



MSc. Thesis

**A New Approach for Estimating the Effect of
Minimum Wage on Employment:
Palestine as an Example**

طريقة جديدة لتقدير أثر الحد الأدنى للأجور على العمالة:
فلسطين كمثال

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**A New Approach to estimating Minimum Wages in
Palestine**

طريقة جديدة لتقدير الحد الأدنى من الأجور في فلسطين

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إهداء

"إهداء إلى السواعد السمراء التي تسعى كل يوم لبناء
مستقبل أفضل لها وللبشرية جمعاء
إلى والدي وإخوتي عريب وعدي وعلا
إلى زوجتي الحبيبة هند
وأطفالي خالد وغسان وباسل عسى أن يكون زمنكم أفضل
من زمننا"

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ملخص:

تبحث هذه الورقة في آثار الحد الأدنى من الأجور على الاقتصاد في الضفة الغربية وقطاع غزة ، من خلال تحليل الزيادة في الطلب الكلي بسبب تأثير تحويل الدخل من من فئات الدخل العليا إلى فئات الدخل الدنيا. وتكمن أهمية هذه الدراسة في أنها تضيف إلى الأدبيات التي تدرس الحد الأدنى للأجور في البلدان النامية ، وتخلق إطارًا نظريًا لاختبار تأثير الحد الأدنى للأجور على الطلب الكلي. إن مثل هذا النهج الفريد من نوعه يجسد آثار العمالة الإيجابية للحد الأدنى للأجور كما وصفها النموذج الكينزي ، ويساهم في تفسير تأثير العمالة الإيجابي الذي لوحظ في العديد من الدراسات التجريبية ، ويمكن أن يساعد في التنبؤ بآثار قانون الحد الأدنى للأجور الفلسطيني قبل تنفيذه.

من الجوانب الهامة للنقاش حول الآثار المترتبة على تشريع الحد الأدنى للأجور على الاقتصاد هو أن معظم الكتابات عن الحد الأدنى للأجور تحلل آثار الحد الأدنى للأجور بعد أن يتم تحديده قانونًا. وتستخدم هذه الدراسات نماذج كلاسيكية جديدة بتقنيات رياضية متعددة تتراوح من التحليل القياسي العادي إلى تحليل التغير في المتغيرات. وقد يكون استخدام النموذج الكلاسيكي الجديد مناسبًا لظروف الدول المتقدمة حيث "تنطبق" بعض المبادئ الكلاسيكية الجديدة ، لكن القصة مختلفة إلى حد ما في البلدان النامية حيث لا تنطبق حتى المبادئ الكلاسيكية الجديدة. وهنا يظهر ضعف النظرية الكلاسيكية الجديدة ، حيث تفترض أن دور الدولة يقتصر على الحفاظ على الأمن وسيادة القانون، وبالتالي تنشأ الحاجة إلى توفير نهج مختلف لتحليل تأثيرات سياسة الحد الأدنى للأجور قبل التنفيذ في حالة بلد نام.

Abstract:

This paper examines the minimum wage effects on the economy in the West Bank and Gaza Strip, through analyzing the increase in aggregate demand due to the income transfer effect of minimum wages. The importance of this study is that it adds to the literature examining minimum wages in developing countries, and creates a theoretical framework to test the aggregate demand effects of minimum wages. Such a unique approach captures the positive employment effects of minimum wages as described by the Keynesian model, contributes to explaining the positive employment effect observed in numerous empirical studies, and may help predict the effects of the Palestinian minimum wage law before its implementation.

An important aspect to the debate on the implications of minimum wage legislation on the economy is that most of the literature on minimum wage analyzes the effects of minimum wages after it has been set. These studies use neoclassical models with different regression techniques ranging from standard ordinary least squares to difference in difference approach. The use of neoclassical model might be appropriate in the circumstances of developed countries where some of the neoclassical tenets "apply", but the story is rather different in developing countries where the neoclassical tenets do not even apply. As the two main assumptions of the neoclassical theory say that the role of the state is limited to maintain security and the rule of law, and so there arises a need to provide a different approach to the analysis of the effects of minimum wages policy before its implementation in the situation of a developing country.

1. Introduction:

This paper examines the minimum wage effects on the economy in the West Bank and Gaza Strip, through analyzing the increase in aggregate demand due to the income transfer effect of minimum wages. The importance of this study is that it adds to the literature examining minimum wages in developing countries, and creates a theoretical framework to test the aggregate demand effects of minimum wages. Such a unique approach captures the positive employment effects of minimum wages as described by the Keynesian model, contributes to explaining the positive employment effect observed in numerous empirical studies, and may help predict the effects of the Palestinian minimum wage law before its implementation.

Despite the importance of the aforementioned approach, the current economic literature lacks any attempt to create an econometric model, which uses the notion of aggregate demand as a tool to analyze and forecast minimum wage effects on the economy.

There has been much debate about the minimum wage and its effects on employment and the economy in general. However that debate takes place in developed countries that have already set a legally binding minimum wage with a well-established history of enforcing it. The story is quite different in developing countries; as most of those countries are relatively new to the experience of

setting a legally binding minimum wage, and continue to struggle with minimum wage policy with all the controversy surrounding it.

The main discourse behind backing up minimum wage enforcement is improving the livelihoods of poor people. Where the supporters of minimum wage argue that setting a legally binding minimum wage would help improve the living conditions of those workers that are paid the least. Those against setting and imposing a legally binding minimum wage (Neumark, Salas, & Wascher, January, 2013) argue that although minimum wages might help those workers paid the least improve their overall living conditions, but in general they tend to reduce employment level as labour costs increase and businesses' replace workers with machines. And it seemed until the early nineties that there was a consensus between mainstream economists that increasing minimum wages would lead to negative effects on employment up until Kard and Krueger (Card & Krueger, 1993) published their empirical work in the early 90's that found little or no relation between raising minimum wages and unemployment rates. This study spurred a number of studies that debated with and against their findings and questioned their results (Neumark, Salas, & Wascher, January, 2013).

It is worth noting that all of the previous studies have used neoclassical models and set out to test them, with emphasis on empirical analysis of applied policies. There is a general disregard for the Keynesian analysis on the effects of minimum wages on the economy as a whole, even when Keynesian approaches have shown

positive effects of minimum wages on employment; an example can be seen in the introduction of the notion of "hungry teens"¹. Applying a Keynesian approach to the analysis would give a counter perspective on the impact of minimum wages on the economy in general and on employment in particular. This approach will also help to predict the effects of minimum wages legislation before its implementation.

In today's global economy workers are pitted against each other in a never ending competition to accept lower wages and worse working conditions, in order to generate higher and higher profits for the economic elite. In this context the theoretical struggle to show that different approaches to development do exist gains much importance, as the dominant discourse gets challenged in various economic and social spheres².

Palestine as a developing country is no stranger to these discussions, as it struggles with high unemployment rates (around 23.7% unemployed among labour force participants) (Palestinian Central Bureau of Statistics, 2015); and among the employed "37.2% of wage employees in the private sector receive less than the minimum wage in Palestine" (Palestinian Central Bureau of Statistics, 2015, p. 6).

¹ Review the paper by Daniel Aaronson, Eric French, and James MacDonald where they introduce the notion of hungry teens to explain the effects of increased employment due the increased demand by minimum wage employees, this is masking Keynes's notion of aggregate demand. (Aaronson, French, & MacDonald, 2004)

² for example see "Political Economy and Class" by Adel Samara especially the chapter on Ideology.

An important aspect to the debate on the implications of minimum wage legislation on the economy is that most of the literature on minimum wage analyzes the effects of minimum wages after it has been set. These studies use neoclassical models with different regression techniques ranging from standard ordinary least squares to difference in difference approach. The use of neoclassical model might be appropriate in the circumstances of developed countries where some of the neoclassical tenets "apply", but the story is rather different in developing countries where the neoclassical tenets do not even apply. As the two main assumptions of the neoclassical theory say that the role of the state is limited to maintain security and the rule of law, and so there arises a need to provide a different approach to the analysis of the effects of minimum wages policy before its implementation in the situation of a developing country.

Through the analysis of the distribution effect of minimum wages on different groups of Households differentiated by income level, this paper aims to examine the minimum wage effects on the economy in the West Bank and Gaza Strip. The importance of this study is that it adds to the literature of examining minimum wages in developing countries, and creates a theoretical framework which can be used to test the aggregate demand effects of minimum wages, this approach is unique as it aims to capture the positive employment effects of minimum wages as it was described by the Keynesian model in the Palestinian context of the West Bank and Gaza Strip.

2. Literature Review

2.1 The Theory:

Historically there have been two theoretical views for the effects of imposing higher minimum wages in the economy; the first one is the neoclassical view which “argued that wage levels were determined by workers’ productivity and that minimum wages would reduce employment among low skilled workers” (Neumark, Salas, & Wascher, January, 2013, p. 1). The second view “argued that minimum wages were necessary to prevent the widespread exploitation of lower-skilled workers by employers with greater bargaining power over wages, would encourage workers to increase their efforts, and would boost consumers’ purchasing power and thus raise aggregate demand” (Neumark, Salas, & Wascher, January, 2013, p. 1).

Those different approaches to tackling minimum wages entail very different postulates about the economy in general and the labour market in particular. The first postulate of the neoclassical school suggests that the market reaches equilibrium through the forces of supply and demand, so any intervention would lead to distortions in the equilibrium state especially if the market is a perfectly competitive one. Thus imposing a minimum wage would in the basic sense be putting a price floor on wages and would lead to lower demand for labour in the market which will increase unemployment in the aggregate level.

The second postulate that is derived from the first one which is Say's law "supply creates its own demand"³. If we extend this postulate to its logical conclusion the presence of a high supply of labour would prompt a demand for this labour, but it's evident that this rarely happens.

Keynes challenged these two postulates and stressed the importance of effective demand as a determinant for increased employment, and to foster economic growth.

2.2 The Empirical studies:

The presence of two different theoretical approaches to minimum wages evoked many empirical studies that have tried to prove one view over the other. In a paper published in 1982 under the title "The Effect of Minimum Wage on Employment and Unemployment", a revision was made of the literature up to 1982, on minimum wage effects on employment and unemployment. The study reviewed the theoretical models used, in addition to cross-sectional studies, time series studies and reaches some important conclusions on the effects of minimum wages on employment and unemployment. The authors concluded that "estimates of the minimum wage effect of a 10% increase on teenage unemployment rates range from zero to over three percent, but estimates from 0 to .75 percentage points are most plausible." (Brown, Gilroy, & Kohen, June, 1982, p. 524). Although this conclusion was stated by Neumark, Salas, and Wascher (2013), they ignore a

³ This is not the actual phrasing by Say which is "that products are always bought ultimately with products ". (Say, 2001, p. 67) But I opted here to mention Keynes phrasing for Say's law because it shows the implications of Say's law on the market structure.

second conclusion which is as important as the first one if not more: “the direction of the effect on adult employment is uncertain in the empirical work, as it is in the theory. While some adults are undoubtedly displaced by the minimum wage, others may be employed because the minimum wage protects them from teenage competition” (Brown, Gilroy, & Kohen, June, 1982, p. 524). This second conclusion is of most importance, because when analyzing minimum wage effects on employment and unemployment the aggregate effect needs to be taken into consideration and what this paper shows is the fact that some of the percentage of teenagers who lost their jobs due to higher minimum wages are replaced to a certain degree by adults, so a zero sum effect on employment even when using the neoclassical paradigm.

After the publication of Brown, Gilroy, & Kohen, no other studies challenged the idea that minimum wage increases were adversely correlated with employment especially among teenagers and other low wage workers, up until (Card & Krueger) published a series of studies in the beginning of the 90's where they present mounting evidence that minimum wage increases do not cause a decline in employment among teenagers and other low wage workers (Card & Krueger, 1993)⁴. In a survey of 410 fast food restaurants before and after an increase in minimum wages, they then used a difference in differences regression analysis to analyze the gain or loss in employment due to increases in minimum wages, they

⁴ See also "Do Minimum wages Reduce Employment? A Case study of California" by David Card, published in *Industrial and Labor Relations Review* in 1992, another study by David Card with similar results "Using Regional Variation in Wages to Measure the Effects of the Federal Minimum wage" published in *Industrial and Labor Relations Review* in 1992.

present "no evidence that the rise in New Jersey's minimum wage reduced employment at fast-food restaurants in the state." (Card & Krueger, p. 792). However, their analysis showed something more theoretically unexpected "employment rose faster at the stores that had to increase wages the most because of the new minimum wage" (Card & Krueger, Sep.,1994, p. 791)

This last remark is of great importance. Similar results are also found in other empirical studies, especially those analyzing the restaurant industry. In a study on the minimum wage effects on prices and employment in the restaurant industry, evidence was found to support the income effect of minimum wages "...whereby higher income resulting from a minimum wage increase causes low wage workers to buy more minimum wage products, attenuating the disemployment effect of the minimum wage" (Aaronson, French, & MacDonald, 2004 , p. 4). This result is reached while using a mathematical model that links prices to minimum wages, where (Aaronson, French, & MacDonald, 2004 , p. 33) find that minimum wage always leads to price increases. This is an indication that the increases in minimum wages were passed on to consumers. The previous result is of some importance as it indicates that at least some -if not all- of the increase in the wages bill, will be successfully passed on to consumers, which means that employers will not have to reduce employment in response to the new minimum wage. But this might be a double edged sword for the welfare of the poor, if the product that's prices increase is a major consumption item by poor households. The previous result is contradicted by an earlier study by (Katz & Krueger, Feb 1992),

which used longitudinal data from fast food restaurants in Texas and found no relationship between changes in minimum wages and the prices of meals, while also finding “that employment increased at firms most affected by the minimum wage increase” (Katz & Krueger, Feb 1992, p. 24). Although the second result might be well interpreted by the nature of the consumers of fast food restaurants as minimum wage workers who benefited the most from the increases in minimum wages, but the first result of the price effect still needs to be examined. The answer might be in the nature of the analysis done by Katz and Krueger. Their suggested model uses a dummy variable to account for regional differences. This has enabled them to capture differences between regions, as restaurants in more well off regions might pass on the price increases to consumers, as compared to restaurants in poor areas that were inclined to bear the increased cost resulting from minimum wages. Aaronson, French, & MacDonald, (2004) did not account for the differences between poor and rich regions. Another important observation is that Aaronson, French, & MacDonald,(2004) observed that the percentage increase of mean item price was lower at the limited service restaurants after the minimum wage increase, which actually contradicts their finding as limited service restaurants are more likely to be affected by the minimum wage increase. This result goes to show that overall prices might decline even when raising the minimum wage, which serves to assert that passing on the price to consumers, is not a straightforward process, but entails profit maximizing considerations by firms. Thus firms take into consideration the

elasticity of price change to demand, so if the item is price elastic then firms will be less inclined to raise the price of the good as its demand will fall.

In a paper by Card, (1992) the study employs the “natural experiment approach⁵” to measure the effects of the U.S federal increase in minimum wages on teenagers’ employment, wages and school enrollment through regression analysis of both individual and grouped data. The study utilizes the fact that there were major regional differences in the fraction of teenagers affected by the new federal minimum wage (from 5% below the new minimum wage to as much as 50% in some states). The study concludes that the new minimum wage raised average teenage wages and “ no evidence that the rise in minimum wages significantly lowered teenage employment rates or altered school enrollment patterns” (Card, OCT, 1992, p. 36)

2.3 Developing countries

The importance of minimum wage in developing countries as a tool for the reduction of poverty has been the subject of much debate, with the need to alleviate poverty being the number one driving force in favour of minimum wages legislation. Other factors have also contributed in favour of implementing

⁵ A Natural experiment: Observational study in which an event or a situation that allows for the random or seemingly random assignment of study subjects to different groups is exploited to answer a particular question. Natural experiments are often used to study situations in which controlled experimentation is not possible, such as when an exposure of interest cannot be practically or ethically assigned to research subjects. Situations that may create appropriate circumstances for a natural experiment include policy changes, weather events, and natural. Source (Britannica: <https://www.britannica.com/science/natural-experiment>, accessed March 23rd 2017)

minimum wages in developing countries such as the awareness of activists in developed countries of the exploitation of low wage workers in developing countries, which put into motion the idea of fair trade and the work done by humanitarian organizations to combat labour exploitation in developing countries through government advocated interventions such as minimum wage legislation.

As in the case of developed countries, there has been much debate on the impact of minimum wages on developing countries in terms of: employment, price effects, and on development, especially how it may affect foreign investment. Some economists argued against imposing such wage floors from an international trade approach⁶ where they suggested that imposing such wage floors would drive foreign investment away towards countries that do not have such wage floors.

Basu, Chau, and Ravi (2010) deal with enforcement as an endogenous factor in their model, where the government may choose to imperfectly enforce the minimum wage law in order to achieve desired efficiencies. When they test their model against different labour market structures and elasticity of labour demand and supply, they conclude that when there exists imperfect enforcement of minimum wage law then the results of empirical studies cannot be relied on to predict the direction and magnitude of minimum wages on employment, wages and income distribution. This enrichment of the minimum wage theory adds an important perspective to the implementation of minimum wage laws in developing countries; many developing countries do not have sophisticated

⁶ For example see Mohammad Naser Published an article In Alhayat ALjadedah Newspaper (Naser).

enforcement systems which mean that setting a law by itself is not enough to achieve desired results. This puts much doubt on the advocates of minimum wage as a signal for employers and employees wage negotiations, as relations between employers and employees cannot be taken out of the socio-political context and power relations that are present in the society.

The above situation puts an emphasis on political economy as a tool of analysis for the effect of minimum wage laws in developing countries, where not only the presence of the law will guarantee implementation, but also the special interests of social forces will govern which laws get implemented.

Another important paper examines minimum wage effects in Indonesia (a developing country) in the period between 1990 and 1996 (Alatas & Cameron, January 2008). There, the government decreed a number of increases in minimum wage between 1990 and 1996 and along with it set a series of monitoring and enforcement procedures. The authors use the same approach as (Card & Krueger, Sep.,1994) and compare the employment effect and investment effects of minimum wages between the Greater Jakarta area and other areas around it, each with a different minimum wage. The authors conclude that although some small establishments suffered from employment loss, the rate of starting or closure of small establishment was not affected by minimum wage increases. On the other hand, large establishments did not show any employment effects after minimum wage increases, and this applied to both domestic and foreign establishments.

During the period of six years there was a 44% increase in the number of foreign establishments operating in the area which challenges traditional trade theory that foreign investment would have moved to places with cheaper labour. However if we examine the unemployment rate that was observed in this study, and according to the (World Bank, 2015) unemployment rate was 6.2% according to ILO standards in 1991 and although of the significant increases in minimum wages (more than 50% in real terms in Jabotabek⁷) over the same period the unemployment rate fell to 4.4% by 1996, and employment in industry rose from 13.7% of total employment in 1990 to 18.1% by 1996 (World Bank, 2015) although most of minimum wage workers are in manufacturing. So when measuring the effects of minimum wages on aggregate employment it is found again that the employment losses incurred in one sector were more than compensated for by growth in other sectors, and the growth of employment in industry also indicates a growth in the industrial sector and in investment both domestic and foreign over the same period. As for the decrease in employment in small business, this could actually capture the effect of a transfer in employment from small business to large ones, as large business can usually offer more employment and advancement opportunities for their workers, this is very plausible since unemployment rates fell in the period from 1991 to 1996.

⁷ Jabodetabek or Greater Jakarta is an official and administrative definition of the urban area or megacity surrounding the Indonesia capital city, Jakarta. The original term "Jabotabek" dated from the late 1970s and was revised to "Jabodetabek" in 1999 when "De" (for "Depok") was inserted into the name following its formation.

Evidence is found in the literature which shows that analysing the aggregate effects of minimum wage legislation is not a straightforward process, as employment and investment outcomes might vary, one source of this variation is the aggregate demand effect or as Aaronson, French, and MacDonald (2004) phrased it as the hungry teens phenomenon. This phenomenon means that when increasing the minimum wage then industries that have primarily minimum wage clients face an increase in demand that is much more than the initial cost of the minimum wages, this prompts industries to expand and hire more workers. Hence the literature has sometimes observed increased employment due to increases in minimum wages.

Another important study for developing countries measured the effect of increased enforcement of legally set minimum wages on employment and wages and other labour standards (Gindling, Mossaad, & Trejos, 2015). The authors use a regression discontinuity approach where they analyzed and compared “what happened to workers who before the campaign had been earning below the minimum wage to those who before the campaign had been earning above the minimum wage” (Gindling, Mossaad, & Trejos, 2015, p. 1). Using this approach the study determines if minimum wages caused any unemployment effects. It will also help them measure the wage gap between below minimum wage workers and above minimum wage earners, and if there was a spillover effect on people earning higher than minimum wages. The study found that “the campaign led to an increase in compliance with minimum wage laws in Costa Rica; the mean

earnings of those earning less than the minimum wage in 2010 increased by approximately 10% more than the earnings of those who had been earning more than the minimum wage...” (Gindling, Mossaad, & Trejos, 2015, p. 24). This shows that the campaign was effective in enforcing minimum wages, as it had an awareness aspect coupled by increased inspection and penalties for noncompliant business owners.

As for the employment effect, there was conflicting evidence as the study “find no evidence that the campaign had a negative impact on the employment of full-time workers whose wages were increased. We find some weak evidence that the campaign had a negative impact on the employment of part-time private sector employees” (Gindling, Mossaad, & Trejos, 2015, p. 24). But did this fall in part-time employment cause a fall in general employment rates? Or were business’ more inclined with the increased costs of labour to transfer some part-time workers to full time jobs? When analyzing the unemployment figures for the years 2010 through 2013 it is found that when the campaign was announced on August 9th, 2010 the unemployment rate was 7%, by the end of 2011 the unemployment rate became 8% and remained steady at the 8% level throughout 2012 and 2013. But this 1% increase in unemployment, although small, cannot be attributed only to increased enforcement of minimum wage laws, as the Costa Rican economy is highly dependent on the US economy, this is evident by quoting the US Department of State official website “*The United States is Costa Rica's most important trading partner accounting for almost half of Costa Rica's exports,*

imports, and tourism, and over half of its foreign direct investment” (US Department of State, 2015). So its logical to attribute at least some of the increase in unemployment to the global financial crisis which the U.S suffered the blunt off causing the crisis to be exported to countries that have close economic relations with the U.S. Another important lesson from Costa Rica is that increased enforcemnt of minimum wage laws caused increased compliance with other labour laws thus creating a positive spillover effect such as increased compliance with healt care laws, payed leave etc...

3 The Palestinian context:

Palestine is suffering from a dire economic situation, increasingly due to the prolonged "Israeli" military occupation. The Unemployment rate is 26.5% (Palestinian Central Bureau of Statistics, 2015); economic growth in the past years hasn't reflected itself on employment rates but a sharper class polarization has occurred in the Palestinian society, especially after neoliberal policies were adopted and implemented by the Palestinian Authority (P.A)⁸. Despite these policies, other social actors (civil society organizations, NGO's, workers unions, and some government officials) advocated for a minimum wage law to be implemented in order to protect the most vulnerable of workers, and after a prolonged discussion with the private sector and workers unions and for the first time in the P.A's history a minimum wage law was passed (Cabinet Decision

⁸ The P.A is one of the few countries in the world that has written the type of economic system as a free market system into its basic law, this reflected itself in a number of investment and financial laws and regulations that are implemented today by the P.A.

Number 11 Year 2012) that stipulated the minimum hourly and monthly salaries paid to workers, this law came into effect on January 1st 2013.

Now almost two years after passing the minimum wage law, it is little more than ink on paper as little enforcement has backed up its implementation. The decreases in the number of people getting paid lower than minimum wage can be mostly attributed to normal increases due to the increase in living standards and the cyclical movement of the economy. Actually if it were not for the government sector, then the minimum wage law would have had little effect on wage labourers in Palestine. This is evident as 24.5% of wage labourers in the West Bank are paid less than the minimum wage, with an average monthly wage of 1,056 NIS (Rimawi, 2015). Table 1 shows the number of wage employees that are paid less than minimum wage according to each district in the West Bank and Gaza Strip.

Table 1 # of Employees Paid Less than minimum wage

District	Number Of workers Receiving lower than minimum wages			Average Monthly Wages of Workers		
	Male	Female	Total	Male	Female	Both
Jenin	4,200	2,000	6,200	1,198	963	1,121
Tubas	400	400	800	1,227	785	998
Tulkarem	4,300	1,100	5,400	1,124	812	1,058
Nablus	7,400	3,100	10,500	1,077	863	1,014
Qalqilya	1,500	600	2,100	1,129	932	1,071
Salfit	300	400	700	1,182	886	998
Ramallah and Albireh	3,100	2,000	5,100	1,159	991	1,093
Jericho and Al Aghwar	1,000	200	1,200	1,165	1,107	1,154
Jerusalem	1,800	1,400	3,200	1,205	979	1,108
Bethlehem	3,000	1,400	4,400	1,125	945	1,068
Hebron	8,200	3,500	11,700	1,092	834	1,016
Total West Bank	35,200	16,100	51,300	1,125	904	1,056
Gaza Strip	58,400	5,700	64,100	817	666	804
Total West Bank & Gaza	93,600	21,800	115,400	933	842	916

Source PCBS: Labour Force Survey, 2013

This table shows two important facts: First, women are earning less than men; and although female participation rate is only 19% in the West Bank, women

constitute 31% of labourers earning below minimum wage, and 42% of total female employment is earning less than the minimum wage in the West Bank (Palestinian Central Bureau of Statistics, 2013). This demonstrates that there is a gender aspect to setting and enforcing minimum wage laws to protect those most vulnerable from exploitation by business owners. While in the Gaza Strip it is evident that female participation rate is much lower than the national average of 19%. The second fact is the high ratio of wage workers paid less than minimum wage as they constitute 37.8% of private sector wage workers in the West Bank and Gaza Strip and 15% of total full time workers in the West Bank and Gaza Strip.

Abu Hantash, (2003) examined the economic effects of a minimum wage law in the Palestinian Economy, the study proposed three scenarios for the minimum wage and analysed their effect on the economy. The study uses two possibilities for the market structure to use in analysis; the first model is the traditional perfect competition model with the minimum wage being a price floor and the second model is the monopsony model. However, the study does not employ these models further in the analysis. The study then examines three scenarios for minimum wages and the rate of wage employees that are affected with costs to production in four sectors “Industrial Production Sector, Internal Trade sector, Transportation, Storage and Communication Sector, and Services Sector”. The study determines the wage cost for each sector under each of the different

scenarios and find that the total costs will increase in each sector according to the following table:

Table 2 %increase in Total Production Costs

Sector	% Increase in total Production Costs		
	M.W 922 Nis	M.W 1291 Nis	M.W 1648 Nis
Industrial production	1%	2.7%	5.3%
Internal Trade	1.2%	3.9%	6.5%
Transportation Storage and Communication	.2%	1%	2.8%
Services	1.8%	4.6%	8.6%

Source (Abu Hantash, 2003)

What is evident from the previous table is that wages costs will increase between 0.2% and 1.8 % according to the first scenario “presuming perfect enforcement of the minimum wage law”, or by a maximum of 2.8% and 8.6 % increase in total costs if the third extreme scenario was enforced. It then tests the ability of each industry to pay the new wages according to each scenario by using the notion of the Gross Operating Surplus⁹. The study then calculates the operating surplus for each industry under each scenario and reaches the following conclusions:

⁹ Gross operating surplus is the surplus generated by operating activities after the labour factor input has been recompensed. It can be calculated from the value added at factor cost less the personnel costs. It is the balance available to the unit which allows it to recompense the providers of own funds and debt, to pay taxes and eventually to finance all or a part of its investment. (OECD, 2015)

Table 3 % decrease in GOS

Sector	% Decrease in Gross Operating Surplus		
	M.W 922 Nis	M.W 1291 Nis	M.W 1648 Nis
Industrial production	3.7%	9.6%	18.8%
Internal Trade	8%	19.7%	37.8%
Transportation Storage and Communication	.3%	1.9%	5.2%
Services	1.3%	4.2%	7.1%

Source (Abu Hantash, 2003)

Despite the usefulness of this analysis, several issues arise: First, the grouping of sectors might not give a clear idea on the impact of the minimum wage policy on each industry. For example, the Transportation, Storage and Communications Sector entails very different industries with differing wage structures: the Communications Industry that has very high wages relative to the Palestinian labour market, and the Goods Transportation Industry that has much lower wages than the Communications Industry. So the effect of minimum wages will be different on each sector. Another point that has to be made is that although the study captured the supply effect of minimum wage legislation, it failed to capture the demand effect of increased minimum wages on each industry. This can be estimated through consumption models where the impact of increased wages would be translated into consumption increase that would show the effect of the

increase in aggregate demand. This effect can actually increase the employment and Gross Operating Surplus (GOP) of certain industries if the shift in the demand curve is big enough.

As the debate increased in the Palestinian society for the need for minimum wage laws, the Palestine Economic Policy Research Institute (Mas) published a paper in 2010 where it analysed the expected effects of imposing minimum wages 15% over the average wages being paid today (Missaglia, Capelli, & Amer, 2010). The study uses a computable general equilibrium model to determine the effects of the increase in minimum wages of production, employment, and prices in four Palestinian sectors “Agriculture, Industry, Marketable Services and Unmarketable Services¹⁰” (Missaglia, Capelli, & Amer, 2010, p. 53). Then the study continues to analyse the effects of this shock in the system. The study concludes that enforcing a minimum wage of 15% higher than average wages would lead to a decline in the production of all sectors by 2-4% and would lead to decrease exports by 4-8% (Missaglia, Capelli, & Amer, 2010, p. 56). Thus the study recommends that if a minimum wage law was enacted that the increase would not be higher than 5% over average wages (Missaglia, Capelli, & Amer, 2010, p. 62).

An important shortcoming in this study is that it assumed that minimum wages would be set at a level higher than average wages. This gave the analysis the

¹⁰ Unmarketable services: these are services provided by NGO's

shock aspect¹¹ to the Palestinian Economy in general. The average wages in the West Bank at the time were 1650 NIS a month “excluding workers in Israel and Settlements” (Palestinian Central Bureau of Statistics, 2015, p. 2) while minimum wages in Palestine were set at 1450 NIS/ month which is lower than average wages in the West Bank. A second shortcoming of the study is that it did not include the industries with workers that are paid less than minimum wage in order to measure the ability of these industries to pay the new minimum wage. Finally, the study did not focus on the demand resulting from the increase in employees incomes resulting from the new minimum wage and where this demand will be directed in order to better measure the effects of minimum wage policy.

4 Conclusions from literature review:

What can be concluded from the literature on minimum wages is that studies are ambiguous on the aggregate effect on employment from minimum wages. In addition there are conflicting results when dealing with teenage employment.

It is also evident that minimum wage enforcement plays a crucial role in deciding the effects of minimum wage policy, as no or little enforcement would mean that business’ employing a rational business model¹² would not be inclined to adhere to the law such as is the case in the West Bank and Gaza strip.

¹¹ A shock analysis in economics is a sudden change in one aspect of the market which causes ripple effects throughout the economy that usually take more than one economic cycle to its effects to settle.

¹² A rational business model is where business computes the costs of each steps before taking it and takes the most profitable actions. In the case of minimum wage law the business would weigh in the cost of adhering to not adhering, so if there is little to no enforcement then

Most of the empirical studies of minimum wages focused on teenagers as a unit of analysis. While ignoring the notion that the teenagers are part of households, and household income is a factor in determining how early teenagers join the labour market. A different line of analysis where household income is taken into consideration will provide an interesting insight on the effects of minimum wages. The classical assumptions against imposing minimum wages have been rebuffed by empirical studies in a number of developing countries. For example, in Indonesia the idea that minimum wages would drive away foreign direct investment has been refuted, as foreign direct investment has increased in conjunction with several increases in minimum wages. The second assumption that minimum wages would increase unemployment has also been refuted, as the literature talks about teenage unemployment and not the aggregate effect.

Thus there arises a need for a different approach to analyze the effects of minimum wages on the economy. This approach would have to capture the effect of increase in aggregate demand as a result of the new minimum wages and the aggregate effect on employment. A good model for that is the Keynesian model, where it would account for changes in aggregate demand, through the analysis of household consumption.

3. Methodology:

3.1 Data:

Data used in this analysis is the PCBS Consumption and Expenditure Survey for 2011. This data was collected for 12 months starting from 15th of January 2011 to the 14th of January 2012. The data collected here is per household where each household had its consumption recorded over the period of one month for 12 months. This data set offers a much needed link between household income and consumption while also providing a number of control variables such as number of males and females in each household and other control variables. The sample size is 4,317 households, of which 2,834 households in the West Bank, and 1,483 households in the Gaza strip. The sample is also disaggregated into three regions in the West Bank: North, Middle and South. The data files were processed by SPSS and Oracle software programs, and organized into 7 SPSS files. All the data manipulation and compilation here were done using SPSS software, and all the data was compiled into a single file. The regression analysis was done using Eviews software package as it provides expanded options for regression analysis compared to SPSS.

There are two obvious shortcomings for this data-set; first the PCBS did not update the data set after 2011. Second there is no clear indication on how to link this data set with previous surveys in terms of households. Thus it is difficult to create a time series analysis of the consumption function. So the data set was used to conduct cross-sectional analyses of the consumption function in Palestine.

3.2 The Model

The study considers a macroeconomic approach to analyze the effects of imposing a minimum wage law. This approach takes into consideration the increase in consumption of households due to the increase in income resulting from the new minimum wages, and then analyzes the effect of increased consumption on GDP and employment.

Two points have to be presented when analyzing this effect. The first one being the effects of minimum wages on the unequal distribution of income are decreasing with time, due to the nature of the capitalist system where labour and business determine wages collectively, while business determines prices solely. Thus in the long run, capitalists can hike up prices to maintain their profit margin. As a result only the short and medium run distributional effects of minimum wages are captured. However, globalization restricts the ability of business owners to hike up prices due to international competition.

The second is that minimum wages, up to a certain degree, do not raise the marginal cost of labour above its marginal revenue, as these are affected by different forces such as worker productivity and technology level.

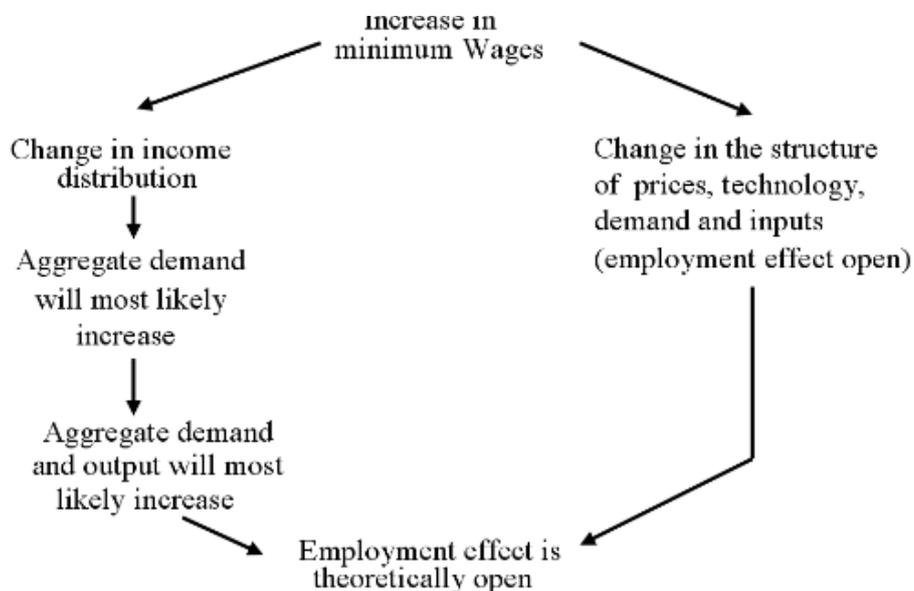
The Keynesian model provides a suitable framework for the analysis of minimum wage effects on employment. It takes into consideration the chain reaction that raising minimum wages would have on the economy. Despite the importance of

this method of analysis there has not been an attempt thus far to create an econometric model that uses the notion of aggregate demand as a tool to analyze and forecast minimum wage effects on the economy.

The basic Keynesian model, as shown in the figure below, would start from an increase in minimum wages that would induce two main effects. The first effect is a change of the income distribution, whereas the second effect is a change in the structure of prices,

technology, demand and inputs (Herr, Kazandziska, & Mahnkopf-Praprotnik, 2009, p. 13).

Figure 1



Source (Herr, Kazandziska, & Mahnkopf-Praprotnik, 2009)

For the purpose of analysis it is assumed that the economy is closed (no exports and imports), prices are constant, technology is fixed, and consumer tastes do not change.

The change in income distribution from business and high income households to low wage households is expected to increase consumption, since lower income households have a higher marginal propensity to consume. This increase in consumption will also lead to an increase in aggregate demand as firms face higher demand for their products which will cause output to increase and labour demand to increase, which will lead to positive effect on employment.

Thus we have the following equation for national economy:

$$Y = C + G + I$$

Equation 1

Where Y is total output, C is total personal Household Consumption, G is total Government spending, and I is total investment.

$$Y = c(y - ty) + G + I$$

Equation 2

Where t equals tax rate, y equals income and c equals consumption ratio from income.

If we totally differentiate this equation and hold that G is constant we get the following equation

$$dy = \hat{c}(dy - tdy - ydt) + di + dg$$

Where dy is the change in income, \hat{c} is the marginal propensity to consume, tdy is taxes paid as the result of increase in income and ydt is taxes paid due to the change in tax rate, di is change in investment and dg is the change in government spending.

By rearranging this expression we get

$$dy = \frac{di + dg - \hat{c}ydt}{(1 - \hat{c})(1 - t)}$$

Equation 3

This equation captures the change in GDP due to the change in investment, government spending, taxes and consumption.

Where $C = C_0 + \sum F(H_n) + \sum Z_{in}$, H is total household income and n is the number of households. The income of household n is a combination of wages, salaries, business profits, remittances that households receive over the duration of each month, and Z represents a number of control variables such as number of people in household, etc.

OLS estimation was excluded because the sample had failed the Breusch-Pagan-Godfrey homoscedasticity test¹³. So the method used here is weighted least squares as it is an accepted treatment for heteroscedasticity (Ramathan, 2002, p. 356).

The table below shows the Consumption function for Palestinian households:

¹³ Heteroscedasticity results in OLS not being BLUE, See annex 1 for the test results.

Table 4 Dependent variable: logarithm of monthly household consumption

Variable	Coefficient	Standardized Coefficient
Constant	4.226715 ^{***} (68.36667)	NA
LOG(Monthly Household Income)	0.483161 ^{***} (59.43191)	0.659458
Males	0.033482 ^{***} (8.647531)	0.097532
Females	0.022058 ^{***} (5.470224)	0.059939
Apartment	0.081008 ^{***} (6.285098)	0.065993
Villa	0.163127 ^{**} (2.414275)	0.025206
Room	-0.472646 ^{***} (-3.776167)	-0.039418
Other Kind of Home	-0.223170 [*] (-1.615974)	-0.016839
Residence is Rented	-0.055735 ^{**} (-2.062112)	-0.021735
Residence is Owned By Work	-0.073183 ^{***} (-3.009296)	-0.031622
HH main income is from Business	0.076511 ^{***} (3.882493)	0.048517

HH main income is from	0.071141***	0.058451
Wages	(4.590943)	
Adjusted R-squared	0.535535	
Akaike info criterion	1.069168	
Schwarz criterion	1.086904	
Hannan-Quinn criter.	1.075431	
Durbin-Watson stat	1.686646	

- The Values in parenthesis are for t Statistics.

Source : Authors own analysis

- * Significant at 10% level
- ** Significant at 5% level
- *** Significant at 1% level

The value of the marginal propensity to consume for Palestinian households is almost 66%, which means that for each 1 % increase in household income 0.66 % of this increase goes to consumption. As for the difference between females and males it is evident that each additional male member of the household increases consumption by 60% more than each additional female.

In order to examine the income effect of imposing a minimum wage policy as it is suggested in the literature, it is important to differentiate between different

household income groups. Thus the households sample was divided into 6 categories (See Table 50).

Table 5 HH income group Disaggregation

Category	Criteria
Group1	Income Below or equals 1450 Nis
Group2	1451- 3000 Nis
Group3	3001-5000 Nis
Group4	5001-8000 Nis
Group5	8001-10,000 Nis
Group6	over 10,001 Nis

Source: Authors own analysis

Then an interaction variable is created from each group with the average monthly Household income (Monthly Household income divided by number of people per household). These variables are used in a regression equation to get the marginal propensity to consume for households.

A main concern here is the existence of high multicollinearity between explanatory variables. Since it will reduce the significance of explanatory variables and might lead to the omission of important explanatory variables. The level of multicollinearity chosen by the author is 0.5 and thus no two variables in the table below indicate a higher than 0.5 correlation.

Table 6 correlation between explanatory variables

	LOG(Average Monthly HH Income)* GROUP1	LOG(Average Monthly HH Income)* GROUP2	LOG(Average Monthly HH Income)* GROUP3	LOG(Average Monthly HH Income)* GROUP4	LOG(Average Monthly HH Income)* GROUP5	LOG(Average Monthly HH Income)* GROUP6	LOG(Average Monthly HH Income)
LOG(Average Monthly HH Income)* Pears on Correlation GROUP1	1	-.314**	-.343**	-.154**	-.107**	-.104**	-.487**
LOG(Average Monthly HH Income)* Pears on Correlation GROUP2	-.314**	1	-.446**	-.201**	-.140**	-.135**	-.159**
LOG(Average Monthly HH Income)* Pears on Correlation GROUP3	-.343**	-.446**	1	-.219**	-.153**	-.147**	.260**
LOG(Average Monthly HH Income)* Pears on Correlation GROUP4	-.154**	-.201**	-.219**	1	-.069**	-.066**	.288**

LOG(Average Monthly HH Income)* GROUP5	Pearson Correlation	-.107**	-.140**	-.153**	-.069**	1	-.035*	.261**
LOG (Average Monthly HH Income)* GROUP6	Pearson Correlation	-.104**	-.135**	-.147**	-.066**	-.035*	1	.355**
LOG (Average Monthly HH Income)	Pearson Correlation	-.487**	-.159**	.260**	.288**	.261**	.355**	1

Source: Authors Own Analysis

Table 7 shows the results of the regression analysis of the dependent variable household consumption, with the independent variables average household monthly income and a number of control variables with a constant. The method used is weighted least squares analysis since the data was given weights from PCBS after collection.

Table 7 HH WLS analysis

Variable	Coefficient	t-Statistic	Standardized Coefficients
Constant	2.174697***	17.24711	4.14E-22
LOG(Average Monthly HH Income)	0.695004***	34.08491	0.894047
LOG(Average Monthly HH Income)*GROUP1	0.068004***	6.680690	0.221956
LOG(Average Monthly HH Income)*GROUP2	0.007063	0.795244	0.029692
LOG(Average Monthly HH Income)*GROUP3	-0.014488*	-1.689792	-0.068412
LOG(Average Monthly HH Income)*GROUP4	-0.030805***	-3.369939	-0.095064
LOG(Average Monthly HH Income)*GROUP5	-0.021724***	-3.822411	-0.051835
LOG(Average Monthly HH Income)*GROUP6	-0.040194***	-6.193794	-0.094889
APARTMENT	0.056478***	3.356587	0.042609
ROOM	-0.475174***	-3.964241	-0.036000
OTHERHOM	-0.174178*	-1.861650	-0.009859
RURAL	-0.068934***	-2.869708	-0.042477
CAMP	-0.082255***	-3.976147	-0.043654
MIDDLE	0.332591***	11.89139	0.209583
NORTH	0.127712***	5.506781	0.085637
R-squared	0.644973		
Adjusted R-squared	0.643816		
Akaike info criterion	1.000944		
Schwarz criterion	1.023113		
Hannan-Quinn criterion	1.008772		
Durbin-Watson stat	1.859244		

* Significant at 10% level

** Significant at 5% level

Source: Authors Own Analysis

*** Significant at 1% level

The interaction variable between group 2 and average monthly HH income is insignificant at 10% level. This indicates that for income group2 the marginal propensity to consume is not statistically different than the marginal propensity to consume for the entire population.

An important fact that is predicted by the economic literature and captured in this model is that the higher we go in the HH income groups the lower is their marginal propensity to consume. This is evident from the interaction variables that capture the interaction between HH monthly income group and the logarithm of average monthly income. This is especially important to capture the effect of minimum wages on HH consumption as its distribution effect will transfer income from higher income HH to lower income ones with a higher marginal propensity to consume.

The increase in HH consumption is the difference between the lowest groups' marginal propensity to consume and the highest group as income is transferred between these two groups, so the increase in total consumption will be equal to the following equation:

Expected Average Increase in Monthly Consumption = Average Workers increase in Monthly Wages * Number of Workers * Difference in Marginal propensity to consume.

$$= (1450-916) * (115,400) * (.20)$$

$$= 12,324,720 \text{ Nis}$$

Total increase in annual consumption equals: 147,896,640 Nis

This happens in Phase 1 as the increase in minimum wages goes directly to consumption, since this increase does not exceed the tax exemptions bracket.

This increase in consumption demand is met first by a decrease in inventories, but as it persists it will encourage more investment which happens in Phase 2 as explained by using equation 3 and since we presumed that government spending won't change and the extra income minimum wage employees receive is tax exempted according to Palestinian Tax law so we get the following

$$147,896,640 = \frac{di + 0 - 0}{(1 - .75)(1)}$$

The marginal propensity to consume for households stated here is used from previous study by MAS (Daoud, 2005) for the Palestinian Economy where they calculated the long run MPC = .75

So the value of change in investment to sustain the increased demand

$$di = 36,974,160 \text{ Nis.}$$

Since aggregate investment has increased, and total expenditure has also increased then according to the Keynesian model, both aggregate employment and aggregate capital stock will also increase according to the following model or what we can also refer to as the Solow growth model:

$$y = a L^\alpha \left\{ \frac{K_t + K_{t-1}}{2} \right\}^\beta$$

Equation 4

where:

a production constant

L size of the labor force

- α partial elasticity of production with respect to labor ($\Delta Y/\Delta L$)
- K_{t-1} Existing productive capital stock
- β partial elasticity of production with respect to capital ($\Delta Y/\Delta K$)
- K_t Desired productive capital stock (plant and equipment) at the end of the year

Where

$$K_t = K_{t-1} + I_t - D_t$$

Equation 5

I_t Gross Fixed Capital Formation in Non-Buildings

D_t Depreciation during the Year

So substituting 5 into 4 and totally differentiating the result we get

Equation 6

$$dy = a\beta L^\alpha \left\{ \frac{2K_{t-1} + I_t - D_t}{2} \right\}^{\beta-1} \left(\frac{dI_t}{2} \right) + a\alpha L^{\alpha-1} dL \left\{ \frac{2K_{t-1} + I_t - D_t}{2} \right\}^\beta$$

We refer to a paper by Bader Hamdan under the title of “Analysis of growth Sources in the Palestinian Economy (1995-2010)” and get the following values that he estimated using the Solow Growth Model:

$$\alpha = .53$$

$$\beta = .63$$

$$a = 1$$

$$D = 4\% * K_{t-1}$$

As for the value of K_{t-1} , I approximate it using the approach used by Bader Hamdan (Hamdan, Abu Mudallahleh, & Audeh, 2012, p. 154) to equaling $K_{t-1} = 277,469,100,000$ Nis as for the value of L it is computed to equal 771622 Full time workers (Palestinian Central Bureau of Statistics, 2013), and using the previous results we obtained for the change in GDP and the change in investment and substituting this in Equation 6 we get a positive change in labour which amounts to 10,131 new jobs created due to the increase in aggregate demand.

4. Conclusion

What we have seen from the increasing amount of literature is that there is mounting evidence that minimum wages do not cause increased unemployment rates. Although the empirical literature was rich on evidence of no employment effects for minimum wages or even sometimes some positive effects but there is a lack in theoretical literature that explains the phenomena. In this paper as we have seen, if minimum wages were implemented in the Palestinian Territories then we would expect 10,131 new jobs to be created as a direct impact of the increase of minimum wages.

But this is only half of the story, because as it was shown in this paper that this increase is directly related to the source of consumption of goods so if the P.A doesn't adopt a different development vision and keeps the local market open to all kinds of imported goods then an important portion of the increase in aggregate demand will go towards foreign goods.

A different development paradigm can be adopted by the P.A like industrialization through import substitution. This strategy along with calculated increases in minimum wages and reforming the P.A budget to transfer funds from the security apparatus to education and health can have lasting impact on the Palestinian Economy.

Maybe the most important aspect of minimum wage policy is to deal with a market failure of not providing decent living and working conditions for the working class, it has also been proven in other countries that minimum wage laws if implemented will lead to business owners abiding by other labour laws such as providing employees with contracts, insurance, severance pay and helping to protect women in the workplace from discrimination and harassment. These effects are as important as the distributional effect of minimum wages as they help workers realize their rights and demand them from business owners. The situation today in the Palestinian territories is of increased polarization of classes as the poverty rate increases while profits of big business increase exponentially, which puts dire consequences on the future and social cohesion of Palestinian society.

A useful example would be to show what if the postulates of the paradigm were changed for example see the table below:

Given that the change to the model parameters is only as stated in the Cells.

Effects in case of minimum wages	Open Economy, With MPM=.428	Change in Tastes (with Open Economy Boycott to Israeli Products Reduces MPM=.3)	Increased Government Spending (By 10%) (With Closed Economy, and no change to tax rate)	Change in Technology Labour Prouctivity increases ($\alpha=.7$)	Change in Technology Capital Productivity increases ($\beta=.8$)
dI	21,149,219	25,881,912	213,639,778	36,974,160	36,974,160
dL	5,795	7,092	58,541	723	37

As we can see from this table the changes in investment and in employment are well within expected theoretical models, so the main model of analysis holds even if we relax the basic assumptions.

Finally here are some recommendations that have risen from this paper:

- 1) The need to implement minimum wage laws immediately in the Palestinian Territories, and to have this implementation accompanied by a huge awareness raising campaign for workers on their rights, accompanied by a serious reform to the judicial system in order to give confidence for workers to raise complaints.
- 2) It is imperative that the P.A shifts its development paradigm from a neoliberal open market paradigm towards a more progressive model. A possible model for development is industrialization through import substitution, although the author knows that development in its broader sense is not possible under occupation, but nonetheless improving the living conditions of the working class helps realize the dream of independence.
- 3) It is also recommended for the PCBS to do the Household consumption survey every year as it is a helpful tool to for policy makers.

Bibliography

Aaronson, D., French, E., & MacDonald, J. (2004). *The Minimum Wage, Restaurant Prices, and Labor Market Structure*. Chicago, United States Of America: Federal Reserve Bank of Chicago.

Abu Hantash, I. (2003). *master program in economic policy management*.

Retrieved from Al Najah University Scholarly Repository:

<http://scholar.najah.edu/ar/content/%D8%A7%D9%84%D8%A2%D8%A>

[B%D8%A7%D8%B1-](#)

[%D8%A7%D9%84%D8%A7%D9%82%D8%AA%D8%B5%D8%A7%D](#)

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[%D9%84%D8%AA%D8%AD%D8%AF%D9%8A%D8%AF-](#)

[%D8%A7%D9%84%D8%AD%D8%AF-](#)

[%D8%A7%D9%84%D8%A3%D8%AF%D9%86%D9%89-](#)

[%D9%84%D9%84%D8%A3%D8%](#)

Alatas, V., & Cameron, L. A. (January 2008). The Impact of Minimum Wages On Employment in a Low Income Country: A Quasi Natural Experiment In Indonesia. *Industrial and Labor Relations Review Vol. 61, No. 2*, 201-223.

Basu, A., Chau, N., & Ravi, K. (March 2010). TURNING A BLIND EYE:

COSTLY ENFORCEMENT, CREDIBLE COMMITMENT AND

MINIMUM WAGE LAWS. *The Economic Journal Vol 120, NO 543* ,

244-269.

- Brown, C., Gilroy, C., & Kohen, A. (June, 1982). The Effect of the Minimum Wage on Employment and Unemployment. *Journal of Economic Literature* , 487-528.
- Card, D. (OCT, 1992). Using Regional Variation to Measure the effects of the Federal Minimum Wage . *Industrial and Labour Relations Review*, 22-37.
- Card, D., & Krueger, A. B. (1993). Minimum wages and employment: A case study of the Fast Food Industry in New Jersey and Pennsylvania. *NBER Working Paper*.
- Card, D., & Krueger, A. B. (Sep.,1994). Minimum Wages and Employment: A Case Study of the Fast-Food Industry in New Jersey and Pennsylvania. *The American Economic Review*, 772-793.
- Daoud, Y. (2005). *Disengaging the Gaza Economy and Palestinian Policy Options: A simulation Framework*. Ramallah: Palestinian Economic Policy Research Institute- MAS.
- Gindling, T., Mossaad, N., & Trejos, J. D. (2015, April 18th). *The consequences of increased enforcement of legal minimum wages in a developing country: an Evaluation of the impact of the Campana Nacional de Salarios Minimos in Costa Rica*. Retrieved from Jobs Knowledge : <https://www.jobsknowledge.org/ExperiencesFromTheField/ProjectDocuments/Campana%20Nacional%20de%20Salarios%20Minimos.pdf>
- Hamdan, B. S., Abu Mudallahleh, S., & Audeh, S. A. (2012, December 26th). *Analysis of Growth Sources in Palestinian Economy (1995-2010)*. Gaza, Gaza Strict, Palestine: Alazhar University.

- Herr, H., Kazandziska, M., & Mahnkopf-Praprotnik, S. (2009, Feb). *The Theoretical Debate About Minimum Wages*. Retrieved April 2nd, 2015, from Global Labour University Working Papers: http://www.global-labour-university.org/fileadmin/GLU_Working_Papers/GLU_WP_No.6.pdf
- Katz, L. F., & Krueger, A. B. (Feb 1992). The Effect of the Minimum Wage on the Fast Food Industry. *NBER Working Paper*.
- Missaglia, M., Capelli, C., & Amer, W. (2010). *The Effects of a PNA Minimum Wage Policy*. Ramallah: Palestine Economic Research Institute.
- Naser, M. (n.d.). الحد الأدنى للأجور ما له وما عليه. Retrieved January 28th , 2016, from الحياة الجديدة: http://www.alhaya.ps/arch_page.php?nid=142414
- Neumark, D., Salas, J. I., & Wascher, W. (January, 2013). Revisiting the Minimum Wage-Employment Debate: Throwing out the Baby With the Bathwater? *NBER Working Paper Series No.18681 National Bureau of Economic Research*.
- OECD. (2015, May 2). *Glossary of Statistical terms*. Retrieved from OECD : <https://stats.oecd.org/glossary/detail.asp?ID=1178>
- Palestinian Central Bureau of Statistics. (2013). *Labour Force Survey* . Ramallah: PCBS.
- Palestinian Central Bureau of Statistics. (2015, May 2). *Press Release on the Occasion Of Labour Day*. Retrieved from Palestinian Central Bureau of Statistics (PCBS): www.pcbs.gov.ps

Ramathan, R. (2002). *Introductory Econometrics with Applications*. Mason, Ohio
United States of America: South-Western.

Rimawi, M. (2015). *Report from the Wage committee on the Implementation of
minimum wages*. Ramallah: Ministry of Labour.

Samara, a. (2016). *Political Economy and Class*. Ramallah.

Say, J.-B. (2001). *A Treatise on Political Economy, Translated from the fourth
edition of the French, by C. R. Prinsep, M.A.* Ontario, Canada: Batoche
Books.

US Department of State. (2015, April 18th). *U.S Relations with Costa Rica*.

Retrieved from U.S Department of State:

<http://www.state.gov/r/pa/ei/bgn/2019.htm>

World Bank. (2015, March April 12th). *The World Bank Database*. Retrieved
from The World Bank:

<http://databank.worldbank.org/data/views/reports/tableview.aspx#>