Women's labor force participation in Spain: An analysis from dictatorship to democracy

Kristi Philips

University of Northern Iowa

Copyright © 2010 Kristi Philips

Follow this and additional works at: https://scholarworks.uni.edu/hpt

Part of the Labor History Commons

Let us know how access to this document benefits you

Recommended Citation

Philips, Kristi, "Women's labor force participation in Spain: An analysis from dictatorship to democracy" (2010). Honors Program Theses. 86.
https://scholarworks.uni.edu/hpt/86

This Open Access Honors Program Thesis is brought to you for free and open access by the University Honors Program at UNI ScholarWorks. It has been accepted for inclusion in Honors Program Theses by an authorized administrator of UNI ScholarWorks. For more information, please contact scholarworks@uni.edu.
WOMEN’S LABOR FORCE PARTICIPATION IN SPAIN:
AN ANALYSIS FROM DICTATORSHIP TO DEMOCRACY

Kristi Philips¹

ABSTRACT. In Spain, women’s labor force participation has drastically shifted in the decades since Francisco Franco’s dictatorship collapsed. Changes in government policy and evolving social attitudes have affected the treatment of women and their access to economic opportunities. Using The World Bank and OECD labor force statistics for Spain, this study compares Spain’s historical data with that of France, Germany and Portugal. My results suggest that the dictatorship inhibited women’s labor force participation in Spain in contrast to nearby countries over the same period.

¹University Honors Program, University of Northern Iowa, Cedar Falls, Iowa 50614-0129; kristip@uni.edu. A special thank you to my advisor, Dr. Shahina Amin, for her many suggestions along the way.
I. Introduction

In Spain, women’s labor force participation has drastically shifted over the past 30 years. This is evident in the more than 30 percentage point increase in women’s labor force participation over the period (The World Bank, 2009). This change corresponds with the termination of Francisco Franco’s dictatorship and the foundation of the present-day democracy. Spain’s women’s labor force participation rate was very low during the era of the dictatorship. Changes in legislation and evolving social attitudes have affected the treatment of women and their access to economic opportunities.

Women’s labor force participation is currently much higher than it was under Franco, but women still face challenges in entering the labor market. Slow-changing attitudes, overall low employment opportunities, and discouraging legal policies are a few of the greatest obstacles females face in entering Spain’s labor force today. Despite these barriers, women in Spain are now more fairly represented in the workforce and are better-equipped to seek economic independence. Although still lacking full equality, Spanish women have become less submissive to their male counterparts and have found it more plausible to enter the labor market and seek out employment.

While studying in Spain in the spring of 2009, I saw the present-day effects of Francisco Franco’s dictatorship on Spanish attitudes towards women and women’s participation in the labor market. This was nothing like the life I had grown up with in the United States. In Spain, women seemed much more objectified, their work devalued, and there appeared to be no sharing of household duties; women were responsible for all household chores and childcare. My host mother described to me how under Franco’s rule, women were granted very few rights. His ideas greatly affected social attitudes, too, and these ideas still have not been completely
erased from Spanish culture. She recounted the joy she felt on the day she divorced her chauvinistic and controlling husband; never had she felt such freedom.

In contrast, I grew up in an environment understanding men and women to be equal: both men and women worked full-time, household duties were shared, and decisions were a joint effort. Much of this is due to the impact of the women’s movement in the 1960’s. Social attitudes have become more open towards women as income earners over time and expanded women’s roles beyond household duties. US women’s labor force participation rates have increased from 48 percent in 1975 to nearly 60 percent in 2005 (The World Bank 2009). From my data analysis, the current 60 percent participation rate range is comparable worldwide. While women in the United States are generally well-accepted in the labor market, there may be less demand for women in the workforce in the United States as compared to economies abroad where average salaries are lower. The higher salary of an American man may be enough to support a family financially, which may decrease the need or desire of women to participate in the labor market. I have always felt safe, strong, and secure as a woman in the United States, but I came to understand that living in Spain in the 1970’s would have left me with a very different sense of self. Learning about such a radically different way of life made me curious as to what caused Spanish women to be viewed in this way and how this influenced the cultural differences I experienced while living abroad.

Section II presents a brief history of Spain’s political and economic background. Section III provides findings of the existing literature which relate to this study. Then, Section IV and Section V describe and analyze trends in women’s labor force statistics in the years since Franco’s rule. This data is used in Section VI where my own calculations are compiled to determine the impact of the dictatorship on women’s labor force participation in Spain and the
expansion of economic opportunities available to women\textsuperscript{2}. My results indicate that the change in women’s labor force participation rates in Spain are much greater than the changes in the rates of comparable countries. This leads to the conclusion that Franco’s dictatorship did suppress women’s labor force participation, and Spanish women have struggled to catch up since.

**II. History and Background**

The conservative nature of the Spanish culture dates back centuries. In 1478, the Spanish Inquisition began under King Ferdinand and Queen Isabella. The movement began as an attempt to unite the country by implementing one common religion, Christianity. By exterminating all non-Catholics from the region, the King and Queen believed they would bring common values to all citizens (Kamen 1999, 18).

In the coming decades Spain became a major international power as Spanish explorers, such as Christopher Columbus, discovered foreign territory in the New World. This meant an influx of precious metals and and new natural resources, adding to the wealth of Spain. More wealth allowed the Spanish government to fund additional expeditions, acquire more land, and thus more resources, and to enforce legislation, such as the practices of the Inquisition. The violent extermination persisted, and the Inquisition lasted for centuries as various leaders sought to implement and maintain a set of common values for all of Spain. In 1834 the Inquisition was finally abolished under the Spanish president, Francisco Martinez de la Rosa (Koeller 1999). Once a world power, Spain’s involvement in warfare over the next several centuries facilitated the breakdown of the power held by the Spanish economy.

\textsuperscript{2} Note: All data used in this research, as well as my own calculations, are compiled in charts and graphs following the text.
Among the lasting impacts of the gruesome conquest is the instillation of a strong sense of traditional Catholicism. The strength of religion in Spaniards’ daily lives is so great that it impacts attitudes and values country-wide, leaving the majority of citizens with ultra-conservative views. This paved the way for future political structures, such as the strict conservatism of Francisco Franco’s dictatorship.

In 1936, tension between polarized political views caused civil war to break out in Spain. Violence persisted until 1939 when the Nationalist group, led by Francisco Franco, emerged victorious. He immediately implemented a dictatorship which ruled until his death in 1975. Franco maintained an isolated dictatorship, keeping Spain highly sheltered. For many years the country saw little outside influence, culturally or economically. As a testament to Franco’s power and authority, citizens faced strict regulations and lacked the right to protest against the government. Mortimer (1988) notes that the Francoist regime established policies that were highly favorable to the Catholic Church. This included actions to ensure women were subordinate to men, valued only in a domestic role.

Society was, once again, bound to highly conservative standards. Because traditional Catholic values were historically engrained in the Spanish people, the main changes under Franco were the legal pressures to live by and the censorship which was implemented. Opposing views were oppressed, the media was entirely censored, and citizens faced social sanctions for breaking from the traditional family structure. Legislation made it difficult for women to secure employment, and since women were only valued in the domestic field, their workforce participation was frowned upon. Because a woman working outside the home indicated her husband’s inability to support his family, working women were seen as low-class. This, and other legislation, limited the rights of Spanish citizens.
Franco remained dictator of Spain until his death in 1975. At this time, Spain underwent a major transition to a Liberal democratic state known as “La Movida,” or “The Movement.” The country’s first elections were held shortly thereafter. The Spanish constitution was established in 1987; it has since been noted one of the most liberal constitutions in western Europe (Just Landed 2010).

The constitution established a democracy and granted powers to each of the country’s 17 autonomous regions. Each autonomy has its own president, government, administration, and supreme court (Just Landed 2010), and each has representatives in the national parliament. The national parliament is divided into the Congress of Deputies and the upper Senate. The country-wide presidential election is held every four years, although there is no term limit to a President’s time in office.

Corresponding with a drastic restructuring of the political system, personal values and social attitudes in Spain were revolutionized, too. Demonstrating the liberalization which has taken place since Franco’s death, Spain became the world’s first country to grant full marriage and adoption rights to homosexual couples. Divorce, contraception use, and abortion were strictly prohibited under Franco but were legalized in 1981 (Solsten 1988, 2). Regional traditions, along with the Basque and Catalan sub-languages were outlawed until recent decades. While once highly censored, Spain currently boasts blatant political critiques and erotic scenes in the media. The strict regulations which had been implemented to prevent competition with or resistance towards Spain’s central authority, have loosened.

“Machismo,” a strong sense of male-chauvinism, was highly dominant in social and political attitudes under Franco. Moore (2006) argues that the country’s legal system did not recognize rights for women. “Domestic violence was considered a means of disciplining wives rather than a criminal violation, and many jobs were closed to women” (Moore 2006, 3). Moral codes held
women to strict gender-based standards, limited women’s opportunities for professional careers, and only honored the role of women as wives and mothers. This left females trapped in the home and dependent on their male counterparts for economic support and survival. Although still present in many Spanish conservatives, the machismo attitude has declined in the years since the dictatorship ended.

Since the dictatorship dissolved in 1975, the Spanish view of women has transitioned, enabling them access to further economic advancement. As seen in labor force participation rate comparisons with nearby countries, Spanish women were greatly oppressed under Franco. Although women’s economic opportunities have dramatically expanded since the dictatorship, women in Spain still face many disadvantages. Despite these struggles, women are now more equally represented in the Spanish workforce and better-equipped to seek economic independence.

Most discriminatory laws which once restricted women have been eliminated, such as “Fuero del Trabajo,” implemented by Franco in 1938. This law essentially instructed employers to replace female employees with male workers and promoted women’s role in the home (Englander 2005, 47). The lifting of such legislation and a gradual transition in attitudes towards women have permitted an increase in female participation in the Spanish labor force, but Spain is still far from a state of pure gender equality. In 2005, women in Spain earned less than 72 percent of what men earned (OECD 2009). Although historical data is lacking, I anticipate that this wage gap has converged over time. The current wage gap may be more of a global problem than a Spain-specific issue; the wage gap in Spain is comparable to that of the United States. While opportunities for women have increased, there is still progress to be made in improving the economic and social conditions for Spanish women.

III. Literature Review
Women’s labor force participation rates in Spain have dramatically increased in the time since the dictatorship, even beyond the global trend of increasing women’s participation in recent decades. This trend has been linked to technological advances creating more opportunities for women to pursue work outside the house. However, women still face many disadvantages in finding and securing work. Structural barriers may pose difficulties for mothers to enter the labor market. Slow-changing attitudes in the treatment of women, overall low employment rates and opportunities for employment, and government policy discouraging women as income earners are a few of the greatest challenges females face in entering Spain’s labor force today.

Jaumotte (2005) finds that Spain’s labor force participation rate for prime-aged women increased by nearly 30 percentage points between 1981 and 2001. Consistent with this finding, Izquierdo (2006) further notes that the proportion of female workers in the Spanish labor force increased by seven percent between 1995 and 2002. It appears that great gains have been made in Spanish women’s labor force participation in recent history. This, in turn, has caused an influx in the Spanish economy. Complimenting Izquierdo’s findings, Rubery et al. (1996) suggest that changes in the female labor supply accounted for the majority of the change in the expansion of Spain’s economic activity since the fall of the dictatorship. Without women’s increasing participation rates the overall change in European employment rates from 1983 – 1992 would have been negative (Rubery et al. 1996, 12).

Nearly all countries saw increasing levels of women’s participation in the labor force from the 1970’s to the present; Cavalcanti and Tavares (2007) point out that some of this may be an externality of technological improvements. This may give some insight into women’s labor force participation increasing world-wide, however Spain’s data is an strong outlier in this trend. Most

---

3 Jaumotte (2005, 36) refers to prime-aged women as those ages 24-54.
European Union countries saw much smaller increases in women’s participation rates than did Spain (Jaumotte 2005, 36). To put this in a more global perspective, women’s labor force participation in Spain increased by 30 percentage points while rates for women in the United States increased by less than 10 percentage points (Jaumotte 2005, 36).

Cavalcanti and Tavares (2007) investigate the increase of women’s labor force participation in comparison to technological advances. It appears that much of the world-wide increase in women’s participation in the labor market is correlated with an increase in technology and a lower cost to having such time-saving gadgets in the household. When appliances are cheaper, a woman’s opportunity cost of staying home versus pursuing outside employment opportunities increases. Cavalcant and Tavares (2007) find that on average, countries that experienced large increases in female labor force participation from 1975 to 1999 also had large decreases in the relative price of home appliances. Time-saving technology and appliances facilitate labor market participation by reducing the time needed for housework (Cavalcant and Tavares 2007, 19). Because a disproportionate share of household work falls on women in traditional, Catholic-based societies, women’s labor force participation appears to increase in response to the decreased time needed for household work. Even taking technological advancement into account, comparisons indicate that the trends observed in Spain are not the norm.

While Cavalcant and Tavares look into the labor force participation of all women, Scharpf et al. (2000) take a closer look at mothers’ time allocation and the implications of motherhood on the decision to participate in the labor market. In Spain, women face structural disadvantages in finding employment, and Spanish culture continues to hold household duties of women as wives and mothers as highly obligatory. Like most countries, women with young children are less active in the labor force. In 2003, just 36 percent of Spanish women with children aged zero to 10 held a job, while 14 percent were merely part-time workers (Scharpf et al. 2000, 490).
Beyond the expectations of women to fulfill duties in the home, Spain typically demonstrates a low availability of part-time jobs (Scharpf et al. 2000, 490). This restricts the number of mothers able to take on such a position. Part-time work seems the most feasible way for mothers to participate in the labor force since children spend less than a full day in school. Such employment would permit a mother to supervise her children during the hours they spend in the home and would alleviate the stress of providing care when a child is sick or has extended educational breaks. With limited opportunities for part-time jobs, many mothers are left jobless.

Although women face difficulties in finding work, employment may be a struggle for the country as a whole. In 1998 the International Labour Organization ranked Spain as having both the highest “Long Term Unemployment Rate” and the highest “Total Unemployment Rate” (Ferrieri 1998, 4). It is worth mentioning, however, that Europe is typically categorized by the low labor force participation of men, too. Yet, in recent years Spain’s unemployment has remained particularly high, even among European countries. Spain has charted unemployment rates well above the average rate of the 30 member countries composing the European Union (EU). In recent months, the United States Bureau of Labor Statistics (BLS) recorded Spain’s unemployment rate to be as high as 18.1 percent (BLS 2009, Table 2). Estimates suggest that this lag will not recover in the near future, unemployment rate predictions soaring over 20 percent for the 2010 fiscal year (Consumer España 2009). Such rates provide more tangible evidence that Spain has fallen far from the position of a world power since the glory days of the 15th and 16th centuries.

Additionally, Spain’s work force faces long workdays. Stores are open from 8:00 am until 2:00 pm, at which time businesses close for a two-hour “siesta.” Employees use this as a lunch break and, if lucky enough to escape awaiting household duties, take a short rest. After siesta, employees return to work for a second shift, 4:00 pm to 9:00 pm. It is nearly impossible for
Spanish women to find daycare centers for such extensive hours (Jaumotte 2004, 10). Even if childcare were available late into the evening, the price for a service offered at inconvenient hours would be unbearably high.

Women’s labor force participation as a household’s second income-earner is also influenced by a given country’s tax structure. The idea behind this is that a higher tax rate effectively lowers one’s net earnings. Should a government implement a low tax on a household’s secondary worker, the household finds an increased incentive to having both the husband and wife to enter the workforce than had the government placed a high tax on household’s second worker.

Spain’s income tax system is found to be discouraging toward the employment of married women (Scharpf et al. 2000, 490). Under Spain’s joint taxation system, a married woman’s income tax rate may increase by up to eight percentage points over the rate she faced as a single woman. Alternatively, the United States’ system carries the same tax rate for the earnings of married couples as each would face under individual taxation. Higher taxes implicitly decrease a worker’s earnings and consequently lowers the incentive for married women to enter the Spanish workforce. This also creates a disincentive to remain in the workforce if the woman is already employed. Spain’s discouraging tax rates correspond with low levels of female employment and labor force participation. This becomes highly influential in a woman’s time allocation decision as she opts towards the relatively cheaper alternative of increased leisure, likely in the form of non-market work, over hours of paid market work.

4 The cited classification system used to evaluate a tax system’s influence on the overall effect of women’s LFP assumes a tax is “discouraging” if the gap between taxes paid by married and non-married women is 6% or more (Scharpf et al. 2000, 497).

5 Under a joint taxation system, a household’s income is pooled and taxed based on total household earnings. In contrast, a separate taxation system taxes earners on an individual basis, resulting in a value of total taxes paid (Jaumotte 2004, 6).
While conditions have improved, inequality between women and men still persists. “Women [in Spain] earned 22% less than men in 1995, [and] the difference between men and women has practically not varied since” (Izquierdo 2006, 22). In contrast, other countries world-wide have shown a decline in such inequalities over the reference period (Izquierdo 2006, 23). This has no apparent justification beyond differences in cultural values and attitudes towards women.

The structure of Spain’s economy may also affect the availability of women’s jobs now and into the future. The service industry is generally recognized as a female-dominated field. Spain’s market system has been observed to be far less service-based than other countries; in 1993 Spain had the lowest proportion of employment in the service sector out of all European countries at just 28.5 percent of total employment (Scharpf 2000, 481). In contrast, the US had the world’s highest proportion with 53.4 percent (Scharpf 2000, 481). With fewer service-sector positions available, it follows that fewer women are able to find employment or will take the time to seek out a position.

While existing literature acknowledges the advances of Spanish women in the labor market along with the difficulties they continue to face, no research connects this with the influence of Franco’s restrictive regime. My analysis and calculations tie the labor market trends of Spain with the country’s historical and political background. My findings indicate that the changes in women’s labor force participation rates in Spain are significantly greater than the general trends seen among the test countries of nearby France, Germany and Portugal. From this, I conclude that Francisco Franco’s dictatorship oppressed Spanish women’s labor force participation rates, leaving Spanish women still striving to catch up today.

**IV. Data**
This research uses labor market statistics from the Organisation for Economic Cooperation Development (OECD) and The World Bank. The OECD collects data for each of its 30 member countries and monitors trends and evolving patterns over time to help make policy recommendations to fight poverty and maintain economic growth and financial stability on a global level. The World Bank keeps tabs on development indicators of countries with a similar goal. Each organization collects data annually, but many statistics were not reported for Spain prior to 1975. In part, this indicates the isolation Spain was subject to under the dictatorship.

This study analyzes data points in five-year increments to more easily observe the overall trends from 1975 to 2005. While the data set is limited in the years before the dictatorship and during Franco’s rule, the post-dictatorship data is significant enough to see that there have been drastic changes in the years since Franco’s death. While the primary aim of this study is to examine women’s labor force participation rates, additional variables are examined to provide color on the full picture of Spain’s social changes (i.e. fertility rates) and labor market trends over the period. For comparison purposes, I examine and analyze the same data points for France, Germany and Portugal. These countries were selected for comparison based on their proximity to Spain and similarity in size, the primary difference being the government structure and transitional movement in Spain as the country became a democracy.

V. Analysis

Women’s Labor Force Participation

As seen in Table I, in 1975 Spanish women’s labor force participation rates (WLFPR’s) were extremely low, just 27.9 percent. Nearby countries showed rates in the upper 40 to upper 50 percent range. Although WLFPR’s in Spain increased dramatically over time, this has been a

---

6 Data for this research was obtained by these institutions as follows: OECD: Unemployment Rates by Gender, Total Fertility Rates, Earnings by Gender, Employment by Sector and Gender; The World Bank: Labor Force Participation Rates.
slow process. Even in 1995, fewer than half of all working-aged women in Spain were in the labor force. Nearby France, Germany, and Portugal showed participations higher than Spain. The rates for these three countries hovered around 10 percentage points more than Spain’s (The World Bank 2009). Spain is not the norm worldwide. US WLFPR’s were upwards of 70 percent in the same year (Scharpf 2000, 469). Even neighboring Portugal showed a 1995 WLFPR of 59.9 percent (The World Bank 2009).

In recent years Spain appears to be catching up with neighboring countries. However, trends observed in France, Germany, and Portugal from 1975 – 2005 show a great difference from those of Spain. Figure I provides a visual of these comparisons over time. Through the 1970s and 1980s, WLFP in Spain was particularly low, with a rate of 27.9 percent in 1975 (The World Bank 2009). Over the same period France and Germany showed less variation in WLFPR and much higher “lows” in the low 50 percentage points (The World Bank 2009).

In 1975, the year Franco’s dictatorship ended, WLFP in Spain lagged 29.6 percentage points behind France and 24.9 percentage points behind Germany (The World Bank 2009). Spain’s WLFP rates were even 18.6 percentage points behind bordering Portugal (The World Bank 2009). Despite such large gaps, there seems to be hope for the future; the inequality is narrowing. In 2005, Spain’s WLFPR was just 5.3 percentage points behind France, 8.2 percentage points behind Germany, and 1.3 percentage points behind Portugal (The World Bank 2009). This indicates that Spain’s data was dramatically more variable than that of other countries observed, lending to the idea that Spanish women’s employment opportunities were suppressed in the years during and directly proceeding Franco’s dictatorship.

\[7\] “Working-aged” women refers to those 24-54 years in age.

\[8\] Specific values are available in five-year increments in Table III as reported by The World Bank.
Although policy and social attitudes have changed in the time since the fall of Franco’s dictatorship, women still face difficulties in Spain’s economic sector. Reforms have and will continue to foster a greater level of gender equality and opportunities for women as time progresses. However, it is evident that male-chauvinism is still present, to some degree, in Spanish attitudes and practices.

Change takes time, and Spain shows no exception. It is impossible to transform the mindset of an entire country within a single generation. Yet it is important to note the progress that has been made since the fall of Franco’s dictatorship in 1975; women’s labor force participation and employment rates have increased dramatically, narrowing the gap between neighboring countries: France, Germany and Portugal.

Evidence indicates that Franco’s dictatorship suppressed women’s labor force participation in Spain. However, European rates of women’s labor force participation and employment are generally low, so while the rates may sound low in comparison to US standards, it is important to understand that current WLFP levels for women are comparable to nearby countries. The key to this analysis is understanding that what began as a huge difference in WLFP’s between Spain and nearby countries has narrowed significantly. This analysis holds a strong significance in terms of international trends in labor force participation and employment rates, political influence on a country’s economy, and gender equality from a global perspective. Further, such research is beneficial in developing a better understanding of how and why Spain’s economic and political trends played out as they did and may be influential in future policy decisions.

Table I also shows men’s labor force participation rates (MFLPR) between the four countries appear to be fairly comparable across time. WLFP’s are similar across decades between Portugal, Germany, and France, but this shows a drastic difference from the LFPR’s of women in Spain. In 1985 Spain had a WLFP of 34.5 percent while the MLFPR was 82 percent.
In the same year the WLFPR for France was 55.5 percent; Germany’s WLFPR was 53.2 percent. Although this is ten years after the termination of Franco’s dictatorship, it is evident that the impacts were long lasting as the country transitioned to a democratic state.

However, it is worth acknowledging that the differences in WLFPR’s have converged in more recent decades. These rates are still well below MLFPR’s, even in current years. However, the fact that Spain’s WLFPR was well below the WLFPR’s of comparable countries, and is still fighting to catch up, leads to the conclusion that there is more to the story of women’s labor force participation in Spain.

**Participation Ratio in Spain**

MLFPR’s in Spain fluctuated back and forth between the mid-eighty and high-seventy percentages from 1975 - 2005\(^9\). Over this period, WLFPR in Spain continually increased from 27.9 percent in 1975 to 58.6 percent in 2005. Figure II depicts the fluctuations between men’s and women’s rates within Spain over the period. I used this data to calculate a ratio of WLFPR to MLFPR. This indicates the percentage of women participating in the labor market as a fraction of the percentage of men participating in the labor market. If the calculated ratio were to equal one, this would indicate that the WLFPR was equal to MFLPR. As Table II indicates, the ratio was 0.324 in 1975, meaning that WLFPR was only 32.4% of MLFPR. The ratio increased dramatically, indicated in Figure III, showing that WLFPR's continue to converge towards MLFPR's over time as the country reaches greater gender equality. This ratio shows a dramatic increase from 32.4 percent in 1975 to present day. In 2005, the ratio was 0.719; WLFPR was almost 72% of MLFPR.

**Employment Sectors**

---

\(^9\) LFPR data is taken from The World Bank.
Internationally, industry continues to become more service-based. This restructuring of employment may be beneficial to women’s labor force participation, particularly in Spain. Service industries may discriminate favorably towards female workers “by job task and because the often lower-pay and more flexible contracts found particularly in private services favour women’s employment” (Rubery et al. 1999, 22). This could particularly increase the workforce participation of mothers of young children.

Table III shows employment by sector: agriculture, industry, and service. This is divided into the proportion of working women and proportion of working men employed in each sector. Women have become increasingly active in the service industry; in 1975, 60% of employed women worked in the service sector. In 2005, 84% of employed women worked in the service sector. While over half of employed men worked in the service sector in 2005, many more men are employed in industry and agriculture than the percentage women in these fields.

Over time, employment opportunities have shifted from agricultural to service-based professions. This is seen in Table III; in 1975, over 18 percent of women and over 19 percent of men were employed in agriculture. In 2005, less than four percent of women and under 7 percent of men were employed in the agriculture sector. Although participation in service positions has increased dramatically for both men and women, the percentage point increase for women’s participation in the sector increased much more than men’s. An increase in the availability of service-sector positions in Spain may have helped more women to enter the labor market, as they are traditionally more accepted in this less labor-intensive sector. Men’s employment has dominated the industry sector over the years, and women have become increasingly dominate in the service sector.\(^\text{10}\)

\(^\text{10}\) While there have been an increasing number of service sector positions available to women across time, at the time data was compiled for this study, there were no statistics available to indicate how many positions were available per sector across time.
Unemployment

Table IV compares the total unemployment rates for the four countries across decades. Spain’s 1985 unemployment rate of 17.8 percent was nearly double the 9.6 percent rate in France and Portugal’s 8.6 percent unemployment rate\(^\text{11}\). This is also considerably higher than France, Germany, and Portugal in 1995\(^\text{12}\). As the decades pass, the gap in unemployment rates between countries seems to be narrowing. In 2005, Spain, France, Germany, and Portugal all had unemployment rates within three percentage points of each other.

The women’s unemployment rate is greater than the men’s unemployment rate in France, Germany and Portugal too, but the difference between men’s and women’s unemployment rates in these countries are not nearly as great as the percentage point differences between men’s and women’s unemployment rates in Spain. Interestingly, despite the expansion in availability of service sector positions, women’s unemployment in Spain is consistently and considerably higher than the unemployment rate for men. This trend is particularly noticeable in Figure IV. Perhaps this can be attributed to a still-present stigma against women in the workplace.

Earnings

While the data on men’s versus women’s earnings in Spain are quite limited\(^\text{13}\), there is a great discrepancy in earnings between genders. Table V indicates the earnings of women and

\(^{11}\) Unemployment rates as taken from the OECD 2009 Fact Book, no data were reported for Germany during this year. Also, note that 1985 is used for this data set, as this is the earliest year for which unemployment rates were consistently reported across countries.

\(^{12}\) Unemployment rates, LFPR, and Earnings data can be found in Table IV, Table I, and Table V, respectively

\(^{13}\) 2004 and 2005 earnings data taken from Instituto Nacional de Estadistica; no additional information was available at the time data was compiled for this study.
men. Similar to the my calculation of the ratio of women’s to men’s participation rates, I have calculated the ratio of women’s earnings to men’s earnings for these years for Spain. The women’s to men’s earnings ratios for 2004 and 2005 are essentially consistent at 0.71. This number means that in these years, the average woman earned only 71 percent of the average man’s earnings in Spain\textsuperscript{14}. This ratio demonstrates that women earn significantly less than men.

However, this is not enough evidence to show that women’s earnings are at a stagnant level in comparison with their male counterparts. This is a variable I will continue to search for in future research, but earnings data divided by gender is limited. Based on the constantly increasing WLFPR to MLFPR ratio across time and the expanding opportunities available to women, it can be inferred that the female to male earnings ratio would have also increased over the time period.

Women’s Labor Force Participation and Fertility:

Table VI examines WLFPR and total fertility rates (TFR) for the four countries over the period. “[A] decrease in fertility rates both cause and result [in] the increase in female labor supply” (Cavalcanti and Tavares 2007, 3). While Spain started 1975 with a significantly higher TFR than France, Germany, and Portugal, all four countries TFR’s decreased over time, Spain with the largest decrease. Figure V depicts the fluctuation between the four countries over time. Spain’s 1975 TFR showed was an average of 2.79 children born per woman (World Bank 2009). Yet, in decades since, this number has dropped as low as 1.16 (World Bank 2009). One possible explanation for this trend is that women have become more able to enter the labor market, drawing them away from their domestic role and decreasing the expectations and pressures for them to reproduce. Alternatively, perhaps as birth control has become more accepted and more

\textsuperscript{14} This is comparable to the wage gap observed in the US, which is perhaps an indication of a more-global problem.
readily available, women find themselves with fewer children and thus are more available to pursue employment outside the home. Under either assumption, Spain’s TFR has dropped so significantly that the country is now well below the 2.1 replacement fertility rate required to maintain a constant population level over time.

WLFPR’s between 1975 - 2005 were very comparable between France and Germany, increasing over the period. Portugal’s rates were slightly behind those of the two previously mentioned countries. However, while WLFPR’s in France and Germany started in the mid 50’s in 1975, the WLFPR in Spain was 27.9 percent in the same year. Although the gap between countries has narrowed over time, WLFPR’s in all four countries were in within 8.2 percentage points in 2005. The gap between Spain and other countries has converged from over 20 percentage points in 1975 to just 8 percentage points in 2007. This convergence indicates that additional factors were present in Spain’s economy and social attitudes in the years following the dictatorship, affecting WLFPR’s for years to come.

It is particularly notable that in 1975, Spain’s WLFPR was just 27.9 percent, while France, Germany, and Portugal had WLFPR’s of 57.5, 52.8, and 46.5, respectively. This is a key indicator that there were factors deterring women from entering the labor force in Spain that were not present (or not nearly as strong) in nearby countries at the time.

A reasonable explanation would be a difference in the social roles of women and the support, or lack-thereof, of their participation in the labor market on behalf of the given country’s legislation. The differences in the rates for France, Germany and Portugal during this period are not near as great as what is seen in comparing Spain with any of these control countries.

TFR also decreased much more over the period in Spain than it did in France, Germany, or Portugal. This implies that, as time passed, restrictive legislation implemented under Franco
relaxed, and social attitudes towards women began to change. Birth control is no longer prohibited in Spain, and the responsibilities of women have shifted over time. Women have transformed from solely domestic beings to potential labor market participants. As expected, greater participation in the labor market is strongly correlated with a decrease in the average number of children a woman has in her lifetime.

VI. Difference-in-Differences Calculations

Because Spain was not an OECD member country until the late 1970’s, data is limited in the years before and during the dictatorship in Spain. However, the post-dictatorship data is significant enough to show that there have been drastic changes in the time since Franco’s death. Therefore, I compare the earliest data consistently available (1975 for most variables) with more recent data (2005) to observe the changes in the years since the termination of the dictatorship.

Methodology

My research uses difference-in-differences (DID) calculations as referenced by Borjas (2010) to best compare variables in two groups (two countries per examination) and how these changed over time (data from the end of the dictatorship and labor statistics several decades later). The idea is that one country is a control group (i.e., France, Germany, or Portugal), whose data fluctuations over a given period are compared with those of the treatment country, Spain, before and after the change takes place. “This removes biases in second period comparisons between the treatment and control group that could be the result from permanent

---

15 However, to compare DID’s, I have performed additional calculations to analyze France vs. Germany, neither of which is classified as a true “control” nor “treatment” group.
differences between those groups” (Imbens et. al. 2007, 1). The permanent difference between the groups is assumed to be the 1975 change in Spain’s government structure.

The calculation can be explained in a few simple steps. Two years have been designated as “before” and “after” points. The value of the variable after the dictatorship ended is subtracted from the value of the variable “before” the dictatorship ended. Next, data is computed covering the same years in a control country in a similar fashion. Finally, to find the DID, the value calculated for the difference in the control group between the two years selected is subtracted from the value calculated for the test group between the two years. This value is the DID for the given variable between the two countries. This value indicates how many percentage points more a variable increased for one country than another country over a given period. For example, the DID calculation for WLFPR’s between Spain and France shows a DID of 24.3; this means that Spain’s WLRPR increased by 24.3 percentage points more than the increase in France’s WLFPR over the period.

This calculation essentially isolates the impact of the dictatorship on women’s labor force statistics in Spain over the period (1975 - 2005). Because the four countries used are of comparable size and in a similar region, one could expect that they would follow comparable labor force trends, all else equal. The key difference between the countries selected for this study is the transition in government structure as seen in Spain. Therefore, the Spanish dictatorship likely accounts for a large portion of the calculated differences. Yet, it is impractical to assume that this is the only factor causing such differences. Each country will naturally face its own economic fluctuations and social influences over time. Additionally, as previously discussed, technological advancements have accounted for a portion of the increase in WLFPR’s

---

16 Due to data availability, 1975 statistics are used as the “before” year, although this is the same year in which the dictatorship ended. The results could be strengthened by using earlier data (i.e. 1970) if it were available. As is, 1975 is the best alternative in the analysis of WLFPR trends that surfaced during the era due to the change in government structure and expanding opportunities available to women in Spain.
observed in all developed countries over the last several decades (Cavalcanti and Tavares 2007, 4). Nevertheless, the extreme variation in Spain’s rates indicate the presence of additional factors discouraging women’s participation in the labor market which were not present in other countries. Thus, while I expect that much of the DID values are attributed to the impact of the dictatorship, it is unfair to assume that the calculations are derived entirely from the impact of Franco. Here, we can only draw a strong correlation between the two ideas.

Calculations

Using The World Bank data, my calculations compare statistics from Spain, France, Germany, and Portugal in the year 1975 versus the year 2005. This is due to the lack of consistent data reported pre-1975, despite the fact that the dictatorship ended in the same year. However, it is likely that many of the legal and social disadvantages women faced under the dictatorship still heavily impacted them within this period. Again, it is unrealistic to believe that the mindset of an entire country could open so quickly. This is evident in the fact that very drastic changes can still be observed in Spain’s statistics from 1975 to 2005. Further, if advances for women had already begun prior to 1975, this would mean that the extent to which my results indicate women’s oppression under Franco was actually even greater than estimated in this study.

Table VII shows my DID calculations for each of the previously mentioned statistics. This analysis shows that women in Spain started out at much lower levels in all labor market statistics (with the exception of employment rates) and, therefore, saw a much more drastic change over the past few decades. This section addresses the key points observed in my DID calculations, including women’s and men’s unemployment rates, women’s and men’s labor force participation, and Total Fertility Rates.
Although unemployment rates decreased for both men and women\textsuperscript{17} in both Spain and France over the period, the DID calculation shows that this changed at a relatively comparable rate for both men and women, 9.9 and 7.1, respectively. A 7.1 DID rate for the women’s unemployment rate means that the decrease in the unemployment rate between 1985\textsuperscript{18} and 2005 was 7.1 percentage points greater in Spain than the percentage point decrease in the female unemployment rate seen in France over the same period. This is likely related with the fact that women’s unemployment was relatively high to begin with in Spain. Similarly, the DID calculation comparing Spain’s and Portugal’s female unemployment rates for the period indicates that unemployment in Spain decreased by a rate of 5.3 percentage points more than Portugal (where is this indicated). Again, the women’s unemployment rate in Spain was much greater than the women’s unemployment rate in Portugal in the “before” year, likely related to this significant change.

Because it is reasonable to assume that Spain and France, as well as Spain and Portugal, are similar in other respects, this DID indicates that external factors, presumably the government, may have led the Spanish rates to shift more than the rates for France or Portugal. This hypothesis is further supported by the fact that the unemployment rate for women in Spain was drastically below the rates of both France and Portugal in 1985 and the gap has narrowed since; as the dictatorial legislation phased out, women’s unemployment in Spain began to fall.\textsuperscript{19} Since no data is available for Germany over this time frame, this is a weak variable to use for comparison, thus it is ignored.

It is likely that women’s employment rates increased across the four countries as society advanced and women became more accepted in the workplace, or more typically female

\textsuperscript{17} This computation only examines women’s unemployment due to the focus of this study.

\textsuperscript{18} 1985 was the earliest year for which unemployment data was available per the OECD. In addition, data for Germany was not reported until later years.

\textsuperscript{19} As women’s unemployment fell, this implicitly means that women’s employment rose.
(primarily service sector) jobs opened up. However, in comparing the DID’s, Spain’s changes over the period were, again, much greater than the changes observed in France, Germany, or Portugal. This indicates that, while Spain’s women’s employment rates are still behind those of France and Germany, the gap has narrowed as opportunities have opened for women in Spain.

Although the DID’s were smaller for men’s employment rates than for women’s, Spain showed a much greater DID in comparison to France, Germany, and Portugal than did France in comparison with Germany. However, in this case, this is due to changes in men’s employment rates in France and Germany, not a variation in Spain’s rates. Spanish men’s employment showed little fluctuation in comparing the 1985 and 2005 rates.

The decision of more women to participate in the labor force may have crowded out men’s opportunities, providing insight into the increase of women’s employment rates while men’s employment rates saw a slight decrease. Yet, as noted, Europe is categorized by high unemployment rates in general, indicating low employment rates, particularly in recent decades. Evidently, Spain exemplifies this trend more-so than other European countries.

Perhaps the differences between Spain and France are consistently greater than the differences between Spain and Germany may be attributed to a division in Germany lasting decades beyond World War II. ”The division of Germany had major implications for equality between men and women...” (Rosenfeld et. al., 2004 104). This could hinder Germany’s labor market trends in keeping up with the rates in France. This outside factor may have impacted the variation in Germany’s DID’s in addition to the change being tested for in the treatment group. The smaller DID’s observed in comparing Spain with Portugal may be related to the fact that the two countries share a border. It would not be surprising, therefore, to find a spill-over effect from Spain’s legal policies and social structure. Also, in recent decades the world has seen a transition towards a more service-based economy, expanding the number of typically-female jobs available for women to pursue (Rosenfeld et. al., 2004, 118).
WLFPR’s showed a dramatic increase in Spain over the period and grew closer to the rates of neighboring countries. These numbers also increased for France, Germany, and Portugal during this time but by a much smaller amount than for Spain. Using the residual percentages of women’s unemployment rates, we see that women’s employment rates show a greater DID in all country comparisons than do men’s. This means that women’s employment rates were much more variable than men’s over the period, particularly notable in Spain. Further, women’s employment rates have increased in all countries while men’s employment rates slightly decreased in each country from 1975 to 2005. This is likely attributable to the expanding opportunities available in the service sector across time.

The DID’s for TFR between the countries indicate that the fertility rate of Spain decreased by more than it did in the control countries. However, this is a difficult correlation to define. The best conclusion to draw is that there is a perpetual link between WLFP and TFR; an increase in a woman’s participation in the labor market causes her to have fewer children, and having fewer children allows women to more easily participate in the labor market.

**VII. Conclusion**

This research used OECD data to investigate women’s labor force participation rates in Spain as the country underwent a drastic political restructuring and analyzed labor market trends as an effect of the social and political influences of Francisco Franco’s dictatorship in the 1960’s and 1970’s. My analysis and calculations lead to the conclusion that Franco’s dictatorship suppressed women’s participation in the Spanish labor market. Since the dictatorship dissolved in 1975 the Spanish view of women has transitioned from ultra-conservative and intolerant to a more-open and less discriminatory stand. Consequently, this has enabled Spanish women
access to further economic advancement. Women have increased labor force participation and employment rates and are now better-equipped to seek economic independence.

This provides potential policy implications for the future of Spain or for other countries that are transitioning, or will transition, to a democracy and offer more opportunities for women to participate in the labor market. By modifying social expectations for women and eliminating legislation which restricts women’s participation in the labor force, the country can entice a greater WLFP. This includes laws such as Franco’s “Fuero del Trabajo” and an income tax structure which discourages women’s labor force participation. An expanding labor market would expand the economy for Spain as a whole, making the country more financially and economically stable.

As discussed, Spain has improved employment opportunities for women, fostered a greater level of gender equality, and increased economic freedoms for women in the years since the dictatorship. Internationally, women’s labor force participation rates have increased across this time frame, but Spain’s evolving social attitudes have played a huge role in expanding such opportunities for females in the Spanish labor market.

Change, particularly a complete restructuring of political, social, and economic ideas, must be implemented over generations, not overnight. While Franco’s dictatorship did oppress women’s labor force participation and women are still catching up today, gradual changes in policies and belief systems are leading the Spain towards greater gender equality and consistency with nearby European countries.
Works Cited


### Table I - Labor Force Participation Rates: Four Countries

<table>
<thead>
<tr>
<th>Year</th>
<th>LFPR</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Spain</td>
<td>France</td>
<td>Germany</td>
<td>Portugal</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Women</td>
<td>Men</td>
<td>Women</td>
<td>Men</td>
<td>Women</td>
<td>Men</td>
<td>Women</td>
</tr>
<tr>
<td>1975</td>
<td>27.9</td>
<td>86.1</td>
<td>57.5</td>
<td>81.1</td>
<td>52.8</td>
<td>82.7</td>
<td>46.5</td>
</tr>
<tr>
<td>1985</td>
<td>34.5</td>
<td>82</td>
<td>55.5</td>
<td>77.4</td>
<td>53.2</td>
<td>82.4</td>
<td>56.4</td>
</tr>
<tr>
<td>1995</td>
<td>46.6</td>
<td>77</td>
<td>59.8</td>
<td>73.9</td>
<td>61.3</td>
<td>79.9</td>
<td>60</td>
</tr>
<tr>
<td>2005</td>
<td>58.6</td>
<td>81.5</td>
<td>63.9</td>
<td>74.7</td>
<td>66.8</td>
<td>80.8</td>
<td>67.8</td>
</tr>
</tbody>
</table>


### Table II - Labor Force Participation Rates and Ratios of LFPR’s: Spain

<table>
<thead>
<tr>
<th>Year</th>
<th>LFPR</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Spain</td>
<td>Women</td>
<td>Men</td>
<td>Ratio</td>
</tr>
<tr>
<td>1975</td>
<td>27.9</td>
<td>86.1</td>
<td>0.324</td>
<td></td>
</tr>
<tr>
<td>1980</td>
<td>33.1</td>
<td>85.5</td>
<td>0.387</td>
<td></td>
</tr>
<tr>
<td>1985</td>
<td>34.5</td>
<td>82</td>
<td>0.420</td>
<td></td>
</tr>
<tr>
<td>1990</td>
<td>41.9</td>
<td>80.3</td>
<td>0.521</td>
<td></td>
</tr>
<tr>
<td>1995</td>
<td>46.6</td>
<td>77</td>
<td>0.605</td>
<td></td>
</tr>
<tr>
<td>2000</td>
<td>52.3</td>
<td>79.5</td>
<td>0.657</td>
<td></td>
</tr>
<tr>
<td>2005</td>
<td>58.6</td>
<td>81.5</td>
<td>0.719</td>
<td></td>
</tr>
</tbody>
</table>

Sources: Rates were compiled from The World Bank 2009. I used this data to make my own ratio calculations.
Table III - Percentage of Employed per Gender by Sector: Spain

<table>
<thead>
<tr>
<th>Year</th>
<th>Agriculture</th>
<th>Industry</th>
<th>Services</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Women</td>
<td>Men</td>
<td>Women</td>
</tr>
<tr>
<td>1975</td>
<td>18.4</td>
<td>19.6</td>
<td>21.3</td>
</tr>
<tr>
<td>1985</td>
<td>16.5</td>
<td>19.1</td>
<td>16.8</td>
</tr>
<tr>
<td>1990</td>
<td>10.2</td>
<td>12.6</td>
<td>17.3</td>
</tr>
<tr>
<td>1995</td>
<td>7</td>
<td>9.8</td>
<td>14</td>
</tr>
<tr>
<td>2000</td>
<td>4.7</td>
<td>7.7</td>
<td>14.5</td>
</tr>
<tr>
<td>2005</td>
<td>3.6</td>
<td>6.4</td>
<td>12.4</td>
</tr>
</tbody>
</table>

Source: OECD 2009.

Table IV - Unemployment Rates

<table>
<thead>
<tr>
<th>Year</th>
<th>% Unemployment Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Spain</td>
</tr>
<tr>
<td></td>
<td>Total</td>
</tr>
<tr>
<td>1985</td>
<td>17.8</td>
</tr>
<tr>
<td>1995</td>
<td>14.7</td>
</tr>
<tr>
<td>2005</td>
<td>9.2</td>
</tr>
</tbody>
</table>

Source: OECD 2009.
### Table V - Earnings by Gender: Spain

<table>
<thead>
<tr>
<th>Year</th>
<th>Spain</th>
<th>Women</th>
<th>Men</th>
<th>Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004</td>
<td>Spain</td>
<td>14,964</td>
<td>20,850</td>
<td>0.717</td>
</tr>
<tr>
<td>2005</td>
<td>Spain</td>
<td>15,426</td>
<td>21,437</td>
<td>0.719</td>
</tr>
</tbody>
</table>

Source: Earnings by Gender data taken from OECD (2009). These statistics are used to make my own ratio calculations.

### Table VI - Total Fertility Rates and Women’s Labor Force Participation Rates

<table>
<thead>
<tr>
<th>Year</th>
<th>Spain</th>
<th>France</th>
<th>Germany</th>
<th>Portugal</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>TFR</td>
<td>WLFPR</td>
<td>TFR</td>
<td>WLFPR</td>
</tr>
<tr>
<td>1975</td>
<td>2.79</td>
<td>27.9</td>
<td>1.93</td>
<td>57.5</td>
</tr>
<tr>
<td>1980</td>
<td>2.22</td>
<td>33.1</td>
<td>1.95</td>
<td>55.2</td>
</tr>
<tr>
<td>1985</td>
<td>1.64</td>
<td>43.5</td>
<td>1.81</td>
<td>55.5</td>
</tr>
<tr>
<td>1990</td>
<td>1.36</td>
<td>41.9</td>
<td>1.78</td>
<td>57</td>
</tr>
<tr>
<td>1995</td>
<td>1.17</td>
<td>46.6</td>
<td>1.71</td>
<td>59.8</td>
</tr>
<tr>
<td>2000</td>
<td>1.23</td>
<td>52.3</td>
<td>1.87</td>
<td>61.6</td>
</tr>
<tr>
<td>2005</td>
<td>1.35</td>
<td>58.6</td>
<td>1.92</td>
<td>63.9</td>
</tr>
</tbody>
</table>

Table VII - Difference-in-Differences Calculations: The Effect of the Dictatorship in Spain

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Spain</td>
<td>20.8</td>
<td>12.2</td>
<td>Spain</td>
<td>16.5</td>
<td>7.1</td>
</tr>
<tr>
<td>France</td>
<td>11.7</td>
<td>10.2</td>
<td>France</td>
<td>7.9</td>
<td>8.4</td>
</tr>
<tr>
<td>Difference-in-Differences</td>
<td>-7.1</td>
<td></td>
<td>Difference-in-Differences</td>
<td>-9.9</td>
<td></td>
</tr>
<tr>
<td>Spain</td>
<td>28.5</td>
<td>50.9</td>
<td>Spain</td>
<td>83.8</td>
<td>76.4</td>
</tr>
<tr>
<td>France</td>
<td>50</td>
<td>58</td>
<td>France</td>
<td>80.3</td>
<td>68.8</td>
</tr>
<tr>
<td>Difference-in-Differences</td>
<td>23.9</td>
<td></td>
<td>Difference-in-Differences</td>
<td>4.3</td>
<td></td>
</tr>
<tr>
<td>Spain</td>
<td>28.5</td>
<td>50.9</td>
<td>Spain</td>
<td>83.8</td>
<td>76.4</td>
</tr>
<tr>
<td>Germany</td>
<td>49.6</td>
<td>59.6</td>
<td>Germany</td>
<td>82.2</td>
<td>71.4</td>
</tr>
<tr>
<td>Difference-in-Differences</td>
<td>12.4</td>
<td></td>
<td>Difference-in-Differences</td>
<td>3.4</td>
<td></td>
</tr>
<tr>
<td>France</td>
<td>50</td>
<td>58</td>
<td>France</td>
<td>80.3</td>
<td>68.8</td>
</tr>
<tr>
<td>Germany</td>
<td>49.6</td>
<td>59.6</td>
<td>Germany</td>
<td>82.2</td>
<td>71.4</td>
</tr>
<tr>
<td>Difference-in-Differences</td>
<td>-2</td>
<td></td>
<td>Difference-in-Differences</td>
<td>-0.9</td>
<td></td>
</tr>
<tr>
<td>Spain</td>
<td>27.9</td>
<td>58.6</td>
<td>Spain</td>
<td>27.9</td>
<td>58.6</td>
</tr>
<tr>
<td>France</td>
<td>57.5</td>
<td>63.9</td>
<td>Portugal</td>
<td>46.5</td>
<td>59.9</td>
</tr>
<tr>
<td>Difference-in-Differences</td>
<td>24.3</td>
<td></td>
<td>Difference-in-Differences</td>
<td>17.3</td>
<td></td>
</tr>
<tr>
<td>Spain</td>
<td>27.9</td>
<td>58.6</td>
<td>France</td>
<td>57.5</td>
<td>63.9</td>
</tr>
<tr>
<td>Germany</td>
<td>52.8</td>
<td>66.8</td>
<td>Germany</td>
<td>52.8</td>
<td>66.8</td>
</tr>
<tr>
<td>Difference-in-Differences</td>
<td>16.7</td>
<td></td>
<td>Difference-in-Differences</td>
<td>-7.6</td>
<td></td>
</tr>
<tr>
<td>Spain</td>
<td>2.22</td>
<td>1.35</td>
<td>Spain</td>
<td>2.22</td>
<td>1.35</td>
</tr>
<tr>
<td>France</td>
<td>1.96</td>
<td>1.92</td>
<td>Portugal</td>
<td>2.52</td>
<td>1.40</td>
</tr>
<tr>
<td>Difference-in-Differences</td>
<td>-0.84</td>
<td></td>
<td>Difference-in-Differences</td>
<td>0.25</td>
<td></td>
</tr>
<tr>
<td>Spain</td>
<td>2.22</td>
<td>1.35</td>
<td>France</td>
<td>1.95</td>
<td>1.92</td>
</tr>
<tr>
<td>Germany</td>
<td>1.56</td>
<td>1.34</td>
<td>Germany</td>
<td>1.56</td>
<td>1.34</td>
</tr>
<tr>
<td>Difference-in-Differences</td>
<td>-0.65</td>
<td></td>
<td>Difference-in-Differences</td>
<td>0.19</td>
<td></td>
</tr>
</tbody>
</table>

Note: Table VII compares 1975 vs. 2005 data for all variables except for unemployment rates (using the earliest available data, 1985). 1975 is the earliest year for which consistent data is reported for each country in all variables. Also, unemployment rates for Germany were not available for this time, so this calculation has been ignored due to insufficient data.
Figure I - Women’s Labor Force Participation

This figure was compiled using The World Bank (2009) data.

Figure II - Labor Force Participation: Spain

This figure was compiled using The World Bank (2009) data.
Figure III - Women’s to Men’s Labor Force Participation Ratios: Spain

This figure is based on my personal calculations using The World Bank (2009) data.

Figure IV - Unemployment Rate: Spain

This figure was compiled using OECD (2009) data.
Figure V - Total Fertility Rate

This figure was compiled using OECD (2009) data.
Appendix - Terms Defined

Because this study uses various technical and field-specific terms, the following list has been compiled to specify how each is defined:

**Agriculture** - The sector of an economy that includes crop production, animal husbandry, hunting, fishing, and forestry (World Book, 2001).

**Difference-In-Differences** - A technique used to measure the effect of a treatment on a group over a given period in time. It is used to measure the change induced by a particular treatment or event (Borjas 2010).

**Female (Women’s) Labor Force Participation** - Female labor force activity (as a percentage of the female population), percent of female population ages 15 to 64 (World Book, 2001).

**Industry** - The sector of an economy that includes mining, construction, manufacturing, electricity, gas, and water (World Book, 2001).

**Labor Force** - All economically active individuals in a country between 15 and 64. Includes all employed persons, the unemployed, and members of the armed services; excludes students and unpaid caregivers such as homemakers (World Bank, 2001).

**Male (Men's) Labor Force Participation** - Male labor force activity (as a percentage of the male population), percent of male population ages 15 to 64 (World Book, 2001).

**Replacement Fertility Rate** - The fertility rate needed to ensure that a population remains stable as each set of parents is replaced by its offspring (Science Dictionary 2010).

**Services** - Intangible goods that are often produced and consumed at the same time. An example is education: students consume a lesson- an educational service- at the same time a
teacher produces it. The service sector of the economy includes hotels, restaurants, and wholesale and retail trade; transport, storage, and communications; financing, insurance, real estate, and business services; community and social services (such as education and health care); and personal services (World Bank 2001).

**Total fertility rate** - The average number of children a woman will have during her lifetime, by country or region (World Bank 2001).

**Unemployment Rate** - Percentage of labor force which is unemployed. One is classified as unemployed if they do not have a job, have actively looked for work in the prior 4 weeks, and are currently available for work (BLS 2009).