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Implications of Macroeconomic Policy Reforms on the North-South Global Regime

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Abstract

The agricultural sector continues to play a critical role for development, especially in developing countries where the majority of the population is involved in agriculture and derives a large portion of its income from it. The structure of agricultural production however, has drastically changed in the last three decades, especially after the implementation of structural adjustment programs in developing countries following the oil crisis in 1979. Since the 1980s, almost 100 countries have been forced to implement such policies, which included the liberalization of markets and the conversion of domestic agricultural production for exports. Trade liberalization and overall globalization however, carry with them tremendous challenges for the rural populations in least developed countries. Although trade liberalization could potentially offer enormous opportunities for countries in the developing world, this potential is undermined by the policies and guidelines of the international trade regime. This paper therefore examines how the IFIs and the WTO have shaped the international and global framework that influences trade and production and its effects on agriculture.

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Dedication

I would like to dedicate this project to my loving parents, brother, and best friend for always believing in me no matter what. Thank you for your constant support and patience, especially over the past couple of weeks.

Acknowledgments

I would like to thank my advisor Kris Feder for her constant support and positivity throughout the past semester. Her confidence in me gave me great strength to push through until the very end. I would also like to extend my gratitude to my past and present professors for their motivation and inspiration.

1. Introduction

The agricultural sector continues to play a critical role for development, especially in developing countries where the majority of the population is involved in agriculture and derives a large portion of its income from it. The structure of agricultural production however, has drastically changed in the last three decades, especially after the implementation of structural adjustment programs in developing countries following the oil crisis in 1979. Since the 1980s, almost 100 countries have been forced to implement such policies, which included the liberalization of markets and the conversion of domestic agricultural production for exports. Trade liberalization and overall globalization however, carry with them tremendous challenges for the rural populations in least developed countries. Potential economic and social development that could be prompted by the participation in international trade is greatly undermined by the rules and regulations of the international global framework that influences trade and production in the agricultural sector, particularly in developing countries. The International Monetary Fund (IMF), International Bank for Reconstruction and Development (World Bank), and World Trade Organization (WTO) are the most visible and influential pillars of this regime. Hence, the purpose of this paper aims to outline the institutional basis of global-policy making, looking at the international financial institutions (IFIs), which include the World Bank and the IMF, and the effects of their structural adjustment programs on agricultural development performance in developing countries. Furthermore, the WTO's rules and implications for developing countries will also be discussed.

Chapter two of this paper begins with an introduction of the North-South global regime. It introduces the reader to the existing North-South imbalances in the world trading system, which reflect the asymmetrical power relations in the global, political, and economic spheres. These imbalances result in outcomes that are particularly unfavorable for developing nations. A brief overview of the International Financial Institutions (IFIs) and their goals in terms of structural adjustment programs will also be offered. The WTO is also introduced and discussed, as it is often grouped together with the IFIs given their common policy goals. Chapter three presents a literature review on the role of agriculture in development. Chapter four provides an existing case study on Malawi that examines the effects of structural adjustment programs in the first decade of implementation, starting from the early 1980's. This case study illustrates Malawi as a country that underwent adjustment without any concrete structural transformation. Most importantly, it was found that the fundamental features of Malawi's agriculture sector, the backbone of the economy and the main source of income and employment for numerous workers, lacked any significant alterations in the decade following initial implementation. The rest of the conclusions are presented and followed by Chapter 5, which proposes alternative policy reforms based on the poor results of economic reform in Malawi. These policy suggestions prioritize smallholder farmer interests as they were hardest hit by the impacts of structural adjustment. Alternative forms of production systems are also provided, to a certain extent, which take into account the environmental aspects of food production.

2. North-South Global Regime

Today, after supposed ‘advances’ in human affairs, the North-South divide still remains a permanent characteristic of international economic relations. The North-South divide generally refers to the socio-economic and political division that exists between the economically backward, developing counties, or “the South”, and the more affluent developed ones, referred to as “the North”. This division is not primarily defined by geography although most nations that make up “the North” are in fact situated in the Northern Hemisphere. This exemplifies a major contradiction in the notion of a unified world economy as it points to a phenomenon of separation where regions of wealth and prosperity are disconnected from a mounting global ghetto of economic and social deprivation. The difference in wealth, technological advancement, political stability, and the size of the agricultural sector are just a few of the characteristics that point to the gap between the North and the South. In examining the relationship between the global North and South, it is of vital importance to call attention to the continued dominance the global North has in directing politics but most importantly, international trade in the global South. It has become conventionally recognized that trade imbalances don’t only originate from domestic practices, but most importantly from foreign agricultural policies, however, their degree of influence remains ambiguous. Chapter two will offer an introduction of the different institutions that have the power to largely influence the direction of agricultural policies that ultimately shaped the nature of the relationship between the global North and South.

In order to understand the motives behind these institutions, it is important to first understand the international and global framework in which they exist.

2.1. Internationalization, Globalization, and Free Trade Agreements

Internationalization is a term in economics that is used to refer to the rising significance of relations between nations worldwide: international trade, alliances, protocols, international treaties, etc. The essential component of community and policy remains the nation, even as relations amongst countries, as well as between individuals across nations, become increasingly important and necessary.[1]

Globalization speaks to global economic integration of many previously national economies into one global economy through the process of free trade. National boundaries become completely absorbent in regards to goods and capital and progressively absorbent in regards to people that in this setting are viewed as providers of cheap labor or in some cases cheap human capital. In such a way, national boundaries are removed for economic motives. Thus, globalization is the economic integration of the world, but what exactly is referred to here as integration? Daly and Farley break down this word and first examine the definition of "integer", which means one, complete, or whole. Integration is a process that extends to something more than interdependence. It refers to the act of linking separate but associated units into a single whole. Since there can only exist one whole that is comprised of integrated parts, or countries in this case, it follows that global economic integration rationally suggests national economic disintegration.[2] Different segments are

[1] Herman E. Daly and Joshua Farley, "International Trade," In *Ecological Economics: Principles and Application* (Washington, D.C: Island Press, 2011), 363.
[2] Ibid.

isolated from their unique national context and are disintegrated only to be reintegrated into this entirely new whole, the globalized economy. There is no doubt that the world is indeed becoming ever more globalized.[3] The current form that globalization as well as free trade and open markets have taken are experiencing much criticism. The primary reason is because of the interests of the powerful, developed nations and institutions that have the power and money to manipulate the terms of world trade.

Free trade agreements are a frequently used tool for development, often encouraged as a means of eradicating poverty and increasing the standard of living in the developing world, however, the agricultural sector of the countries in the South is routinely affected by such policies. With a large percent of the South involved in either subsistence or commercial agricultural practices, the removal of barriers for imports allows for foreign agribusiness imports to sell at much lower prices than local ones, putting farmers out of business. The effects of such policies, specifically Structural Adjustment Programs (SAPs) will be further discussed in Chapter 4.

2.2. The Bretton Woods Institutions

After the period that saw an interlude of depression and protectionism following the Second World War, organizations and international regulations began to support economic integration on a worldwide level.[4] The foundation of this collaboration was based upon the Bretton Woods Agreement of 1944. This was centered on a meeting consisting of 43 countries that agreed to create a family of institutions to address critical

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[3] "Free Trade and Globalization," - Global Issues, accessed May 04, 2016, http://www.globalissues.org/issue/38/free-trade-and-globalization.

[4] Walden Bello, "Capitalism Versus the Peasant," In *The Food Wars*, 24, London: Verso, 2009.

issues in the international financial system, encouraging international economic cooperation, with the objective of reconstructing the postwar economy in hopes of developing a more stable and prosperous one. With the U.S. being the leading economy of the world, the dollar became the monetary base of the financial system and the Bretton Woods System was designed so that countries had fixed currency exchanges in relation to the U.S. dollar, which in turn was set to the gold standard.

The international diplomats and economists, led by John Maynard Keynes of England, and U.S. Secretary of the Treasury Henry Morgenthau and his aide Harry Dexter White were successful in negotiating the charter that set up the Bretton Woods Institutions consisting of the International Monetary Fund (IMF) and the International Bank for Reconstruction and Development (World Bank). These two institutions are made up of member states. Their foundation is rooted upon the central model of internationalization, and not on the model of globalization. The goal of the World Bank was to assist in improving the capability of impoverished and war-torn countries to trade by lending money to be used for reconstruction and development projects. It concentrated on long-term lending (the capital account). The IMF on the other hand was there to help construct a climate stable enough for international trade by balancing out its representatives' monetary policies and upholding exchange stability. It focused on short term balance-of-payments financing (the current account of the balance of payments). [5]A combination of the two seemed like a suitable source of temporary financial assistance by offering support to nations struggling with their balance of payments. When initially established, these institutions marked the end of an era of economic depression, followed by war and

[5] Herman E. Daly and Joshua Farley, "International Trade," In *Ecological Economics: Principles and Application* (Washington, D.C: Island Press, 2011), 365

destruction, and symbolized hope towards a new age of peace and production. This hopeful attitude is captured by Morgenthau, who envisioned "a dynamic world economy in which the people of every nation will be able to realize their potentialities in peace… and enjoy, increasingly, the fruits of material progress on an earth infinitely blessed with natural riches". She continues to state, "Prosperity has no fixed limits. It is not a finite substance to be diminished by division". [6]

The unspoken objectives of these institutions however, were to integrate the elites of all countries into the capitalist world system of rewards and punishment. [7] The billions of dollars controlled by the World Bank and IMF have neglected the national majorities of countries and instead have encouraged the creation of greater adherence of national elites to the elites of other countries. Further, policy prescriptions, such as structural adjustment programs (SAPs), encouraged liberalization of economies in debtor countries. This allowed foreign corporations to infiltrate developing countries and gain access to workers and natural resources at extremely low prices. In the proceeding chapter, the macroeconomic policy effects of SAPs will be further examined, using a case study on Malawi, to particularly asses the impacts in the Malawian agricultural sector.

2.3. World Trade Organization

The World Trade Organization (WTO) was established more recently than the IMF and World Bank. Unlike the other two that have their origins in the Bretton Woods

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6 Herman E. Daly and Joshua Farley, "International Trade," In *Ecological Economics: Principles and Application* (Washington, D.C: Island Press, 2011), 364.

conference, the WTO's foundation is based on the formal body of the General Agreement on Trade and Tariffs (GATT). The purpose for the GATT was to minimize tariffs and other barriers to international trade. The WTO is often grouped together with the World Bank and IMF because of their common policy goals. These are free trade, free capital mobility, and export-led growth, or in other words, globalization. To the extent that the World Bank and the IMF push a policy of globalization, they run into conflict with the internationalist model of world community based on their charter, a model different than that of globalization. "We are no longer writing the rules of interaction among separate national economies. We are writing the constitution of a single global economy".[8] These are the words of Renato Ruggiero, the WTO's former director-general, whereby through this statement, there is a vibrant affirmation of globalization and neglect of internationalization as defined previously.

An internationalized economic system does indeed have more benefits over a globalized one. One of these, as Daly and Farley state, is that the nation-states can control their own boundaries better by setting their own monetary and fiscal policy. Markets dislike boundaries, but policy necessitates them. It must be noted that international free trade is not necessarily the trade among nations, but rather trade between private firms or individuals living in different nations. Their transactions are executed for the private benefit of the contracting party, not for the greater benefit and wellbeing of their national societies.[9]Furthermore, the policy of free trade illustrates the assumption that if these transactions are to the advantage of the private contracting parties, then they will also

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[8] Renato Ruggiero's words from a speech to the United Nations Conference on Trade and Development's (UNCTAD) Trade and Development Board in October 1996.

[9] Herman E. Daly and Joshua Farley, "International Trade," In *Ecological Economics: Principles and Application* (Washington, D.C: Island Press, 2011), 364.

benefit from the overall welfare of the nation to which each belongs. As Daly and Farley mention, the advocates of a globally integrated economy argue that nations are obsolete and have been held accountable for two world wars, which points to the real evils of nationalism. They go on further to agree with the Bretton Woods delegates that the solution to nationalism is internationalism and not globalism.

2.4. Globalization, Liberalization, and Protectionism

As Khor states, the process of liberalization in free trade has been prompted by the loan conditionalities of the international financial institutions, World Bank and IMF, the rules of the WTO, and unilateral policy measures. The policies however that are associated with globalization are a mixture of both liberalization and protectionism. [10] In developing countries policies are centered on the intensive liberalization of their markets, meanwhile developed countries keep pushing to maintain and sometimes even intensify protectionist policies. This is a puzzling phenomenon because it would usually be expected that poorer countries are given more time and flexibility to liberalize as they face strong competition from the bigger enterprises in the developed world. It follows then that developed countries should be the ones liberalizing at a faster rate as they have already achieved high levels of development.[11]

What is relevant to this discussion in terms of globalization is the "globalization of policy making". The policies and decisions that must be made involving a series of matters

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[10] Martin Khor, "Globalization, Liberalization, Protectionism:"Impacts on Poor Rural Producers in Developing Countries"", *Third World Network Report* (2006):14.

[11] Ibid.

that were once made under the main scope of national governments are now directed through these international agencies or are strictly under their influence. The developing countries therefore can be seen as "policy takers" in the sense that they have minimal control over the creation of the rules, policies, and regulations made by the IMF, World Bank and WTO. On the other hand, the developed countries are the "policy makers", as they have extensive influence over the World Bank and IMF (by virtue of the voting system which is weighted by equity shares) as well as the WTO.[12] Overall, the transference in power to these institutions that are governed by developed countries has led to the diminution of the developing countries in the decision-making process over economic and social issues at the international level.[13] The policies that are implemented by these institutions have not at all been effective in meeting the development requirements of developing countries. In terms of trade-related issues for example, the loan conditionalities of the IFI's, mainly through SAPs, have resulted in the liberalization of their imports at a much too rapid rate, especially as the high subsidies and tariff protection policies persist in the developed countries. For much of the developing countries in the South, the potential benefits of meeting export opportunities have not been achieved, while the risks of import liberalization have become real and have already unfavorably impacted the rural livelihoods and national economies of the least-developed countries.[14] Overall, the problem of the global North-South regime in terms of efficiency, justice, and poverty alleviation must focus on increased income opportunities for rural populations in the least-developed countries. In order to achieve this, agricultural development should be targeted,

[12] Ibid., 14
[13] Ibid
[14] Ibid., 15

given that in developing countries agriculture is indeed the main source of employment, livelihood, and income for between 50 to 90 percent of the population.[15] The shifting structure of agricultural production however, and the policies implemented through IFIs have generated a heavy reliance on imported inputs that cannot be sustained economically. The following issues therefore should therefore be considered when targeting the welfare of developing countries and their small, indigenous agricultural producers.

1. The barriers that prevent developing countries from access to national and global markets.
2. The inappropriate rates and scope of import liberalization, with unfavorable impacts on the economic viability of the produce of the rural communities, and subsequent deterioration of income and livelihoods.
3. The exogenous factors, primarily policies of the IFI's and the WTO, which influence the harmful circumstances of the rural producers of developing countries.

2.5. The Global Agriculture Policy Framework

The SAPs had major impacts on the agricultural policies implemented in developing countries. Particularly, the removal of subsidies, and protection from imports has largely exposed rural producers to the direct effects and fluctuations of global markets. This was due to the interventionist measures that withdrew the capacity of the state to intervene. Rural producers therefore, faced great pressure from competing imports that are much cheaper than their own. In the early stages of implementation, the governments in developing nations anticipated substantial benefits from the new rules in agriculture, given

[15] Aileen Kwa, *Agriculture in Developing Countries: Which Way Forward?*, South Centre, (2001): 3, http://focusweb.org/publications/2001/agriculture_which_way_forward.html.

that the incorporation of agriculture in the system of the WTO would presumably eradiate protection in the developed nations.

This however was not the case and small producers were left disappointed by the results and did not receive the expected benefits due to the persistence of high protectionism in the North. High protectionist measures were maintained and further permitted under the agenda of the Agreement of Agriculture (AoA). The AoA is an international treaty of the WTO that was negotiated during the GATT, and entered into force with the establishment of the WTO.[16] The developing countries however, under the AoA, were devoted to strict limits on their domestic subsidies and had to forgo quantitative restrictions placed on imports, and had to reduce their bound tariffs. Subsequently, these obligations created even more obstacles for developing countries to encourage and shield the interests of their rural producers.[17]

The global economic structure of agriculture, which is largely manipulated by the loan conditionalities of the IFI's and the rules of the WTO, have created a situation where developed countries are able to continue and in many cases even increase their domestic subsidies, elevated levels of export subsidies, and high tariffs on their agricultural products, while developing countries are limited in their capacity to develop by these farm subsidies and face strong burdens to uphold low applied tariff rates. The imbalances have impaired developing countries and have only exacerbated their vulnerable economic and social nature. [18]

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16 "WORLD TRADE ORGANIZATION," WTO, accessed May 04, 2016, https://www.wto.org/english/tratop_e/agric_e/ag_intro01_intro_e.htm.

17 Martin Khor, "Globalization, Liberalization, Protectionism:"Impacts on Poor Rural Producers in Developing Countries"", *Third World Network Report* (2006):24.

18 Ibid.

2.6. Weaknesses in the AoA

As mentioned, the AoA consists of several types of imbalances that are advantageous to developed nations and damaging to developing countries. Khor references Das and the Third World Network that offer an analysis of these imbalances.

> "The WTO Agreement on Agriculture has permitted the developed countries to increase their domestic subsidies (instead of reducing them), substantially continue with their export subsidies and provide special protection to their farmers in times of increased imports and diminished domestic prices. The developing countries, on the other hand, cannot use domestic subsidies beyond a *de minimis* level (except for very limited purposes), export subsidies and the special protection measures for their farmers. In essence, developed countries are allowed to continue with the distortion of agriculture trade to a substantial extent and even to enhance the distortion; whereas developing countries that had not been engaging in such distortion are not allowed the use of subsidies (except in a limited way) and special protection".[19]

What the passage points to is that the arrangement of this injustice is in the sphere of domestic support. Developed nations are permitted to continue to provide up to 80 percent after the six-year period. On the other hand, developing countries, due to their lack of resources, have had minimal opportunities for subsidies. Furthermore, several types of domestic subsidies have been exempt from reduction, most of which are utilized by developed nations. Therefore, while they minimized their reducible subsidies to 80 percent, in the meantime, they augmented significantly the exempted subsidies. As a result, compared to the base period 1986-88, the total domestic subsidies in developed countries greatly increased. The supposed reason for exempting these subsidies in developed countries is that they do not distort trade. Nevertheless, these subsidies clearly allow farmers in developed countries to sell their products at much lower prices than the prices

[19] Ibid., 25

that would have been in the absence of the subsidy. Therefore, there is indeed a trade-distorting outcome.[20]

In respect to export subsidies, developed countries maintain up to 64 percent of their budget allocations and 79 percent of their subsidy coverage after six years. Developing counties however, had typically not utilized export subsidies, with the exception of some special cases. Those farmers not using subsidies are now completely restricted from using them, while those that do have subsidies are not only of little value but have had to reduce them.[21]

Another form of injustice is in the functioning of the "special safeguard"[22] provision. This is a provision "that may be invoked by a WTO Member for a product subject to tariffication and for which application of the special safeguard is designated in the Member's Schedule. It allows WTO members to impose additional tariffs on agricultural products if their import volume exceeds defined trigger levels or if prices fall below specified trigger level."[23] Countries that had applied non-tariff measures or quantitative restrictions on imports were obligated to eliminate and convert them into equivalent tariffs. Countries that initiated "tariffication" for a product have been given the advantage of the "special safeguard" provision, which allows them to shield their farmers when imports rise above an identified limit or price drop below an identified level. This

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[20] Ibid., 26

[21] Ibid.

[22] Definition: "GATT/WTO: Provision that allows two types of multilateral protection to its signatories: (1) importer's right to impose temporary import restriction to help protect its domestic industry, and (2) corresponding right of the exporter(s) that prevents imposition of arbitrary restriction on access to a market."

[23] "OECD Glossary of Statistical Terms - Special Agricultural Safeguard (SSG) Definition," OECD Glossary of Statistical Terms - Special Agricultural Safeguard (SSG) Definition, accessed May 04, 2016, https://stats.oecd.org/glossary/detail.asp?ID=2513.

benefit however could not be realized by countries that did not undertake tariffication. Hence, this has been extremely damaging to developing countries that didn't have any form of non-tariff measures and this did not have to "tariffy" them. Subsequently, developing nations that did not take part in such practices could not deliver special protection to their farmers, while developed nations were engaging in trade-distorting practices. The imbalance between developed and developing nations in the agricultural sector therefore is exacerbated when there is a constraint to use of the general safeguard provision. [24]

In addition to the issues concerning subsidies and protection, another problem that arises under the AoA agreement is the assumption that production and trade in the agricultural sector should be conducted on a commercial basis. In most developing countries however, agriculture is most certainly not a commercial practice. It is one that largely consists of small household farms that grow crops for subsistence. It is a source of livelihood. When these smallholder farmers are faced with international competition therefore, they will undoubtedly fail to benefit from trade and will be left unemployed. Therefore, the rural economy, wholly founded on agriculture, will break down.

2.7. Persistent Protection in Developed Countries

Indeed, it is now apparent that after several years of implementation of the AoA, developed countries still maintain high protection in their agricultural sector. First, high tariffs placed on particular items that are crucial to developing countries in the South have been marginally minimized. In the U.S. for instance, in the first year of the agreement,

[24] Martin Khor, "Globalization, Liberalization, Protectionism:"Impacts on Poor Rural Producers in Developing Countries"", *Third World Network Report* (2006): 26.

tariffs peaked at very high rates. An example of this is the sugar tariff, which reached a level of 244 percent.[25] According to the agreement, by 2000, developed countries needed to minimize their tariffs by only 36 percent, yet the rates for some products still remain exceedingly high. Second, domestic support has increased rather than decreased. This is related to the amber box, blue box, and green box subsidies. Here, these "boxes" are used by the WTO to categorize trade subsidies.[26]

Before further discussing the rise in domestic support these boxes must be explained. Green box subsidies are agriculture-related subsidies that include policies, which are not constrained by the trade agreement as they are not considered trade distorting. These are government funded subsidies that do not directly charge consumers with higher prices, and do not encompass price support. They do not directly target specific products and must include direct income supports for farmers that are divorced from current production and or price levels. The amber box is used for all domestic support measures that are considered distortionary towards production and trade. Under the amber box the 30 WTO members, one of which includes the United States, call for the commitment to minimize trade-distorting domestic supports. According to Darren Hudson, a Mississippi agricultural economist, this means that any sort of support payments that are regarded as trade distorting and are subject to restrictions fall under the amber box. The blue box includes any support payments that are not based on the amber box reduction agreement as they are direct payments under a production limiting program. Hudson states that direct payments are to be made on fixed areas and yields, or must be based on 85

[25] Ibid.

[26] "WORLD TRADE ORGANIZATION," WTO, accessed May 04, 2016, https://www.wto.org/english/tratop_e/agric_e/agboxes_e.htm.

percent or less of the base level of production. Livestock payments for example are to be made on a fixed number of head. Further, the WTO claims that the blue box "is an exemption from the general rule that all subsidies linked to production must be reduced or kept within defined minimal levels. It covers payments directly linked to acreage or animal numbers, but under schemes which also limit production by imposing production quotas or requiring farmers to set aside part of their land."

Hence, although developed nations reduced their amber box subsidies, the reason for the rise in domestic support is that they increased the exempted subsidies, which were under the blue and green boxes.[27]

Third, export subsidies also remain high. This is because under the AoA, developed countries are only required to decrease the budget outlay by 36 percent and that total quantity of subsidized exports by 21 percent. Overall, of these three factors, the most criticism is centered on the increase of domestic subsidies in developed countries.[28] Furthermore, the public is becoming increasingly aware that the AoA has an outlet by which developing countries have used to their advantage in order to expand their total domestic support by altering from the price-based, directly-distorting subsidy, to that of which offers direct payments to farmers, and other "indirect" subsidies.[29] Consequently, although the switch in subsidy category is considered to eliminate trade distorting support, in reality, blue and green box subsidies also impact the market and the structure of trade. For farmers therefore that are driven by the incentive of making profit, it is insignificant

[27] Ibid., 27
[28] Ibid.
[29] Ibid,. 28

whether this comes in the form of higher prices through price support measures or from direct payments and government grants.

Overall, although the AoA has categorized several types of subsidies under the blue box or the green box, farmers receiving either of these subsidies will have an advantage. This has enabled developed countries to uphold and in some cases expand the level of their total domestic support, which has damaged indigenous, small holder farmers in developing countries.

The next section of this paper will shift focus to the importance of agriculture in development and will outline the existing literature on development theories and growth strategies. The shift in the role of agriculture over time will also be discussed, as well as the importance of having a strong agricultural sector in developing countries for the primary purpose of food security.

3. Literature Review

3.1. Agriculture and Economic Development

In the 1970s and 1980s there was a notable transition in development thinking. Agriculture and rural development came to be seen as an important precondition of national development.[30] Mohammed Rahahela states that in the absence of integrated rural development there would be severe internal imbalances in the economy that would exacerbate poverty, inequality, and unemployment.[31] In developing countries therefore, the role of agriculture became crucial in achieving economic development. However, the structure of agricultural production in developing countries has experienced a radical transformation in the last two decades. As was noted in the chapter two, institutions such as the World Bank and IMF have played an active role in this transformation through the agricultural policies in which they implement. These policies adopted by developing countries strongly promoted the adoption of highly industrial agricultural practices that were expected to benefit all farmers, including the poor, through higher yields that were believed to ultimately increase people's incomes.[32] However, the heavy reliance on imported inputs from developed nations could not be economically maintained by developing countries. This was compounded, in the 1970s and 1980s, by the oil crisis and

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[30] Mohammed Rahahela, "Impacts of Trade Liberalization on the Development of Agricultural Sector and its Prospected Role in Development in Developing Countries," *Available at SSRN 1400006* (2003): 15.
[31] Ibid.
[32] Aileen Kwa, *Agriculture in Developing Countries: Which Way Forward?*. South Centre, (2001): 2, accessed April 20, 2016, http://focusweb.org/publications/2001/agriculture_which_way_forward.html.

debt crisis. The economic and financial crisis in developing countries therefore, led to the implementation of loan packages from IFIs. Since the 1980's, approximately 100 countries have been required to undertake structural adjustment packages. These policies involved forced liberalization on the one hand, and on the other a shift of domestic agricultural production for the sole purpose of fulfilling export requirements. [33]

Over the last two decades, small farmers in Central and South America, Africa, and Asia, have all undergone similar experiences that have substantially damaged their livelihoods. The policies implemented in these countries have required farmers to shift from diverse traditional polycultures to monocultures in order to compete in overseas markets. The stream of extension services and credit were often conditioned upon farmers accepting the new technologies in export crops that were encouraged. With declining local prices that swamped local markets of staples and traditional crops due to cheap subsidized imports from developed and highly industrialized countries, farmers have been obliged to change to export crops.[34] The course that agricultural development has taken therefore, has been especially damaging towards smallholder famers who are systematically impoverished. A number of them have even been entirely phased out of farming. Food security has also not been achieved, as several developing countries experienced a shift from a state of food self-sufficiency to one of food dependency.[35]

It is important to note that in developing countries especially, there are two critical challenges related to agriculture. The first is the need to increase food productivity and production, especially for smallholder farmers. The second is the issue of food price

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[33] Ibid.

[34] Ibid.

[35] Manitra Rakotoarisoa and Massimo Iafrate and Marianna Paschali, *Why has Africa become a net food importe*, Rome, Italy: FAO, 2011, 5.

volatilities. These price instabilities often arise from events external to the control of developing countries. Hence, this chapter will offer a review of the existing literature on agriculture, targeting the issues that are critical for agricultural productivity and poverty reduction.

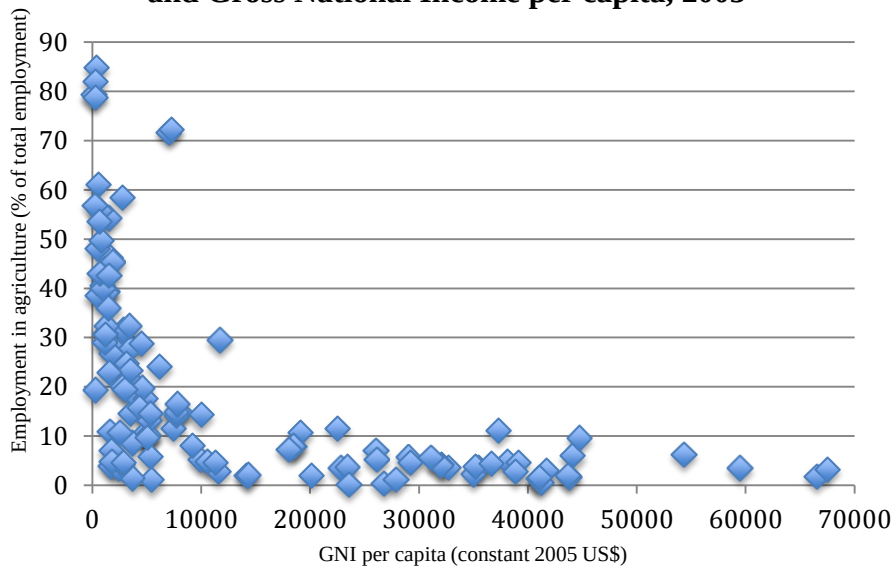
3.2. The Economic Transformation

Almost always, economic growth is followed by an economic transformation from agriculture into other activities. When an economy expands, the rate of growth in the agricultural sector tends to decrease, while that of manufacturing and services continue to grow at a faster pace. Agriculture also accounts for a declining fraction of employment, output, and consumer expenditure. This phenomenon of transformation from farm to non-farm activities as income levels rise can be seen on a worldwide level. It is one of the most dependable linkages in the world economy and has a crucial impact on people's lives.[36] The two figures below, reproduced from the figures offered by Norton, Alwang, and Masters demonstrate the tendency for richer countries to derive a smaller share of their income from agriculture and their tendency to have a smaller share of total employment in agriculture.[37] These two figures demonstrate significant similarities, but also share a remarkable difference. The commonality is that in both these graphs there is an apparent downward trend. In both cases it can be said that there is a strong, negative correlation. We can see from these figures that all poor countries derive a substantial amount of their income from agriculture, while rich countries receive a minimal portion of income from

[36] George W. Norton and Jeffrey Alwang, "Economic Transformation and Growth," In *The Economics of Agricultural Development: World Food Systems and Resource Use*, edited by William A. Masters, 81.
[37] Ibid.

agriculture. It is important to note that in developed countries agriculture does not completely disappear while among poorer countries, it can be observed that there are wide disparities. A major difference between these two figures is that in poor countries agriculture accounts for a larger portion of employment than of output. For example, countries that earn less than $1000 per year in per capita income have approximately 40 to 90 percent of the labor force employed in agriculture, and these people receive only 20 to 50 percent of their country's total income.[38] In poor countries therefore, non-farmers earn on average approximately half the amount earned by farmers.

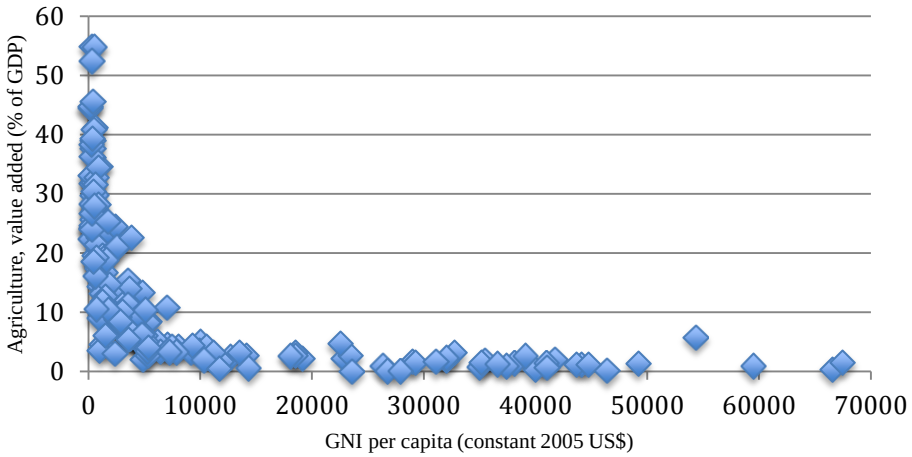
Figure 3.2a: Agriculture's share of total employment and Gross National Income per capita, 2005



Source: World Bank, *World Development Indicators*, 2016.

[38] Ibid., 82

Figure 3.2b: Agriculture's share of total output and Gross National Income per capita, 2005



Source: World Bank, *World Development Indicators*, 2016.

3.2.1. Causes of Economic Transformation

In least developed countries, since labor productivity is low people are essentially obliged to spend a large portion of their income on food. Their primary assets are the labor they have to offer and the land they own. Typically, they have no choice but to devote their personal labor to farming in order to feed and sustain themselves and their families. Many of these farmers are sometimes even net food-buyers and have to use portions of their sale on high-valued crops and livestock or small amounts of their non-farm income to buy additional basic foodstuffs. Therefore in order to overcome poverty it becomes essential to these semi-subsistence farmers to either improve their productivity on their farm or in their non-farm activities.

If they are able to accomplish this goal there are four key elements that will drive a shift from farm to non-farm activities. The first is rising incomes, which will be facilitated

through higher productivity. This will progressively lead to a change in demand from food to non-food items. This consumption change will take place because the income elasticity demand for food is less than 1.0 and tends to decline with rising incomes. Falling income elasticities imply that for each percent increase in income there will be a progressively lower proportion spent on food.[39] This notion originates from "Engel's Law", which states that the percent of income allocated for food purchases will decrease as income rises. As a household's income increases the percentage of income spent on food decreases while the proportion spent on other goods, such as luxury items, increases.[40] These variations in demand for agricultural and non-agricultural products suggest that over the course of development more labor inputs and other resources are spent on nonagricultural activities. The second factor directing this conversion is the quantity of food demanded, which changes only slightly when prices increase. This applies to all income levels. This means that the price elasticity of food demand is low, less than 1.0 in absolute value, and could possibly be smaller at higher income levels. This characteristic in food demand illustrates that with an increase in agricultural productivity prices received by farmers will fall by a higher percentage than the increases in the quantity demanded. This would ultimately generate incentives to re-allocate more resources towards non-farm activities as opposed to farming ones. These two demand-side drivers however cannot be used to justify the shift in settings where farmers are selling their produce at world market determined prices. Therefore, under such circumstances the prices received by farmers are not determined by local demand but rather, are based on supply-side explanations. This leads us to the third

[39] Ibid., 82-83
[40] Ibid., 83

supply-side factor, known as specialization. During a period of economic expansion there is an increase in the availability of capital and market opportunities. This encourages people to increase production of the few goods they specialize in. In turn they will trade these goods for other products on the world market. These activities will be averted from agriculture to industry. The last factor, also a supply side factor, is the fixed supply of land. With economic growth people are able to accumulate higher savings, which at some point will reach higher levels than the amount of resources that could possibly be added to their farms. In such a case these savings will be invested in non-farm enterprises, such as retail trade or services.[41]

3.2.2. Economic Transformation and the Size of Agriculture

It is important to note that smaller portions of output and employment in agriculture, enabled through higher incomes, certainly do not imply a reduction in the absolute size of the farm sector. Indeed, as countries become wealthier the level of farm production and consumer expenditure on farm goods keeps rising. Further, countries that have a fast growing productive farm base usually experience equivalent growth rates in non-farm output. As agricultural productivity and income rise labor progressively transfers from on-farm work to off-farm work.[42]

The capacity of land available in most countries for farm use is more or less constant over time.[43] Thus, any variations in the amount of farm workers converts directly into an adjustment of the acres available per worker. Economic development does in fact

[41] Ibid., 84
[42] Ibid.
[43] Ibid., 85

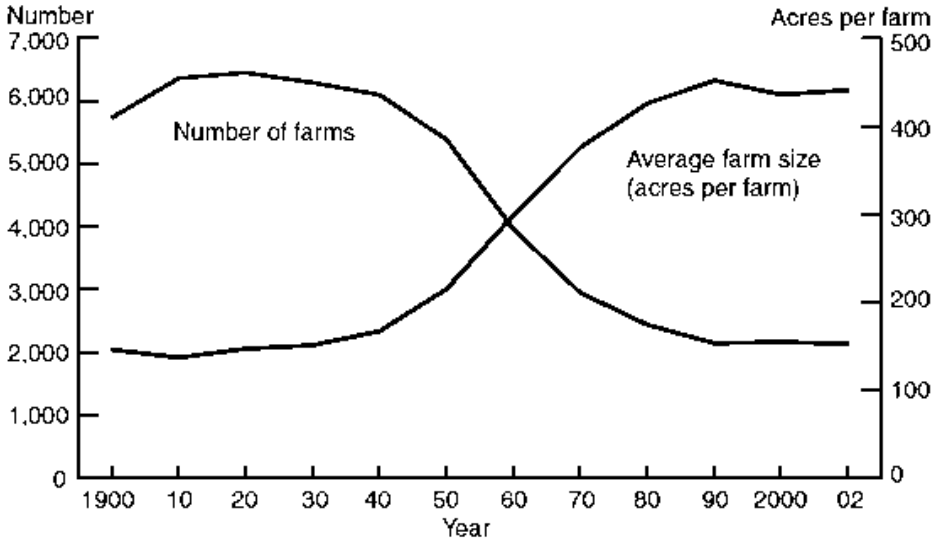
influence the number of people working on each acre of land but in an unexpected way. Usually, across countries over time, family farming has been the dominant approach in the agricultural sector. Hence, the amount of workers on each farm remains close to the land. Moreover the number of workers on each farm alters with family size, which is greatly determined by economic growth. Family size tends to fall with the development of an economy. Therefore, as a result of the declining number of workers per family richer countries tend to have fewer workers per farm than poorer countries. Furthermore, at all income levels, family members work part-time on the family farm and are employed for the rest of their time on off farm work.[44]

The reason for the persistence of family farms in the agricultural sector is rather straightforward. The key explanation is the difficulty of managing and supervising field procedures. Self-motivated workers therefore are much more capable of providing this kind of monitoring than any other worker outside the family. Any change in the number of farm workers could ultimately lead to a change in the average cropped area per farm. This process is illustrated in figure 3 for the United States. It is evident from the graph below that during the 1920s the number of farms reached their maximum level but as farm labor migrated into cities the acreage per farm increased as a result of landowners renting or selling their land. In addition, this figure illustrates that there has not been a point in time where all farmers completely disappear. After the 1990s there has been a stable number of farmers with only approximately one-third of the number of farms that existed between 1910 and 1920. Moreover, farm sizes have increased to around three times the size they once were between 1910 and 1920.

[44] Ibid.

Overall, there is still a large disproportionality in farm sizes across the world. For example, middle-income countries in Asia have been undergoing a process of accelerated decline in the number of farmers, similar to the story of the United States in the 1960s. Least-developed countries however have been experiencing rising rural populations on the fixed land bases that are available.[45] Several areas in South Asia and Africa have been facing decades of decline in the accessible acreage per farmer. In turn, this strictly lowers their capability of sustaining themselves as well as hindering any sort of transformation out of agriculture into industry.[46]

Figure 3.2.2a: Number and average size of farmers in the United States, 1900-2002



Source: Compiled by Economic Research Service, USDA, using data from *Census of Agriculture*, *Census of Population*, and *Census of the United States*.

[47] *3.3.*

[45] Ibid.

[46] Ibid.

[47] George W. Norton and Jeffrey Alwang, "Economic Transformation and Growth," In *The Economics of Agricultural Development: World Food Systems and Resource Use*, edited by William A. Masters, 86.

3.4. Development Theories and Growth Strategies

In the previous section the inevitabilities of structural transformation accompanying economic development were discussed. This section turns to the concepts and theories that attempt to clarify how economic growth can be integrated in a way that will produce higher welfare effects on overall economies. For two decades now economists have been dedicated to finding appropriate theories of economic development. There have been several different theories that have generated different implications of how governments, private firms, and individuals should act in order to accomplish their goals.

3.3.1 The Role of Agriculture in Development: Agriculture, Growth, and Poverty Reduction

Developing countries have been described as having dual economies, a traditional agricultural sector and a modern capitalist sector. This model is commonly known as the Lewis model, named after its inventor W. Arthur Lewis and was later extended by Ranis and Fei.[48] It explains the growth of a developing economy in terms of a labor shift between two sectors, the capitalist and the subsistence sector. It is assumed that productivity is lower in the agricultural sector than in the modern one. The major assumptions of this model are listed below. First, it assumes that a developing economy has a surplus of unproductive labor in the agricultural sector. This offers workers an incentive to find work in the growing manufacturing sector where higher wages are offered. This shift in labor from agriculture to the modern sector would subsequently stimulate economic growth. Wages in this sector are more or less fixed. Entrepreneurs in the manufacturing sector make large profits

[48] Gustav Ranis and John C.H. Fei, "A Theory of Economic Development," *The American Economic Review* 51 (4). American Economic Association: 533–565, accessed April 20, 2016, 543, http://www.jstor.org/stable/1812785.

because they charge a price above the fixed wage rate. Therefore this assumption leads to the conception that these profits will be reinvested in the business in the form of fixed capital. [49] Other precursors, such as Schutlz, also acknowledge the importance of agriculture as it functions as an engine towards achieving economic growth in regards to ensuring subsistence to a society. In the absence of a strong and robust agricultural sector this growth is just not possible. Shultz therefore points to the significance of agriculture in terms of offering a steady supply of food.[50] Kuznets' view is also in accord with this earlier view on the role of agriculture, asserting that in reference to economic development agriculture is capable of offering low wage labor in the modern sector as well as providing cheap food.[51] His empirical observations show that the prominence of agriculture will decline over the trajectory of economic development as it will instigate growth and higher productivity by freeing labor and capital to other sectors in the economy. Nevertheless, agriculture is seen as a traditional low-productivity sector while industrialization is considered to be the spearhead of a country's development. Johnston and Mellor also develop Lewis' model and express agriculture as an active sector in the economy.[52] Not only does it offer labor and food but also fuels economic growth through production and consumption lineages. For example, agriculture can demand inputs from the modern sector as well as provide raw materials to the production of nonagricultural goods. It can also help

[49] Ibid.

[50] Theodore Shultz, *Tranforming Traditional Agriculture* (New Haven: Yale University Press, 1964).

[51]Robert W. Fogel and Enid M. Fogel and Mark Gugliemo and Nathaniel Grotte, "How Simon Kuznets Codified Modern Economic Growth," The University of Chicago Booth School of Business, July 1, 2013, 571-72, accessed May 03, 2016, http://www.chicagobooth.edu/capideas/magazine/summer-2013/simon-kuznets.

[52] Bruce F. Johnston and John W. Mellow, "The role of agriculture in economic development, " *The American Economic Review* 51, no. 4 (1961): 571, accessed April 20, 2016, http://www.jstor.org/stable/pdf/1812786.pdf?_=1462329436654

boost employment in the rural non-farm sector given that higher productivity in agriculture increases the income of the rural population which in turn generates demand for domestically produced industrial output. Additionally, agricultural goods can be exported in order to earn the adequate foreign exchange needed to import capital goods.

The significance of the linkage effects between higher productivity in the agricultural sector and an increase in employment opportunities was represented in Adelman's general equilibrium idea of "agricultural demand-led industrialization" (ADLI).[53] Because of the relationship between production and consumption a country's development strategy should be focused on agriculture instead of exports as agricultural productivity has the ability of stimulating industrialization. Furthermore, Adelman stresses the importance of small-to-medium-size farmers over large-scale producers because they are more inclined towards utilizing domestically produced intermediate goods as opposed to imported inputs and machinery. Such imports could ultimately dwindle the connection between agriculture and other segments of the economy. Overall, the association between the traditional and modern sectors of a developing country's economy is crucial as it not only enhances agricultural growth but can also translate this growth into a tool for poverty reduction. Poverty reduction is directly and indirectly influenced through the impact of agricultural growth on farm employment and productivity as well as through job creation in upstream and downstream non-farm sectors in response to greater domestic demand.

[53] Stephen J. Vogel, "Structural Changes in Agriculture: Production Linkages and Agricultural Demand-led Industrialization". *Oxford Economic Papers* 46 (1) (1994): 137, accessed April 20, 2016, http://www.jstor.org/stable/2663527.

This of course also greatly depends on the individual conditions of an economy because in many cases farm employment will remain unaffected if labor is replaced by capital.[54]

While the majority of the literature represents agriculture as an effective and active economic sector there are still a number of authors who have rather conflicting views and analyses on the matter. Matsuyama believes that international trade is the determining factor of the strength of the relationship between agricultural growth and economic growth.[55] Typically in a small, closed economy, agricultural growth will inevitably in one way or another lead to economic growth, however, in the case of an open economy this relation could be inverted. An open economy, which has a comparative advantage in agriculture, could potentially draw resources away from the modern sector into agriculture, which might be less productive than industry. The advocates of the "agriculture-first" approach are the ones who highlight the significance of the extent of openness of a given economy. Adelman proposes that ADLI would be most effective for low-income countries that have not yet been export-driven.[56] Similarly, Ranis and Fei recognize that domestic agricultural products could easily be replaced by imports.[57]

There is considerable literature that ranges from the critical contributions that do not support "agriculture-first" approaches to more recent views of "agro-pessimism". The

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54 Xavier Irz and Lin Lin and Colin Thirle and Steve Wiggins, "Agricultural productivity growth and poverty alleviation." *Development policy review* 19, no. 4 (2001): 452, accessed April 20, 2016, http://onlinelibrary.wiley.com/doi/10.1111/1467-7679.00144/epdf

55 Kiminori Matsuyama, "Agricultural Productivity, Comparative Advantage, and Economic Growth." *Journal of economic theory* 58, no. 2 (1992): 317-334, accessed April 20, 2016, http://www.sciencedirect.com/science/article/pii/002205319290057O

56 Stephen J. Vogel, "Structural Changes in Agriculture: Production Linkages and Agricultural Demand-led Industrialization". *Oxford Economic Papers* 46 (1) (1994): 136–56, accessed April 20, 2016, http://www.jstor.org/stable/2663527.

57 Gustav Ranis and John C.H. Fei, "A Theory of Economic Development," *The American Economic Review* 51 (4). American Economic Association: 533–565, accessed April 20, 2016, http://www.jstor.org/stable/1812785.

agro-pessimism view is formed on the observation that in a given economy, specifically in developing nations, the agricultural sector is the least productive one. First, it is important to note that Dercon and Gollin both acknowledge that under certain situations, particularly in landlocked countries, the agricultural sector can be an essential tool for economic growth.[58] However, Dercon also infers from a two-sector model elaborated by Eswaran and Kotwal that in an open economy where goods from both agriculture and the modern sector can be traded the link between agriculture and industry becomes less important to the general growth of an economy.[59] Consequently, there is less of an incentive to target agricultural productivity to stimulate growth and ultimately reduce poverty. If both sectors are effective in inducing growth efforts will then be aimed other sectors that can in the long run be more valuable to a country's development since food can easily be imported.

Indeed, there are numerous theoretical models that offer contrasting roles of agriculture in development, however this certainly does not mean that they are incongruous to one another. It must be recognized that these diverse models have originated from very different economic assumptions, such as openness to trade. Hence, it should not come as a surprise that they also assume different policy assumptions. The role of agriculture must therefore be revised to fit each individual situation given that developing countries widely vary with regards to their economic backgrounds. This is also in agreement with the 2008 World Bank Report on agriculture for development, which implies that the nature of any

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[58] Stefan Dercon, "Rural Poverty: Old Challenges in New Contexts." *The World Bank Research Observer* 24, no. 1 (2009): 1-28, accessed April 20, 2016, http://www-wds.worldbank.org/external/default/WDSContentServer/WDSP/IB/2013/04/23/000445729_20130423155206/Rendered/PDF/767910JRN0WBRO00Box374387B00PUBLIC0.pdf

[59] Eswaran Mukesh and Ashok Kotwal, "Export Led Development Primary vs. Industrial Exports." *Journal of Development Economics*41, no. 1 (1993): 163-72, accessed April 20, 2016, http://www.sciencedirect.com/science/article/pii/030438789390043M.

given economy is the main determinant of the importance of agriculture.[60] In other words, in developing countries where economies are largely agrarian-based agriculture must be the central device used towards achieving growth. In transitioning nations however, agriculture by default becomes a smaller economic activity but still functions as the leading mechanism towards reducing rural poverty. Conversely, in urban countries agriculture is just as important as any other tradable sector that has a comparative advantage in accomplishing economic growth.

In examining the importance of agriculture in development and its relationship to economic growth we must include some of the existing empirical analyses as well. Chenery and Kuznets along with others have underlined sectoral changes that have affected economic growth. It has been observed that the share of agriculture in output and employment shrinks over the course of economic development, as was also depicted in figure 1 and 2.[61] Self and Grabowski find that from 1960 to 1995, through a cross-section of countries, there is a positive correlation between different measures of agricultural productivity and average growth of real GDP per capita.[62] This is similar to Timmer's findings that illustrate a positive relation between the depressed values of GDP in agricultural growth and nonagricultural GDP growth.[63] He attributes this to the "first-order" effects of agricultural growth on labor migration, capital flows from agriculture and "second-order" effects (higher nutritional intake, which in turn improve labor

60 *Agriculture for Development*, report, accessed April 20, 2016, https://siteresources.worldbank.org/INTWDRS/Resources/477365-1327599046334/8394679-1327614067045/WDROver2008-ENG.pdf.

61 Jean-Jacues Dethier and Alexandra Effenberger, "c", *Policy Research Working Papers* (2011): 6, accessed April 20, 2016, http://www.sciencedirect.com/science/article/pii/S0939362512000271

62 Ibid., 6

63 Ibid.

productivity), and lower food prices. These observations however are all refuted by a study performed during 1980-2001. It is based on panel data from 52 developing countries. It finds that agriculture does not appear to be a vital factor of national GDP per capita growth.

More recent observational studies recognize that poverty reduction can be positively influenced by the outcomes of agricultural progress. For example, it is found that greater farm productivity curtails both relative and absolute poverty. This is because, to some degree, in the short run there is a direct channel of higher household income and also, in the long run, there are indirect channels of lower food prices and higher wages.[64] Furthermore, in favor of supporting the argument for agricultural growth other studies suggest that these are the central channels and not a shift in the labor force from agriculture to other sectors. Another empirical study concludes that the direct and indirect effects of agricultural growth can alleviate poverty whereas economic growth on its own cannot.[65] Christiaensen and Demery approximate that a 1 percent per capita growth in agriculture can decrease poverty by 1.6 times more than if there were to be an equivalent growth rate in industry and a growth rate three times higher in the service sector.[66] This is supported by a cross cross-sectional study performed on developing countries that illustrates that the

64 Guarav Datt and Martin Ravallion, "Farm Productivity and Rural Poverty in India." *Journal of Development Studies* 34, no. 4 (1998): 62-85, accessed April 20, 2016, http://www.tandfonline.com/doi/pdf/10.1080/00220389808422529

65 John Mellor, "Faster more equitable growth–agriculture, employment multipliers and poverty reduction." *Agricultural Policy Development Project Research Report* 4 (2001): 23, accessed Alpril 20, 2016, http://www.abtassociates.com/reports/19998977199472.pdf

66 *Agriculture for Development*, report, accessed April 20, 2016, https://siteresources.worldbank.org/INTWDRS/Resources/477365-1327599046334/8394679-1327614067045/WDROver2008-ENG.pdf

agricultural sector, which is considered a more labor-intensive sector, has a greater impact on poverty alleviation than any other less labor-intensive.[67]

To accommodate these cross-sectional findings some case studies are also offered to support these conclusions. It is documented that in 15 villages in Ethiopia off-farm inputs such as the use of fertilizer improves farm productivity and hence generates an 8.5 percent higher consumption rate per adult.[68] Furthermore, agricultural growth can instigate employment in nonagricultural sectors, which would contribute to poverty reduction however, this varies depending on income distribution. In accord with this claim is the cross-country analysis by Christiaensen et al., which is consistent with the larger poverty-reducing effect of agriculture compared with other sectors. This disparity is greatest amongst the really poor. For example, individuals who live on an extremely low dollar basis, especially less than $1 per day, can experience a reduction in poverty of up to 3 to 4 times higher from agricultural growth than any other nonagricultural sector.[69] Income inequality minimizes the poverty-reducing effect of growth and the reduction is greater for growth in the agricultural sector. On the whole, the important contribution is that in developing countries agricultural growth is and should be utilized as a tool towards enhancing the general welfare of the people, particularly the poor.

While several of these empirical examinations find that there is indeed a relationship between GDP growth and agriculture they do not suggest causation in either

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[67] Norman V. Loayza and Claudio Raddatz, "The Composition of Growth Matters for Poverty Alleviation." *Journal of Development Economics* 93, no. 1 (2010): 137-51, accessed April 20, 2016, http://siteresources.worldbank.org/DEC/Resources/PovertyandtheCompositionofGrowth032309.pdf

[68] Jean-Jacues Dethier and Alexandra Effenberger, "c", *Policy Research Working Papers* (2011): 6, accessed April 20, 2016, http://www.sciencedirect.com/science/article/pii/S0939362512000271

[69] Luc Christiaensen and Lionel Demery, and Jesper Kuhl, "The (evolving) Role of Agriculture in Poverty Reduction—An Empirical Perspective."*Journal of Development Economics* 96, no. 2 (2011), 239-54, accessed April 20, 2016, http://www.sciencedirect.com/science/article/pii/S0304387810001252

direction. The correlation could simply be coincidental, as either of these sectors could have potentially developed independently of one another as a result of any other possible influencing external factor. Hence, there is harsh criticism on the research that argues for a causal effect of agricultural growth on economic growth. In support of this, Braco-Ortega and Lederman found that in developing nations a rise in agricultural GDP increases nonagricultural GDP, whereas the opposite occurs in developed countries. This conclusion is reached through the use of panel data tools, such as the GMM and Granger causality test employed on panel data from 1960 to 2000. Tiffin and Irz, also through the use of a Granger causality test, found that in developing countries GDP per capita is explicitly affected by agricultural value added per worker.[70]

Furthermore, in formulating a general correlation between agriculture and overall economic growth, it is important to note that cross-country studies examine numerous countries that all have very unique and diverse backgrounds. There are numerous elements that could greatly transform the association between agriculture and nonagricultural. An example of such a factor would be the extent of openness to trade in a certain economy.

Consequently, the significance of the associations between the different sectors that make up an economy and agriculture vary extensively across nations. Some examples that demonstrate the importance of such linkages in unique developing countries are briefly mentioned. The first examines the particular case of China between 1980 and 2001 and demonstrates that a 1 percent growth in agriculture did indeed influence the overall growth

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[70] Claudio Bravo-Ortega and Daniel Lederman, "Agriculture and National Welfare Around the World: Causality and International Heterogeneity since 1960", *Policy Research Working Papers* (2005): 28, accessed April 20, 2016, http://www-wds.worldbank.org/external/default/WDSContentServer/WDSP/IB/2005/02/25/000090341_20050225104637/Rendered/PDF/wps3499.pdf

by 0.45 percent, whereas the nonagricultural sector's indirect effect was less than that.[71] The second of these studies, which is in line with Mellor's finding for nonagricultural employment, finds that consumption links have been the central tool of multipliers from agriculture to the rest of the economy.[72]

3.5. Agriculture and urban bias

Agriculture has for a long time now been very influential in development studies and the agriculture-led development approaches, backed by state support programs, have been fundamental to poverty alleviation, structural transformation, and rapid aggregate economic growth. In the last three decades however, there has not been any change in the policy environment on either the domestic or international level, which has systematically discriminated against agricultural development as well as the rural economy in the allocation of developmental resources in the least-developed countries. The theory of urban bias therefore, can partially be used to justify the proportional neglect of agriculture.

The urban bias is a notion established by Michael Lipton, which contends that agriculture has gained minimal attention in the application of the majority of development policies. This is because of a set of multifaceted social forces and mechanisms that are at work in both developed and developing countries alike. Firstly, it is important to note that

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71 De A. Janvry and E. Sadoulet, "Agricultural Growth and Poverty Reduction: Additional Evidence", *The World Bank Research Observer* 25, no. 1 (2009): 1-20, accessed April 20, 2016, http://www-wds.worldbank.org/external/default/WDSContentServer/WDSP/IB/2013/05/13/000442464_20130513144141/Rendered/PDF/768000JRN0WBRO00Box374387B00PUBLIC0.pdf

72 Richard Tiffin and Xavier Irz, "Is Agriculture the Engine of Growth?", *Agricultural Economics* 35, no. 1 (2006): 79-89, accessed April 20, 2016, https://www.academia.edu/14971309/Is_agriculture_the_engine_of_growth

most of the leading policymakers in the less-developed countries usually live in the main urban areas if of course it is not in the main capital city. This means that their interaction and exposure with the rural sector is minimal as they have very peripheral awareness of the daily routines of the rural population. Hence, in such a way they are not only physically detached from the rural areas but also intellectually detached in the sense that they are usually educated under a very Western academic paradigm, which typically neglects the lifestyle and practices of regressive agricultural regions. Development is typically associated with industrialization, and industrialization has been largely an experience felt most prominently by urban regions. Consequently, the urban bias constructs a sense of negligence towards the rural agricultural sector.

Quantitative studies have been conducted that support the notion of urban bias. Schiff and Valdes use a sample of 18 developing countries and conclude that if these countries' governments had not imposed policies that were detrimental to the welfare of the rural regions, the domestic terms of trade in the period between 1960-1985 would have been 43 percent higher.[73] Furthermore, this study claims that the bias against sufficient agricultural support still persists even though there is evidence that countries with a lower bias against agriculture would be better off. These advantages would come in the form of lower rates of migration from agriculture, higher investment by cultivators, better adjustment to technology, and of course higher economic growth. With the early models that support agriculture as an engine towards generating surplus to be extracted for the benefit of industry, governments in developing countries have in the recent past inflicted

[73] Maurice Shiff and Alberto Valdés, "Agriculture and the Macroeconomy," *World Bank Policy Research Working Paper* 1967 (1998): 31, accessed April 20, 2016, file:///D:/SSRN-id620527.pdf

heavy strains on agriculture by enforcing such urban-bias policies. Anderson has further revised and updated this study, finding very similar conclusions but demonstrates that since the mid-1980s the inter-sector bias against agriculture and the anti-trade discriminations have been considerably minimized.[74] A large amount of policies have been undertaken by numerous developing countries that have opened them up to trade and have benefited them proportionally more (relative to GDP) than high-income economies that have implemented the same trade policy reforms. Overall, this study confirms that farmers competing with imports in developing countries have become progressively protected over time.

In many developing countries, particularly India, subsidies and off-farm inputs such as fertilizers and irrigation has helped production in the agricultural sector. These policies however are generally found to assist large farmers significantly more than smallholders. [75]Further, it has been argued that pricing and support towards agriculture through public policies, are indeed a precondition for agricultural growth, and market liberalization has not been advantageous to small farmers because of distortions and market failures.[76] An example of this is the Green Revolution experienced in Asia, which was backed by continuous government interventions that included fertilizer subsidies. Gonzales shows that between 1970 and 1988, Indonesia's rice production increased 5 percent annually

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[74] Kym Anderson. Introduction to *Distortions to agricultural incentives: A global perspective, 1955-2007*, ed. Kym Anderson (New York: Cambridge University Press, 2010), 3.

[75] Harry De Gorter "36," In *Political Economy of Agricultural Policy*, edited by Johan Swinnen, 1893-943, Leuven: Elsevier B.V., 2005, accessed April 20, 2016, Science Direct.

[76] Dirk Bezemer and Derek Heady, "Agriculture, development, and urban bias." *World Development* 36, no. 8 (2008): 1342-1364, accessed April 20, 2016, http://ac.els-cdn.com/S0305750X08000661/1-s2.0-S0305750X08000661-main.pdf?_tid=77e78bec-11bb-11e6-92a1-00000aab0f02&acdnat=1462340935_4be708d5cb9c6df3ddd22e19fa182465

because of government pricing, investments in the rice sector, and research.[77] However, such large quantities of public interventions do require a sizable government budget, which is not something that can be sustained over the long run. In addition, interventions that enhance the heavy use of fertilizer have had a very damaging effect on the soil. For a long time orthodox view amongst economists and policymakers in the 1980s and 1990s has been that urban bias has had disadvantageous impacts on agricultural growth by promoting industry, however it has also been recognized that market intervention is costly and could provoke the mismanagement of resources. Market interventions in agriculture also increase fiscal spending, which potentially creates macroeconomic problems. However, in recent years, there has been a revival in the interest of subsidies, particularly in Africa. This has given rise to "smart subsidies". An example of this is the Malawi Government Agricultural Input Subsidy Programme, which is based on a voucher system, of which vouchers can be exchanged though a designated marketing outlet. This is seen as an effective method of controlling the accessibility of subsidies in order to increase agricultural productivity. It offers opportunities for innovative public-private partnerships to foster input supply and demand systems; and could potentially boost economic and social welfare gains.[78] This program however requires a dynamic environment with robust institutions for decentralized targeting of input vouchers, because otherwise, as was the case in Tanzania,

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[77] Leonardo A. Gonzales, *Economic incentives and comparative advantage in Indonesian food crop production* (Vol. 93. Intl Food Policy Res Inst, 1993), https://books.google.com/books?hl=en&lr=&id=GQiJGD5zGr8C&oi=fnd&pg=PA11&dq=Economic+incentives+and+comparative+advantage+in+Indonesian+food+crop+production&ots=JD0Xok9zs5&sig=q9W1suX4T36xmdfzDGKDilvSdng#v=onepage&q=Economic%20incentives%20and%20comparative%20advantage%20in%20Indonesian%20food%20crop%20production&f=false

[78] Jean-Jacues Dethier and Alexandra Effenberger, "c", *Policy Research Working Papers* (2011): 8, accessed April 20, 2016, http://www.sciencedirect.com/science/article/pii/S0939362512000271

this could lead to patronage and fraud. In 2008, the input voucher pilot program in Kilimanjaro, allowed for the elected officials to receive about 60 percent of the vouchers, which reduced the targeting performance of the program, particularly in the more isolated communities.[79] Additionally, this program is susceptible to influences that are external to the government's regulation, which include variations in international fertilizer and maize prices and weather. Overall, it is important to note that although such policies, as stated in the literature, are considered crucial to the growth and expansion of an economy, it is most certainly not a sustainable, long-run approach to achieving economic development. The second chapter of this paper is going to further examine the misconceptions of the ideologies these sorts of policies are grounded upon, specifically focusing on their environmental impacts as well as their detrimental effects on smallholder farmers in developing countries.

3.6. Agricultural Policy and Food Security

When examining agricultural policy, it is just as important to look at the international element as well. The rise of protectionist policies in the past decade have gained much attention and have become an issue that has been given top priority in the agenda of the World Trade Organization Doha Round of trade, especially in terms of the needs of developing countries.

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79 Lei Pan and Luc Christiaensen, "Who is vouching for the input voucher? Decentralized targeting and elite capture in Tanzania," *World Development*40, no. 8 (2012): 1629, accessed April 20, 2016, http://ac.els-cdn.com/S0305750X12000733/1-s2.0-S0305750X12000733-main.pdf?_tid=65ded368-11bd-11e6-b1de-00000aab0f01&acdnat=1462341763_4741cd2fb46d18a808da535283f40164

High protection policies still persist in both developed and developing nations but only burden the agricultural exports of developing countries. Furthermore, in terms of food security, many countries have responded to food price increases by imposing additional protectionist policies, which have only put further pressure in several developing countries.

3.6.1. Market Distortion policies of developed countries

Trade amongst developing counties has gained significant importance in the last decades. Over the last 30 years, trade flows have seen a rise of more than twice the rate of aggregate GDP and global trade in the developing world has increased from approximately one quarter to more than one third.[80] Furthermore, particularly in the developing world, there has been a modification in the configuration of exports. The conventional pattern of exported commodities and imported manufactured goods that persisted for many years shifted over the last two decades to one that has placed exported manufactured goods at the center. In developing countries the export share in global manufacturing exports was 32 percent in 1990/91 and increased to 41.5 in 2006/07. For manufacturing exports the share was 20 percent and increased to 42 percent in the same periods. Trade in developing countries also became extremely important as intra trade between the developing nations of global manufacturing exports increased from 4 percent to 20 percent and for agriculture there was a 13 percent increase, again in the same time frames.[81]

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[80] Jean-Jacues Dethier and Alexandra Effenberger, "c", *Policy Research Working Papers* (2011): 20, accessed April 20, 2016, http://www.sciencedirect.com/science/article/pii/S0939362512000271

[81] Ataman Aksoy and Francis Ng, "The evolution of agricultural trade flows," *World Bank Policy Research Working Paper Series, Vol* (2010): 14, accessed April 20, 2016, http://www-wds.worldbank.org/external/default/WDSContentServer/WDSP/IB/2010/05/11/000158349_20100511131430/Rendered/PDF/WPS5308.pdf

Although these trade liberalization policies point to significant gains in both these sectors, numerous developing nations have definitely not successfully accomplished to integrate themselves into the world market. For example, the majority of countries in the African continent have certainly not benefited from increased market shares. Moreover, some regions have experienced only a minimal shift in the composition of their exports. The manufactured share of merchandise exports in Africa has barely even reached 30 percent, and the poorest countries still heavily rely on exports of natural resources and agricultural goods. Partly to blame for this stagnant performance are the trade barriers in developed countries. Indeed, the climate for investment in most non-integrating countries has most certainly not been favorable. This is because of resource depletion, weak infrastructure, and poor economic management. Hence, there is a lack of investment, which makes it even more challenging for developing countries to change their export patterns. Although focus should be shifted towards improving the investment climate in order to encourage integration, developing countries are also confronted with obstacles in developed country markets in every major sector, including agriculture, manufacturing, and services.

This is the case because developed countries are highly protected, particularly in the agricultural sector, which has only been damaging to the agricultural exports of developing countries. For example Valenzuela et al. found that in 2004 an additional 83 percent was added to the welfare costs of overall trade-distorting policies in developing countries. Even more interesting to this story is that the agricultural products that are most relevant to developing countries are usually the ones that are most notably protected

against.[82] Despite heavy discussions on eliminating or even minimizing the sizable barriers placed on imports from developing nations, developed countries continue to levy them. In addition, the 300 billion tax dollars spent annually on domestic agricultural subsidies in high-income countries only heightens the situation and further depresses agricultural exports from the developing world.[83]

Developed countries in general have a markedly large and complex system of protection for their agricultural sector which is kept rather underneath the radar from the general public, whose tax money is ironically used to fund such support networks. These commonly come in the form of subsidies and border barriers. Subsidies are allocated towards production under different mechanisms known as direct support and come in the form of direct budget transfers. They have the direct effect of transferring income from the general taxpayers to farm owners. Border barriers include both tariffs and quantitative restrictions that are aimed at supporting domestic market prices. There are distortion effects that come with such practices and these usually impact international markets as well as damaging developing countries. These agricultural policies cost developing countries around $17 billion annually. Anderson and Martin find that compared to a 2.5 percent average tariff that developing countries face for manufactures, the agricultural products tend to reach up to16 percent average tariffs.[84] The tariffs that OECD countries provide tend to push down the world prices for agricultural exports, which ultimately puts great

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[82] Jean-Jacues Dethier and Alexandra Effenberger, "c", *Policy Research Working Papers* (2011): 20, accessed April 20, 2016, http://www.sciencedirect.com/science/article/pii/S0939362512000271

[83] Ibid,. 21

[84] Kym Anderson and Will Martin, "Agricultural trade reform and the Doha Development Agenda," *The World Economy* 28, no. 9 (2005): 1303, accessed April 20, 2016, http://onlinelibrary.wiley.com/doi/10.1111/j.1467-9701.2005.00735.x/epdf

pressure on the livelihoods and markets of the smallholder farmers in developing countries. Dethier and Effenberger find from The World Bank 2008 development report on agriculture and development that from 1986 to 1988 the absolute amount of agricultural support that was allocated to producers increased from $242 billion to $273 billion, while the gross value of farm receipts in the same period fell from 37 percent to 30 percent.[85] This comes to show that the core of the problem is the size and structure of the support and its destructive effects on prices of goods produced in developing countries.

Indeed, some efforts have been made to target this issue and have initiated programs that permit the least-developing countries duty-free access to the markets of developed countries. The U.S. African Growth and Opportunity act is one of these initiatives but has had rather modest effects. This is a legislation that was approved by the U.S. congress in May 2000 and its purpose was to assist the economies of sub-Saharan Africa to advance their economic ties with the U.S. The provisions under this act however were granted only to apparel exports, which 99% of come from only seven SSA countries of which only two, Malawi and Madagascar, are considered least developed.[86] The negligible exposure of programs of this sort can be attributed to the foundational multifaceted guidelines, the complex administrative conditions, and the fragile trade capacity of developing counties.

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85 Jean-Jacues Dethier and Alexandra Effenberger, "c", *Policy Research Working Papers* (2011): 21, accessed April 20, 2016, http://www.sciencedirect.com/science/article/pii/S0939362512000271

86 "About AGOA," Country Profiles, Toolkits, Bilaterals, News, Stats, accessed May 03, 2016, http://agoa.info/about-agoa.html.

3.6.2. Price Transmission and Stabilization policies

An important indicator of the global food situation is the international prices of food. What is relevant here however for developing countries and their food security is the domestic prices they must pay for food. In order to measure the impact of international food price volatility on the poor, it is vital to comprehend the ways in which this instability is transferred into domestic markets and transmitted to consumers. If for example a country has policy interventions and is fully incorporated into world trade then international prices will be translated directly into domestic markets. Evidence on price transmissions is rather varied. Mundlak and Larson, using a data set for 58 countries over 1968-1978, reveal that international agricultural prices are almost fully transmitted to domestic markets. Looking at the separate prices of different commodities, it is found that for wheat, the transmission prices are lower than the average agricultural commodities.[87] Overall, these authors conclude that the central part of domestic price instability is triggered by instable international prices. A study that opposes this conclusion reveals that five of the eight countries examined for the purpose of this study, demonstrate that domestic price volatilities cannot be explained by instabilities in international prices.[88] Hence, it can be said that price transmissions can differ across countries and among different commodities. In order to limit the price transmission from international markets and stabilize domestic prices policy interventions such as trade restrictions can be used. It is interesting however to note that when a country attempts to insulate its domestic market from the world market

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87 Yair Mundlak and Donald F. Larson, "On the transmission of world agricultural prices," *The World Bank Economic Review* 6, no. 3 (1992): 419, accessed April 20, 2016.

88 John Baffes and Bruce Gardnerm, "The transmission of world commodity prices to domestic markets under policy reforms in developing countries," abstract, *Policy Reform* 6, no. 3 (2003): 159, accessed April 20, 2016, https://ideas.repec.org/a/taf/jpolrf/v6y2003i3p159-180.html.

additional pressure is placed on the international market and hence results in shocks that must be absorbed by other countries. Bale and Lutz argue that compared to a free-trade situation, trade restrictions can instigate further international price volatilities.[89]

Having reviewed the literature on the different perspectives on role of agriculture in development as well as the interactions between agriculture and other economic sectors, a case study of Malawi, a country in sub-Saharan Africa, will be reviewed in an attempt to understand how institutional policies, particularly SAPs have affected the structure of the different sectors in the economy.

[89] Malcolm D. Bale and Ernst Lutz, "The effects of trade intervention on international price instability," conclusion, *American Journal of Agricultural Economics*61, no. 3 (1979): 515, accessed April 20, 2016, http://www.jstor.org/stable/pdf/1239438.pdf?_=1462344067643.

4. Case Study: Malawi

In this final chapter a case study of Malawi by Sahn and Arulpragasam will be offered in order to demonstrate the effects of policy reform on the economic structure of Malawi. Furthermore, it attempts to show that donor-supported policy reforms which had emphasized the restoration of agricultural growth did not support or promote the agricultural sector of the Malawian economy, whose economic structure most crucially depends on agriculture for development in terms of income and employment generation.

4.1. Background and context of Adjustment

During the 1980s economic reform programs were introduced to two-thirds of the countries in sub-Saharan Africa. These policy reforms were initiated in response to the heightening economic crisis that was stirred by changing international conditions and by the absence of development after the implementation of strategic policies by almost every government in the two decades succeeding independence. These strategic development policies highlighted the importance of the state as the major engine towards generating economic growth and development, placed priority to industry over agriculture and the formation of a systematic import substitution structure to stimulate industrialization and lastly, a prevalent opposition to the private sector and to the market as an instrument of efficiently allocating resources. This approach was followed by the punishment of countries whose ideals were centered on socialism. These countries include Guinea, Ghana, Tanzania, Ethiopia, Angola, Mozambique, and Madagascar. The state took over banks,

trading companies, supply networks for agricultural inputs and outputs, and aimed to re-define the arrangement and organization of both agricultural and industrial production. The outcome however, experienced by all these countries with the partial exception of Tanzania, was economic and socio-political decline. Even the African countries that pursued a much more moderate form of this approach were constrained in their growth potential and experienced unmanageable current account deficits. Consequently, even African nations that were considered "high growth" during the 1960s and 1970s were susceptible to external shocks, while lagging well behind even moderately progressing developing countries.

This type of development approach that several sub-Saharan African countries were confronted with was tied to a very authoritarian political structure labeled "development dictatorship"; a term coined by a very distinguished political scientist named Richard Sklar. The development dictatorships in Africa took the form of state-centered growth and sizable private sector regulation, promising to deliver sufficient economic achievement and improved standards of living. In exchange, they declared the right to uphold a centralized and authoritarian regime-type.

The economic effect of this development approach enforced by governments was detrimental for the majority of the population, nevertheless there was still confidence in the development of parallel markets offered by the successful efforts of African producers and traders. A parallel market, not to be confused with a black market, refers to the trade of a commodity through distribution channels that are legal but unintended by the original manufacturer. In the context of Africa, these markets were predominantly important in foreign exchange markets, urban food markets, and cross-border trade. The sectors in

which governments put most effort in preventing market forces from were usually the ones where the most important parallel markets emerged in. Additionally, they were more inclined to surface in nations where the state capacity was weakening fastest. With the expansion of the informal economy, paradoxically, it became more challenging for the African states that sought to implement strict controls to influence and regulate the economy. Moreover, for the more exploitative states with "dirigiste" economic policies, the development of parallel markets and the informal economy was a fundamental precautionary alternative that facilitated incentives for production, produced income, and safeguarded a sustained source of goods and services essential for survival.

The existence of even a strong and robust informal sector such as the one that has become a significant part of African economies cannot serve as the foundation of successful economic development and is incapable of generating rapid and sustained economic growth. By default, it is associated with excessive transaction costs and other losses as it is not a part of the official economy. Businesses are limited in their capacity to grow and thus tend to remain small and typically incapable of achieving economies of scale and technical upgrades necessary for dynamic industrial advancement. Even the existing formal sector lacks in beneficial practices given that business confidence has debilitated, following capital flight and the expansion of rent-seeking behavior. Hence, by the early 1980s most African nations were confronted by economic crises and were marked by the combination of the failure to generate foreign exchange to have the ability to acquire crucial imports and the incapability to yield budget revenues in order to provide government services, deliver public service salaries, and support infrastructure. Therefore, under these severe conditions, adjustment became inevitable.

Adjustment programs were one of the two alternatives available for African countries to pursue in order to repair internal and external imbalances. The other option, which African governments were more inclined to undertake was the "ad hoc" adjustment, which would result in tightening foreign exchange controls while increasing the national supply of money to provoke an "inflation tax" in order to boost government revenues. The first option however seemed more appealing to many African governments that were financially insufficient and desperate for funding. It provided them with considerable donor resources from the IMF, World Bank, and bi-lateral donors. It was more of a thirst for resources rather than adjustment that steered virtually every African nation into the initial stage of economic reform.

Ultimately, this led to the era of top-down policy reform as the IMF, World Bank, and bi-lateral donor institutions levied immense pressure on African governments to implement systematic stabilization and structural adjustment programs. The major vehicle of external pressure was "conditionality", under which loans were hastily and injudiciously dispensed. Conditionality has typically included the adjustment/devaluation of local currencies and/or floating of hitherto fixed exchange rates; the decontrol of internal price systems as well as external and internal trade flows (trade liberalization), removal of legal restrictions on private entrepreneurship, abolition of state enterprises and monopolies in both production and marketing, reforming on banking policy including interest rate decontrol, cutting the state budget, including the removal of all consumer subsidies and other social expenditures, and reduction in money supply accompanied by a general public sector wage and salary freeze to control inflation.[90]

[90] Gerry N. Muuka, "In defense of World Bank and IMF conditionality in structural adjustment programs," *Journal of Business in Developing Nations* 2 (1998).

For the most part, in the first half of the decade adjustment efforts were made occasionally. During interludes of hardship, there was strong appeal towards printing money and overall control. For example, governments such as those of Sudan, Zaire, and Liberia effectively leveraged US and other donor funds for "adjustment", while in actuality instigated minimal reform. Indeed, their strategic affairs with the U.S. safeguarded the inflow of funds into these countries irrespective of their failure to fulfill the conditions. These economic reform activities that took place in Africa however were crucial in introducing new concerns and ideas into policy agendas and encouraged dynamic adjustment efforts in a small number of other countries as well. This was essential to the formation of the basis of the more serious efforts that followed in the second half of the 1980s.

A larger group of African economic technocrats became convinced of the importance of systematic adjustment and realized, especially with the intensifying crisis, that ad-hoc adjustment efforts were surely unsustainable. Numerous political leaders came to the realization that the cost of economic decline was much higher than that of implementing adjustment and were also lured by the incentive of donor resources for those countries introducing reform. Therefore, as the decade of the 1980s came to an end there was big desire towards the application of adjustment and a majority of African nations were heavily involved with such programs that were supported by international donors.

Lastly, in the context of adjustment, it is crucial to mention that the political realm of economic reform in Africa plays a significant role in determining the sustainability of economic reform. The events that took place in the early years of the 1990s have

dramatically altered the political context of economic reform. In addition to the already absent state of economic growth, the infectious response of political change was rapid, as African development dictatorships became the focal point of mounting demonstrations subsequent to the outcome of the revolutions in Eastern Europe and the fall of communism. It thus became inevitable that East and Southern regions of Africa, which were in a state of political sensitivity, altered their political agenda and became even more exposed to change after the defeat of President Kaunda in 1991 in the Zambian elections subsequent to President Moi's compliance to donor pressures of political reform in Kenya. Hence, numerous African countries are confronted with new regimes that have come into power while a handful of them are still at an earlier phase of the abiding process of political transformation. Overall, this political alteration has put tremendous pressure on the donors to re-evaluate their approach towards development and economic reform and has shed light on the importance of the political factors that come into play in determining the appropriate path towards a dynamic economic environment.

4.2. Malawi

Malawi is a small, land-locked country surrounded by Mozambique to the South, East and West, Tanzania to the North and East, and Zambia to the West. The territorial area is about 119, 140 square kilometers of which agriculture accounts for about 61 percent while forests occupy 38 percent of the total area. To this day, the agricultural sector in Malawi is by far the most important sector in the whole of its economy. It makes up for 39% of GDP, 85% of the labor force, and generates approximately 83% of foreign exchange earnings. It is estimated by national surveys that crop production accounts for

74% of all rural incomes. The agricultural sector comprises two central sub-sectors. These include the estate sub-sector that contributes less than 30% to GDP and the smallholder sub-sector, which contributes a substantial amount of 70% to GDP. The smallholder agricultural sector mostly cultivates the main staples, including grain and maize, for the pure purpose of subsistence. The landholding sizes amid these smallholders are commonly relatively small in size. It is found that the national mean landholding size has dropped from 1.52 hectares per household in 1968 to 0.80 hectares per household in 2000, owing to the pressure from the population subsequent to the fragmentation of land. The primary crops that are grown in Malawi include maize, sugarcane, tea, wheat, groundnuts, pulses, coffee, and rice. The main exports are tobacco, sugar, and tea, which must be noted, are mostly harvested on commercial estates owned by multinational companies. The smallholder sector therefore, contributes minimally to the overall production of these crops, contributing to less than 15% of total sugar and tea production.[91]

Agriculture in Malawi is the primary and most important sector, contributing enormously to the performance of the economy. Since Malawi gained independence in 1964 a handful of resources have been dedicated to the agricultural sector, particularly towards estate and smallholder agriculture, for development. These investments in this sector have come in the form of state provision of extension services, providing subsidized credit and inputs, and the formation of state-owned enterprises administered to the engagement in agricultural production and marketing of smallholder agricultural produce. In the early years of independence, particularly in the 1970s, this agricultural sector-led

[91] R. Kachule, "Performance of the Agricultural Sector in Malawi," (2011).

strategy enabled Malawi to become self-sufficient in food production. The economy grew at an approximate rate of 6% per annum. Between 1979 and 1981 however, the circumstances changed drastically for the Malawian economy, as it was confronted with an economic crisis, provoked by the oil-shock of 1979 and the international transport restriction caused by the escalation of the Mozambican War as well as other structural rigidities in the economy. The GDP real growth rate fell from 8.3% in 1978 to 3.9% in 1979 and for the first time, the economy experienced negative growth rates of -1.1% in 1980 and -4.7% in 1981. Consequently, these harsh conditions experienced between 1970 and 1980 directed Malawi into the implementation of IMF stabilization measures and the World Bank SAPs.

4.2.1. Policy Reform Measures

Given Malawi's vulnerable position and deteriorating economic health, it undertook the adjustment program in the later part of 1979. This began with a standby facility loan[92] given by the IMF. The typical mechanisms of the program include diversification of revenue sources, reduction in government spending, reduction in new credit, diversification of credit to the private sector, and rationalization of interest rates. The early stages of the efforts to stabilize the economy were not effective, partly because of the transport shocks mentioned above, that resulted from the Mozambique War. The situation was only exacerbated by the dependency of external funds to import food during

[92] Definition: "A sum of money, not to exceed a predetermined amount, that can be borrowed in part or in full from a credit granting institution if the borrower needs in".
"Standby Line of Credit Definition | Investopedia." Investopedia. 2010. Accessed May 04, 2016. http://www.investopedia.com/terms/s/stanby-line-of-credit.asp.
In this context, it refers to an economic program of the IMF involving financial aid to a member state in need of financial assistance, normally arising from a crisis.

the drought emergency, which resulted in surpassed credit ceilings and failure to meet other targets. Hence, a second standby loan was negotiated until mid-1982. Again, the efforts to stabilize the economy proved unsuccessful. There was a continued dependency of food imports, a lack of revenue generation, high levels of interest payments, and insolvency of parastals. These all added to the persistent crisis in the balance of payments and fiscal deficits.[93]

Despite the disappointing results of Malawi's first stabilization policies, the government was still able to make a deal with the WB. This deal led to the first provision of the first structural adjustment loan (SAL I) of US$45 million. It should be stated that several of the goals were similar to those of the suspended IMF standbys. These include the restoration of the equilibrium in the internal and external account balances. These loans however additionally highlighted the restoration of growth through resource management, institution building, and price policy and marketing arrangements.[94]

In an attempt to better the balance of payment, these policies aimed at increasing exports through price-oriented adjustment, as the prices of exports were to be raised. In addition, certain adjustments were also made in order to make the Agricultural Development and Marketing Corporation (ADMRAC) more resourceful. ADMRAC was founded in Malawi is 1971 as a government-owned or parastatal to encourage the Malawian economy by increasing the volume as well as the quality of agricultural exports. This was done in order to develop new foreign markets for the consumption of Malawian

[93] David E. Sahn and Jehan Arulpragasam, "Adjustment without Structural Change: The Case of Malawi," In *Adjusting to Policy Failure in African Economies*, 202, Ithica: Cornell University Press, 1994.
[94] Ibid., 202

agricultural produce and to support Malawian farmers. There was no reference here to the estate sector as it had in preceding decades created the most economic growth.[95]

The prices of various commodities and wages were also targeted for improved flexibility, similar to the pricing mechanisms of smallholder crops. In combination with the IMF standby requirements, the interest rates and exchange rates were also under observation. External borrowing by domestic banks and the government were tightly supervised as a way to manage resources. Furthermore, attention was also given to the agricultural sector as well as education, housing, and health, which were all under the government investment program involving frequent development expenditure targets.[96]

In 1982 and 1983, a number of other IMF facilities complementing SAL I were also organized. However, the early implementation period of SAL I was stagnant in most areas. These difficulties that were confronted initiated the push towards the signing of the SAL II. This included an amount of US$55 million, and was deferred until January 1984. The targeted growth rate was reviewed and changed to a more realistic rate of 3.4 percent for the period covering the next five years. This plan of the second phase of the adjustment program was envisioned to continue the reforms introduced in the first phase.[97]

SAL II targeted two important problems that were not addressed in SAL I. The first was the use of fertilizers. The goal was to commit the government to the complete removal of the use of fertilizers by1985/86. The second feature of this program was to assist the government in implementing measures that would ultimately improve the functioning of ADMRAC. This was to be done by minimizing its marketing costs by reducing the quantity

[95] Ibid.
[96] Ibid.
[97] Ibid.

of markets in which it operated. The reason for this was to increase the role of the private sector as it was believed to be more capable of improving crop marketing and distribution. Overall, the government proved successful in obeying the SAL II guidelines. This adherence, coupled with a 3.6 percent increase in the GDP growth rate in 1983 and a 4.5 percent growth rate in 1984 facilitated the acceleration of the SAL III approval in 1985.[98]

Under this program new obligations had to be met in order to complete the price liberalization program which would ultimately lead to the achievement of food self-sufficiency, export promotion, and crop diversification. Under the SAL III, for the first time, the role of the estate sector was taken into consideration and was included in the conditionality. This support came in the form of a pilot scheme that would deliver medium and long term credit, with an extension and management training program. Although the active exchange rate policy was still maintained, measures were to be enforced that would encourage the completion of the improvement of an export promotion policy as well as the installation of an export financing facility. The third goal of SAL III was to encourage the government to implement strategies that would assist in the rearrangement of the tax system as well as the improvement of public sector management.[99]

In 1986 however, the Malawian economy once again began to demonstrate signs of instability. In 1986, with the termination of the extended fund facility, the government and the IMF could not settle on an agreement on the extension of further facilities to Malawi for the years 1986 and 1987. This prompted the involvement of the World Bank, which stepped in and offered a supplemental credit extension of the SAL III in 1987. In

[98] Ibid.
[99] Ibid., 203

consultation with the World Bank and the IMF, the government was required to readdress its measures and resulted in the formation of a new fiscal program that restricted expenditure. Once more, together with the World Bank and IMF, by mid-1988, the government of Malawi rectified a shadow stabilization program that was intended to minimize the fiscal deficit. In addition, during this period the World Bank also planned to "move away from broad-based SALs to a series of policy-based sectoral operations, designed to address remaining structural constraints in the key productive sectors". In other words, this meant that in 1988 the World Bank endorsed an industrial and trade policy adjustment credit for US$70 million. This program intended to liberalize the foreign exchange allocation system, institute a duty-drawback system[100] and an export revolving fund that would be favorable towards exporters, and encourage a suitable exchange rate policy. Furthermore, in the 1990s, and agriculture sector adjustment credit was approved. This was an agreement that authorized, on a restrictive basis among smallholders, the production of burley tobacco. This was intended to discourage the transference of land from the smallholders to the estate sector. The plans under the agriculture sector adjustment credit also include measures that would increase the rents on leasehold land, partly privatize fertilizer distribution as well as official maize prices so that the prices would reflect the transportation prices to and from ADMRAC's central depots. This credit also

[100] Definition: "A refund that can be obtained when an import fee has already been paid for a good, but the good is then subsequently exported". "What Is Duty Drawback? Definition and Meaning," BusinessDictionary.com, accessed May 04, 2016. http://www.businessdictionary.com/definition/duty-drawback.html.

emphasized research, which was anticipated to develop a maize variety with adequate storage and processing facilities.[101]

Overall, the structure of the nationwide economic policy that was in place from the early 1980's up until the end of the decade was governed by this reform program. The combination of the World Bank's structural adjustment programs and the IMF's stabilization measures were projected to achieve internal and external balances as well as economic growth through the strict control of demand and supply-side restructuring.

4.2.2. Reform and Macroeconomic Performance

The first decade of adjustment in Malawi is marked by instabilities that can be identified in most of its performance indicators. For example, inflation, GDP growth, the current account, and budgetary deficits were all extremely volatile. Between 1980 and 1987, GDP grew at a rate of only 2.4 percent. During the following two years there is indeed evidence that GDP experienced an improvement that averaged to 4.2 percent, however these results are considered relatively uncertain. This growth is associated mostly to estate agriculture. On the other hand, performance in the smallholder sector experienced a continuous decline. Hence, the important message to draw from this is that even this minimal improvement in GDP performance did not benefit the majority of the rural population. [102]

Efforts to control for inflation were also ineffective. The reasons for this can be attributed to the combination of devaluations of the kwacha, the loosening of government

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[101] David E. Sahn and Jehan Arulpragasam, "Adjustment without Structural Change: The Case of Malawi," In *Adjusting to Policy Failure in African Economies*, 203, Ithica: Cornell University Press, (1994).

[102] Ibid., 204

price controls, monetary expansion, and the rising demand for food that was caused by the inflow of refugees.[103]

The deficit of the current account during the early years of adjustment was also at an exceedingly high level, reaching 10 percent of GDP in 1982 and 1983. It should be noted that part of the reason for the negative trade balance can be attributed to the rising transportation costs. These costs were high due to the fact that Malawi is a landlocked country that lost access to the coast as a result of the closing of rail lines. The net outflow of factor and nonfactor services also contributed to the worsening current account balance.[104]

In 1984, the external account experienced a noteworthy improvement. Several factors can be attributed to this reversal. First, although minimal, Malawi experienced a recovery in its terms of trade. Second, although the c.i.f margin continued to increase and reached 40 percent of the total cost of imports, total imports c.i.f, in actuality, declined. C.i.f. stands for cost, insurance, and freight. This is a trade term that requires the seller to arrange for the carriage of goods by sea to a port of destination, and provide the buyer with the documents that are necessary to acquire the foods from the carrier. Third, remittances, which are considered private transfers, from Malawian workers overseas continued to inflate the current account. Fourth, under the SAL II, Malawi experienced a onetime capital inflow of SDR 52 million. Fifth, for the third year in a row Malawi rescheduled debt, accumulating relief that totaled SDR 23 million. Overall, in 1984, the outcome of all these

[103] Ibid.
[104] Ibid.

factors resulted in a surplus on its balance of payments account, which in turn permitted the country to restock its gross official reserves.[105]

These improvements however were not sustained. In 1985, external account began to diminish. This situation was made worse in 1986. The merchandise trade balance that was characterized by the compression of imports resulted to the overall economic slowdown. Non-maize imports fell by 22 percent from the preceding year. The service account was overshadowed by the services account. This reached to an amount totaling to SDR 44.4 million, which overcrowded the continued inflow of private transfers that totaled to SDR 21.6 million. What was striking however in 1986 was the negative capital account balance despite the inflow of SDR 63.9 million SAL-related funds that were caused by large debt-servicing payments and unknown short-term outflows. These SAL-related funds have been said to contain a large expenditure on security-related imports.[106]

Consequently, the overall balance in 1986 amounted to SDR -67 million, which translates to a -6.4 percent of GDP. Once again, in order to finance this deficit reserves were inevitably exhausted. This balance of payments situation was slightly improved in 1987 and continued through to 1988 largely due to new financial agreements that were lengthened by the country's primary creditors. Paris and London club creditors, which provided rescheduling agreements, explain a large portion of debt relief that further assisted in bettering the balance of payments situation. Club creditors are informal groups of officials from creditor countries whose role is to find coordinated and sustainable solutions to the payment difficulties experienced by debtor countries. However, these influences only

[105] Ibid., 205
[106] Ibid.

act as a cover to the persisting decline the trade balance. The trade balance was projected to have weakened by 500 percent. In 1988, the currency devaluation in combination with the foreign exchange liberalization resulted in a 34 percent increase in imports that was unmatched with exports. The current account deficit further declined in 1989 as a result of the import liberalization program. In 1990, there was a marginal improvement in the current account deficit as a share of GDP decreased to 8.8 percent from preceding year's peak amount of 10.8 percent. This improvement can largely be attributed to unexpectedly high estate crop exports.[107]

Similar to the absent state of external development, the budget deficit similarly reveals large instabilities. From 1976 to 1977, the years before adjustment, the budget deficit, discounting grants, increased from 7.3 to 15.5 percent of GDP. From 1990 to 1991 however, the overall deficit began to fall, reaching an estimated low point of 5.8 percent. This decline can be explained by a return to more sustainable levels of development expenditures. In the 1980s however, there is no indication of falling recurrent expenditures after their upsurge in the years prior to adjustment. Recurrent expenditures refer to expenditures made of goods and services that do not result in the creation or acquisition of fixed assets. They mainly comprise of expenses on wages, salaries, and supplements, purchases of goods and services, and consumption of fixed capital (depreciation).[108]

The sectoral allocation of expenditures must also be reviewed, as they are just as important as the overall deficit figures. Between 1977 and 1979, the share of recurrent expenditures which averaged to 23.2 percent before adjustment saw a significant decline

[107] Ibid., 208
[108] Ibid.

and reached an average below 20 percent in the years between 1982 and 1986. From 1987 to 1991, this average, once again, ascended to 22.1 percent. This was applied to all divisions in social spending. The most substantial increase was in education, where spending in 1989 to 1991 encompassed 13.2 percent of the total, contrasting from a figure of only 4.7 percent between 1977 and 1979. Recurrent expenditures in real terms on social services also saw a significant rise between 1977 and 1981.Subsequently, there was no secular trend observed during the period of adjustment.[109]

4.2.3. Agricultural Sector Performance and Reform

In the early years of the 1980s, policy reform in Malawi had specifically aimed at recovering agricultural growth. This was to be accomplished through changing the assembly of incentives and refining the efficiency of markets. Altering relative prices and eliminating obstacles that come in the way of the appropriate functioning of the market through the elimination of government intervention were the pillars of Malawi's reform program.[110]

The agricultural sector in Malawi takes the form of a dualistic arrangement. The one side of this arrangement is the smallholder sector, which is based on farming for subsistence and operating in land managed under customary law. In 1980, this comprised approximately 80 percent of Malawi's agricultural production. Smallholder production is focused on maize, cassava, and other subsistence crops, as well as cash crops that include cotton, groundnuts, and oriental, sun-, and air-cured tobacco. It is important to note that

[109] Ibid., 208
[110] Ibid., 209

crop choice is not entirely based on the farmer's decision. For example, according to the law, the smallholder sector had been prohibited from growing certain export-oriented cash crops. These include burley and flue-cured tobacco, tea, and sugar. A significant amount of smallholder production was for the purpose of domestic consumption, however excess production was subject to marketing and price regulations. With the limited options presented to smallholders, they had no choice but to sell their produce to ADMRAC as it was their main source of fertilizer. Hence, producer and input prices as well as cropping patterns and production were solely determined by the government. The other side of this dualistic arrangement is made up of the estate sector. This sector has traditionally focused on export crop production as a tool for generating growth. It is the sector that the basis of achieving growth depends on, which means that the government implements its policies accordingly. These policies directly target production, pricing, marketing, and land tenure policies controls. The nature of the interaction between these two subsectors therefore becomes crucial given that they compete for the same resources and are related through input, labor, and labor markets.[111]

It is important to note therefore that structural adjustment programs have been implemented on an agricultural sector that is inherently defined by strict institutional divisions. In particular, from the above overview offered on the reform programs, adjustment has focused especially on pricing policy in the smallholder sector, neglecting the enforced dualism, as well as the estate sector. There are three agricultural sector reforms that have been particularly prominent in the smallholder sector. The first was the objective of increasing producer prices of agricultural commodities. The second was the removal of

[111] Ibid.

subsidies on fertilizers for smallholder. The third was the goal of privatizing central grain marketing functions that were conventionally executed by ADMRAC.[112]

4.2.4. Case Study Conclusions

The structural adjustment programs implemented in the decade between 1980 and 1990 have resulted in very restrictive success in the regards to the intended scope of the adjustment process, its extent of implementation, and its consequences. In examining the economic performance in Malawi during the 1980s, it can be concluded that adjustment has not addressed the existing structural deficiencies.[113]

Malawi's experience in meeting the conditions defined by various financing agreements was vastly volatile. Financial flows were not stopped from entering the Malawian economy despite the nations' weak performance and its inability to meet the guidelines of conditionality. Despite minimal positive changes from 1980 to 1990, due to the accompanied concessional lending, the Malawian economy still faces several weaknesses since the 1990s. Some of these include substantial import dependence, weak interindustry linkages, inefficient and underused capital markets, technically weak civil services, and the reliance of parastatals, oligopolies, and monopolies on indirect subsidies from the government. Two further issues however that are much more concerning are the lack of improvement in human capital investment and the lack of agricultural development. Regarding the first of the two issues are the continuously high levels of malnutrition and disease. In terms of the second issue, given that Malawi's agricultural sector is the

[112] Ibid., 210
[113] Ibid., 230

backbone of the economy and main source of income and employment for the majority of the population, the SAPs were unsuccessful in effectively designing and executing a reasonable and realistic policy that would transform the structural obstacles that contribute to Malawi's fragile agricultural economy.[114]

Adjustment reforms have only succeeded in offering support in the form of substantial loans while they lack any sort of real intention of promoting policy change. In the smallholder sector for example, precondition reforms of input and product prices have not materialized. Additionally, the better-off farmers were the only ones who benefited from subsidies to fertilizers. Moreover, consumer subsidies did not favor the majority of the poor in Malawi. Smallholder crop taxations continued to threaten the possibility of establishing a potentially strong agricultural sector while decreasing the returns to labor for the poor.[115]

The policy reforms also significantly ignored the control of land and assets as well as the appropriate use of natural resources. This was exacerbated by the prohibitions placed on the production of the most advantageous crops to smallholder producers. These crops were limited to the producers of the estate sector who were further favored by the arrangements that targeted prices and marketing. The impact of the bans placed on these lucrative crops must be reevaluated. Furthermore, issues concerning land policy must also be reviewed to correct for the continued support offered to the estate sector in terms of the provision of smallholder land. Policy must also aim towards the removal of the institutional obstructions that avert land from finding its most productive use.[116]

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[114] Ibid.
[115] Ibid., 231
[116] Ibid.

It can also be concluded that reform in Malawi must encompass a strategy that increases labor productivity, mainly among the smallholder sector. The proposed approach towards achieving this goal is through the use of biotechnology. In terms of this policy solution, the authors point out that this should not be considered the ultimate strategy that will transform on-farm agricultural activities into long-term sources of income growth for rural households. Furthermore, Sahn and Arulpragasam go on to state that although there is indeed a need to enhance fertilizer uptake and the adoption of improved agricultural practices among smallholders, there are limitations that come with this strategy. These limitations apply particularly to the growing number of smallholders whose land is typically less than half a hectare. In this case, the possibilities of generating and maintaining a surplus that is beyond their own food necessities are restricted. Attention therefore should be shifted towards increasing rural wages in both the traditional sphere of hired labor on large smallholder plots and estates as well as through the recognition and expansion of alternative, nontraditional employment opportunities. In dealing with the mounting population pressures and the competition between producing for subsistence and exports, the authors recommend that poverty alleviation should be addressed through investments that could potentially increase land productivity and support the growth of nonfarm enterprises that produce employment and rural incomes.[117]

Sahn and Arulppragasam also conclude that attempts should be made to improve the needs of the informal sector. If growth and productivity are enhanced in the informal sector and smallholder enterprises, there will be a need for economic reforms that eliminate the embedded discrimination that supports the formal modern sector. Therefore, targeting

[117] Ibid., 232

the informal sector will require the enhancement of infrastructure and access to capital, adopting a system of information and services to small-scale entrepreneurs, eradicating disproportionate regulatory constraints, and motivating private sector initiatives in sectors that were formerly governed by parastatals or leading private entrepreneurs.[118]

[118] Ibid., 233

5. Policy Implications and Concluding Remarks

5.1. Policy Implications

The policy implications offered in this section are based on some of the conclusions and policy recommendations drawn by Sahn and Arulpragasam in their case study. It also targets the literature discussed in chapter two that supports the adoption of industrial agriculture as an engine towards achieving higher economic growth. Finally, it offers recommendations on the overall structure of the global agricultural policy framework that is largely manipulated by IFIs and WTO guidelines. Overall, major adjustments must be made in agricultural and macroeconomic policies. Furthermore, although this paper has not focused on the environmental aspects of agricultural development, they must also be taken into account in order to achieve long term and sustainable agricultural development.

First, major modifications in macroeconomic policies are necessary and should be changed to prioritize smallholder farmer interests in developing countries. These farmers must have adequate protection from the drastic liberalization measures that favor the big players in developed countries. Hence, trade policies most offer smallholder farmers as well as the rural poor in developing countries the necessary protection needed to secure a steady and viable livelihood. They must also be protected against dumping and obstructive competition from subsidized producers in developed countries. Greater security of the rural population will ultimately result in more equitable development for countries as a whole. Furthermore, considering the special place of agriculture in developing countries' economies, as well as for reasons of food, national, political, and economic security, policy

flexibility must be given in order to guarantee that existing production of staples and food crops of domestic consumption are not jeopardized, and if deficient, can be increased. Policies that take all these factors into account include the following:

- Developed countries should be provided with more flexibility to only sign agreements in which their economies and industries are adequately prepared for and which can benefit from. They should have the option of withdrawing from an agricultural agreement until their farmers and economies are better equipped for competition, otherwise smallholder farmers and food security will greatly be threatened. This is especially important considering the unjust competition and dumping practices that developed countries are involved with that have substantial impacts on developing countries' economies. It should be noted that this does not imply the complete isolation of developing countries from trade, but rather recognizes that liberalization can oftentimes greatly impair the weakest sectors on a developing country's economy. Hence, flexibility should come in the form of careful time management and structure when it comes to integration with the world economy.[119]
- Developed countries should by all means remove both direct and indirect export subsidies within a specific time frame. Concessional export credits and other forms of export promotion programs must also be removed.[120]
- In terms of domestic support, developed countries should significantly reduce their amber box subsidies. Blue box subsidies must be re-categorized as amber box subsidies and therefore be subjected to reduction disciples. Green box subsidies must be revised and subjected to tighter criteria.[121]
- Developed countries should substantially reduce their high agricultural tariffs.[122]
- If high subsidies are to be sustained in developed countries, developing countries should not be exposed to additional tariff reductions in their food products. They

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119 Martin Khor, "Globalization, Liberalization, Protectionism:"Impacts on Poor Rural Producers in Developing Countries"", *Third World Network Report* (2006):44.
120 Ibid.
121 Ibid.
122 Ibid., 45

must be permitted to reexamine tariff levels and adjust them according to the need of domestic food production capacity, protecting livelihoods, and employment.[123]

- In developing countries a special safeguard mechanism (SSM) must be established. This is a tool that allows developing countries to temporarily increase tariffs in order to cope with import surges or price falls. [124]

In addressing SAPs, the appropriateness of the conditionalities that come attached to loans must also be reviewed. Relevant to the agricultural sector, the recommendations of the SAPRI report should be considered. These include the following:

- Policy should be altered and aimed at providing priority to production in the domestic market and safeguarding food security.[125]
- Policy and investment decisions must consider the disparate capacity of certain groups', such as smallholders, access to new market opportunities and improve their access to land and other resources. [126]
- Trade policy in the agricultural sector should be refined in order to allow countries to pursue some degree of self-sufficiency while also assisting the rural poor in accessing affordable food by encouraging production by smallholder and marginalized farmers.[127]
- With state support, formal institutions should be established and engaged in providing equal access to information and markets to all producers. Furthermore, they must ensure environmental oversight and address negative impacts. [128]
- On a more general note, agricultural policies must be constructed to reduce existing inequalities by assisting subsistence farmers in building more sustainable livelihoods in the rural sector. In order to achieve this, policies

[123] Ibid.
[124] Ibid.
[125] Ibid., 43.
[126] Ibid.
[127] Ibid.
[128] Ibid.

should encompass a more participatory process that considers all stakeholder, and socio-economic and environmental factors.[129]

5.2. Towards a More Environmentally Sustainable Agriculture

Next, policy recommendations will be offered based on the conclusions drawn by Sahn and Arulpragasam. These authors purpose that Malawi adopts more commercialized and industrialized agricultural practices in order to achieve higher economic growth. It is important to note however that the combination of industrialized agriculture, increased concentration of production, emphasis on exports, and the removal of barriers for staple crops in developing countries have been detrimental not only to the livelihoods of smallholder farmers and overall food security in developing countries, but also to the environment. Industrial agriculture should not be considered the solution for achieving food dependency in developing countries. Therefore, alternative methods of more equality-generating forms of food production must be offered. This will ensure smallholder farmers in developing countries a viable source of livelihood, access to food, and more sustainable long run development.

As concluded in chapter three, the decade of donor-sponsored efforts at economic reform in Malawi have been very limited in terms of the intended scope of the adjustment process, its degree of implementation, and its consequences. An examination of Malawi's economic performance during the 1980s, particularly in terms of agricultural development, has not addressed the country's structural weaknesses and has largely failed in positioning Malawi in place to better manage both internal and external vicissitudes. Most importantly, the fundamental features of Malawi's agricultural sector, the backbone of the economy and

[129] Ibid.

main source of income and employment for the majority of workers, have hardly been transformed. The smallholder farmers especially have greatly been neglected. Hence, this section aims at offering more equality-generating forms of food production, which can ultimately provide small farmers with a viable source of livelihood and access to their daily food needs.

First, a more environmentally sustainable form of farming is vital for the long term survival of smallholders, which will cultivate rather than exploit the resources needed for long term food production. A production system that is more reliant on locally available inputs is also necessary. This is because farmers cannot benefit from technologies and inputs which are not accessible, affordable, or suitable to their conditions. Inputs such as pesticides, fertilizers and 'high technology' seeds present problems and risks for less-secure farmers, especially when they depend of external funds to make these purchases. As Vandana Shiva suggests, instead of relying on the typically promoted industrial methods of chemical intensification, there must be a shift towards other methods of intensification that will target the ecological needs as well as the affordability aspect for small farmers. Shiva's suggestions therefore will be included in these recommendations. She purposes the following:

- Replacing the use of external inputs with the intensification of biodiversity.[130]
- Replacing competition between crops, livestock and humans with intensified crop-livestock integration.[131]
- Increasing internal inputs such as local labor and knowledge for crops and livestock.[132]

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130 Aileen Kwa, *Agriculture in Developing Countries: Which Way Forward?*, South Centre, (2001): 13, http://focusweb.org/publications/2001/agriculture_which_way_forward.html.
131 Ibid.
132 Ibid.

In order to move beyond the industrial practices of agriculture, productivity must be assessed on a more holistic farm system rather than one that focuses explicitly on specific commodities. This would mean evaluating a farm's stability, sustainability, and productivity of its diverse elements on a long term basis rather than focusing on each year's farm output in isolation in terms of the profits of the top cash crops. As mentioned above, ecological approaches to agriculture must therefore encompass methods that integrate plant and animal production, which has been a prehistoric tradition to farm practice.

The process of intercropping allows several crops to grow simultaneously on the same field. The concurrent rotation of cereals and legumes as well as the interplanting of low-growing legumes with a cereal, for example, can help preserve the fertility of soil without the need of overpriced fertilizers.[133] Furthermore, the problem of soil depletion that arises from monocropping of row crops is avoided, and rather helps increase the organic matter content of soils. Less land is also required given that crops are cultivated together. Integrating crops and animals on the same farm also offers benefits to the soil as it allows for the return of organic matter. For example, ducks and geese in rice farming can reduce weeds without the use of herbicides. Overall, these methods are considered low-input technologies, meaning that there will no longer be a heavy reliance on externally imported inputs given that they will be replaced by the internal inputs of labor, skills, and management. The combination of these internal inputs can ultimately lead to higher land productivity.

[133] Ibid., 14

5.3. Benefits of Alternative Food Production

In support of these alternative food production methods, the benefits must be mentioned. First, agroecological food systems can lead to higher yields. Of course, those who oppose these alternative methods question the ability of small farmers to produce sufficient quantities of food to also feed themselves. It is found however that these methods can in fact lead to increased production of approximately 50-100 percent.[134] The crops that smallholder farmers most heavily rely on, (i.e. rice, beans, maize, cassava, and potatoes) have been found to increase drastically. This of course is attributed to the sufficient labor and traditional practices that go into farming, not the expensive off-farm inputs. Second, yields have been found to be more stable while crops also become more resistant to pests. It is found that apart from higher yields, the levels of total production have been much more stable than they are under industrial systems. This is measured on a per unit area. For example, there is significantly less yield variability in cereal/legume polycultures than in monocultures of the components. In addition, this form of farming protects and conserves the soils and improves water management and harvesting. Biodiversity is also enhanced, which results in increased resistance to pests and diseases. Overall, the benefits of alternative agricultural practices assure the long term sustainability of food production. These beneficial aspects however are often not included in the conventional, single dimensional method of agriculture as they are not easily quantifiable in terms of calculating costs, outputs, and profits. Third, agroecological systems can contribute to poverty alleviation, rural development, and sustainable livelihood. The most important aspect of it however is the ability it has in offering small famers a decent form of income and

[134] Ibid., 14

subsistence, with nondiscriminatory returns to their labor. This of course must be complemented with adequate support from the larger policy environment. The rates of return are also higher since farmers are no longer burdened by exceedingly high input costs. Improved smallholder production therefore increases food supply, income, malnutrition, reduces poverty, and adds to the overall wellbeing of the rural community.

5.4. Concluding Remarks

As it has been identified, the current international trade regime as defined by the IFIs and the WTO agreements is marked by several imbalances from a North-South perspective. Furthermore, it has also been recognized that the worldwide framework is extremely influential towards national policies and agendas. As it was concluded in chapter three, the decade following the implementation of structural adjustment in Malawi only saw very limited outcomes in terms of the intended scope of the adjustment process. Most importantly, the performance in the agricultural sector remained stagnant.

The opening up of markets and free trade under these donor-supported economic reforms have led Malawi into a state of greater social and economic deprivation, while increasing the nation's dependence on external loans. The most industrialized, developed countries on the other hand, have actually experienced significant improvements in their economies, as the state remained the central role in economic activity, practicing strong protectionism, with subsidies given towards domestic industrial production. Overall, under the auspices of the World Bank and IMF developing countries have been forced to cut back on the very provisions that assisted rich countries of the global North to grow and prosper. Hence, in recognition of these asymmetries, there is a pressing need to reform the structure

of the international global framework. Major modifications in macroeconomic policies are vital. Furthermore, a revision is also offered on the appropriateness of the conditionalities that come attached to the loans given under the SAPs. Lastly, recommendations on alternative forms of agriculture, specifically agroecological systems, which could benefit smallholder farmers in developing countries are also offered.

The major limitation of this paper is that the case study reviewed on Malawi doesn't directly focus on the power rations between the global North and South, but rather outlines the measures under the policy reforms and their internal effects on the macroeconomic and agricultural sector performance of the Malawian economy. Although not specifically through the use of the case study presented, there are broader discussions and arguments made throughout the paper that do point to the overarching issue of the international trade regime shaped by the neoliberal ideologies embedded in the World Bank, IMF, and WTO.

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