share in GDP (%): 2000-2014	12.3	29.0	26.3	8.0
2000s GDP Per Capita (US$): 2000-2014	794.4	19,490.2	7,252.1	567.9

Data Source: World Bank (2016)

'n.a.' means data not available

Comparative Patterns in Industrial Performances

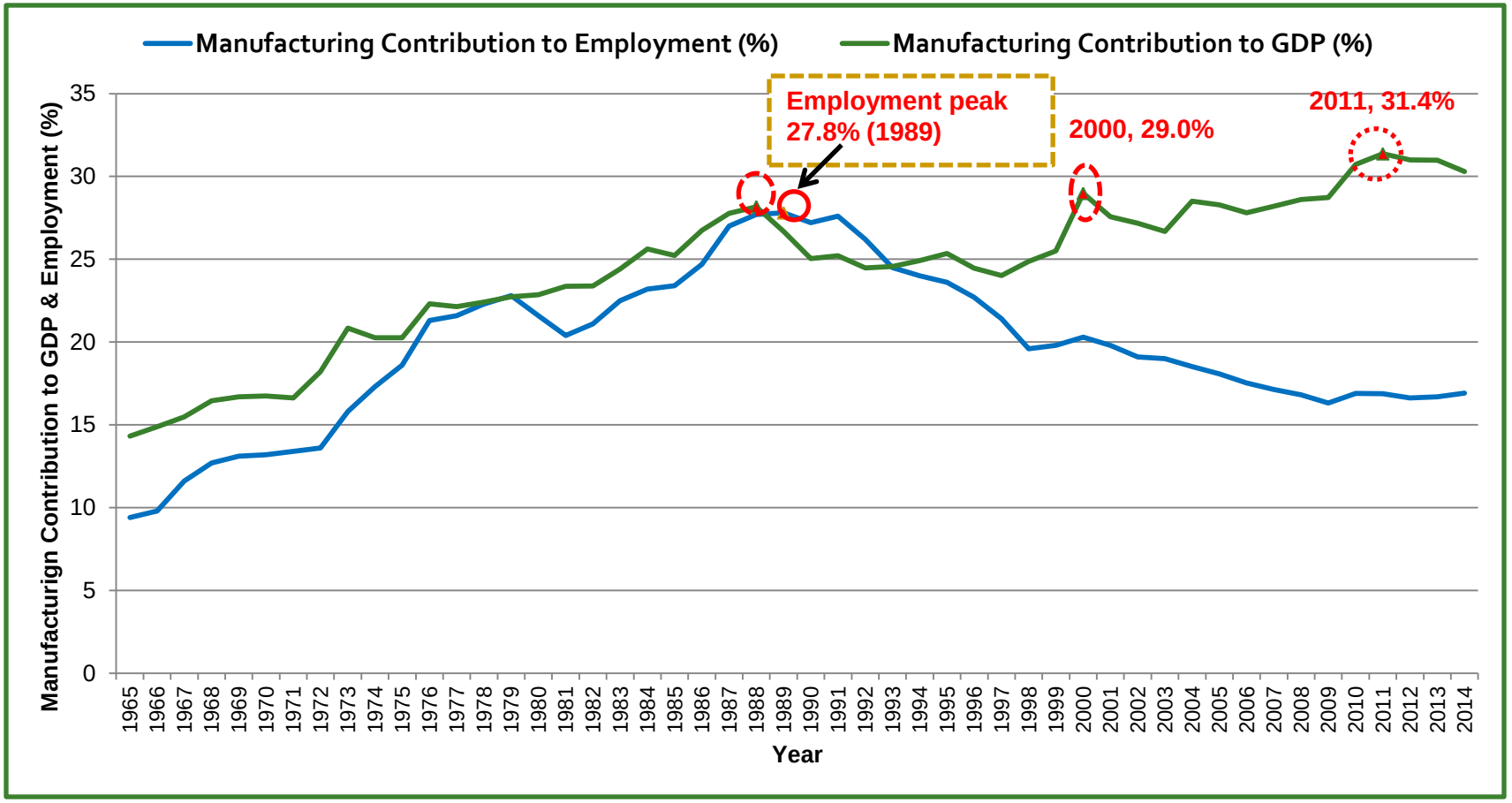
Malaysia: Manufacturing Contribution to GDP & Employment



Data Source: Department of Statistics Malaysia (2015)

Comparative Patterns in Industrial Performances

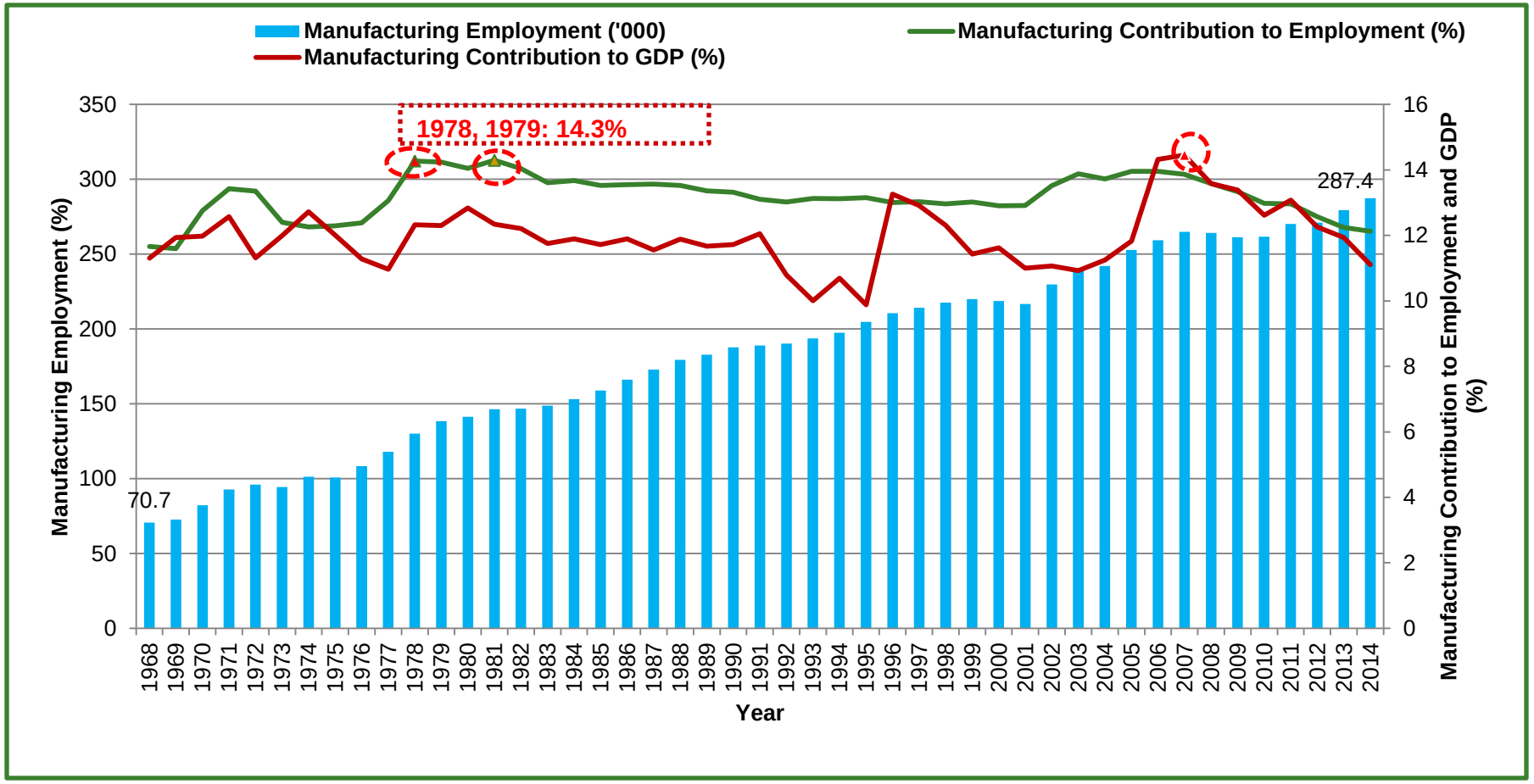
Korean: Manufacturing Contribution to Employment



Data Source: Korean Statistical Information Service (2016)

Comparative Patterns in Industrial Performances

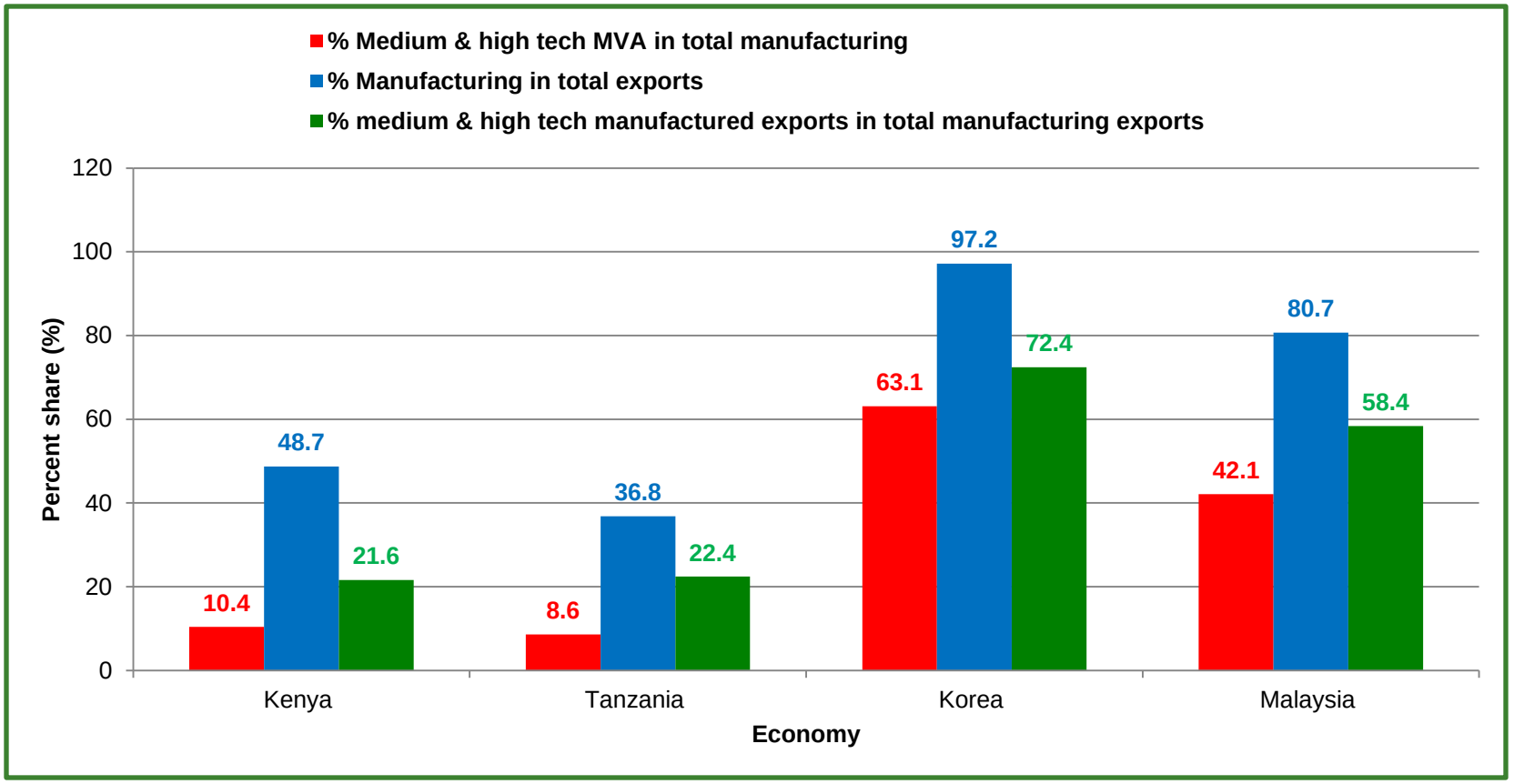
Kenya: Manufacturing Contribution to Employment and GDP



Source: KNBS Economic Surveys

Comparative Patterns in Industrial Performances

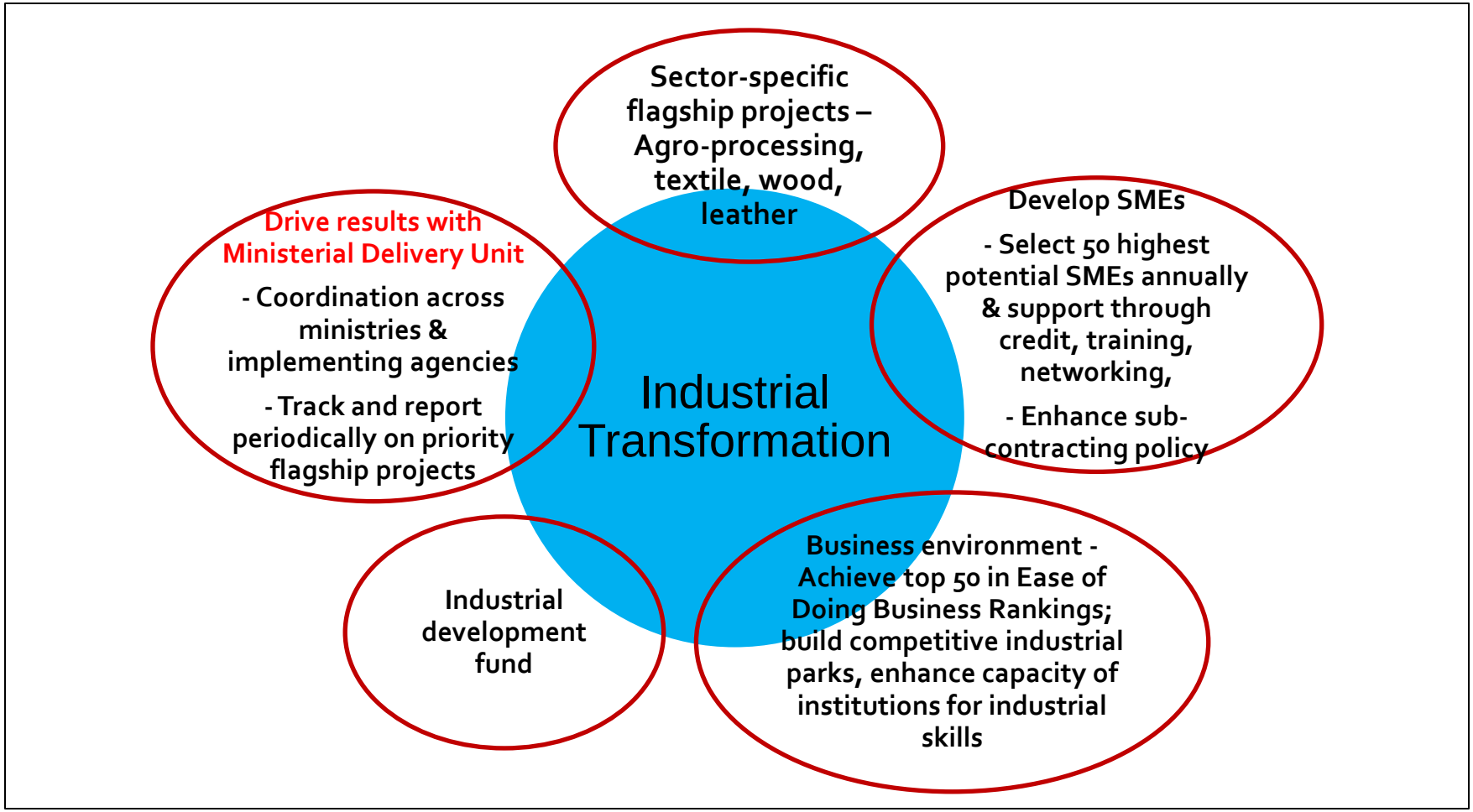
Manufacturing Sophistication; 2013



- Data Source: UNIDO (2015)

Kenya's Recent Response

Kenya Industrial Transformation Program



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THANK YOU