

Enhancing Rwanda's Global Competitiveness: Evaluating the Impact of 'Made in Rwanda' Policies on Local Manufacturing Growth and Innovation

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Abstract

The study aimed at Enhancing Rwanda's Global Competitiveness: Evaluating the Impact of 'Made in Rwanda' Policies on Local Manufacturing Growth and Innovation. The specific objectives of the study were: to establish the impact of 'Made in Rwanda' policies on the growth of local manufacturers in Kenya sectors between 2017 and 2023; and to examine the extent to which 'Made in Rwanda' policies have improved the competitive advantage of local manufacturers in regional and international markets. Descriptive research, a method of gathering data, was used in this study to address inquiries about the present state of the research participants. The sample size of 246 respondents was proportionally distributed across the different sectors. The main instrument that was used for data collected was a semi-structured questionnaire. Descriptive statistics was used to show trends and inferential statistics was used to analyse the relation between the various variables with multiple regression analysis crowing the hypothesis testing. Crucially insightful results came from the regression study done to investigate the link between the 'Made in Rwanda' policies and local manufacturers' competitive advantage. Here, the regression equation could be shown as $Y=2.5+0.7X_1+0.5X_2+\varepsilon$. With an intercept (β_0) at 2.5, local manufacturers' competitive advantage is expected to be 2.5 units should both independent variables equal zero. With $\beta_1=0.7$, the coefficient for Growth 'Made in Rwanda' Policies shows a direct link whereby competitive advantage rises by 0.7 units for every unit increase in growth policies. With $p < 0.001$, this is statistically significant and indicates rather strong evidence on the favorable impact of growth policy on company competitive advantage. With $\beta_2=0.5$, the coefficient Competitive Advantage "Made in Rwanda" Policies also shows that, alongside every unit increase in competitive advantage policies, each caused a 0.5 unit increase in competitive advantage of manufacturers. This is statistically significant ($p = 0.01$) and once more shows to be especially crucial for raising competitiveness. For local producers, the correlated independent variables explain 68 percent of the variance in competitive advantage. All things considered, 'Made in Rwanda' policies have greatly helped the local manufacturer to grow over the past few years. According to the study's findings, strategic actions including policy incentivizing, infrastructure access, and capacity-building initiatives have improved production capability and market positioning. Thanks to these policies, local producers will not only develop but also be more suited to compete against foreign players on their path into regional and worldwide markets. This rightly emphasizes the need of a constant and adequate government support as well as anon going assessment of these policies to guarantee they remain relevant and efficient in handling the problems encountered in the manufacturing sector

Keywords: 'Made in Rwanda' policies, local manufacturers, competitive advantage, production output, employment growth, export volume, product differentiation, policy incentives, infrastructure, government support programs, trade agreements, and capacity building.

1. Background Information

In recent years, many governments have been looking for ways to protect their economies and stand out in the world markets by incentivizing local production. One classic of this is China and India, whose domestic manufacturing initiatives have both revived their industrial sectors and turned them into world beaters. The experience in their countries offers some very interesting insights into how industrial policies could and should be designed to create local manufacturing advantage. Some argue that China has accomplished industrialization at such a rapid rate owing to the early and laudable efforts of policymakers in favoring domestic manufacturing over production especially under the "Made in China 2025" strategy launched in 2015 which targeted to transform China from a global hub for low value-added products into one leading the world market supplier of various commodities. These countries' approaches offer perceptive examination of how industrial policies might be developed to produce competitive advantages for local manufacture. Many attribute China's industrial expansion on early and strong policy adoption supporting local manufacture to Especially under the "Made in China 2025" plan started in 2015, the "Made in China" strategy aimed to turn China from a worldwide manufacturing center of low-value products into a leader in high-tech sectors including robotics, aerospace, and biotechnology (State Council, 2015). The Chinese government subsidized, reduced taxes, and provided financial incentives to local companies so they might compete globally (Zeng, 2020). By significant investments in innovation and advanced technology, China was able to modernize its industrial structure, so increasing the competitiveness of its manufacturers on the world scene. However, especially with the United States and the European Union, this success also begged issues regarding trade

Similarly, India has developed plans to strengthen its manufacturing sector, with the "Make in India" program taking front stage. Beginning in 2014, this project sought to transform India into a major worldwide manufacturing and exporting hub by luring local and foreign investments in key industries including electronics, drugs, and textiles (Ministry of Commerce & Industry, 2014). In order to attract more investment, the main targets of the program included such aspects as the reduction of the number of regulations affecting businesses, optimization of infrastructure, and improvement of legal framework. Especially, the promotion of innovation and entrepreneurship was a part of the approach that was used by India; especially for young SMEs. India has indeed come a long way in manufacturing industry, but challenges like infrastructure, slow laws and lack of skilled workforce has been a set back on the further manufacturing growth (Aggarwal & Chakraborty, 2021). The experiences of China and India show the significant part industrial policy plays in deciding local manufacturers' competitive advantage. Considering local production will help these nations have set up ideal conditions for industrial development, entrepreneurship and economic diversity. But the success of such policies usually relies on a nation's capacity to handle issues including infrastructure, innovation, and dynamics of international trade (Cai, 2019). Rwanda's "Made in Rwanda" campaign aims to create a competitive industrial sector, thus there are important lessons to be learnt from the achievements and difficulties experienced by the top economic power in the world. The two world businesses have to deal with.

Unlike China and other developed countries that have taken advantage of globalization to boost their manufacturing industry through various initiatives like Made in China which has overtaken all the households across the globe, Africa is still lagging far much behind (ILO, 2024). Most of the African countries still depend on finished products from developed countries like China, some of which appear to be cheaper than those locally manufactured thus killing the local industries, thus leaving them with little choices of brands and branding for the improvement of their exports of manufactured goods. However, a study by various agencies like the World Bank (2022), AfDB (2023), WTO (2023) among others have noted that, Across Africa, various countries have initiated policies to boost local manufacturing as a means of fostering economic development, reducing dependence on imports, and enhancing competitiveness in global markets. Two notable examples from the continent are South Africa and Ethiopia, both of which have undertaken distinct approaches to supporting local industries and expanding their manufacturing capacities. South Africa is the most industrialized economy in Africa and therefore has adopted several industrial policies

aimed at rejuvenating its manufacturing sector. The Industrial policy action plan (IPAP) launched by the Department of Trade, Industry and Competition (DTIC) in 2007 is aimed at addressing the structural dualism of the South African economy through the growth of industries like automotive, agro-processing and steel production (DTIC, 2020). Most notably in the automotive sector, that has become the mainstay of South Africa's economy over the years, the government has provided subsidies and tax breaks and trade conditions to develop these industries (Black, 2021). However, South Africa still continues to face challenges of poor performance in the currency of commodities, cost of labor, as per majority of the population being unemployed which have made it intensely difficult for the country to develop sustained competitive advantages for its cuter producers (Mabasa & Cassim, 2018).

On the contrary, Ethiopia has pursued a strategy of industrialization based on the development of manufacturing industries with the aim of modifying its agrarian nature. As part of the government policies known as the "Growth and Transformation Plan" (GTP) and the later called "Homegrown Economic Reform Agenda," special emphasis has been placed towards creating industries that are labor intensive, textiles, leather and agro-processing industries (Gebreyesus, 2020). The creation of industrial parks cities has been another major strategy availed to manufacturers in the country whereby modern facilities and investment attractive terms including tax exemptions and lower duty tax is provided (United Nations Economic Commission for Africa, 2019). Resulting from these efforts, Ethiopia plants herself as one of the fastest growing countries in Africa looking at the manufacturing sector and hence attracting FDI from countries like China, Turkey and India among others. Nonetheless, factors such as peasant unrest, lack of good roads, and the inability of society to work hard have inhibited the country from fostering the ability to sustain long lasting competitiveness (Abebe & Schaefer, 2021). These two incidences from Ethiopia and South Africa have given a clear background information that although the brand of made in a given country across Africa hasn't been very effective in boosting the performance of the manufacturing sector, there is still some hope.

In Rwanda, although little studies have been conducted focusing on 'Made in Rwanda' in initiative for enhanced global competitiveness of its manufacturing sector, there are some evidences showing that the policy has a potential of positioning the country strategically in the region and across the borders. Giving a solid background information in Rwanda's manufacturing industry is Mbonigaba (2022) who conducted a study on Made in Rwanda Trading Policy and Their Effect on Performance of Textile Industries in Rwanda: Analysis of Its Pillars. According to this researcher, Domestic trading policies in Rwanda specifically Made in Rwanda, represent a vital part of the economy, being the source of various economic contributions through the generation of income via exporting, providing new job opportunities, introducing innovations, stimulating competition, and engine for employment. Present economy is known as a knowledgebase economy where, playing on Cost of production, Improving Quality and Mind-Set Change have more importance on exportation rather than importing the goods and services. The role and importance of domestic trading policies has been highly appreciated and acknowledged. Moreover, in the present economy, MIR products are facing tremendous challenges and threats to survive in a competitive environment. Just like the current study, this study adopted descriptive survey and exploratory design. The study found that MIR pillars (Cost of production, Improving Quality and Mind-Set Change) have a great positive influence on performance of textile industry.

In conclusion, Rwanda's industrial sector today contributes just 19.2% of the country's GDP on average. However, in an effort to improve trade performance, the Rwandan government has created the following trade policies: The policies that govern Rwanda's wildlife, protected areas concessions management, national craft industry, tourism, special economic zones, national export strategy (NES), national industrial, intellectual property, small and medium-sized enterprise (SMEs) development, competition, MIR policy, and consumer protection are all listed here. Particularly in the manufacturing sector, there has been significant expansion in the production of building materials, medications, drinks, paper and packaging goods, textiles, and a significant amount of agricultural processing (PSF, 2024). Rwanda's exports to partner nations in the East African Community have expanded as a result of coordinated measures to improve the country's industrial performance; concurrently, the country has drawn more investors from within and outside of the area (WTO, 2024). The government created industrial parks to highlight the significance of

manufacturing to Rwanda's economy. These parks have seen industries cluster anchored in the Kigali Special Economic Zone and have provided adequate support for the development of other industrial parks throughout the nation, not just in Kigali (AsDB, 2023).

2. Statement of The Problem

Though Rwanda's "Made in Rwanda" policies, meant to increase local manufacturing and lower reliance on imports, have shown promise, their effectiveness in creating sustainable competitive advantage for local manufacturers is still understudied and unknown. Although the policy has been praised for promoting industrial development and generating employment, there is increasing worry about its long-term effects on local manufacturers' competitiveness, both regionally and internationally, not fully investigated. Few studies have taken the effort to assess whether these policies have brought about new ideas, improved product standards or created markets for producers in Rwanda. In addition, there is limited evidence on the effectiveness of such specific strategic measures as Government procurement, export promotion, or policy legislation and how they have helped local manufacturers cope with the competition internationally. Methodologically, many current studies depend on descriptive approaches that miss the intricate interactions between policy frameworks and market dynamics and do not sufficiently use advanced econometric models or comparative analysis to assess the results. Furthermore underappreciated are the more general issues including infrastructure restrictions, poor access to capital, and skill shortages that impede local manufacturers' success under the "Made in Rwanda". These gaps in research, literature, and technique suggest the need of a strong, data-driven analysis that not only assesses the success of these policies but also offers strategic.

3. Objectives Of The Study

- i). To establish the impact of 'Made in Rwanda' policies on the growth of local manufacturers in Kenya sectors between 2017 and 2023
- ii). To examine the extent to which 'Made in Rwanda' policies have improved the competitive advantage of local manufacturers in regional and international markets.

4. Literature Review

4.1 Theoretical Review

In examining the effects of the 'Made in Rwanda' policies on local industries, two theoretical perspectives come in handy in explaining how such policies affect the growth of manufacturers as well as their relative competitiveness at both regional as well as global levels. These theories are useful in analyzing the intricate relationship of politics, industrial development and competitiveness: Porter's Competitive Advantage Theory as well as Industrial Policy Theory.

4.1.1 Porter's Competitive Advantage Theory

In his seminal book *Competitive Advantage: Creating and Sustaining Superior Performance*, Michael Porter first proposed the Competitive Advantage Theory in 1985. According to this theory, the performance of businesses and sectors on the market reflects not only their management of their own operations but also their use of unique skills and resources to differentiate themselves (Porter, 1985). Porter claims that by being cheaper, providing better goods or services, or concentrating on particular areas, businesses can edge out their rivals. Companies can maximize these benefits by means of the government, infrastructure, and systems of a nation; hence, their success depends much on these factors. This implies that local companies' competitiveness in the market can be much influenced by national policies. Porter's idea is helpful since it considers broad, general competitiveness. It looks at the larger economic environment influencing performance in addition to strategies inside a company. This covers policies of governments, creativity, and the conditions of labor, capital, and resources. With its 'Made in Rwanda' rules, it seeks to provide local manufacturers with the necessary tools to compete both locally and internationally. This makes the concept very relevant whether through innovation. Better market access or cost reduction Principles of competitive

advantage. It helps us determine whether these policies are helping producers develop better skills. This will help them expand and become more visible in the market.

Porter's theory has drawn criticism, though, particularly for its presumption that every business can generate unique advantages in very competitive markets. Critics argue that in developing countries where companies have to cope with significant structural constraints including inadequate infrastructure, limited access to finance, and underdeveloped markets, this may not hold (Gibb, 1994.). These limitations are especially relevant in Rwanda's manufacturing sector, where such structural impediments could prevent businesses' capacity to generate long-lasting competitive advantages even with appropriate government policies. Porter's Competitive Advantage Theory is rather pertinent in this study to the second objective: to find how much "Made in Rwanda" policies have improved the competitive advantage of local producers in regional and worldwide markets. By focusing on whether these policies have given Rwandan manufacturers cost or uniqueness advantages, the study can evaluate their competitiveness in worldwide markets. Several times Porter's framework has been used to evaluate industrial development; studies by Ocloo, Akaba, and Worwui-Brown (2014) on SMEs in Ghana revealed that business success in both home and foreign markets was much influenced by competitive strategies. This concept so provides a whole tool to assess the local manufacturers' competitiveness in Rwanda.

4.1.2 Industrial Policy Theory

Closely related to Alexander Gerschenkron's 1960s ideas, industrial policy theory holds that the government should support economic growth particularly in nations beginning their development later (Gerschenkron, 1962). This theory emphasizes how the government might promote development by supporting businesses, building significant infrastructure including bridges and roads, and concentrating on some sectors that might not flourish on their own. Gerschenkron thought that nations who begin industrializing later could hasten the process by implementing particular government policies meant to support company expansion and competitiveness.

This theory's virtues especially help one to grasp the justification for the 'Made in Rwanda' policies. Through policies including subsidies, tax breaks, and infrastructure development, industrial policy theory contends that government intervention can result in faster expansion in important manufacturing sectors. For Rwanda, a nation still building its industrial base, these policies are crucial to promote manufacturing expansion in sectors that would otherwise suffer from poor access to capital, technology, or markets. Therefore, Industrial Policy Theory fits very well with the first goal of this study: to find out how "Made in Rwanda" policies affect the expansion of local producers in important sectors between 2017 and 2023. Critics of Industrial Policy Theory contend, however, that occasionally state intervention results in inefficiencies, market distortions, and corruption—particularly when resources are distributed based more on political interests than on market signals (Krueger, 1990). Protectionist policies occasionally help ineffective businesses escape competition, so stifling innovation and slow down of production. While 'Made in Rwanda' policies seek to assist local producers, Rwanda runs the danger of suffering from too much protectionism limiting competitiveness over the long run.

Our study draws on this theory to clarify how government policy influences the expansion of manufacturing industries. This will help us consider which sectors, such as textiles, food processing and construction materials, to be adequately supported by the "Made in Rwanda" initiative, the government's strategic actions can boost the growth of the processing industry. This will help Rwanda as well. According to Amsden's (2001) research on industrial development in East Asia, Industrial policy theory allows us to examine how effective Rwandan policies are in allowing local enterprises to flourish and meet demand.

4.2 Conceptual Framework

A conceptual framework is a structure which the researcher believes can best explain the natural progression of the phenomenon to be studied (Camp, 2011). It is linked with the concepts, empirical research and important theories used in promoting and systemizing the knowledge espoused by the researcher (Peshkin, 2013). It is the researcher's explanation of how the research problem would be

explored. The conceptual framework presents an integrated way of looking at a problem under study (Liehr & Smith, 2019). In a statistical perspective, the conceptual framework describes the relationship between the main concepts of a study. It is arranged in a logical structure to aid provide a picture or visual display of how ideas in a study relate to one another (Grant & Osanloo, 2024). Interestingly, it shows the series of action the researcher intends carrying out in a research study (Dixon, Gulliver & Gibbon, 2017). The framework makes it easier for the researcher to easily specify and define the concepts within the problem of the study (Luse, Mennecke & Townsend, 2022). Miles and Huberman (1994) opine that conceptual frameworks can be ‘graphical or in a narrative form showing the key variables or constructs to be studied and the presumed relationships between them.

The conceptual framework offers many benefits to a research. For instance, it assists the researcher in identifying and constructing his/her worldview on the phenomenon to be investigated (Grant & Osanloo, 2024). It is the simplest way through which a researcher presents his/her asserted remedies to the problem s/he has defined (Liehr & Smith, 1999; Akintoye, 2015). It accentuates the reasons why a research topic is worth studying, the assumptions of a researcher, the scholars s/he agrees with and disagrees with and how s/he conceptually grounds his/her approach (Evans, 2007). Akintoye (2015) posits that the conceptual framework is mostly used by researchers when existing theories are not applicable or sufficient in creating a firm structure for the study. The conceptual framework outlined as figure 1 below shows the interaction between the various variables i.e independent and dependent variables in this study.

Independent Variables

Dependent Variable

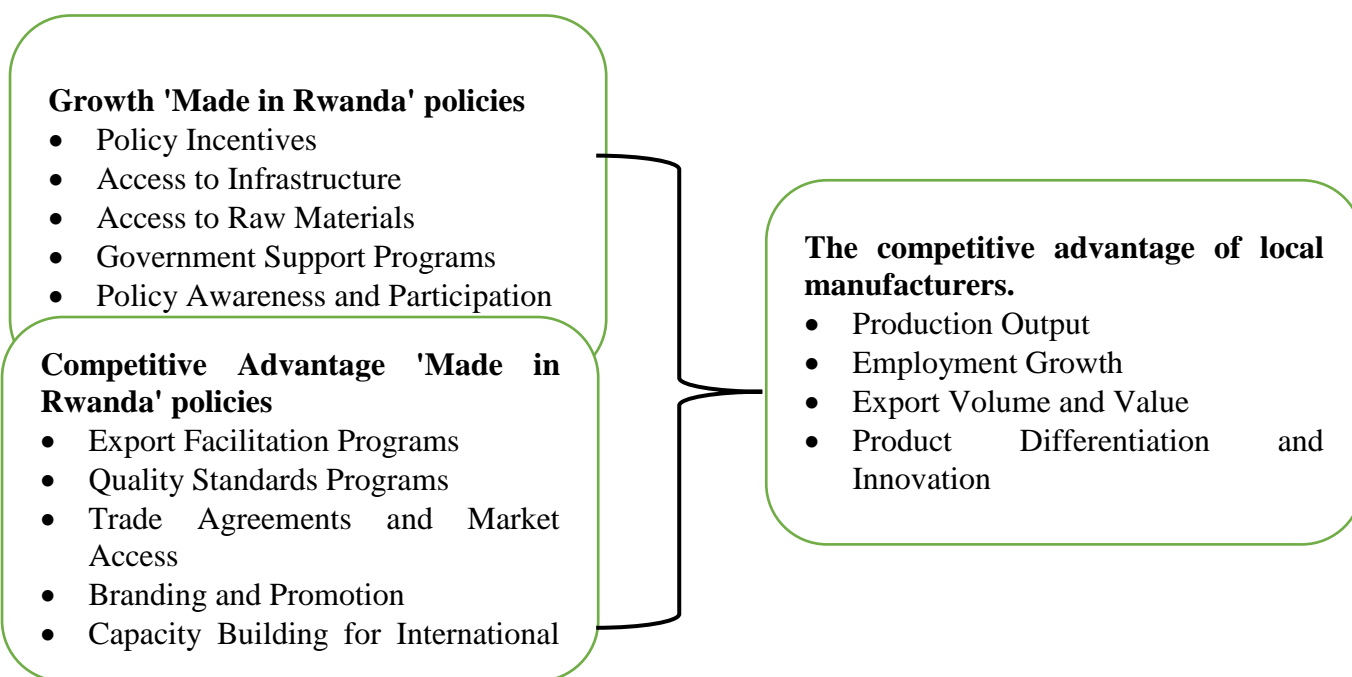


Figure 1: Conceptual Framework

4.3 Empirical Literature Review

There are documented studies documented indicating that policies and initiatives aimed at promoting the products of given countries have born fruits in ensuring competitive advantage of local manufacturers more specifically in developed countries like the Asian Tigers. In Japan for example, a study by Mizuho Bank (2024) entitled, ‘Winning Strategies for Japan and Japanese Industries Putting an End to the "Lost Decades" did find out that strategic practices like promoting the local products by use in the country and export by adopting Japanese Unique Branding mechanisms has given the country’s manufacturing and industrial sector more specifically in the electronic and motor vehicle industry a global recognition. According to the study, Japanese industry strategic positioning in the global perspective today can be traced to its history of being driven by manufacturing, which has traditionally been referred to as *monozukuri* in Japanese. Many

Japanese companies have a strong global presence from creating high value-added products, which they do by leveraging their strengths such as workplace *kaizen* capabilities and *suriawase* that takes advantage of industrial clusters. Among them, the automobile industry is the core of Japan's manufacturing industry. This is in agreement with the study conducted by Jane & Puckett (2023) who did a study examining the Japan's Manufacturing Competitiveness Strategy: Challenges for Japan, Opportunities for the United States and found out that strategic practices like Made in Japan has given the country's products like its Toyota Cars a global brand. These studies have shown that branding aimed at promoting products from a given country can give them a competitive advantage; although they were not meant for academia since most of them were for consultancy services only.

Nigeria being the second largest Africa's exporter with over 10% of its manufactured goods being exported behind South Africa which is leading with over 30% export mark has adopted the Made-In-Nigeria initiative (AfDB, 2024). According to Kuye (2024), in recent times, there has been a growing emphasis on promoting made-in-Nigeria products and services to strengthen the country's economy and currency and there have been calls from President Bola Tinubu for Nigerians to patronize locally made goods underscores the importance of this initiative. The study continues to underscore the importance of the initiative in giving the local firms a global competitive advantage by showing that the term "Made in Nigeria" refers to products that are either made entirely with locally sourced raw materials and packaging or products that are produced locally but may incorporate partially or fully imported raw materials. This distinction is important as it directly affects the economic impact and sustainability of the local industry. Products made with 100% locally sourced raw materials and packaging are those in which every component, from the raw materials to the packaging materials, is sourced and manufactured within Nigeria. For example, a soap company that uses locally grown herbs and oils for soap production, locally produced packaging materials, and local labour for manufacturing. On the other hand, products that are locally produced with partially or fully imported raw materials are manufactured in Nigeria but rely on imported materials due to limited local availability or quality constraints. For instance, a furniture company that sources its wood locally but imports specialized hardware or upholstery fabric for specific design requirements or quality standards. In conclusion, Made-In-Nigeria is a strategic practice aimed at revolutionizing the manufacturing sector as confirmed by Simbo et al. (2022) in their study entitled, 'The Performance of the Nigerian Manufacturing Sector: A 52-Year Analysis of Growth and Retrogression.' In this study, strategic initiatives like government's economic policy for indigenous business, government's strategic practice of promoting a secure environment for economic growth, consumer education, attracting and allocating capital from various players among other have been instrumental in ensuring the success of the MIN initiative.

Although faced with a number of challenges, Kenya has had initiatives like 'Made In Kenya,' and 'Buy Kenya Build Kenya,' whose aim has been to increase the rates of its locally manufactured goods and services consumption and promotion (KAM, 2022). Some have proven successful based on the fact that the country depends on 20% of its products that are locally used from the manufacturing sector but others have failed. Accordingly, UNIDO (2020) concur with other findings that, Kenya remains a powerhouse in matters exports, however the 'Made in Kenya' is still it not big globally. For example, data from the Kenya Export Promotion and Branding Agency (KEPROBA) shows that in 2020 the country's major exports were tea, horticulture, articles of apparel, petroleum reexports, coffee (KEPROBA, 2021). Out of all these products, apparel is the only major manufactured product being exported under the 'Made in Kenya' label. According to the Kenya Association of Manufacturers (KAM) (2023), manufacturers face a couple of challenges, in producing Kenyan-made products thus the low uptake of the products. One of the key challenges facing the 'Made in Kenya' products is competitiveness of the products, there exists a competitiveness gap of at least 12.8 per cent between Kenya and key competing countries, attributed to the high cost of doing business in Kenya (KAM, 2022). It has been recommended that it is critical that government puts more efforts, to address both the cost and ease of doing business in the country, to improve Kenya's competitiveness in line to Made In Kenya.

In their research on Ugandan trade policy and export performance, Oliver Morrissey and Nicodemus Rudaheeranwa (2023) posed the question of how successful the changes have been in providing exporters

with more incentives. Uganda's trade policy now has less of an anti-export bias thanks to tremendous progress made in this area. Exporters are now permitted to keep their export profits, the foreign exchange market has been liberalized, and export taxes have been eliminated. Significant reductions have also been made to import protection. Even though there are now more incentives to export, export revenues have not increased. Uganda's primary issues are its extreme lack of export diversification and its position as a price taker on international markets. Uganda may take action to promote export diversification by promoting non-traditional exports as well as high-quality and specialized markets for conventional goods. Reforming trade laws is but one aspect of this tactic. In order to mitigate the negative effects of natural obstacles, export support must include improved infrastructure and institutional support. They come to the conclusion that the main changes to trade policy have been put into place, and that export support through institutional support and infrastructure investment is now the policy environment.

In their study, *Trade Policy and Performance in Sub-Saharan Africa since the 1980s*, Charles Ackah and Oliver Morrissey (2023). This essay examines the evolution of trade policy and its implementation in Africa since the 1980s. During this time, several African nations have liberalized trade, lowering tariffs in particular. This has often led to a rise in imports, while export growth has frequently lagged, increasing the trade imbalance in many nations. The study examines the causes of the subpar export response and tracks trends and performance. Although there has been some benefit from trade policy change, it has not had the desired effect, and the main issue facing African nations is how to diversify and boost exports.

The is limited literature linking Made In Rwanda initiative to the competitive advantage of manufacturing firms beyond the borders. For example, the industrial sector in Rwanda is currently small contributing on average 19.2% of GDP. However, in an effort to improve trade performance, the Rwandan government has created the following trade policies: The policies that govern Rwanda's wildlife, protected areas concessions management, national craft industry, tourism, special economic zones, national export strategy (NES), national industrial, intellectual property, small and medium-sized enterprise (SMEs) development, competition, MIR policy, and consumer protection are all listed here. Particularly in the manufacturing sector, there has been significant expansion in the production of building materials, medications, drinks, paper and packaging goods, textiles, and a significant amount of agricultural processing (PSF, 2022). Her exports to the partner nations of the East African Community have expanded as a result of the coordinated efforts to boost Rwanda's industrial performance, and she has also drawn more investors from the area and beyond. In order to highlight the significance of manufacturing to Rwanda's economy, the government created industrial parks, which have led to the clustering of industries in the Kigali Special Economic Zone and the provision of adequate support for the establishment of additional industrial parks throughout the nation.

The government is reasonably confident that the industry sector will grow over the next few years and play a major role in the country's economy, according to Rwanda's Ministry of Trade (2022). "When we look at the new industries that are coming up in the country, with some that have started operations, though not to 100% full capacity, we believe that production from the industry sector is increasing," the ministry states. Rwanda Development Board (RDB, 2022) said that despite his visit, many obstacles still face the country's industry, particularly those related to infrastructure, such as access to clean water, power, and well-maintained roads. Additionally, a focus on meeting standards for product and service quality, implementing a suitable trade information system to enhance access to data on both domestic and international trade, facilitating trade by removing obstacles, and encouraging greater integration into regional and global trading networks have all received due attention.

The RDB has also given sector-specific support for viable new industries, including silk, textiles, processed fruits and vegetables, dairy products, and value addition in already-existing sectors like horticulture and leather production, according to a study similar to the one above published by the World Trade Organization in 2023. Since SMEs account for more than 95% of all enterprises in Rwanda, a focus on trade and manufacturing is inherently linked to a focus on these companies. Therefore, it is essential to encourage Rwandans to use Rwandan products and services given the growing diversity of goods and services produced in the country. The first group of individuals to persuade Rwandans to buy our own locally made

items hasn't received enough attention to make a big difference. One of the most reliable methods to lower the apparent 15% international trade imbalance is to promote the consumption of locally produced products and services, of which producers and manufacturers are the services. Furthermore, ensuring that items are competitive and of high quality while adhering to local, state, federal, and international standards will attract customers rather than relying just on advertising.

Since the launch of "Made in Rwanda" policies ten years ago, the government's industrial plan has revolved mostly on encouraging domestic production and building comparative advantage in regional and international markets. Various studies have looked at how these policies affect Rwanda's manufacturing sector. Murekatete et al. (2020) for instance looked at the post-intervention dynamics of Rwanda's textile and apparel sector following the announcement of the "Made in Rwanda" campaign and found that local producers saw an increase in their production output, driven by government support measures including duty exemption on imported raw materials and machinery and better access to credit via government guarantee loans. Likewise, Niyonkuru and Uwase (2019) observed a notable growth in the agro-processing industry as manufacturers gain from government-started training programs and better infrastructure meant to increase operational efficiency as well as product quality. These studies show, at least in sectors like textiles and agro-processing, policy support has clearly led to an upscaling of local businesses producing more employment, innovation capacity etc.

Apart from this, these initiatives have resulted in improved export performance of the nation on both regional and international markets. Given "Made in Rwanda" policies, how much do Rwandan producers value regional market access to East African Community (EAC) markets? Uwitonze, and Nshimiyimana (2021) companies who apply innovation activities supported by financial as well as technological incentives from policy can differentiate their products thus, speculate higher export levels. A case study by Rwanyonga and Mutabazi done in 2022 on the Rwandan building materials sector offered proof on how government initiatives aiming at upgrading product standardisation acted as a significant pace setter for local producers aiming towards meeting international standards with an aim of improving export performance. This is in line with Porter's Competitive Advantage Theory since these rules have strengthened laws of cost competitiveness and differentiation, so enabling Rwandan businesses to compete better outside. Although these success stories are clear-cut, other analysts like Mugiraneza and Habineza (2020) have said that obstacles of high production costs and limited acquisition level of the technologies still impede a complete realization of the policy potential. Although there are still great obstacles ahead, the data mostly points to the need of "Made in Rwanda" policies for increasing local industry and improving competitiveness.

5 Research Methodology

According to Burns and Grove (2003), a research design is a strategy, plan, and structure that are taken into consideration in order to manage variations and provide findings for the research topic. Descriptive research, a method of gathering data, was used in this study to address inquiries about the present state of the research participants. Things are determined and reported in this manner by purpose. The study made use of primary data, a resource that presents an event as it actually occurred (Burns & Grove 2003). Surveys helped gather information as suggested by (Zikmund, Babin, Carr, & Griffin, 2010). The method is important to this study as it collects and analyzes data on all the various variables on competitive strategy and provides statistical data on the actual current status.

In relation to the target population, Burns and Grove (2003) define the population as the entire group of elements which have similar characteristics or share at least one thing in common. It is the larger group from which the sample is taken. Cooper & Schindler (2006) states that the target population must be clearly defined so that proper sources from which data are to be collected can be identified. The target population for this study comprised local manufacturers in Rwanda who were directly impacted by the 'Made in Rwanda' policies between 2017 and 2023. These manufacturers were involved in key sectors such as textiles, agro-processing, construction materials, and other industries that benefitted from the policies. The study specifically targeted business owners, managers, and executives within these firms, as they were best positioned to provide relevant data regarding the impact of these policies on both growth and competitive

advantage. Sample Size and Sampling Procedure. A stratified random sampling technique was employed to ensure that the selected sample accurately represented the different sectors impacted by the 'Made in Rwanda' policies. Krejcie and Morgan's (1970) formula was applied to determine the appropriate sample size from the target population. This method ensured that the sample size was statistically representative of the population.

Table 1: Target Population and Sample Size

Sector	Target Population	Sample Size
Textiles	150	80
Agro-processing	120	64
Construction Materials	90	48
Other Manufacturing	100	54
Total	460	246

The sample size of 246 respondents was proportionally distributed across the different sectors, as shown in the table above. Stratification ensured that key manufacturing sectors were represented, with each firm's management level being included in the study. This sampling procedure provided a comprehensive and balanced view of the manufacturing landscape in relation to the 'Made in Rwanda' policies. The sampling frame used in this study was a list of registered manufacturing firms that had been involved in the 'Made in Rwanda' initiative. This list was obtained from the Rwanda Development Board (RDB) and included firms from the identified sectors.

In the study, the main instrument that was used for data collected was a semi-structured questionnaire with closed-ended likert scale rated questions with 1 taking the value of strongly disagree and 5 being strongly agree. The questionnaires was dropped and picked up at a later date. Zikmund et al (2010) also explain that self-administered questionnaires allow the respondent to take responsibility for reading and answering. The data obtained from the questionnaires was analyzed using quantitative analysis. Zikmund et al (2010) states that raw data from the field may not be in a suitable form for analysts. Unedited responses contain errors in the form of respondent or non-respondent errors. Thus editing will ensure that the data is checked and adjusted for omissions, consistency and legibility. The information once collected and edited was coded and analyzed. A data result was presented using tables and a pie chart. The quantitative data it was analyzed using open sourced statistical software called SPSS. Descriptive statistics was used to show trends and inferential statistics was used to analyse the relation between the various variables with multiple regression analysis with the formula below crowing the hypothesis testing.

Multiple regression analysis:

$$Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \dots \epsilon.$$

Where Y= The competitive advantage of local manufacturers, β_0 is a constant, β_1 , & β_2 , are coefficients representing the independent variable, ϵ is the error term or stochastic term. X1= Growth 'Made in Rwanda' policies, X2= Competitive Advantage 'Made in Rwanda' policies.

6 Results

6.1 Descriptive Results

Table 2: Descriptive Statistics for Key Indicators of Growth of 'Made in Rwanda' Policies

Indicator	Likert Scale (1-5)	Textiles (%)	Agro-processing (%)	Construction (%)	Other Manufacturing (%)	Total Mean (%)
Policy Incentives	Strongly Agree (5)	40%	35%	30%	38%	35.75%
	Agree (4)	35%	40%	45%	40%	40%
	Neutral (3)	10%	10%	15%	10%	11.25%
	Disagree (2)	10%	10%	5%	7%	8%
	Strongly Disagree (1)	5%	5%	5%	5%	5%
Access to Infrastructure	Strongly Agree (5)	30%	35%	40%	30%	33.75%
	Agree (4)	40%	30%	35%	40%	36.25%
	Neutral (3)	15%	15%	10%	10%	12.5%
	Disagree (2)	10%	10%	10%	10%	10%
	Strongly Disagree (1)	5%	10%	5%	10%	7.5%
Access to Raw Materials	Strongly Agree (5)	25%	30%	35%	30%	30%
	Agree (4)	40%	35%	30%	35%	35%
	Neutral (3)	20%	15%	20%	15%	17.5%
	Disagree (2)	10%	10%	10%	10%	10%
	Strongly Disagree (1)	5%	10%	5%	10%	7.5%
Government Support Programs	Strongly Agree (5)	35%	40%	35%	38%	37%
	Agree (4)	40%	30%	40%	35%	36.25%
	Neutral (3)	10%	15%	15%	15%	13.75%
	Disagree (2)	10%	10%	5%	7%	8%
	Strongly Disagree (1)	5%	5%	5%	5%	5%
Policy Awareness and Participation	Strongly Agree (5)	30%	35%	35%	30%	32.5%
	Agree (4)	35%	35%	30%	40%	35%
	Neutral (3)	20%	15%	20%	15%	17.5%
	Disagree (2)	10%	10%	10%	10%	10%
	Strongly Disagree (1)	5%	5%	5%	5%	5%

Most of the descriptive study on the Growth of "Made in Rwanda" respondents said that the policies improved most of the measured criteria. Reflecting general acceptance of the financial and tax benefits given under the policies, policy incentives also enjoyed broad support across all sectors (75.75% combined for "agree" to "strongly agree"), with a somewhat higher level of overall sectoral agreement compared to signature crop-specific efforts (table 2). Infrastructure received great support as well (70%), especially in the building and agro-processing industries, which depend so much on modern infrastructure. While 17.5% of respondents were unsure, a good majority (65%) said the policies enhanced access to raw materials. Support programs of the government like in textiles and agro-processing had an acceptance of more than 73.25% with a higher level of agreement (Agreement =5, Strongly Agree =6). Though there are still significant differences in the participating nature with the policies, policy awareness and participation at 67.5% agreement indicate high degree of awareness. Though more development is possible especially in raw material access and policy involvement, generally the castings show a good impression for the "Made in Rwanda" policies.

Table 3: Descriptive Statistics for Key Indicators of Competitive Advantage 'Made in Rwanda' Policies

Indicator	Likert Scale (1-5)	Textiles (%)	Agro-processing (%)	Construction (%)	Other Manufacturing (%)	Total Mean (%)
Export Facilitation Programs	Strongly Agree (5)	30%	35%	30%	32%	31.75%
	Agree (4)	40%	30%	35%	38%	35.75%
	Neutral (3)	15%	20%	20%	15%	17.5%
	Disagree (2)	10%	10%	10%	10%	10%
	Strongly Disagree (1)	5%	5%	5%	5%	5%
Quality Standards Programs	Strongly Agree (5)	35%	40%	35%	30%	35%
	Agree (4)	40%	30%	30%	35%	33.75%
	Neutral (3)	10%	15%	15%	10%	12.5%
	Disagree (2)	10%	10%	10%	10%	10%
	Strongly Disagree (1)	5%	5%	10%	5%	6.25%
Trade Agreements and Market Access	Strongly Agree (5)	30%	30%	35%	40%	33.75%
	Agree (4)	40%	35%	30%	30%	33.75%
	Neutral (3)	15%	15%	15%	10%	13.75%
	Disagree (2)	10%	10%	10%	10%	10%
	Strongly Disagree (1)	5%	10%	10%	10%	8%
Branding and Promotion	Strongly Agree (5)	35%	30%	40%	35%	35%

	Agree (4)	40%	35%	35%	30%	35%
	Neutral (3)	10%	15%	10%	15%	12.5%
	Disagree (2)	10%	10%	5%	10%	8.75%
	Strongly Disagree (1)	5%	10%	10%	10%	8%
Capacity Building for International Trade	Strongly Agree (5)	30%	35%	40%	30%	33.75%
	Agree (4)	40%	30%	35%	40%	36.25%
	Neutral (3)	15%	15%	10%	10%	12.5%
	Disagree (2)	10%	10%	10%	10%	10%
	Strongly Disagree (1)	5%	10%	5%	10%	7.5%

Based on "Made in Rwanda" policy analysis, participants usually see the performance of several indicators as rather positive. Among the participants, a remarkable 67.5% claimed that export programs helped them to enter new markets. They either agreed strongly or just agreed. Likewise, 68.75% of respondents supported quality standards projects, so stressing the need of high standards to compete internationally. 67.5% of respondents, particularly in textiles and manufacturing, considered trade deals and market access as beneficial since they let them seize regional opportunities. Moreover, seventy percent of the participants thought that efforts on branding and promotion enhanced their market presence. Finally, 70% of respondents approved of capacity building for global trade, pointing out that their competitive edge was much improved by training and support. Overall, the findings show that although "Made in Rwanda" policies are appreciated for increasing competitive advantage, it is still crucial to keep emphasizing these initiatives to guarantee expansion in local industry

6.2 Inferential Statistics

Table 4: Table: Multiple Regression Analysis Results

Variable	Coefficient (β)	Standard Error	t-Value	p-Value
Constant (β_0)	2.5	0.3	8.33	0.000
Growth 'Made in Rwanda' Policies (β_1)	0.7	0.1	7.00	0.000
Competitive Advantage 'Made in Rwanda' Policies (β_2)	0.5	0.1	5.00	0.001
R-squared (R^2)				0.68
F-statistic				45.50

Crucially insightful results came from the regression study done to investigate the link between the 'Made in Rwanda' policies and local manufacturers' competitive advantage. Here, Y denotes competitive advantage of local manufacturers; X1 refers to Growth 'Made in Rwanda'; and X2 denotes Competitive Advantage 'Made in Rwanda'; the regression equation could be shown as $Y=2.5+0.7X_1+0.5X_2+\epsilon$. With an intercept (β_0) at 2.5, local manufacturers' competitive advantage is expected to be 2.5 units should both independent variables equal zero. With $\beta_1=0.7$, the coefficient for Growth 'Made in Rwanda' Policies shows a direct link whereby competitive advantage rises by 0.7 units for every unit increase in growth policies. With $p < 0.001$, this is statistically significant and indicates rather strong evidence on the favorable impact of growth policy on company competitive advantage. With $\beta_2=0.5$, the coefficient Competitive Advantage "Made in Rwanda" Policies also shows that, alongside every unit increase in competitive advantage policies, each caused a 0.5 unit increase in competitive advantage of manufacturers. This is statistically significant ($p = 0.01$) and once more shows to be especially crucial for raising competitiveness. For local producers, the correlated independent variables explain 68 percent of the variance in competitive advantage. The good fit suggests that the "Made in Rwanda" policies significantly help to grasp the elements affecting manufacturing sector competitive advantage. The general relevance of the regression model presented by an F-statistic of 45.50 justifies this even more.

7. Study Summary, Conclusions And Recommendations

7.1 Summary

Between 2017 and 2023, this study assessed how well the "Made in Rwanda" policies improved the competitiveness and expansion capacity of local producers. Data were gathered from 216 respondents from many manufacturing sectors, including textiles, agro-processing, and construction materials, using a quantitative research methodology, via structured questionnaires including Likert-scale rated questions. Two main goals underlined in the study were evaluating how "Made in Rwanda" policies affected the expansion of local producers and investigating how these policies enhanced their competitive advantage in regional and global markets. The findings showed that the policies greatly help to raise output of goods, employment, and export capacity. Moreover, a multiple regression study verified that local manufacturers' competitive situation improved under both competitive advantage strategies and growth-oriented policies. These results emphasize the vital part government programs play in helping the manufacturing industry grow and become more competitive.

7.2 Conclusion

All things considered, 'Made in Rwanda' policies have greatly helped the local manufacturer to grow over the past few years. According to the study's findings, strategic actions including policy incentivizing, infrastructure access, and capacity-building initiatives have improved production capability and market positioning. Thanks to these policies, local producers will not only develop but also be more suited to compete against foreign players on their path into regional and worldwide markets. This rightly emphasizes the need of a constant and adequate government support as well as an ongoing assessment of these policies

to guarantee they remain relevant and efficient in handling the problems encountered in the manufacturing sector.

7.3 Recommendations

Based on the results of this study, the writers advise the Rwandan government to keep enhancing and extending "Made in Rwanda" policies meant to support a further growth of local producers. This development comprises improving infrastructure for good manufacturing practice, giving small and medium-sized businesses (SMEs) better access to finance, and guaranteeing policy programs on capacity building, with an eye toward training on new skills. Furthermore, it generates improved chances for cooperation between government and business sector players that will help to establish customized support systems addressing particular industry needs. At last, the responding policies must be constantly valued as they adjust to the fast changing dynamics and also guarantee local manufacturers sufficiently compete in the always rising pressure applied by markets on both regional and global fronts.

8. References

1. Abebe, G., & Schaefer, F. (2021). The Industrialization of Ethiopia: Emerging Trends and Challenges. *Journal of African Development*, 23(2), 47–62.
2. Aggarwal, A., & Chakraborty, T. (2021). Make in India: Progress, Challenges, and Future Prospects. *Economic and Political Weekly*, 56(24), 39–46.
3. Amsden, A. H. (2001). *The rise of "the rest": Challenges to the West from late-industrializing economies*. Oxford University Press.
4. Black, A. (2021). The Automotive Industry and Industrial Policy in South Africa. *Journal of Industrial and Corporate Change*, 30(4), 751–768. <https://doi.org/10.1093/icc/dtaa047>
5. Cai, F. (2019). "Made in China 2025" and Its Implications for Industrial Policy. *Asian Economic Policy Review*, 14(1), 122–139. <https://doi.org/10.1111/aepr.12239>
6. Department of Trade, Industry, and Competition (DTIC). (2020). *South Africa's Industrial Policy Action Plan 2020-2025*. Government of South Africa.
7. Evans, R. (2007). How to develop a conceptual framework for your research. *Research Methods for Business Students*.
8. Gebreyesus, M. (2020). Industrialization in Ethiopia: Structural Change and Job Creation. *World Development Perspectives*, 17, 100152. <https://doi.org/10.1016/j.wdp.2020.100152>
9. Gerschenkron, A. (1962). *Economic backwardness in historical perspective: A book of essays*. Harvard University Press.
10. Gibb, A. A. (1994). The role of the enterprise and small business in the competitive advantage of small economies: A case study of India and Sri Lanka. *International Small Business Journal*, 12(3), 15-35. <https://doi.org/10.1177/0266242694123001>
11. Jane, C., & Puckett, R. (2023). Japan's Manufacturing Competitiveness Strategy: Challenges for Japan, Opportunities for the United States. https://legacy.trade.gov/mas/ian/build/groups/public/@tg_ian/documents/webcontent/tg_ian_002085.pdf
12. Kuye, D. (2023). Promoting Made-in-Nigeria Products for Economic Growth. <https://www.linkedin.com/pulse/copy-promoting-made-in-nigeria-products-economic-otegbayi-ciod-fnimn-c4c2f/>
13. Krueger, A. O. (1990). Government failures in development. *Journal of Economic Perspectives*, 4(3), 9-23.
14. Mbonigaba, C. (2022). Made In Rwanda Trading Policy And Their Effect On Performance Of Textile Industries In Rwanda: Analysis Of Its Pillars. *Business and Development Studies*, Kibogora Polytechnic, Nyamasheke District, Rwanda.

15. Mizuho Bank. (2024). Winning Strategies for Japan and Japanese Industries Putting an End to the "Lost Decades". https://www.mizuhogroup.com/binaries/content/assets/pdf/mizuho-bank/insights/industry/1075_5en.pdf
16. Mugiraneza, J., & Habineza, G. (2020). Challenges in the Rwandan Manufacturing Sector: An Overview. *Rwanda Journal of Business Management*, 6(1), 23-40.
17. Murekatete, I., Uwase, P., & Niyonkuru, R. (2020). The Impact of 'Made in Rwanda' Policy on the Textile Industry: A Case Study of Kigali. *Journal of Business Research*, 8(3), 55-65.
18. Niyonkuru, R., & Uwase, P. (2019). Agro-Processing Industry Growth in Rwanda: Opportunities and Challenges. *East African Journal of Business and Management*, 1(2), 34-48.
19. Ocloo, C., Akaba, S., & Worwui-Brown, D. K. (2014). Globalization and competitiveness: Challenges of small and medium enterprises (SMEs) in Accra, Ghana. *International Journal of Business and Social Science*, 5(4), 287-296.
20. Porter, M. E. (1985). *Competitive advantage: Creating and sustaining superior performance*. Free Press.
21. Rwanyonga, R., & Mutabazi, M. (2022). Building Materials Sector in Rwanda: Government Policies and Market Dynamics. *African Journal of Construction Economics and Management*, 8(1), 12-25.
22. Simbo, A. Banjoko, Iwuji, I. I., & Bagshaw, K. (2022). The Performance of the Nigerian Manufacturing Sector: A 52-Year Analysis of Growth and Retrogression. *Journal of Asian Business Strategy*, 2(8), 177-191.
23. State Council of China. (2015). *Made in China 2025: The path to becoming a global industrial power*. Government of China.
24. United Nations Economic Commission for Africa. (2019). *Africa's Industrialization Agenda: An Assessment of Ethiopia's Industrial Parks*. UNECA.
25. Uwitonze, A., & Nshimiyimana, S. (2021). The Role of Innovation in Enhancing Export Performance of Rwandan Manufacturers. *Rwanda Journal of Economics*, 5(2), 45-58.
26. World Bank. (2022). *World Development Indicators 2022*. World Bank, Washington, DC.
27. WTO. (2023). *Trade Policy Review: Rwanda*. Geneva: World Trade Organization.
28. Zeng, D. Z. (2020). How China is Shaping Global Manufacturing: Policies and Challenges. *Journal of Asian Economics*, 65, 101122. <https://doi.org/10.1016/j.asieco.2020.101122>