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**The Effects of International Trade on Gender Inequality:
Women Carpet Weavers of Iran**

by

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ABSTRACT

The process of economic globalization has winners and losers. Iran's carpet industry provides a good illustration of the adverse side of this process. As the production costs of its rivals have fallen, surging international trade has reduced the market share of Iran's labor-intensive products, especially Persian carpets.

This paper reports the findings of an informal survey of carpet weavers conducted in and around the Iranian city of Kashan, showing how harsh international competition has reduced the weavers' real wages and restructured the labor force of the industry in Iran. Middle-income families have left the industry, and poor Afghan immigrant householders and their children are increasingly taking the place of Iranian weavers. Furthermore, weaving is consistent with the subordinate position of women carpet weavers within the household; as a form of employment, it has hardly affected the social status quo.

Keywords: International Trade; Gender Inequality; Iran; Race to the Bottom; Hand Woven Carpet

JEL Classifications: F14; F16; J16; J31; J41

1. INTRODUCTION

Globalization offers extensive opportunities for worldwide development, but it is not progressing evenly. Some countries that have been able to integrate are seeing faster growth and reduced poverty. By contrast, there are also many developing countries that have not been able to gain from open and liberalized international trade; the vast majority of the workforce faces economic stagnation and a declining standard of living.

This paper sets out to investigate the effects of surging international trade on gender inequality in Iran by investigating the conditions of its carpet weavers. In order to provide a relatively clear picture of the hand-woven industry in Iran, in addition to the use of all available statistics and information, the author has conducted interviews in selected sites with 96 carpet weavers in Kashan, a city famous for its hand-woven carpets worldwide.

Section 2 reviews the literature about globalization and gender inequality, especially in labor-intensive export sectors where women are mainly concentrated and discusses how international competition has led to falling real wages, especially in developing countries. Section 3 examines Iran's foreign trade composition to show the effects of globalization on its labor-intensive exports. In Section 4, changes in Iran's share of the international carpet market are studied to find out the effects of declining exports on changes of labor force structure in the hand-woven carpet industry. Various parts of Section 5 examine the age, gender, education, and income of weavers, information obtained from the author's survey. Section 6 looks at the position of female carpet weavers within households. The final section, Section 7, contains the conclusion of this study.

2. THE IMPACT OF GLOBALIZATION ON GENDER INEQUALITIES

Competition between nations over investment and export markets leads to the progressive dismantling of regulatory standards, also described as the "race to the bottom." This process implies that states compete with each other, each trying to underbid the others in lowering production costs, real wages, and taxes to make their economies more attractive to outside commercial interests. This process would hurt all nations except the one that undercut all others (Tonelson 2002). Some believe,

however, that the race to the bottom can help ameliorate poverty through trading-off employment and growth with labor standards. Yet, in general, the benefits of globalization in accordance with this competitive logic have not trickled down to those who make the products. The race to the bottom works to undermine the ability of governments to enforce labor standards, such as workers' compensation and working conditions (Rodric 1999), and the only winner will be the country that defines the bottom. Therefore, globalization has been associated with declining labor standards in most countries, especially in developing economies. Indeed, many governments ignore the violation of labor laws in order to persuade investment and to promote exports (Stiglitz 2002; Standing 1999).

Economic reforms of the early 1980s aimed at promoting growth, exports, and employment through privatization, but efficiency gains were not sufficiently successful in many oil exporting countries, as labor costs in these countries were generally higher than many newly industrializing countries, especially India and China. Intensified competition among developing countries for capturing the markets of labor-intensive exports led to loss of employment in some, especially for women, depending on the sectoral reallocation of work. Loss of employment as a result of import competition has been mainly among small-scale farmers and low-skilled workers (where the female workforce is concentrated), so women living in poverty have suffered disproportionately in some countries, though in some others they have made inroads into paid work. The impact on the poor has been even greater as safety nets have grown thinner and remained gender biased (Winters 1999).

The increase in women's share of paid employment has taken place at a time when the power of workers generally has eroded, owing to increased capital mobility and greater flexibility due to technological innovation, as well as labor market deregulation caused by the need to stay competitive. Although trade expansion may give women more advantages in terms of employment, their "comparative advantage" as workers often lies in their lower wages. Women are crowded into a narrow range of sectors that produce standardized commodities (such as textiles, garments, and electronics) that compete on the basis of price alone and are often in the informal sector where work is characterized by long hours, insecure employment, unhealthy conditions, low wages, and often sexual harassment (Benería and Lind 1995; Williams 1999). The search for greater flexibility and lower costs has led to the exploitation of cheap female labor in many developing countries.

In general, the poorest female workers in developing countries, who tolerate the heavy burden of harsh international competition by accepting low wages, bear a double workload of productive and reproductive activities, and do not experience a change in the sexual division of labor in household tasks, especially in home-based work. Under such conditions, female employment is compatible with traditional female roles as workers with limited rights and access to outside employment (Berik 1987).

3. EFFECTS OF INTERNATIONAL TRADE ON THE COMPOSITION OF IRAN'S EXPORTS

Since the late 1980s, Iranian governments have tried to expand and diversify non-oil exports. Due to Iran's rich oil and gas reserves, chemical and petrochemical industries have a comparative advantage. Trade liberalization has expanded the international markets for energy resources and energy-based products. By contrast, Iran did not increase the export of its labor-intensive goods and its non-oil exports face increasing competition in international markets. During 1994–2005, the share of carpets in non-oil exports has declined from 44.2 to 4.4 percent (Table 1). Although export of clothing has increased from USD 5.7 million in 1989 to USD 225.4 in 2005, its share in total non-oil export remained low, accounting for only 2 percent by 2005. The easy response to the challenge of harsh competition was to race to the bottom: increasing *flexibility* in the labor market and lowering real wages. The adverse effects of this policy were particularly severe in Iran's carpet industry.

Table 1. Iran's Non-Oil & Oil and Gas Exports (million USD)

Sector	1977	1982	1989	1994	2000	2002	2004	2005
Carpets	114.5	67.0	344.7	2,132.9	619.5	514.3	490.1	460.2
Pistachio	N/A	N/A	272.9	389.8	318.5	497.9	547.9	823.4
Caviar	1.1	18.9	35.7	27.5	38.5	21.6	22.4	13.3
Other Agricultural Products	262.8	169.4	241.1	708.4	489.3	690.6	891.8	851.7
Mineral Metal Clods	1.1	7.1	26.9	55.9	37.7	32.2	95.6	395.9
Chemicals and Petrochemicals	12.1	0.1	34.2	35.3	110.2	1,118.4	1,732.2	2729.2
Clothing and Shoes	32.0	11.3	5.7	133.0	150.5	141.2	132.0	225.4
Vehicles and Spare Parts	9.9	1.5	1.8	24.1	39.3	38.3	89.9	274.1
Copper Ingots and Wires	N/A	N/A	17.0	244.4	85.4	72.3	113.0	375.5
Iron, Cast Iron, and Steel	N/A	N/A	N/A	340.5	300.8	350.4	925.6	1326.0
Other Industrial Products	89.7	8.4	63.9	732.7	1,573.0	1,131.5	1,806.6	3019.9
Total Non-oils Exports	523.2	283.7	1,043.9	4,824.5	3,762.7	4,608.7	6,847.1	10,494.6
Oil and Gas	20,926.0	10,563.0	11,993.0	14,603.0	28,461.0	22,966.0	36,315.0	48,823.0

Source: Central Bank of Iran (various years)

4. IRAN'S SHARE OF THE INTERNATIONAL CARPET MARKETS

Persian carpets are treasured as magnificent works of art and there is widespread practice of the craft in almost all parts of the country. Carpet weaving is easy to learn; it provides employment for more than one million people, mainly women, as a cottage industry. In the 1970s, more than 58 percent of home-based production units and 33 percent of Iran's rural areas were engaged in carpet weaving. About 55 percent of carpet weavers lived in villages and 45 percent in towns and cities, of which 80 percent were women (Iran Statistics Center 1977). According to one report, in 2005 about 1.3 million persons wove carpets on 900,000 looms in different parts of Iran (Iran Carpet Company 2006).

However, during the past few decades, Persian carpets have lost a significant degree of their appeal because of severe competition from other countries and from machine-made carpets. Political problems have also taken a toll on Iranian exports. Before the Islamic Revolution in 1979, joint Iranian/American firms produced rugs specifically targeted to the American markets. After the crises of the American hostages in 1980, the United States imposed sanction against Iran and prevented Persian carpet imports into the country. Some rug dealers continue to export Iranian

carpets to the United States from Canada, yet most American dealers, unwilling to risk their businesses, rely upon Chinese or Turkish hand-made carpets. As a response to the American demand for Persian carpets, carpets from China, India, and Pakistan with Iranian designs are flooding the market. For example, India offers 65 percent of its carpets with Persian designs (Eiland 1998). Increasing supply coupled with more or less stable demand has pushed down the international price for carpets. The average price for one square meter of woolen, hand-woven carpet decreased from USD 300 in 1981 to about USD 90 in 2005 (Arman and Mohammadi 2005).

In 2005, China, India, Turkey, and Pakistan collectively held 60 percent of the global carpet market, twice the Iranian share. Within the last three decades, the international carpet trade grew from USD 350 million to about USD 2 billion. Nevertheless, Iran’s market share has dropped from 60 percent to 30 percent. Iran still has the highest share in the international carpet market, but the slack due to falling Iranian production is taken up by other nations, especially China, India, and Pakistan (Table 2).

Table 2. Production, Employment, and Exports in Hand-Woven Carpet Industry in Major Exporting Countries (2000–05)

	Iran	India	China	Pakistan	Turkey
Exports (million USD)	550.0	370.0	400.0	250.0	90.0
Production (million sq. meters)	6.0	N/A	N/A	4.0	5.2
Weavers (million persons)	1.5	1.5	N/A	N/A	N/A
Avg. Price of Carpets (per sq. meter)	96.0	N/A	N/A	67.0	72.0
Market Share (percent)	30.0	20.0	20.0	15.0	5.0

Source: WTO (2005)

In particular, China’s share in the international carpet market is rising. China’s competitiveness stems from a huge supply of low-paid labor. The legal minimum wage in China is much lower than Iran. For example, in 2003 the legal minimum wage in Shenzhen, the Chinese city with the highest monthly minimum wage, was equivalent to only USD 42 (formal minimum wage in Iran was about USD 150). Moreover, the average workday in labor-intensive industries amounts to about 11 hours each day, often with no day off in a week—about an 80-hour work week. When the long working hours are taken into account, a sizeable proportion of the workers

are making considerably less than the minimum legal wage (Chan 2003). Furthermore, in 2003, the average monthly salary of carpet weavers in Iran and India was USD 61 and 23, respectively (Iran National Carpet Center 2005). The labor cost of carpet production in India, China, and Pakistan is less than half of that for the Persian carpets. Declining carpet prices due to competition among rival countries is the most important reason for decreasing Persian carpet production and export. From 2000 to 2005, production of Persian carpets decreased from 7.5 to 5 million square meters.¹ Many major Iranian carpet exporters are no longer interested in investing in carpet production, as the profit margin in hand-woven carpet industry is very low. They believe that Persian carpets cannot compete with Chinese and Indian carpets and their share in the international market will shrink further in the future (Iran National Carpet Center 2005).

Carpet weavers in Iran, India, Pakistan, Turkey, and Nepal also face unfavorable work conditions. Countries with the lowest production costs, mainly China and India, have been the winners in the global competition and their low real wages are essential causes of their success in the export of hand-woven carpets. However, low wages have also changed the composition of the workforce in the Persian carpet industry. Most middle-income weavers have left the industry and currently the poorest families are engaged in low-paid weaving. In particular, Afghan women and children increasingly enter to the industry, as they cannot find alternative employment.

5. EMPLOYMENT STRUCTURE OF KASHAN'S HAND-WOVEN CARPET INDUSTRY

About 40 years ago, Kashan's economy was mainly dependent on hand-woven carpets and women had no other job opportunities. Kashan is an industrial district now and many women work in different industries such as blanket, china, and glassware factories. Increasing numbers of educated women work in education, health, and other services. So, carpet weaving has declined considerably, not only in Kashan itself, but in its rural areas that have limited access to jobs outside the household where female employment in weaving is common. The limited number of

¹ About 70 percent of Persian rugs and carpets are exported.

Iranian weavers in Kashan's urban areas (10 percent of our sample) indicates that Iranian women who live in the city have access to better-paid outside jobs. The gap seems to be filled in by immigrant Afghan workers. Among Afghan immigrants who live in Kashan, working in the carpet weaving is common. Most Afghan immigrants live illegally in Iran and do not have work permission. Afghan men generally work in the construction sector and dairy farms, and Afghan women and children weave carpets in Kashan and its villages. Carpet weaving earnings are an important complementary income for poor and crowded Afghan families. Afghans learn the special Iranian weaving style and their carpets are among the finest.²

5.1 Data

Kashan used to be the center of many carpet-weaving workshops, but at present carpets are woven at home. Supervising carpet-weaving in workshops is easier, yet carpet dealers prefer to put the looms in the homes of the weavers in order to avoid paying formal minimum wages, overtime, taxes, rent, and utilities. Flexibility is another reason. Matching home-based production to the fluctuation of market demands is much easier and cheaper, and a dealer can add or remove looms from the houses depending on the state of the market.

To examine the current employment pattern in the hand-woven carpet industry, I conducted a survey in and around the city of Kashan. I chose Kashan as a representative of the carpet-producing regions in Iran. Kashan is a city situated between Tehran and Isfahan, known for its quality hand-woven carpets. Kashan's design is highly rated, both in domestic and international markets. This design needs a high-density of knots, which requires great skill, much practice, and immense concentration. The principal research tool used was an extensively structured questionnaire comprised of an introductory sequence of close-ended questions eliciting demographic data on age, education, marital status, occupation, and household structure, followed by several sequences of open-ended questions on wages, working hours, and job preferences. In addition to interviews with carpet weavers, the study relies heavily upon information generated through direct talks with carpet merchants and exporters, as well as government officials.

² An Iran Carpet Company's official in Kashan informed me that about 50 percent of carpet weavers in Natanz and Delijan (Kashan's neighboring cities) are by Afghan.

I make no claim that this survey is a representative random sample of Kashan's carpet industry. Nonetheless, it is based on more extensive data than that available from existing sources and its results are suggestive. The survey method is snowball sampling. Because of the lack of formal data about carpet weavers, I relied on my personal contacts in Kashan to assist me setting up interviews. The Iran Carpet Company also provided a limited number of additional site addresses. The women I had already interviewed in each site introduced me to a number of weavers in other sites. The survey was carried out during October and December 2006. The sample consists of 68 carpet-weaving households, amounting to 96 weavers (80 women and 16 men) from Kashan and five nearby towns and villages (Table 3). Over 60 percent of the sample weavers lived in Kashan and Ravand because I had better connections in these sites. Afghan weavers constitute over 40 percent of our sample. I visited many Afghan carpet weavers in these two sites, but I did not find Afghan weavers in other selected locations.³ Hand-weaving carpet is the most important accessible job for Afghan women and children in the Kashan region.

Table 3. Distribution of Carpet Weavers by Location (percent)

	Iranian		Afghan		Total	
	Women	Men	Women	Men	Women	Men
Kashan	9	0	17	2	26	2
Fin	12	2	0	0	12	2
Ravand	9	2	13	8	22	10
Khozagh	4	0	0	0	4	0
Aran	10	2	0	0	10	2
Aliabad	6	-	0	0	6	0
Total	50	6	30	10	80	16

Source: Author's questionnaire

The sites selected cover the diverse economic structure of the region. Close to Fin and Ravand there are job opportunities in industrial complexes and factories, while Khozagh and Aliabad have no industries. In addition to the regular questionnaire, I had informal talks with carpet weavers in the sample and the direct quotations below are from my recollections.

³ There are likely to be Afghan weavers working in other locations left out of the survey due to its limited geographical coverage.

5.2 Age and Sex Structure of Carpet Weavers

Carpet weaving is generally a women’s job in most parts of Iran. In 1996, more than 91 percent of female industrial workers were the in textile and clothing sector, mainly in carpet weaving. As international carpet prices are decreasing, so do the real wages of carpet weavers. Furthermore, Iran’s declining international market share has resulted in a shrunken labor force (Iran Chamber of Commerce 2006). It should be noted that carpet weavers are generally unpaid family workers. Home weaving is compatible with childcare and the performance of domestic tasks, often through stretching the length of the working day, hence the visible presence of female workers in the industry.

The age, sex structure, education, and income levels of Iranian and Afghan households in our sample are not the same. While 87.9 percent of Iranian weavers are women, this share for Afghans is 73.3 percent. As Table 4 shows, Afghan men constitute a larger percentage of workers in carpet weaving compared to Iranian men. At present, Afghan workers are among the best weavers of delicate designs of silk carpets with a high-density of knots.

Table 4. Distribution of Sample Carpet Weavers by Sex and Nationality

	Iranian		Afghan		Total	
	Number	Percent	Number	Percent	Number	Percent
Women	58	87.9	22	73.3	80	83.3
Men	8	12.1	8	26.7	16	16.7
Total	66	100.0	30	100.0	96	100.0

Source: Author’s questionnaire

Male carpet weavers are divided into two different age groups. Among Iranians, a few men go back to weave carpets with their wives after retirement. They learn carpet weaving from childhood, but they stop weaving when they go to school. Afghan men, usually single, weave till they can find outside jobs. In our sample, there was not any male weaver in an Afghan household who was more than 15 years of age, while there were no male carpet weavers in Iranian households less than 41 years of age (Table 5). Sixty-five percent of Iranian women carpet weavers in the sample were housewives with more than 30 years of age; this rate for Afghan women is 25 percent. By contrast, 40 percent of Afghan women and 5 percent of Iranian women were less than 16 years old.

Table 5. Distribution of Sample Carpet Weavers by Age, Sex, and Nationality (percent)

Age	Iranian		Afghan		Total	
	Women	Men	Women	Men	Women	Men
7–10	0.0	0.0	15.0	28.6	5.0	20.0
11–15	5.0	0.0	25.0	57.1	11.7	40.0
16–20	12.5	0.0	15.0	14.3	13.3	10.0
21–30	17.5	0.0	20.0	0.0	18.3	0.0
31–40	27.5	0.0	15.0	0.0	23.3	0.0
41–50	22.5	66.7	10.0	0.0	18.3	20.0
51+	15.0	33.3	0.0	0.0	10.0	10.0
Total	100.0	100.0	100.00	100.0	100.0	100.0

Source: Author's questionnaire

5.3 Child Labor

Insufficient income of adult members in low-income families draws children into income-earning activities to bridge the gap. Until the 1990s, child labor was an important feature of Iran's hand-woven carpet industry. In Kerman Province, five- to seven-year-old children were rented for one year to carpet production workshops (Social Research Institute 1967). In the 1960s, about 60 percent of carpet weavers were 5–19 years old, worked 14–15 hours per day, and received less than half of the adult wages. A survey in Yazd Province in 1982 showed that 50 percent of carpet weavers were less than 20 years old. Even in urban areas, more than 30 percent of female carpet weavers were less than 15 years of age (Rashidian 1988). However, reduction in family size in the 1990s, together with rapidly increasing school enrollment rates (especially for girls), encouraged even low-income Iranian families to keep their children at school as a means of escaping poverty.

By contrast, in our sample, Afghan families were more dependent on the earnings of their male and female children. Looking again at Table 5 shows that 85.7 percent of male and 40 percent of female Afghan weavers are less than 16 years of age; these rates for Iranian weavers are 0 and 5 percent, respectively. While in our sample there are not any weavers younger than 10 years of age among Iranian families, 15 percent of Afghan weavers in the sample are less than 11 years old. The share of 11- to 15-year-old weavers is 5 percent for Iranians and 82 percent for Afghans. The young Iranian weavers lived in Aliabad village, about 20 kilometers

away from Kashan, where as the young Afghan weavers lived in urban as well as rural areas.

The average size of Iranian and Afghan households in our sample is 6.1 and 4.1, respectively. Many Afghans live in extended families—typically, a husband and his two wives with many children who have been carpet weavers since a young age. The houses of many Afghan families in Kashan’s villages have become carpet-weaving workshops. In some houses, there are two or three looms and up to 10 people weaving simultaneously (Table 6). While 12 percent of Iranian households in our sample had three weavers, this share for Afghan families was 45 percent. There was not any Iranian household with more than three weavers in our sample, while 35 percent of Afghan families had more than three weavers, most of them children.

Table 6. Number of Carpet Weavers in Households by Nationality

	Iranian		Afghan		Total	
	Number	Percent	Number	Percent	Number	Percent
1 Weaver	22	45.8	1	5.0	23	33.8
2 Weavers	20	41.7	3	15.0	23	33.8
3 Weavers	6	12.5	9	45.0	15	22.1
4 Weavers	0	0.0	3	15.0	3	4.4
5 + Weavers	0	0.0	4	20.0	4	5.9
Total	48	100.0	20	100.0	68	100.0

Source: Author’s questionnaire

Beside carpet weaving, Afghan children (especially boys) are active in different kinds of relatively difficult and low-paid jobs in agriculture, construction, and the service sectors⁴ in Kashan’s urban and rural areas. Whenever there is alternative work, boys stop weaving, both because the weaving income is often the lowest and weaving is believed to be a women’s job.

5.4 Education

Distribution of education level demonstrates the dissimilarity between Afghan and Iranian carpet weavers more clearly. The education levels of Iranian women have increased substantially during the past three decades. Bearing in mind that girls from low-income families in most rural areas have secondary and even higher education, Table 6 shows that most female weavers are illiterate or have about five years of schooling (84 percent of sample weavers). This also indicates that these weavers are

⁴ For example, some Afghan boys carry carpets on their back in Kashan’s Bazaars.

from the poorest households, as an increasing proportion of Iranian middle-income families support the education of their children (both boys and girls), forgoing any additional income from child labor, hence there is little evidence of Iranian weavers of schooling age in our sample. The illiteracy rate among Afghan women in our sample is 50 percent; the rate for Iranian female weavers in the sample is 20 percent. Ten percent of Afghan female weavers have more than five years of schooling; the rate for Iranians is 20 percent. The difference is due to the limited access to educational possibilities for Afghan immigrants in Iran. Iranian female students generally do not weave carpets during school age, while their Afghan counterparts do (Table 7).

About 50 percent of the Afghan illiterate in our sample are less than 16 years old, while the ages of all illiterate Iranians are more than 35 years. Afghan girls are likely to suffer more from household poverty. Separate data by child gender in our sample indicate that about 17 percent of males and 56 percent of females who are less than 16 years of age in Afghan households are illiterate, indicating that Afghan low-income carpet weaver families attach more importance to boys' education than to girls'.⁵

Table 7. Distribution of Sample Carpet Weavers by Education Level (percent)

Years of Education	Iranian		Afghan		Total	
	Women	Men	Women	Men	Women	Men
Illiterate	20.0	0.0	50.0	14.3	30.0	10.0
1-5	60.0	100.0	40.0	71.4	53.4	80.0
6-8	20.0	0.0	10.0	14.3	16.6	10.0
Total	40.0	3.0	20.0	7.0	100.0	100.0

Source: Author's questionnaire

⁵Further anecdotal evidence: a) I visited the father of a 14-year-old illiterate Afghan carpet weaver in Kashan's bazaar. He got USD 800 from a carpet dealer as the wage for his daughter weaving carpets 14 hours per day for 8 months (her mother also helped her in weaving). The money would be spent for household expenses and the girl did not have access to her earnings; b) In an Afghan family in Ravand, a 15-year-old boy was a student. He told me that he got up at 5:30am to weave carpet for about an hour before going to school. Coming back in the afternoon, he weaves until 10pm and does his school homework at break time. He was lucky because he could continue his high school study. His sister had to leave school to weave carpets with her mother for the whole day, despite her enthusiasm to continue her studies. Their father had left Iran and the family was entirely dependent on the children's earning.

5.5 Earnings

Carpet weaving is a home-based cottage industry and finishing a carpet takes a long time; a job can be interrupted because of illness of a family member, wedding celebrations, or mourning ceremonies, so it is not easy to calculate the real daily or monthly earnings of female carpet weavers. Carpet weavers have implicit, verbal contracts. They generally receive advance payment during the long process of weaving a carpet. When the job is done, the middleman evaluates the weaver's wage based on the quality and quantity of weaving, duration of weaving, and amount of advance payment. If weaving takes longer than expected, the weaver receives a lower wage, as the capital of the merchant remained dormant for longer. In most cases, the final payment is not in cash. The weavers have to accept a post-dated check to be cashed after 1–3 months. If the family can afford not to rely on advance payment for weaving, it is more profitable to weave carpets independently.⁶ In 2007, the cost of material for a 12 square meter carpet was about USD 650. It took a year (at an average of eight hours per day) for two weavers to finish the carpet. They sold the carpet for USD 2,600. Their earnings were about USD 2,000 (USD 1,000 each). If they wove for a trader, their income would be half. As most weavers are from low-income families and cannot afford to wait a long time for the weaving earning, they prefer to get advance payment and weave for the carpet traders.

Table 8 shows that all Iranian men in our sample were independent carpet weavers. They were retired from their previous job and could finance the household expenditures during the time of weaving carpets, whereas all Afghan men were wage earners because they were children of low-income families and could not work without advance payment. Only one Afghan woman in our sample was an independent weaver. The hourly wage of a carpet weaver in our sample was about 20 cents. A 20-year-old Afghan man in Ravand told me that he weaves carpets whenever he is unemployed. The daily wage of a construction worker is about USD 9, while if you weave carpets 10 hour per day, you cannot get more than USD 3 daily. In Aliabad, the monthly wage of two young girls and their mother was about USD 200, while the wage of the head of household who worked as an unskilled construction worker was the same. In other words, the wage of construction work was three times

⁶ Most weavers in Kashan receive the raw material in advance and pay for it afterwards.

that of a carpet weaver's earnings. In 50 percent of sample households, the share of weaving earning in the total income is less than 30 percent.

Table 8. Distribution of Sample Carpet Weavers by the Kind of Production (percent)

Employment Status	Iranian		Afghan		Total	
	Women	Men	Women	Men	Women	Men
Wage Earner	52.5	0.0	95.0	100.0	66.7	70.0
Independent	47.5	100.0	5.0	0.0	33.3	30.0
Total	100.0	100.0	100.0	100.0	100.0	100.0

Source: Author's questionnaire

Table 9 indicates that while weaving wages are too low to cover the costs of living for most Iranian carpet weavers' households, they can be an important part of total household income if the head of household is unemployed or has left the family. In 63.7 percent of Iranian families in our sample, carpet-weaving income was less than 31 percent of households' income. In such families, women usually are not obliged to finish the carpet very quickly. They weave carpets whenever they have no other duties. By contrast, 54.6 of Afghan and 12.2 percent of Iranian households gained more than 40 percent of their total earnings by carpet weaving. Such families are highly dependent on carpet weaving.

Table 9. Share of Carpet Weaving in Household Income (percent)

	Iranians	Afghans	Total
10–20 Percent	36.4	9.1	26.5
21–30 Percent	27.3	18.2	23.5
31–40 Percent	24.2	18.2	29.4
41–50 Percent	6.1	27.3	11.8
50+ Percent	6.1	27.3	8.8
Total	100.0	100.0	100.0

Source: Author's questionnaire

6. POSITION OF CARPET WEAVERS WITHIN HOUSEHOLDS

Our survey suggests that participation in paid work in carpet weaving does not necessarily bring about an improvement in the status and roles of women. Carpet weaving is an activity that does not change, let alone challenge, women's subordinate position in the household. Home-based weaving is compatible with childcare and the

performance of domestic tasks, often through stretching the length of the working day. While development of the carpet industry does promote employment among poorer women, it does not increase the income of female carpet weavers to a level that would lead to a fundamental change of their traditional status. Female carpet weavers bear a double workload and do not experience a change in the sexual division of labor in households. The majority of women who were interviewed indicated that housework is endless and boring, and preferred to weave carpets. However, they did not regard weaving as formal employment. It is widely believed that weaving is not a serious job; it is rather a hobby for women. A carpet weaver's earning is generally invisible and unrecognized. Male members of the family sell the produced carpets and receive the weaving wage from the carpet traders, therefore most female weavers have no access to their wages.⁷ As expected, the position of female carpet weavers in the Afghan households of our sample was worse than their Iranian counterparts. Some confided that they were even subject to violence and had no right to participate in decision making about the most important family affairs, despite their high share in the total household income.

7. CONCLUDING REMARKS

Economic globalization has increased Iran's energy-related exports significantly, while the share of Iran's main labor-intensive exports, especially hand-woven carpets, has declined during past two decades. Excess supply of hand-woven carpets has reduced international carpet prices. The profit margin of investment in Persian carpets has shrunk and many carpet exporters have given up the trade, therefore the volume of production and export of Persian carpets has declined sharply. Female carpet weavers in Iran are among the main losers of expanding international trade, as harsh competition among developing countries has suppressed their real wages. The battle

⁷ A 53-year-old Iranian woman in Khozagh village said she had been carpet weaving since the age of six. She continued weaving during her pregnancy and was back at work seven to ten days after the baby was born. Although she worked from early morning until sunset for past 45 years, she did not have any belongings of her own—their house was in the possession of her husband. She tolerated the hard life without protest, as she had five daughters. She had to work to manage their life and prepare her daughters' dowry. However, some of the female weavers had control over part of their earnings. One of the unmarried Iranian weavers told me: "When my father was alive, I had to weave from 6am until 8pm without any earnings and I had to help with the housework, too. Two years ago my father died. Now I pay half of my wage to my mother and I bought a golden necklace and ring for myself with the rest of my earnings."

for more exports is accompanied by the race to the bottom, as the winners are countries with lowest labor costs.

The findings of our survey in Kashan show that as a profession, carpet weaving has become a sign of poverty. The average earning of carpet weavers is much lower than the formal minimum wage and most women are not interested in carpet weaving any more, yet low-income families still rely on the complementary income of women's carpet weaving to a significant degree. Many women and children from low-income Afghan immigrant households have substituted for Iranian weavers. Indeed, it seems that without low-paid Afghan weavers, Persian carpets could not preserve their relatively strong presence in the international markets.

Although the women's earning from carpet weaving is important for their families, home-based carpet weaving has not changed the subordinate position of female workers within households. Since home-based production does not violate prevailing gender ideology, it serves to maintain the historical status quo.

REFERENCES

- Arman, Alireza, and Maryam Mohammadi. 2005. "The Study of Factors that Effect on Iranian Hand-Woven Carpet Exports." *Economic Studies Quarterly* 6(3): 38–52.
- Bell, Stuart. 1995. "Privatization through Broad-Based Ownership Strategies: A More Popular Option?" Working Paper No. 33. Washington, DC: World Bank.
- Benería, Lourdes, and Amy Lind. 1995. "Engendering International Trade." in Noeleen Heyzer (ed.) *A Commitment to World's Women: Perspectives on Development for Beijing and Beyond*. New York: UNIFEM.
- Berik, Gunseli. 1987. *Women Carpet Weavers in Rural Turkey: Pattern of Employment, Earning, and Status*. Geneva: International Labour Organisation.
- Chan, Anita. 2003. "A Race to the Bottom: Globalization and China's Labour Standards." *China Perspectives* 46: 41–49.
- Eilland, Murry. 1998. *New Directions for Iranian Carpets*. London: Calmann & King Ltd.
- Iran Central Bank. various years. *Economic Report*. Tehran: Iran Central Bank.
- Iran Carpet Company. 2006. *Iran's Carpets and Flooring*. Available at: <http://www.irancarpet.ir> (accessed 2007).
- Iran Chamber of Commerce. 2006. "Demand Dips for the Fine Rugs." Available at: <http://www.iccim.ir> (accessed 2006).
- Iran National Carpet Center. 2005. *Production and Employment in Hand-Woven Carpet Industry in Iran*. Available at: <http://persiancarpetnc.ir/en/default.aspx>
- Iran Statistics Center. 1977. *Detailed Report of 1976 Census*. Tehran: Iran Statistics Center.
- Rashidian, Kh. 1988. *A Survey on Carpet-Weaving in Kashan's Rural Areas*. Tehran: Tehran University Press.
- Rodrik, Dani. 1999. "Where Did All the Growth Go? External Shocks, Social Conflict, and Growth Collapses." *Journal of Economic Growth* 4(4): 385–412.
- Social Research Institute. 1967. *Iran's Hand-Woven Carpet Industry in Kerman Province*. Tehran: Tehran University Press.
- Standing, Guy. 1999. "Global Feminization through Flexible Labour: A Theme Revisited." *World Development* 27(3): 583–602.
- Stiglitz, Joseph E. 2002. "Employment, Social Justice, and Societal Well-being." *International Labour Review* 141(1–2): 9–29.

Tonelson, Alan. 2002. *The Race to the Bottom: Why a Worldwide Worker Surplus and Uncontrolled Free Trade are Sinking American Living Standards*. New York: Westview Press.

Williams, Mariama. 1999. "Free Trade or Fair Trade." DAWN Discussion Paper on WTO. Available at: <http://www.dawn.org.fj/publications/wtodiscussion.html> (accessed 2005).

Winters, Alan L. 1999. "Trade and Poverty: Is There a Connection?" in World Trade Organization Special Studies Number 5, *Trade, Income Disparity, and Poverty*. Geneva: World Trade Organization (WTO). Available at: http://www.wto.org/english/res_e/booksp_e/disparity_e.pdf (accessed 2005).

World Trade Organization. 2005. *WTO Statistics Database, Trade Profiles*. Geneva: WTO.