التأثير المحتمل لتطبيق السياسات النيوليبرالية على الاقتصاد الفلسطيني

The Potential Impact of the Implementation of Neoliberal Policies on the Palestinian Economy

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Abstract

This research aims to study the possible short-term impacts of neoliberal policies' implication on the Palestinian economy for the year 2020 -amid the COVID-19 crisis. This research takes into consideration the fact that the Palestinian economy is limited by the constraints enforced by the Israeli occupation, which limits the applicable neoliberal policies. This research focuses on the government expenditures on Health, Education, and Social Development, credit extension policies, and other external factors to analyze the effects on the main economic indicators. These indicators include expenditure, value-added of economic activities, unemployment rates and tax revenues indicators.

This was done using the integrated simulation framework (ISF) by assuming quantitative estimates of some of the neoliberal versus non-neoliberal policies to compare their results with the results of the baseline scenario estimates. These estimates assume the continuation of the current politico-economic situation – including the covid-19 crisis– depending on the chronological data from the years 1972–2019.

The study shows that neoliberal policies are expected to reduce government expenditures substantially as an indication of an alarming rise in social inequality and class differences. Such policies are expected to increase investment in the private sector, in contrast, they are expected to cause a significant reduction in the consumption index which may indicate an increase in the poverty rate. As for productivity, it is expected to have a significant negative impact on both agricultural and other services sectors (the biggest contributor to GDP).

الملخص التنفيذي

يسعى هذا البحث إلى دراسة الأثر المحتمل لتطبيق السياسات النيوليبرالية على الاقتصاد الفلسطيني على المدى القصير في سنة 2020 خلال أزمة كورونا، مع الأخذ بعين الاعتبار خصوصية الحالة الفلسطينية نظراً للقيود المفروضة عليها من قبل الاحتلال ومحدودية السياسات الممكن تطبيقها، وبالتالي تم التركيز على سياسة تخفيض النفقات الحكومية الموجهة لقطاعات الصحة والتعليم والشؤون الاجتماعية وسياسة توسيع الإقراض وعوامل خارجية أخرى لتحليل الأثر العائد على المؤشرات الاقتصادية الأساسية المتمثلة بمؤشرات الإنفاق وإنتاج القطاعات الاقتصادية والبطالة والإيرادات الضريبية. تم ذلك باستخدام إطار المحاكاة المتكامل (ISF) من خلال افتراض تقديرات كمية لعدد من السياسات النيوليبرالية وغير النيوليبرالية لمقارنتها مع نتائج تقديرات سيناريو الأساس الذي يفترض استمرار الوضع الحالي السياسي والاقتصادي بما فيه أزمة كورونا، معتمدة على التسلسل التاريخي للبيانات من سنة 2019-1972.

أظهرت الدراسة أنه من المتوقع أن تقلل السياسات النيوليبرالية من النفقات الحكومية بشكل جوهري مؤشراً على زيادة اللا مساواة والفروق الطبقية، كما من المتوقع أن تزيد من الاستثمار في القطاع الخاص على المدى القصير مع تقليل كبير في مؤشر الاستهلاك كدلالة على زيادة معدل الفقر، أما فيما يخص الانتاجية فمن المتوقع أن ينتج تأثيراً سلبياً كبيراً على قطاعي الزراعة والخدمات الأخرى (المساهم الأكبر في الناتج المحلي الإجمالي).

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Chapter 1: Introduction

1.1 Problem Background

Neoliberalism is the political and economic model that defines our time. It advocates for free markets without the involvement of the government, since the middle of the 1970s when the Keynesian model did not succeed. The transition from the Keynesian to neoliberal model took place mainly due to the failure of capitalist countries to make big profits after World War II; since it did not save capitalism from its cyclical crises and the beginning of structuring a long-term global crisis as they had expected from the Keynesian theory (Palley, 2005).

Neoliberalism was initially adopted in the United States of America and the United Kingdom during Reagan and Thatcher era. Thus, many countries followed suit; either under American political pressures, or through international institutions that represent the most significant tools for spreading neoliberalism (Harvey, 2007). Neoliberal policies were built based on the ideas of the Bretton Woods institutions, including liberalization of trade and finance. This situation allows the market to set prices (deregulation), privatization, and austerity policies to economically and socially bolster the role of the private sector. They were mostly applied to the most vulnerable communities, as strict structural reform programs (Chomsky, 1999).

Neoliberalism has been based on a designed policy of development during immediate integration with the global economy. This economy was enhanced by the World Bank and IMF driving by "structural adjustment programmes" (Siddiqui, 2012). According to Klein, neoliberalism seeks to exploit natural disasters, military wars and

political problems to build and spread its ideas to exchange the previous system (Klein, 2007). For instance, the first experiment that took place in the formation of the neoliberal state was in Chile after the Pinochet coup, followed by Iraq after the US occupation, and others (Harvey, 2007). These reforms and economic policies lead to greater inequalities and poverty rates in developing countries (Chomsky, 1999).

In the Palestinian context, economic neoliberalism emerged as a feature that defines the Palestinian market and its economic development process when the Oslo Accords were signed. The Palestinian Basic Law also stipulates the establishment of the economic system based on the principles of the free market for the benefit of the private sector. However, neoliberal policies have been openly dealt with during the past decade in Salam Fayyad's government. As the World Bank, IMF and other donor institutions 'suggested' or ordered the Palestinian Reform and Development Plan (PRDP) of the government of Salam Fayyad, the program focuses on "rebuilding the Palestinian national institutions" and "developing the Palestinian public and private sectors" (Palestinian National Authority, 2011). "The Fayyadist strategy" is based on the need to establish a Palestinian state to build the infrastructure for a future state despite the presence of occupation (Palestinian National Authority, 2009). Thus, after the second intifada in 2005, the PA began a project of institutional reforms and reforms addressed towards security and law, efficiency and transparency of public finance, and services and facilities (Khalidi, 2012). However, due to the specificity of the Palestinian situation, the neoliberal policies that can be applied are limited as the Palestinian government does not have the proper instruments to implement it due to the restrictions imposed by the Israeli

occupation. These restrictions were shaped by the following factors: the Paris Agreement, the increased dependence on foreign aid, the absence of a Palestinian currency, the inability of Palestine to have an independent trade policy, and having the Palestinian economy controlled by the Israeli occupation, a developed capitalist economy, with no possibility of competition. Hence, monetary and fiscal policies are very limited. The austerity policies, credit extension and imposed context of neoliberal by Israel or donor countries were the only actions that could be taken by Fayyad's government within what the neoliberal program requires. For instance, programs from the International Monetary Fund (IMF) were conducted to encourage private lending or Israeli policies that affect the collection of value-added taxes. In the same vein, programs were implemented by Salam Fayyad's government which represent financial collection policies that encourage private loans by providing credit facilities. Considering that the Palestinian market is facing all of these hurdles, how will it be influenced if the neoliberal program is implemented?

1.2 Research Questions

This study examines the potential impact on the Palestinian market if neoliberal policies were applied, given the current state of the Palestinian economic sectors, and its political and economic history. The study aims to answer the following fundamental question: What is the potential impact of the implementation of neoliberal policies on the Palestinian economy during the COVID-19 crisis?

The following sub-questions also need to be answered:

1. Which policies reduce the impact of the Corona-virus crisis on the Palestinian market more, the neoliberal or non-neoliberal policies?

2. Assess the impact of neoliberal policies implementation in terms of expenditures, production, unemployment, and tax revenue.

3. What is the extent of the decrease/increase in the growth of the Palestinian market when implementing neoliberal policies?

4. How are poverty and inequality indicators affected when applying neoliberal policies?

1.3 Importance

Given the neoliberal reforms have become the global economic and political reality in modern times, forecasting and evaluating the potential impact of neoliberal policies on the Palestinian market is critical to assess the possible choices that may enhance Palestinian economic development. Provided the Palestinian situation and the lack of Palestinian research that studies the economic side of the neoliberal policies, this study fills the literature gap of the economic role. This economic role is supposed to be played by neoliberal policies and reforms in Palestine if implemented in the current economic/political situation during the COVID-19 crisis. Given the prevailing argument that the neoliberal model is the only economic solution to a global crisis, the COVID-19 crisis was taken into account in this thesis to see how efficiently the neoliberal system has dealt with the Coronavirus crisis and its effectiveness in mitigating its effects.

The short-term effect is considered in the analysis because the economic effects of neoliberal policies in the short-term are usually expected to be positive. Therefore, this thesis tries to study it to the extent of its change with

the Palestinian circumstances and with the existence of the COVID-19 crisis during it. Moreover, this work is relevant to both academics and policymakers.

1.4 Methodology

Assessing the potential impact of the implementation of neoliberal policies on the Palestinian economy, this thesis analyzes the main economic indicators using the "Integrated simulation framework" which is the same economic simulation model the Palestinian Central Bureau of Statistics (PCBS) uses to forecast annual economic indicators. It considers the historical aspect, the current Palestinian policies, economic and political situations and the current existence of the COVID-19 crisis using E-Views. The model analysis is made for the years 1972-2019 (the sample is from 1982-2019) and it performed a "dynamic in-sample simulation" to simulate all endogenous variables during that period. Assuming several scenarios of existing policies and some different alternative policies in the short term for the year 2020, it used real data values.

Endogenous variables are represented in government expenditure, income tax, value-added tax, unemployment rate, real GDP, value-added of all economic activities (eight sectors), foreign trade balance, private consumption, national savings, and private investment. The exogenous variables are the health-education-development expenditures, number of closure days for worker crossings imposed by the Israeli authority, number of closure days for commercial crossings, credit extension, government transfers, government investment, income tax revenue, value-added tax revenue, government employment, net current transfers, population, Jordan and Israel GDP growth rates, inflation, and exchange rate ($/NIS).

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The data are historical time-series, the same database that was developed by UNCTAD's model (The Quantitative framework, 2003). It was collected from the Palestinian Ministry of Finance and Planning (MoFP), the Palestinian Central Bureau of Statistics (PCBS), the Palestine Monetary Authority (PMA), the International Monetary Fund (IMF), and the Israeli Central Bureau of Statistics (ICBS).

1.5 Organization of this thesis

The remainder of the study is structured as follows: chapter two reviews the theoretical literature of neoliberalism, the empirical literature on developing countries and the Palestinian context; chapter three illustrates the research methodology; chapter four discusses the results of the analysis, the empirical results and the results of the simulated scenarios; and chapter five concludes the research.

Chapter 2: Literature Review

2.1 Theoretical Literature

The driving ideologies and philosophies of the capitalist economic system have changed radically from what they were after World War II and what they became after the 1980s, both in developing and developed countries. Accordingly, a new economic policy has dominated for almost the last 40 years, known as "neoliberalism" after Keynesian policies and theories were applied after World War II. The latter is also known as "Keynesian compromise" or as the "Neoclassical Synthesis" as claimed by Paul Samuelson (Dumenil & Levy, 2005). Neoliberalism refers to "liberalism" for its belief in individual liberty standards, and the addition of 'neo' reflects the revival or renewal of the philosophy of economic liberalism. This renewal happened with the ideas of neoclassical economists representing free-market principles such as Alfred Marshall, William Stanley Jevons, and Leon Walras, which spread in the 19th century. Such ideas replaced the ideas of classical economists such as Adam Smith, David Ricardo and Karl Marx (Harvey, 2007; Palley, 2005).

It was also related to the principle of Adam Smith's "invisible hand" of the market, which he explained in the book of Wealth of Nations, by the principle of individual egotistical, where the individual, while pursuing his/her self-interest, indirectly leads to the public/social welfare; the unity of private and public interests. When the market is liberalized, the economy will adjust quickly and bring the world out of economic problems through the concept of the invisible hand (Harvey, 2007). Many classical economists such as Adam Smith and David Ricardo interpreted the

advantages of free-market economics as an alternative to the exploitation of the state by the landlords and the powerful in England who controlled the economy almost entirely in favor of increasing their wealth is the same as the neoliberal notion which specifies that the state should not intervene in order not to stand with the parties' force (Chomsky, 1999; Steger & Roy, 2010). Leonard (2006) differentiates neoliberal theory from the ideas of Smith and Ricardo of state intervention, that "neoliberal economists see that 'limited' government intervention to ensure smooth functioning of markets and to provide for 'externalities' is necessary". Furthermore, for Leonard, neoliberal theory "generally sees the government's role in economic terms as regulating markets, such as providing transparent price information, and ensuring the smooth functioning of commodities markets" (Leonard, 2006). There is much debate in this discussion, as other scholars assert that neoliberal theory goes entirely with classical economic ideas of the self-correcting market without any state intervention.

Neoliberalism for Harvey is utterly contrary to Keynes' theory of state intervention, which was widely disseminated to resolve the Great Depression after World War II. It also opposed the ideas of Oscar Lange of the theories of centralized state planning, on the pretext of the bias of the state to the powerful in society (Harvey, 2007). The most representative theories of neoliberalism that contradict the Keynesian system (which was widespread from the 1940s to the mid-70s) are "the theory of income distribution" and "the theory of employment".

Regarding the theory of income distribution, neoliberalism emphasizes that workers earn what they deserve according to supply and demand through the

relative scarcity and productivity of the worker. Thus, there is no need for unions and social protection institutions because their intervention may lead to unemployment. As for the theory of employment, neoliberalism asserts that free markets will not waste valuable factors of production as employment specifically, so prices are adjusted to make sure that all factors are used (Palley, 2005).

The roots of the neoliberal ideas return primarily to Friedrich von Hayek, the spiritual father of neoliberalism, with the establishment of "the Mont Pelerin Society" in 1947. It defended neoclassical liberalism to revive or renew its principles to challenge the principles of Keynesianism. The ideas of this neoliberal society influenced Milton Friedman, who directed the theoretical emergence of neoliberalism in the 1950s and its application after the 1980s. Hayek considered that state intervention in the market leads to some form of tyranny. He believed that a free market can regulate and adjust itself. In addition, Milton Friedman believed that political/state interventions in the market to reach full employment led to inflation or increase unemployment, so market forces must be left to solve its problems (Harvey, 2007; Lapavitsas, 2005; Steger & Roy, 2010).

Many authors describe neoliberalism as the dominant ideology in the world in recent years. As Harvey (2007) said, "Neoliberalism has become hegemonic as a mode of discourse". On the other hand, Alfredo Saad-Filho and Deborah Johnston (2005) said, "it is impossible to define Neoliberalism purely theoretically". The latter fits well with David Harvey's detailed definition of Neoliberalism:

> *"Neoliberalism is in the first instance a theory of political economic practices that proposes that human well-being can best be advanced by liberating individual entrepreneurial freedoms and skills within an institutional*

framework characterized by strong private property rights, free markets, and free trade. The role of the state is to create and preserve an institutional framework appropriate to such practices. The state has to guarantee, for example, the quality and integrity of money. It must also set up those military, defence, police, and legal structures and functions required to secure private property rights and to guarantee, by force if need be, the proper functioning of markets. Furthermore, if markets do not exist (in areas such as land, water, education, healthcare, social security, or environmental pollution) then they must be created, by state action if necessary. But beyond these tasks the state should not venture. State interventions in markets (once created) must be kept to a bare minimum because, according to the theory, the state cannot possibly possess enough information to second-guess market signals (prices) and because powerful interest groups will inevitably distort and bias state interventions (particularly in democracies) for their own benefit" (Harvey, 2007).

Furthermore, Harvey illustrated that neoliberalism could be seen in two ways, with the "utopian project" of realizing the theory of justification and legitimizing the re-organization of international capitalism, or with "the political project", which prevailed and dominated to re-establish the conditions for capital accumulation and to build or create the power of the wealthy (Harvey, 2007).

Chomsky (1999) agrees that Neoliberalism is restructuring as "a relative handful of private interests are permitted to control as much as possible of social life to maximize their personal profit". Neoliberalism has also been called the "Washington Consensus", which Chomsky defined as the principles that international financial institutions designed for the market and applied in developing countries in the form of rigid structural reforms. Its ideas are mainly defined by the liberalization of international trade, deregulation, macroeconomic stability to end inflation, and privatization of state enterprises, i.e., the government should not interfere in the market. Steger and Roy added that "Washington Consensus" is a set of policies designed by the United States to promote the globalization of American capitalism and its cultural system (Chomsky, 1999; Steger & Roy, 2010).

The main tools and policies of Neoliberalism are deregulation of the market by reducing state regulations; strengthening the role and effectiveness of central banks; privatization of public sector; austerity policies that include the reduction of government expenditures whether on health, education or infrastructure; trade liberalization; significant tax reduction; export-based growth; reduce the role of social institutions of labor unions and others; and the abandonment of the theory of full employment to be replaced by natural employment rate (Chomsky, 1999; Dumenil & Levy, 2005; Harvey, 2007; Palley, 2005).

Concerning the history of the rise of neoliberalism, after World War II, many countries such as the United States, Europe, Japan, and others relied on Keynes' monetary and fiscal policies. Called by Harvey as "embedded liberalism", it produced high economic growth rates in developed capitalist countries, increased purchasing power, and reduced unemployment until the end of the 1960s. By the beginning of the seventies, embedded liberalism began to deteriorate with the emergence of a severe crisis of capital accumulation, formed by low growth, unemployment, and high inflation, with a significant decline in tax revenues and an increase in social expenditures. Therefore, neoliberalism emerged in the 1980s in developed countries such as the United States, the United Kingdom, and gradually in developing countries (Harvey, 2007).

The beginning of neoliberal theory and policies in the mid-1970s coincided with the era of the Vietnam War and the oil crisis, which had a significant impact on social and economic distortions. The Cold War and its inherent ideological conflict have indeed stimulated the concept of the individuality and increased hatred of the

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concepts of collective economic action. This situation caused the spread of the discourse of free-market Neoliberalism without government intervention (Palley, 2005). Neoliberalism's ideas of state non-intervention in the market spread with economic recession and inflation in the 1970s. When Margaret Thatcher, Britain's former prime minister, intended to reform the economy from inflation, she decided to abandon Keynes' theories of economics. Neoliberal ideas then represented the importance of a free market in the regulation and treatment of the capitalist economy (Harvey, 2007; Lapavitsas, 2005).

The 1970s are considered the transition decade towards Neoliberalism, with several transitions taking place at the international level in particular. The biggest turning point was in 1979 when the decision was made to reduce inflation and the subsequent rise in interest rates after the inauguration of Paul Volcker[1] as chairman of the Fed (Dumenil & Levy, 2005). Many developing countries, including countries from Latin America and Africa, suffered from debt and successive crises in the 1970s as well as limited growth or a decline in per capita incomes (Rodrik, 1993). At the end of the 1970s, McNamara's[2] vision for the World Bank's approach in the development of the developing countries changed from focusing on the concept of "basic human needs" towards the creation of the World Bank economic programs for developing countries to guide their economic path to successful development, as a condition for their loans. Then so-called "structural adjustment loans" and

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[1] Paul Volcker, former president of the Federal Reserve in the Reagan and Carter period of 1979-1987, played a major role in reducing inflation in the United States, which suffered from in the 1970s and early 1980s (Dumenil & Levy, 2005).

[2] Robert McNamara, the fifth president of the World Bank (1968-1981), was the "spokesman for the developing countries". Although he was a strong supporter of the SAP, it was not formally implemented after his retirement because many rejected the program as "unwarranted intrusion by the Bank into a country's economic policies", under the pretext of implementing it in urgent cases only. However, SAP later became the main activity to the bank (World Bank, n.d.).

"sectoral adjustment loans" emerged to form the main activity of the World Bank (Cypher & Dietz, 2008).

Loans grew substantially in the 1980s with the Balance of Payment crisis[3] and the reform policies supported by World Bank structural adjustment loans. However, the World Bank's focus quickly shifted to the treatment of "Microeconomic distortions" that many, including Stern (1991), later linked to the 1982 debt crisis as a symptom of those distortions. The process of adjusting distortions is represented by "stabilization" and "structural adjustment", as described by Thomas et al. (1991). They respectively are represented by reducing expenditures to settle domestic demand to a level where the imports in the country are at their lowest; and by a change in prices, structure, and environment of institutions to create an efficient and more stable economy with sustainable growth that can most benefit from resources (Rodrik,1993).

The World Bank and the IMF became major mechanisms for reproducing neoliberal globalization, after 1982 and Mexico's neoliberal reforms. They became such major mechanisms, by imposing neoliberal policies on developing countries to help them repay their debts by rescheduling them. Hence, to move towards Neoliberalism, the IMF imposes or 'proposes' conditions for debt relief by recommending austerity policies and through institutional reforms of reducing government expenditures, privatization, and more flexible legal system adjustments in favor of the market. Almost all countries have adjusted their policies to

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[3] Balance of Payment, also called as "the currency crisis", caused by two waves of the 1970s oil shocks, a deficit in the balance of payments and thus the inability of the state to repay its foreign debt of imports or services, which usually comes in conjunction with the rapid depreciation of the state currency (Ravenhill, 2005; Kaminsky & Reinhart, 1999).

accommodate the application of neoliberal theory, whether voluntarily or forcibly, as there is no other option because of the conditions for obtaining IMF and World Bank loans by applying the accompanying structural adjustment policies (Harvey, 2007; Steger & Roy, 2010).

The World Bank and the IMF exert pressure through structural adjustment programs that set loan terms and impose changes in the economic policy of the borrower (trade liberalization, raising direct and indirect taxes, tariff reduction, devaluation of the national currency, etc.). In other words, funds are disbursed according to the World Bank and IMF conditions, which may include balancing the state budget and financial performance, adjustments in agricultural prices, reducing government expenditures, which may deprive many people who need these withdrawn expenditures. Thus, it created large disparities in social differences that made aid complementary to the process of structural adjustment to try to fill some gaps in inequality between social classes (Cypher & Dietz, 2008).

Specifically speaking the evolution of neoliberalism, the first permanent balance of trade deficit after World War II emerged in the late 1960s in the United States. The surplus of dollars has accumulated in the rest of the world, thus increased the risk of gold conversion, so the dollar had to be devalued for gold and other major currencies. Then, there came the first component of what later became the neoliberal framework, floating currencies as the United States put an end to the dollar's convertibility in 1971. That measure was taken when floating exchange rates were introduced. Neoliberal dynamics were spreading while Keynesian policies are already exposed to criticism, through other instruments that followed currency float,

such as the liberalizing capital flows that the United States added in 1974 after the restrictions of the 1960s, then the United Kingdom joined in 1979, followed by other European countries. The Keynesian policies failed to solve the structural crisis of the 1970s as they failed to stimulate the economy. However, when looking at macro policies in the neoliberal era, the Keynesian's goal of full employment was replaced by maintaining the power of the owners of capitals using strict monetary policy by controlling the price level, so Keynesian's objectives were retained and not disputed (Dumenil & Levy, 2005).

With all the events of the 1960s and 1970s, it was a period of decline in the dominance of the United States, where inequality has dropped dramatically. As described by Dumenil and Levy (2005), neoliberalism is the attempt of the richest class to stop the decline in profits. Through this system, the power and income of the upper classes of the wealthy have been re-established after the structural crisis. Although the conditions that caused the structural crisis were gradually replaced, most of the world economy continued to suffer from slow growth, unemployment, and inequality. They increased dramatically as a cost in return for restoring the power and wealth of the wealthy (Dumenil & Levy, 2005).

illustrating the process of transition from Keynesianism to neoliberalism and the tools used to apply it briefly the researcher studies a case of the first experience in the formation of the neoliberal state in Chile, specifically after the 1973 coup known as the Pinochet coup[4]. At the beginning of the post-coup period, the labor

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[4] Pinochet's coup was the turning point in Chile's history and the history of the Cold War, where they overthrew the government and the socialist president Salvador Allende after much troubles between Chile's Congress and the presidency as well as the Richard Nixon economic war (Kornbluh, 2000).

market was freed from institutional constraints and encouraged national industries through subsidies and tariff protection, and the import substitution was implemented. However, as the global recession spread, there were pressures for new policies: Neoliberalism. The representatives of the Chicago School ideas negotiated with the International Monetary Fund (IMF) for loans. Therefore, they privatized public property and social security and encouraged private investment in natural resources and free trade. Thus, they facilitated Foreign Direct Investment operations (FDI) and provided guarantees for foreign companies in Chile to repatriate their profits. They also preferred export-led growth instead of import substitution (Harvey, 2007).

After the 1970s, development and policies were dominated by the International Monetary Fund (IMF), the World Bank, and other international institutions by demanding developing countries to achieve macroeconomic stability (low deficit, low debt, currency stability, low-interest rate, and low inflation), deregulate the financial market, privatize the public sector, and free trade. The results were not as expected in terms of growth and per capita income in the 1980s and 1990s, in addition to the ongoing financial crises in developing countries (Lapavitsas, 2005). The enduring feature of Neoliberalism resulted in great social inequality, in which economic growth is at a steep slowdown and a significant increase in inequality compared to the Keynesian system of 1945-70 (Harvey, 2007; Palley, 2005).

Cypher and Dietz (2008) criticized the approach of structural adjustment loans and their relationship to developing countries through observations by many

researchers in developing countries. The World Bank and IMF abused their powers by overstepping their limits and expanding them by taking a greater role and place illegally in the national sovereignty of developing countries while they are under great pressure because of their falling commodity prices[5] and growing debt crisis; in addition to being institutions based on the assumptions of the neoliberal school, which emphasizes that the policy of privatization and directing the economy into export-market orientation will lead to significant growth and greater expansion of the economy. Furthermore, a joint report by the World Bank and NGOs (2002) to examine the impact of structural loans on a group of developing countries (Bangladesh, Ecuador, Ghana, Hungary, Mexico, the Philippines, and Zimbabwe) has shown frustrating results. Due to indiscriminate trade liberalization, imports grew more than exports, destroyed local businesses, women suffered the most from labor market reforms imposed, worsening employment situation and real wages, and financial reforms encouraged short-term investment in unproductive activities, as well as individual stakeholders in the country, are not actively involved in the design and implementation of trade policies, which makes them technically ineffective (SAPRIN, 2002).

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[5] This is for several reasons, one of which is due to the devaluation of the currency in order to boost exports, which increased the prices of imported raw materials and thus increased costs for producers. Furthermore, due to market liberalization, privatization, and most importantly, the removal of government price supports has led to a decrease in the prices of commodity for producers, and thus they are no longer able to compete (SABRIN, 2002).

2.2 Empirical Literature

2.2.1 Developing countries

The impact of neoliberalism and its policies on developing countries has been the subject of much debate. Therefore, this section tries to review several empirical studies of different neoliberal reforms, structural adjustment policies and their impact on various developing countries. Given the fact that the Palestinian situation is different from other countries, the study focuses on reviewing the countries that are similar to the Palestinian economic situation. Some were critical of neoliberal reform policies (Achy, 2013; Harrigan & El-Said, 2010; Opoku, 2010; Sakellariou & Rotarou, 2017) as studies in Morocco, some countries in the Middle East and North Africa (Jordan, Egypt, Morocco, and Tunisia), Ghana, Chile and Greece. Another review showed an economic positive impact but with negative impacts on the social side (Karingi & Siriwardana, 2001) as a study on Kenya.

Concerning the studies that criticized the neoliberal reforms, some of them studied the impact of the neoliberal reforms by focusing on analyzing the sources of growth (Achy, 2013; Harrigan & El-Said, 2010; Opoku, 2010). Another studied the neoliberal policies' impact on the health care sector (Sakellariou & Rotarou, 2017). For example, a study about neoliberal reforms in Jordan, Egypt, Morocco, and Tunisia as the IMF and World Bank have claimed them as successful countries in reform policies long after the application of neoliberal policies. The study focused on finding the sources of growth through "production function analysis" to determine whether the growth was intensive or extensive and if it is concentrated in the tradable sectors or non-tradable. The researchers concluded that growth, except in

Tunisia, was an extensive growth[6] in the non-tradable sectors, caused 'partly' by exogenous factors, not reform policies[7], and has not succeeded in creating sustainable growth. These exogenous factors were represented by the decrease in the price of the dollar and imported oil, in addition to the increase in the number of immigrants to Jordan for political reasons and thus the increase in savings, large foreign aid as well as huge debt relief, and finally due to good weather that increased agriculture growth (Harrigan and El-Said, 2010).

As for Tunisia, the study used the "endogenous growth theory" to find out if the growth is caused by neoliberal reforms or by other factors. The study found that it is partially due to exogenous factors (unorthodox policies), economic, political, and historical factors[8], not fully to neoliberal reform policies, and this finding is consistent with the result of Harrigan and El-Said (2009). The Tunisian government has followed lengthy strategies and policies called "picking winners" before the neoliberal structural reforms, whereby the government develops a specific economic

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[6] it is expected to generate sustainable growth, sector-specific (intensive) growth in tradable sectors as a result of neoliberal reform policies implication, and not from external factors, but that was not the result in this study (Harrigan and El-Said, 2010).

[7] "Jordan growth was partly due to inflows of returnee migrants and Iraqi migrants and their savings as well as by large geopolitically motivated inflows of foreign aid" (Harrigan & El-Said 2009). While "Morocco's boom in the latter half of the 1980s was also partly the result of high levels of aid inflows, extensive debt rescheduling, good weather producing a 17 per cent growth rate in agriculture in 1985–6, low oil import prices and a decline in the value of the dollar". Moreover, "A massive debt forgiveness package in the first part of the 1990s as well as huge influxes of aid are the cause of the growth otherwise Egypt would have needed much tighter fiscal and monetary policy, which would have been likely to induce deep recession" (Harrigan & El-Said, 2010).

[8] "Tunisia had already achieved a substantial degree of economic diversification under the dirigiste policies of the 1970–86 period because Tunisian authorities had pursued a strategy of 'picking winners', that is, the government would voluntarily pick some activities, develop them and when profitable open them up to the private sector… This historical performance is a reason why Tunisia's economic reform program under the IMF and World Bank was more successful than other three countries due to the hard work had already been accomplished before the Washington multilaterals launched their programs." (Harrigan & El-Said, 2010).

activity until its profit increases to transfer it into the private sector later (Harrigan and El-Said, 2010).

Another study focused on the causes of the limitation in successfully implementing neoliberal reforms in African countries, specifically the causes of Ghana's economy collapsing as it is a country that had made a significant shift during the period of neoliberal reforms, from being the most successful African countries to become in the list of "highly indebted poor countries (HIPC)". The research studied the manufacturing sector developments during the neoliberal era. As the World Bank justifies the collapse by failing to implement macroeconomic policies properly and to create an environment suitable for institutions, the study showed that although the government of the (2000-2009) period implemented the World Bank proposed policies very strictly, the economic conditions continued to decline. The author confirms that Neoliberalism and its policies are unable to create industrial economic growth in similar developing countries to Ghana (Opoku, 2010). A study of "Structural transformation and industrial policy in Morocco" focused on the industrial policies imposed since the 1990s and their effects by dividing them into three periods using the "classical growth accounting approach" to find the reason behind poor performance in the manufacturing sector. It also analyzed the economic impacts of the tools of neoliberalism applied, by analyzing the process of structural transformation in Morocco for the years 1965-2011. The study found that the production structure has not changed significantly, and due to the slow process of structural change and its failure to reach the required level, Morocco's share of value-added in GDP has been declining continuously since the 1990s. Moreover, the

contribution of the manufacturing sector to the GDP has been in a worrying decrease in recent years as well as its contribution to total employment, and export diversification has not changed significantly in recent decades (Achy, 2013).

Another research examined the impact of neoliberal reforms on the health system by focusing on people with special needs and the impact on their access to health care in both Chile and Greece. The research reviewed the neoliberal policies applied by focusing on the policies that directly/indirectly affect healthcare services ("budget cuts in the health sector, increased co-payments, reduced staff, increased privatization; austerity reforms in the broader public sector, leading to hiring freezes; capital controls") which affect the society as a whole, including those with special needs, as well as policies that affect socio-economic factors that directly/indirectly target people with special needs and thus lead to inaccessibility to healthcare services ("changes in the benefits system; association of state pension with disability level; austerity-driven financial policies leading to an increase in unemployment and poverty, reduced labor costs"). The study found that the neoliberal reforms in Chile led to a significant increase in inequality and class division of healthcare access, and increased restrictions imposed on healthcare access. It also demonstrated the slowdown in the Chilean economy in general and the deterioration of the construction and mining sectors' performance in particular. Meanwhile, the reform policies in Greece have led to negative socio-economic impacts. The former is represented by reducing public government expenditures especially health expenditures, increasing privatization, and attempts to address the effects of the 2007 crisis. The latter is represented by an increase in poverty and unemployment. It

in turn proved a major obstacle to obtaining healthcare and a significant negative impact on society as a whole (Sakellariou & Rotarou, 2017).

As for the study that showed a positive economic impact, research about Kenya analyzed the potential impact of implementing the neoliberal policies recommended by the World Bank and IMF for the Kenyan economy, using "the Computable General Equilibrium model (CGE)" which is based on neoclassical specifications focusing on two main components of structural adjustment programs, namely structural adjustment and trade liberalization to analyze the potential impact of alternative fiscal austerity (the reduction of government expenditures, direct and indirect increases in taxation) measures to adjust budget deficit; and to examine the trade liberalization with tariff reduction (accompanied by an increase in indirect taxation and increased foreign financing). The authors concluded that the results of the model do not support taking one measure without the other. Therefore, the study suggested applying policies of reducing government expenditures by increasing direct taxes, as well as the policy of liberalizing trade associated with foreign financing, since they achieve the best overall result for the economy. However, while these neoliberal policies have positive effects on the economic side and for government revenues, in return it has negative effects on the social side, as the austerity policies are bad for employment requirements, and with increasing indirect taxes the poverty and inequality increase (Karingi and Siriwardana, 2001).

Most studies measured growth to analyze the impact of neoliberal policies on different economies. However, growth is not a criterion for the success or progress of economic development, as it fails to realistically reflect the economic situation.

However, the IMF and the World Bank consider it to be a criterion for the success of their programs since all the proposed neoliberal policies aim directly or indirectly to increase the foreign currency of the state to improve the capacity to pay the debt regardless of the internal situation of the economy. Therefore, there is a lack of research that measures the neoliberalism impact other than growth, which will be covered in this thesis.

2.2.2 The Palestinian context

The topic of neoliberalism has been studied heavily in recent years in the context of Palestinian development, by attempting to define the relationship between the Oslo agreement and neoliberal development. That is the case as neoliberalism emerged from the Oslo agreement and the Palestinian Basic Law (2002). Accordingly, Article 21 was established in 2002, and it stipulates the establishment of a Palestinian state based on a free-market system). Researchers mostly focused on viewing Neoliberalism's impact on changing the path of national struggle rather than the economic aspect. Therefore, this section attempts to review the most critical research on neoliberalism in Palestine. They were mostly based on a critical perspective to redefine an alternative development strategy as a form of struggle and resistance. This measure was done by focusing on the historical economic and political side (Haddad, 2015; Hanieh, 2013; Hever, 2010; Nagarajan, 2015; Samara, 2000; Tabar, 2015; Turner, 2009). Hever focused mainly on the historical economic level. Tabar, Turner, Haddad, and Samara focused on the political level. Else, this measure was conducted through the most important research that focused on criticizing the PRDP. It aimed to find an alternative to neoliberal development

(Hanieh, 2008; Khalidi & Samour, 2011; Ziadah, 2010). Other researchers linked neoliberalism with its impact on changing the structure of civil society (Dana, 2015; Merz, 2012; Tabar & Hanafi, 2003).

The studies that focused on **analyzing the historical side** helped building a better understanding of the events that caused the current Palestinian market and perpetuated its dependence on the Israeli economy. Research authors focused on the most important turning points of the post-1967 stage, the first and second Intifada, the Oslo agreements, the developments of the Palestinian Authority, and through an analysis of the development path over the years. Hanieh (2013) and Nagarajan (2015) analyzed the path of development in Palestine by discussing the historical sequence and global forces that influence the development and their interdependence with the liberation movement from the occupation. Hanieh's paper (2013) is based on explaining the reason for the de-development in Palestine and on the mechanism of forming control through the partition of the West Bank and the Gaza Strip. In the same vein, Nagarajan (2015) studied the idea of continuity of development in its current form under colonialism as adopted by donor countries, discussed the extent of its rationality and its impact on the Palestinian struggle. Both authors illustrate the impossibility of development in Palestine without facing the control of the occupation, as this neoliberal system does not take into account the history of Palestine and its current situation. It also enhances the dependence of the Palestinian economy on the Israeli economy; since it integrates the Israeli economy in the Palestinian development process, especially the development of the industrial sector. Besides, they both agreed with Jamil Hilal's (2010) proposal about the

alternative ways to neoliberal development in terms of resistance, by the adoption of empowerment, the dissemination of social rights, and other similar proposals.

Another research studied Palestine economically for the post-1967 period as it is the starting point in the formation of the joint economy between the two economies, the dominance and the control of the Israeli economy. The study analyzed the effects of changes in Israeli economic policies towards the Palestinian market. Moreover, the author rejected both neoclassical ideas, neoliberal and Marxist, instead relied on institutional economics to emphasize an argument against the two-state solution (Hever, 2010). Whereas Tabar's paper (2015) was based on a critical question about the ways to benefit from all the historical experiences of the First Intifada to re-establish the Palestinian struggle for liberation from the occupation and its impact on the current Palestinian situation. Both Authors acknowledged the failure of the liberalization process after the signing of the Oslo Agreement and the role played by the neoliberal regime. This said role is supposed to achieve Palestinian autonomy, instead, it created an economy governed by foreign funding and Israeli occupation policies. This economy also had been contributed to a radical change in the context of the Palestinian struggle of directing the individuals towards the global market. Given the global market is controlled by neoliberalism (Hever, 2010; Tabar, 2015). As for Turner (2009), he analyzed the sequence of developments of the Palestinian Authority, since its inception after the Oslo agreement as a temporary authority into "a failed semi-state". He was influenced by the violent movements in the Palestinian territories, represented by Israeli incursions, closures and Palestinian political division, with two separate

governments in the West Bank and the Gaza Strip. Furthermore, he analyzed the period after the second Intifada and the conditions created by the occupation, which force the Palestinian side to succumb under the orders of international financial institutions under the pretext of the reform. The study revealed how the Palestinian Authority has not been able to achieve development, sovereignty, and peace because of the control of many forces on the security and economic system, whether by the occupier or the international financial institutions. Besides, there is a difference of power between the Palestinian and Israeli sides, and it impacts the joint peace process (Turner, 2009).

In a study of "Neoliberalism and Palestinian Development", the author explored the narrative of neoliberal concepts of the development plan applied in the contemporary Palestinian political system by analyzing the position of Palestine among the forces of global capital interests. The research sees Neoliberalism in Palestine as a political matter, and that the Palestinian Authority will not be able to avoid implementing a neoliberal program due to the structural nature of the PA represented by the founding principles of it that based on neoliberalism, the Paris Protocol, the geographical division represented by the (A, B and C areas) and the process of separation between the West Bank and the Gaza Strip. Therefore, the basic needs to create a suitable development program in Palestine are not available (Haddad, 2015). Another study relied on dependency theory in analyzing the impact of globalization on Palestine and the territories occupied in 1967 and its process of integration into the economy of the Israeli occupation and thus in the global economy depending on the policies of the World Bank and IMF. The study showed

that applying the foundations of globalization and Neoliberalism in Palestine is more dangerous than other developing countries due to its position as a prisoner of colonial domination. From this perspective, neoliberal policies would only increase this dependency (Samara, 2000).

Other studies focused on analyzing and critiquing "**the Palestinian Reform and Development Plan (PRDP)**" as a starting point of their research, and the application of neoliberal policies in the Palestinian economy under occupation to assess the current turning point of the Palestinian struggle. A study of "Palestine in the Middle East: opposing neoliberalism and US power" focused on the objectives of the application of neoliberalism in Palestine and how it serves the Israeli occupation, through a critical reading of the Reforms and Development Plan in the year it was published. He stresses the inability to understand the economic changes in Palestine without understanding the Middle Eastern regional framework and the trade agreements the United States created there in their favor, specifically under Bush's presidency. The main point in this aspect is the integration and normalization of Israel in the Middle East because of a fundamental relationship between Neoliberalism in the Middle East and the increase of normalization with Israel (Hanieh, 2008).

Khalidi and Samour (2011) presented a preliminary assessment of the developments and risks associated with the application of neoliberal policies in the Palestinian economic sectors under occupation during Salam Fayyad's period that was implemented for the establishment of a Palestinian state in 2011. The Authors argued that neoliberalism and the statehood program are incapable of creating

independence or economic development for Palestine. In their view, neoliberal "governance" that calls for freedom, the establishment of an independent state and development under the occupation rather than the national struggle against it, will not give the Palestinians their rights to development and will increase the dependence on the economy of the occupation. There is no economic development policy that will be applied effectively in Palestine unless the occupation is ended, and Palestinian sovereignty is achieved. Otherwise, neoliberal policies will remain prevalent. Hence, they proposed what is called "economic resistance" to confront Israeli containment of Palestine. Their proposals, however, are mainly in the context of economic liberalism, as the proposed strategy is based on creating new trade policies capable of diversifying Palestinian commercial markets and exports to gradually detach them from the Israeli economy.

Another study analysis based on the "Ending the Occupation" document[9] has focused on developing the security sector and confirms through numerous reports, its relationship with creating full cooperation between the Israeli military and the Palestinian security forces who were trained by Dayton. Even though Ziadah's research is called "What Kind of Palestinian State in 2011?", it did not discuss the expected state after the application of neoliberal policies, except by formally linking it with the results of other Arab neoliberal countries as failed economies, accumulated debts to international financial institutions with a huge security sector to maintain "Peace", with a focus on the development of the security sector on the

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[9] The document represents the view of Salam Fayyad's government to achieve development for the establishment of a Palestinian state afterward, which is filled with the words of the World Bank, based on the obligation of Fayyad to follow all dictates of the World Bank to ensure access to international aid (Ziadah, 2010).

Palestinian context during Salam Fayyad's period, without focusing on the economic aspect (Ziadah, 2010).

About the studies that focused on linking neoliberalism with its impact on changing the structure of civil society, authors defined a specific structure for the nature of the relationship between the neoliberal system, international aid, and NGOs, because of their impact on the consolidation of the neoliberal values and the development of Western-Israeli dependency. Tabar and Hanafi (2003) explained the relationship between international, Palestinian NGOs and donor parties to determine the role of NGOs in the second Intifada and the transformation of the Palestinian non-governmental organizations (PNGOs) due to their influence from the neoliberal principles of International non-governmental organizations (INGOs) and donors. The spread of neoliberalism in the world had separated NGOs from politics. Subsequently, the second Intifada exposed the contradictions of NGOs, as their role in mobilizing the societal powers was almost non-existent. Meanwhile, they kept ignoring the reality of their presence in an occupied country, and the fragile relationship between the Palestinian and the donor sides, after they were expected to support the national struggle. Dana (2015) studied the determinants of the process of structural transformation in Palestinian civil society. She studied this case in the early 1990s after the Oslo Accords and the invasion of the neoliberal system accompanying it. The study covered organizations from mass organizations representing the national liberation movement to NGOs seeking to meet the requirements of the peace process and build an independent state for economic development. These determinations include the neoliberal globalization factor, the

political factor (the Oslo Agreement in particular), and the financial factor (precisely the conditions of international financing). Furthermore, Merz (2012) explained how neoliberalism penetrated the Palestinian civil society and its effects that led to the restructuring of social formations with a focus on the areas of Ramallah and Al-Bireh. The study also argued about the transfer of neoliberal foundations to Palestinian civil society, such as consumption, competition, and individual choice to divert society from the goal of liberation and national struggle.

Most research papers focus on the impact of neoliberal development on changing the path of the national struggle instead of focusing on the economic effects of neoliberal policies in a full and in-depth manner. Hence, it was important to focus more deeply on its economic impact. The researchers achieve the significance of this thesis by analyzing the potential impact of applying neoliberal policies on the Palestinian economy. The researchers take into account the history of the Palestinian economy, the occupation, and the dependence of the Palestinian economy on it with no possibility of competition. The researchers aim to evaluate the impact of neoliberal policies on the Palestinian economic sectors.

Chapter 3: Methodology

3.1 Model

The model used in this thesis is the same economic simulation model the PCBS use for forecasting annual economic indicators, which is called "integrated simulation framework (ISF)". It is considered an improved version of the UNCTAD (2006) model utilized to analyze the situation of the Palestinian economy and assess future policies in both the West Bank and the Gaza Strip. This study takes into account the historical aspect, current Palestinian policies, economic, and political situations.

The model is based on time-series data and some functional equations. It is a "Klein-type demand-side model"[10]. However, what differs the model from the standard demand-side approach is that it integrates both supply and demand factors in the model structure. As in ElKhafif (1996) states that the model uses "the input-output approach (I-O)" to review the output by economic activity, and to include both supply-demand factors (UNCTAD, 2006; MAS, 2018).

The "Quantitative Framework" was the first simulation framework created by UNCTAD in 1994 to discuss the Palestinian economy (UNCTAD, 1994). Later on, it was updated in 2000 to include the developments after the establishment of the PA to bolster the understanding of the macroeconomic of Palestine. It's called "the Macroeconomic Simulation Framework (MSF)" (UNCTAD, 2000). Afterward, it was developed into Integrated Simulation Framework (ISF) which the PCBS uses to build

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[10] It is based on Keynesian theory, and on the fact that the engine of the economy is the demand for goods and services. However, what differentiates this model from the normal demand side model is that it integrates all of the supply and demand elements into the structure of the model by using the input-output approach (UNCTAD, 2006).

their framework for measuring annual forecasts (UNCTAD, 2006). This model differs from the previous models created by the UNCTAD in a manner that it takes into account the impact of the partial implementation of the Paris Protocol. It reflects the dependence of the Palestinian economy on the Israeli's to predict the performance of the Palestinian economy in the short term.

Different models measure forecasts for the Palestinian economy with different purposes. For example, the Palestine Monetary Authority (PMA) adopts regression equations to analyze the economic situation that affects the banking sector (Aref, Khalil & Bsharat, 2013). IMF applies the "External Balance Assessment" approach to estimate "current accounts and exchange rates" in order to give suggestions for adjustment in the Palestinian monetary policies (IMF, 2020). The World Bank applies the "Computable General Equilibrium Model" (CGE) by analyzing medium/long-term development trends. What distinguishes this thesis model (ISF) from the rest of these models is that others depend on classical theories based on the assumptions of equilibrium in the markets, such as the models adopted by the World Bank, the IMF, and the Palestinian Monetary Authority (PMA). Furthermore, the World Bank's approaches assume full employment; IMF and PMA take labor as an exogenous variable. Contrarily, the ISF model is based on the Keynesian theory and does not assume full employment in the market. The ISF model analyzes unemployment by separating "participation rate in the labor force" and "employment" as it defines the gap between supply and demand. This model was modified to suit the Palestinian case so that the model depends on several

behavioral equations for a long time series of not less than 30 years while other models depend on a very short period in their analysis.

The above-mentioned models above also differ in their division of economic sectors. For example, the International Monetary Fund and the Palestinian Monetary Authority focus on the financial sector, while the World Bank divides the sectors according to productive or non-productive investments. Whereas the ISF model divides economic activities into eight sectors (Agriculture, manufacturing, construction, trade, transportation and storage, telecommunication and information, health and education) (UNCTAD, 2006; MAS, 2018). The structure of the ISF model and its division of sectors, wages, employment contributes to reflect a more accurate and comprehensive view of the economic situation than the other models. It aims to be consistent with the purpose of this thesis, as it focuses on the impacts on the Palestinian economy.

Adopting the approach of this thesis, the researcher chose the most prominent indicators that the model can predict based on the available data. The model analysis studied the period from 1972 to 2019 (the studied sample is from the year 1982 to 2019). This study performed a "dynamic in-sample simulation" to simulate all endogenous variables during that period using real values of data, by assuming several scenarios of existing policies and some different alternative policies in the short term for the year 2020. These assumptions are often made based on the data collected from previous periods, and they reflect the probability of how the current political and economic situation will remain the same/improve/decline. The high degree of economic-political uncertainty was taken into consideration in

assuming the scenarios. Hence, the assumption was based on the presence of COVID-19 in the baseline scenario to analyze the potential impacts on the short-run for the year 2020.

The ISF model consists of 151 endogenous variables associated with "35 behavioral equations and 116 identities" distributed as five blocks (labor, government, trade, prices, and value-added). In the model of MAS (2018), economic sectors were divided into eight sectors with services divided into five sectors, unlike the UNCTAD's model which presented four sectors. The division of economic activities assumed by MAS (2018) was adopted in the analysis of this thesis is as follows: (agriculture, manufacturing, construction, trade, transportation and storage, telecommunication and information, health, education, and other services).

The researcher modified some of the equations due to the absence of the relationship between the deleted variables and the endogenous variable to add exogenous variables that are related to the purpose of this thesis, as the researcher will show in the following.

The researcher modified two of the value-added equations; the health-education-development and the telecommunication & information equations. In respect to the former equation, have replaced the total investment with government investment, and total consumption with government expenditures on health-education-development. For this measure, the researcher omitted the total imports of goods and services, and exports of services variables as follows:

VA7R0 = C(380) + C(382)*GINR + C(383)*HED_EXP + C(385)*(T) +C(386)*DUM9407

Equation before the omission:

VA7R0 = C(380) + C(381)*CTR + C(382)*INTR + C(383)*FEXSER + C(384)*FIMTR + C(385)*(T) + C(386)*DUM9407

Where:

VA7R0   Value added of the health-education-development.

C   Constant.

GINR   Government Investment (gross).

HED_EXP   Health-education-development expenditures (both current and capital).

CTR   Total Consumption.

INTR   Total Investment.

FEXSER   Exports of Services.

FIMTR   Total Imports of Goods and Services.

T   Time Trend.

DUM9407   Dummy variable for year (1994-2007).

Regarding the Telecommunication and Information equation, the researcher omitted the total consumption and the total imports of goods and services variables as follows:

VA6R0= C(370) + C(372)*INTR + C(373)*FEXSER + C(376)*(T) + C(377)*DUM9407

Equation prior ro the omission:

VA6R0= C(370) + C(371)*CTR + C(372)*INTR + C(373)*FEXSER + C(374)*FIMTR + C(376)*(T) + C(377)*DUM9407

Where:

VA6R0   Value Added of Telecommunication and Information sector.

C   Constant.

INTR   Total Investment.

FEXSER   Exports of Services.

CTR   Total Consumption.

FIMTR   Total Imports of Goods and Services.

T   Time Trend.

DUM9407   Dummy variable for year (1994-2007).

3.2 Data

The data utilized in this thesis are historical time-series data that were developed by UNCTAD's first Palestinian economic model, i.e., "The Quantitative Framework" (UNCTAD, 2003). All subsequent frameworks of the UNCTAD have used this database. The data were collected from the Palestinian Ministry of Finance and Planning (PMoF), the Palestinian Central Bureau of Statistics (PCBS), the Palestine Monetary Authority (PMA), the International Monetary Fund (IMF), the Israeli Central Bureau of Statistics (ICBS) (data were modified to ensure their consistency with the PCBS data in the UNCTAD database).

Assessing the potential economic impact of the implementation of neoliberal policies, several important indicators were selected including the government expenditure, income tax, value-added tax, unemployment rate, real GDP, value-added of all economic activities (eight sectors), foreign trade balance, private consumption, national savings, and private investment. The exogenous variables are demonstrated as the health-education-development expenditures, the number of closure days for worker crossings imposed by the Israeli authority, the number of closure days for commercial crossings, credit extension, government transfers, government investment, income tax revenue, value-added tax revenue, government employment, net current transfers, population, Jordan and Israel GDP growth rates,

inflation rate, and exchange rate ($/NIS). All of the aforementioned variables were already included in the PCBS model but this thesis added the health-education-development expenditures variable. "The data were verified on a global basis through a constant analysis of the variables against their historical trends and internal double-checking" (UNCTAD, 2006).

The data of (government expenditures for the Ministries of Health, Education and Social Development) from 1999-2000 and 2008-2019 were converted from the Israeli Shekel to the US dollar using the average exchange rate per year according to the IMF (2019). Afterward, all the nominal data were converted into real values using the Annual Consumer Price Index (CPI) as 2018 is considered the base year according to the latest data published by the PCBS (2019). Regarding the rest of the years, all the applied steps are illustrated in the appendix. The entire data processing was done using Excel while the model analysis was done using E-Views.

3.3 Limitations of the model

The model has several vulnerabilities, notwithstanding the accuracy of the data, the development of the model, the model structure that is based on the current economic and political situation, but economic-political situations are continually evolving and might change suddenly, whether locally or globally. This alteration might go beyond the scope of the prediction that results from the model. Another vulnerability of the model is its reliance on the UNCTAD collected data for the period (1972-1993). These data are mostly estimated data from Israeli and Jordanian statistics that indicate the duration before the establishment of the Palestinian

Authority (1994), which makes them prone to error with a high error rate. As a solution to this dilemma, the PCBS tried to start the model in 1994. However, the number of years was not enough for the analysis of the model. Therefore, the analysis sample was extracted from the year 1982-2019. Furthermore, the choice of the data in the model is limited according to what suits the current model and whether it can be modified to add more variables. Hence, adding some useful indicators to the thesis analysis was challenging.

Chapter 4: Analysis and Discussion

This chapter aims to simulate the potential impact of the implementation of the neoliberal policies on the Palestinian economy in the short run for the year 2020 amidst the COVID-19 crisis. This measure is applied by assuming a baseline scenario that considers the continuation of the current conditions for the year 2020 including the existence of the Coronavirus pandemic. This study takes into account the political and the economic situation, along with the structure of economic policies currently applied since the inception of the Palestinian Authority. Additionally, it considers the political and economic developments after the establishment of the PA. The alternative scenarios that deviated from the baseline scenario would be the key to assess the implementation of the neoliberal policies' impacts.

The assumptions of all scenarios are made depending on the historical trends as a basis for the expected future trends of exogenous variables in the model (the health-education-development expenditures, the number of closure days for worker crossings imposed by Israeli Authority, the number of closure days for commercial crossings, credit extension, government transfers, government investment, income tax revenue, value-added tax revenue, government employment, net current transfers, population, Jordan and Israel GDP growth rates, inflation rate, and exchange rate). The above-mentioned exogenous variables represent policies that may be applied in the future by Palestinian decision-makers, and the main drivers of the growth. Using these elements, endogenous variables (government expenditure, income tax, value-added tax, unemployment rate, real GDP, value-added of all economic activities, foreign trade balance, private consumption, national savings,

private investment) that represent the most important economic indicators are simulated based on the data of the previous period (1972-2019) to be measured for the year 2020.

4.1 Empirical results

All the functional equations of the model are estimated separately at first. Therefore, all equations are grouped into three systems (GDP, price, and sectoral value added). In each system, all equations are re-estimated by least squares (3SLS) or SUR methods to solve any "endogeneity bias". The model is created by merging these three systems. The first system (GDP) consists of "labour market, public finance, external sector, and national accounts" equations. The second system consists of functional equations for prices. The last system (sectoral value-added) consisted of the value-added equations for eight sectors representing "agriculture, manufacturing, construction, trade, transportation and storage, telecommunication and information, health and education". In regards to the estimation of each equation separately, some of the major equations used in the analysis are demonstrated as follows in table 4.1. The estimation of each system is shown in table 4.2 in the appendix. However, it should be stated that the selection of the variables is mostly based on the theoretical consistency not on their t-statistics, for that reason, it might include variables that are not statistically significant.

4.2 Baseline Scenario

As the researcher mentioned earlier, the ISF model studies several economic indicators (government expenditure, income tax, value-added tax, unemployment rate, real GDP, value-added of all economic activities, foreign trade balance, private

consumption, national savings, and private investment). Therefore, an expected vision of the future direction of the exogenous variables is developed in each scenario to study the potential effects on the selected endogenous variables.

The assumptions of the scenarios were selected based on the policies that can be changed by Palestinian decision-makers and based on some external factors that are not presently available for the policymakers. The policy variables and the other factors are presented in health-education-development expenditures, credit extension, government transfers, government investment, Income tax revenue, value-added tax revenue, government employment, net current transfers, population, number of closure days for worker crossings imposed by the Israeli authority, number of closure days for commercial crossings, Jordan and Israel GDP growth rates, inflation rate, and exchange rate. Afterward, a simulation is done for each scenario separately to compare the endogenous variables change with the respect to the baseline scenario to evaluate the possible impacts of the neoliberal policies.

4.3 Other Scenarios

Acknowledging the potential impact of applying neoliberal policies on the Palestinian economy, several other scenarios were assumed for several neoliberal and non-neoliberal policies. This assumption was made to compare the results of each scenario with the baseline scenario. Later on, the rest of the scenarios are compared with one another to study the possibility of preserving the essence of the Palestinian context as is, improve or worsen as the neoliberal policies applied during the pandemic (the COVID-19 crisis). Moreover, these alternative scenarios assume

financial interventions that could revitalize the economy, i.e., the public investment, government transfers, health-education-development government expenditures. Other non-financial factors include employment in the public sectors, trade closures, or closures of individual crossings among others.

The first three scenarios represent the non-neoliberal policies, in the first scenario, the government expenditures for the Health, Education, and Social Development ministries are expected to increase as a non-neoliberal policy to try to handle the economic impact of the COVID-19 crisis. While the second and third scenarios were assumed as sub-scenarios for the first scenario. In respect with the second scenario, the same policies assumed for the first scenario were assumed the same, but with a change in the number of closure days for individuals and trade crossings, with an increase of for each, to see the extent of the change in the policies under the closure. For the third scenario, the researcher assumes the same expectations as the first scenario, but with an expected decrease in private lending. The last scenario was assumed based on neoliberal policies during the crisis, by adopting a policy of reducing government expenditures for the Health, Education, and Social Development ministries, in addition, to increase credit extension policy as shown in table (4.3.1).

The following table (4.3.1) represents the assumptions for policies and other factors for each scenario mentioned previously, so that the baseline scenario represents the continuation of the current situation politically and economically, including the Coronavirus crisis, while the first three scenarios represent non-neoliberal policies, while the fourth scenario represents neoliberal policies, as

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demonstrated in the table (4.3.2) of the most significant neoliberal and non-neoliberal policies that represent the scenarios.

The baseline scenario assumptions are assumed based on the developments of exogenous variables in recent years (2012-2019), using the estimates of the Ministry of Finance, the Palestinian Monetary Authority, the Palestinian Central Bureau of Statistics (PCBS), and the International Monetary Fund (IMF), in addition to taking into account the continuation of the current political/ economic situation and the existence of the Coronavirus pandemic. As the model of this thesis adopted the same baseline scenario assumptions that were adopted by the PCBS and MAS in their recent estimates for the year 2020 based on the previously mentioned resources. These assumptions depend on the calculation of the growth change for each variable in recent years as shown in table (4.3.1).

The same applies to the assumption of the other scenarios. Therefore, the estimates are approximate to the estimates of the baseline scenario, but in a higher or lower rate. It is also based on studying the effects of the policy, whether the effect of increasing or decreasing health-education-social development expenditures. This could be implemented by taking a look at the growth rates of the variable in the previous years.

Table 4.3.1: Scenarios assumption

Polices & other factors	Baseline	1st scenario	2nd scenario	3rd scenario	4th scenario
Population	2.40%	#	#	#	#
Collection of income tax	-50%	#	#	#	#
Collection of VAT	-60%	-10%[3]	-10%	-10%	#
Credit extension	-22.80%	#	#	-10%	40%
Gov. transfers	6.60%	15%	15%	15%	-2%
Private transfers	-30%[1]	#	#	#	#
Gov. investment	-60%	30%	30%	30%	-40%
Employ. in public sector	#	3%	3%	3%	-4%
Health-education-development exp.	2.40%	15%[2]	15%	15%	-10%
No. of days of closing crossings for people	15.78%	#	20%	#	#
No. of days of closing crossings for trade	20.15%	#	20%	#	#
Exchange rate ($/NIS)	3.55	#	#	#	#
Inflation rate in Israel	1.43%	#	#	#	#
Inflation rate in Jordan	2.30%	#	#	#	#
Growth rate in Israel	-5.30%	#	#	#	#
Growth rate in Jordan	-7.80%	#	#	#	#

#: Remained the same as the baseline assumption.
1: Because there is a global crisis.
2: The same rate of health-education-social development variable growth in the year 2000.
3: the scenario assumes that the government would have the revenue of clearances so instead of a decrease in the VAT by 60%, the scenario assumes there would be a decrease of 10%.

Table 4.3.2: Neoliberal/ Non-Neoliberal Policies

Neoliberal Policies	Non-Neoliberal Policies
Decrease in health-education-development expenditure	Increase in health-education-development expenditure
Increase in credit extension	Decrease in credit extension
Decrease in government investment	

4.4 Results of Simulation

After simulating the model based on the assumptions of the aforementioned scenarios, the potential impact of applying neoliberal policies on the Palestinian economy during the Coronavirus crisis of 2020 was estimated, by focusing on several economic indicators. The following tables show the results of the assumed policies in the four scenarios that were previously mentioned while comparing scenarios'

results with the results of the baseline scenario for a set of different economic indicators, whether on the expenditure, production levels, or concerning tax revenues and unemployment.

The results of the baseline scenario estimates, which assume that the current situation remains unchanged. They also show that the Palestinian economy will suffer more from the economic recession in 2020, since the growth in GDP is expected to decrease compared to 2019, in addition to an increase in the unemployment rate to 38%. This decrease is expected due to the suspension of many economic activities from work because of the government restrictions imposed to limit the spread of the virus. This situation led to many losing their jobs, whether temporarily or permanently. Furthermore, the private investment rate is expected to decrease, along with private consumption, which may be an indication of an increase in the poverty rate. Moreover, a significant decrease in tax revenues compared to the year 2019 and a decrease in government expenditures successively.

As for the production, the added value of most economic activities is expected to decrease. The agriculture sector is the most affected, and then the construction sector, with a slight decrease in the added-value of the Health and Education sectors. The other services and industry sectors were able to almost maintain the stability of their productivity. Regarding foreign trade, the trade deficit is expected to decrease as shown in the following tables.

The following sections will explain the changes in the Palestinian economy according to the change of policies, whether neoliberal or other changes. Policies were mentioned in the four scenarios to assess the effectiveness of each policy to

reduce the economic effects of the Coronavirus crisis by focusing the neoliberal policies.

4.4.1 Economic indicators at the level of expenditure

Table 4.4.1.1: First scenario results (at the level of expenditures)

In million $ and percentage	Baseline		Scenario 1	
	2019	2020	2019	2020
RGDP	16559.32	14624.06	16559.32	15212.31
growth rate	-11.69%		-8.13%	
Gov. Expenditure	4168.687	3451.724	4168.687	4542.03
growth rate	-17.20%		8.96%	
Private consumption	13983.24	11750.84	13983.24	12110.22
growth rate	-15.96%		-13.39%	
Private investment	3895.117	3345.983	3895.117	3536.313
growth rate	-14.10%		-9.21%	
National savings	3217.436	1890.654	3217.436	2881.607
growth rate	-41.24%		-10.44%	
Foreign trade balance	-4993.34	-3559.79	-4993.34	-4287.33
growth rate	-28.71%		-14.14%	

Source: Authors own analysis

The simulation results revealed that all economic indicators at the level of expenditure in the first scenario outperformed the results of the baseline scenario as shown in table (4.4.1.1). The most improved indicator is government expenditures, followed by national savings, followed by the trade balance. Real GDP in the first scenario is expected to decline less than the decline in the baseline by a difference of 3.56.

The decline in private consumption in the first scenario is less than the baseline decrease. National saving in the first scenario is expected to decrease way less than its decrease in the baseline scenario. As for the deficit in the trade balance, it decreased more in the first scenario than it did in the baseline.

Table 4.4.1.2: Results of the second and third scenarios (at the level of expenditures)

in million $ and percentage	Baseline		Scenario 2		Scenario 3	
	2019	2020	2019	2020	2019	2020
RGDP	16559.32	14624.06	16559.32	15214.47	16559.32	15163.42
growth rate	-11.69%		-8.12%		-8.43%	
Gov. Expenditure	4168.687	3451.724	4168.687	4542.03	4168.687	4542.03
growth rate	-17.20%		8.96%		8.96%	
Private consumption	13983.24	11750.84	13983.24	12106.9	13983.24	12114.31
growth rate	-15.96%		-13.42%		-13.37%	
Private investment	3895.117	3345.983	3895.117	3537.311	3895.117	3341.25
growth rate	-14.10%		-9.19%		-14.22%	
National savings	3217.436	1890.654	3217.436	2873.012	3217.436	2830.558
growth rate	-41.24%		-10.70%		-12.02%	
Foreign trade balance	-4993.342	-3559.788	-4993.342	-4282.853	-4993.342	-4145.256
growth rate	-28.71%		-14.23%		-16.98%	

Source: Authors own analysis

Table (4.4.1.2) compared the results of the second and third scenarios with the baseline scenario. The same assumed policies were used in the first scenario, but with an increase in crossing closure days in the second one, and a reduction in credit extension in the third one. This measure revealed that the results of the assumed non-neoliberal policies in the first three scenarios had better results than the expected results of the baseline. However, the impact of these two policies on RGDP, government expenditures, and private consumption is limited. The change of these policies in 2020 compared to 2019 is similar to results' change in the first scenario, but with better results than the results of the baseline.

The private investment, national savings, and trade deficits remained the same between the first and second scenarios. Whereas, when the policy of reducing lending was applied in the third scenario, the decline in private investment was greater than its decline in the first scenario and similar to its decline in the baseline.

The same applies to the trade deficit, it indicated an improvement in the first three scenarios than in the baseline.

Table 4.4.1.3: Results of the fourth scenario (at the level of expenditures)

in million $ and percentage	Baseline		Scenario 4	
	2019	2020	2019	2020
RGDP	16559.32	14624.06	16559.32	15175.95
growth rate	-11.69%		-8.35%	
Gov. Expenditure	4168.687	3451.724	4168.687	3988.145
growth rate	-17.20%		-4.33%	
Private consumption	13983.24	11750.84	13983.24	12012.31
growth rate	-15.96%		-14.09%	
Private investment	3895.117	3345.983	3895.117	4045.193
growth rate	-14.10%		3.85%	
National savings	3217.436	1890.654	3217.436	3051.183
growth rate	-41.24%		-5.17%	
Foreign trade balance	-4993.342	-3559.788	-4993.342	-4401.246
growth rate	-28.71%		-11.86%	

Source: Authors own analysis

The fourth scenario results, represented by the implementation of neoliberal policies through reducing government expenditures, expanding lending while closure days remain the same as it is in the baseline, and some other factors (see table (4.4.1.3)) showed that the most improved indicator is the private investment, and what remains is expected to be less than their decline in the baseline. The national saving rate decreases less than its decrease in the baseline.

Comparing the results of the fourth and the other scenarios, the RGDP is expected to have a bigger decrease than that of the first scenario. Regarding the national savings, they showed an increase compared to other scenarios including the baseline. Meanwhile, the savings were directed toward the private investment rather than the consumption. This is the case because of the low consumption rates in the fourth scenario, notwithstanding the increasing credit extension policy. At the

same time, the simulation showed that private investment is expected to increase in the fourth scenario, while it decreases in all other scenarios, including the baseline.

The reduction of the government expenditures when applying neoliberal policies was much larger than its impact from other policies, which indicates the growing inequality.

The deficit in the trade balance is expected to decrease in the fourth scenario. Given the Coronavirus crisis, exports and imports have decreased due to global closures and lower demand. Therefore, the decline in imports on the Palestinian side might be greater than the decline in exports. The decrease in the rate of VAT collection in the fourth scenario confirms that the trade deficit decreased, which appears in the next section. This is the case not because of a positive result such as an increase in exports, as it is due to a significant decline in imports due to the decrease in domestic consumption, the imposition of many restrictions locally and internationally, and the huge effect on the tourism and transportation and other sectors.

4.4.2 Taxes revenue and unemployment

Tables (4.4.2.1 & 4.4.2.2 & 4.4.2.3) show the impacts of policies applied on tax revenues and unemployment, whether they are neoliberal or non-neoliberal policies. This goes in line with the assumption of the researcher in the four aforementioned scenarios, compared between 2020 and 2019.

Table 4.4.2.1: First scenario results of unemployment and taxes revenue

in million $ and percentage	Baseline		Scenario 1	
	2019	2020	2019	2020
Unemployment Rate	0.3464927	0.3816507	0.3464927	0.3724347
Income Tax	262.1767	79.09596	262.1767	120.0675
growth rate	-69.83%		-54.20%	
VA Tax	856.0038	78.67579	856.0038	722.2365
growth rate	-90.81%		-15.63%	

Source: Authors own analysis.

Table 4.4.2.2: Second and third scenarios result of Unemployment and taxes revenue

in million $ and percentage	Baseline		Scenario 2		Scenario 3	
	2019	2020	2019	2020	2019	2020
Unemployment Rate	0.3464927	0.3816507	0.3464927	0.3731501	0.3464927	0.3767502
Income Tax	262.1767	79.09596	262.1767	119.984	262.1767	119.7387
growth rate	-69.83%		-54.24%		-54.33%	
VA Tax	856.0038	78.67579	856.0038	722.4736	856.0038	723.7975
growth rate	-90.81%		-15.60%		-15.44%	

Source: Authors own analysis.

Table 4.4.2.3: Forth scenario result of Unemployment and taxes revenue

in million $ and percentage	Baseline		Scenario 4	
	2019	2020	2019	2020
Unemployment Rate	0.3464927	0.3816507	0.3464927	0.3622132
Income Tax	262.1767	79.09596	262.1767	119.7805
growth rate	-69.83%		-54.31%	
VAT Tax	856.0038	78.67579	856.0038	716.621
growth rate	-90.81%		-16.28%	

Source: Authors own analysis.

The income tax decrease in the first scenario is less than its decrease in the baseline. The value-added tax has also decreased much less than in the baseline as shown in table (4.4.2.1). It is also expected that the forecasted tax revenues in 2020 compared to 2019 in the first three scenarios for both income tax and value-added tax would decrease at the same rate in almost every scenario, but the expected income tax decrease was slightly higher in the third scenario when the policy of reducing lending was applied. However, it is almost unaffected when increasing the

crossing closure days in the second scenario. In contrast, the value-added tax decreased at a lower rate when applying the policy of reducing lending in the third scenario than it decreased in the first and second scenarios. This indicates no significant difference among them.

When applying neoliberal policies that are represented by reducing government expenditures, expanding private lending while closure days remain the same as it is in the baseline. As assumed in the fourth scenario, the income tax and VAT decreased less than they did in the baseline. Compared to the first three scenarios, its decline was almost similar, except at a higher rate to the fourth scenario concerning the value-added tax, as it decreased in the fourth scenario by a slightly higher rate than the first scenario as shown in table (4.4.2.1) and table (4.4.2.3).

As for the unemployment index, it decreased slightly in each of the four scenarios from the baseline scenario, so that the unemployment rate increased in the baseline to 38.16% in 2020 from 34.64% in 2019, and in the first scenario, the unemployment rate is expected to increase in 2020 to 37% as well as the other scenarios.

4.4.3 The value-added of economic activities

This section shows the change in the added values of the main economic sectors, as the sectors' output is expected to decrease in all assumed scenarios but it decreased less than it did in the baseline scenario. The projections shown in the next tables indicated that the added values of the economic activities are not fundamentally affected by increasing the crossing closure days as shown in the second scenario. Moreover, agriculture production, followed by other services sector, are the most

negatively affected by the neoliberal policies, while the industry and transportation sectors are less affected than the rest of the scenarios.

Table 4.4.3.1: First scenario result (value-added of economic activities)

in million $ and percentage	Baseline		Scenario 1	
	2019	2020	2019	2020
VA in Agriculture	986.9564	505.487	986.9564	819.7979
growth rate	-48.78%		-16.94%	
VA in manufacturing	1733.341	1720.275	1733.341	1631.376
growth rate	-0.75%		-5.88%	
VA in Construction	984.8905	718.5059	984.8905	758.6945
growth rate	-27.05%		-22.97%	
VA in trade	3688.763	3424.134	3688.763	3534.377
growth rate	-7.17%		-4.19%	
VA in transportation and storage	322.0648	303.2544	322.0648	319.1694
growth rate	-5.84%		-0.90%	
VA in telecommunication and information	236.8955	202.1227	236.8955	207.2012
growth rate	-14.68%		-12.53%	
VA in health and education	1543.924	1521.223	1543.924	1519.328
growth rate	-1.47%		-1.59%	
VA in other services	4215.63	4208.201	4215.63	4065.194
growth rate	-0.18%		-3.57%	

Source: Authors own analysis

Table 4.4.3.2: Second and third scenarios result (value-added of economic activities)

in million $ and percentage	Baseline		Scenario 2		Scenario 3	
	2019	2020	2019	2020	2019	2020
VA in Agriculture	986.9564	505.487	986.9564	819.7667	986.9564	850.5501
growth rate	-48.78%		-16.94%		-13.82%	
VA in manufacturing	1733.341	1720.275	1733.341	1631.884	1733.341	1618.254
growth rate	-0.75%		-5.85%		-6.64%	
VA in Construction	984.8905	718.5059	984.8905	758.8591	984.8905	756.6239
growth rate	-27.05%		-22.95%		-23.18%	
VA in trade	3688.763	3424.134	3688.763	3536.818	3688.763	3487.947
growth rate	-7.17%		-4.12%		-5.44%	
VA in transportation	322.0648	303.2544	322.0648	319.4289	322.0648	310.0643
growth rate	-5.84%		-0.82%		-3.73%	
VA in IT	236.8955	202.1227	236.8955	207.3384	236.8955	206.4523
growth rate	-14.68%		-12.48%		-12.85%	
VA in health and edu	1543.924	1521.223	1543.924	1519.776	1543.924	1518.925
growth rate	-1.47%		-1.56%		-1.62%	
VA in other services	4215.63	4208.201	4215.63	4065.487	4215.63	4134.105
growth rate	-0.18%		-3.56%		-1.93%	

Source: authors own analysis

Table 4.4.3.3: Fourth scenario result (value-added of economic activities)

in million $ and percentage	Baseline		Scenario 4	
	2019	2020	2019	2020
VA in Agriculture	986.9564	505.487	986.9564	658.3239
growth rate	-48.78%		-33.30%	
VA in manufacturing	1733.341	1720.275	1733.341	1722.996
growth rate	-0.75%		-0.60%	
VA in Construction	984.8905	718.5059	984.8905	745.7914
growth rate	-27.05%		-24.28%	
VA in trade	3688.763	3424.134	3688.763	3610.615
growth rate	-7.17%		-2.12%	
VA in transportation and storage	322.0648	303.2544	322.0648	335.5021
growth rate	-5.84%		4.17%	
VA in telecommunication and information	236.8955	202.1227	236.8955	208.1018
growth rate	-14.68%		-12.15%	
VA in health and education	1543.924	1521.223	1543.924	1521.493
growth rate	-1.47%		-1.45%	
VA in other services	4215.63	4208.201	4215.63	3952.362
growth rate	-0.18%		-6.25%	

Source: Authors own analysis.

When applying policies, and before detailing the statistical results for each sector in each scenario, it was concluded that the productivity of agriculture, manufacturing, other services, and transportation and storage sectors was significantly affected more than the remaining sectors (construction, trade, telecommunication and information, and health and education). As for the case of applying the non-neoliberal policies, the productivity of the agriculture, transportation and storage, construction, trade, and information and communication sectors is expected to increase. It is difficult to determine the direct cause of the decrease or increase in productivity among the sectors. However, given the current situation, and the assumed scenarios, some of the most major reasons behind the increase in the productivity of these sectors are the increase in Health-education-development expenditures, the decrease in value-added tax, and the possibility of

increasing government subsidies directed to these sectors and thus increasing investment in them.

It is expected that the productivity of the aforementioned sectors will increase while it will decrease in industry and other services upon the increase in the health-education-social development expenditures. Especially, if the spending is directed towards low-income housing or towards activities that they can benefit from. Therefore, this situation stimulates the increase in the domestic demand, thus the production of sectors towards which the individual consumption is directed. It also appeared that the policy of credit extension decreases the productivity of agriculture and other services sectors significantly. Meanwhile, the productivity of the industry and transportation sectors increases, and vice versa when reducing the credit expansion as the production of agriculture and other services sectors increases. This result indicates the possibility that the agriculture and other services sectors are among the most debt-sensitive sectors and directly affected by credit in the short term. Else, there are greater restrictions associated with them as the granted "credit facilities" are few due to their high risk. Consequently, investments, as well as productivity in these two sectors, decrease. While investment in industry and transportation sectors increases due to its lack of sensitivity to debt or the lack of its imposed bank restrictions of credit facilities, the costs imposed on borrowers decrease. This situation encourages the survival of small firms in the market, thus the aggregate productivity of the manufacturing and transportation sectors increases. Besides the impact of the credit extension policy on the agriculture and

other service sectors, the associated decrease in the health-education-social development expenditures also increases the harm inflicted on them.

Given the great structural distortion that the Palestinian economy suffers from, the growth of the manufacturing sector without addressing the structural distortions in productive sectors as a start does not bring real benefit to the economy. Moreover, since the services sector is the largest contributor to the GDP among the economic activities. Thus the services sector's absorption rate of labor is much more than other sectors, reducing the productivity of this sector negatively influences the Palestinian economy.

In detail, the first scenario showed that the expected value-added of agriculture, construction, trade, transportation and storage, and information and communication sectors are expected to decrease less than the expected decline in the baseline scenario. Meanwhile, the manufacturing sector decreases in the first scenario more than the decrease in the baseline, as well as the other services sector, as it is expected to decrease in the first scenario more than its decrease in the baseline. When assuming an increase in the closure days in the second scenario, a close decline happens to the expectations of the first scenario.

Concerning the third scenario, when assuming a decrease in credit extension, the agriculture and other services sector is expected to be affected less affected than the effect on the first scenario. Whereas the transportation, trade, construction, and industry sectors will be decreased slightly more than they did in the first scenario.

Regarding the fourth scenario, it is expected that the agriculture sector would be the most affected when implementing neoliberal policies compared to non-neoliberal policies in the first three scenarios, as shown in table (4.4.3.3). When compared with the expected results of the first three scenarios, the added-value of the agricultural sector and the other services sector improves dramatically when lending is reduced. Likewise, in the third scenario, reducing the credit extension would decrease the added-value by 1.93% as the best rate for the other services sector among other scenarios.

The transportation and storage sector appeared to have the best improvement in the fourth scenario; growing at a rate of 4.17%. In addition, the industrial, construction, trade, and telecommunications sectors are expected to decline less than the expected decrease in the baseline. Regarding the added-value of the Telecommunications and Information, and Health and Education sectors, almost all policies decrease at a similar rate and with a smaller decrease compared to the decrease in the baseline scenario.

4.5 Summary

This section displays a summary of the answers to the questions posed in this thesis to answer the main question.

1. Which policies reduce the impact of the Coronavirus crisis on the Palestinian market more, the neoliberal or non-neoliberal policies?

Given the economic effects of the Coronavirus crisis, decision-makers have to implement policies that mitigate the effects of this crisis on the economy, which can

be formed by providing aid and tax relief. The government expenditure factor is significant in determining the policies which may further mitigate the impact of the crisis as it helps accelerate economic recovery. That is the case in light of the analysis of this thesis of the current Palestinian economic-political situation. Given the government expenditure's noticeable decline after applying the aforementioned neoliberal policies, the government expenditure factor does not achieve the goal of mitigating the effect of Coronavirus. Hence, it is expected that the non-neoliberal policies will mitigate the impact of the Coronavirus crisis on the Palestinian economic activity, due to the resulting increase in government expenditures.

2. Assess the impact of neoliberal policies implementation in terms of expenditures, production, unemployment, and tax revenue.

About the economic indicators on the level of expenditures, it is expected that growth in GDP will decrease with a significant decrease in government expenditures accompanied by a decrease in private consumption. On the other hand, an increase in private savings is foreseen, accompanied by an increase in private investment. Regarding the trade balance, it is expected to improve compared to 2019, but at a lower rate than when applying other policies.

The productivity of most economic sectors is expected to decrease when applying neoliberal policies in the year 2020 compared to 2019. This productivity decrease is foreseen to be accompanied by great damage to the productivity of the agricultural and other services sectors in particular. On the flip side, there is an improvement in the productivity of the industrial and transportation sectors compared to the impact of the other policies.

For the unemployment rate, the Palestinian market is expected to suffer from a high unemployment rate with a decrease in tax revenues upon implementing neoliberal policies.

3. What is the extent of the decrease/increase in the growth of the Palestinian market when implementing neoliberal policies?

The growth in real GDP is expected to decrease when implementing neoliberal policies, but at a similar rate to its decline when other policies are implemented.

4. How are poverty and inequality indicators affected when applying neoliberal policies?

The decrease in government expenditures when applying neoliberal policies indicates an increase in the rate of inequality. The same applies to poverty. The declining rate of consumption is associated with the increase in private investment, and it indicates an increase in the poverty rate when applying neoliberal policies.

Chapter 5: Conclusions

The current economic-political system that dominates the world was built on principles of the Bretton Woods institutions that aim to integrate the economies into the global economy, liberalizing trade, reducing inflation, privatization, and others. These principles were applied to developing countries through development programs concerned with structural reforms. Various theories and studies have indicated an increase in poverty and inequality in the countries following these economic policies. Given the specificity of the Palestinian situation, and due to the restrictions imposed by the occupation, the Paris Agreement, the absence of currency and barriers, and the massive dependence on foreign aid; the neoliberal policies that can be applied are limited. According to Chomsky and Harvey's definition of Neoliberalism and its policies, the neoliberal policies that can be applied in Palestine are limited to the austerity policies through reducing government expenditures, and a single monetary policy represented by credit expansion.

Previous studies of several developing countries focused on studying the source of growth in the economy, whether it is from neoliberal policies or others. Another studied the impact of neoliberal policies on the economic activities in general, or the Health sector in particular. Studies showed that the source of growth is partly due to unorthodox policies more than neoliberal policies. Others agreed that reducing government expenditures and other reform policies would increase poverty, inequality, and unemployment, whether it was directly related to the Health sector or not. Since the results of other developing countries' research cannot be generalized to the Palestinian context, and having the studied Palestinian

research have focused on the political and historical aspects more than the economic, this research makes its contribution by focusing on the potential impact of the implementation of neoliberal policies on several major economic indicators during Coronavirus crisis.

This thesis was analyzed using the Integrated Simulation Framework model provided it is the most accurate and compatible approach with the Palestinian context among other approaches that were reviewed. ISF model is based on the Keynesian theory and takes into account the current political and economic history of Palestine, including the existence of the Coronavirus crisis in 2020. The different scenarios for several assumed policies (fiscal, monetary, and external factors) were assumed based on the historical trends of data for the years 1972-2019 to estimate the selected economic indicators.

Concerning the economic activities, the study showed that the decrease in health-education-social development expenditures in conjunction with the policy of credit expansion negatively affects the agriculture and other services sectors, and it positively affects the manufacturing and transportation sectors. This is according to the difference in the economic activity sensitivity to credit which stimulates the increase or decrease in investment and thus increased productivity. Moreover, the lower health-education-social development expenditures influenced the reduction of domestic demand and thus the reduction of productivity based on the consumption trend. However, due to the structural distortions of the Palestinian economy, the increased value-added of the industry sector with a decrease in the productivity of the other services sector (the largest contributor to the GDP) negatively affects the economy.

The study showed that the economic recession in the Palestinian economy will continue in 2020 due to the continued decrease of the RGDP. However, it decreases at about the same rate in all scenarios. As for the unemployment indicator, it is expected to increase at about the same rate for all the assumed scenarios for the year 2020 compared to 2019. The same applies to tax revenues that decrease by a high percentage but are not expected to differ from the other non-neoliberal policies. While government expenditures were very deeply affected by neoliberal policies, it is expected to decrease significantly compared to non-neoliberal policies as an indicator for the expectation of increasing inequality and the gap difference between social classes.

The research also demonstrated an increase in the national savings orientation towards private investment with a decrease in consumption, which might be an indicator of the increase in poverty when implementing neoliberal policies. Moreover, It is expected that the government deficit will decrease more than it did when applying the rest of the policies. Considering the current existence of the Coronavirus crisis and the global closure, it is expected to be as a result of a larger decrease in imports than it is in exports. In the end, regardless of all the expected statistical results, 2020 showed that the neoliberal system which currently governs the world economy is practically fragile, especially in the midst of the current Coronavirus crisis. The neoliberal system was incapable of standing in the face of the uncertainty and the surprises that came along with the Coronavirus crisis. It also failed to effectively lift the economy out of the devastating shock that ensued.

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Appendix

Since 1996-2007 & 2011 data were obtained as government budget values[11] (forecasted value), while the remainder until 2019 was obtained from government balance sheets[12] (actual values). The researcher used several steps to calculate the approximate actual values for 1996-2007 and 2011. The researcher took the percentage difference of actual expenditure value and budget value for each of 2010 & 2012 to calculate the approximate actual value of the year 2011. Then, the researcher took the average value between them which is (0.995), i.e., approximately 1. Therefore, the researcher took the same value as the year 2011 budget. As for the years 1996-2007, excluding 2006, the percentage difference of actual-budget values for 2008 was fixed (0.942) for all the mentioned years. The researcher multiplied it with the budget values to get the approximate actual values of the years 1996-2007.

The researcher couldn't obtain the value of government expenditures of Health, Education, and Social Development Ministries for 2006. Hence, the researcher used "Revenues, expenditures and financing sources of PNA fiscal operations" (PMA, 2019) to calculate the percentage decrease in public expenditures and net lending (2005-2006) then multiply it by the actual value of health-education-development expenditure for the year 2005. The researchers aimed to obtain an approximate value for 2006 for each ministry. Thenceforth, the researcher added all the values of expenditures from the years 1996-2019 to get the total expenditures of the three

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[11] "A budget is a financial plan expressed in quantitative terms, prepared by the management in advance for forthcoming period" (Surbhi, 2016).
[12] "A balance sheet is a financial statement that reports a company's assets, liabilities and shareholders' equity at a specific point in time" (Investopedia, 2020).

ministries. Regarding the years 1972-1995, and provided there were no social development expenditures before the year 1995, the researcher took the difference between total expenditures and the 1996 social development expenditures values and multiplied it with the percentage change of the government consumption (GCR) for each year (1972-1995).

Tables

Table 4.5: Estimates of the model equations (OLS)

Dep. Var	Independent Variables	Coefficient	Std. err	t-statistic	Pr.	R²
Value Added in Agriculture	Constant	669.6726	123.8660	5.406427	0.0000	0.851
	Private & Gov. Consumption	0.136680	0.028950	4.721253	0.0000	
	Private Investment	-0.062150	0.049097	-1.265864	0.2150	
	Government Investment	0.303374	0.120927	2.508733	0.0176	
	Exports of Goods	0.160267	0.121864	1.315134	0.1981	
	T. Imports of Goods & Services	-0.012129	0.050855	-0.238495	0.8131	
	Time Trend	-41.85447	8.774328	-4.770105	0.0000	
	Agriculture Dummy	134.5084	33.62230	4.000570	0.0004	
Value Added in manufacturing	Total Consumption	0.029142	0.032028	0.909919	0.3695	0.941
	Total Investment	0.185283	0.048161	3.847158	0.0005	
	Government Investment	-0.147727	0.138620	-1.065694	0.2943	
	T. Exports of Goods & Services	0.093128	0.130676	0.712664	0.4811	
	T. Imports of Goods & Services	-0.021103	0.071618	-0.294662	0.7701	
	Time Trend	11.17446	9.322282	1.198683	0.2392	
Value Added in Construction	Private Consumption	0.149697	0.030463	4.914018	0.0000	0.803
	Government Consumption	0.115620	0.136013	0.850063	0.4014	
	Private Investment	0.146980	0.061060	2.407141	0.0218	
	Government Investment	0.160506	0.086760	1.850012	0.0733	
	T. Imports of Goods & Services	-0.126836	0.066708	-1.901357	0.0660	
	Time Trend	-14.53298	7.891394	-1.841624	0.0745	
Value Added in Trade	Constant	-452.6925	143.5028	-3.154590	0.0034	0.991
	Total Consumption	0.414288	0.098057	4.224952	0.0002	
	Total Investment	0.567352	0.122174	4.643813	0.0001	
	T. Imports of Goods & Services	-0.247598	0.165446	-1.496549	0.1440	
	Time Trend	53.86557	23.08568	2.333289	0.0259	
	9407 Dummy	-464.0895	165.5290	-2.803674	0.0084	
Value Added in transportation	Constant	65.25807	15.53127	4.201722	0.0002	0.882
	Total Consumption	-0.000537	0.010101	-0.053196	0.9579	
	Total Investment	0.085293	0.014096	6.050776	0.0000	
	Exports of Services	0.163070	0.111489	1.462658	0.1533	
	T. Imports of Goods & Services	-0.025123	0.020669	-1.215510	0.2331	
	Time Trend	0.182074	2.337907	0.077879	0.9384	
	9407 Dummy	74.65693	19.62831	3.803533	0.0006	
Value Added in telecommunication	Constant	-86.34050	23.49061	-3.675532	0.0008	0.845
	Total Investment	0.026592	0.013969	1.903581	0.0655	
	T. Exports of Goods & Services	0.383556	0.140168	2.736393	0.0098	
	Time Trend	1.986284	1.861580	1.066988	0.2935	
	9407 Dummy	69.54055	17.69230	3.930554	0.0004	
Value Added in health and education	Constant	98.66544	88.49630	1.114910	0.2727	0.950
	Government Investment	-0.216354	0.089067	-2.429099	0.0206	
	Health-Educ.-Development Exp.	-8.93E-05	6.62E-05	-1.350514	0.1858	
	Time Trend	31.74503	2.799125	11.34105	0.0000	
	9407 Dummy	-84.59420	30.38391	-2.784178	0.0087	
Value Added in other services	Constant	53.00962	101.8126	0.520659	0.6061	0.971
	Total Consumption	0.140397	0.039132	3.587774	0.0011	
	Total Investment	-0.112560	0.097480	-1.154702	0.2565	
	Exports of Services	0.236809	0.682989	0.346724	0.7310	
	T. Imports of Goods & Services	0.052941	0.108353	0.488592	0.6284	
	9407 Dummy	30.42026	12.28232	2.476752	0.0186	

Private Consumption	Constant	0.318484-	0.268544	1.185964-	0.2441	0.982
	Gross Private Disposable Income	0.339380	0.116454	2.914280	0.0064	
	Private consumption price def.	0.293202-	0.278175	1.054020-	0.2995	
	89 dummy	0.155518-	0.070544	2.204544-	0.0346	
	97 dummy	0.098925	0.070568	1.401843	0.1703	
	Lagged dependent variable	0.691057	0.104099	6.638432	0.0000	
Private Investment	Constant	0.366093-	2.267661	0.161441-	0.8727	0.932
	VA in Manufactur-Construc-Serv	0.270326	0.295519	0.914748	0.3670	
	Credit Extension	0.164650	0.140927	1.168339	0.2510	
	Lending rate on NIS	0.019357-	0.042784	0.452431-	0.6539	
	Number of closure days/yr	0.000124-	0.001633	0.076126-	0.9398	
	Lagged dependent variable	0.563712	0.182114	3.095379	0.0040	
Net Indirect Tax and subsidies	Constant	0.853830-	0.811815	1.051755-	0.2997	0.688
	Other public revenues	1.126820	0.124720	9.034783	0.0000	
Governmen t Other revenue	Constant	6.304681-	0.802940	7.851996-	0.0000	0.883
	Total imports of goods & Ser.	1.498907-	0.158770	9.440738	0.0000	
	Fiscal Leakage	0.051120	0.192131	0.266067	0.7917	
Government Consumption	Constant	1.096697-	0.199675	5.492420-	0.0000	0.993
	Government employment	0.460231	0.060554	7.600285	0.0000	
	Lagged Total Gover. Revenue	0.106031	0.037219	2.848826	0.0073	
	Lagged T. Gover. Exp.	0.444907	0.072263	6.156747	0.0000	
	Lagged dependent variable					
Imports of goods and services from ROW	Constant	12.30413-	1.991867	6.177185-	0.0000	0.954
	Total consumption	1.516263	0.273513	5.543658	0.0000	
	Total investment	0.650144	0.171569	3.789402	0.0006	
	Imports price deflator	0.830006-	0.372397	2.228821-	0.0325	
	No. of closure days for workers	0.002165-	0.000895	2.419891-	0.0210	
Imports of goods and services from Israel	Constant	0.116844	1.185397	0.098570	0.9221	0.913
	Total consumption	0.713678	0.176651	4.040046	0.0003	
	Total investment	0.220057	0.099424	2.213308	0.0339	
	Imports price deflator	0.501414-	0.216973	2.310955-	0.0272	
	No. of closure days for workers	0.001383-	0.000482	2.870629-	0.0071	
	Lagged(share of non-construction invest. in T. Invet.)	1.285013-	0.496928	2.585912-	0.0143	
Exports of goods & services to ROW	Constant	3.298705-	2.353769	1.401456-	0.1701	0.839
	Export price deflator	0.074867-	0.491818	0.152224-	0.8799	
	Jordan real GDP	0.463098	0.258835	1.789161	0.0825	
	No. of closure days for workers	0.001627-	0.001427	1.140043-	0.2622	
	Lagged dependent variable	0.824105	0.091333	9.023032	0.0000	
Exports of goods & services to Israel	Constant	10.83776-	3.003365	3.608538-	0.0010	0.924
	Israel real GDP	1.166294	0.285066	4.091317	0.0002	
	Export price deflator	0.630189-	0.354811	1.776124-	0.0847	
	No. of closure days for workers	0.001246-	0.000806	1.545155-	0.1316	
	Lagged dependent variable	0.578962-	0.108086	5.356511	0.0000	
Employment in Agriculture	Constant	1.516349	1.475242	1.027865	0.3115	0.789
	Value added of agriculture	0.034490-	0.103246	0.334055-	0.7405	
	Wages in agriculture	0.002340	0.130192	0.017974	0.9858	
	01-02 dummy	0.206655-	0.113299	1.823985-	0.0772	
	share of non-construc in T. Invest	0.205098-	0.517377	0.396419	0.6943	
	lagged dependent variable	0.878744	0.116143	7.566058	0.0000	

Dep. Var	Independent Variables	Coefficient	Std. err	t-statistic	Pr.	R²
Employment in Manufacturing	Constant	2.152366	0.447063	4.814457	0.0000	0.989
	Value Added of manufacturing	0.221021	0.050912	4.341268	0.0001	
	Wages of manufacturing	0.077651-	0.058159	1.335138-	0.1907	
	Employment in construction	0.159964	0.040972	3.904248	0.0004	
	Lagged dependent variable	0.535622	0.059731	8.967189	0.0000	
Employment in Construction	Constant	2.589324	4.844168	0.534524	0.5969	0.902
	Value added of construction	0.159563-	0.160113	0.996565-	0.3269	
	Wages of construction	0.148363	0.311853	0.475747	0.6377	
	Palestinian employment in Israel	0.077906-	0.204428	0.381092-	0.7058	
	Investment construction	1.296830	0.284495	4.558352	0.0001	
	02-07 dummy	0.205450-	0.285651	0.719234-	0.4776	
	Employment in agriculture	0.004205-	0.253856	0.016566-	0.9869	
	Population	0.007704	0.323437	0.023819	0.9812	
	Government investment	0.011404	0.144883	0.078709	0.9378	
employment in Trade	Constant	0.378119-	1.338807	0.282430-	0.7794	0.992
	Value added of trade	0.180810	0.121025	1.493990	0.1447	
	Wages of trade	0.198972-	0.238566	0.834035-	0.4103	
	Employment of agriculture	0.219002	0.053753	4.074215	0.0003	
	02 dummy	0.048587-	0.077788	0.624604-	0.5365	
	Lagged dependent variable	0.768568	0.109711	7.005392	0.0000	
Employment in transportation	Constant	0.475528	1.391165	0.341820	0.7352	0.993
	Value added of transportation	0.029479	0.073704	0.399965	0.6924	
	Wages of transportation	0.088633-	0.112800	0.785756-	0.4391	
	Output of transportation	0.358901	0.104820	3.423986	0.0021	
	Palestinian employment in Israel	0.174427-	0.053768	3.244042-	0.0032	
	PDIESEL	0.000650-	0.016709	0.038929-	0.9692	
	NLRV	0.085984-	0.091884	0.935788-	0.3580	
	Employment of manufacturing	0.753459	0.177401	4.247208	0.0002	
	Employment of agriculture	0.098843	0.093696	1.054937	0.3012	
	02 dummy	0.038634-	0.082408	0.468815-	0.6431	
	Lagged dependent variable	0.057654	0.116251	0.495948	0.6241	
employment in telecommunication	Constant	22.35971-	3.214032	6.956905-	0.0000	0.961
	Value added of telecom.	0.054689-	0.058438	0.935843-	0.3562	
	Wages of telecommunication	0.325962-	0.387667	0.840831-	0.4065	
	population	2.141063	0.195237	10.96650	0.0000	
employment in health and education	Constant	11.46349-	0.794936	14.42063-	0.0000	0.989
	Population	1.418274	0.122063	11.61923	0.0000	
	GDP at market prices	0.011163-	0.082961	0.134551-	0.8937	
	Health-Education-Develop Exp.	0.116482	0.056906	2.046917	0.0482	
employment in other services	Constant	0.686426-	1.046235	0.656091-	0.5166	0.995
	Value added of other services	0.231782	0.122606	1.890466	0.0681	
	Wages of other services	0.019183	0.226722	0.084608	0.9331	
	Palestinian employment in Israel	0.102270-	0.029450	3.472682-	0.0015	
	Employment in manufacturing	0.326656	0.080029	4.081733	0.0003	
	Lagged dependent variable	0.572507	0.084503	6.774997	0.0000	

Source: Authors own analysis

Table 4.6: Empirical results for the three systems

Dep. Var	Independent Variables	Coefficient	Std. err	t-statistic	Pr.	R²

Value Added in Agriculture	Constant	574.1720	88.67803	6.474795	0.0000	0.844
	Private & Gov. Consumption	0.110378	0.022811	4.838909	0.0000	
	Private Investment	-0.084900	0.041256	-2.057886	0.0406	
	Government Investment	0.367249	0.084873	4.327014	0.0000	
	Exports of Goods	0.306433	0.086435	3.545246	0.0005	
	T. Imports of Goods & Services	-0.015031	0.044328	-0.339079	0.7348	
	Time Trend	-34.89178	7.041576	-4.955109	0.0000	
	Agriculture Dummy	129.9978	21.87504	5.942747	0.0000	
Value Added in manufacturing	Total Consumption	0.031204	0.029799	1.047137	0.2960	0.94
	Total Investment	0.165076	0.046878	3.521353	0.0005	
	Government Investment	-0.151434	0.151668	-0.998456	0.3190	
	T. Exports of Goods & Services	0.072309	0.113902	0.634840	0.5261	
	T. Imports of Goods & Services	0.004902	0.069817	0.070219	0.9441	
	Time Trend	8.396047	8.846625	0.949068	0.3435	
Value Added in Construction	Private Consumption	0.144250	0.029889	4.826226	0.0000	0.793
	Government Consumption	-0.026143	0.214231	-0.122033	0.9030	
	Private Investment	0.122280	0.062403	1.959529	0.0511	
	Government Investment	0.197750	0.079343	2.492359	0.0133	
	T. Imports of Goods & Services	-0.084007	0.070281	-1.195296	0.2331	
	Time Trend	-18.73160	7.221467	-2.593878	0.0100	
Value Added in Trade	Constant	-303.1586	111.8308	-2.710870	0.0072	0.948
	Total Consumption	0.203354	0.072683	2.797823	0.0055	
	Total Investment	0.723883	0.096491	7.502078	0.0000	
	T. Imports of Goods & Services	-0.368754	0.127244	-2.898014	0.0041	
	Time Trend	-0.492264	17.54064	-0.028064	0.9776	
	9407 Dummy	-354.4648	119.2372	-2.972771	0.0032	
Value Added in transportation	Constant	62.22110	13.46451	4.621120	0.0000	0.879
	Total Consumption	0.002242	0.008694	0.257911	0.7967	
	Total Investment	0.081807	0.012264	6.670557	0.0000	
	Exports of Services	0.096734	0.089246	1.083905	0.2794	
	T. Imports of Goods & Services	-0.023238	0.017678	-1.314544	0.1898	
	Time Trend	-0.264034	2.042124	-0.129294	0.8972	
	9407 Dummy	76.73632	16.43165	4.670031	0.0000	
Value Added in telecommunication	Constant	83.60174-	21.72650	3.847916-	0.0002	0.843
	Total Investment	0.028997	0.020161	1.438299	0.1516	
	T. Exports of Goods & Services	0.395216	0.139234	2.838511	0.0049	
	Time Trend	0.002296	3.289863	0.000698	0.9994	
	9407 Dummy	93.13622	25.01656	3.722983	0.0002	
Value Added in health and education	Constant	98.66544	88.49630	1.114910	0.2727	0.950
	Government Investment	-0.216354	0.089067	-2.429099	0.0206	
	Health-Educ.-Development Exp.	-8.93E-05	6.62E-05	-1.350514	0.1858	
	Time Trend	31.74503	2.799125	11.34105	0.0000	
	9407 Dummy	-84.59420	30.38391	-2.784178	0.0087	
Value Added in other services	Constant	0.474668	64.33052	0.007379	0.9941	0.981
	Total Consumption	0.097325	0.027029	3.600766	0.0004	
	Total Investment	0.249702-	0.077859	3.207097-	0.0015	
	Exports of Services	0.453209-	0.342886	1.321749-	0.1875	
	T. Imports of Goods & Services	0.151208	0.067742	2.232130	0.0265	
	9407 Dummy	40.45930	7.502183	5.393003	0.0000	
Private Consumption	Constant	-0.429566	0.218749	-1.963742	0.0498	0.976
	Gross Private Disposable Income	0.413906	0.041852	9.889778	0.0000	
	Private consumption price def.	-0.432898	0.081001	-5.344349	0.0000	
	89 dummy	-0.144652	0.021210	-6.819833	0.0000	
	97 dummy	0.068930	0.020506	3.361438	0.0008	
	Lagged dependent variable	0.627272	0.039006	16.08143	0.0000	

Private Investment	Constant VA in Manufactur-Construc-Serv Credit Extension Lending rate on NIS Number of closure days/yr Lagged dependent variable	0.298587 0.288914 0.251095 0.020165- 0.000151- 0.396834	0.556195 0.077740 0.042850 0.011229 0.000570 0.057601	0.536839 3.716415 5.859824 1.795885- 0.265244- 6.889328	0.5915 0.0002 0.0000 0.0728 0.7909 0.0000	0.930
Net Indirect Tax and subsidies	Constant Other public revenues	1.165956- 1.175062	0.462012 0.070204	2.523650- 16.73776	0.0118 0.0000	0.649
Government Other revenue	Constant Total imports of goods & Ser. Fiscal Leakage	5.923157- 1.577567 0.105610-	0.720108 0.075907 0.084956	8.225371- 20.78281 1.243110-	0.0000 0.0000 0.2141	0.8689 09
Government Consumption	Constant Government employment Lagged Total Gover. Revenue Lagged T. Gover. Exp. Lagged dependent variable	1.080725- 0.440079 0.130522 0.475724	0.112783 0.024782 0.014411 0.029757	9.582352- 17.75806 9.056873 15.98688	0.0000 0.0000 0.0000 0.0000	0.993
Imports of goods and services from ROW	Constant Total consumption Total investment Imports price deflator No. of closure days for workers	12.86458- 1.657228 0.574403 0.578610- 0.002195	0.798117 0.113352 0.070878 0.130322 0.000397	16.11867- 14.62015 8.104081 4.439851- 5.533509	0.0000 0.0000 0.0000 0.0000 0.0000	0.945
Imports of goods and services from Israel	Constant Total consumption Total investment Imports price deflator No. of closure days for workers Lagged(share of non-construction invest. in T. Invet.)	2.477880 0.147074 0.556313 0.136820 0.000841 0.464096	0.448360 0.072213 0.043804 0.085143 0.000220 0.201314	5.526536 2.036668 12.69999 1.606937 3.826171 2.305340	0.0000 0.0419 0.0000 0.1084 0.0001 0.0213	0.905
Exports of goods & services to ROW	Constant Export price deflator Jordan real GDP No. of closure days for workers Lagged dependent variable	12.86458- 1.657228 0.574403 0.578610- 0.002195	0.798117 0.113352 0.070878 0.130322 0.000397	16.11867- 14.62015 8.104081 4.439851- 5.533509	0.0000 0.0000 0.0000 0.0000 0.0000	0.945
Exports of goods & services to Israel	Constant Israel real GDP Export price deflator No. of closure days for workers Lagged dependent variable	11.47134- 1.237557 0.561255- 0.001086- 0.552374	0.754185 0.068311 0.084201 0.000258 0.026285	15.21024- 18.11638 6.665658- 4.214896- 21.01472	0.0000 0.0000 0.0000 0.0000 0.0000	0.916
Employment in Agriculture	Constant Value added of agriculture Wages in agriculture 01-02 dummy share of non-construc in T. Invest lagged dependent variable	0.946219 0.270447 0.523591- 0.129209- 2.320954 0.658623	0.540505 0.036352 0.057095 0.026145 0.195696 0.039139	1.750620 7.439679 9.170466- 4.942071- 11.85999 16.82762	0.0803 0.0000 0.0000 0.0000 0.0000 0.0000	0.852
Employment in Manufacturing	Constant Value Added of manufacturing Wages of manufacturing Employment in construction Lagged dependent variable	2.178558 0.254686 0.077026- 0.147168- 0.525615	0.218029 0.019015 0.028823 0.015774 0.025107	9.992051 13.39401 2.672407- 9.329575- 20.93538	0.0000 0.0000 0.0077 0.0000 0.0000	0.991

Employment in Construction	Constant	5.853490	2.262861	2.586765	0.0098	0.886
	Value added of construction	0.006709	0.064397	0.104185	0.9170	
	Wages of construction	0.209995	0.152546	1.376597	0.1689	
	Palestinian employment in Israel	0.150879-	0.085092	1.773123-	0.0765	
	Investment construction	1.369810	0.125418	10.92198	0.0000	
	02-07 dummy	0.208402	0.073962	2.817708	0.0049	
	Employment in agriculture	0.130841-	0.120898	1.082238-	0.2794	
	Population	0.163376-	0.156543	1.043646-	0.2969	
	Government investment	0.029256-	0.051507	0.568008-	0.5702	
employment in Trade	Constant	1.706568-	0.425760	4.008289-	0.0001	0.987
	Value added of trade	0.138536	0.026961	5.138378	0.0000	
	Wages of trade	0.037026	0.062225	0.595046	0.5519	
	Employment of agriculture	0.255522	0.030756	8.308165	0.0000	
	02 dummy	0.060632-	0.038760	1.564277-	0.1181	
	Lagged dependent variable	0.809177	0.030076	26.90433	0.0000	
Employment in transportation	Constant	0.422946	0.447743	0.944617	0.3451	0.994
	Value added of transportation	0.069980	0.020538	3.407362	0.0007	
	Wages of transportation	0.229903-	0.029848	7.702440-	0.0000	
	Output of transportation	0.332150	0.029234	11.36192	0.0000	
	Palestinian employment in Israel	0.151032-	0.015192	9.941435-	0.0000	
	PDIESEL	0.004640-	0.004121	1.125970-	0.2604	
	NLRV	0.044684-	0.020545	2.174928-	0.0299	
	Employment of manufacturing	0.679313	0.046055	14.74997	0.0000	
	Employment of agriculture	0.110089	0.028885	3.811310	0.0001	
	02 dummy	0.004706-	0.027034	0.174059-	0.8619	
	Lagged dependent variable	0.092864-	0.029937	3.101925	0.0020	
employment in telecommunication	Constant	20.84514-	0.802459	25.97660-	0.0000	0.964
	Value added of telecom.	0.047148	0.013180	3.577249	0.0004	
	Wages of telecommunication	0.521952-	0.100610	5.187854-	0.0000	
	population	2.043504	0.060367	33.85132	0.0000	
employment in health and education	Constant	12.80609-	0.372487	34.37997-	0.0000	0.989
	Population	1.544025	0.036916	41.82525	0.0000	
	GDP at market prices	0.100523	0.033884	2.966705	0.0031	
	Health-Education-Develop Exp.	0.116482	0.056906	2.046917	0.0482	
employment in other services	Constant	1.365934-	0.299520	4.560417-	0.0000	0.994
	Value added of other services	0.171450	0.028317	6.054625	0.0000	
	Wages of other services	0.108361	0.053008	2.044250	0.0412	
	Palestinian employment in Israel	0.091116-	0.011531	7.901623-	0.0000	
	Employment in manufacturing	0.358695	0.024664	14.54318	0.0000	
	Lagged dependent variable	0.617831	0.022440	27.53235	0.0000	

Source: Authors own analysis