

# Role of Industrial Policy in Employment Generation for Women

By

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**High-Level Symposium on  
Industrial and Trade Policies**

Promoting Exports and Developing Employment

Tehran, October 10-11, 2015

A plethora of international and regional analytical reports, linking women's economic opportunities to growth, competitiveness, prosperity.

Among them:

## Women, Work, and the Economy: Macroeconomic Gains from Gender Equity

Katrin Elborgh-Woytek, Monique Newiak, Kalpana Kochhar, Stefania Fabrizio, Kangni Kpodar, Philippe Wingender, Benedict Clements, and Gerd Schwartz


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### Empowering Women Is Smart Economics

FINANCE & DEVELOPMENT, March 2012, Vol. 49, No. 1

Ana Revenga and Sudhir Shetty

[PDF version](#)

[World Bank gender action plan: Liberia](#)

*Closing gender gaps benefits countries as a whole, not just women and girls*

NOT long ago women faced tremendous

opportunities that put them on an equal footing with men. In the quarter century since the end of World War II, women and men have been in university classrooms, in boardrooms, in homes. Since then, the economic and social roles of women and girls around the world have changed dramatically. In both rich and developing countries—they are going to school, starting businesses, getting better jobs, and acquiring legal rights and protections.



remain. Women and girls are more likely to die, relative to men, in low- and middle-income countries than their counterparts in high-income countries. They earn less and are less economically productive than men in many parts of the world. And women have less opportunity to shape

## Fair Play: More Equal Laws Boost Female Labor Force Participation


Christian Gonzales, Sonali Jain-Chandra, Kalpana Kochhar and Monique Newiak

world development report

2012

# GENDER EQUALITY AND DEVELOPMENT



 THE WORLD BANK

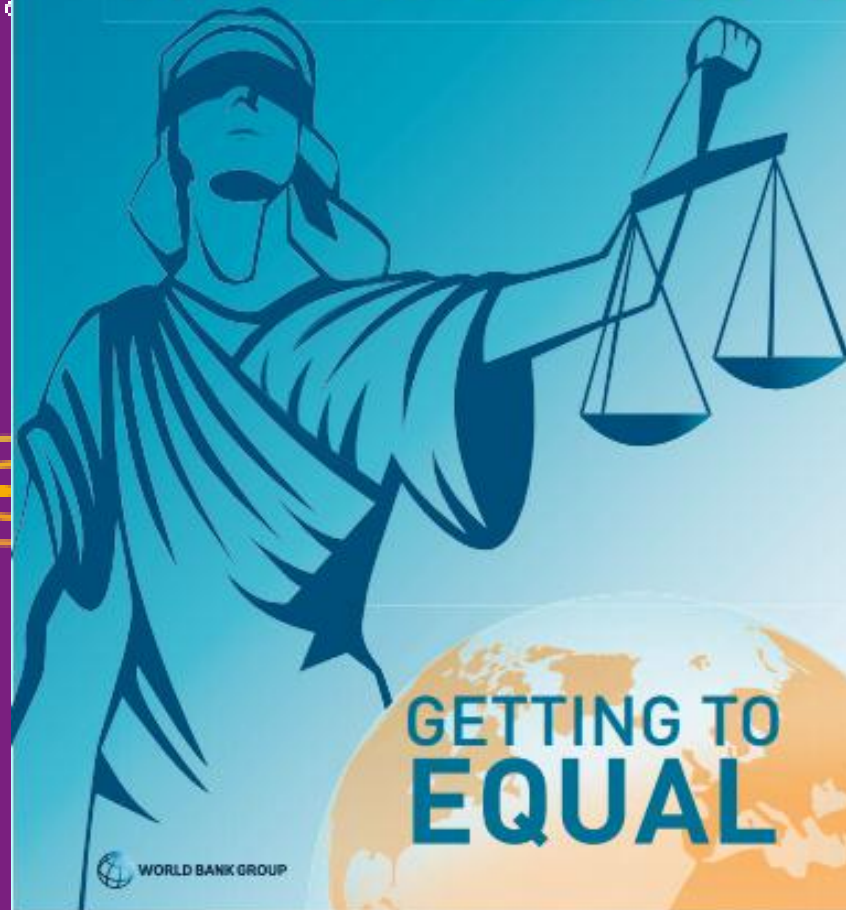
PROGRESS OF THE WORLD'S WOMEN 2015-2016



TRANSFORMING  
ECONOMIES,  
REALIZING RIGHTS

 UN WOMEN

# WOMEN, BUSINESS AND THE LAW 2016



GETTING TO  
EQUAL

 WORLD BANK GROUP

ORIENTATIONS IN DEVELOPMENT SERIES

# The Environment for Women's Entrepreneurship in the Middle East and North Africa

Nadereh Chamliou



28115

MENA DEVELOPMENT REPORT

## Gender and Development in the Middle East and North Africa

### Women in the Public Sphere



Imperial College Press

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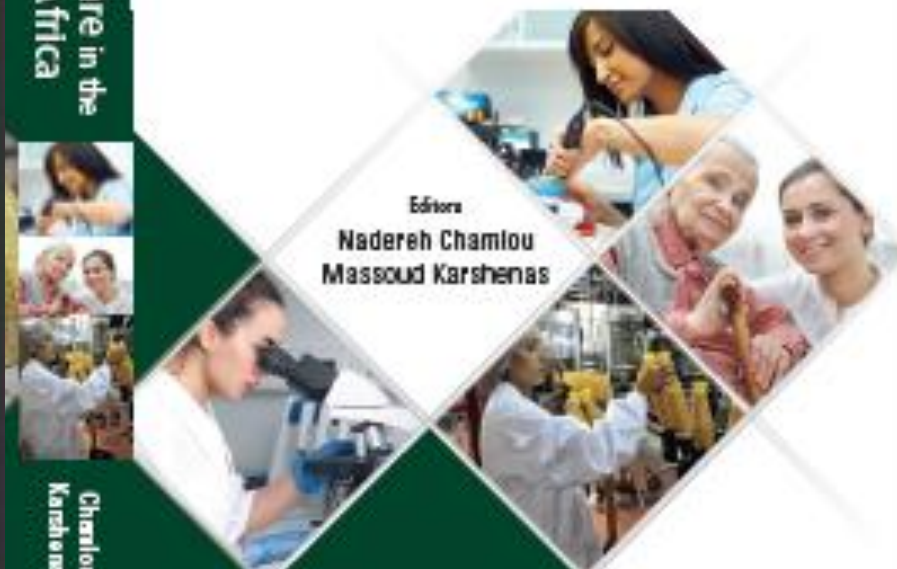


Women, Work and Welfare in the Middle East and North Africa

# Women, Work and Welfare in the Middle East and North Africa

## The Role of Socio-demographics, Entrepreneurship and Public Policies

Editors  
Nadereh Chamliou  
Massoud Karshenas



Chamliou  
Karshenas



Imperial College Press

**The literature highlight women's contribution to the engines of economic growth as:**

**workers  
producers  
consumers  
entrepreneurs  
investors  
innovators  
decision-makers**

**and as a leaver in the competitiveness of nations.**

# Iran's challenge

- Low Labor Force Participation
- High levels of female education, esp. tertiary education
- High female unemployment, esp. for highly educated
  
- Iran's challenges are similar to rest of Middle East and North Africa, where:
  - Women outnumber men in 13 out of 18 countries
  - Labor force participation is low,
  - Female unemployment high and a multiple of male unemployment.

But, Iran's case is more acute. Elsewhere, it is said that women do not study marketable disciplines.

“ As of 2006, women accounted for over half of university students in Iran<sup>[1]</sup> and 70% of Iran's science and engineering students.<sup>[2]</sup>

In 2012, according to the [UNESCO](#) data, 2,191,409 out of 4,404,614 students in tertiary education were females, thus making fifth largest female enrollment after China, India, USA and Brazil.

In engineering fields Iranian female enrollment ranked as first in the World, in science fields second (after USA).<sup>[3]</sup>”



# GDP Losses due to Economic Gender Gap

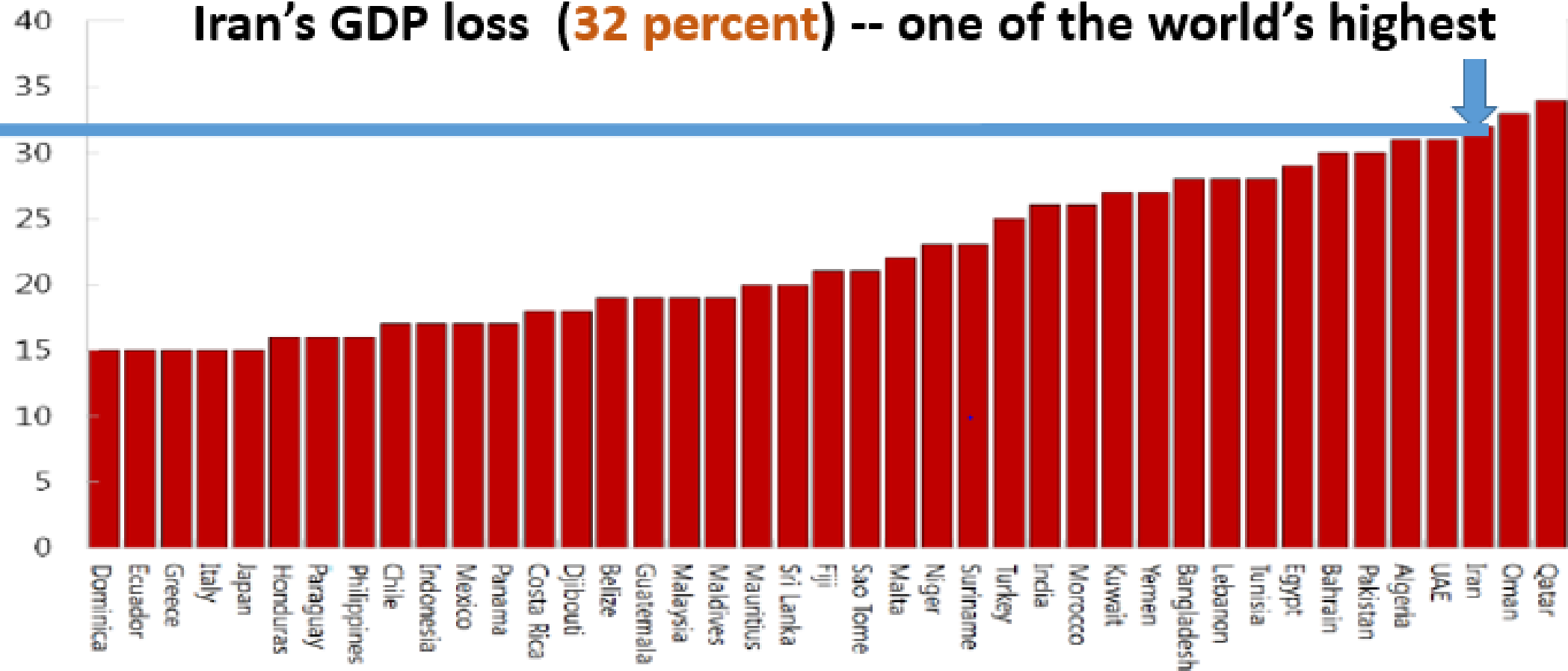
Iran's GDP loss (**32 percent**) -- one of the world's highest



And IMF Discussion Paper SDN 15/02, Figure 1.

## GDP Losses due to Economic Gender Gap

Iran's GDP loss (32 percent) -- one of the world's highest



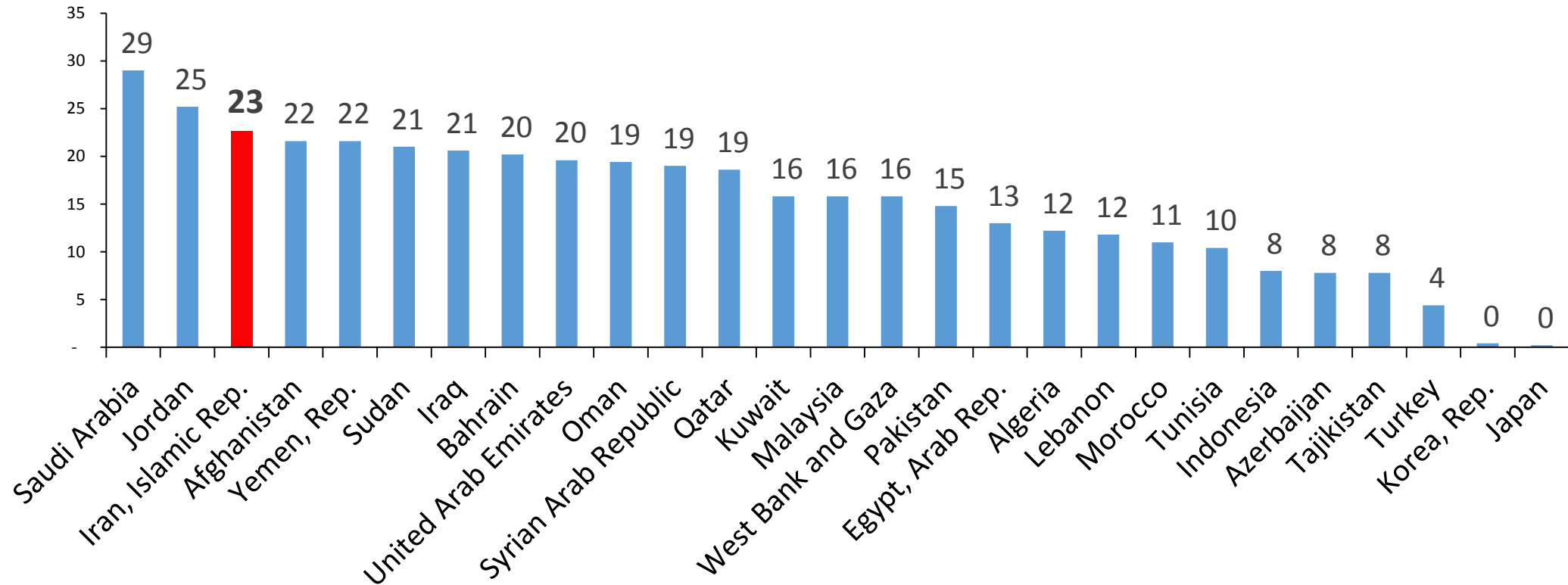
Source: Estimates by Cuberes and Teignier (2014).

And IMF Discussion Paper SDN 15/02, Figure 1.

<sup>1</sup>Losses are estimated for a particular year for each country and can thus be interpreted as a one-off increase in GDP if gender gaps were to be removed.

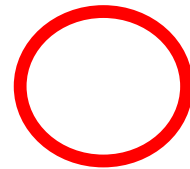
# An important cause: Legal Differences

**Male/Female Legal differences in Iran is among highest in the World  
– even in comparison to other Muslim Countries**



Source: Figure 1.2 (Number of Legal Gender Differences by Economy) – Women, Business, and the Law 2016  
**International Finance Corporation – The World Bank Group**

# Legal Differences & Secondary Education



Legal differences do not seem to affect M/F secondary education in Iran.

Using 96 countries, regression (2012) is statistically significant at the 1% level after controlling for 2014 GNI per capita.

Source: IFC – Women, Business, and Law 2016, Fig. 1.3

# Legal Differences and Economic Participation

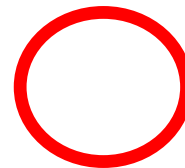
Negative relationship between the number of legal gender differences and the percentage of women employed to the population ( age 15+) (2013).

Regression analysis based on 132 economies for which data are available.

Results statistically significant at the 1% level even after controlling for GNI per capita, and ratio of female/male enrollment in secondary education (2012).

Relationship not to be interpreted as causal.

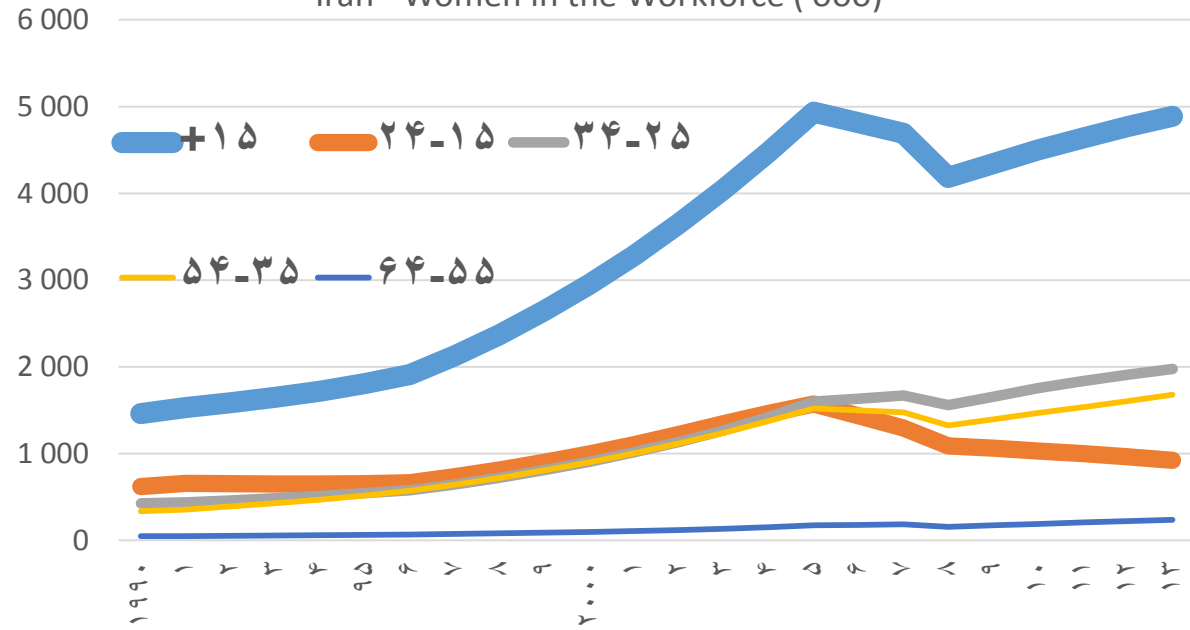
Source: IFC – Women, Business, and Law 2016, Fig. 1.3



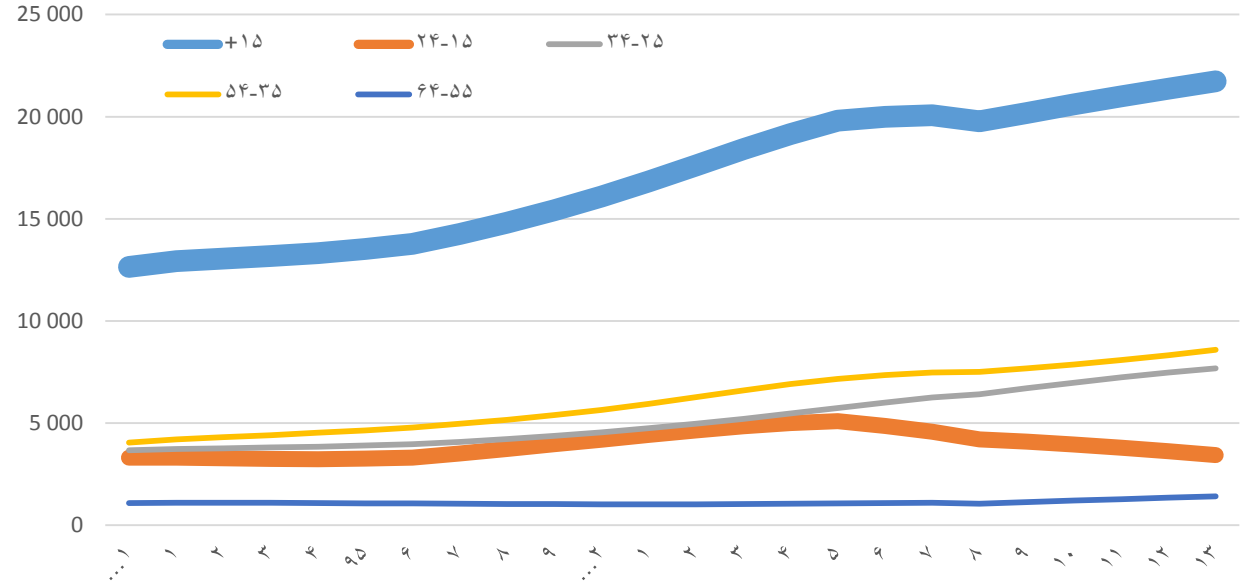
Now, let us look at some trends

# Labor Force Trends (1990-2013)

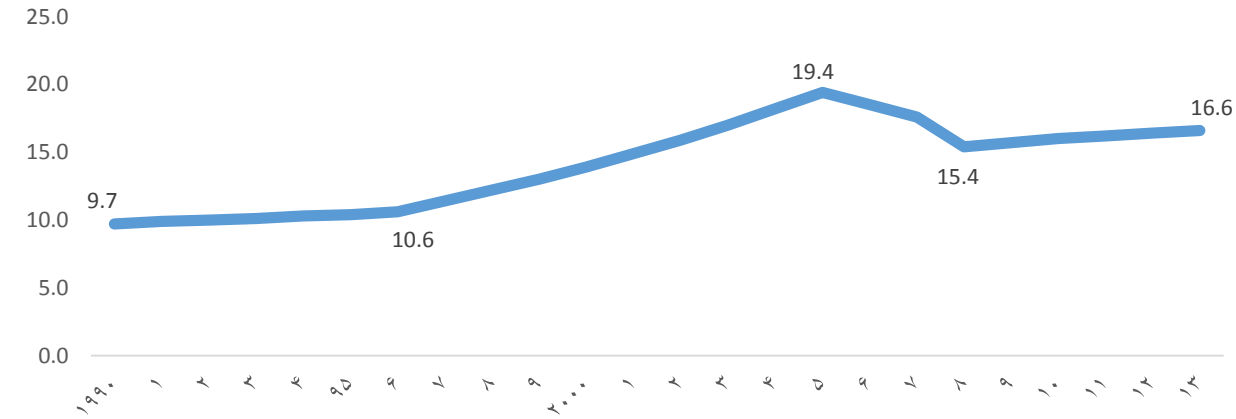
Iran - Women in the Workforce ('000)



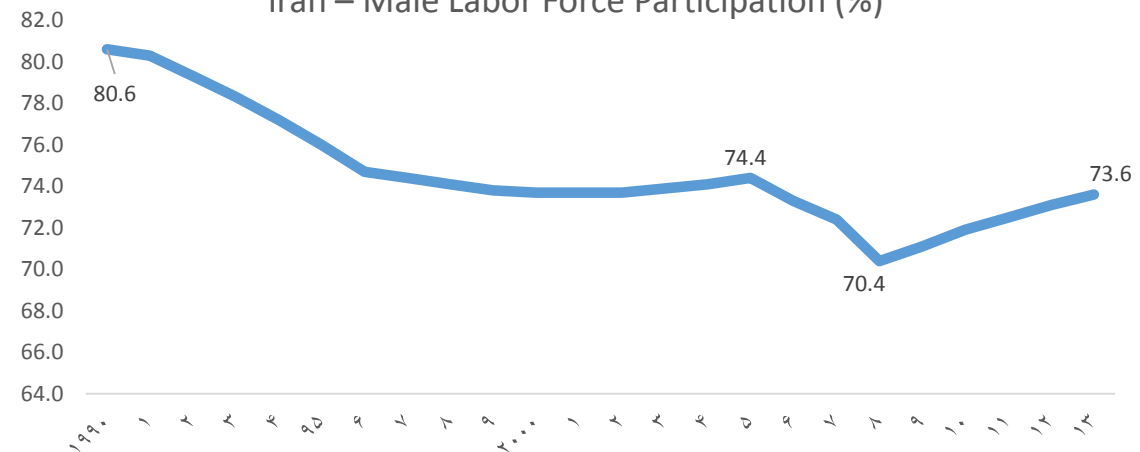
Men in the Workforce ('000)



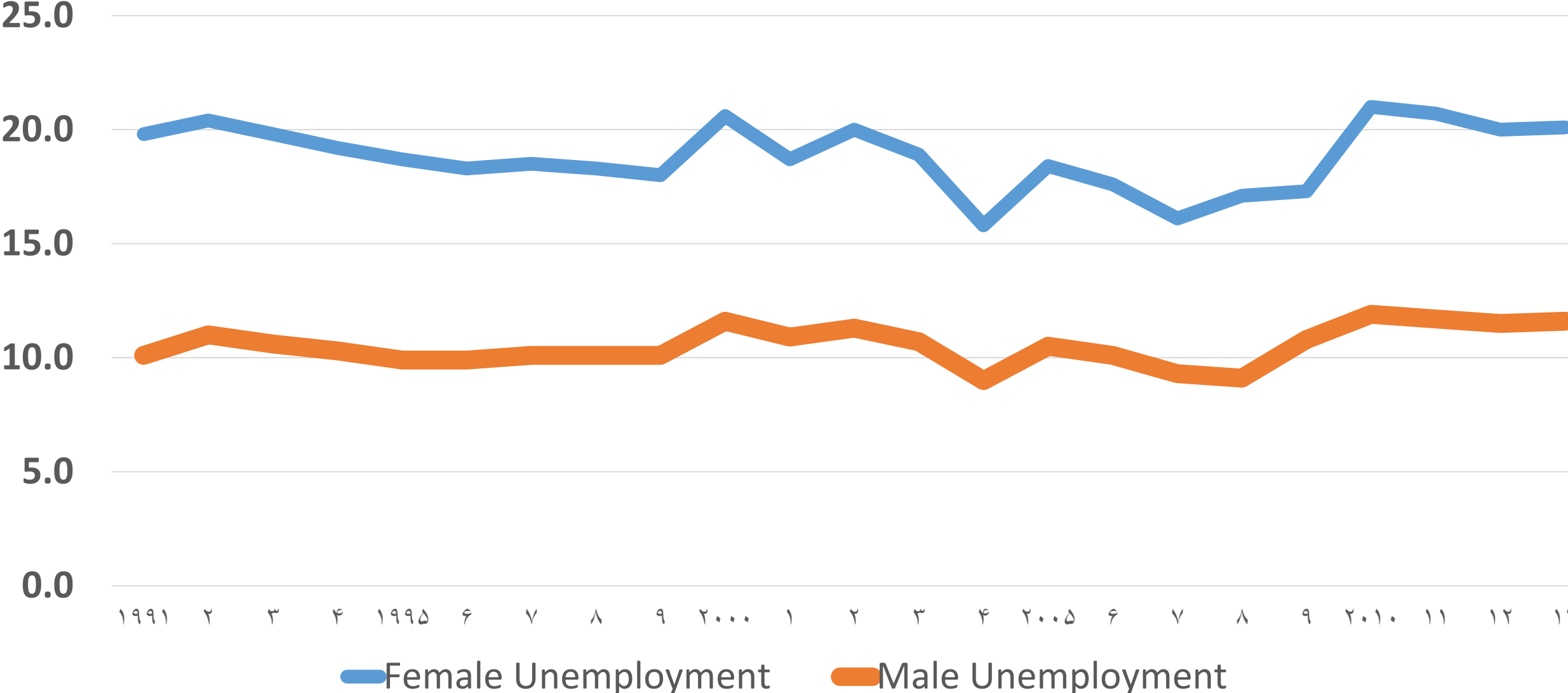
Iran - Female Labor Force Participation (%)



Iran - Male Labor Force Participation (%)



# Female Unemployment – twice as high as men’s

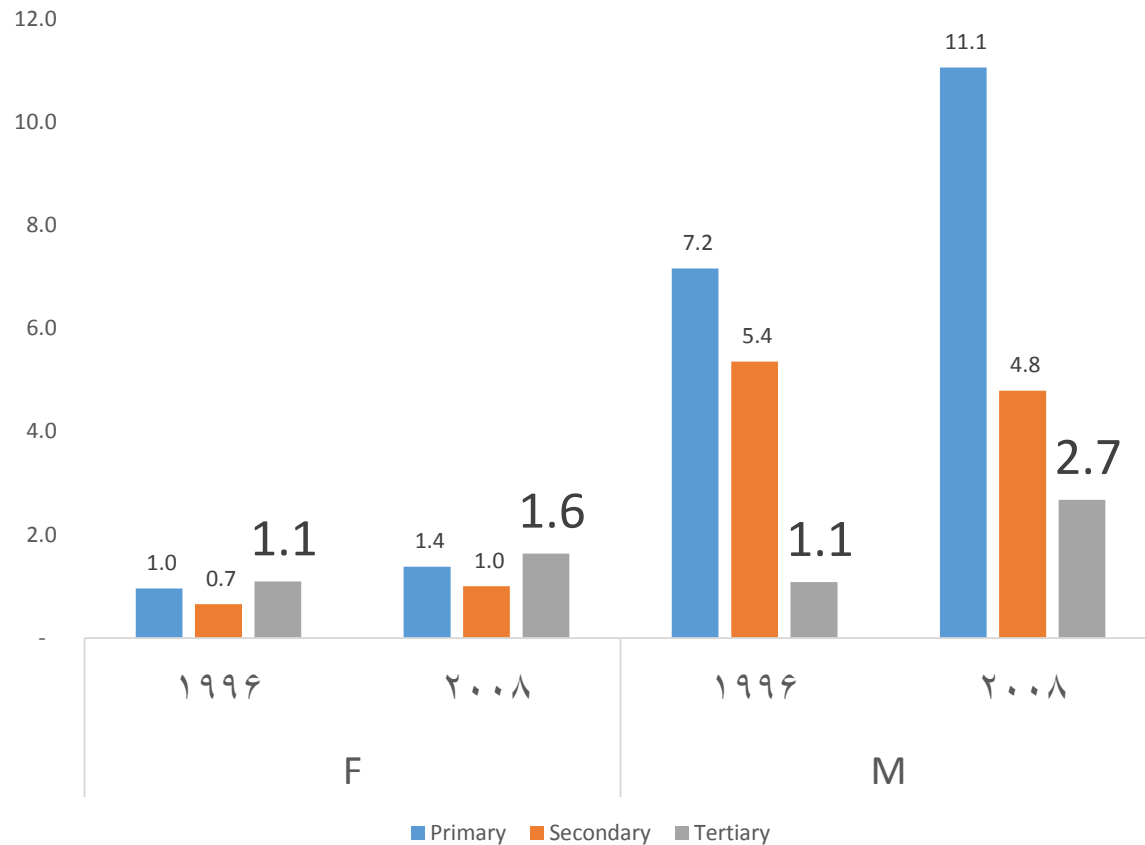


Source: KILM, 2015

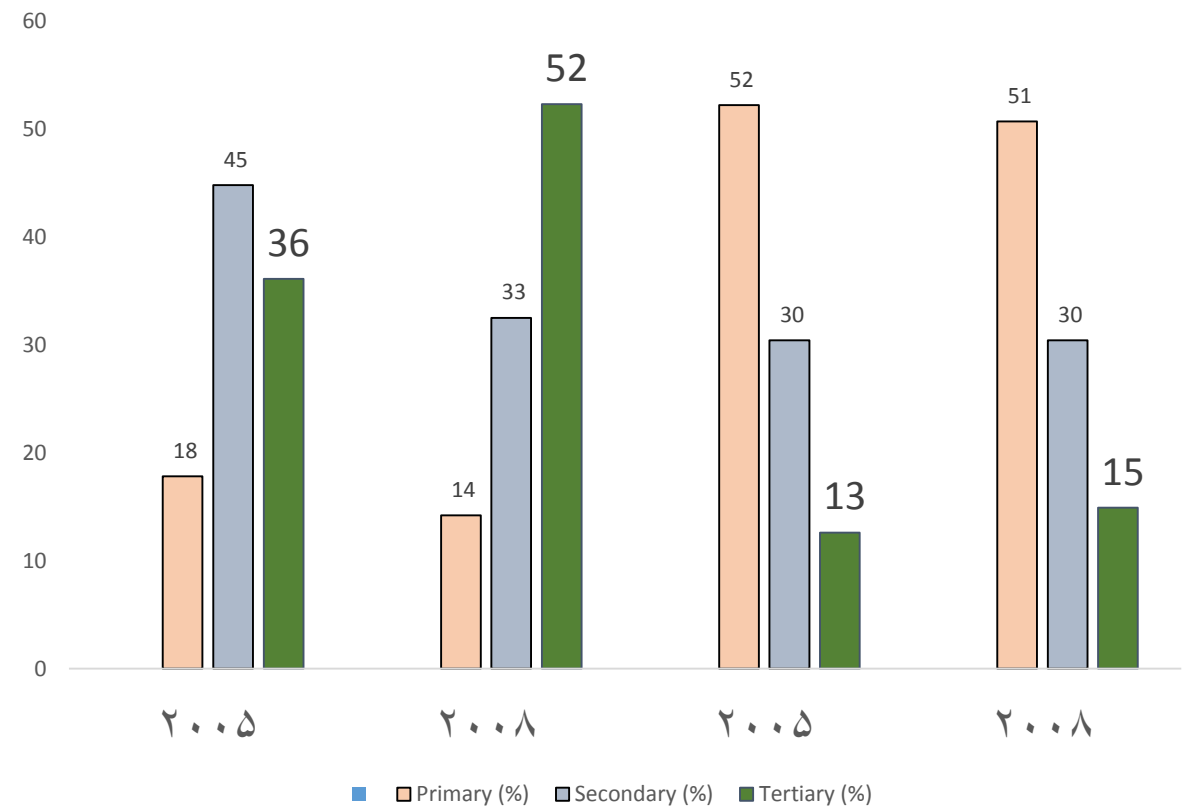


# Labor Force Participation and Unemployment

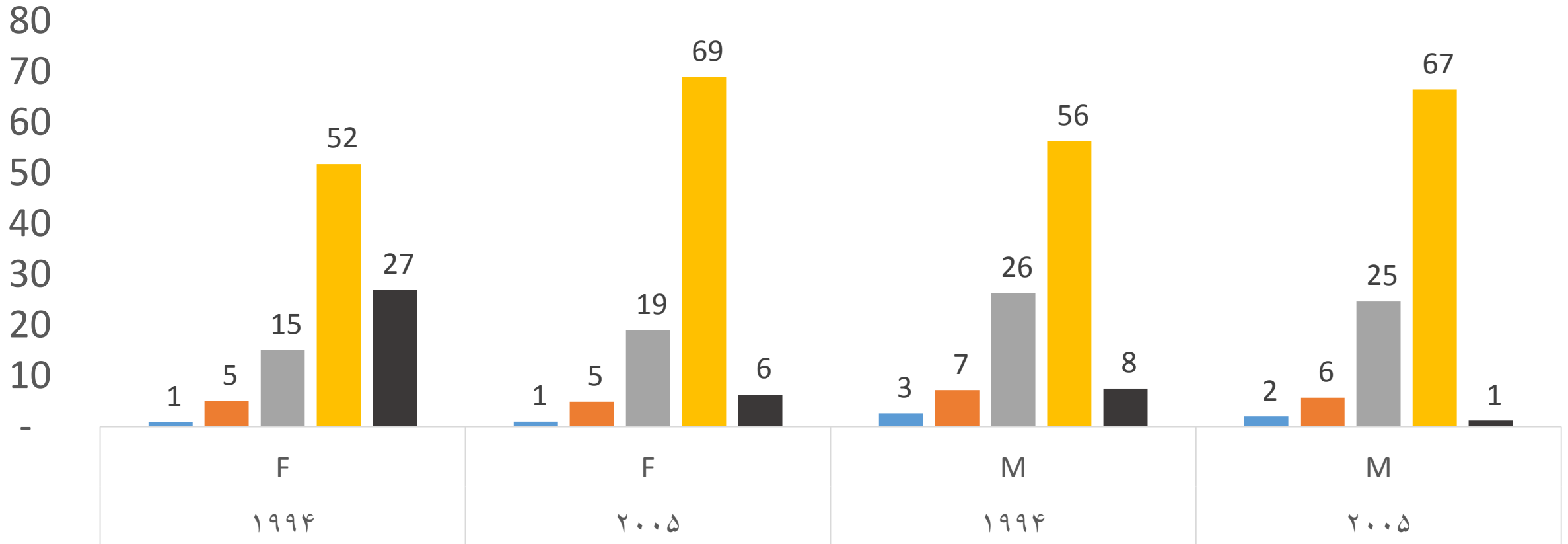
## Labor Force Participation ('000)



## F-M Unemployment by Education (%)



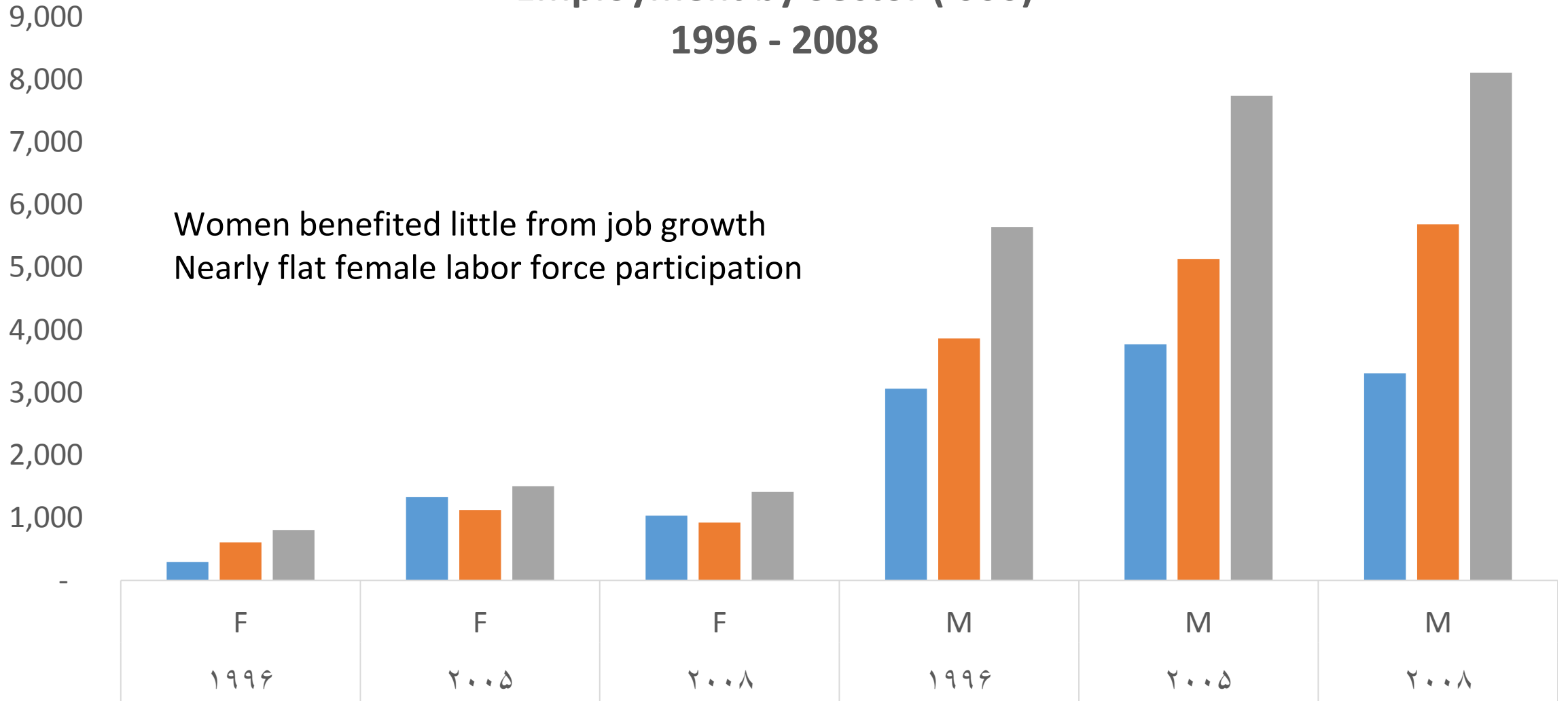
# Economic participation by Economic Class



Low among poor or moderately poor  
 Increasing among moderately and near poor  
 Declining among upper class – not good for tax-base

- Extremely poor (<US\$1.25, PPP)
- Moderately poor (≥US\$1.25 & <US\$2, PPP)
- Near poor (≥US\$2 & <US\$4, PPP)
- Developing middle class (≥US\$4 & <US\$13, PPP)
- Developed middle class and above (≥US\$13, PPP)

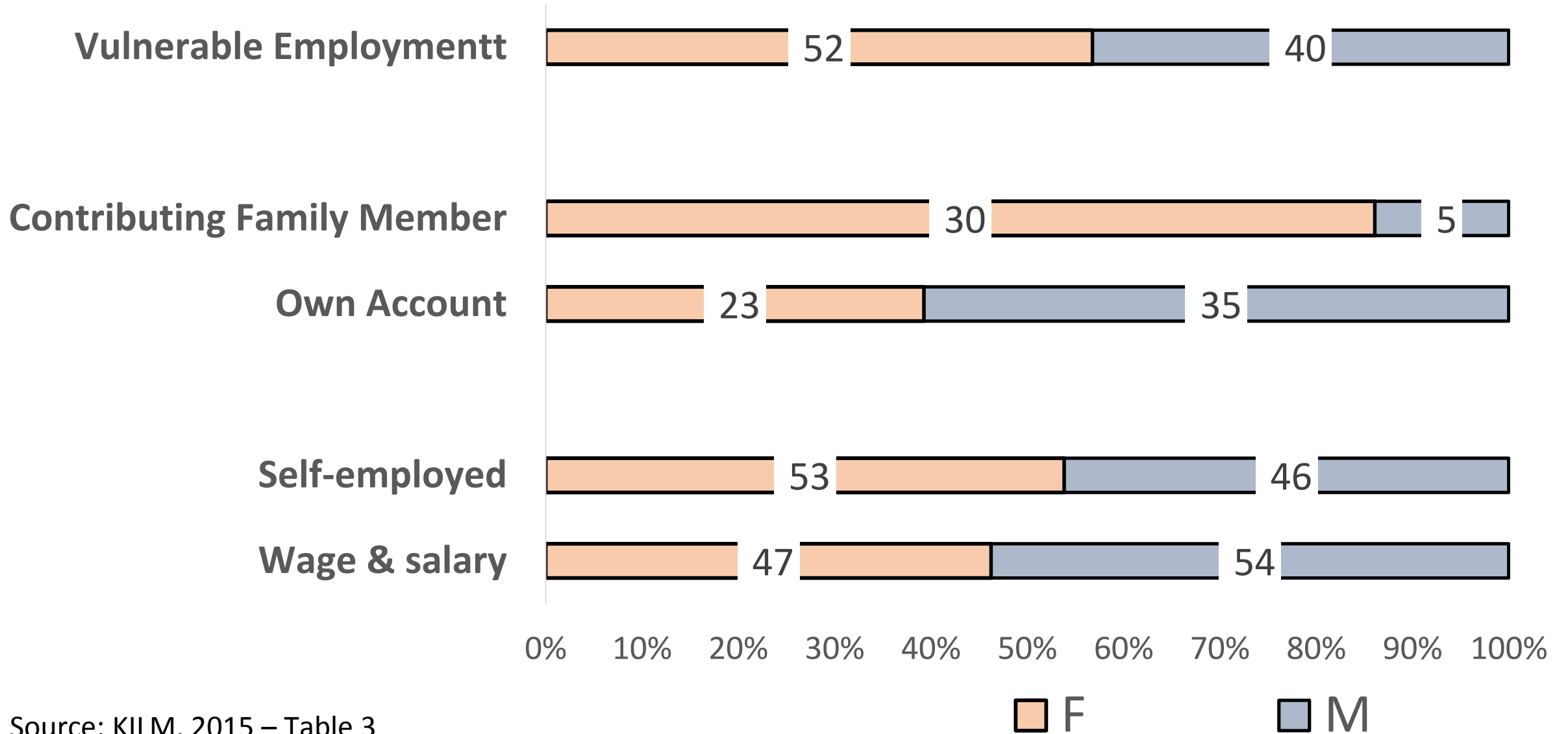
## Employment by Sector ('000) 1996 - 2008



Source: KILM, 2015, Table 4a

■ Agriculture   
 ■ Manufacturing   
 ■ Services

# Job Safety



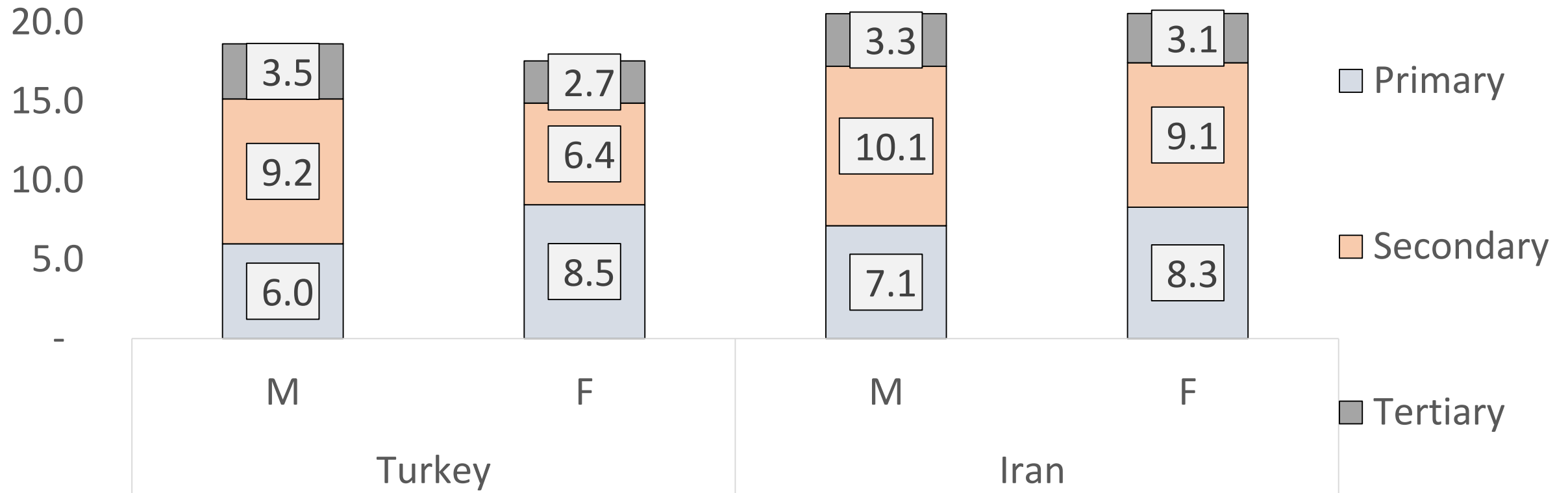
Source: KILM, 2015 – Table 3

Opportunities

# Deep and multi-faceted workforce

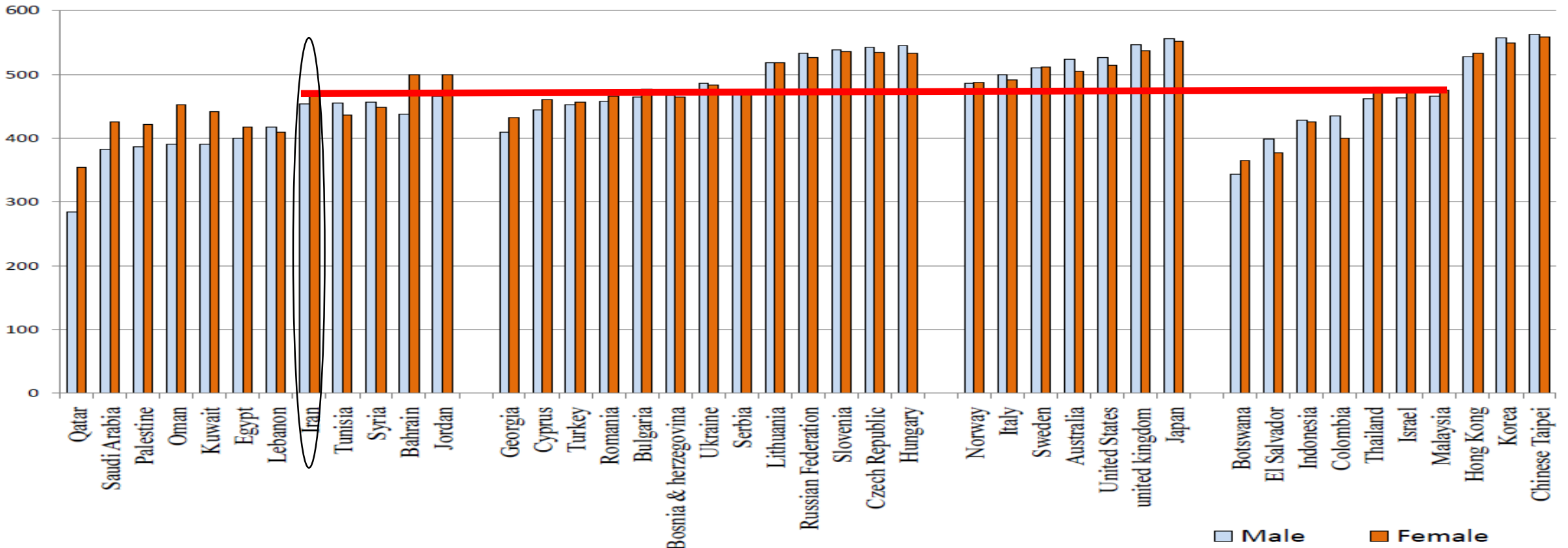
## Quality Parity between male and female workers

Educational Attainment of Population above 25 - Millions --  
laterst year



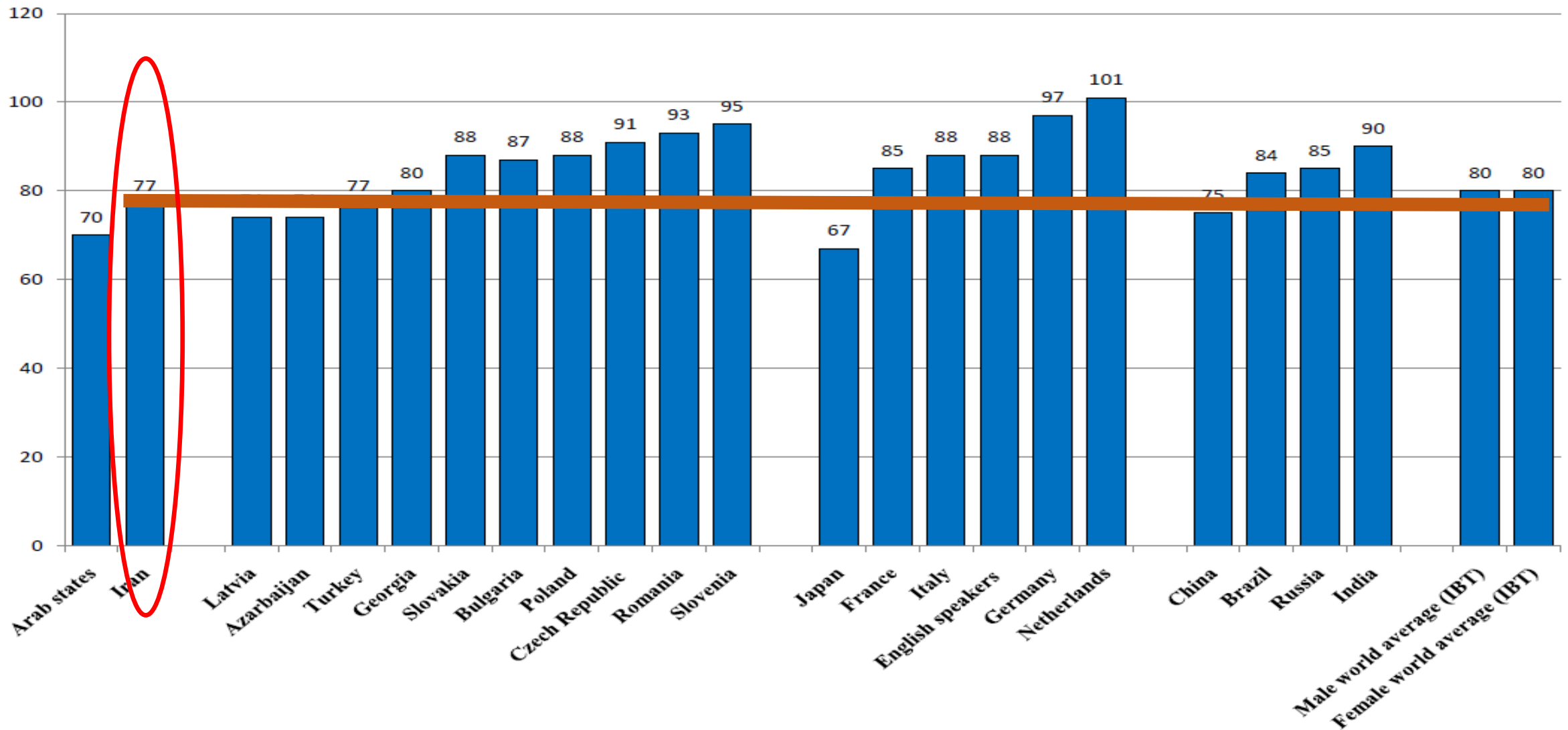
Source: UNESCO, 2015

## Average science score of eight grade by gender



Source: Highlights from TIMSS 2007, Appendix E, Table E-30

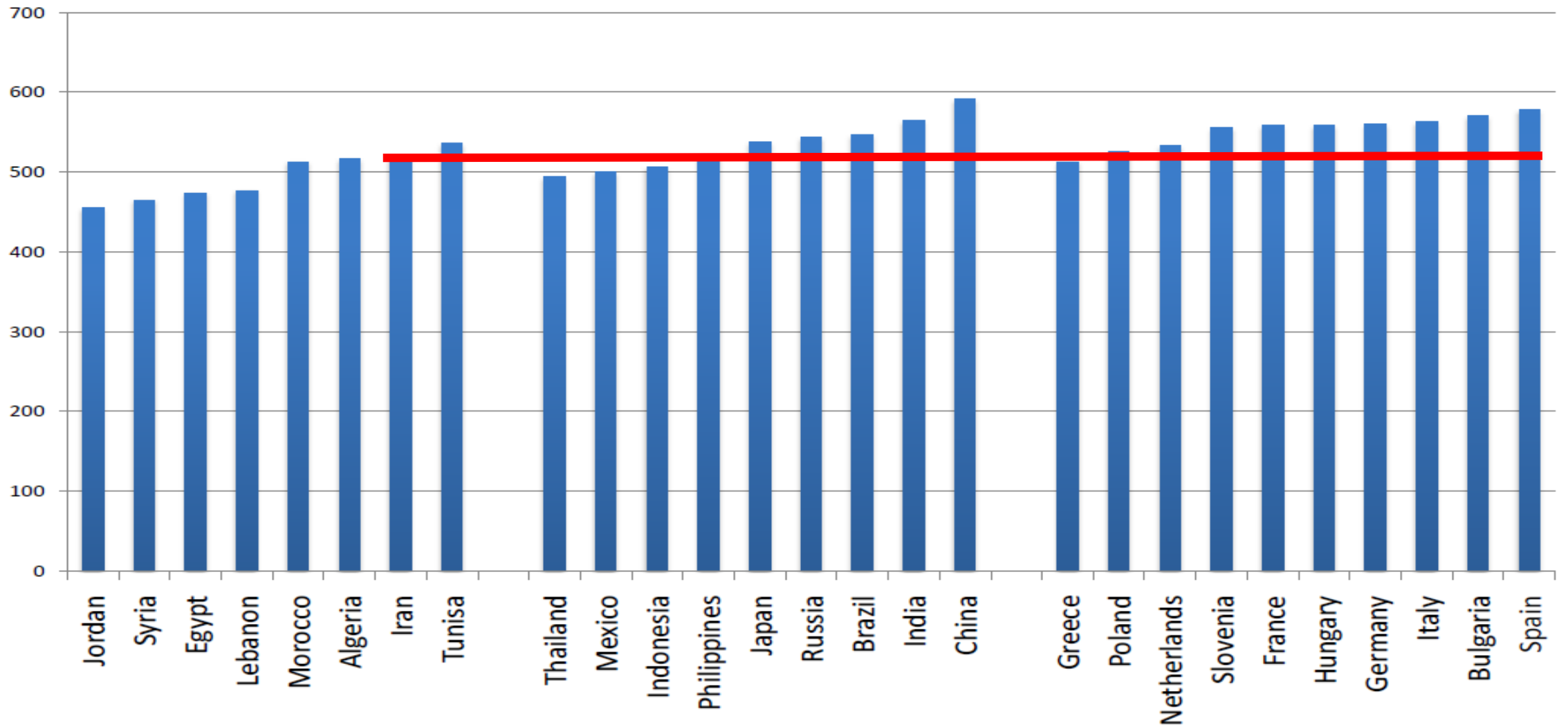
## English skills as measured by TOEFL IBT scores



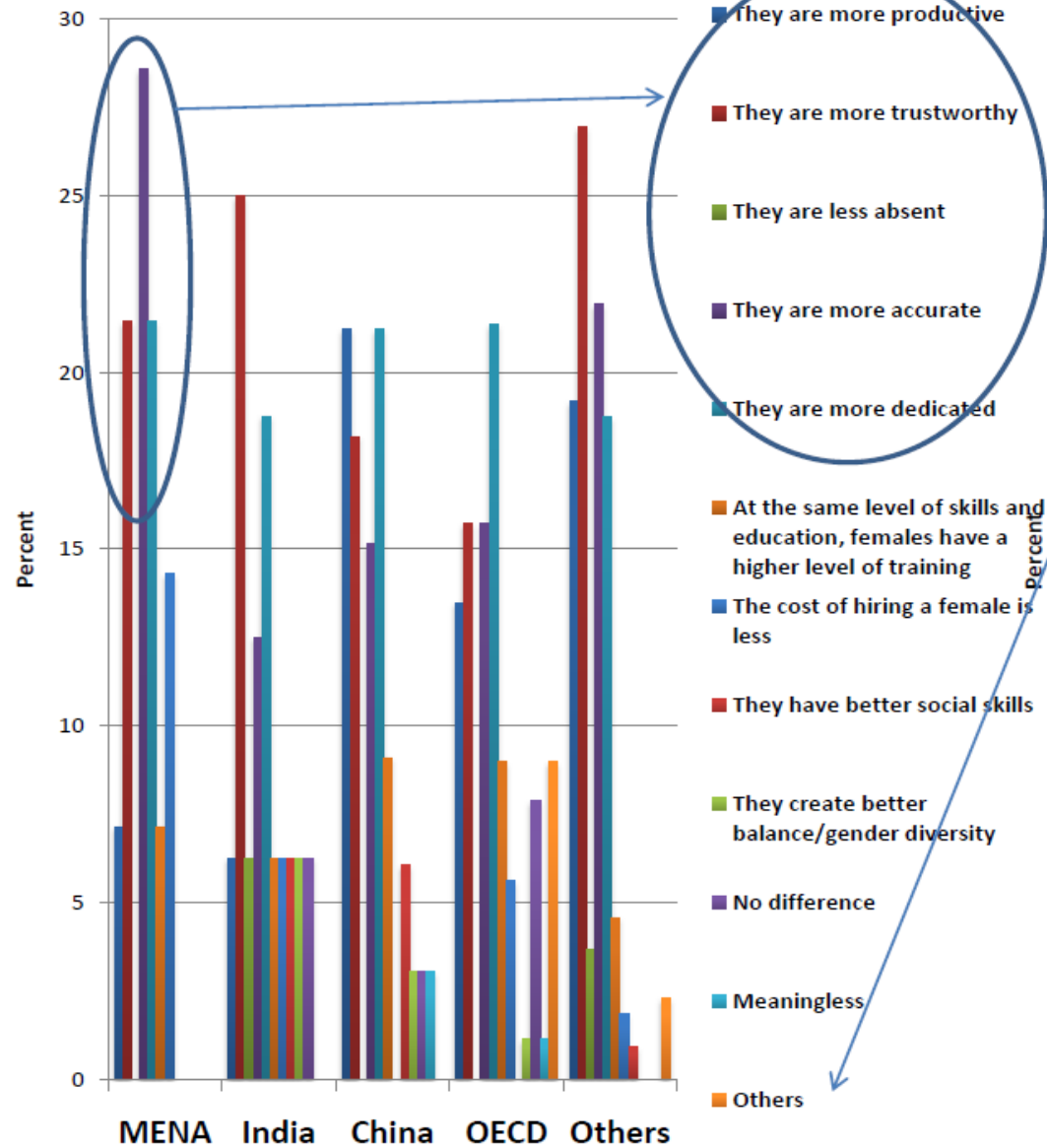
Source: TOEFL Test and Score Data Summary , January 2009 Test Data



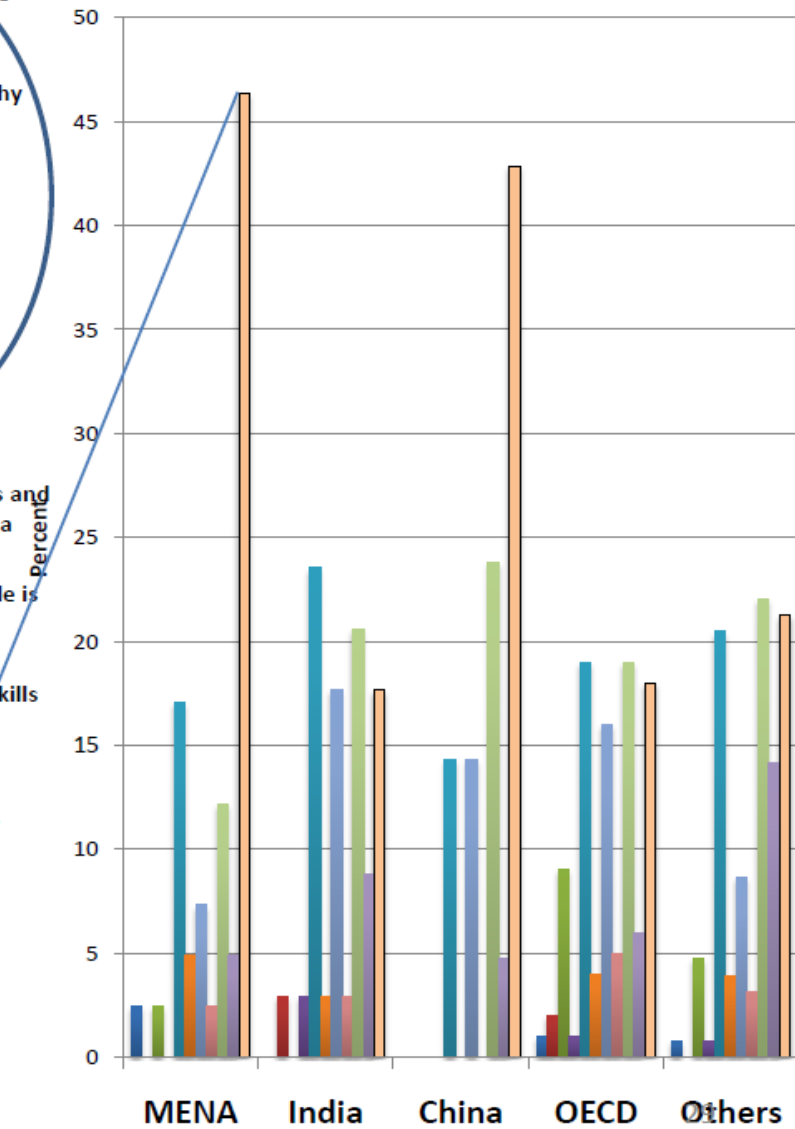
## GMAT Total Score Means by Citizenship 2008-09 as a measure of connecting to global business



### Advantages of hiring female employees over male employees at foreign location



### Disadvantages of hiring female employees over male employees



## Country Rankings

- **22<sup>nd</sup> largest GDP in 2012**
- **10<sup>th</sup> largest country taking its geographic and population size into account**
- **12<sup>th</sup> largest talent pool, measured by the size of the working age population and the average years of male and female education.**
- **8<sup>th</sup> largest size of university graduates per year,**

**Sources: Author's estimation based on UN, World Bank, and other reports.**

Rank	Nominal GDP (2012) UN methodology	Size (population and area)	Talent pool (working age population, avg years of schooling)	Size of Tertiary Graduates per Year	
1	United States	China	China	31.0	China
2	China	India	India	20.4	United States
3	Japan	United States	United States	18.6	India
4	Germany	Russia	Brazil	9.3	Russia
5	France	Brazil	Indonesia	6.1	Brazil
6	United Kingdom	Indonesia	Japan	5.1	Indonesia
7	Brazil	Canada	Russia	3.8	Japan
8	Russia	Mexico	Mexico	<b>3.8</b>	<b>Iran</b>
9	Italy	Australia	Germany	2.9	Turkey
10	India	<b>Iran</b>	France	2.7	Mexico
11	Canada	Argentina	South Korea	2.4	South Korea
12	Australia	South Africa	<b>Iran</b>	2.4	United Kingdom
13	Spain	Saudi Arabia	United Kingdom	2.4	Argentina
14	Mexico	Turkey	Italy	2.1	France
15	South Korea	Colombia	Turkey	--	Germany
16	Indonesia	Japan	Spain	2.1	Italy
17	Turkey	France	Canada	2.1	Poland
18	Netherlands	Germany	Poland	2.1	Venezuela
19	Switzerland	Venezuela	South Africa	1.8	Spain
20	Saudi Arabia	Spain	Argentina	1.7	Colombia
21	Sweden	Italy	Colombia	1.2	Australia
22	<b>Iran</b>	United Kingdom	Australia	0.8	Netherlands
23	Norway	Poland	Netherlands	0.4	Belgium
24	Poland	South Korea	Venezuela	--	Canada
25	Belgium	Sweden	Belgium	--	South Africa

Source: UN, UNESCO, WDI

# Excerpts about Iran by from “Start-up Rising” by Christopher Schroeder

- Tremendous potential -- outstanding young engineering talent, more women than I would see in many startup communities in the States.
- While slow in broadband speeds, the country has one of the highest internet penetrations in the region, and mobile usage approaches 100%.
- Per capita income is large and this is a nation that likes to consume, e-Commerce a potential.
- It has some of the greatest cultural, historic and tourist destinations on earth, but virtually none booked online.
- Its geographic location makes it outstanding for the movement of goods, ideas and services east/west/north/south.
- Startup gatherings, attracting thousands of young people, are growing. The key is that while so much is happening in the globe bottom up -- despite the top down regimes that try to control it.

**TABLE 1.1** Ease of doing business ranking

Rank	Economy	DTF score	Rank	Economy	DTF score	Rank	Economy	DTF score
1	Singapore	88.27	64	Cyprus	66.55	127	Mozambique	56.92
2	New Zealand	86.91	65	Croatia	66.53	128	Lesotho	56.64
3	Hong Kong SAR, China	84.97	66	Oman	66.39	128	Pakistan	56.64
4	Denmark	84.20	67	Samoa	66.17	130	Iran, Islamic Rep.	56.51
5	Korea, Rep.	83.40	68	Albania	66.06	131	Tanzania	56.38
6	Norway	82.40	69	Tonga	65.72	132	Ethiopia	56.31
7	United States	81.98	70	Ghana	65.24	133	Papua New Guinea	55.78
8	United Kingdom	80.96	71	Morocco	65.06	134	Kiribati	55.48
9	Finland	80.83	72	Mongolia	65.02	135	Cambodia	55.33
10	Australia	80.66	73	Guatemala	64.88	136	Kenya	54.98
11	Sweden	80.60	74	Botswana	64.87	137	Yemen, Rep.	54.84
12	Iceland	80.27	75	Kosovo	64.76	138	Gambia, The	54.81
13	Ireland	80.07	76	Vanuatu	64.60	139	Marshall Islands	54.72
14	Germany	79.73	77	Kazakhstan	64.59	140	Sierra Leone	54.58
15	Georgia	79.46	78	Vietnam	64.42	141	Uzbekistan	54.26
16	Canada	79.09	79	Trinidad and Tobago	64.24	142	India	53.97
17	Estonia	78.84	80	Azerbaijan	64.08	143	West Bank and Gaza	53.62
18	Malaysia	78.83	81	Fiji	63.90	144	Gabon	53.43
19	Taiwan, China	78.73	82	Uruguay	63.89	145	Micronesia, Fed. Sts.	53.07
20	Switzerland	77.78	83	Costa Rica	63.67	146	Mali	52.59
21	Austria	77.42	84	Dominican Republic	63.43	147	Côte d'Ivoire	52.26
22	United Arab Emirates	76.81	85	Seychelles	63.16	148	Laos PDR	51.45
23	Latvia	76.73	86	Kuwait	63.11	149	Togo	51.29
24	Lithuania	76.31	87	Solomon Islands	63.08	150	Uganda	51.11
25	Portugal	76.03	88	Namibia	62.81	151	Benin	51.10
26	Thailand	75.27	89	Antigua and Barbuda	62.64	152	Burundi	51.07
27	Netherlands	75.01	90	China	62.58	153	São Tomé and Príncipe	50.75
28	Mauritius	74.81	91	Serbia	62.57	154	Algeria	50.69
29	Japan	74.80	92	Paraguay	62.50	155	Djibouti	50.48
30	Macedonia, FYR	74.11	93	San Marino	62.44	156	Iraq	50.36
31	France	73.88	94	Malta	62.11	157	Bolivia	49.95
32	Poland	73.56	95	Philippines	62.08	158	Cameroon	49.85
33	Spain	73.17	96	Ukraine	61.52	159	Comoros	49.56
34	Colombia	72.29	97	Bahamas, The	61.37	160	Sudan	49.55
35	Peru	72.11	97	Dominica	61.37	161	Senegal	49.37
36	Montenegro	72.02	99	Sri Lanka	61.36	162	Suriname	49.29
37	Slovak Republic	71.83	100	St. Lucia	61.35	163	Madagascar	49.25
38	Bulgaria	71.80	101	Brunei Darussalam	61.26	164	Malawi	49.20
39	Mexico	71.53	102	Kyrgyz Republic	60.74	165	Equatorial Guinea	49.01
40	Israel	71.25	103	St. Vincent and the Grenadines	60.66	166	Tajikistan	48.57
41	Chile	71.24	104	Honduras	60.61	167	Burkina Faso	48.36
42	Belgium	71.11	104	Lebanon	60.61	168	Niger	47.63
43	South Africa	71.08	106	Barbados	60.57	169	Guinea	47.42
44	Czech Republic	70.95	107	Bosnia and Herzegovina	60.55	170	Nigeria	47.33
45	Armenia	70.60	108	Nepal	60.33	171	Zimbabwe	46.95
46	Rwanda	70.47	109	El Salvador	59.93	172	Timor-Leste	46.89
47	Puerto Rico (U.S.)	70.35	110	Swaziland	59.77	173	Bangladesh	46.84
48	Romania	70.22	111	Zambia	59.65	174	Liberia	46.61
49	Saudi Arabia	69.99	112	Egypt, Arab Rep.	59.54	175	Syrian Arab Republic	46.51
50	Qatar	69.96	113	Palau	59.50	176	Mauritania	44.21

# Why does Industrial Policy Need the Gender Perspective?

- Many reforms need to be enacted – critical that barriers of ALL kind be removed to unleash Iran's human capital potential.
- Piecemeal promotion will not lead to the revival that is desired.

Thank you

# A Framework for female intensive sectors – by type of skills availability and market orientation

