

Women Empowerment and Economic Growth: Empirical Evidence from Saudi Arabia

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Abstract

This paper analyses the long-term relationship between women empowerment and economic growth in Saudi Arabia using a time series data for the period 1999-2014. The results show that there exist a significant positive long-term relationship between women empowerment and economic growth. Thus our findings support the core idea that women empowerment stimulates long-term economic growth in the country. Economic growth is measured by the Female Employment.

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1 Introduction

There is ample evidence that when women are able to develop their full labor market potential, there can be significant macroeconomic gains. (Loko and Diouf, 2009; Dollar and Gatti, 1999). GDP per capita losses attributable to gender gaps in the labor market have been estimated at up to 27 percent in certain regions (Cuberes and Teignier, 2012). Aguirre and others (2012) suggest that raising the

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female labor force participation rate (FLFPR) to country-specific male levels would, for instance, raise GDP in the United States by 5 percent, in Japan by 9 percent, in the United Arab Emirates by 12 percent, and in Egypt by 34 percent. Based on International Labour Organization (ILO) data, Aguirre and others (2012) estimate that of the 865 million women worldwide who have the potential to contribute more fully to their national economies, 812 million live in emerging and developing nations.

In Saudi Arabia women make up almost 50% of the population, but their contribution to the measured economic activity is far below its potential. It is believed in general that role of women was basic to maintaining the structure of the family and therefore of society. The deeply embedded and complex nature of gender inequality in the society should be taken into account. Women participation would increase domestic economic activity, empower competition and enrich cultural and civic development.

Rising numbers of well-educated women enlarge the national talent pool, allowing reduced dependence on expatriates (who comprise over half the workforce). Instead women are still not seen as part of the solution. Since 2001, the number of Saudi women seeking employment has risen faster than the number of jobs, resulting in a 28 percent female unemployment rate, nearly four times that of men, according to The Ministry of Labor in the Kingdom of Saudi Arabia with Booz & Company analysis. Women's economic empowerment also boosts household income. Studies demonstrate that women are more likely than men to use their resources to promote their children's health and education.

Economic growth alone is not enough. It needs to be geared instead towards inclusive growth of women. Saudi Arabia is prosperous, with GDP per capita of close to \$23,000 in 2012 according to the IMF. However, Saudi Arabia ranked 123 out of 128 countries in Booz & Company's Third Billion Index which measures women's economic participation. In addition to economic growth, Saudi Arabia needs inclusive economic policies that promote long-term, targeted reforms that harness the potential of its aspiring women. Allowing women to drive, for example, is economic empowerment. Many Saudi women are likely to give up their jobs because they cannot afford to hire drivers to get them to work.

Economic measures need to be accompanied by civic changes that make women more visible in leading positions and that allow them to engage in shaping the debate. The decision to appoint women to the Shura Council, the kingdom's national consultative body, will have both these effects. Research shows that visibility is a key dimension of empowerment. It creates national role models and encourages younger women to advance in their careers. In Argentina, for example, women have made progress thanks to their national prominence. They hold high political office and are 39 percent of the parliament, compared to 6 per cent in

1990. Visibility fosters economic integration—Argentina's women are now 40 percent of the workforce, according to the World Bank.

According to the Saudi Ministry of Labor, the number of women in employment quadrupled from nearly 48,000 in 2009 to over 200,000 in 2012. Despite the leap, Saudi's national employment rate today is 85% for men and 15% for women, while women constitute 60% of the 12% national unemployment rate. There is no short supply of potential women power in the Saudi labour market. Women account for at least 80% of the entries on Hafez, the Saudi employment database of people who want to work. Saudi women have great potential, that is why the mostly institutions chooses to attract them and give opportunity in tapping into an idle talent pool which comprises of 50% of Saudi Arabia Economy.

It has been our experience, and that of other organizations, that Saudi women have consistently proven their professional worth despite a culture that limits their roles and career advancement; irrespective of financial needs. These traditions are deeply embedded in our social and economic infrastructure, and have resulted in decades of negligible involvement of women in the workforce; particularly in sectors other than education and healthcare. Due to the inherent volatility of this labour market, most organizations in Saudi Arabia will undergo a relatively high turnover rate among their women employees for many reasons, some of which continue to be of a social and cultural nature. Equal pay and career advancement, however, should not be among these reasons. In many organizations, equal pay has been in place since the organization publically opened its doors to women employees, in Saudi Arabia, 15 years ago.

In 2014, the active workforce in Saudi Arabia comprised 11.1 million people. Women in the labor force had an unemployment rate of 32.8% nearly five times of men which is only 5.9%. As the Kingdom promotes its Saudization policy, which seeks to increase the proportion of Saudi national in the new competitive jobs, women must be supported and encouraged to contribute to their country's economy.

According to the Ninth Year Plan of Saudi Arabia, the rate of unemployment among Saudis is expected to drop from 9.6% in 2009 to 5.5% in 2014, and policies to encourage women to participate in economic activity, enhance their resources, and expand job opportunities for them are expected to continue. In 2011, the Kingdom held its second ever municipal elections and passed a new women vote policy whereby women would be able to stand as candidates for and vote in the next municipal elections, set for 2015.

Although female participation is limited in Saudi Arabia, Saudi women are getting educated as of their male counterparts in all level of education. Over 93% of employed female hold either a secondary qualification or a university degree verses around 75 % of employed men. In fact 78.3% of the unemployed women

are university graduates while 76% of the unemployed men have a secondary education or lower (CDSI). Social pressure and lack of family support prevent women from entering the labor market.

This study provides with a valuable model to understand the relationship between women empowerment and economic growth. It also seeks to investigate the relationship between various variables participating in country's economic growth and development.

Table 1.1: Women Empowerment and Economic Growth Indicators (Percent)

	1999-2001	2002-2004	2005-2007	2008-2010	2011-2014
Female Population (in millions)	44.80	44.85	44.05	43.76	43.53
Female Employed Rate (FEMP)	45.2	60.23	85.70	84.33	79.66
Fertility Rate (FER)	4.21	3.98	3.46	3.24	3.03
Literacy Rate (LIT)	65.25	76.45	82.56	89.33	91.84
RGDP Growth Rate (Y)	1.53	5.67	6.27	5.00	4.50

Source: Authors' Estimation

Table 1.1 shows that women empowerment indicators have steadily increased in the country, Real GDP growth has slowed since 2011 to 2014. Following a strong start, real GDP growth slowed during the course of 2014, reflecting a decline in oil production and weakening non-oil output growth. For the year as a whole, growth was 3.5 percent, up from 2.7 percent in 2013 with non-oil growth of 5 percent, in part reflecting the continued strength in government spending.

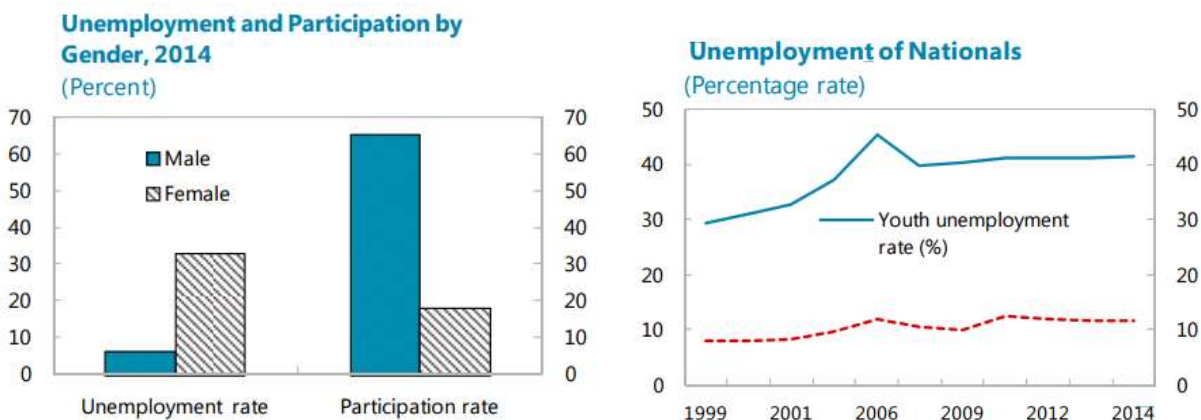
Employment growth was strong in 2014, but the unemployment rate for nationals remained high. Employment grew by 3.2 percent in 2014, with Saudi employment growing by 4.4 percent and non-Saudi by 2.2 percent. Nevertheless, the unemployment rate for nationals stood at 11.7 percent at end-2014, unchanged from a year earlier. The Gini coefficient which was published by CDSI with the 2013 Household Income and Expenditure Survey stood at 45.9 in 2013, down from 51.3 in 2007⁴.

The overall unemployment rate for nationals of 11.7 percent is high and masks considerable gender and age variations. Despite low labor force participation among women, female unemployment was about 33 percent in 2014. Youth unemployment was over 40 percent, and has been increasing. With rising labor force participation for women, and over 35 percent of the population still under the age of 19, these segments of the labor force will increase rapidly, underscoring the urgency of creating private sector jobs for nationals.

The government has introduced a number of initiatives targeting mainly youth and female workers including in the Nitaqat and Hafiz programs, and a number of

⁴ The Gini index measures the extent to which the distribution of income or consumption expenditure among individuals or households within an economy deviates from a perfectly equal distribution. A Gini index of 0 represents perfect equality, while an index of 100 implies extreme inequality.

sectors have been opened to female employment.⁵ Female participation has increased from around 14 percent in 2011 to 18 percent in 2014 and the unemployment rate has declined. A number of development projects have been targeted to high unemployment regions.



Sources: CDSI; GOSI; IMF staff estimates.

The above women empowerment in the country generates an interest to study the link between women empowerment and economic growth in the country. A review of existing literature shows that most of the previous studies into the relationship between women empowerment and economic growth are cross country in nature. The use of cross-country regression is not without problems, since they do not properly account for the time dimension. Moreover the cross country estimates can give a wrong impression of the impact of women empowerment development on economic growth since they assume the different countries in the model are homogeneous entities. Since countries may differ greatly with respect to country and economic policies used, results may not be true for a specific country.

The short comings of the cross-country results have prompted a number of researchers to rely on time series method to examine the relationship between women empowerment and economic growth on the data of individual countries. There are few studies with reference to Saudi Arabia, but there conclusion are inclusive. This study is designed to use the latest data available and perform a more rigorous analysis on the relationship between women empowerment and economic growth. The rest of the paper is structured as follow. Section II, gives a brief theoretical background and empirical studies. Section III discusses the

⁵ Nitaqat is a Saudization program that sets quotas on the minimum number of Saudi's a company needs to employ depending on its size and sector of activity. Hafiz is a program that provides financial support while nationals search for a job.

modelling framework and estimation results. Final Section IV concludes the study and discusses the policy implications.

2 Theory and Evidence

A number of studies have pointed out the strong correlation between gender equality and economic growth. Research has shown that societies that discriminate by gender tend to experience less rapid economic development and poverty reduction than societies that treat males and females more equally and that social gender disparities produce economically inefficient outcomes. (Dollar and Gatti 1999; Klasen 1999) Whereas the countries where women's participation in the labor force has increased significantly, the economy is accelerated giving significant lift to the GDP. Women's success to education, employment and having jobs reduces the likelihood of household poverty and resources in women's hand have a range of positive outcomes for human capital.

Identification of women as being a reliable, productive and cheap labor force makes them the preferred workforce for textiles and electronic transnational corporations. Perception of women as 'good with money,' including being better at paying back loans, has led them to be targeted in microfinance programs. Recognition of women as more efficient distributors of goods and services within the household has led to them being targeted with resources aimed at alleviating poverty, such as cash transfer programs. (Bradshaw, Castellino, Diop, 2013)

In rapidly aging economies, higher Female Labor Force Participation can boost growth by mitigating the impact of a shrinking workforce. For example, in Japan, the annual potential growth rate could rise by about $\frac{1}{4}$ percentage point if the female labor participation rate were to reach the average for the G7 countries, resulting in a permanent rise in per capita GDP of 4 percent, compared to the baseline scenario (IMF, 2012c). Higher female work force participation would also result in a more skilled labor force, in view of women's higher education levels (Steinberg and Nakane, 2012).

Better opportunities for women to earn and control income could contribute to broader economic development in developing economies, for instance through higher levels of school enrolment for girls. Women are more likely than men to invest a large proportion of their household income in the education of their children. According to the ILO, women's work, both paid and unpaid, may be the single most important poverty-reducing factor in developing economies (Heintz, 2006). Accordingly, higher FLFP and greater earnings by women could result in higher expenditure on school enrolment for children, including girls, potentially triggering a virtuous cycle, when educated women become female role models

(Aguirre and others 2012; Miller 2008). Stotsky (2006b) posits that women's relative lack of opportunities in developing countries inhibits economic growth, while at the same time, economic growth leads to improvements in their disadvantaged conditions.

Equal access to inputs would raise the productivity of female-owned companies (Do, Levchenko, and Raddatz, 2011). Productivity differentials among companies owned by men and by women have been found to be mainly the result of differences in access to productive inputs (Blackden and Hallward-Driemeier 2013). A reduction of this productivity gap through equal access to productive resources could yield considerable output gains (World Bank, 2011).

The employment of women on an equal basis would allow companies to make better use of the available talent pool, with potential growth implications (Barsh and Yee, 2012; CAHRS 2011). While not uncontroversial, there is evidence of a positive impact of women's presence on boards and in senior management on companies' performance.⁶ Companies employing female managers could be better positioned to serve consumer markets dominated by women (CED 2012; CAHRS 2011) and more gender-diverse boards could enhance corporate governance by offering a wider range of perspectives (OECD, 2012; Lord Davies, 2013). Moreover, a larger share of women in decision-taking positions could reduce the share of high-risk financial transactions that are normally conducted by male traders (Coates and Herbert, 2008).

Empowerment means giving authority to reinforce and build confidence in someone (World Bank, 2001). It is familiar that empowerment could be used as a tool for sustainable development in various fields i.e. Education and resources decision making power and authority and even in feeling sense of responsibility (Fatany, 2007, pp.26).

Empowerment means to give authority or power such as could to strengthen and build confidence in them (World Bank, 2001, pp.2). It was considered in the society that women's empowerment may substitute the men's working force.

Gender development and the role it plays in national progress is a significant. Every nation handles things differently and clearly cultural context is of paramount importance, something that is especially true in the case of Saudi Arabia. This paper helps the reader to gain further insight into the complexities

⁶ In their analysis of companies with a focus on innovation, Dezsó and Ross (2011) find that female representation in top management can improve performance. McKinsey (2008) shows that companies with three or more women on their senior management teams score higher on all nine organizational dimensions (including leadership, work environment and values, coordination and control) that are positively associated with higher operating margins. This result is supported by an earlier study by Catalyst (2004) that finds a positive correlation between gender diversity and financial performance (return to equity and total return to shareholders).

and challenges faced in regards to the role women are permitted to play in economic development in Saudi Arabia.

The issue of gender as a contributing factor to GDP and economic growth is a significant topic. Saudi Arabia with its own conservative laws and habits has slowly begun to recognise the importance of enabling some limited opportunities, which it trusts will help move the country forward. This paper gives some insight into the unique challenges and the modest progress being made. The definition of the empowerment vary, at times it portray as potential to make their choices while on the other hand it is also expressed as capacity to shape the choices and thus empowerment has proven to be an representative for women in old expired society, where women were considered as a deprived segment. It is also recognized that empowerment used in different context. For economic development there should be equal resource sharing among men and women (Zahidi, 2005, pp. 5). Global economic institutions, policies and national government's policies contribute to women's empowerment.

Development of education system in Saudi Arabia grew with the development of economy. Earlier girls were restricted to stay at their homes because of the traditional norms and gender segregation (AlMunajjed, 2009, pp. 8). On the contrary, today investment in female education has become crucial for the development of the economy. Education of women is related to various measures of development such as reducing population growth, improvement in health and nutrition and literacy rate is also increased (AlMunajjed, 2009, pp. 9). Investment by Saudi government for the development of education system and developing its economy by increasing foreign investment, increasing the contribution of women through labor force participation can lead the global economy to its height (Royal Embassy of Saudi Arabia, 2012, pp. 2). Together these developments have opened the Saudi economy to extraordinary opportunities. The best source for the growth of Saudi Arabia is to increase its GDP.

The government of Saudi Arabia has mixed policies while treating women in light of Saudi law. The law Q 3:14 states that women are equal to the ground of cattle, horses, gold, silver and wealth and furthermore Q 2:228 states that men and women are not equal. However, there are many disadvantages in implementation of these laws and they are not fully implemented in the society. There is a mixture of traditions, laws, social beliefs, norms and policies that exert considerable influence on the lives of women and limits their opportunity to complete their education (AlMunajjed, 2009, pp. 10). Early marriages of women may also be the factor that can be a constraint in educating a woman (AlMunajjed, 2009, pp. 12). Traditional roles of men and women in the society always favor men over women. Low level of awareness among girls can also be the factor that keeps women away from education.

Labor market of Saudi Arabia reveals different potentials and challenges. In 2013, a survey by International Monetary Fund showed that 34% of women labor force was unemployed (Saudi Arabia: Selected Issues, IMF, 2003). The government of Saudi Arabia is making a lot of efforts to improve the position of women in terms of employment (Saleh, 2007, pp.337). However, there are number of factors that continue to hinder the participation of Saudi women in labor market to increase the performance of economic development (Fatany, 2007, pp. 49). Incorporation of women in labor market cannot be achieved overnight; it can be achieved if the government shift to knowledge based economy. Employment of women is a vital element for the macroeconomic policy to promote economic development.

Female labor force participation has been one of the main sources of the Saudi labor market in developing the economy over the last fifty years (Asmari, 2008, pp.18). For evaluating the current status of the woman at the labor market, the researcher explore certain general feature that include specifying the number of females at the labor market, knowing the expected development rate by using available data and estimation of unavailable data. It is conspicuous that there is a sluggish increase in the labor market in the numbers of females in comparison to the successive increase in those of males. This underlines the decline at the development rate of females when compared with those of males. For instance, the rate of women contributions reached approximately 7% in 2010, while was found to be around 3.5% in 2012; and that these situations are expected to continue till 2018 unless clear policies are adopted and conducive climate for women's effective absorption and involvement made available.

Significant progress has been made in Saudi Arabia in recent years, in terms of the number of women participating in tertiary education and in the workforce, but the number of women in senior management and Board roles is still very low. In Saudi Arabia, female enrolment in tertiary education is on average 20% to 34%. Moreover, less than 2% of listed Board positions in the Saudi Arabia are held by women.

Women in the Saudi Arabia have the drive and talent they need to succeed at the highest level, and they are willing to work hard to get there. In fact, women represent an enormous untapped resource for organisations in the Saudi Arabia. But there are significant barriers that are hindering the full exploitation of this pool of talent. If we are to address the 'leaking pipeline', companies need to support and nurture their high-potential women, and create a more equal and positive working culture. This, in turn, will open up a significant new source of skills, energy and commitment for the future, which will help build success, profitability and competitive advantage at the company and the country level.

3 Models and Results

Following the standard growth theories the log of real GDP per capita (Y) is taken as the proxy for economic growth. The fertility rate (FER) as to proxy this variable. Women empowerment is represented by female employed rate (FEMP). Other growth determining factors such as, literacy rate is also considered in the analysis.

$$Y = \alpha_0 + \alpha_1 FER + \alpha_2 FEMP + \alpha_3 FER + \varepsilon_4 \dots\dots\dots (1)$$

Where ε_4 is the error term. The data that have been used in this analysis are annual, covering the period from 1999 to 2014. This is the latest period up to which all data are available in complete form. The data come from the World Development Indicators and Saudi Arabia Monetary Agency data.

Table 2: Results of Stationarity Test with and without Time Trend

	Augmented Dickey Fuller Test (ADF)				Phillips-Perron Test (PP)			
	I(0)		I(1)		I(0)		I(1)	
	C	C & T	C	C& T	C	C & T	C	C& T
Y	0.58	-2.69	-3.48	-5.42	0.78	-1.62	-4.44	-4.40
FER	-1.74	-3.45	-4.30	-6.25	-1.26	-2.16	-5.39	-6.28
LIT	-1.45	-2.28	-4.75	-5.80	-0.98	-2.91	-4.31	-5.56
FEMP	-1.95	-2.96	-5.09	-8.07	-2.67	-2.38	-6.77	-9.89

Note: McKinnon critical values for intercept (C); 1% level= -3.6394, 5% level = -2.9511, and for intercept & trend (C & T); 1% level = -4.2529, 5% level = -3.5485. Lag length in all cases is one.

Source: Authors' estimation.

Before proceeding further it is imperative to ensure that the underlying data are stationary. For this Augmented Dickey Fuller (ADF) test an extension of the Dickey Fuller (DF) method (see Dickey and Fuller, 1981) can be is used. However, this test assumes that the errors are statistically independent and have a constant variance. To circumvent these limiting assumptions, Phillips and Perron (1988) developed a generalization of the Dickey-Fuller test, which is also applied here.⁷ The ADF and PP tests results are reported in Table-2, where we can see that all variables are non-stationary at levels, but stationary at first difference.

Since we have concluded that variables in the system are I(1), the OLS regression results of the equation (1) are reported in Table-3.

⁷ The Phillips-Perron (PP) method has also been added to test the robustness of our results.

Table 3: Financial Development and Economic Growth

	Coefficient	t-stats	Probability
Constant	4.005	9.470	0.000
Fertility Ratio	0.156	2.262	0.043
Female Employed ratio	0.340	5.362	0.000
Literacy Ratio	0.178	6.489	0.000
Adjusted-R ²	0.982	--	--
Durbin Watson stat.	2.377	--	--
F-statistics	1806.912	--	0.000

Source: Authors' estimation.

It is clear from Table-3 that women empowerment has significant positive impact on economic growth in Saudi Arabia. However, since all the variables have a unit root, the existence of a co-integrating vector is a necessary condition for any sensible interpretation of the results. The fundamental aim of co-integration analysis is to detect any common stochastic trends in the data and to use these common trends for a dynamic analysis. So co-integration tests are performed to test for the presence of a long-run relationship between financial development and economic growth. The OLS regression result, which is the first step of Engle Granger (1987) procedure, is shown in Table 2. The results show that the long run coefficient of literacy rate is positive and highly significant. However, if and only if, there exist a co-integration, then these will be the valid long run estimates. To confirm this, we go to the second step of the Engle Granger procedure and check the stationarity of the residuals using ADF test. According to the Engle and Granger approach, if the error term is a stationary process or $I(0)$, then co-integration exists. In other words, although individually the variables are non-stationary, if residuals are found to be stationary the regression is a co-integrating regression.

Further, Saudi women have achieved a high level of education and this could be used successfully in workforce participation. As a result, there is lower fertility and fewer children. In addition, by working, women contribute to value added in the economy and hence the economic output or income grows in the economy. With the lower rate of population growth as a result of women's education and economic participation, the per capita income increases as well. The adjusted R-square is 0.982, which is a measure of how well our model generalizes and. So, the assumption has certainly been met.

4 Conclusion and Future Recommendations

From international legislative commitments to NGOs dedicated to women's welfare, Saudi Arabia's policies and programs are promising steps on the road to women's full participation in its labor market. However, women still make up less than 15 percent of the national work force; this represents an enormous source of

untapped potential for the Kingdom, whose labor force currently relies heavily on expatriates. Legislative, social, educational, and occupational constraints prevent women from fully participating in the Saudi labor market. Overcoming these constraints will be essential if the Kingdom is to create a dynamic market economy. The introduction of sweeping reforms to the national educational system is a major step in preparing Saudi women for competitive jobs. Labor market reforms and labor law reforms—including legislation promoting gender equality and family-friendly mechanisms—should be seriously considered. In addition, Saudi Arabia should seek to create a supportive environment that encourages the design of programs to emphasize the positive role of Saudi women in the labor market and introduce women to senior employment positions.

Flexible working is central to this, with performance appraisal based on achievements rather than time spent in the office. Trust and technology become vital enablers for flexible working. It has to be made clear that flexible working does not mean working less but actually increases commitment and productivity. CEOs can play a vital role by visibly supporting women at work. The key is to ensure more women make it through middle management to more senior positions, and the ‘tone in the middle’ will take its cue from the ‘tone at the top’. It also means that every employee needs to be clear about the standards of behaviour required, and what is - and is not - acceptable. Organisations need to invest in building career paths, which means not only more support and mentoring for talented women, but also more diversity training for men. It includes identifying high potential female talent and proactively planning their careers. Organisations should focus on developing team with the right mix of skills and capabilities rather than focus on specific diversity mixes.

Adopting HR policies such as policies on recruitment pay and promotion, and targets for numbers of women at each managerial level will ensure equity in the workplace. Organisations should also explore the business benefits of offering more than statutory requirements for certain benefits in order to retain top talent. CEOs can make a difference by being seen and heard to support women in the workplace, and helping to promote positive female role models. They can also make a huge impact by contributing speeches and editorial comment on the value of a more diverse workforce for both their own business, and the wider economy. It is particularly important for the next generation.

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