



Who Drives the Car?

Hypothesizing the Impact of Trends in Post-Secondary Education on the Labour Market, Home Production and Gender Roles

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Abstract

Traditionally discourse around women and labour market has been concerned with women's opportunities (or lack thereof) in the workplace vis a vis their male counterparts. While this is still a concern, current trends demonstrate that women are increasingly accessing post-secondary education (PSE), obtaining managerial positions, and otherwise performing better than men in many ways. Simultaneously, men are becoming less likely to access PSE and in some cases are struggling to find work in a post-industrial society that favours human capital, desk jobs, and soft skills like communication and interpersonal intelligence. Jobs involving physical labour are in decline in Canada (e.g., manufacturing sector) and some are asking whether or not women may be better suited to this new reality.

This paper will examine trends in women and men's education and labour market participation to understand the potential implications of these trends for gender roles. It will also provide an overview of the literature surrounding women in PSE and the labour force in order to contextualize the discussion and to demonstrate the complexity of women's labour market

choices. Following this, it will describe three hypothetical scenarios that could arise out of current trends and that are consistent with the literature. The first scenario is the status quo, which would involve a stable equilibrium in which changes in women's PSE attendance would not have significant impacts on gender roles or the labour market. The second scenario is a successful adjustment of gender roles, where women would increasingly be the main breadwinners and men would increasingly be involved in household production. The final scenario involves an unsuccessful adjustment of gender roles where women would continue to struggle to achieve in the labour market and men would resist taking on work traditionally belonging to women, such as clerical work or home production. The scenarios speculate that current trends could lead to significant social problems.

While the three scenarios are meant to be somewhat stark and overstated, they suggest that gender roles be an important policy consideration amidst changes in PSE attendance and labour market participation. Understanding current trends and understanding how they impact men and women differently is an opportunity that could ultimately allow for more equality, and that may enable men and women to achieve their full potential – both in the home and in the labour market.

Introduction

Throughout the last four decades, the number of women in Canada accessing post-secondary education (PSE) has risen dramatically. Today in Canada women make up nearly 60% of full time undergraduate students and around half of Master's and PhD students (Turcotte 2011, p. 19). Women are also starting to catch up in the working world: women are increasingly filling managerial roles and the gender wage gap is almost non-existent for young female university graduates (Finnie, Childs, Islam, & Wismer, 2011, p. 50). Given that education impacts earnings and labour market participation, increases in education among women may increasingly influence women's earnings, the jobs they hold, and perhaps how men and women relate to each other and divide labour both at work and in the home (i.e., gender roles).

This paper will highlight important trends in terms of the amount of education women are pursuing and the jobs they are selecting, and will discuss the implications of these trends in terms of male and female wages; fertility; the division of labour, both in the home and the labour market; and household spending. Overall it will look at evolving gender roles in a post-industrial society that emphasizes human capital and educates more females than males.

Broadly speaking Canada may already be on its way to gender equality in the labour market, and some hypothesize perhaps even an eventual overrepresentation of women. The gender wage gap is closing, women are obtain more post-secondary degrees than men, and it seems like only a matter of time until women represent at least 50% of senior managers, politicians, and engineers (although the glass ceiling may endure at the very top). If this is true,

then gender roles are already shifting and we may even need policies that support men in the education system and the labour market. In fact recent studies have shown that high school boys are less engaged high school than girls, have lower performance in most subjects, and are less likely to access PSE (Finnie, Childs, Islam, & Wismer, 2011, p. 60).

If men are less frequently obtaining post-secondary education (as evidence suggests), what will this mean for uneducated men in a postindustrial labour market that values human capital? Will men even be able to adapt to new gender roles, and become comfortable taking on the work of home production or traditionally female work? How gender roles evolve may impact the choices that are available to men and women. Conversely, the choices men and women make will also have an impact on gender roles.

These questions are all the more pertinent given the global context. Canada's productivity ranks low among OECD countries, especially given the amount we spend on research and development. Birth rates are declining, and we have more baby boomers retiring than young people entering the labour force, which suggests that our productivity will continue to decline. The government's response (the prosperity agenda) to date has been to focus on increasing immigration, particularly skilled immigrants. However maintaining prosperity will also require understanding trends in education and the labour market. If as evidence suggests, certain segments of the male population are struggling to obtain education and find work while women are increasingly succeeding at obtaining PSE, what will the impacts be?

This paper will discuss the implications of current trends for gender roles as well as the impact that changing gender roles will have on current trends. For example, changing gender

roles have enabled women to seek out new kinds of work and education. At the same time, seeking out new kinds of work has changed the division of household labour and consequently has caused gender roles to adjust further. In other words, there is a reciprocal relationship between gender roles in the home, and women's education and workplace achievement.

To this end the paper lays out three hypothetical scenarios, to help illustrate how current trends might evolve, and the range of impacts they could have for Canadians. The first scenario will outline the status quo: women are increasingly obtaining PSE and doing better in the workplace, but are less quick to seek out certain kinds of jobs like STEM¹ jobs, and high level managerial positions like CEOs and COOs. In this scenario gender roles might evolve, but quite slowly and unremarkably and current trends in PSE attainment would not have a great impact. The second scenario posits a successful gender role adjustment. In this scenario the number of fathers who take paternity leave would increase, and the number of stay at home fathers would increase. Men would also be more likely to obtain traditionally female work while the women increasingly fill competitive white-collar positions. This could mean more female CEOs than male CEOs, and more female politicians.

The third scenario follows from the status quo scenario, but more radically. Under this scenario we would see an unsuccessful adjustment of gender roles and instead of seeing slow unremarkable change, we would see significantly fewer men attending PSE and increasingly numbers of men struggling to contribute productively to society. It hypothesizes a situation where men are unable to find traditional blue collar work in a post-industrial society that values

¹ Science, Technology, Engineering and Mathematics

human capital, but unwilling (and perhaps unable as well) to take on new kinds of work like childcare or clerical work. Furthermore, they may also not step up in home production and would thus be unable to support their wives by staying home with the children, which could lead to low fertility rates. This scenario is perhaps the most concerning as it involves a mismatch between what men and women think they should be doing (informed by unchanging gender roles) and the kinds of educational and work opportunities that are available to them.

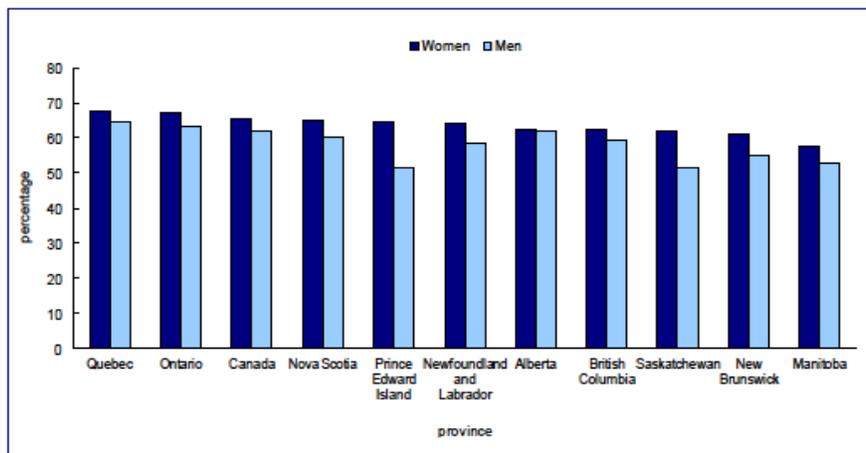
To explore these challenges, the paper has been divided into four main sections. The first section will discuss current trends in terms of women's (and men's) educational and professional choices. It will compare the percentage of women with advanced degrees today with the percentage of women in the 1990s. It will also provide an overview of women's professional choices, highlight the kinds of jobs women are pursuing, and discuss the gender wage gap. The second section will provide an overview of the academic and popular literature on gender roles, education, labour market participation, and household production. These different topics all contribute to understanding gender roles and how current trends have been discussed in the literature, and how they may continue to evolve. The third section of the paper introduces and contains the three hypothetical scenarios, which include maintaining the status quo, successful gender role adjustment, and unsuccessful gender role adjustment. This section will outline how the scenarios could play out and what the consequences could be without an adequate policy response. The paper will finally conclude by highlighting the main messages of the paper and by providing some key takeaways for policy makers.

Trends: Men and Women in PSE and in the Labour Market

This section will highlight trends in terms of women's educational achievement; the degrees they are pursuing, as well as their labour market participation; the types of jobs they are choosing; and the gender wage gap.

Women's educational attainment has changed drastically in the last several decades. In 1990 only around 14% of women between the ages of 25 and 54 had a university degree. By 2009 that number had doubled to 28% (Turcotte 2011, p.6), and if trends continue that number will only continue to rise. In fact today women make up almost 60% of full time university enrollments at the undergraduate level, around 55% at the Master's level, and 48% of PhDs (Turcotte 2011, p.19). A comparison of the number of women and men with a post-secondary degree can be found below. Significantly, women on average have more degrees than men in every province.

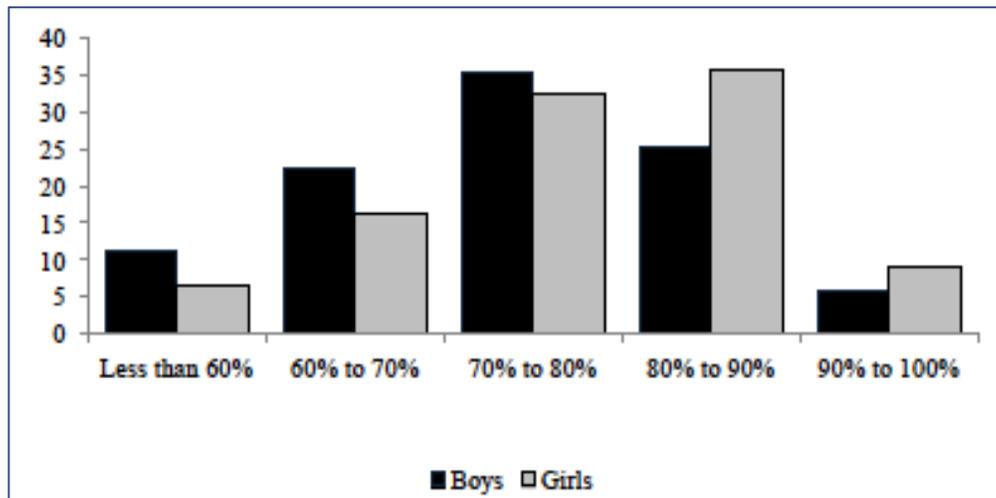
Figure 1: Percentage of Women and Men with a Post-secondary Degree, by Province, 2009



Source: Turcotte, 2011, p.9; Labour Force Survey 2009

However women are not just outperforming men in the number of advanced degrees they obtain. Recent data from the Youth in Transition Survey reveals that high school age girls on average receive higher grades than high school age boys. Research by Ross Finnie, Stephen Childs, Misbahul Islam and Andrew Wismer reveals that high school age girls are outperforming boys in many areas. Their analysis found that boys have lower grades on average than girls in math, science and language courses, and that boys have lower overall grades than girls, as illustrated in figure 2 below. Furthermore boys are significantly less likely to graduate from high school. At age fifteen, they are also less likely to volunteer or participate in most extracurricular activities (besides sports) and are 14 percentage points less likely to access university (Finnie, Childs, Islam, & Wismer, 2011, p. 9). This suggests that, boys are less engaged and have lower attainment in academics and other activities than girls.

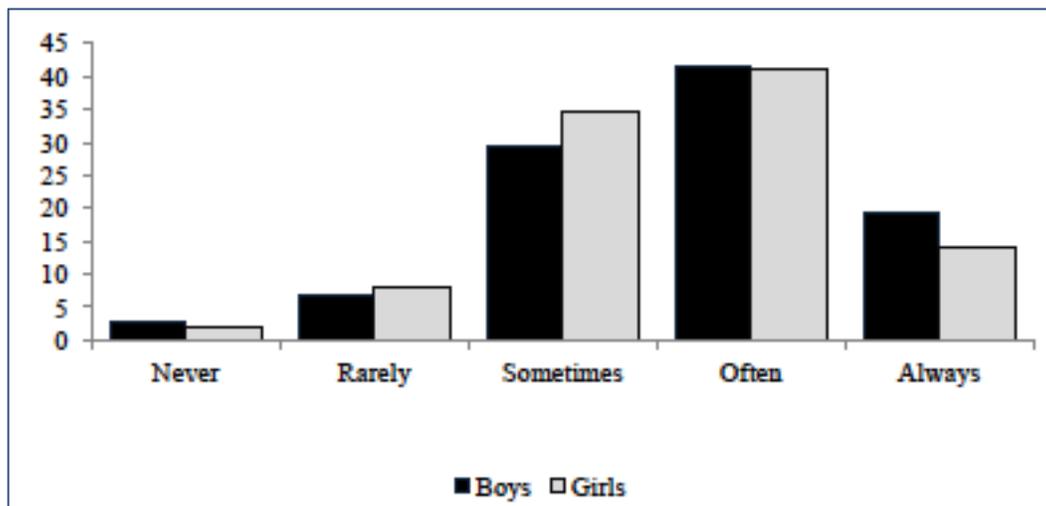
Figure 2: Overall High School Grade, Average (% Dist), Age 15



Source: Finnie, Childs, Islam & Wismer, 2011, p.3

One area, however, where boys do outperform girls is in self-confidence, which is an interesting paradox. Girls are performing on average at a higher level than boys, yet they are far less likely, for example, than boys to report that they often or always “can master the skills being taught” as seen in figure 3 (Finnie, Childs, Islam, & Wismer, 2011, p.16).

Figure 3: “I can master the skills being taught” (% Dist), Age 15



Source: Finnie, Childs, Islam & Wismer, 2011, p.16

This is an interesting trend because it may reveal something about how boys and girls are socialized to view themselves. As this paper will go on to discuss, elements such as culture and gender role attitudes play a significant role in educational and professional attainment, and these attitudes may help explain why women, at least currently, do not make up a large percentage of workers in many areas of the workforce, such as in Science Technology Engineering and Mechanics (STEM) jobs, or in high profile managerial positions (i.e., CEOs, CFOs).

This paper will highlight STEM jobs and high-level managerial jobs because these jobs are highly paid, traditionally male positions, and because there are many implications of women not pursuing these jobs. Qualified workers for STEM positions are in high demand, and if women do not increase their participation, there could be labour market shortages. Given that Canada is already lagging in terms of productivity, shortages in areas of high growth may lead to decreased prosperity and a lower standard of living.

High-level managerial positions are also interesting because they reflect gender role attitudes. These positions are elite, they require long hours, and are difficult to combine with an active family life. If gender role attitudes emphasize the role of women in raising their children, then many women may not aspire to these positions.

Interestingly, despite having higher grades in science and math than boys, girls' participation in STEM related degrees and diplomas has not significantly increased. For example, in 1992 women made up 59% of university graduates in "social and behavioural science, law" and by 2008 they made up 67% of students. For "mathematics, computer and information sciences" women made up 35% in 1992, and by 2008 that number had decreased to 30%. For "architecture, engineering and related services" women represented 17.5% of students in 1992 and 22% by 2008 (Turcotte 2011, p.21). However, this increase is not nearly as substantial as that seen in other disciplines such as the social sciences. These trends are particularly interesting given that women are generally outperforming men in high school in science and math (see above for a more detailed discussion). These trends may have significant repercussions for Canada's ability to meet labour market skill demands if women make up over

50% university students and they are not opting to enter fields of study that would prepare them for STEM careers.

As far as employment is concerned, the gender wage gap over the last two decades has narrowed considerably, especially for young women with a university degree. While women with a high school education or college education tend to make significantly less than men within 18 months of graduation, women with a university degree make around 98% of the male wage within 18 months of graduation (Finnie, Childs, Islam, & Wismer, 2011, p.57). However, as women's and men's careers progress, the gender wage gap still exists. For example, between the ages of 25 and 29, women with a university degree tend to make between 85% and 107% of the wage of similarly educated men. So for every dollar earned by a male worker, a woman on average makes between \$0.85 cents and \$1.07 dollars depending on the degree. In other words, on average, women with some degrees (such as "health, parks, recreation and fitness") actually make 7 cents more on every dollar than men with the same degree. However, between the ages of 30-34 women make between 78% and 96% of the wage that men with the same degree earn (Turcotte 2011, p.22), so in some cases they make 22 cents less than men for every dollar earned².

The increase in the wage gap as women and men age is likely attributable at least in part to women taking time off to have children or to raise a family. However if true, it reflects current gender roles: women are still the main parent to take time off and spend twice as much time on

² Significantly this comparison may not be exactly accurate because the data comes from a cross sectional survey. The women between ages 25-29 are not the same women as those between the ages of 30-34. Those between 30-34 were born earlier when gender roles were more defined so it makes sense they would, on average, earn less than women from a younger cohort.

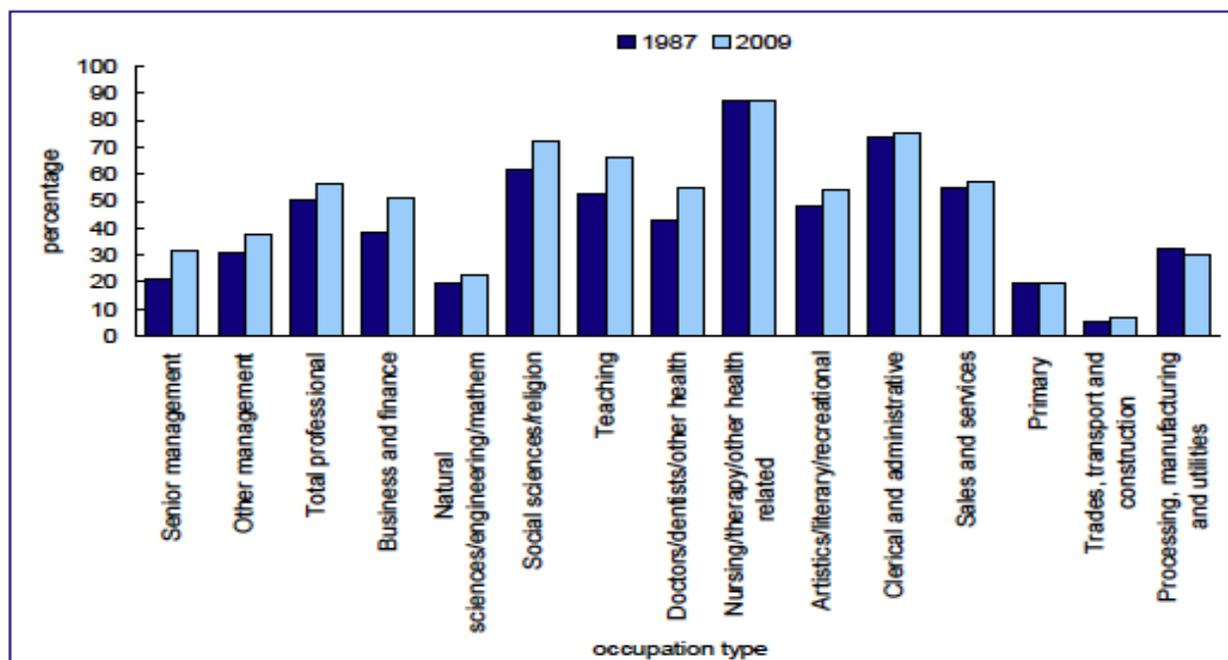
childcare (Milan, Keown & Urquijo, 2011, p.20). Later on this paper will discuss the limitations of maintaining some conventional gender roles (women as the main caregiver) while abandoning others (women increasingly becoming the main breadwinner), and the pressure that this juxtaposition places on the family unit.

Beyond the gender wage gap, however, we are continuing to see dramatic changes in the number of women participating in the labour market and the kinds of jobs they are obtaining. Between 1976 and 2009, the employment rate in Canada of women ages 15 and over³ rose from 42% to just under 60%. During this same period, the employment rate of men ages 15 and up fell from 73% to 65% (Ferraio 2011, p.5) making the current employment rate of men and women nearly equal. For women and men ages 45 and up⁴ with a university degree, the employment rate is 64% and 67% respectively (Ferraio 2011, p.7). However, despite an increase in education and labour market participation, as well as employment rates that are comparable to men's, women are still participating predominantly in traditionally "female" work. For example in 2009 women represented only 31.6% of senior management, but 75.5% of clerical and administrative workers (Ferraio 2011, p.22) as seen in figure 4 below.

³ The Statistics Canada study that generated these numbers does not indicate an age limit.

⁴ See foot note 2

Figure 4: Women employed as a percentage of all occupations, 1987 and 2009



Source: Ferrao, 2011, p.22; Statistics Canada Labour Force Survey

That said, in general women are increasingly filling positions that have been traditionally filled by men in the past and make up over 50% of doctors and 51% of business and financial professions (Ferrao, 2011, p.22). This means that although women’s professional attainment and wages have lagged behind their educational attainment, they have caught up in many fields.

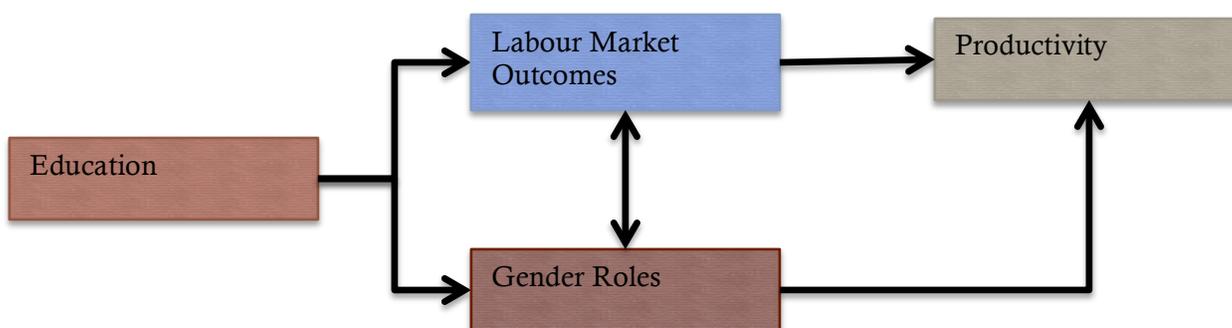
This is where the interesting questions arise for the labour market, gender roles and even productivity. What happens if women start to increasingly fill higher paying positions than men? Will women on average become the main breadwinners for families? Conversely, what will happen if women don’t continue to move into traditionally male occupations? If so what will this

mean for raising children and for the role men play in the family unit? Will gender roles evolve along with wages and prestige? Will women pay the bills and buy their boyfriends flowers?

These questions of labour market participation and gender roles may even influence productivity. For example, as the labour market increasingly requires skilled labour, particularly in the STEM fields, what will it mean for productivity if women continue to predominantly pursue administrative or clerical positions? If women are graduating from university at a far higher rate than men, will there be enough men to fill the positions that women opt not to pursue?

These questions are ultimately very significant because they concern not only impact family relationships and gender roles, but also labour markets, and productivity. Although family dynamics and productivity are rarely discussed in conjunction, the trends in Canada will have important ramifications for both. How these trends play out in Canada may have a significant impact on how we understand ourselves as a society. Figure four below illustrates this relationship between education and labour market outcomes, gender roles and productivity.

Figure 5:



Education, Work, and Gender in the Academic and the Popular Literature

The topic of women's education and labour market participation has received a significant amount of attention from mainstream and academic sources in the last few years. Economists such as Francis Woolley have looked into inequity in the household while CFOs like Sheryl Sandberg of Facebook have encouraged women to equally divide household labour to enable themselves to pursue careers (Sandberg, 2011). While women are generally outperforming men in many areas, many are still concerned that the professional arena is still male dominated. Consequently much of the debate in the popular literature focuses on helping women achieve more professionally while debate in the academic literature looks at family economics and inequality between spouses in the household.

Women Entering the Labour Force

In the academic literature, the article "Liberation Revisited: Education, Technical Adoption and The Household Labour Supply" by economist Marina Adshade, looks at the effects of increased women's labour force participation on mode of production in the early 1900s. While the article does focus on changes that happened prior to the current changes that this paper is set to discuss, it is relevant because of the explanation Adshade provides for increased labour force participation and subsequent changes to modes of production.

According to Adshade "the turn of the century marked a significant transition for women in terms of education and employment" (Adshade, 2002, p.2), and she argues that a division of labour began to exist in certain labour markets between managers and skilled clerical workers. These clerical positions required minimal education and did not involve physical labour, which

made clerical work very suitable to female workers of that period. Adshade argues that as the number of people graduating from high school increased, changes occurred in the labour market. She posits that “increases in the potential supply of skilled workers also induced an increase in the demand for those workers . . . new jobs previously unavailable, were created and filled primarily by women who now found it profitable to choose waged employment over home production” (Adshade, 2002, p. 5).

While these changes were taking place over a century ago, the trends that Adshade identifies are significant because they demonstrate how increasingly educated women can impact the labour market. In this case, a higher supply of educated workers led employers to change their mode of production, which in turn increased the demand for skilled workers to fill clerical positions. These positions were ideal for women given the level of education they required coupled with the fact they were considered acceptable jobs for women, as they did not involve manual labour. Although attitudes have changed today regarding the kinds of work women can pursue, this example highlights how women’s education and consequent participation in the workforce has the potential to completely transform how labour is organized.

A second article by Marina Adshade entitled “Female Labour Force Participation in an Era of Organizational and Technological Change” makes a similar argument. This paper posits that “the rise in the skill level [of women] explains the rise in female labour force participation, the increase in women’s wages and the decline of the clerical wage relative to manufacturing” (Adshade, 2007, p.2). This article is significant as it discusses the beginnings of the gender wage

gap. Even over a century later, women are still overrepresented in clerical positions and underrepresented in senior management and the gender wage gap persists in many fields.

Determinants of Women's Labour Market Participation

There are a number of factors involved in women's decisions whether to participate or opt out of the labour market. In the article "The Causality between Female Labour Force Participation and the availability of Childcare" economists A. Chevalier and T.K. Viitanen conclude that women are limited in their ability to participate in the labour market by an inadequate supply of childcare services. Significantly the article is based on data from the UK and was published in 2002. Since that time the number and use of daycare facilities have increased substantially (Bushnik, 2006). However, the article highlights the fact that's that's labour market participation is complicated by gender roles much more than men's labour market participation.

This is significant because it means women seeking more education may not result in increased labour market participation or better career outcomes unless the right childcare systems are in place to support them. Daycare in Canada costs between \$600 and \$2000 per month (Baluja, 2012). This means that even in 2013, there are still women opting out of the labour market because they cannot find affordable or accessible childcare.

To this end, another article by Rachel Connelly entitled "The Effect of Childcare Costs on Married Women's Labour Force Participation" looks at how women's labour market decisions are influenced by the cost of childcare. Using an economic model, Connelly finds that higher day care costs are associated with reduced labour market

participation among married women, particularly among those with pre-school age children. In fact Connelly concludes by predicting that legislation to lower the cost of daycare would result in an increase in the labour market participation of women. Later in this paper three scenarios will be presented describing possible futures based on current trends. The fact that women's labour market participation is dependent on childcare and the cost of childcare is significant as it may how each scenario unfolds. Without adequate childcare women's labour market participation may always be limited even as they obtain more education.

Childcare however is not the only determinant of women's labour force participation. An older article by Moshe Semyonov entitled "The Social Context of Women's Labour Force Participation" looks at the broader context of women in the workforce. The article was published in the 1980s meaning some of its conclusions may be out of date. That said it is interesting insofar as Semyonov concludes that the divorce rate is positively correlated with women's labour force participation. Although this is a fairly intuitive conclusion in 2013, it is significant because it relates marriage to labour force participation. This speaks to the relationship between gender roles within the marriage and women's labour force participation.

Similarly, economist Catherine Hakim looks at the impact of women's attitudes, values and goals on their labour market participation in her article "Lifestyle Preferences as Determinants of Women's Differentiated Labour Market Careers." In this article Hakim analyzes longitudinal data from the United States and Britain. She finds that "lifestyle

preferences have a powerful impact on women's employment decisions" (Hakim, 2002, p. 454). In particular she found that although women have the same opportunities as men they are more likely than men to gravitate to part time and short-term jobs. Meanwhile men are more likely than women to start their own businesses or seek self-employment.

These findings speak to the importance of attitudes in women's labour market participation, including their gender role attitudes. Furthermore, these findings suggest that women may face hurdles in reaching their potential in the workplace. Unlike men who are more likely to take risks and dedicate themselves to full time work, women may choose not to as a result of their goals, values or attitudes towards women in the workplace. This idea that gender role attitudes may be limiting will be discussed in the next section of the literature review on household influence. It will also factor into the likelihood of the scenarios presented later in the paper.

Household Influence

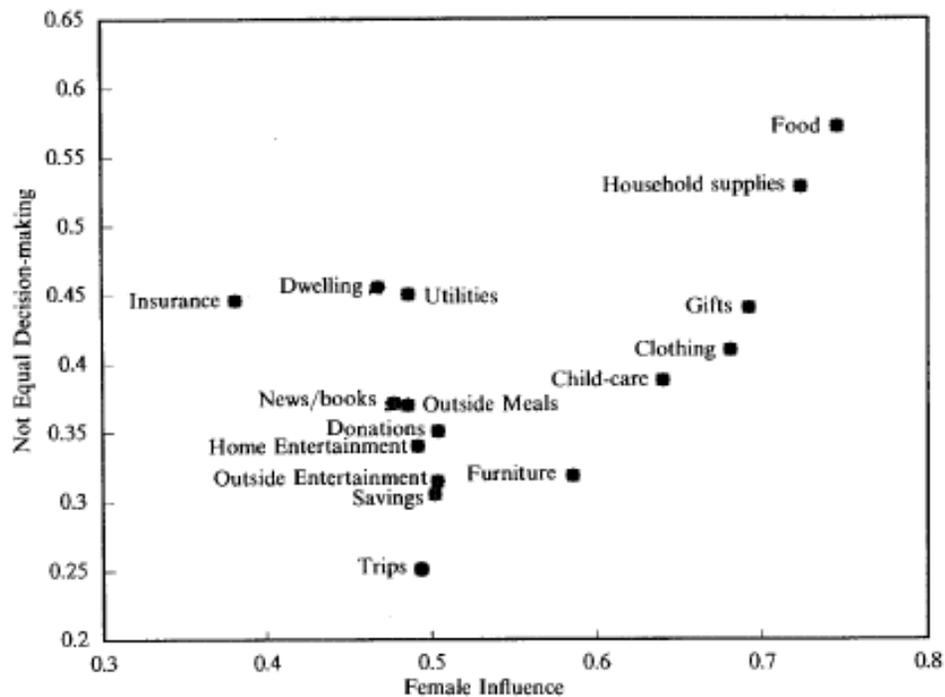
Another economist, Francis Woolley examines inequality within households. While Woolley does not explicitly make the connection between household inequality and the labour market, successful female professionals, such as Sheryl Sandberg, the CFO of Facebook, have posited that equality within the household is necessary for women to succeed in their professions. It is consequently an important discussion in considering how women's education and labour market participation may play out given current trends.

In the article "Measuring Inequality within the Household" Francis Woolley and Judith Marshall explore measures of inequality in money incomes and inequality in control of

household resources. The authors use the Gini coefficient and the Haddad and Kanbur inequality index in order to gain an understanding of inequality within households. Their study ultimately finds that inequality is higher than is typically hypothesized, but also “that inequality in the household favours men is not unanimously supported” (Woolley, Marshall, 1994, p.430).

In particular, their analysis demonstrates that there are a number of domestic areas where women have significant input and where decision making is not equal (i.e., spending on food), but conversely that there are other areas where women do not have very much influence (i.e., insurance). The graph below outlines how much influence women have over several household areas as well as how equal decision making is for those areas.

Figure 6: Who has the most say about how much is spent?



Source: Woolley, Marshall, 1994, p.427

While the authors do not come to any concrete conclusions they do provide interesting evidence about gender influence within the household. Significantly, household decision-making in 1994 was not equal and was fairly gendered. If you examine the areas where women have more influence they are areas like household supplies, food, clothing and childcare. Conversely they have less influence in traditionally male areas of expertise like insurance and savings. However, since the data is from 1994 the same trends may not have continued into 2013, nearly twenty years later. Throughout that period women's participation in post-secondary education has sharply risen and it is possible that if the same study were conducted today a less gendered family structure of influence would emerge.

While Frances Woolley did not repeat this particular study for a more recent period, she did publish a paper in 2000 titled "Control over Money in Marriage." that looks at the influence each person in a marriage has on their economic outcomes. Interestingly she does not find that men or women have more influence on household spending. Another finding was that higher income earners generally have more influence and that incomes are not pooled in the same way in all marriages. For example couples that include a spouse that has had a failed marriage are less likely to pool their resources as extensively as couples are in their first marriage.

The fact that gender was not linked to influence on household is promising and could suggest that as women have increasingly pursued education and become main breadwinners in many cases they have also gained influence in domestic decisions.

Woolley also draws the link between economic circumstances and domestic labour, writing that “people’s economic and social circumstances shape how they live their family lives. The effects are not limited to who does the dishes. Access to, and control over, the family’s financial resources is shaped by each family member’s circumstances” (Woolley, 2000, p.21). Not only does the amount of money a spouse earn impact their control over the family’s financial resources, but it also can indicate something about the division of labour, and as Woolley puts it, who does the dishes.

An older article from 1992 by economists Shelley Phipps, and P.S. Burton, titled “What’s Mine is Yours?: The Influence of Female Incomes on Patterns of Household Expenditure” argues that gender roles influence household spending. Although income is pooled between spouses on many expenditures, the paper reveals that certain expenditures increase with female income, but not with male income. For example, higher expenditures on childcare are positively correlated with women’s incomes, but not with men’s incomes – even when both spouses work full time. Phipps and Burton attribute this to the ongoing emphasis placed on traditional gender roles. The paper was published in 1992 and uses 1992 data, so the expenditure patterns have likely changed in the last two decades. However it still presents interesting data from a historical perspective.

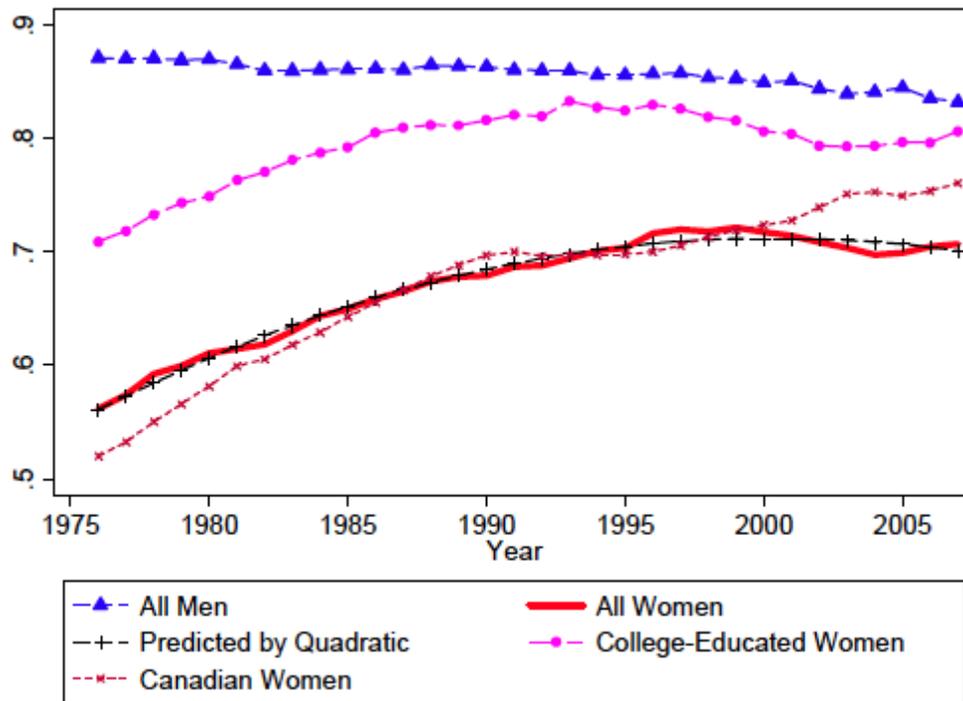
Gender Role Attitudes

In the article “Gender Role Attitudes and Women’s Labour Market Participation: Opting-Out, AIDS, and the Persistent Appeal of Housewifery” economist Nicole Fortin looks at the impact of changing attitudes towards gender roles on the participation of women in the labour

force. According to Fortin, women's labour force participation increased substantially until the mid 1990s when the rate peaked at around 72% (Fortin 2009, p.1). She argues that "the evolution of aggregate trends in [female labour force participation] only partially reflects the profound changes in the place of women in society that accelerated in the second half of the 20th century" (Fortin 2009, p.1). So even as women's have become increasingly involved in the public domain (e.g., sports, voting, volunteering), the rate of participation in the labour force has not kept up. For this reason, Fortin appeals to gender role attitudes to explain how women's labour force participation has leveled off, and even decreased.

According to Fortin's analysis, attitudes of equality increased throughout the 1970s and 1980s, but leveled off in the mid 1990s around the AIDS crisis, which corresponds to similar trends in female labour force participation. Fortin runs a number of regressions using the 1977-2006 General Social Surveys (GSS) and ultimately concludes that attitudes towards gender roles are highly correlated with women's labour market participation. She speculates that the mid 1990s experienced a decline in the egalitarian view of men and women, which may have led to more women opting out of the labour force. The graph below illustrates the labour force participation of 18-65 year olds from 1975 to 2005.

Figure 7: Labour Force Participation 18-65 Year Olds



Source: Fortin, 2009, p.41; March CPS Data and Cansim Data⁵

Fortin also posits that the AIDS scare (which affected far more women in the United States than it did in Canada), explains at least a third of leveling off of female labour force participation.

Fortin's article is significant for the purposes of this paper because it highlights the link between gender roles attitudes and the labour market. It demonstrates that even as women continue to increasingly obtain post-secondary education and to obtain employment, they may

⁵ All women includes non-citizens whereas Canadian women refers to citizens only

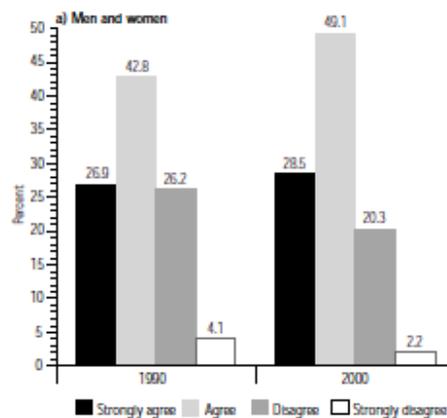
not choose to stay in the labour force or to pursue high level positions if gender role attitudes do not emphasize women's equal role in the public domain. Furthermore it demonstrates how exogenous shocks (e.g., the AIDS scare) can have a significant impact on gender role attitudes and consequently on labour market decisions. This point highlights challenges of hypothesizing how current trends may play out, particularly if gender role attitudes are radical change.

Fortin has also looked at the relationship between gender role attitudes and labour market outcomes internationally. In her paper "Gender Role Attitudes and the Labour-market Outcomes of Women across OECD Countries" Fortin uses data from the World Value Surveys and finds that countries with "anti-egalitarian views . . . display the strongest negative association with female employment rates and the gender pay gap" (Fortin 2005, p416). Although this finding is not entirely surprising, it does draw attention to the significance of the relationship between gender role attitudes and labour market participation. Fortin found in particular that countries that linked gender roles (i.e., women as mothers and homemakers) to religion showed less change over time in terms of women's labour market participation. Interestingly the article concludes with the suggestion that there is an "unavoidable clash between family values and egalitarian views" (Fortin 2005), which Fortin frames as an obstacle to gender equality in the labour market.

Another article by economist Shelley Phipps highlights the importance of supporting parents (particularly women) in the labour force. In her article "Working for Working Parents: The Evolution of Maternity and Parental Benefits in Canada" Phipps suggests that "dramatic changes in mothers' labour market involvement have made maternity and parental benefits

increasingly important” (Phipps 2006, p.5), but also that current benefits were not designed with today’s society in mind. Today women are far more likely to be employed than they were in the 1970s, yet maternity benefits have changed very little in the last several decades. In making this argument, Phipps, like Fortin, links women’s labour market participation to gender roles. Phipps indicates that changes in women’s labour market participation have been accompanied by changes to attitudes towards gender roles, which is line with Fortin’s findings. This change in attitudes is highlighted in the following graph:

Figure 8: Attitudes on Gender Roles, Canada 1990 and 2000 Do you strongly agree, disagree, or strongly disagree with the following statement: A working mother can establish just as warm and secure a relationship with her children as a mother who does not work.



Source: Phipps 2006, p.6; World Values Survey

Phipps goes on to discuss the evolution of maternity benefits in Canada, and looks at some of the rationales for maternity benefits. These rationales include income security, and support for child development, but they also include gender equity. According to Phipps, women who have children earn on average less than women who do not have children. This means that

there is a case to be made that women with children are disadvantaged in the labour market, but also that women's incentives to stay in the labour market after children are lower than that of men. It also means that if women are to succeed professionally as well as in their educational outcomes, the right kinds of social supports may be necessary to ensure women (and men, who have taken over more child raising responsibilities) are able to return to work without being economically penalized for the time away. Without such measures we are likely to continue to see women select traditionally female careers, which may be more family friendly, or to see birth rates decline as women seek higher profile careers.

Women's Workplace Realities

Princeton professor, Anne-Marie Slaughter, spent two years in Washington as the director of policy planning at the State Department. In this time she came to several conclusions about women's workplace realities, which are described in her article entitled "Why Women Still Can't Have it All" that she wrote for *The Atlantic*. However, what Slaughter argues is not that family values and labour market participation are unavoidably at odds, but rather that they are *currently* at odds due to government and work policies. From this perspective, it's not necessarily the case that women can't have it all, but rather that they can't have it all given our policies and our society. In other words, our attitudes towards gender roles and towards women's role in the labour market may limit what women are able to accomplish both in the family and in the workplace. Slaughter is writing from the perspective of the first female director to hold her position, and also from the perspective of a mother who ultimately chose to leave her high ranking position to spend more time with her family. That said Slaughter did not opt-out of the

labour market (she is still a professor at Princeton), but she did choose what could be considered a downward move in her career in order to spend time with her children.

Slaughter suggests that the workplace is fairly antagonistic towards parents in general, and that this antagonism is a generally a greater burden for women than men because gender roles can dictate that women have a bigger role to play in the family. Many workplaces do not offer flexible hours, they expect workers to put in long hours in the office, and governments in North America have not done a good job of making child care readily available to working parents. These pressures are especially acute for women who seek to fill prestigious, high level positions, and for this reason Slaughter argues that only a few superhuman women can “have it all” (she sites Sheryl Sandberg, whose view will be discussed shortly as one of these superwomen).

In Slaughter’s words:

“If women are ever to achieve real equality as leaders, then we have to stop accepting male behavior and male choices as the default and the ideal. We must insist on changing social policies and bending career tracks to accommodate our choices, too. We have the power to do it if we decide to, and we have many men standing behind us.” (Slaughter 2012, p.6).

This quote highlights the fact that the workplace has largely evolved with a nuclear family model in mind, where one partner puts in long hours and makes money while the other takes care of the family. However, given that the labour market has changed, both government

and work policies need to change as well. Whether or not these kinds of changes are made will be a deciding factor in how current trends in post-secondary education will translate to the labour force. If policies do not become more family (and by extension, female) friendly then it is likely that women's labour force participation will continue to stagnate and that birth rates may decline at a fairly rapid pace. However, introducing more family friendly policies may be one approach to ensuring that both men and women can participate equally in the labour market and can live up to their potential.

Despite the fact that gender role attitudes may not be keeping up, many women have been extremely successful professionally, increasingly so this decade, and are likely to continue on this trajectory. One example is the Chief Operating Officer of Facebook, Sheryl Sandberg, who recently released a book titled *Lean In* that provides data, anecdotes, and advice on how women can better succeed in the workplace. The book is interesting insofar as it provides fairly practical advice, and Sandberg advocates for changes in women's behavior at work and also for workplace policies. She suggests that women are held back in part by family situations, but also to a large degree by their own choices and behaviours. She encourages women to be proactive in pursuing their careers, to sit at the boardroom table, to speak up, and to do the kinds of things that their male colleagues are already doing.

In addition to advocating for women to assume a perhaps less traditionally female role in the labour market, Sandberg also advocates for men to take more responsibility in the domestic sphere. One of Sandberg's three tips to young women in her 2010 Ted talk is "make your partner your partner" (Sandberg 2010), meaning that if you want to have a career as a woman you need

to have a partner who supports that and who takes care of at least 50% of child rearing and domestic tasks. Sandberg is often critiqued however for being one the superwomen that Anne-Marie Slaughter describes in her article, and also for writing from the perspective of an upper class woman. For example, it is much easier to split domestic tasks and childrearing with your partner when you also have a maid and a nanny. That said, Sandberg provides an interesting commentary, and the fact that it is still considered relevant and necessary suggests that women are not replacing men in white-collar jobs as quickly as an initial look at the numbers might suggest. However, things are changing gradually and if women continue to be more educated than men, perhaps in twenty years a successful male CEO will write a similar book for young men entering the labour market.

Challenges for Men and Women

In some cases however, the solution to increasing women's labour force participation is not quite so simple as picking the right partner. In her book "Future Girl: Young Women in the Twenty-first Century, Anita Harris examines two binary stereotypical views of young women. The first is the "can do" girl, as Harris describes her. These girls are typically perceived as "independent, successful, and self inventing" (Harris 2004, p.16). They are the girls who are outperforming boys, on average in terms of high school grades and obtaining PSE at an increasing rate.

In contrast to these girls, Harris discusses another category of young women, the "at risk" girls. These girls are typically from low socio-economic backgrounds and unstable homes. They are at increased risk of teenage pregnancy, drug use, and low grades. Harris

notes that “for youth in general, but for young women in particular, academic success has become the key to safeguarding the future” (Harris 2004, p.27). This interesting because it shows that while women on average are outperforming men in post-secondary attainment, this is not true of all women. This fact may complicate any predictions that this paper will go on to make about gender role attitudes and women and men’s division of labour in the workplace and in the home.

An article titled “The End of Men” by Hanna Rosin looks at the consequences of high achieving women gaining more education and pursuing high-level careers. She asks, perhaps depressingly, “what if equality isn’t the end point? What if modern postindustrial society is simply better suited to women?” (Rosin 2010, p. 1), and provides a series of evidence that suggests that the future for men may not be especially bright. She points out the decline of the manufacturing sector, and the growing number of women with a university degree, and argues that “the attributes that are most valuable today – social intelligence, open communication, the ability to sit still and focus – are at a minimum, not predominantly male” (Rosin 2010). There is likely some truth to this argument given the rising incidence of ADD/ADHD diagnoses among school aged boys (Schwarz, 2013). While Rosin point that the labour market values social intelligence and open communication may be overstated (attributes like decisiveness, leadership, and even some degree of aggressiveness– so called “male characteristics” - seem to be equally valued), jobs prospects for uneducated men who have been socialized to believe they can’t sit still are in decline.

Predictions for the Future

The next section of this paper will go on to outline three hypothetical scenarios as to how the trends discussed in the literature could play out. These scenarios are drawn from the author's own analysis of the trends and the literature. However there has been a significant amount of work undertaken on this topic and academics have made a variety of predictions and looked at different factors in women's labour market participation. The majority of these predictions were conducted in the 1970s up until the 1990s. Thus this section will look at some older literature that made predictions regarding women and men's labour market participation.

In particular, academics have done a lot of work on the labour market participation of married women. In an article entitled "Dynamic Labour Force Participation of Married Women and Endogenous Work Experience, Zvi Eckstein and Kenneth Wolpin use a model to examine married women's labour market participation and fertility. Their findings include that increases in the number of children or a husband's wages reduce women's labour market participation substantially, but also that schooling is correlated with higher wages and is thus a main predictor of women's labour market participation over time. This article was published in 1989 thus these findings are not particularly surprising. However, the findings do speak to the prediction that if women continue to increase their schooling than their wages are likely to continue to rise and their labour market participation is also more likely to rise.

Another more recent paper by Rob Euwals, Marike Knoef, and Daniel Vuuren makes explicit predictions about women's labour force prediction. The paper is entitled "The Trend is Female Labour Force Participation: What can be Expected for the Future?" Notably the paper looks particularly at the labour force participation of women in the Netherlands and thus their conclusions cannot be extrapolated for the purposes of this paper. That said, the authors come to some interesting conclusions that are worth considering in creating possible scenarios for Canada.

Essentially the authors look at labour market trends among Dutch women from 1992-2004 and identify certain patterns which allow them to create futures scenarios. Their main finding is that labour force participation among women is "depends on changes in attitudes towards the combination of paid work and children. How the authors' describe their scenarios differs greatly from those found later in this paper because they are based on economic modeling rather than an independent analysis of trends. They predict that there will be fewer households with children, education levels among women will rise and there will be lower structural unemployment. This means that women's labour market participation will continue to rise. Interestingly, the authors bring in the idea of gender role attitudes (like Fortin – seen above). They attribute women's increased participation in part to more favourable views of the combination of paid work and childcare. This scenario does not fit perfectly into any of the scenarios presented later in this paper. It does however fall somewhere between a scenario entitled "the status quo" and another entitled "successful gender role reversal" which will be examined in the next chapter.

A paper written by Florence Jaumotte for the OECD entitled “ Labour Force Participation of Women: Empirical Evidence of the Role of Policy and Other Determinants in OECD Countries ” examines a number of factors that help influence or predict women’s labour force participation internationally. These factors include tax regimes (i.e., how heavily second earners are taxed) child benefits and tax incentives, paid parental leave, and the number of part time work opportunities. In addition the paper concludes that “female education, well-function labour markets (which translate into low unemployment), and cultural attitudes . . . remain important” (Jaumotte, 2004 p.94). While this paper applies largely to developing countries (i.e., Canada already has parental leave, child benefits etc.) it is worth mentioning in passing because it highlights the fact that there is a strong link between policies and the decision to enter the labour force.

Later in this paper the three hypothetical scenarios will mention the role of government. It is significant that government can actually have a great deal of influence even though many of the challenges may be related to cultural attitudes, discussed in this paper as gender roles and gender role attitudes.

This literature review reveals a fairly eclectic collection of literature on gender roles and women’s labour market participation has several implications for understanding current and future trends. First, Adshade reveals that there has always been a strong link between women’s educational outcomes and major changes in the labour market. Second, Connelly, Semyonov and Hakim illustrate that there are a number of determinants of women’s labour market participation that complicate any predictions of the future. Third, Francis Woolley suggests that there remains

a large degree of inequality between men and women in the household exists, but has decreased significantly as the wage gap has narrowed and as women have become more educated and professionally successful. Nicole Fortin explicitly links gender roles to women's labor market participation, demonstrating that egalitarian views lead to higher levels of participation. In sum, women's educational outcomes, domestic treatment, and labour market participation are intimately linked and reinforce one another. Gender roles influence the kinds of economic choices that women make (whether to go to university, to pursue a career, control over spending in the household), but the choices women make also shape perceptions of gender roles, which have certainly evolved at least in part to women's educational and professional achievements.

To this end, successful women like Sheryl Sandberg and Anne-Marie Slaughter have come to several conclusions about the role of women in the workplace and what kinds of changed need to occur. Both women take gender roles for granted. Sandberg advocates that women take an active approach to their careers and that they learn to be more assertive, like many men already are (i.e., negotiating salary, sitting at the boardroom table). She recognizes that women are often held back by the gender roles they are often expected to fill, and that influences the kinds of choices they want to make (i.e., privileging family over career). Slaughter has a similar perspective, but rather than encouraging women to be more active she advocates for a more female friendly work environment where women may not have to make the hard choices between family and career. For Slaughter it is possible to be an excellent mother and a successful professional, but only if workplace rules change to allow for it. This is consistent with the work

of Shelley Phipps who suggests that maternity and parental benefits need to continue to evolve if they are to keep up with changing gender roles and labour market realities.

Finally, the literature demonstrates that economists like Euwals, Knoef, and Vuuren have used economic models to try and predict women's labour market participation. This aspect of the literature review is important to the three scenarios because it reveals that most studies of women's labour market participation were conducted from 1970-2002. In other words it has become a less discussed topic in the twenty-first century. Secondly it reveals that qualitative analysis of current trends is far less common than economic modeling or quantitative analysis. This paper thus contributes to the literature by taking a different approach and by using a different lens.

Ultimately, however, for the purpose of the three scenarios outlined later in this paper, the literature review demonstrates that women achieving more academically will not necessarily lead to women filling their 50% of boardroom seats or seats in the House of Commons. The relationship between education and labour market outcomes are complex and so are women's reasons for pursuing or not pursuing certain kinds of work. Gender roles and societies' approach to the labour market will likely dictate the kinds of changes that are able to emerge. The literature suggests that because gender roles, education, and professional outcomes are so linked, none will move forward drastically without the others. Currently women are overachieving academically compared to men, and they are participating at very high rates in the labour market. They are also increasingly filling highly paid, high profile positions and there is some fear that in a post-industrial society it will be the men who are unable to keep up. This may be a legitimate

concern, especially for men who are undereducated or unable to work white-collar jobs; however, just because we are concerned about men's professional achievement does not mean we cannot simultaneously be worried about women's professional achievement as well.

It may in fact be the case that we need policies to target certain segments of the male population and certain segments of the female population. While women are well positioned to succeed professionally, and may one day surpass men professionally, they are not there yet. Thus the literature review provides context and a deeper understanding of current trends that informs the three hypothetical scenarios to come.

The following sections of this paper will outline the broad possible implications of the trends outlined in the previous chapter, and the next section in particular outline three hypothetical scenarios as to how evolving gender roles, educational outcomes and professional attainment may manifest. These three scenarios help highlight the need for government to consider upcoming changes in order to best support men and women equally as they face diverse sets of challenges.

Implications of Current PSE and Labour Market Trends: Three Scenarios

Based on the literature, it can be concluded that as women increasingly obtain PSE there are several possible labour market outcomes. First, if women increasingly pursue higher levels of education, it is likely that they will also increasingly pursue employment and their labour market participation will increase. Furthermore women could be likely to obtain more senior management positions and the proportion of women on boards, for example, may rise. The gender wage gap may also decrease, cease to exist, or even reverse as women obtain higher earnings as a result of their increased PSE and labour market participation. This is all potentially good for productivity assuming men's labour market participation does not decrease.

However this picture changes if we consider the impacts for men as women increasingly achieve academically and professionally. If women are filling more university places and traditionally male roles, such as management positions, and if manufacturing jobs continue to disappear, what are the implications for men? Canada could see a demographic of young males with less education and fewer skills than women. This is particularly problematic in a labour market that is knowledge based and increasingly values human capital. Will these men be equipped to contribute productively to society? If not, Canada could experience higher crime rates and more violence in general since lower productivity has secondary effects.

Additionally, the number of marriages may decrease as women are increasingly unable to find partners with similar, or higher, levels of education. Women who do marry may increasingly be the main breadwinner of their family. This could have a depressing effect on birth rates: it

may not be financially feasible for the main breadwinner (i.e., women) to take a year of maternity leave. For this reason many families may choose to have fewer children because of the opportunity costs of the main breadwinner taking a year away from work. These are just two examples of how women's increased PSE attainment could result in social and demographic changes. Whether or not men and women are able to adapt to new gender roles will impact decisions as personal as family planning.

Assuming that men are willing to take on more responsibility within the family, then there may be few changes in family composition. For example, if men are willing to obtain traditionally female work (i.e., clerk, secretary) and to increasingly participate in domestic work such as cleaning and child rearing, then men would be able to contribute productively to society even while women earn more and achieve more in their careers. If men took more paternity leave, birth rates may not decline and the operations of the family unit could remain relatively unchanged; all that would change is which sex fulfills which gender role.

In fact, taking this hypothesis further we could envision a world where gender roles are essentially reversed. Where women demonstrate their market value to possible partners by paying for dinner, where women prefer to drive and occasionally joke with their friends about how bad male drivers are. Where men place more emphasis on their appearance than women, and where the professional expectations placed on daughters could exceed those placed on sons.

The next of this paper will present three possible scenarios. Under the first scenario, gender roles would remain relatively unchanged and the status quo would persist. Changes in women's PSE attendance would lead to a stable equilibrium rather than significant changes in

the labour market or to gender roles. In the second scenario we could see a successful adjustment of gender roles. If women really are better suited to this new postindustrial society, then we would see women working most white collar jobs and men working in traditionally female areas of work. The third scenario involves an unsuccessful gender role adjustment in the labour market and in home production. So as women are increasingly succeeding in the labour market, men would be increasingly alienated if they struggle to find adequate employment and are either unwilling or unsuited to obtain traditionally female work and to increase their role in home production.

Significantly, none of these scenarios are likely to arise in isolation. It is likely that women will increasingly perform well in the labour market, while some men obtain traditionally female jobs and some do not find work at all. These three scenarios consequently present a fairly exaggerated view of how our society might change. However, the contribution of taking an exaggerated look is to understand the worst cases scenario and to begin to think of how the federal government might respond. It highlights the fact that gender roles actually have a significant impact on the kinds of choices that people make, and that they are not simply guided by rational economics.

Scenario One: The Status Quo

This scenario is essentially the status quo, which means not a lot of change in the labour market or to gender roles. The status quo would mean that increasing participation of women in PSE may lead to a stable equilibrium rather than a significant amount of social change. For example the number of women entering university may level off. In terms of jobs, men probably

still occupy the majority of STEM jobs and managerial positions, but likely the number of women in both of these professions may rise by several percentage points. For this reason there may be continued focus on labour shortages in the STEM professions. If fewer men are entering university and occupying these jobs while women continue to seek other kinds of work it is not unreasonable to think that shortages may occur, or that wages may need to be adjusted upwards. Birth rates would likely still be in decline to some degree, but not significantly, as many women would still opt out of the workforce in favour of raising a family and many working women would still have one or two children.

Gender roles probably would not have evolved significantly given this scenario. Men would probably still be involved in domestic work, but on average may not be carrying out 50% of household production. There are probably more stay at home fathers, but it would probably still be considered a bit of a strange choice for the man, who is still seen as the main breadwinner – or at least one of the breadwinners. Similarly while increasing numbers of women may out earn their husbands, this is likely not true on average even if marrying down (i.e., marrying men with less education or a lower income) is becoming increasingly common.

There are a number of responses for the government to consider to this particular situation. These responses would ultimately have to seek to support women, who despite having high levels of education are still failing to succeed professionally. If this remains the case, and does not change significantly, then one explanation for the slow progress is our gender role attitudes. This means government would have a role to play in the kinds of programs they offer to support women. One example could be subsidizing tuition costs of women seeking degrees in

STEM fields. Another example could be actively promoting the role of women in society through advertising campaigns – something that already goes on to a certain degree. Instead of always portraying a male engineer in recruitment ads, there could be a focus on consistently portraying women in these kinds of roles until it eventually seemed normal. A third option would be to introduce a daycare system or subsidize day care costs to encourage women to remain in the workforce. It is likely that if women feel that they have access to affordable, quality childcare than they may consider staying in the labour force, or leaving it for shorter periods of time.

The policy response will be discussed in more detail later, but the point to press is that if women are still not succeeding professionally, then there is a role for government to play in ensuring Canada maintains its productivity and provides the same kinds of opportunities for its citizens. The provision of daycare for example, may change the tradeoffs that women face in choosing whether or not re-enter the labour force. In other words this is debate not only about choices and equality of opportunity, but also a discussion of productivity, innovation, and efficiency in the market. Organizations like Catalyst, which aims to expand opportunities for women in business, may become even more important.

Interestingly however, even today Catalyst does not always frame its discussions in terms of equality. Their executive director, Alex Johnston, recently summed up this view at a conference on women on boards. Her argument is essentially the business case: more diverse boards provide a better range of expertise. If our boards do not include women, than we are missing out on more than 50% of the talent in Canada. If the trends do not lead to major social change and these are the kinds of discussions we are still having in twenty years than I suspect

this argument will come up a lot more often. In the face of declining productivity and limited resources governments have to be resourceful. Without tapping into female talent this mission may be especially difficult.

Scenario Two: Successful Gender Role Adjustment

This scenario would mean significant social change, but that the labour market will essentially self regulate and work itself out. In this scenario the fact that boys are underperforming in high school and are going to university less often than women is not a huge concern because there would be other kinds of employment for them to pursue. Women's participation in post-secondary education and in the workforce, including in senior managerial positions and in STEM jobs, would have increased substantially, to the point where the majority of CEOs are women. Simultaneously fewer men would be seeking additional education, many would be staying home with their children and it would be common for the woman to be the main breadwinner in a family. The kinds of jobs men would seek may also have changed substantially. For example, there may be far greater numbers of men working in daycare, in nursing and in clerical positions. Birthrates would likely continue to be in some state of decline, but perhaps not so much as in scenarios one or three. As the main breadwinner in families, women may not want to frequently take time off to have children; however, given that men would be assuming a large portion of domestic work it would not be unfeasible for women to have children and simply take shorter maternity leaves.

In some ways this seems like a fairly radical, unlikely scenario, but it is important to consider the degree to which gender roles have evolved throughout the last two generations. A

father in the 1950s was literally not expected to do any domestic work. A father today typically assumes an active role in their children's lives, although women still, on average, assume the bulk of the work. Today men are single parents, stay at home fathers, nurses, and clerks – a huge shift from the 1950s. In this context it may not be that unrealistic to think that things could continue to evolve – particularly if women are better adapted to succeed in modern society, as Hanna Rosin argues. Gender roles have already changed so much that it is not impossible to imagine them changing even more.

Importantly, if this scenario were to occur there would still be a fairly significant role for government to play. It is possible to argue that there is no problem in the labour market if the right jobs are filled. However equality of opportunity would still be a concern. A world in which this is the opposite, where men are disadvantaged by gender role attitudes is no better and would not lead to a diverse, innovative, productive workforce. For this reason government would have a role to play in encouraging men to pursue post secondary education and pursue high level positions. In particular, the evidence suggests that there would be a role to play in supporting school age boys, before they start to underperform. It's one thing if men feel comfortable choosing to stay home with their children, and it's probably a very good thing for society if they do. It's another thing if they feel compelled to, or if they feel incapable of pursuing the kind of education or career that will allow them to be successful in the labour market.

Government response in this case may consist of providing bursaries to men in post-secondary institutions, again providing accessible childcare, and also ensuring that we are promoting the message that both men and women can pursue any kind of career. Interestingly,

the policy response is essentially the same whether it is men or women who are struggling to achieve professionally. The kinds of barriers that currently prevent women from aiming for the top are the same kinds of barriers that could prevent men. Currently Sheryl Sandberg is known for referring to an ambition gap between men and women (Sandberg 2013). Her view is that women today are not succeeding professionally at least in part because they lack the ambition to do so – they start thinking about work life balance before they are even married, and thus ensure that by the time they do have children they do not have a career worth returning to the labour market for. Under this scenario it is easy to see this ambition gap evolving in the opposite direction. If boys already are not engaging in high school, are more likely to drop out of high school, and less likely to pursue post secondary education, it is not hard to envision that they might lack ambition in future years. If and when the ambition gap starts reversing, government will have an important policy role to play in encouraging young men and ensuring they are receiving the right kinds of messages to succeed.

Although this situation seems less concerning than an unsuccessful gender role adjustment, many of the same policy measures could apply. This is because even though men are able to contribute productively to society via home production in this scenario, they still may not be reaching their full potential. Consequently supporting boys in school and men in the labour market could help ensure that all Canadians have life choices, regardless of gender.

Scenario Three: Unsuccessful Gender Role Adjustment

This third scenario is the most worrisome of the three outlined in the paper. Under this scenario, we would see current trends continue at an accelerated rate. We would see women

increasingly entering the workforce into white collar positions while men increasingly do not attend post-secondary education, do not obtain traditionally female work (as in scenario two), and ultimately are less able to find productive employment. This scenario is disconcerting for several reasons.

First, marriage rates and birth rates would likely decline enormously. Many women would have to marry men with less education and who make less money. This in itself would not really be an issue because some women already do so, and will likely increasingly do so. However, many women would also have to marry unemployed men who are unwillingly to take part in domestic work. It seems likely that fewer women would be willing to marry into this scenario. This would produce a class of men who are unemployed, not married, and who would rely on the state for financial support.

Birth rates would decline with the marriage rate, but also because women who are main breadwinners, who are unmarried, or who have a husband who will not cover at least 50% of childrearing may be less able to take maternity leave or to pursue a career while being a mother. In other words not only would the size of the workforce be declining due to the availability of male workers able to fill positions that require human capital, but also because the population would be shrinking.

Labour shortages would likely be a reality, especially in STEM positions if women do not step up and pursue these careers. Unemployed, unproductive men may be likely to commit crimes. This would place a huge burden on the government. Not only would the government need to support increasing numbers of unemployed men via Employment Insurance and social

assistance, but they would also need to fund more social programs and social institutions, like penitentiaries. This may sound like a fairly drastic scenario, but if a large percentage of men are not able to assume new gender roles or to adapt to the postindustrial labour market, it does not seem that implausible. It is likely that a number of these uneducated men would be able to obtain employment in the resource sector, or other manual labour based positions, but these jobs are also the most volatile. In recessions, men in with little education typically experience the most layoffs. Furthermore many manual labour positions require a certain level of skill and human capital. Even working in the resource sector, it is the engineers, the welders and the electricians who make the best wages.

In this scenario the government would have a much more drastic role to play in ensuring society maintains its productivity. Rather than focus on market campaigns or post secondary bursaries, emphasis would need to be placed on training programs, labour mobility programs, and maybe even promoting a less gendered view of certain kinds of labour to increase male participation and help with gender role adjustment. This could mean trying increase Canada's manufacturing capacity, as has been attempted recently in the United States. However the fact is that the economy has changed, and the long-term challenge for the government would be to ensure that young men are socialized in such a way, and face the right incentives to seek out education at the post-secondary level. The fact that high school aged boys are in general less engaged in life and academics than girls does not suggest that they will be well equipped either to succeed academically or professionally. Likely this scenario will not come to pass, as it is in some ways the worst-case scenario. However, each scenario probably has some predictive

power, and it may likely be the case that increasingly numbers of men struggle to contribute productively to society. There may not be a critical mass of these men, as underperforming boys do grow up, and often do make productive choices, but there may be enough to put pressure on the government to respond.

Conclusion

In some respects, women's increasing access to post-secondary education is a major gain for society. The fact that education is closely tied to labour market outcomes means that women are more likely to be able to live up to their potential and contribute to society in a productive way. If current trends continue then we will certainly see women playing an increasingly significant role in white-collar jobs. Simultaneously trends indicate that some men are struggling to access PSE and consequently to find productive work. How these trends continue to play out could have a number of implications for gender roles and society more broadly.

Literature on the topic demonstrates that educational and labour market outcomes are closely linked, that there are multiple determinants of women's choices of work, and that gender role attitudes are a contributor to women's choices in the labour market. This means that any prediction of the future is complex and requires taking a number of factors into consideration.

For this reason, there are any possible combinations of scenarios. This paper has examined three could emerge given current trends and the literature: the status quo, a successful gender role adjustment, and an unsuccessful gender role adjustment. The first scenario suggests that current trends might play out in a subtle way. Increasing numbers of women will continue to access PSE and to enter the labour market, and some men will continue to struggle. Gender role attitudes and gender roles may not change dramatically, but may still evolve. Under the second scenario gender roles and gender role attitudes would adjust dramatically, resulting in an adjustment of gender roles. For example, women would be the main breadwinners and men

would take a year off for paternity leave. In the third scenario current trends would strengthen, but there would be no change in gender role attitudes, and even more conservative attitudes may emerge. This would lead to an unsuccessful gender role adjustment that could leave men feeling isolated and alienated.

These scenarios raise questions such as, will women continue to increasingly pursue education and careers? Will men continue to obtain traditionally female employment, such as clerical work? Conversely, will men find that with lower levels of education they are not as well equipped to contribute productively to society? However, the outcome will likely not be as polarized as any of these scenarios suggests. Likely some men will seek jobs that have traditionally been held by women, and some men will not. It is highly probable that women will increasingly have more education than their husbands, but not in all cases. Even as women obtain higher-level positions and higher salaries, at least in the short term many of the decision makers will likely still be male. So the most important question to ask, is how will the resulting challenges impact both genders, and how can those challenges be mitigated.

From a policy perspective it may be advisable to seek a balanced outcome. That is, to see more women achieving more and expecting more professionally, while men increasingly continue to pursue a range of careers, including a greater role in home production. This discussion emphasizes the need for policy makers to play a role in promoting gender equality in times of change and social uncertainty. Regardless of whether men continue to play a dominant role in the labour market, or if women surpass them there will be a challenge for government to

ensure that society is productive, and to do so they will have to ensure that all Canadians have the opportunity to contribute to the labour market.

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