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Global Value Chains in Egypt: Overview, Challenges, and Opportunities

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Global Value Chains in Egypt: Overview, Challenges, and Opportunities

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Motivation

- Trade along GVCs increased substantially over the past decades and represents more than 70% of today’s international trade (OECD, 2020) -> The “Age of Global Value Chains”
- Growing evidence on the positive impact of participation in GVCs and economic growth (Mallick and Zhang, 2022; Jangam and Rath, 2021, Altomonte et al., 2018).
- Egypt’s integration in global value chains (GVCs) increased only slightly over time and remains low compared to other developing countries.

What we do

- We examine (1) **how** Egypt participates in GVCs and **why** its participation in GVCs has remained low.

-> We examine the composition of Egypt's GVC-related flows and compare these with a selected sample of developing countries.

-> We investigate Egypt's participation in GVCs at the macro, sector, and at the firm-level, using data from multiple sources and resorting to several definitions of GVC participation.

-> We investigate structural prerequisites and supportive policies that may enable or hinder GVC participation in Egypt.

What we find

- Some structural determinants (e.g. factor endowments) may explain why Egypt’s participation in GVCs is more “upstream”, i.e. at the origin of the value chains.
- Policy factors (trade, investment, competition policies) largely undermine Egypt’s GVC participation and reinforced the “upstreamness” in GVCs, especially when compared to other success stories from Vietnam (in labor intensive activities), Mexico (in ICT industry), Morocco and Poland (in the automotive industry).

Outline

- Conceptual framework
- Overview of GVCs in Egypt
  - A macro approach
  - A sectoral approach
  - A firm-level analysis of GVCs in Egypt
- What explains Egypt’s GVC participation?
  - Trade policy
  - Labor productivity
  - Competition
  - Investment climate
- Conclusion and policy recommendations

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Conceptual framework: GVCs

- GVCs include a series of globally fragmented stages which constitute together a product or service, with each stage adding value, and at least two stages being produced in different countries (Antràs, 2019).
- The proliferation of GVCs caused a fundamental shift in our understanding of the features and determinants of international trade on three main levels:
  - factor endowments,
  - market structure,
  - actors.

Conceptual framework (2): understanding international trade under GVCs

Neoclassical trade theory		**Trade under GVCs**
Comparative advantage in final products	→	Competitiveness in intermediates, tasks, services
Perfectly competitive markets & constant returns to scale	→	Imperfect competition & increasing returns to scale
Countries	→	Firms (MNEs, lead firms)

Conceptual framework (3): Determinants of GVC participation and position

Country-level determinants	**Firm-level determinants**
Structural determinants	***Macroeconomic determinants***
Factor endowments Geographical remoteness Degree of industrialization	Trade policy Investment climate Quality of institutions
Policy determinants	***Firm-specific determinants***
Trade policy Trade agreements Behind-the-border restrictions Trade-related infrastructure Investment policies	Size Ownership Productivity Innovation Skills Political connections

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A macro approach

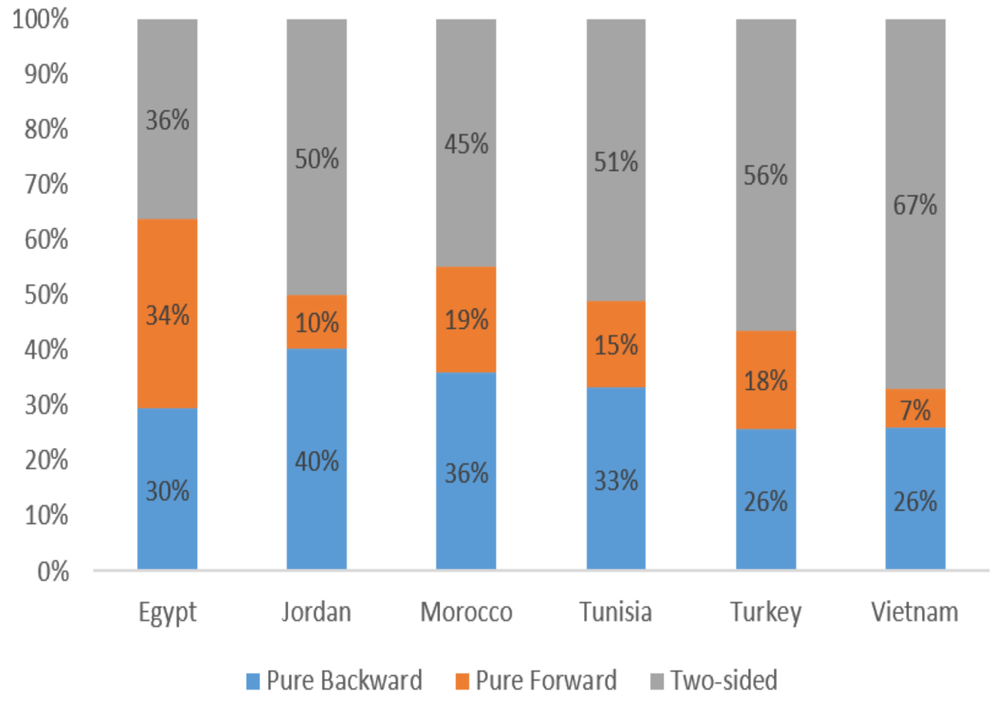
- ***Egypt's GVC-related trade is comparatively low and evolved modestly over time*** compared to countries like Türkiye and Vietnam.
- ***Several factors could explain the relatively poor GVC-related performance of Egypt***. While differences in countries' GVC participation may be attributable to structural factors, including such as factor endowments, and policy factors including trade and investment policies and institutional quality.
- Despite 3 decades of market and investment-related reforms and trade policy reforms, these do not seem to have enhanced Egypt's participation in GVCs.

A macro approach (2)

- **Pure backward GVC related-trade:** value of goods and services produced with imported inputs and exported to the final destination market ->*end* of the chain.
- **Pure forward GVC related-trade:** value-added in goods and services entirely generated within the domestic chains and exported to partners, which further process and re-export it to other markets -> *origin* of the chain.
- **Two-sided GVC related flows:** value of goods and services produced with imported inputs and exported to partners which, in turn, re-export it to other markets -> more central position of the chain.

-> Egypt's two-sided GVC flows are relatively low and pure-forward flows are relatively high and increased over time.

Figure 3: Comparison of GVC-related Flows (%)



Source: Authors' own elaboration using WITS dataset.

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A sectoral approach

- Primary:
  - The mining sector for energy and non-energy producing products is dominated by ***pure forward flows*** (96% and 77% of total flows, respectively) -> *resource endowments.*
- Manufacturing:
  - The manufacturing sector reflects a ***rather central position*** of Egypt along value chains.
  - Two-sided GVC flows are highest for rubber and plastic products (72%), coke and refined petroleum products, basic metals (67% each).
  - Backward flows: motor vehicles, trailers and semi-trailers, food products, and other transport equipment, textiles and pharmaceuticals.
  - Forward GVC: chemicals and chemical products (33% of total GVC flows).
- Services:
  - ***Extreme of the value chain*** rather than along the chain itself.

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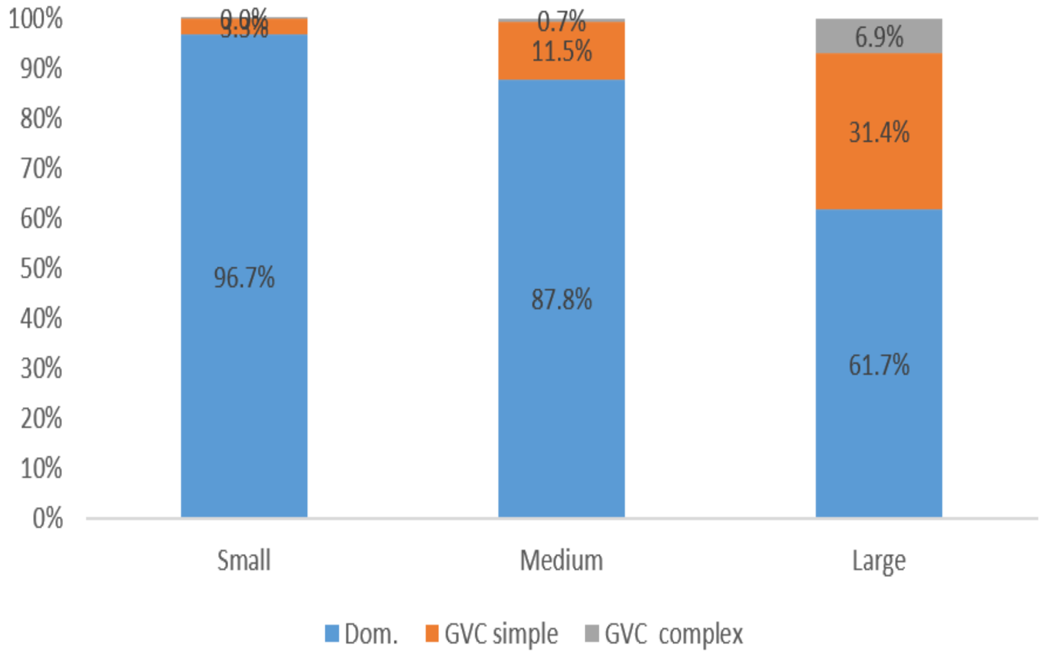
Firm-level analysis

- Positive association between firm size and GVC participation
- Positive association between wages, capital intensity and GVC participation.

Figure: GVC by firm level (%)



Source: Authors' own elaboration using WBES (2013, 2016 and 2020).
Note: Dom refers to domestic firms that do not participate in any GVC. GVC simple refers to two-way traders and GVC complex refers to two-way traders, with a foreign certification and a foreign ownership.

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Trade policy

<u>Tariffs and non-tariff measures:</u>

- Countries with the lowest tariff rates are those with the highest GVC related flows (such as Türkiye and Vietnam, as illustrated previously).
- Compared to country sample, ***Egypt has one of the highest MFN tariffs*** (16.43% compared to only 3.87% in Türkiye).
- The number of harmful measures has been higher than the number of trade liberalizing measures during the period of analysis.
- Technical barriers to trade (TBT), sanitary and phytosanitary (SPS) are common type of NTMs imposed by Egypt.
- Recent work on Egypt's political economy of trade policy also suggests that ***gradual tariff dismantlement in line with the country's regional trade agreements was accompanied by an increase in NTMs*** (Diwan et al. 2020).

Trade policy (2)

Behind-the-border policies

- GVC participation is often hindered by behind-the-border measures stemming from ***burdensome regulations and bureaucratic procedures***.
- The number of hours/days necessary for border and documentary compliance in order to export and import are strikingly higher in Egypt than in other countries.
- The quality of ***trade- and transport-related infrastructure*** can have a severe impact on trade and integration in GVCs. Overall, Egypt's performance is slightly better than the some of the other MENA countries, but worse than Türkiye and Vietnam.

Trade policy (3)

<u>Services protection and regulation</u>

- ***Trade and provision of services are impacted by restrictive behind-the-border policies*** and regulations, such as licensing, restrictions on foreign ownership, and employment of foreign individuals.
- Restrictions on services trade reduces the likelihood that firms participate in GVCs.
- Data from the STRI suggest that Egypt's restrictions in the transport and telecom sectors are higher than some other MENA countries.

Trade policy (4)

Shallow trade agreements:

- Regional integration is one of the key trade policy variables which matter for regional value chains and can have an impact on GVC participation.
- However, the effect of RTAs on the development of value chains is likely to be limited if these agreements are shallow, i.e. the number of provisions covered by the agreement is small (*horizontal depth*) and they not legally enforced(*vertical depth*) (Hofmann et al., 2017 and Guillin et al., 2023).
- In the case of Egypt, the ***horizontal and vertical shallowness of most RTAs*** may be a key factor explaining Egypt’s relatively modest GVC participation.

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Labor productivity

- Labor productivity is one of the key determinants of firms' and countries' participation in GVCs.
- In line with literature of heterogeneous firms (Melitz, 2003), only the most productive firms are able to enter the international market and resist the competition.
- When comparing labor productivity, Egypt ranks second after Türkiye in terms of output per worker (45450 USD per worker), while Vietnam (despite its considerable GVC-related trade flows) has the smallest output per worker in the sample.

-> ***Thus, labor productivity can be a factor of attractiveness for future GVCs in Egypt***.

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Competition policy

- Efficient institutions and competitive practices encourage innovation, increase productivity and competitiveness, which can improve developing countries' integration in GVCs. They also help reduce the transaction costs for firms that engage in GVCs
- The role of competition policies is crucial in developing countries as they can help reduce the market power that transnational corporations have over their suppliers along value chain.
- Competition can help SMEs in Egypt (which constitute a major share of firms operating in the market) to participate in GVCs.
- The EIU "freedom to compete" index and "promotion of competition" index show that ***in terms of competition policy, Egypt ranks lower than the MENA region.***

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Investment climate

- In Egypt, the time required to complete different procedures is longer than in several other countries (for example, up to 1010 days to enforce a contract, compared to 400 days in Vietnam; 15 days to prepare and pay taxes, compared to 4 days in Jordan).
- Among the ***top obstacles reported by domestic and GVC engaged firms are access to finance, tax rates, customs, corruption***.
- ***Politically connected firms*** are more likely to perform better than non-connected firms, enabling these to engage in GVCs (Aboushady and Zaki, 2023).

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Conclusion

- GVCs represent an opportunity for developing countries, especially latecomer industrializers, to secure a position in the international market.
- This opportunity will not materialize automatically and requires a set of supporting policies, including more open trade policies, policies tailored to attract FDI, and more effective competition policies.

Conclusion(2)

- Geopolitical tensions are likely to increase “friend-shoring and safe-shoring” of value chains

-> opportunity for Egypt to increase its GVC participation, especially when considering the country’s central geographical position and its proximity to production networks in Europe, the abundance in some raw materials and in labor force.

- This requires strong policy coordination and a rigorous implementation of the necessary trade and investment policy reforms.
- Investing in skills is indispensable to upgrade the country’s participation in GVCs and “move up” from lower value-added tasks or exports of raw materials.
- Increasing transparency, fighting corruption, and levelling the playing field for domestic as well as international investors remains one of the key challenges facing the country, and likely undermining its present and future participation in international trade and value chains.

Thank you for your attention