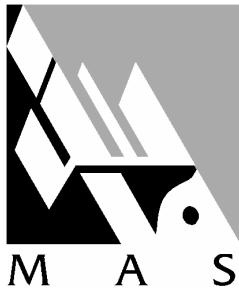


**'The Determinants of Female
Labour-Force Participation in
the West Bank and Gaza Strip'**



PALESTINE ECONOMIC POLICY RESEARCH INSTITUTE

2007



Palestine Economic Policy Research Institute

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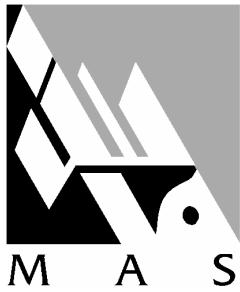
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FOREWORD

Despite having one of the highest levels of educational attainment in the region, Palestinian women's participation in the labour market remains among the lowest in the world. This is doubly paradoxical when set against the harsh economic conditions which have afflicted the Palestinian economy over the past seven years: in other parts of the world, dramatic falls in household incomes often lead women to seek employment. This study seeks to analyse why female labour force participation remains so low, and by identifying the social and economic factors at work it aims to present policy-makers with a clearer picture of the situation and what can be done about it.

I would like to thank the principal researchers on this project, Samia Botmeh and Garry Sotnik, for the hard work they put into the preparation of this study. They were assisted by able research assistants, reviewers, and the participants at the workshop held to discuss the preliminary research findings, all of whom I would also like to thank. Finally, I would like to express my gratitude to our partners at the Friedrich Ebert Stiftung, whose support of this study (along with so many other pieces of research over the years), has made such a valuable contribution both to MAS and to knowledge-based policy-making in Palestine.

Dr. Mohamed Nasr
Director General

Contents

Introduction	xi
1. Theory & Empirical Research	1
1.1 Individual Characteristics	1
1.2 Household Dynamics	3
1.3 Social, Economic, and Political Environment	4
2. The Palestinian Context	9
2.1 Social Environment	9
2.2 Political and Economic Environment	9
2.2.1 <i>The Oslo Agreement</i>	10
2.2.2 <i>The Al-Aqsa Intifada and intensification of the closure policy</i>	11
3. Female labour force participation in the WBGS	13
3.1 Main Trends	13
3.2 Empirical research on female labour force participation in the WBGS	16
4. Methodology	19
4.1 Theoretical Model	19
4.2 Data	19
4.2.1 <i>Labour Force Survey Data</i>	20
4.2.2 <i>Palestinian Household Expenditure and Consumption Survey</i>	20
4.2.3 <i>Case Studies</i>	21
4.3 Econometric Model	21
4.3.1 <i>Variables for the LFS-based model</i>	23
4.3.2 <i>Variables for the PECS-based model</i>	24
4.3.3 <i>Questions asked in the case studies</i>	25
5. Results and Analysis	27
5.1 Labour Force Survey (LFS)-based model	27
5.1.1 <i>Structural Change Analysis</i>	27
5.1.2 <i>All Women</i>	31
5.1.3 <i>Married Women</i>	36
5.1.4 <i>Never-Married Women</i>	37
5.1.5 <i>Divorced & Widowed Females</i>	39
5.2 Household expenditure and consumption (PECS)based model	40
5.3 Case Studies	42
5.3.1 <i>Women</i>	42
5.3.2 <i>Employers</i>	44
6. Findings & Recommendations	45
References	49

List of Tables

Table 1: Labour force participation rates in the WBGS and world averages (%)	13
Table 2: Structural Change Analysis	28
Table 3: Percentage breakdown of employed females by sector over time	30
Table 4: Results for All Females	32
Table 5: Results for Married Females	36
Table 6: Results for Never-Married Females	38
Table 7: Results for Divorced & Widowed Females	39
Table 8: Results for PECS	41

List of Figures

Figure 1: Female labour force participation in the WBGS, 1996-2006	14
Figure 2: Male versus Female labour force participation levels across age groups, 2006	15
Figure 3: Educational qualifications of labour force participants, 2006	15
Figure 4: Percentage of females participating in the labour force	27
Figure 5: Percentage of females within the labour force who are unemployed	29
Figure 6: Females as a percentage of those employed in each sector	30
Figure 7: Distribution of Employed Women and Men by Economic Sector, 2006	33

Executive Summary

This study sets out to investigate some of the determinants of female labour force participation within the WBGS. What are the factors that shape women's decisions to participate or remain out of the labour market? What is the impact of the personal characteristics of the woman, her household characteristics, as well as the socio-economic and political environment that she lives in? The study examines these determinants and how they have affected female labour force participation over the past eleven years.

Our research utilises both a supply- and demand- side theoretical framework, while keeping in perspective the social, economic, and political environment within which the labour market is embedded. On the individual level, neoclassical labour market theory is utilised. On the household and environment level, elements of structuralist and feminist theories are employed to provide a more comprehensive view of women's experience.

Neoclassical labour supply theory suggests a number of personal variables to assess women's participation, including age, education and locality. Household characteristics that are helpful in explaining women's participation are also employed, including number of children and sources of income for the household.

Demand-side structuralist and feminist theories are utilised to help contextualise the setting within which women make the decision to participate or not. They present issues such as the role of culture and tradition, the structure of the labour market, the level of industrialization, the actual experience of working women and the impact of the political situation.

Before utilising these theoretical frameworks to shed light on female labour force participation in WBGS, the study considers empirical research from around the world, the MENA region, as well as previous research on the WBGS. This helps define the main parameters governing female participation, as well as placing the contribution of this study in context.

Methodologically, the study relies on both quantitative and qualitative techniques. The quantitative analysis relies on models estimated using a

logistic regression. Quantitative analysis is based on 11 years of PCBS Labour Force Survey (LFS) data as well as the data from the 2004 Palestinian Household Expenditure and Consumption Survey (PECS). The model estimated based on the LFS includes variables such as age, education, marital status, locality, and region. In total, four LFS-based models were estimated for: 1) all females; 2) married females; 2) never-married females; and 4) divorced and widowed females. The models that rely on the PECS encompass variables such as age, education, locality, the number of children, and the household's main sources of income. Two models were estimated using PECS data, one for married, widowed, and divorced women and the other for women who were never married.

Qualitative enquiry aims to capture the impact of the socio-economic and political factors governing women's experience and relies on case studies. Thirty women were interviewed in the Nablus area to assess the role of social factors in shaping their decision, as well as the impact of Israeli measures. To complement this analysis, 10 employers were interviewed about their perceptions of women working.

The following is a list of our study's main findings (F), organised according to the main category of factors they may be associated with. Findings, loosely divided by category (although with significant overlap), are followed by our recommendations (R) which are geared toward increasing female labour force participation in the WBGS.

Political environment:

- ✧ F: The problem of low female labour force participation in the WBGS may be rooted in mass displacement in 1948 and 1967, which transformed a large portion of the WBGS's labour supply from agrarian to non-agrarian, and from then on distorted the supply/demand dynamics of the non-agrarian labour market.
- ✧ F: Israeli violence and restrictions on mobility from the end of 2000 led to a structural change which lowered female labour force participation. Another structural change occurred in 2003, which led to the increase in female labour force participation.
- ✧ F: The impact of the *Intifada* was most heavily felt by Gazan women. The severity of Israeli measures had a detrimental impact on the Gazan economy, where it destroyed much of the private sector, particularly agriculture. Additionally, and particularly in Gaza, cultural factors that emphasise the man's role as the main breadwinner may have led to women withdrawing from the labour market in order not to compete with the subsequently greater number of unemployed men.

- ❖ R: Any effort to improve female labour force participation must include attempts to end the military occupation of WBGS by Israel and prevent future economic and political shocks.

Economic environment:

- ❖ F: The odds of participating are higher for non-educated and highly-educated females than for women who are semi-educated. We attribute this to the structure of the WBGS economy, which lacks a labour-intensive manufacturing sector and restricts employment opportunities for women to, on one hand, the agricultural sector, and, on the other, health care, education, and office work such as the financial services sectors.
- ❖ R: Promote the development of a labour-intensive manufacturing sector within WBGS.
- ❖ R: Improve access to credit for women to enable them to venture into other forms of work besides wage employment. Providing greater access to credit could enhance the entrepreneurial spirit of women and encourage them to become economically active.
- ❖ F: Women from households depending on subsistence farming are much more likely to participate in the labour force than women depending on other main sources of income. This may be explained partly by the observation that such households are usually poorer than the rest of the population, but also by the observation that women depending on subsistence farming have access to agricultural land, which often guarantees employment even if the returns are marginal.
- ❖ F: Women from the Northern West Bank have the greatest odds of participating. We attribute this mainly to the strong agricultural sector in the Northern West Bank region, which acts as a relatively stable source of labour market outlet for women.
- ❖ R: Promote the development of WBGS's agricultural sector.
- ❖ F: The odds of younger never-married women participating are decreasing over time. Further analysis of this trend is needed in order to identify its main drivers.

Social environment:

- ❖ F: Employers often reinforce the patriarchal structure of Palestinian society in their employment decisions, validating women's perception of the existence of a gender bias within the labour market. Case studies of employers undertaken by this study suggest that employers are influenced by cultural norms in their employment decisions as well as profit maximisation.

- ◊ F: Women often perceive the labour market as unwelcoming due to vertical and horizontal segregation and low average female wages. The inferior position of women within the labour market is internalised within the women's decision to participate.
- ◊ R: Enact legislation that tackles the labour market's vertical and horizontal segregation, and enforce laws that protect women from labour market discrimination.
- ◊ R: Promote female participation in sectors where vocational skills are applicable, while encouraging girls and their families to pursue forms of vocational education or complete university degrees.
- ◊ R: Run awareness campaigns for employers on women's high level of education and the general benefits of female employment.
- ◊ F: Female labour force participation is negatively correlated with number of children.
- ◊ R: Develop a cost-sharing mechanism between the government and employers for covering maternity leave expenses. Female employment has become more expensive for employers since the endorsement of the Labour Law in 2000. As is the case in other countries, this cost should be shared by society at large.
- ◊ R: Provide affordable nurseries for children to encourage women to join the labour market. This is particularly important in light of the high fertility rate and presence of young children at home, which represents a significant hindrance to the participation of women in the labour market.

Introduction

Within the West Bank & Gaza Strip (WBGS), the issue of female labour force participation has always been an intriguing phenomenon. Averaging around 40% prior to the Israeli occupation in 1967, female labour force participation began to decline and by 1995 was in single digits - amongst the lowest in the world. This trend was paradoxical, given the increasing female labour force participation trends elsewhere. However, this negative trend was reversed when the establishment of the Palestinian National Authority (PNA) in 1994 led to the creation of new work opportunities for women, primarily in the public health, education and emerging private financial sectors. Nevertheless, despite this brief upturn, the female participation remained relatively low and experienced a significant decline in the early years of the *Al-Aqsa Intifada*.

The low involvement in the labour market is particularly strange given the high education rates of Palestinian women. Enrolment rates at schools are higher for girls than for boys, and girls have a lower dropout rate and tend to excel in their studies. Female enrolment rates at universities are also higher. Yet, participation rates in the labour market remain very low.

Another factor that makes this issue of particular interest is the fact that the political and economic hardship endured by the Palestinians especially over the past seven years of *Intifada* does not seem to have substantially increased female participation. This is contrary to accepted theoretical perspectives, which indicate that female participation in formal labour markets tends to rise following political and economic shocks.

The contribution of this study is in providing analysis of the determinants of labour force participation of women in the WBGS. It looks at the experience of participation for women cross-sectionally as well as over time. The study identifies structural changes resulting from the severe political adversities, then traces the impact of this structural change on the various determinants of participation for women in the WBGS.

The analytical framework utilised by this study relies on neoclassical, feminist and structuralist theories. It thus draws upon variables from both the supply- and demand- side to explain the participation decisions of women. Individual and household characteristics are discussed together

with factors representing the socio-economic and political environment that women live in.

The method utilised by this study relies on logistic regression which uses quantitative data from the Palestinian Household Expenditure & Consumption Survey (PECS) and the Labour Force Survey (LFS) conducted by the Palestinian Central Bureau of Statistics (PCBS). To account for socio-economic factors missing in the above mentioned surveys, this study employs 40 structured interviews. This qualitative information is intended to compliment the quantitative data provided by surveys. The structured interviews focus on both women and employers; and only serve as examples and, when appropriate and supported by other evidence, contribute to potential explanations.

Following this introduction, Section 1 discusses the theoretical framework utilised by this study, reviews several commonly accepted determinants, as well as discusses determinants unique to the Middle East and North Africa region (MENA). The social, political, and economic setting within which WBGS women live, as well as empirical research on this region, is then discussed in Sections 2 & 3. In Section 4, the study outlines the models used to assess the determinants of female labour force participation, including a pooled model for all women, one for married women, one for never-married women and one for widowed and divorced women. Results are then discussed in Section 5 and are followed by findings and recommendations in Section 6.

1. Theory & Empirical Research

A debate has been going on for decades between neoclassical economists and those from other schools of thought about what determines labour force participation. Neoclassical economists tend to argue that it is only the supply-side factors that determine an individual's participation, with all other factors being relatively insignificant. Economists from, for example, the feminist and structuralist schools of thought disagree, arguing that demand-side factors, as well as the social, economic, and political environment, must also be taken into consideration. They maintain that by only focusing on individual-specific characteristics, light is shed on the effects of the determinants and not the determinants themselves.

In this study we consider individual-specific characteristics, household dynamics, and the overall social, economic, and political environments within which the Palestinian labour market functions. Below, we summarise the theory and empirical research, which form the basis of our enquiry.

1.1 Individual Characteristics

The economic theory of labour supply is an extension of the neoclassical theory of consumption, which centres around the notion of utility maximisation. In an attempt to maximise utility, an individual is thought to choose between consuming more goods or leisure¹ (Becker, 1965). The consumption of more goods potentially requires wage income (if non-wage income does not suffice), which can be earned in the labour market in exchange for a wage.

The choice between working and leisure is therefore thought to be based on the individual's perception of the favourability of the market wage² and her/his unique preferences that are subject to a number of constraints, such as time, non-wage income, and market prices of goods. The market wage and the individual's preferences and constraints guide her/his choice between work and leisure, and, in turn, determine the level of her/his

¹ Leisure includes all unpaid activities and is treated as a normal good.

² Throughout this paper, the term *market wage* will be used in reference to the wage being earned by employed workers, as well as the wage expected to be earned by those unemployed.

labour force participation (Mincer, 1962; Cain, 1966; Brown and Finegan, 1969).

Since earnings forgone by not working are the opportunity cost of consuming leisure, the individual is thought to choose to participate in the labour force only if the market wage is greater than the marginal rate of substitution between the consumption of leisure and goods. In other words, the individual participates in the labour market if and only if the following condition is met:

$$\left(\frac{U_L}{U_C} \right) < w_M$$

where U_L and U_C are the marginal utilities from consumption of leisure and goods, respectively, and w_M is the market wage. The wage at which the marginal rate of substitution between consumption of goods and leisure equals the market wage is referred to as the reservation wage. If the market wage falls below an individual's reservation wage, s/he is expected not to participate in the labour market. The difference in market wage faced by each individual is thought to depend primarily on her/his marginal productivity. Those individuals perceived by employers as more productive are paid a higher market wage.

Over the years, empirical research studying labour force participation has identified a number of demographic factors that either increase or decrease the reservation wage and therefore the likelihood of an individual deciding to participate. The following three demographic factors are agreed upon by most economists and are usually included within any labour-force-participation model:

- ❖ *Age* is a key determinant, affecting participation indirectly (Nakamura and Nakamura, 1986). Setting aside the typical restrictions on under-age employment and social assistance measures for those retired, age is entered into the basic model as a proxy for other explanatory factors on which the researcher may not have data. For example, on the individual level, this could include preferences toward paid employment at various stages of the individual's life-cycle, cumulative employment experience, depreciation of job skills, and health status. Each of the mentioned factors either changes the level of the reservation wage or of the market wage that the individual faces. At the household level, age potentially signifies the individual's role and level of responsibilities within the household, both of which affect the

decision whether to participate in the labour force or not. Age is also often a gauge for status, though the relationship between the two varies according to the culture of the country in question.

- ✧ *Education* is known to have a positive relationship with the odds of an individual participating in the labour force. This is in line with the theory introduced above, as the individual's investment in education is likely to positively increase the market wage s/he faces in relation to her/his reservation wage, *ceteris paribus*. The higher market wage available to the individual with higher education often affects her/his status within the household as well as society. It also potentially offers the individual more options in times of economic difficulties.
- ✧ *Locality* is usually included in the model to capture issues of transaction costs. For example, living far away from a potential place of work could increase the reservation wage through increasing transportation costs, which include loss of time. Locality also often defines a unique set of opportunities an individual faces, as well as the size of the local market wage.

1.2 Household Dynamics

A similar theoretical framework was initially applied in economic analysis of household behaviour, where the household was treated as one unit that maximised utility (Becker, 1965). Factors such as time, wage income and non-wage income were taken in aggregate, while the household preferences were represented by those of the head of the household. Such models, however, did not take into account that, in the process of maximising the household's utility function, household members allocate their time among various activities in concert with one another. Taking this interaction and interdependence into account, household bargaining models (also known as divorce-threat models) were developed by economists from the feminist school of thought to analyse household formation, dissolution, and time and resource allocation decisions (McElroy & Horney, 1981).

Rooted in the Nash bargaining model of household behaviour, the model assigns to household members a utility function and a threat point. The threat point represents the member's maximum level of utility outside the household, and therefore captures the opportunity cost of remaining in the household. Factors such as the market wage a member faces, her/his non-wage income, and, generally, how well a member can do outside the household, are thought to increase her/his threat point and, in turn, her/his

bargaining power within the household. While in our study we do not apply household bargaining model techniques, we find its theoretical framework useful for understanding intra-household behaviour.

In terms of labour force participation determination, the following two additional factors have been identified to result from intra-household interaction and interdependence:

- ◊ *Husband's income* has been identified as having a negative relationship with the odds of the wife's labour force participation (Lundberg, 1985). This fits into the theoretical framework discussed above, where the husband's income plays the role of non-wage income for the female, increasing her reservation wage.
- ◊ *Pre-school children* have been found to have a negative relationship with labour force participation of the mother (Cleveland et al., 1996). An explanation may be that a woman's preference to spend time with her children, whether due to personal or financial reasons, increases her reservation wage.

1.3 Social, Economic, and Political Environment

Economists from the structuralist and feminist schools of thought have been challenging the notion that participation determination is limited to supply-side factors related to individual and household characteristics. They point out that in empirical research, supply-side factors described above are insufficient in explaining or predicting labour-force participation dynamics, particularly in countries with developing economies.

The basis of the critique is the view that neoclassical models do not include factors that shed light on the individual's environment. In countries with developing economies, for example, social factors in particular may be a far more influential force in determining labour-force participation than rational optimisation. In other words, the existence of a female's preference to, for example, conform to social norms or to avoid certain adverse and potentially severe socially-motivated repercussions associated with her working, is misleadingly excluded from the set of supply-side-driven factors assumed by neoclassical economists to affect her utility maximisation decision. Just as importantly, social factors not only extend their influence over the female's decision directly, but also indirectly through demand-side factors. Employers conforming to local social norms, particularly in the context of gender, limit a female's options by basing

their decision to hire on social gender-defining norms and not on profit maximisation.

In other words, the level of a female's reservation wage, particularly in countries with developing economies, is heavily influenced by her social environment. Furthermore, similar social factors influence employers' decisions of who to employ, and adversely affect the market wage that a female faces. It is therefore inappropriate to proxy the influence of the social environment solely through supply-side-driven factors. Treating local social factors as preferences or demographic variables fails to capture the complexity of socially-motivated interaction that, in particular regions, decisively determines female labour force participation.

Another fundamental critique is the lack of consideration given to broader economic and political factors. For example, Guy (1978) noted that explanations of the determinants of female labour force participation must go beyond individual characteristics to take into account the structure of employment and political economy issues within the country. The structure of employment refers to the capacity of an economy to provide employment opportunities for females. This can be illustrated through considering countries that rely on capital-intensive industries, such as the Gulf States, which tend to have minimal female participation. On the other hand, countries with large labour intensive industrial and agricultural sectors tend to have higher female labour participation rates.

Since empirical work began on female labour force participation in the Middle East and North African (MENA) region, there has been an emphasis on the social environment. Youssef (1974), for example, compared Middle Eastern female workers' demographics, their social environment, and national economic development to that of the situation of female workers in Latin America. She concluded that female labour force participation was not so much a function of a woman's demographics, but rather a function of her social environment that regulated a woman's level of contribution in all but agricultural economic activity.

All females studied, she explained, appeared to be restricted from non-agricultural work, regardless of their age, marital status, or number of children. Enforcement of such restrictions was exclusively delegated to and assumed by male family members, with full institutional support from the religious and judicial systems. Thus, Youssef attributed low non-agricultural female labour force participation in the Middle East and Latin

America to the combined effects of fear of social stigmatisation and the provision of economic support for females within their families.

Azzam et al. (1985) arrived at similar conclusions as Youssef in her study of Arab countries. While finding that demographics played a role, she included a society's social, legal, and economic environment among the leading determinants of female labour force participation. For example, Azzam argued that honour, upon which the male-female relationship in the Arab world is established, imposed a number of restrictive measures on a female, in order to 'protect' her. Such measures include segregation, veiling, strict parental surveillance, early marriage, and rigid gender-role socialisation. The restrictions confine a female's activity to a domestic role, limit her educational opportunities, and place the main responsibility for her welfare on the males within her family. Such social interference overshadows the female's preferences and qualifications, and, in turn, distorts the relationship between her reservation wage and the market wage she faces.

Along similar lines, Moghadam (1995, 1998) saw the economic and political environment, including class and gender divisions, as providing important explanations for female labour force participation:

- ❖ *Industrialisation* was found to have a positive correlation to female participation. A labour-intensive manufacturing sector tends to be an important provider of employment for females. However, during the oil era of the 1960s and '70s, state-sponsored import-substitution industrialisation in the Arab world created demand for capital-intensive jobs, which, unlike labour-intensive jobs, are geared toward males (Moghadam, 1995 & 1998). Additionally, and unlike the experiences of East Asian and Latin American countries, import-substitution industrialisation in the MENA region did not later evolve into labour-intensive manufacturing, which could have increased the demand for female labour. Moghadam saw the absence of a labour-intensive manufacturing sector in countries from the MENA region as the leading explanation for the region's low female labour force participation rate.
- ❖ *Class*. Moghadam noticed that upper- and upper-middle-class females had a different relationship with their kin when compared to middle- and lower- class females. She also found that upper- and upper-middle-class urban females were usually able to access and afford better education, increasing their opportunities in a job market where they were treated according to their status instead of gender.

Moghadam further noted that class contributed to shaping women's reproductive choices, with educated middle- and upper- class working females having fewer children, and peasant or poor women having more, potentially as result of the need for children as labour inputs or to provide old-age security.

Moghadam concluded that in the MENA region, females remained an under-utilised human resource due to limited industrialisation, their social environment, and a failure by patriarchal ruling elites to promote the participation of females in economic development.

The empirical research from the MENA region further revealed the importance of the social and economic environment in the level of female labour force participation. It showed that labour market supply/demand dynamics cannot be understood solely through profit and utility maximization decisions of employers and existing and potential employees. Female labour force participation may only be understood through the prism of the local environment that captures the multitude of decision-determining socio-economic layers.

2. The Palestinian Context

Before considering the determinants of labour force participation of Palestinian females, we review the social, economic, and political environments within which their decision to participate or not may be made.

2.1 Social Environment

Rubenberg (2001) provided four ingredients that define a Palestinian female's identity and the role she plays in society: 1) Kinship, which embeds a female within the patriarchal framework of nuclear and extended family and strictly guards the female from anything that may be seen as dishonourable or shameful; 2) Religion, which assigns a female a particular set of roles, obligations, and restrictions; 3) Class, which often justifies exclusion, discrimination, and oppression; and 4) Geographic location.

Palestinian society is characterised by strong adherence to deep patriarchal traditions and values, which substantially favour males. Although this does not reflect itself strongly in education, where there is near parity in enrolment of boys and girls, there is a strong sense within Palestinian society that males are the only appropriate providers for the household. This gender disparity in the household translates into similar restrictions in the labour market, where the participation of females is hampered to a greater extent by the challenges of a patriarchal labour market than through religion-based gender-role assigning.

2.2 Political and Economic Environment

The political and economic environments within the WBGS during the period studied (1996-2006) was defined by two major stages: the Oslo years, which were initiated by the signing of a series of agreements with Israel³ to cover the supposed transitional period from 1994 to 1998; and the *Al-Aqsa Intifada*, which started in September 2000 and is considered

³ These include the Declaration of Principles (Oslo I) in September 1993, the Protocol on Economic Arrangements (Paris Agreement) in April 1994, the Agreement on the Gaza Strip and Jericho Areas (Cairo Agreement) in May 1994, and the Israel-Palestinian Interim Agreement on the West Bank and Gaza Strip (Oslo II) in September 1995.

by some to be still ongoing. Both of these periods were overshadowed by the policy of closures, introduced by Israel in 1991 and increasingly implemented on a larger scale from 1993 onward.

2.2.1 The Oslo Agreement

The Oslo agreements created the legal context for the operation of the Palestinian National Authority (PNA), which was established in early 1994. Powers were transferred from the Israeli side to the PNA, which was composed of a number of ministries, a legislative council, and an extensive security force. This was accompanied by high expectations of considerable improvement, creating an environment conducive to sustainable development.

In accordance with the Oslo II agreement, the Israeli authorities remained in control over borders of the WBGS. The West Bank was divided into three Areas, A, B and C, each of which was under varying degrees of Palestinian and/or Israeli control.⁴ By March 2000, Area A (nominally under total Palestinian control) comprised 17% of the West Bank, Area B comprised 24%, while Area C accounted for the remaining 59%.

Security control over Area B was translated on the ground as effective Israeli control, so on the whole Israel remained in charge of 83% of the West Bank during the interim period. The division of the WBGS into the three areas and the ongoing Israeli settlement enterprise caused geographic segmentation of the various WBGS territories. The West Bank areas are non-contiguous and constitute isolated enclaves separated by areas under the complete jurisdiction of Israel. As the result, Palestinians do not even have control over the borders of their towns or villages.

According to Amnesty International, by December 1999, the Oslo agreements had created 227 separate West Bank enclaves under the full or partial control of the PNA. Approximately 88% of these areas are less than two square kilometres (Roy, 1999).

Israel's control of borders in the post-Oslo era meant that it could seal off the West Bank and Gaza Strip from each other, Israel, and the rest of the

⁴ Area A, which includes the larger Palestinian towns, was under the total civilian and security control of the PNA. Area B comprises the remaining Palestinian population centres, where civilian control resides with the PNA while security control rests with Israel. Area C, which incorporates most of the unpopulated areas around Palestinian villages and towns, remains under the total control of Israel and is spottily populated by Israeli settlements.

world. This has resulted in restricted movement of Palestinian labour, especially in and out of Israel. However, PNA control over some economic spheres allowed for the removal of some direct restrictions on business activities within the WBGS. In these PNA-controlled areas, Palestinian firms were able to function without facing many of the crippling effects of permits and licenses previously required by the Israeli authorities (Naqib, 1999).

The Oslo agreement also brought with it the revival of certain economic sectors, most importantly the financial and public sectors. Accordingly, employment opportunities for females, although limited, increased with the expansion of the banking, public health and education sectors. These changes affected gender roles, norms, and identities across the WBGS. However, the societal shifts and the degree of change were still largely a function of region, class, religion, and sub-group identity (Kuttab, 2006).

2.2.2 The Al-Aqsa Intifada and intensification of the closure policy

The Al-Aqsa Intifada started on 29 September 2000. Since then, many WBGS Palestinians have faced economic devastation and have been subjected to severe human rights violations. While these violations by the Government of Israel have been continuous since the occupation of WBGS in 1967 (and were occurring even during the peace process in the wake of the Oslo Accords), the Al-Aqsa Intifada has been characterised by a persistent use of excessive force, including arbitrary detention, extrajudicial killings, demolition of houses, seizures of land and destruction of infrastructure and crops. Moreover, Israel initiated severe mobility restrictions and closure policies that significantly compounded the mass-suffering of the Palestinian population.

As a result, the economy of the WBGS has been severely affected. These conditions have had serious ramifications on the growth, structure, and functioning of the economy. For example, real per-capita Gross National Income (GNI) dropped by more than 33% from \$1,860 in 1999 to \$1,237 in 2004.⁵ Average incomes also plummeted, mainly due to the loss of employment in Israel and the higher wages earned there. According to the World Bank, this loss, which amounted to around 100,000 jobs in 2001, directly affected the welfare of 600,000 to 800,000 people, between 18% and 24% of the WBGS population.⁶ Poverty also rose substantially,

⁵ In 1997 prices.

⁶ World Bank, West Bank and Gaza Country Economic Memorandum - Growth in West Bank and Gaza: Opportunities and constraints. Volume 1 (September, 2006).

leaving 63% of the population below the (income) poverty line of \$2.30 per person per day and 16% of the population living in extreme poverty below \$1.60 per person per day (World Bank, 2006). It is important to note that unlike in other countries with developing economies, as result of Israel being the main trading partner of WBGS, the average price level in the WBGS is that of a middle-income country, while average income is that of a low-income country.

This has been further compounded by the Israeli demolition of Palestinian houses, which has been particularly devastating for women, children, and the elderly. House demolitions and the destruction of natural resources increased the economic and psychological burden on Palestinian women, who carry the primary responsibility of running the household and caring for household members (UN Special Rapporteur, 2005).

The extent and nature of the closure measures have continued to expand during the *Al-Aqsa Intifada*. Inside the West Bank, the pervasive network of flying and permanent checkpoints, roadblocks, earth mounds, walls, trenches, and the West Bank separation wall, coupled with a complex and inconsistent regime of permits, severely curtails the movement of goods and people. Furthermore, females' economic responsibilities have expanded with the increasing death, imprisonment, and unemployment of male household members. Many females were placed in the position of being a primary household provider, caregiver, and strategist for coping financially, mentally and physically with the new situation.

3. Female labour force participation in the WBGS

In this section we present the main female labour force participation trends in WBGS, as well as review previous WBGS-specific empirical research.

3.1 Main Trends

According to the Palestinian Central Bureau of Statistics (PCBS) survey of 2005, the labour force participation rate in the WBGS stood at 40.7% of the population aged 15 and over. However, the male labour force participation rate (67.6%) was higher than the female participation rate (13.4%). Compared to other countries, female labour force participation rates in the WBGS remain very low (see Table 1). Based on the World Development Indicators (2004), the average female participation rate for Arab countries is reported to be 27%. Jordan for example, had a female participation rate of 23%, while the female participation rates in Lebanon and Egypt are 29% and 30% respectively.

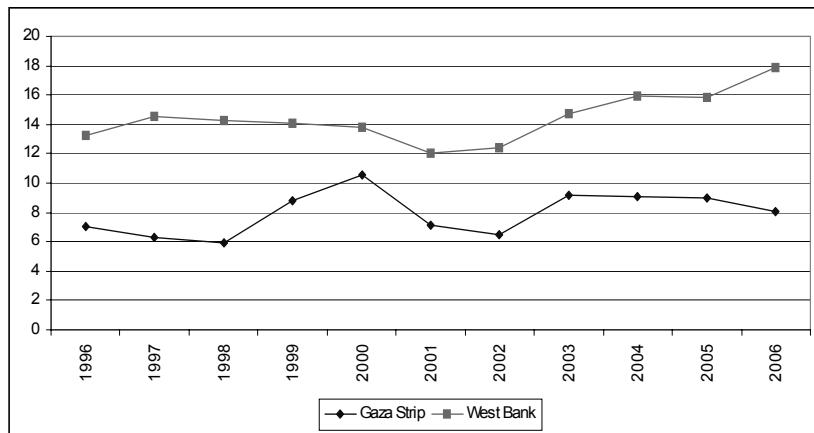
**Table 1: Labour force participation rates
in the WBGS and world averages (%)**

	Female (%)	Male (%)	Total (%)
WBGS	13.4	67.6	40.7
Locality			
Urban	12.8	69.9	41.5
Rural	14.2	73.0	43.7
Refugee camp	9.8	65.6	37.3
Region			
West Bank	15.8	69.5	42.9
Gaza Strip	9	63.9	36.7
Other Country Averages			
Arab	27	--	--
Low- & mid- income	40	--	--
World	41	--	--

Source: Palestinian Central Bureau of Statistics, labour force survey, 2005; World Development Indicators, 2004.

It can be seen from Figure 1 below that WBGS female participation in the labour force has passed through various phases. In the West Bank, participation was stable between 1996 and 2000, but sharply declined in the first two years of the *Intifada* and then started increasing from 2003 onward. The picture is slightly different in the Gaza Strip, where female labour force participation initially witnessed a slight decline, then increased between 1998 and 2000 and then fell sharply during the first two years of the *Intifada*. In 2003, the Gazan female participation rate returned to its pre-*Intifada* levels and stabilised around an average of 9%, only to decline again in 2006.

Figure 1: Female labour force participation in the WBGS, 1996-2006 (%)

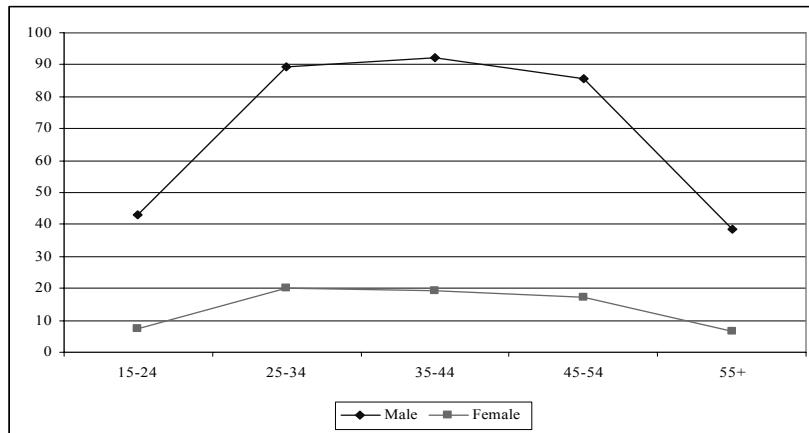


Source: PCBS labour force surveys, various issues.

For those in the labour market, the largest proportion of females is in the age category of 25 to 35, while for males, the age category is 35 to 44.

There are clear differences in the educational attainment of male and female labour force participants. In 2006, female labour force participants had higher educational rates than men, with 41.1% of women having a post-high-school qualification, compared to only 17.3% of men. However, there are also more illiterate women (13%) in the labour force than men (2.4%).

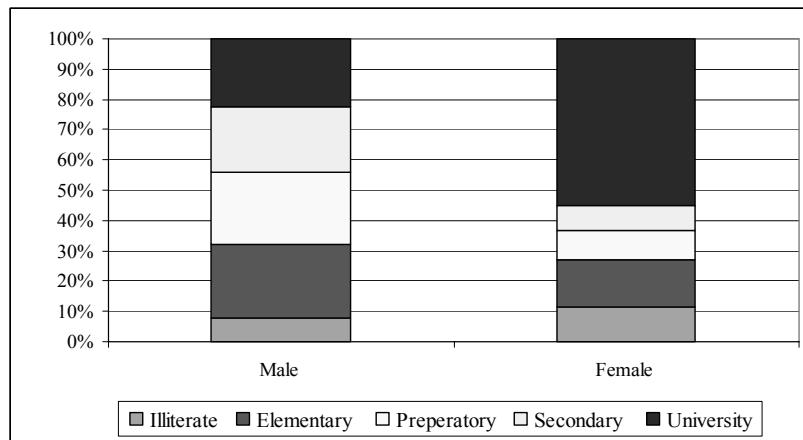
Figure 2: Male versus Female labour force participation levels across age groups, 2006



Source: PCBS labour force survey, 2006.

Female labour force participants in the Gaza Strip have higher educational attainment than females in the West Bank. Just over 50% of female labour force participants in the West Bank had *Tawjihu* or higher, compared to 58% in the Gaza Strip.

Figure 3: Educational qualifications of labour force participants, 2006



Source: calculated from PCBS data.

Overall, female labour force participation in the WBGS has been erratic and is amongst the lowest in the world. Political and economic shocks induced structural changes and, as argued later in this paper, have played a major role in shaping the experience of women's involvement in the labour market.

Before discussing our analysis of the female labour force participation determinants, we consider empirical work previously carried out in this field in the WBGS, whose findings will inform our subsequent analysis.

3.2 Empirical research on female labour force participation in the WBGS

Empirical research focusing on female labour force participation in the WBGS began in the mid-1990s in concert with an analysis of female labour force participation in Jordan. In the Jordanian study, Shakhatreh (1995) utilised a range of demographic, economic and social factors, including religion, age, family size, the child-care burden, the presence in the household of other adult females, education, household income, regional unemployment rates, and average wage. Jordan has expected similarities with the WBGS as over 60% of the Jordanians are of Palestinian origin. Both Jordan and the WBGS are characterised by a high birth rate and, in comparison to other regions, low female labour force participation.

Shakhatreh's study found the following factors to have a positive relationship with female labour force participation:

- ❖ *Marital Status.* Never-married females had higher odds of participating in the labour force than married females. This may be a result of never-married females having a lower level of household responsibilities than married females, decreasing the opportunity cost of working.
- ❖ *Presence of other adult females in the household* was found to have a strong positive relationship with a female's labour force participation, potentially a result of the women sharing those household responsibilities typically allocated to females.
- ❖ *Household income for never-married females.* This factor may potentially act as a proxy for class and level of education.

Shakhatreh's study found the following factors to have a negative relationship with female labour force participation:

- ◊ *Social Environment*, for which religion was used as a proxy, had a very significant effect on a female's decision to participate in the labour force. Christian women, who were found to be more conservative than their Muslim counterparts, participated less in the labour market. The religion-effect appeared much stronger for never-married females than for married females. Accordingly, never-married Christian women were found to have a lower probability of participation.
- ◊ *Presence of young children*. It was found that the more young children a female had, the less likely she was to participate in the labour force.
- ◊ *Living in a rural location*. Lack of jobs in rural areas in Jordan impacted women's participation negatively.
- ◊ *Household income for married females*. Since married women have significant household responsibilities, particularly in terms of caring for children, they were more likely to opt out of participating in the labour market, given the possibility, than never-married women.

In her work on human capital and women in the Bethlehem region, Olmsted (1995) provided an explanation to the paradox of Palestinian females having high educational attainment while remaining out of the labour force. She noted that Palestinian women acquire education not for labour market purposes, but as insurance against potential future displacement. This paradox is unique to Palestinian females.

Hammami (1998) attributed the low rates of Palestinian female labour force participation to:

- ◊ *Weakness in the manufacturing sector*. As mentioned before, the presence of labour-intensive manufacturing jobs usually has a positive correlation with female labour force participation in countries with developing economies.
- ◊ *High male unemployment rates*. This had a negative impact on female participation, since cultural factors result in males being considered the main breadwinners. Thus, in times of high unemployment, women are expected to refrain from participating in the labour market in order to avoid competing with men.
- ◊ *Family-oriented nature of the agricultural sector*, which, due to the size of the plots, provides employment opportunities only for females who are born into agrarian households.

- ❖ *Negative social attitudes towards employment of Palestinian women in Israel*, which had provided plenty of low-skilled employment opportunities for Palestinian men, and to a much lesser extent for women.

In 1999, Daoud analysed female labour force participation in WBGS and found the following:

- ❖ *Years of schooling* were an insignificant factor in explaining a female's decision to join the labour force. Without offering an explanation, Daoud pointed out that this is in contradiction to empirical research in other countries. However, this is in line with Olmsted's analysis of the reasons Palestinian women acquire education.
- ❖ *Average market wage for husbands* had a positive correlation to female labour force participation. Daoud explained that higher earning males often get married to educated females who, as result of their education level, have greater odds of participating.

In 2006, Kuttab explained the low female participation rate during the *Al-Aqsa Intifada* by highlighting the political insecurity that complicated work attendance through the imposition of closures.

It is in light of these previous findings that our research analyses some of the commonly-accepted and MENA-region-specific determinants of female labour force participation. In particular, our study separates Palestinian women into categories to examine which women are most affected by the various determinants and to what extent. It also investigates how the effect of each determinant on the categories of women had changed over time, particularly in the context of the *Al-Aqsa Intifada*. Previous findings from neoclassical, structuralist, and feminist schools of thought are utilised in the analysis, as are a set of case studies that offer examples in support of potential explanations.

4. Methodology

In this study, we utilise quantitative and qualitative methods in assessing the effect of various factors on female labour force participation. We approach our analysis in a two-step fashion. In the first step we aim to gain insight into how each determinant influences different women. In the second step we track this influence throughout the period studied. In this section, we briefly discuss the economic theory behind our approach, describe the data used, and introduce our quantitative and qualitative methods.

4.1 Theoretical Model

It is commonly accepted to view an individual's labour force participation decision in the context of her/his effort to maximise her/his utility. Theory suggests that in attempting to maximise utility, an individual will participate if and only if the market wage s/he faces is larger than her/his reservation wage. Empirical research has identified a number of factors that are thought to either increase or decrease an individual's reservation wage, in turn discouraging or encouraging labour force participation. Formally, this may be summarised by the following equation:

$$LFP = F(P, D, S, W_M, E)$$

where LFP depicts the individual's labour force participation status, P represents the individual's preferences, D represents the individual's demographics, S represents social environment, W_M represents the market wage the individual faces, and E stands for the economic and political environment.

In this study, we limit the above model to demographic (D) factors:

$$LFP = F(D)$$

and then include social, economic, and political factors presented in previous sections of this paper in analysing the results.

4.2 Data

In our study, we utilise data from the Palestinian Central Bureau of Statistics' (PCBS) Labour Force Survey (LFS), the Palestinian Expenditure

and Consumption Survey (PECS), and from a series of specially-conducted case studies.

4.2.1 Labour Force Survey Data

Eleven years of cross-sectional data from the West Bank and Gaza Strip labour force survey has been consolidated together, reweighed and harmonised for the purpose of investigating female labour force participation. The surveys contain a series of questions pertaining to the labour force participation of women aged 15 years and over, and identify demographic characteristics such as age, locality (village, camp and city), region (north, centre, south and Gaza), specific individual characteristics such as educational attainment and marital status.

With cross-sectional data, it is possible to take account of the available characteristics of each individual woman in the database, and to relate the differences in the observable characteristics of these women to differences in their observed labour market behaviour.

Selection criteria are imposed to create the required samples for the analysis in this research. The sample selected comprises women, with or without children, who choose whether or not to participate in the labour market. Using 11 years of the PCBS LFS data, the pooled dataset of all respondents in the WBGS includes 869,941 people, of whom 427,718 are females. Once females over the age of 65 are excluded, the size of the pooled sample is reduced to 424,619 observations or 48.8% of the LFS's original size. Of this sample, 142,865 were never married, 258,059 were married, and 23,582 were widowed or divorced females.

4.2.2 Palestinian Household Expenditure and Consumption Survey

The other set of data used in our study is from the 2004 Palestinian Household Expenditure and Consumption Survey (PECS). This year was selected because it has a large sample size. The survey covers 120 households every month, adding up to 1,440 households annually (20,585 individuals). Following the exclusion of males from the sample as well as women under 15 and over 65, we are left with 9,023 observations. Two models were run, one for married, divorced and widowed women together, and another for never-married women. The reason for this division was to explore the effect of having children on women's probability of participating, which the PECS data allows but the LFS data does not.

The variables covered by this survey include questions related to the main source of household income, refugee status, number of children in a household, age and education.

4.2.3 Case Studies

In order to provide a better insight into the determinants of female labour force participation in the WBGS, this study employed 40 structured interviews. This qualitative information is intended to compliment the quantitative data provided by the LFS and PECS. The structured interviews focused on both women and employers. It is important to note that we acknowledge that the limited number of case studies does not provide a representative sample of views of WBGS employers and female employees. The case studies only serve as examples and, when appropriate and supported by other evidence, contribute to potential explanations.

Women. Amongst the critique advanced by feminist economists was the fact that quantitative tools are inadequate in capturing issues of interdependence within the family unit, such as the impact of patriarchy, the bargaining power of women, life histories and women's aspirations. In order to try and capture some of these effects within the Palestinian context, this study conducted 30 interviews with women (both inside and outside the labour market) in the Nablus area. The Nablus area was selected because it provides an interesting case since the movement restrictions within this governorate are severe. Accordingly, the questions tried to capture the impact of these restrictions on the decision of women to engage in economic activities. The interviews took place in rural areas, refugee camps as well as in the city of Nablus.

Employers. To further investigate the demand side of the labour market, this study gauged the perceptions of employers towards the employment of women. This is particularly important because the data from the LFS and PECS does not provide a sufficient account of the demand side of the labour market. For this purpose, we interviewed 10 business owners in city of Nablus to provide us with examples of potential answers.

4.3 Econometric Model

As described in the theoretical section above, the variable of interest is the female's labour force participation status. Ordinary (binary-outcome) logistic regression is commonly utilised in studying the determinants of an

individual's labour force participation, as it properly treats the *LFP* variable's in-out nature (Greene, 2000). With logistic regression, the following equation is calculated:

$$\text{odds}(y_i \neq 0) = \exp(x_i\beta + \beta_0)$$

We are interested in the odds of female participating. To derive the odds ratio for each predictor variable, the regression equation's coefficients, which are the rates of change in the log odds, need to be exponentiated. Stata 9.1 was the statistical package utilised for the regression analysis, which conveniently calculates the odds ratios with the application of the logistic command. The exponentiated coefficient is interpreted thus:

$$\text{Odds Ratio} = \frac{\text{odds (if predictor variable is incremented by 1)}}{\text{odds (if predictor variable is not incremented)}}$$

or, equivalently,

$$\text{Odds Ratio} = \frac{P(LFP = 1 | x + 1) / (1 - P(LFP = 1 | x + 1))}{P(LFP = 1 | x) / (1 - P(LFP = 1 | x))}$$

The odds ratio reflects the magnitude of change in the response variable from a one unit change in the relevant continuous predictor variable, while holding other predictor variables constant. For example, an odds ratio close to 1.0 suggests that a change of one unit in the predictor variable had led to no change in the odds of the female participating. However, an odds ratio of, for example, 1.5 implies that for every unit increase in a particular predictor variable, the odds of the female participating increases by a factor of 1.5. Similarly, an odds ratio of, for example, 0.5 suggests that for every unit increase in a particular variable, the odds of the female participating decreases by a factor of 0.5, or in other words is halved.

In the case of interpreting odds ratios associated with dummy variables, an odds ratio of, for example, 1.5 implies that if a female falls into a particular category, the odds of her participating are 1.5. The use of multiple dummy variables to represent a particular predictor variable requires the exclusion of one of the categories, in order to avoid the dummy variable trap, and expresses all the odds ratios in relation to that excluded category, referred to as the reference group. For example, for a variable with multiple categories, an odds ratio of 1.5 implies that if a woman falls into a particular category, the odds of her participating are 1.5 times higher than the odds of one participating from the reference group.

4.3.1 Variables for the LFS-based model

In this section, we introduce the response and predictor variables of the LFS-based model, and, where appropriate, describe the methodology behind their creation.

$$\text{LFP} = \beta_0(\text{age}) + \beta_1(\text{education}) + \beta_2(\text{marital status}) + \beta_3(\text{region}) + \beta_4(\text{locality})$$

Labour Force Participation is a binary response variable consisting of 0s and 1s, with the 0s assigned to those individuals (observations) who are out of the labour force (neither employed nor unemployed) and 1s assigned to those who are in. The variable is based on the *inoutlf* variable provided by the PCBS with the LFS data.

Age is a demographic factor represented by a set of four predictor dummy variables, with each dummy variable assigned to a particular age category. The dummy variables are based on LFS's *age* variable that records the individual's age at last birthday and has been restricted to between the ages of 15 and 65. The age categories are: 15-24, 25-34, 35-50 and 51-65.

Education is another demographic factor represented by a set of six predictor dummy variables, with each one assigned to a particular education-level category. The dummy variables are based on LFS's *yerschol* variable that records the number of an individual's completed years of education. In the process of cleaning the data, a small number of *yerschol* observations that have reported more than 26 years of education have been removed. The education categories are: 0, 1-11, 12, 13-15, 16-17, and 18>.

Marital Status is also a demographic factor represented by a set of three predictor dummy variables describing a woman's marital status. They are based on the LFS's *maritals* variable and are *single*, *married*, and *other*. Marital status mainly affects a female's preferences and the role she is expected to play within the social structure.

Region is a demographic factor represented by a set of four predictor dummy variables describing where the woman lives. They are based on the LFS's *id06* variable, which lists WBGS's 16 districts. The *north* dummy variable includes Jenin, Tubas, Tulkarem, Nablus, Qalqilya, and Salfit; the *centre* dummy variable includes Ramallah, Jericho, and Jerusalem; the *south* dummy variable includes Bethlehem, and Hebron; and the *Gaza*

variable includes North Gaza, Gaza, Deir Al-Balah, Khan Younis and Rafah.

Locality is a demographic factor represented by a set of three predictor dummy variables describing where the female is located. They are based on the LFS's *id07* variable, which breaks down localities to *urban*, *rural*, and *camp*. The model's locality variables use the same breakdown and naming.

Other variables, such as *average female wage*, *average male wage*, and *unemployment rate* were found to be statistically insignificant predictors, and were removed from the regression model. However, we believe that this is probably due to our methods of calculation, in light of a lack of data, and not the variables' irrelevance.

4.3.2 Variables for the PECS-based model

In this section, we introduce the response and predictor variables of the PECS-based model, and, where appropriate, describe the methodology behind their creation.

$$\text{LFP} = \beta_0(\text{age}) + \beta_1(\text{marital status}) + \beta_2(\text{HH's main source of income}) + \beta_3(\text{HH's number of children})$$

Labour Force Participation is a binary response variable consisting of 0s and 1s, with the 0s assigned to those cases who are out of the labour force and 1s assigned to those who are in. The variable is based on the PECS's *d10* variable, which separates females into eleven categories. Females falling into the following categories are considered as being in the labour force: *employed for 1-14 hours*, *employed for 15 or more hours*, *unemployed but had previously worked*, *unemployed and had never worked*, and *absent from work*. Individuals falling under the following categories are considered as being out of the labour force: student; housewife/keeper; unable to work; not working & not looking for work; other; and not applicable.

Age is a set of four predictor dummy variables, with each dummy variable assigned to a particular age category. The dummy variables are based on PECS's *d5* variable that records the individual's age at last birthday and has been restricted to between the ages of 15 and 65. The age categories are: 15-24, 25-34, 35-50, and 51-65.

Marital Status is a set of three predictor dummy variables describing a woman's marital status. They are based on the PECS's *d9* variable, which separates females into six categories. Females falling under the category of *never-married* are accounted for by the *never-married* dummy variable. The *married* dummy variable includes the following categories: *legally married*, and *married*. And the *other* dummy variable includes: *divorced/separated* and *widowed*.

Household's main source of income is a set of dummy variables describing the sources of income for the household. These include subsistence farming, household business, wages acquired from work in the WBGS, wages acquired from work in Israel, cash remittances, assistance and others.

Household's number of children. This variable is calculated based on the total number of children within the household. In other words, the number of children under the age of six was calculated for each household and assigned to each woman in that household between the ages of 15 and 65.

4.3.3 Questions asked in the case studies

Women. Interviews with women in the Nablus area focused on what was the primary factor that had encouraged a woman to join the labour market or stay out of it. Within this, the issues discussed with women included economic need, the desire to utilise her skills and education, and the desire to gain status and respect in society. The interviews tried then to assess the bargaining process that takes place within the household. This basically focused on issues related to whose decision it was ultimately to participate in the labour market and how the bargaining process was conducted and how she went about convincing those in a position to allow her wish to become economically active. The interviews also discussed with working women whether the income they brought into the family enhanced their bargaining power within the household. Finally, the interviews discussed with women the impact of movement restrictions on their decision to participate in the labour market.

Employers. Interviews with employers focused on whether they would employ women, whether they thought women are as productive as men, whether it is more costly to employ women, which jobs/professions they think women can or cannot do, and why would they hire a woman or not.

5. Results and Analysis

In this section we present and discuss the results of our analysis of female labour force participation in the WBGS. We first examine the results from the LFS-based model, then the PECS-based model, and we conclude this section by summarising the recurrent themes emerging from the case studies of employers and female employees from the Nablus area.

5.1 Labour Force Survey (LFS)-based model

This subsection focuses on the results and analysis of the LFS-based model, including structural change analysis as well as labour force participation patterns for all, married, never-married, and divorced and widowed women.

5.1.1 Structural Change Analysis

Our analysis of the Labour Force Survey (LFS) data begins with an observation that there was a significant decline in female labour force participation in 2001 and 2002. This is clearly visible in Figure 4 below. Female labour force participation returned to its pre-2001 level in 2003 and exceeded it in 2005.

Figure 4: Percentage of females participating in the labour force

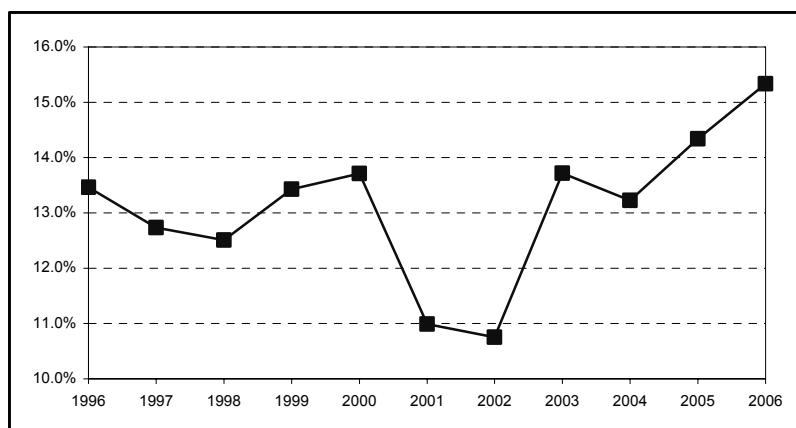


Table 2 lists the percentage changes in female labour force participation from year to year. In 2001, female labour force participation dropped 19.9%, with the next closest decline during the 11 year period studied being only 5.4%. In 2003, female labour force participation jumped 27.6%, with the next largest increase being only 8.5%.

Table 2: Structural Change Analysis

Year	FLFP (%)	Δ FLFP (%)	Δ FLFP (- / +)	Δ GDP (- / +)	Δ GDP (%)	GDP (\$, mill)
1996	13.5	--	--	+	+ 02.9	3,286
1997	12.7	- 05.4	-	+	+ 12.7	3,702
1998	12.5	- 01.8	-	+	+ 12.1	4,148
1999	13.4	+ 07.4	+	+	+ 08.8	4,512
2000	13.7	+ 02.1	+	-	- 05.6	4,261
2001	11.0	- 19.9	-	-	- 06.4	3,989
2002	10.7	- 02.2	-	-	- 03.8	3,839
2003	13.7	+ 27.6	+	+	+ 08.5	4,165
2004	13.2	- 03.6	-	+	+ 02.0	4,248
2005	14.3	+ 08.5	+	+	+ 06.0	4,503
2006	15.3	+ 06.9	+	-	- 08.8	4,107

Source: Data from PCBS LFS. Calculations by MAS.

The distinct magnitude of the 2001 decline and 2003 increase in female labour force participation suggests the presence of structural change and raises both a theoretical question and a modelling approach issue.

The theoretical question deals with the drivers of the significant change in participation. In other words, as theory dictates, the relationship between females' decision to participate in the labour force and at least one of the determinants from the following categories had structurally changed: their preferences, demographics, social environment, average market wage they face, and/or their economic and political environment.

It may be reasonable to assume that it is unlikely that factors such as preferences, demographics, or social environment are capable of changing so abruptly for such a large number of females. Additionally, the average market wage remained approximately at its previous level. On the other hand, in the context of the *Al-Aqsa Intifada*, the likelihood that the structural change in female labour force participation was brought about by factors such as the overall economic and political environment is relatively high.

As described in Section 3, the *Al-Aqsa Intifada* quickly resulted in a devastating economic situation in the WBGS. As may be seen in the last column of Table 4, its impact was so powerful and immediate that its start in the fourth quarter of 2000 led to losses of the gross domestic product for the entire year. During 2001 and 2002, GDP declined 9.9%, while GNI declined 17.0%. Clearly, the structural changes in the WBGS economic and political environment that brought such drastic changes to the GDP and GNI had an impact on women's decisions whether to participate in the labour force.

During the Oslo years, the proportion of females in the labour force remaining unemployed was steadily decreasing, as can be seen in Figure 5, declining to 12.5% by the end of the year 2000. However, the start of the *Intifada* disrupted this trend, with the proportion of participating females remaining unemployed steadily increasing to 22.5% in 2005. In other words, the female labour force in the WBGS went through two major changes. Following the start of the *Intifada*, the female labour force: 1) shrank from 13.7% of the female population in 2000 to 11.0% in 2001 (this trend reversed by 2003 when the participation rate returned to 13.7%); and 2) transformed from 12.5% of the female participants being unemployed in 2000 to 14.2% in 2001 and 22.5% by 2005.

Figure 5: Percentage of females within the labour force who are unemployed

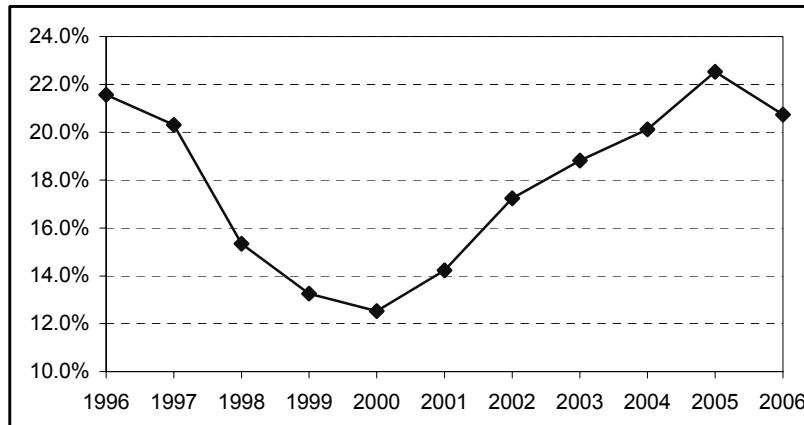


Table 3 shows the percentage breakdown of employed females by sector over time. In 2001, the proportion of females in manufacturing and agriculture decreased significantly, while the proportion of females in the

services sector increased. The earlier expansion of the services sector during the Oslo years took place as result of the PNA creating jobs in the public sector. This was part of the quasi-state building process as well as an attempt to mitigate the impact of the loss of employment in Israel. By the time of the *Intifada*, the WBGS's public sector was able to sustain employment of many females who may otherwise have lost their jobs if they were employed in the private sector.

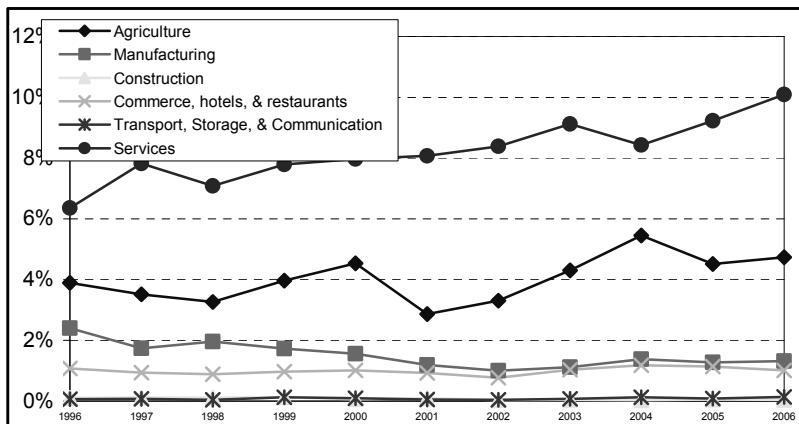
Table 3: Percentage breakdown of employed females by sector over time

Year	Agri-culture	Manufacturing	Construction	Commerce, Hotels, & Restaurants	Transport, Storage, & Communication	Services
1996	29.0	15.4	0.7	7.5	0.6	46.6
2001	26.0	9.5	0.8	8.4	0.4	54.9
2003	33.7	7.6	0.1	8.2	0.5	49.9
2006	34.4	8.5	0.2	7.4	0.9	48.7

Source: PCBS.

Figure 6 charts females as a percentage of those employed in each sector. Israeli policies, especially during the earlier years of the *Al-Aqsa Intifada*, caused major disruption to economic activity within the agriculture and manufacturing sectors, particularly in the Gaza Strip.

Figure 6: Females as a percentage of those employed in each sector



Source: PCBS LF Surveys

The first structural change in females' decisions to participate must be viewed in the context of the Israeli response to the *Intifada*, which resulted almost immediately in thousands of Palestinian civilians being killed or wounded and severely restricted external, and in many cases internal, mobility. The 2001 and 2002 drop in female labour force participation may seem counter-intuitive – one would expect a woman to be more likely to participate in the labour force at a time of economic difficulties. But such an expectation disregards the severity of the *Intifada*. Clearly, economic and political changes in a woman's environment contribute greatly to her labour force participation decision, essentially increasing her reservation wage; lack of consideration of this may lead to very misleading conclusions.

The drivers of the second structural break are less clear. One could be the reduction in the intensity of violence, allowing those previously fearing for their safety to venture out looking for work. Another driver could be the continued difficult economic situation, which could have forced those previously not allowed/willing to participate in the labour force to participate. And yet another reason could be the gradual creation of jobs that accompanied the easing of violence.

The modelling approach issue mentioned above arises with the presence of this structural change and concerns how we go about our analysis of the data. The disruption of the trend suggests that the years prior to the *Al-Aqsa Intifada*, the *Intifada*'s earlier years, and then the *Intifada*'s later phase need to be considered separately. We deal with this by separating the years into three clusters: 1996-2000; 2001-2002; and 2003-2006. The separation is based on the largest year-over-year decline and increase in female labour force participation, highlighted above in Table 2. While the trend in the 1996-2000 and 2003-2006 year clusters is similar, further analysis would be required to identify its drivers, taking pre- and post- *Al-Aqsa Intifada* factors into account. After separating the years, we move on to analysing the data.

5.1.2 All Women

Over the 11 years studied, 14.4% of never-married, 12.1% of married, and 12.8% of divorced and widowed females were employed. Below are the general results for all females.

Table 4: Results for All Females

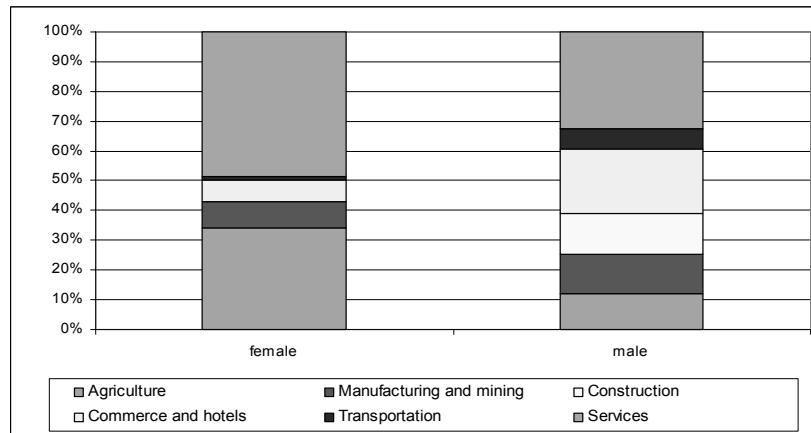
Variables\Years	1996-2000	2001-2002	2003-2006
Age			
Ref. Group: 15-24	--	--	--
25-34	3.75 (0.000)	4.20 (0.000)	4.56 (0.000)
35-50	5.31 (0.000)	5.86 (0.000)	6.13 (0.000)
51-65	3.66 (0.000)	3.91 (0.000)	4.05 (0.000)
Education			
Ref. Group: 0	--	--	--
1-11	0.83 (0.000)	0.83 (0.000)	0.84 (0.000)
12	1.39 (0.000)	1.10 (0.133)	0.94 (0.112)
13-15	6.67 (0.000)	6.04 (0.000)	4.00 (0.000)
16-17	25.57 (0.000)	34.96 (0.000)	37.46 (0.000)
18>	20.16 (0.000)	16.18 (0.000)	28.17 (0.000)
Marital Status			
Ref. Group: Single	--	--	--
Married	0.37 (0.000)	0.44 (0.000)	0.50 (0.000)
Other	0.51 (0.000)	0.64 (0.000)	0.71 (0.000)
Region			
Ref. Group: Centre	--	--	--
North	1.33 (0.000)	1.46 (0.000)	1.82 (0.000)
South	0.90 (0.000)	1.36 (0.000)	1.45 (0.000)
Gaza	0.60 (0.000)	0.65 (0.000)	0.73 (0.000)
Locality			
Ref. Group: Rural	--	--	--
Urban	0.70 (0.000)	0.70 (0.000)	0.62 (0.000)
Camp	0.68 (0.000)	0.75 (0.000)	0.60 (0.000)

Age, in line with theory, improves a Palestinian female's odds of participating in the labour force until she reaches her late 30s and 40s, and then her odds of participating begin to decline. With the beginning of the *Al-Aqsa Intifada*, females in their late 20s and older became more likely to participate in the labour force than younger females. This may be a result of an increased concern for the safety of younger females during Israeli incursions into various civilian neighbourhoods. It also may be a result of younger females spending more time in education due to increased difficulties in penetrating the labour market as first timers. According to the ILO (2006), despite the similar levels of unemployment amongst females and males, females' unemployment duration is four times that of males'. Such a situation implies that the deterioration of the overall

economic situation was likely to make it even more difficult for young women without any experience to join the labour market.

Education, in line with theory, increases the odds of a Palestinian female participating in the labour force. In particular, a female who has completed a bachelor's or a master's degree has the greatest odds of participating. Also interestingly, the odds of participation for females with some years of schooling (1-11) are the lowest, and are even below the odds of a female with no education. This contradicts previous findings by Olmsted (1995) and Daoud (1999), whose research found that education levels were not a significant determinant. However, this pattern matches the fact that most Palestinian females are employed in either the highly unskilled sectors that require no education, such as agriculture, or in sectors that require high levels of education, such as healthcare and teaching (see Figure 7).

Figure 7: Distribution of Employed Women and Men by Economic Sector, 2006



Source: PCBS, LFS 2006.

Why this is the case is worth exploring. Economic intuition suggests that an individual with a higher education is more likely to participate in the labour force than one with lower education. While this may very well be the case in a developed economy, there are three main reasons why in the Palestinian context this expectation does not necessarily apply. Firstly, we must keep in mind that formal education is not the only form of education. For example, gaining experience while working on a farm is also a form of education, which is arguably more useful in the agricultural sector than

formal education. Secondly, there is little labour-intensive industry within the Palestinian economy, and this is the sector that usually utilises the semi-educated females. And thirdly, other sectors that may be appropriate for semi-educated workers are often considered inappropriate for females as result of various social factors. As the result, a situation exists for semi-educated females where on one hand there is no manufacturing sector to participate in and, on the other hand, there exists gender bias with the available job opportunities for semi-educated workers.

The idea introduced above that women's decisions to participate in the labour market are affected by the structure of this market was confirmed by our case studies. In these interviews, women noted that the presence of vertical and horizontal segregation, which restricts them to certain sectors and professions, discourages them from seeking participation in the labour force. This result tends to confirm the impact of demand-side factors as a determinant of participation for women.

These perceptions were also reinforced by the preferences of the employers in our case studies. The interviewees asserted that women's capabilities are conditioned by traditional gender roles as well as by their perceived abilities. Accordingly, the employers thought that women should take up employment in the areas of education, health care, or other types of employment that do not require strenuous physical exercise or much exposure to market activities. This brings the social dimension into the picture as a contributing factor that interacts with the structure of the labour market to shape the opportunities for women participation.

Over time, the odds of a female with a higher education participating in the labour force have been increasing, while the odds of a woman with a *Tawjih* or less participating have been decreasing, when compared to females with no education. This may imply that the labour market has become more competitive for females, and that only females with higher qualifications even try to compete in this market. The odds of a woman with a *Tawjih* certificate joining the labour market compared to females with no education were more favourable before the *Intifada*. On the other hand, the likelihood of a woman with a bachelor's or postgraduate degree joining the labour market has increased from 25 times the probability of a woman without education to over 37 times that probability.

Marital Status. While the trends have been improving over time, and in line with the predictions of economic theory, married, divorced, and widowed women are less likely to participate in the labour force than a

never-married woman. This lower probability of participation of women who are married, divorced or widowed can be explained by the impact of the strong traditional values in the WBGS, which still see women's primary role as caring for their families. Consequently, married, divorced and widowed women are likely to have a heavier domestic burden, particularly in caring for their children. This result is expected, given the high fertility rate in the WBGS; the average number of children is currently 6.6 births per woman in the Gaza Strip and 5.2 births per woman in the West Bank (PCBS, 2005).

Region. Women living in the Northern region of the West Bank have the highest odds of participating in the labour force, while women living in the Gaza Strip have the lowest odds. This can be explained by the fact that the northern region of the West Bank has the most active agricultural sector. With the loss of employment in the private sector as a result of external and internal closures, it is likely that the availability of work in the agricultural sector in the northern region has mitigated the impact of the loss of jobs for women within this region. On the other hand, employment opportunities for women in the Gaza Strip are largely concentrated in the services sector (70%, compared to 45% in the West Bank).

Locality. Women located in urban and refugee camp areas are less likely to be participating in the labour force than women located in rural areas. Again, this confirms the importance of agriculture as a source of employment for Palestinian women.

This observation may very well be the key to explaining the low female labour force participation rate in the WBGS. Particularly in countries with developing economies, there is a pattern of migration from the rural area to the urban. Farmers, and especially children of farmers, migrate to urban areas in search of a higher standard of living by working in the urban formal sector. However, labour demand for jobs in the urban sector is often far below the labour supply from the rural area, resulting in high unemployment and with many of the migrants settling for work in the urban informal sector.

A form of rural to urban migration has also taken place in the WBGS, but in the shape of mass displacement. Israeli aggression, in 1948 and 1967, that resulted in the creation of hundreds of thousands of Palestinian refugees may be seen as forced rural to urban migration. From an economic perspective, refugee camps share many more similarities with urban areas than with rural, particularly because camp dwellers have no

access to agricultural land. This unnatural transformation of Palestinian labour supply distorted the Palestinian labour market, with urban labour supply drastically exceeding urban labour demand ever since. The major shortage of non-agricultural jobs created intense competition between non-agrarian workers, with females, as result of the existing gender bias within the Palestinian society, finding themselves to a great extent marginalised.

5.1.3 Married Women

Marriage is considered as the one most important event in a Palestinian female's life, as it represents a union between members of the often large two families and defines her relationship with society (Rubenberg, 2001). While the legal age for marriage is 15, Islam permits women to marry once they reach puberty. Once a Palestinian female marries and moves in with her husband (and often in-laws) she frequently experiences a higher level of control than while living with her parents (Rubenberg, 2001).

Table 5: Results for Married Females

Variables\Years	1996-2000	2001-2002	2003-2006
Age			
Ref. Group: 15-24	--	--	--
25-34	1.91 (0.000)	1.68 (0.000)	2.13 (0.000)
35-50	3.15 (0.000)	2.73 (0.000)	3.12 (0.000)
51-65	2.40 (0.000)	2.07 (0.000)	2.33 (0.000)
Education			
Ref. Group: 0	--	--	--
1-11	0.62 (0.000)	0.58 (0.000)	0.62 (0.000)
12	0.81 (0.000)	0.68 (0.000)	0.60 (0.000)
13-15	7.54 (0.000)	6.19 (0.000)	3.50 (0.000)
16-17	17.57 (0.000)	18.28 (0.000)	18.96 (0.000)
18>	27.70 (0.000)	18.38 (0.000)	40.08 (0.000)
Region			
Ref. Group: Centre	--	--	--
North	1.31 (0.000)	1.76 (0.000)	2.30 (0.000)
South	0.91 (0.011)	1.49 (0.000)	1.85 (0.000)
Gaza	0.79 (0.000)	0.94 (0.277)	1.10 (0.004)
Locality			
Ref. Group: Rural	--	--	--
Urban	0.61 (0.000)	0.58 (0.000)	0.53 (0.000)
Camp	0.53 (0.000)	0.60 (0.000)	0.49 (0.000)

Age. The odds of a married woman participating in the labour market are highest if she is between 30-50 years of age. This is likely due to the fact that in their late teens and twenties, women are occupied by caring for their children. According to the PCBS, in 2001 the median age of marriage in the WBGS was 24 years for men and 19 years for women. These comparatively low national averages, particularly with regard to the age of women, highlight the early marriage phenomenon that is prevalent in WBGS. The results imply that married women are more likely to join the labour market once their children are old enough to attend school.

Education. With the exception of women who hold diplomas, the odds of married women participating in the labour market sharply decreased in the earlier years of the *Al-Aqsa Intifada*. An explanation may be that the increase in the cost of searching for work, if they were unemployed, or travelling if they were employed, exceeded the benefits of working.

Region. In comparison to the central region of the West Bank, the odds of a married woman participating in the labour force from either the northern or southern regions have increased significantly. In comparison, the odds of married Gazan women participating were also increased, but only in the later period of the *Al-Aqsa Intifada*. In other words, it seems that the impact of the structural change represented by the Israeli response to the *Intifada* – incursions, closures, and bombings of the WBGS - had more of a devastating impact on the participation prospects of Gazan women during the *Intifada* than on West Bank women. The increase in participation of women in the later period in Gaza could be due to expansion of the public sector. Following the significant loss of jobs in Israel in 2001, the PNA created employment opportunities for large numbers of people. According to the PCBS (2006), the public sector accounted for 30% of employment in the Gaza Strip in 2000. By 2006, the public sector has expanded to employ nearly 40% of the working population. Since the public sector is a significant employer of women, this expansion seems to have improved their participation rate.

5.1.4 Never-Married Women

In 1995, only 9.3% of Palestinian females from 35 to 65 had never been married (PCBS, cited in Rubenberg, 2001). According to Rubenberg (2001), many never-married females have not married by choice and consider themselves better off than married, divorced, and widowed females. Most never-married females, regardless of age, live with their parents or, if their parents are deceased, with the family of a married brother (Rubenberg, 2001).

Table 6: Results for Never-Married Females

Variables\Years	1996-2000	2001-2002	2003-2006
Age			
Ref. Group: 15-24	--	--	--
25-34	6.13 (0.000)	7.96 (0.000)	8.04 (0.000)
35-50	6.04 (0.000)	8.07 (0.000)	9.19 (0.000)
51-65	3.82 (0.000)	3.91 (0.000)	5.80 (0.000)
Education			
Ref. Group: 0	--	--	--
1-11	1.81 (0.000)	2.60 (0.000)	2.11 (0.000)
12	4.35 (0.000)	4.25 (0.000)	2.93 (0.000)
13-15	9.16 (0.000)	12.29 (0.000)	8.53 (0.000)
16-17	76.85 (0.000)	221.98 (0.000)	220.38 (0.000)
18>	14.89 (0.000)	19.20 (0.000)	29.77 (0.000)
Region			
Ref. Group: Centre	--	--	--
North	1.35 (0.000)	1.19 (0.005)	1.26 (0.000)
South	0.90 (0.027)	1.20 (0.008)	1.00 (0.992)
Gaza	0.37 (0.000)	0.36 (0.000)	0.37 (0.000)
Locality			
Ref. Group: Rural	--	--	--
Urban	0.85 (0.000)	1.02 (0.729)	0.84 (0.000)
Camp	0.96 (0.423)	1.04 (0.627)	0.87 (0.010)

Education. Compared to never-married illiterate females, the odds of never-married females with a Bachelor's or Master's degree or higher participating in the labour force is significantly higher. This difference is particularly apparent among never-married females since the beginning of the *Al-Aqsa Intifada*, when the odds of a never-married female with a university qualification participating in the labour force are more than 200 times higher than those of an illiterate spinster. Again, this may reflect the increased importance of the public sector – which heavily values education – as an employer after the damage to private enterprise caused by Israeli measures.

Region. When compared to other never-married women living in the central region of the West Bank, the odds of a never-married woman from the north participating in the labour market are higher. However, in the Gaza Strip, the odds of participation for a never-married woman compared to never-married women in the centre of the West Bank are much lower.

5.1.5 Divorced & Widowed Females

Divorced and widowed females must adhere to particular roles within Palestinian society that are in certain instances unique to their religion. For example, in Christian communities, there is no possibility for divorce.⁷ Therefore, a female must remain in a marriage regardless of how terrible it is. At the same time, they do not live in fear of being divorced, as Muslim women do, for reasons such as not satisfying their husband or not bearing sons (Rubenberg, 2001). In Islam, females do have the right to divorce, although it is more difficult than for males and carries with it social stigma (Rubenberg, 2001). There tends to be less shame associated with widows. While both Christian and Muslim widows are allowed to remarry, they are expected to return to their family's home and remain there under strict vigilance until they do (Rubenberg, 2001). Below are the results for divorced and widowed females.

Table 7: Results for Divorced & Widowed Females

Variables\Years	1996-2000	2001-2002	2003-2006
Age			
Ref. Group: 15-24	--	--	--
25-34	1.98 (0.000)	2.29 (0.009)	6.48 (0.000)
35-50	2.26 (0.000)	3.80 (0.000)	6.35 (0.000)
51-65	0.90 (0.501)	1.19 (0.567)	2.23 (0.000)
Education			
Ref. Group: 0	--	--	--
1-11	1.08 (0.384)	1.00 (0.996)	1.20 (0.047)
12	2.15 (0.000)	1.92 (0.004)	2.47 (0.000)
13-15	10.08 (0.000)	11.81 (0.000)	8.23 (0.000)
16-17	27.01 (0.000)	37.01 (0.000)	53.46 (0.000)
18>	45.33 (0.000)	--	21.10 (0.000)
Region			
Ref. Group: Centre	--	--	--
North	1.47 (0.000)	1.30 (0.079)	1.93 (0.000)
South	1.01 (0.920)	1.78 (0.001)	1.44 (0.004)
Gaza	0.56 (0.000)	0.36 (0.000)	0.51 (0.000)
Locality			
Ref. Group: Rural	--	--	--
Urban	0.75 (0.000)	0.65 (0.002)	0.62 (0.000)
Camp	0.66 (0.000)	0.88 (0.486)	0.59 (0.000)

⁷ Separations are occasionally allowed, but the individuals can not remarry.

Age is much less of a determinant for divorced and widowed females than for married and never-married ones. This may suggest that the role a divorced or widowed female is expected to play in society does not go through much change as she ages. However, there are signs of this changing over time, with age playing a greater role in a female's labour force participation in the later years of the *al Aqsa Intifada* than in the pre- and even earlier years. This may be due to households' dire economic conditions which forced the divorced or widowed female out of her previous restricted role.

Locality has played an increasingly influential role for divorced and widowed females from urban and camp areas, with the odds of them participating in comparison to divorced and widowed females from the rural area decreasing over time. This may have to do with divorced and widowed females having access to family land to work on during economic hardships, while urban and camp-dwelling females do not.

5.2 Household Expenditure and Consumption Survey (PECS)-based model

The PECS data was utilised to investigate factors that are not available in the LFS. In order to be able to examine the effects of having children, married, widowed and divorced women were taken as one group and never-married women were treated separately in the logistic regression, the results of which are presented below in Table 8.

Age, in line with theory and the results from the LFS, increases the odds of a female's participation until her late 40s, and then the odds begin to decrease. This trend is particularly strong among never-married females, with a never-married female from the 35 to 50 age range being around 12 times more likely to participate in the labour force than a never-married female from the 15 to 24 age range. In the case of currently or previously-married females, the odds are only around 4 times higher. This is in line with the result below concerning the affect more children has on a woman's participation rate.

Table 8: Results for PECS

Variables	Married, widowed, divorced	Never-Married
Age		
Ref. Group: 15-24	--	--
25-34	2.38 (0.000)	8.93 (0.000)
35-50	3.68 (0.000)	11.92 (0.000)
51-65	2.58 (0.000)	7.20 (0.001)
Education		
Ref. Group: 0	--	--
1-12	0.79 (0.128)	4.42 (0.015)
13-18	4.63 (0.000)	68.44 (0.000)
Household's # of children under the age of 6		
# of Children	0.91 (0.007)	--
Household's main source of income		
Ref. Group: Subs. Farming	--	--
Household Business	0.34 (0.000)	0.27 (0.000)
Wages in WBGS	0.36 (0.000)	0.59 (0.051)
Wages in Israel	0.42 (0.000)	0.32 (0.007)
Cash Remittances	0.20 (0.000)	0.33 (0.008)
Assistance	0.39 (0.000)	0.12 (0.000)
Other	0.10 (0.000)	0.04 (0.000)
Refugee Status		
Ref. Group: Refugee	--	--
Non-refugee	1.27 (0.013)	1.27 (0.189)

Education, in line with economic theory and the LFS results, is a much stronger determinant of labour force participation for never-married females than it is for –married, widowed and divorced females. For example, in comparison to illiterate females, sometime-married females with 1 to 12 years of education are less likely to participate, while the odds of a never-married female with 1 to 12 years of education participating are over 4 times higher. When a never-married woman pursues higher education, the odds of her participating are 68 times higher than those of an illiterate woman. As with the age factor, this also may be due to the effect more children has on a married or once-married woman's participation rate. Additionally, as exemplified in the case studies, some women, despite their education level, find it difficult to return to the labour market after being out of it as result of having children.

Number of children. As expected, the odds of a once- or currently-married woman participating decrease as the number of children under the age of five in the household increases. While typically explained as a supply-side factor driven by the women's preference to choose leisure (caring for children as opposed to working) it is worth noting that there is also a social factor involved, which dictates norms of behaviour to a Palestinian child-bearing woman.

Main source of income. Women from households depending on subsistence farming for their main source of income are much more likely to be participating in the labour force than women with other main sources of income. One supply-side explanation may point to the general low level of income of subsistence farmers. However, this would not explain why the odds of women participating, for example, from households receiving social assistance are much lower. An alternative explanation could deal with a structural factor, acknowledging that subsistence farming allows for participation of all able family members, while other main sources of income do not. In other words, the ownership of land that can be cultivated plays a determining role.

Refugee status. The odds of a non-refugee woman participating are higher than those of a refugee woman. One structural explanation that was discussed above may be land ownership, since a large number of WBGS women are employed in agriculture, and in particular work on their own land. Since most refugee women live in refugee camps and therefore do not possess agricultural land, their participation opportunities are limited.

5.3 Case Studies

Structured interviews were conducted for a number of case studies to verify the impact of several factors, particularly those demand-side and cultural factors that cannot be evaluated through data from the LFS or PECS. The section below presents some of the findings from these case studies, and highlights the significance of the structure of the labour market as well as cultural factors as determinants to female labour force participation.

5.3.1 Women

The interviews with women reveal that the prime reason for which women joined the labour market is economic. However, women also noted the importance of developing their capabilities, utilising their education and/or

broadening their horizons as significant factors encouraging them to seek work. Women also claimed that the instability of the labour market for men, thus the higher uncertainty about the future, has been important in pushing them to join the labour market. In that sense, it is not just the need for immediate income, it is the perceived instability that pushes women to join the labour market.

As for women outside the labour market, the issue of patriarchy and stereotypical roles of women as carers or home-makers seems to be the dominant factor in keeping them from looking for work. The unavailability of 'suitable' types of employment - traditionally acceptable and respected by society - figured prominently for women outside the labour market. In addition to these cultural factors restricting women from participation, they also cited the low wage rates for women as another factor keeping them from involvement in the labour market. In other words, the vertical and horizontal segregation of women in the labour market is internalised within the women's economic decision. The fact that women have an inferior position in the labour market discourages those who are outside it from joining.

In terms of the bargaining process within the household for women who managed to join the labour market, a number of issues were suggested by women. Whenever there was a need to convince a husband or father, economic need was the most important argument in getting over this hurdle. However, the encouragement and support provided by the other women within the household, particularly the mother, was also an important factor in encouraging women to become economically active. Several women said that the fact that these older women did not have economic independence seems to have pushed them to encourage their daughters to escape that situation.

As for the impact of earning an income on women's bargaining power within the household, women confirmed that working does empower them. Although women spend their earned income totally on their families, they feel that the income they bring into the household enhances their bargaining power regarding the allocation of money within the household. This is the case even though involvement in the labour market is often doubling the efforts of women, as they still have to carry out domestic activities.

The impact of movement restrictions seems to have been significant on women. Those in rural areas quit employment in urban centres because of

such restrictions. The uncertainty involved in the journeys back and forth is detrimental to their families, to the extent they had to quit their work. However, for those outside the labour market, the transaction costs involved in commuting was an issue to consider in their decision not to join the labour market.

5.3.2 Employers

In order to further explore the importance of supply and demand-side factors, as well as cultural factors, in understanding female labour force participation, interviews with ten private sector employers were conducted.

The interviews showed that employers believe that there is a gender division of labour between men and women. They stated that there are certain jobs that women can do, and others they cannot, for physiological reasons. In other words, productivity levels are decided by physical and mental abilities of women, which are assumed to differ from those of men. Employers believed that women perform best in jobs that require repetition, limited physical activity and minimal challenge. In this respect, they are better workers in an assembly line mode of production.

In addition to this notion, which focuses on issues of innate abilities, there is also the issue of culture and accepting the exposure of women to certain professions. Employers noted that there are certain jobs which it is socially acceptable for women to join and others not. The latter category includes those with an element of exposure to the market, such as trading jobs or transport activities. However, employers are willing to countenance women working within offices, such as banks or large companies.

From the above it can be deduced that demand-side factors (in the private sector) exert a negative impact on women's participation. The preferences of employers are biased in favour of men, in terms of types of employment as well as pay. Accordingly, the reservation wage paid for women in certain sectors, such as transport, is zero. This leads to the fact that women have no chance to join these sectors.

6. Findings & Recommendations

This study used data from the LFS to analyse some of the determinants of female labour force participation in the WBGS from 1996 to 2006. It also used data from the 2004 PECS to analyse additional determinants that are based on information not captured by the LFS. Case studies were conducted in order to help explain some of the trends identified through the analysis of the LFS and PECS data. Female labour force determinants considered in this study include: age, education, marital status, locality, region, number of children, and a household's main source of income.

The analysis in this study was guided by commonly-accepted neoclassical theory, as well as by theory developed within the feminist and structuralist schools of thought. In our analysis of the results, we take into consideration women's potential preferences and constraints, household dynamics, and social, economic, and political circumstances.

We approached our analysis in a two-step fashion. The first step was to offer insight into how each determinant influences different women. The second step was to track this influence throughout the period studied. In our analysis, we identified two structural changes within female labour force participation. We attribute the first structural change to the Israeli violence and restrictions on mobility imposed during the *Al-Aqsa Intifada*. The drivers of the second structural break are less clear. One could be the lessening of the violence, allowing those previously fearing for their safety to venture out looking for work. Another driver could be the continued difficult economic situation, which could have forced those previously not allowed/willing to participate in the labour force to participate. And yet another driver could be the gradual creation of jobs that started taking place with the easing of violence. In order to incorporate the structural changes into our analysis, we separated the 11 years into three groups: the Oslo years (1996-2000), the early years of the *Intifada* (2001-2002), and the latter years of the *Intifada* (2003-2006).

On the whole, it can be said that individual, household, and general environmental factors have all contributed to shaping the Palestinian female's participation decisions during the period studied. With that said, it is clear that the turmoil in the political and economic environment had played a leading role. Similarly, social factors that discourage female

labour force participation within the household and on the demand-side are major contributors.

The following is a list of our study's main findings (F), organised according to the main category of factors they may be associated with. Findings, loosely divided by category (although with significant overlap), are followed by our recommendations (R) which are geared toward increasing female labour force participation in the WBGS.

Political environment:

- ✧ F: The problem of low female labour force participation in the WBGS may be rooted in mass displacement in 1948 and 1967, which transformed a large portion of the WBGS's labour supply from agrarian to non-agrarian, and from then on distorted the supply/demand dynamics of the non-agrarian labour market.
- ✧ F: Israeli violence and restrictions on mobility from the end of 2000 led to a structural change which lowered female labour force participation. Another structural change occurred in 2003, which led to the increase in female labour force participation.
- ✧ F: The impact of the *Intifada* was most heavily felt by Gazan women. The severity of Israeli measures had a detrimental impact on the Gazan economy, where it destroyed much of the private sector, particularly agriculture. Additionally, and particularly in Gaza, cultural factors that emphasise the man's role as the main breadwinner may have led to women withdrawing from the labour market in order not to compete with the subsequently greater number of unemployed men.
- ✧ R: Any effort to improve female labour force participation must include attempts to end the military occupation of WBGS by Israel and prevent future economic and political shocks.

Economic environment:

- ✧ F: The odds of participating are higher for non-educated and highly-educated females than for women who are semi-educated. We attribute this to the structure of the WBGS economy, which lacks a labour-intensive manufacturing sector and restricts employment opportunities for women to, on one hand, the agricultural sector, and, on the other, health care, education, and office work such as the financial services sectors.
- ✧ R: Promote the development of a labour-intensive manufacturing sector within WBGS.
- ✧ R: Improve access to credit for women to enable them to venture into other forms of work besides wage employment. Providing greater

access to credit could enhance the entrepreneurial spirit of women and encourage them to become economically active.

- ❖ F: Women from households depending on subsistence farming are much more likely to participate in the labour force than women depending on other main sources of income. This may be explained partly by the observation that such households are usually poorer than the rest of the population, but also by the observation that women depending on subsistence farming have access to agricultural land, which often guarantees employment even if the returns are marginal.
- ❖ F: Women from the Northern West Bank have the greatest odds of participating. We attribute this mainly to the strong agricultural sector in the Northern West Bank region, which acts as a relatively stable source of labour market outlet for women.
- ❖ R: Promote the development of WBGS's agricultural sector.
- ❖ F: The odds of younger never-married women participating are decreasing over time. Further analysis of this trend is needed in order to identify its main drivers.

Social environment:

- ❖ F: Employers often reinforce the patriarchal structure of Palestinian society in their employment decisions, validating women's perception of the existence of a gender bias within the labour market. Case studies of employers undertaken by this study suggest that employers are influenced by cultural norms in their employment decisions as well as profit maximisation.
- ❖ F: Women often perceive the labour market as unwelcoming due to vertical and horizontal segregation and low average female wages. The inferior position of women within the labour market is internalised within the women's decision to participate.
- ❖ R: Enact legislation that tackles the labour market's vertical and horizontal segregation, and enforce laws that protect women from labour market discrimination.
- ❖ R: Promote female participation in sectors where vocational skills are applicable, while encouraging girls and their families to pursue forms of vocational education or complete university degrees.
- ❖ R: Run awareness campaigns for employers on women's high level of education and the general benefits of female employment.
- ❖ F: Female labour force participation is negatively correlated with number of children.
- ❖ R: Develop a cost-sharing mechanism between the government and employers for covering maternity leave expenses. Female employment has become more expensive for employers since the endorsement of

the Labour Law in 2000. As is the case in other countries, this cost should be shared by society at large.

- ❖ R: Provide affordable nurseries for children to encourage women to join the labour market. This is particularly important in light of the high fertility rate and presence of young children at home, which represents a significant hindrance to the participation of women in the labour market.

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