

Policy Brief

NUMBER 2, 2020

Overview

Structural transformation and the creation of new and high quality jobs are at the core of the development debate. How to promote structural transformation in a world characterised by globalisation of production, new technologies and the services revolution is a matter of concern that policymakers are trying to address with 21st century industrial policies.

Written by Marco Sanfilippo, University of Turin (1). Edited by Howard Hudson, UNU-MERIT

© United Nations University 2020 ISBN 978-92-808-5013-0

Licensed under the Creative Commons Deed 'Attribution-NonCommercial-NoDerivs 2.5'

The views expressed in this publication are those of the authors and do not necessarily reflect the views of United Nations University.



Jobs and Structural Transformation in Developing Countries

What are the drivers of new and quality jobs in the developing world? What role does structural transformation – and new forms of structural transformation – play in labour market developments and how does this compare with the past? These questions arose frequently during academic and policy presentations at the 'Future of Industrial Work' (FIW) conference held at the United Nations Industrial Development Organization (UNIDO) headquarters in Vienna in September 2019.

Structural Transformation and Job Creation

Jobs and structural transformation are at the core of the policy debate in most of today's developing countries. Recent estimates, for instance, project Africa's working-age population to increase by nearly 70% by 2035 (World Bank, 2017). Without structural transformation to create more jobs, it will be difficult to achieve sustainable development. Yet, evidence provides contrasting views on what works on the ground to generate more, and higher quality, employment opportunities.

A well-established strand of research has shown how different the patterns of structural transformation and jobs creation have been across different developing regions and over different periods. There are important differences in the process of structural transformation that seem most visible in today's less developed countries (e.g. in Africa), compared to the notable experience of East Asian countries in the past. First, most of the productivity growth seem to take place within, rather than between, sector (McMillan et al., 2016). Second, and related, productivity growth within manufacturing has been so far negligible. This has clear implications, as it suggests that in many developing countries there is still high potential for structural transformation.



www.unu.edu

During the FIW Workshop, the keynote presentation by Margaret McMillan put emphasis on these macro-economic dynamics, while trying to understand them better through the lens of micro-economic factors. Using detailed firm-level information from two emerging African countries, Ethiopia and Tanzania, she found that most employment generation in the manufacturing sector is still occurring in small and informal, rather than in larger, firms. Provided that these patterns happen in services as well (where informality is pervasive, too), this offers a disappointing picture in terms of productivity-led growth on the continent. One issue that came out of the discussion is therefore how to raise the productivity in the small and medium enterprises (SMEs) sector. The SMEs sector is in fact the prevalent source of jobs in the developing world, but it faces several constraints - such as access to markets, finance and foreign trade - that hamper its growth potential.

Structural Transformation and Global Value Chains

Recently, the evidence on the rise of global value chains (GVCs) has provided important insights to navigate this process. By enhancing specialisation through international fragmentation of production, GVCs allow firms and workers in developing countries to potentially enjoy the benefits of globalisation at unprecedented levels.

As such, GVCs are a key driver of growth and jobs for developing countries. As emphasised in the 2020 edition of the World Development Report (World Bank, 2020), the rise of GVCs has the potential to support private sector development, spur structural transformation and to enhance the creation of jobs in developing countries. This relation is not unambiguous, though. On the one hand, evidence shows that firms embedded in GVCs are generally more productive and capital intensive than non-trading firms. This means that labour intensive activities and jobs are less likely to be affected by a larger involvement in GVCs. Moreover, improvements in productivity spur firms' output and employment, thus helping to shift workers to more productive activities like manufacturing and services, while also employing larger shares of women. On the other hand, GVCs can generate dependence and incur high entry costs, which disproportionately affect the small business sector. In this respect, linkages between SMEs and lead firms in GVCs are especially sensitive to the role of coordination policies, in terms of strengthening local firms' capabilities on the one side, and providing information about local supply opportunities to lead foreign firms on the other.

Towards a New Pattern of Structural Transformation?

Traditionally, industrialisation has represented a secure engine to generate new job opportunities, attracting labour force in excess from rural areas (e.g. Szirmai, 2012). Owing to its capacity to generate economies of scale and productivity growth, the contribution of manu-

About the Author

Marco Sanfilippo is an Associate Professor of Economics at the Department of Economics and Statistics of the University of Turin (Italy). He is also a research fellow at the Institute of Development Policy at the University of Antwerp, and an associate fellow at the global governance programme at the European University Institute in Florence. He holds a Phd in Development Economics at the University of Florence.

His main research interests lie at the intersection of international trade and development economics with a current focus on the role of the drivers of private sector development in developing countries. On these topics he works on a regular basis with national and international organisations, including UNICEF, UNIDO, UNU-WIDER, the Asian Development Bank (ADB), the African Development Bank (AfDB) and the IMF.

2 Policy Brief





facturing to create jobs has been outstanding. This is clearly an immediate outcome occurring during the first stages of industrialisation, once excess labour force in agriculture is absorbed by low-skilled activities in low-value added industries. But it is also true at later stages of development. Thanks to the absorption of new technologies (through importing or foreign direct investments), high productivity related jobs have most likely been introduced in the manufacturing than in other sectors, as far as developing countries are concerned (e.g. Javorcik, 2015). Following the work by Rodrik (2013), in the past, most of the

facturing sector (2) (e.g. IMF, 2018) are linked to changes in the nature of services - in terms of the organisation of international production, the reduction in transport costs and opportunities offered by new technologies. Many services activities are indeed becoming tradable, have experienced high productivity growth and can achieve economies of scale. Yet, these claims are only partially backed up by existing evidence. Services are heterogeneous in terms of productivity, etc. so the activities in which a country specialises can strongly influence their employment potential.

"...some traditional manufacturing activities are nowadays generating their value added mostly outside of the production process, and more in intangible activities."

countries that achieved unconditional growth convergence have done so through industrialisation, though he finds this to be highly dependent on manufacturing shares in total employment. First developed countries, followed by East Asian economies, all developed through a process of structural transformation based on the take-off of the manufacturing sector (Haraguchi et al., 2019). Nowadays, for several reasons (see for example, Rodrik, 2016), industrialisation can no longer guarantee such outcomes.

Will the services sector become the new engine of jobs creation in developing countries? Claims that services can play the role previously held by the manu-

A specific argument is that some traditional manufacturing activities are nowadays generating their value added mostly outside of the production process, and more in intangible activities. For instance, think of Apple and how most of its revenues are obtained from high value added non-production activities, including research and development (R&D) or design. For developed countries, this means focusing on high value added services, such as R&D or advanced financial and business services. This follows the 'smiling-curve' distribution of value added, which tends to shape international fragmentation of production - shifting more and more value away from production towards services (e.g. Baldwin,

www.unu.edu

2016). As argued by Beverelli, Rubinova, Stolzenburg and Woessner at the FIW Workshop, these dynamics have led to a rise in the employment share of highly skilled workers, to polarisation of the job market and so potentially to greater inequality – at least in the USA.

that many industries now share features similar to manufacturing. These include economies of scale, participation in GVCs and potential for technological change and productivity growth, especially thanks to the pervasive role that new technologies can play. To what point is this relevant to our discussion? Once they enlarge the defini-

"...these dynamics have led to a rise in the employment share of highly skilled workers, to polarisation of the job market and so potentially to greater inequality – at least in the USA."

For developing countries, however, this type of argument is less straightforward given that some of the high value added intangibles have yet to be developed, and most of the jobs are concentrated in lowvalue added activities, including the public sector, transport, tourism or trade. So, is diversification into services a viable strategy in the context of developing countries? According to recent work by UNU-WIDER, diversification into non-manufacturing activities shows promise for creating new jobs across Africa (Newfarmer et al., 2018). Thanks to revolutions in transport and technologies, so-called industries 'without smokestacks' such as horticulture, agro-processing, tourism and business services, have the potential to enhance a sustainable demand for jobs, together with rising productivity and exportability of local productions.

Work by De Vries and Deuzeman presented during the FIW Workshop highlighted the blurred definitions of sectors and tion of manufacturing to include some related activities (those that the authors define modern sectors and include agriculture and business services), trends in the reduction of jobs and value added becomes less pronounced if compared to what is found in seminal work by Dani Rodrik (2016) on premature deindustrialisation.

This is not to say that manufacturing will not matter for economic growth in the future. The presentation by Hauge and Chang at the FIW Workshop provided several counterpoints, arguing that developing countries still need to develop their manufacturing sectors if they want to grow and generate jobs. Some of these arguments are indeed compelling. This includes the fact that innovation capacity and productivity growth in the manufacturing are not only superior to other sectors, but also have a larger potential to generate positive spillovers. They also claim that manufacturing growth is essential to stimulate the demand of services.

4 Policy Brief



The Role of Policies to Stimulate Jobs in Developing Countries

From a policy perspective, it is important to understand where the jobs of tomorrow will come from and what policies can best support a process of structural transformation leading to more jobs in developing countries in the future. Accelerating economic growth is essential to rising incomes in the developing world. One key is to establish activities that can employ large numbers of unskilled workers, that can raise productivity through innovation and that can stimulate economic growth through exports.

In light of the changes affecting the global economy in recent years, there has been a revival of interest on the role of industrial policies. Though still difficult to be defined in practice, there is a growing consensus that markets left alone cannot guarantee job creation and structural transformation. There also appears to be consensus on the fact that traditional forms of industrial policies are no longer suited to the changing economic landscape of developing countries. These include, for instance, 'picking the winners' approaches or those based on the provision of tax incentives or local content requirements for foreign investors to set up production activities (World Bank, 2020). Rather, modern industrial policies should aim at levelling the playing field, while promoting the creation of productive employment (i.e. good jobs). In this respect, it is important to understand the economic and institutional circumstances under which industrial policy can contribute to economic development, as shown so

clearly in China and South Korea (Rodrik, 2019). Even researchers from the International Monetary Fund recently highlighted how 'high gear' industrial policies were able not only to fix market failures but also to develop technological capacities for entering into high productive activities – which in turn ensured longrun growth across East Asia (Cherif and Hasanov, 2019).

To adapt to a changing world in which globalisation and new technologies are rapidly changing production, industrial policy in the 21st century needs to focus on a broader set of industries (such as services) that contribute to high productive and employment-intensive growth.

Footnotes

- 1. Department of Economics and Statistics 'Cognetti de Martiis', University of Turin and IOB, University of Antwerp. Correspondence to: marco.sanfilippo@unito.it
- 2. Not all manufacturing jobs are declining. A decomposition analysis presented during the FIW Workshop by Fiona Tregenna (with Antonio Andreoni) showed that the drop in manufacturing employment is most likely to be found in low-technology industries (and much less in medium and, especially, high technological activities).

References

Beverelli, C., Rubinova, S., Stolzenburg, V. and Woessner, N. (2019) Revisiting the drivers of US labor market polarization, paper presented at the FIW Workshop

Baldwin, R. (2016) The Great Convergence-Information Technology and the new Globalization, Harvard University Press.

Cherif, R and F Hasanov (2019), "The Return of the Policy That Shall Not Be Named: Principles of Industrial Policy", IMF working paper 19/74.

Deuzeman, S. and de Vries, G. (2019) Premature deindustrialization? A reappraisal, paper presented at the FIW Workshop.

Hauge, J. and Chang, H.J. (2019) The role of manufacturing versus services in the process of economic development, paper presented at the FIW Workshop

Haraguchi, N., Martorano, B. and Sanfilippo, M. (2019) What factors drive successful industrialization? Evidence and implications for developing countries, Structural Change and Economic Dynamics 49, 266-276

IMF (2018) Manufacturing Jobs: Implications for Productivity and Inequality, Chapter 3 of the April World Economic Outlook.

Javorcik, B. (2015) Does FDI Bring Good Jobs to Host Countries? World Bank Research Observer, 30(1): 74 - 94

McMillan, M., Rodrik, D. & Verduzco-Gallo, I. (2014). Globalization, Structural Change, and Productivity Growth, with an Update on Africa, World Development, 63: 11-32.

Newfarmer, R., Page, J. and Tarp, F. (2018) Industries Without Smokestacks: Industrialization in Africa Reconsidered. Oxford: Oxford University Press.

Rodrik, D. (2013). Unconditional convergence in manufacturing, *The Quarterly Journal of Economics*, 128(1), 165–204.

Rodrik, D. (2016). Premature deindustrialization, *Journal of Economic Growth*, 21(1), 1–33.

Rodrik, D (2019), "Where Are We in the Economics of Industrial Policy?" VoxEU.org, 21 January.

Szirmai, A. (2012). Industrialisation as an engine of growth in developing countries 1950–2005, Structural Change and Economic Dynamics 23(4), 406–420.

6 Policy Brief

UNITED NATIONS UNIVERSITY UNU-MERIT

www.merit.unu.edu

Tregenna, F. and Andreoni, A. (2019) Beyond the inverted-U: the changing nature and structural heterogeneity of premature deindustrialisation, paper presented at the FIW Workshop

World Bank (2017) The Africa competitiveness report 2017 - Addressing Africa's demographic dividend, Washington, DC: the World Bank.

World Bank (2020) World Development Report- Trading for Development in the Age of Global Value Chains, Washington, DC: the World Bank.



UNU-MERIT

The United Nations University – Maastricht Economic and Social Research Institute on Innovation and Technology (UNU-MERIT) is a research and training institute of United Nations University based in Maastricht in the south of the Netherlands. The institute, which collaborates closely with Maastricht University, carries out research and training on a range of social, political and economic factors that drive economic development in a global perspective. Overall the institute functions as a unique research centre and graduate school for around 100 PhD fellows and 140 Master's students. It is also a UN think tank addressing a broad range of policy questions on science, innovation and democratic governance.

INSIDE:

Policy Brief

Jobs and Structural Transformation in Developing Countries

Structural transformation and the creation of new and high quality jobs are at the core of the development debate. How to promote structural transformation in a world characterised by globalisation of production, new technologies and the services revolution is a matter of concern that policymakers are trying to address with 21st century industrial policies.

Uniter Nations University - Maastricht Economic and social Research institute on Innovation and Technology Boschstraat 24
6211 AX Maastricht The Netherlands

UNU-MERIT

