

The girls' march to school

**A comparative historical analysis of gender equalization in
education in Argentina and Japan, ca. 1880-1970**

by

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Introduction

The millennium goals face their deadline in 2015. By then, children everywhere, boys and girls alike, should be able to complete a full course of primary schooling and gender disparity at all levels of education should be eliminated. Gender disparity in primary and secondary education was set to be ‘preferably’ eliminated by 2005. Equality needed to be attained at such an early stage because education forms the basis of other development goals; it provides knowledge to adopt a healthy lifestyle and the tools to counter hunger and poverty. Yet gender equality in education was unfulfilled in 2005 and other the other development goals are now in jeopardy.

Gender equality in education matters because first and foremost, education is a fundamental human right. Not only are children better able to tackle problems like hunger and poverty with a basic education but education also promotes the child’s culture and provides the tools to develop his or her abilities, individual judgment and a sense of moral and social responsibility. Education paves the way for a successful and productive future as a contributing member of society. Therefore, education should not be reserved for a sole social group or a single sex; men as well as women should be equally able to fulfill their basic human right of education.¹ This reason alone sufficiently justifies the importance of our study. However, in the next chapter we provide four supplementary reasons why gender equality in education matters.

Western nations were the first to realize gender equality in education in the course of the nineteenth and twentieth century. Yet by the end of the nineteenth century, non-Western countries also followed their example. We have chosen to compare two non-Western success stories of gender equalization in education, namely Argentina and Japan, measured by the female enrolment share.² Though the degree of their success differs, both countries effectively installed a mass gender-equal primary education system in the period between 1880 and 1914. In Argentina, primary education became compulsory by *Law No. 1420* in 1884 and was provided for seven years, between the ages of 6 and 14. Compulsory

¹ See for more information on the UN millennium goals for universal education; <http://www.un.org/millenniumgoals/education.shtml> for gender equality in education;

<http://www.un.org/millenniumgoals/gender.shtml>

UNICEF <http://www.unicef.org/mdg/gender.html> and <http://www.unicef.org/girlseducation/>

And for the UN *Declaration of the Rights of the Child* <http://www.unhchr.ch/html/menu3/b/25.htm>.

² Why we have chosen the female enrolment share as a proxy for gender equality in education will be explained in chapter two.

education for boys was installed in Japan by the *Elementary School Ordinance* of 1885. In 1908 elemental education became compulsory for girls as well. The compulsory nature of education did not lead to a full participation of all school-age children straight away, indicating that legislation alone was not enough to accomplish a mass gender equal education system.

Argentina was less successful in maintaining its equal female enrolment share in secondary enrolments, which only rose in the 1940s. This delay was also visible in its legal structure; Argentine compulsory education was not extended until as late as 1993, when the *Federal Law of Education* expanded compulsory education to secondary education for nine years.³ The trend of gender equalization persisted in Japanese secondary education until the Second World War. After the Second World War an occupied Japan passed the *Fundamental Law of Education* in 1947 under American pressure, which placed large emphasis on equality and opportunity and made secondary education equal for both sexes.

Besides a gender equal primary education system, Argentina and Japan have few things in common. Japan, a small island in the Pacific, and Argentina, the eighth largest country in the world, completely differ in dominant religion and cultural heritage. Until 1816 Argentina was a colonial backwater of the Spanish empire, which extracted a large part of Argentina's wealth for the benefit of the Spanish crown. Japan was never colonized and was actually closed off to foreigners for 250 years until the invasion of Western forces into the ports of Japan in 1864. These differences are all the more reason to investigate what underlying causes resulted in gender equality in primary school enrolments in Argentina and Japan, which until then, was a solely Western phenomenon. Though the emphasis of this thesis is on primary education, the pattern of secondary enrolment presents further fuel for our curiosity of causes for gender equality. Why was Argentina unable to continue an equal gender enrolment pattern for secondary school enrolments, and why was Japan able to do so?

A selection of data from various Asian and Latin American countries will be provided to show that Japan's gender equalization of education was unique to Asia, yet in Argentina, it was part of a more common regional Latin American phenomenon. Furthermore, data on secondary enrolments demonstrates that gender equality in secondary education was attained much later, in Japan in 1948 and in Argentina in 1964. In terms of economic affluence, Argentina and to a lesser extent Japan were the only two non-Western

³ E. A. Parrado, 'Expansion of Schooling, Economic growth and Regional Inequalities in Argentina', *Comparative Education Review*, 42 (1998) 353.

countries to reach the same high standard of living as the West by the end of the nineteenth century. Other countries like Chile, Uruguay and even Brazil, which also demonstrated gender equal primary education in the 1880s did not match Argentina's economic standards. Other selection criteria played a role as well in the choice for Argentina. Uruguay was a very small country and was formerly part of Argentina, thus similar results of gender disparities in education are unsurprising. Brazil has a gender equal education system, but no *mass* education system by any stretch of the imagination, making schooling an elite phenomenon. The selection of Japan was straightforward; it was the only Asian country instigating a gender equal mass education system in the late nineteenth century.

The question this thesis addresses is, *what factors accounted for a process of gender equalization in primary and secondary education in Argentina and Japan in the long twentieth century?* We attend to this question by means of the Comparative Method (CM hereafter), a symbiosis of the strong points of the case-oriented (qualitative) method and variable-oriented (quantitative) method.

Most historians tend to pursue a case-oriented and qualitative approach to analysis, which has two major benefits. In the first place the case-oriented method is holistic and treats cases as whole entities, not as collections of parts. A second advantage is that causation is seen conjuncturally, meaning that historical outcomes are assessed in terms of intersections of conditions. A single factor might produce a particular outcome, but it might also be the result of a combination of factors. Nevertheless, the case-oriented method is also limited by some flaws. The subjective nature of the historical heuristic approach taints the objectivity of choice in cases and possible factors. When the research does not systematically address all factors, including the ones that did not lead to the investigated outcome, the case-oriented method offers us an incomplete image. It is possible that some unwanted factors were discarded along the way, and the favorite conditions colored the generalized outcome. What's more, in general historical studies restrict themselves to only a few cases or a limited amount of factors. Sometimes no trend or pattern can be unveiled because structural change does not happen in these cases, or at least only at a slow pace. A possible way to overcome this is to provide for hypothetical cases, a thought experiment if you will, by using Mill's method of difference.⁴ Such a theoretical method however is not in the same class as the empirical methods, which should always receive preference. A more desirable strategy would be to expand the

⁴ C. C. Ragin, *The Comparative Method: Moving Beyond Qualitative and Quantitative Strategies* (Berkeley, Los Angeles, 1987) 39.

number of included factors and cases. Yet the expansion gradually complicates upholding complexity as the number of cases rises and generalized conclusions are only applicable to a few cases.⁵

The quantitative variable-oriented approach presents an alternative research strategy for comparative history and is able to deal with a large amount of cases or variables. This methodology is used abundantly in the regression literature of historical economics.⁶ The quantitative approach is theory-oriented, involving a delineation of any or several hypotheses that are tested by means of statistical calculation. In this way experimental design is approximated. The result of the study is a general macrosocial and structural explanation. An advantage of the variable-oriented approach is that it considers more alternative explanations by testing multiple hypotheses. Next to that, the debate broadens because others than area specialists can join in on the discourse. Lastly, the quantitative approach limits the possibilities and inclinations of some historians and social scientists to favor certain explanations in the case of multiple contradictory cases. Yet the expansion of the number of cases comes at a cost because the emphasis on generality sacrifices complexity and the human agency is lost.⁷ In addition, the quantitative approach needs statistical techniques that tend to strain the connection between research and its motives. The examined data can have little meaningful connection to the actual empirical process, something that is less likely to happen with the qualitative method.⁸

The CM presents a comfortable middle position between these two methodologies. It uses case-oriented strategies to address complexity, but also applies parts of the variable-oriented to deal with large amounts of variables. Therefore the outcome of a comparative study is contextualized to a certain number of cases, but within those cases a delineated general pattern or trend can be discovered. In other words, comparative historians are able to address generality and complexity within certain limits. In the CM, a systematic analysis of all possible relevant factors provides a general explanation and the holistic element of the approach assures this generalization is historically dependent because the units of comparison are historically set.⁹ Comparative history is not unified by one theory or method, yet all work in this field shares a concern with the analysis of causes, an

⁵ Idem, 34-52.

⁶ See for example D. Acemoglu, S. Johnson and J. A. Robinson, 'The Colonial Origins of Comparative Development: An Empirical Investigation', *The American Economic Review*, 91 (2001), pp. 1369-1401.

⁷ Ragin, *The Comparative Method*, 30-35, 53-68.

⁸ Idem, IX.

⁹ P. McMichael, 'Incorporating Comparison within a World-Historical Perspective: An Alternative Comparative Method', *American Sociological Association*, 55 (1990).

emphasis on processes over time and the use of systematic and contextualized comparison. Most comparative historians aim to explain important outcomes within delimited historical contexts, usually focusing on a small number of cases.¹⁰ An example of an approach that attempted to unify both the qualitative and quantitative methods is the book *The Comparative Method: Moving beyond Qualitative and Quantitative Strategies* by Charles Ragin. To do so he uses the Boolean Method, a form of Boolean linear algebra, to analyze multiple conjunctural causation.¹¹

Ragin's Boolean Methodology could not be used in this study because of our limited case selection of only two countries. So what method did we select for our comparison? Next to not using a Boolean analysis, a truth table seemed unpractical as well; adding hypothetical cases of all other possible outcomes to our case selection of two countries would have provided more theoretical cases than empirical cases. An expansion of the number of cases would have made the outcome too general, and we would like to go into the deep causes of history as well as the factors that make both countries unique. To map our explanatory factorial framework we use what we call a *Boolean matrix* as a compromise between the Boolean analysis and the truth table. The working of this matrix will be explained in chapter three, when we use the Boolean matrix for the first time.

Before we attend to the factor analysis, the theoretical and conjectural explanations of gender equalization in education will be discussed first. We provide four additional reasons why gender equality in education matters, besides that education is a basic human right. The chapter will also explain why gender theories were not selected as a theoretical starting point of our study. Lastly, we will tackle the possible factors that might lead to gender equality in education. Subsequently, chapter two presents the long term trends in data on female enrolments, which we use as a proxy for the degree of gender equality in education. Why we selected this criteria will be explained as well. The data ranges from the 1880s until approximately 2000. Chapter three and four will analyze the data by systematically addressing the three possible sets of factors that can explain equality in education, namely economic, political and cultural factors. Chapter three tackles the question why Argentina and Japan both succeeded in equalizing their primary enrolments. Chapter four addresses the question that follows on chapter three; why did Argentina not continue the path of gender equality in secondary education, and why was Japan able to do

¹⁰ J. Mahoney and D. Rueschemeyer, 'Comparative Historical Analysis: Achievements and Agendas' In J. Mahoney and D. Rueschemeyer (eds.), *Comparative Historical Analysis in the Social Sciences* (New York, 2003) 10-13.

¹¹ Ragin, *The Comparative Method*, 85-163.

so? Lastly, chapter five concludes with a comprehensive answer to our primary question: what factors caused the gender equalization of education in Argentina and Japan in the period ca. 1880-1970.

Chapter one – Theoretical and conjectural explanations of gender equalization in education

Desired as it might be, gender equality is still not the standard in most parts of the world. Even though the last century witnessed large progressions in educational equity between boys and girls, many women still are deprived of the same education or work opportunities as men on the basis of their sex. Why does gender equality or inequality in education matter? As discussed, the most important reason is that education is a basic human right and should therefore be accessible to all. But there are four additional economic and social reasons to justify why we should be bothered with gender inequality in education. These are the impact of female education on the human capital stock, on individual private returns, on social benefits to society and on intergenerational effects. Even though they are discussed separately, these four reasons are interdependent.

The impact of female education on the human capital stock is important because in general low levels of human capital are considered to be an impediment to economic growth. According to Stephen Klasen, gender inequality in education directly affects economic growth by lowering the average level of human capital.¹² According to Robert Barro, growth is insignificantly related to years of female school attainment at secondary and higher level education, suggesting that highly educated women are not well utilized in the labor market of many countries.¹³ The stock of human capital is additionally influenced by a drop in fertility related to a higher female education level, which will be discussed further in the section about social benefits to society.

A second validation for gender equality in education is that it results in higher private returns and a larger productive efficiency. Education can increase women's capabilities and control over resources, thus increasing her productive capacity.¹⁴ The female individual can benefit from her education economically, by finding a better paid job or otherwise by finding a better educated man with a higher income potential. On the other hand, non-market activities such as childrearing become more productive as well, resulting in better child nutrition and health. These social benefits will be discussed

¹² S. Klasen, 'Low Schooling for Girls, Slower Growth for All? Cross-Country Evidence on the Effect of Gender Inequality in Education on Economic Development', *the World Bank Economic Review*, 16 (2002), 345-373.

¹³ R. J. Barro, 'Human capital and Growth', *The American Economic Review*, 91 (2001) 16.

¹⁴ P. T. Schultz, 'Investments in the Schooling and Health of Women and Men: Quantities and Returns', *the Journal of Human Resources*, 28 (1993) 694-734.

below.¹⁵ George Psacharopoulos and Harry Patrinos investigated the returns to investment in education. In Argentina and Japan, private returns to primary education were 10.1% in 1989 and 13.4% in 1976 respectively. The returns of secondary education were even higher in Argentina at 14.2%, but lower in Japan at 10.4. The returns to overall education were in 1989 higher for women than for men, a percentage of 11.2% and 10.7% for Argentina and Japan respectively.¹⁶

External social returns to women's education are a third reason for educational gender equity. The externalities or non-market returns are generally byproducts of a women's education, not its main goal. However, these externalities are very important for the economical and social welfare of the family and the nation. External social benefits can be measured by a reduction of child mortality and an improvement of a child's nutrition and schooling. Paul Schultz argues that the most important predictor of reduced child mortality is the formal education of the mother.¹⁷ Another important social externality is that female education at primary level induces a lower fertility rate and decreases population expansion, leading to an increase in economic growth.¹⁸ In his regression Robert J. Barro found the fertility rate to negatively correlate in a significant way to economic growth. A lowering of the fertility rate, by means of investment in female education, is therefore an investment in the total economic growth.

The last justification for gender equal education is the intergenerational effect of education. Parental educational attainment has a large impact on the possible education of their children. Peter Glick and David Sahn investigated the impact of parental education on their offspring's education in West-Africa. They found that a mother's education has a large positive impact on the educational opportunities of her daughter. Intergenerational effects will in the future lead to even greater reductions in the gender gap in schooling and ultimately earnings.¹⁹ Also, parental education is passed on to their children, resulting

¹⁵ Possibly females will be able to reap some psychological benefits as well, because education gives them the tools for self development, at the time of education, but also in the future.

¹⁶ G. Psacharopoulos and H. A. Patrinos, 'Returns to Investment in Education: A Further Update', *World Bank Policy Research Working Paper* 2881 (2002) Tables A1 and A3.

¹⁷ T. P. Schultz, 'Human Capital, Family Planning, and Their Effects on Population Growth', *The American Economic Review*, 84 (1994) 256.

¹⁸ Barro, 'Human capital and Growth' 15-17. Other authors such as Schultz or Strauss and Thomas agree with the view that education lowers fertility.

Schultz, 'Investments in the Schooling and Health' pp. 694-734.

J. Strauss and D. Thomas, Human resources: Empirical modeling of household and family decisions In J. Behrman and T. N. Srinivasan (eds.), *Handbook of development economics* (Amsterdam, 1995), pp. 1883-2023.

¹⁹ P. Glick and D.E. Sahn, 'Schooling of girls and boys in a West African country' 63-87.

better health education and a lower unwanted fertility rate.²⁰ In sum, gender equality or inequality in education matters not only for the individual, but also for the family and the entire society.

1.1 Gender Theories

Naturally, any thesis directed toward the explanation of gender equality should find theoretical backing in gender theories. However, we encountered two problems with the application of gender theories. In the first place, these theories try to explain gender *inequality* in society, not gender equality, thus assuming a 'natural' state of gender equality. This position is contrary to our research question. We try to explain gender equality in education and see, perhaps somewhat negatively, that inequality is the 'natural' state. We did not choose this point of view out of a belief in natural inequality of women, but it stems from observation; try to name ten countries that started their pre-Second World War education system on a gender equal basis. Before we address the second problem with gender theories, we must first explain what they are. Among the explanations of the origins of gender inequality, three theories are bound together under the banner of the *critical approach*: the theories of difference, theories of gender oppression and the theory of liberal feminism.

The theories of difference claim a biological determinism between men and women. Sex role theory is one of the theories originating from this determinism. It argues a division of labor based on the different roles of reproduction. Sex roles within society are a construct, but based on a natural distinction.²¹ Biological determinism however, fails to explain the historical and geographical variation in the position of both sexes.²²

Theories of gender oppression include radical feminism, neomarxism and social feminism, which is a combination of the previous two. Radical feminism claims that all of society is oppressive to women, including the educational system. Society is patriarchic; therefore boys have power over girls within the entire system.²³ Neomarxism asserts that education can be seen as an important instrument of the superstructure, thus as an

²⁰ P. T. Schultz, 'Investments in the Schooling and Health of Women and Men' 714-715.

²¹ C. Mannathoko, 'Theoretical Perspectives on Gender in Education: The Case of Eastern and Southern Africa', *International review of education*, 45 (1999), 448-451.

²² L. Measor and P. J. Sikes, *Gender and schools* (London 1992) 7.

²³ Mannathoko, 'Theoretical Perspectives' 453-455.

instrument of oppression used by the upper class.²⁴ Social feminism and neomarxism both assimilate gender inequality into the class struggle. An important pitfall of these gender oppression theories is that they subordinate the female sex to a structure, unable to make adjustments themselves and often radical change is needed to break this pattern. In practice, most change occurs gradually and only sometimes radical.

Liberal feminism, more generally known as mainstream feminism, is based upon the political philosophy of liberalism and on the basic liberal principles of liberty, equality and fairness. Occupations and positions in society should be based on ability alone, yet in practice a sexual division of labor explains gender inequality in society and education. Generally, social activity is divided in a separate female private sphere and public male sphere. The private sphere is composed of unpaid and undervalued work, based on taking care of children, housework and supporting men. In the public sphere “*the true rewards of social life are to be found – status, power, money, freedom, self-esteem and personal development*”.²⁵ Education can be located in the public sphere, offering the above ‘rewards’ of social life. Unequal opportunities existing in society, such as legal or social constraints, are the reason for gender inequality in education. A solution therefore comes from legal reform, creating equal opportunities.²⁶

Liberal feminism has two major shortcomings. First, just like liberalism itself it overemphasizes individual freedom, downplaying the role of society. Social feminists are particularly critical of liberal feminism because it fails to tackle the problems of poverty and economic oppression, preventing women from taking advantage of opportunities.²⁷ Second, the term unequal opportunity remains abstract. Without pinpointing what causes inequality, the reason why women are excluded from education remains an external factor. Opportunities might be blocked because of cultural, economical or social constraints. Are legal reforms enough to equalize education?

Let us get back to the problems this study encountered in incorporating gender theories. The second problem with the gender theories is that, with the exception of liberal feminism, these theories try to structurally explain the causes of gender inequality. Not only does this blur the female agency, it also complicated the finding of a unique and specific path of gender equality in education. However, we are not trying to brand gender

²⁴ Measor and Sikes, *Gender and schools*, 22.

²⁵ Mannathoko, 'Theoretical Perspectives' 448.

²⁶ Idem, 447-450.

²⁷ Measor and Sikes, *Gender and schools*, 20-21.

theories as ineffective. Gender theories make us aware of patriarchic notions in the deeper layers of society, ones that we might have not discovered if the approach had not been structural. They address the problems that multiculturalism could bring when female rights are involved. In fact, they make clear that equal rights are something that go against almost every culture, religion and tradition.

But this study is not about pinpointing inequality in society. The main focus of this thesis is on the equalization process of education in Argentina and Japan in the long twentieth century. Therefore, our interests rest in a process of change, namely gender equalization. We also want to know the specific causes that led to the gender equalization of education in Argentina and Japan. Liberal feminism is the only theory that can possibly explain the change in the sexual composition of education. It puts forth the possibility of legal reform, a political factor that will be discussed in more detail later on. Liberal feminism is very much concerned with opportunities, and we will address these opportunity possibilities in our factor analysis. But we will extract these opportunities from other historical, economic, political and cultural sources, not from a theoretical gender perspective. Gender theory is too concerned with a concept of inequality and not enough with its historical dynamics; therefore it does not fulfill our methodological needs. The CM provides a much more practical method to structurally address and compare the dynamics of the factorial framework that caused the expansion of equality in education. To use the CM we must first attend to the possible factors that might lead to gender equality in education.

1.2 Factors explaining equality in education

Three sets of factors can have an effect on gender equality: cultural, economic and political factors. The cultural factors are mostly barriers that must be overcome to reach gender equality in education. Cultural heritage seems to be formed by ideology or religion in the same way as coal is formed underground: stacking layer after layer of carbon until it becomes something hard and static. Cultural heritages work the same way. Years upon years of ideological and religious layers are stacked together until they form a traditional pattern that is not easily changed. Gender inequality is one of those cultural heritages acting like a drag on modernization and equality. However, culture is not only static; it can also be a factor in change. Dollar and Gatti put forth the claim that gender inequality can

be explained to a considerable extent by religious preference, regional factors, and civil freedom. Protestant religions and well protected civil liberties are associated with high female educational attainment. Interesting for this study is that Dollar and Gatti found large positive coefficients on female educational attainment on the Shinto variable, an indicator for Japan and on the regional indicator variable for Latin America.²⁸ The cultural analysis of Argentina and Japan therefore promises to be a complex, yet interesting case study, seeing as both nations are generally known for their less than gender equal societies.

Cultural barriers are often put up by organized religion. Organizations such as the Catholic Church have been around that long that they became hubs of conservatism. The same goes for an organized elite value system such as Confucianism. Confucianism came into being in a patriarchic society, and always placed women on a lower position in society, subordinating her to men. It was only at a later time that Confucianism became rigidly dogmatic and all measures against women were associated with Confucianism. Even then, women were still valued, albeit not on the same equal level as men. In traditional Confucian society the mother and grandmother enjoyed respect and admiration. In addition, children's education, especially the moral training and cultivation of character was the first duty of the parents. The achievements of great men were said to come directly or indirectly from the virtues of the mother.²⁹ Thus even if Confucianism assigned women a lower position in society, her tasks were still important and her education could play a role in her virtues as a mother.

The Catholic Church might have hampered investment in education in two ways. The Church valued education for ordinary people less than their Protestant counterparts because the latter believed that all members of the population should be able to read the Bible, even the girls. Secondly, the Church might have slowed down individual or community institutions to organize schools.³⁰ This view on the Catholic Church does not hold up when we see that Catholic French Canada was one of the first, next to the northern U.S. and the rest of Canada, to develop a mass primary education system, including girls. Also it is not consistent with the British protestant colonies in the Caribbean, where such a system was not instigated. Furthermore, in the Middle Ages, the Catholic Church positively influenced emancipation of young women with its doctrine of mutual consent at

²⁸ D. Dollar and R. Gatti, 'Gender Inequality, Income, and Growth: Are Good Times Good for Women?' *Policy Research Report on Gender and Development, Working Series Paper*, 1 (1999).

²⁹ X. Yao, *An introduction to Confucianism* (Cambridge, 2000) 182-184.

³⁰ E. Mariscal and K. L. Sokoloff, 'Schooling, Suffrage, and the Persistence of Inequality in the Americas, 1800-1945' In S. Haber (ed.), *Political Institutions and Economic Growth in Latin America: Essays in Policy, History, and Political Economy* (2000).

marriage. When mutual consent of both spouses was needed to marry, this negatively affected the paternal authority within the household. The Church's ideological backing combined with a material basis from the medieval labor market led to the emancipation of young women, within certain boundaries of course.³¹ The point is that in a certain mixture, the Church can enhance the position of women, instead of worsening it, so it is not necessarily an impediment for female education.

Class distinctions and urbanization can both have an effect on education for women. In general, peasant and other lower-class households were cooperative economic unit, in which all members must participate to reach maximum production for the family. Because women contributed their share, they had a strong position within the household, stronger than elite women. Peasant family values thus presented less of an obstacle in the decision of sending daughters to school. In addition, urbanization played a large role in the disconnection from traditional patriarchic values because it enlarged labor opportunities for women and thus expanded female financial freedom. The first generation of female city dwellers was not likely to follow an education, but they did possess the material means to send their children to school. Also, urbanized areas provided girls with more schooling and subsequent job opportunities than rural areas and parents were more likely to be sensitive towards what education could mean for their offspring's social standing. In other words, culture can go either way. We should not assume anything about the barriers that it might impose, though the general historic trend was toward gender inequality.

Economic factors

Economically, two important factors can break the cultural barrier of gender inequality; the *necessities of a changing economy* and the *parental choice or parental cost problem*.

The *necessities of a changing economy* are changes in the economy that demand a more skilled work force. In a blossoming economy, more parents, politicians and entrepreneurs are willing to invest in education, because bureaucratization, industrialization and the service sector demand a more skilled labor force. The *necessities of a changing economy* can be measured by the growth of industrialization and the service sector. The service sector is especially important in the schooling of women because many educated women end up as teachers, secretaries and other service occupations.

³¹ T. d. Moor and J. L. v. Zanden, 'Girl Power: The European Marriage Pattern (EMP) and Labour Markets in the North Sea Region in the Late Medieval and Early Modern Period', (2006).

The theoretical background of the *necessities of a changing economy* is captivated in the modernization theory, which originated from the work of Marx, Weber and Durkheim. It suggests that economic, cultural and political changes go together in coherent ways and that industrialization brings generally similar paths even if the situation specific factors are different. Ronald Inglehart and Pippa Norris revised the modernization theory, claiming that human development brings changed cultural attitudes toward gender inequality in almost every society that experiences a form of modernization linked with economic development. “*Modernization brings systematic predictable changes in gender roles.*”³²

Industrialization and the service sector provide an incentive to get educated by offering employment to women as well as men. However, parents must be willing and able to send their children to school. The *parental choice* or *parental cost problem* is an important factor in the teardown of cultural barriers because the parents make the decisive step of enrolling their daughters. Four features play a role in this decision. The most important question for parents is; can we afford to send all children to school, even the girls? Parental income or economic resources are a central determinant in the education of women and its the effect is greater on girls than boys.³³ The factor can be measured by the GDP per capita of a country.

Parents who are trapped within the *parental cost problem* might have other reasons not to invest in their daughters, but rather in their sons. The second feature of the problem is asserted by T. Paul Schultz who sees that next to the income of parents, the low returns to schooling are an important factor, i.e. the opportunity costs are too high.³⁴ The private individual returns might be lower because within society more jobs are available for educated men than educated women. Peter Glick and David Sahn add that parents may not recognize the value of non-market or social returns, such as better child nutrition.³⁵ Remittances to parents are a third feature. According to David Dollar and Roberta Gatti, remittances to parents might be smaller for daughters than for sons. Parents might expect a more direct benefit from investing in sons because they remain in the family, providing for parents in their old age, while daughters tend to leave and become part of a different

³² R. Inglehart and P. Norris, *Rising Tide: Gender Equality and Cultural Change around the World* (New York, 2003) 10.

³³ J. A. Jacobs, 'Gender inequality and higher education', *Annual Review of Sociology*, 22 (1996) 165.

³⁴ P. T. Schultz, 'Investments in the Schooling and Health of Women and Men: Quantities and Returns', *The Journal of Human Resources*, 28 (1993) 704.

³⁵ Glick and Sahn, 'Schooling of girls and boys in a West African country' 63-87.

household.³⁶ The fourth feature of the *parental cost problem* is related to geography. How far is the child away from the nearest school and can the parents afford the journey? The distance to school has more impact on the enrolment of girls than that of boys.³⁷ Urbanized areas have a higher density of schools, minimizing the traveling expenses for girls. Also, urban environments are nexuses of commercial and administrative activities, possibly enhancing consciousness about the importance of education for girls.

Political factors

Political factors can also account for the breakdown of cultural barriers constraining gender inequality in education. Robert Connell maintains that the state engages in substantial ideological activity on issues of gender. “*The state intervenes in the sexual division of labor in ways ranging from subsidizing immigration to equal opportunity politics. It regulates workplaces and families, provides school, builds houses.*”³⁸ Cultural change, such as a change in the status of women, often occurs with the formation of a nation state. Ramirez and Weiss stress the importance of political centralization in supplying education for women at elementary and secondary levels in developing countries.³⁹ A state or government can shape and intervene in education and thus play an active role in implementing gender equal schooling. However, political factors can also explain a lag of general equality in education. Governments are less likely to invest in education when a society is unequal.

Both Argentine as well as Japan’s society was unequal. Stanley Engerman and Kenneth Sokoloff argued that Argentina’s colonial heritage caused economic inequality in the long run. The initial development of inequality probably came with the massive grants of land to privileged families and military leaders during the first half of the nineteenth century. This affected early institutions and therefore economic growth in the long run; extensive inequality in the distribution of land, human capital and political influence became clearly apparent in the second half of the twentieth century.

Japan before the Meiji Revolution in 1868 was also known for its social inequality. From the late sixteenth century until the Meiji restoration in 1868 Japan acknowledged a

³⁶ Dollar and Gatti, 'Gender Inequality' 7-8.

³⁷ Jacobs, 'Gender inequality and higher education' 165.

³⁸ R. W. Connell, 'Gender and power: society, the person and sexual politics' (Oxford, 1987) 126.

³⁹ Jacobs, 'Gender inequality and higher education', 164.

F. Ramirez , J. Weiss, 'The political incorporation of women' In *National Development and the World System*, ed. J. Meyer, M. Hannan, (Chicago, 1979) pp. 238–49.

formal system that completely separated the social classes: that between the samurai and the peasants (heinō) and between the merchants and the peasants (shōnō). The division of society in early modern Tokugawa Japan into the samurai, chōnin (townspeople) and nōmin (peasants) was comparable to the Western ruling class, bourgeoisie and peasantry respectively.⁴⁰ This formal social division was relieved after the Meiji revolution in the name of modernization of the nation and the peasantry was legally freed from restraints in 1871 in occupations and residents, though this did not immediately lead to a decrease in income inequality in Meiji Japan.

What reasons would a government of an unequal nation have to gender equalize primary or secondary education? The main reason is that the government can use gender equality in education as a tool to achieve certain political goals. A few possible reasons can be distinguished. Firstly as discussed above, it is economically unconstructive to exclude women from the human capital stock. Dollar and Gatti agree with Klasen that gender differences in education are not an efficient economic policy choice because underinvestment in girls slows down economic growth and lowers income.⁴¹ Historically, not all governments were aware of the inefficiency of the policy choice of not including women. Historical investigation must determine this awareness. Education can be used as a tool to promote three other outcomes. It can be used as a tool to promote modernization, to create a cultural unity of the society and to promote nationalism. *“Education may serve many gods: it can be used to pursue salvation, vocation, civilization, participation and recreation.”*⁴² The government must have incentives to invest in the education of girls. These can either come out of the economy, the necessities of a changing economy, or from culture and society itself.

⁴⁰ G. Rozman, Social Change In M. B. Jansen (ed.), *The Cambridge History of Japan, Vol. 5: The Nineteenth Century* (New York, 1989), pp. 505-506.

⁴¹ Dollar and Gatti, 'Gender Inequality, Income, and Growth'.

⁴² Jacobs, 'Gender inequality and higher education' 164.
From Kelly (1983), cited in Coats (1994).

Chapter two – Long term trends in female enrolments

2.1 Introduction

What factors caused the gender equalization of education in Argentina and Japan in the period between 1880 and 1970? The first step toward addressing this question is to demonstrate the gender equalization process in both nations, and show how the equalization processes differed for primary and secondary education. We will look at primary education from 1880 until 1915 and subsequently at secondary education at the start of the same period, but until ca. 1970. The gender equalization of primary education will be addressed in a regional comparative perspective because Argentine equalization was part of a broader regional phenomenon, unlike Japan's, which educational equality between the sexes was not found in another Asian country. We will measure the extent of educational gender equality by using the female enrolment share as a proxy. These figures are largely based on statistics from the International Statistical Institute⁴³ (ISI hereafter), UNESCO (United Nations Economic and Social Committee) and a Japanese data set compiled by Bas van Leeuwen for his dissertation *Human Capital and Economic Growth in India, Indonesia, and Japan: A quantitative analysis, 1890-2000* (2007).

Before we unravel the long term trends in primary and secondary education, one important note must be made beforehand to prevent confusion. The research is mostly based on enrolment and specifically female enrolment data. Consequently this study will not make claims of *total* gender equality in education. In both Argentina and Japan, actual attendance was much lower than enrolments and participation alone does not ensure equality between women and men. However, we find we can use enrolments as a proxy to measure the development of gender equality in education. A benefit of using enrolment ratio's as a proxy over literacy rates is that enrolment figures tend to be less 'polluted' by large externalities, especially immigration. Argentina attracted many immigrants with a high literacy rate at the end of the nineteenth century.⁴⁴ Using male and female literacy rates to measure gender equality in education is therefore clouded by this 'import' of literacy. Literacy would also not tell us much about gender equality in secondary schooling and it would be less practical to demonstrate the process of gender equalization in both

⁴³ The original language of these old yearbooks, ranging from 1919 to 1921, is French. Therefore we use original French name of the institution in our annotation, namely *L'institute Internationale de Statistique*.

⁴⁴ Mariscal and Sokoloff, 'Schooling, Suffrage, and the Persistence of Inequality in the Americas', 181-182.

primary and secondary schooling. Moreover, an enlargement of female enrolments can be seen as proof of a certain mindset. For some reason, women were included in education in these countries, while at the same time in other countries they were *not* included. At the present time, data on enrolment is the best data we have for female participation in education, especially at the end of the nineteenth and beginning of the twentieth century. Therefore it is the best tool to get a clear and quantitative picture of gender inequality in this period.

Besides data on female enrolment, we make use of gross enrolment ratios to examine education in general. The gross enrolment ratio (GER hereafter) is an indicator of the degree of participation, indifferent to whether or not the pupil belongs to the official age group. The GER can be calculated by dividing the enrolment of the level of education in a school-year, by the population in the official school-going age group of the same school-year. If the GER approaches 100%, a country can accommodate all of its school-age population, but it does not indicate what proportion is already enrolled. When above 90%, the GER indicates that the collective number of places for pupils is approaching the number for universal access of the official age group.⁴⁵

As mentioned before, most data on enrolment was obtained from the ISI, UNESCO and a data set compiled by Bas van Leeuwen. The ISI and UNESCO provide data gathered over the years from national statistical agencies. The data collected from the ISI stems from around 1920. The data collection obtained from UNESCO is mostly- post-war, but the UNESCO World Survey of Education goes as far back as 1930. All male, female en gross enrolment statistics for Japan, Indonesia and India are derived from Van Leeuwen's work. The data stems from a cross-comparison of different data, retrieved from UNESCO and local statistical sources, and we believe that at the time being it is the most complete series of data available for these three countries. We use his entire data-set, even though at times we would have been able to substitute some figures with UNESCO data. We decided not to do so because we wanted to maintain consistency in the Japanese data.

The division of primary and secondary education is determined by the standards of the ISI and UNESCO. Van Leeuwen has also used the same division of education levels by UNESCO standards. Secondary education can be divided into two parts, lower secondary education and higher secondary education. Before the Second World War,

⁴⁵ Explanation of Gross enrolment
[http://www.uis.unesco.org/glossary/Term.aspx?name=GROSS%20ENROLMENT%20RATIO%20\(GER\)&lang=en](http://www.uis.unesco.org/glossary/Term.aspx?name=GROSS%20ENROLMENT%20RATIO%20(GER)&lang=en).

secondary education for women were called girls' high schools in Japan; no difference is made between lower secondary and higher secondary education for girls.⁴⁶

Although we believe our data-set to be trustworthy, some problems of comparison downgrade the quality of the discussed data. The first problem lies in the extent of both databases. We have a larger data base for Japan than for Argentina, so the comparison is in large part limited to the data available for Argentina. Especially Argentine enrolment figures for secondary schooling by sex are very hard to obtain for the late nineteenth and the beginning of the twentieth century. Only for 1930 could we find the first data on female enrolments into secondary schooling. In Japan, much data in the 1940s was missing, but the gaps were filled by using ratios with the available data or by linear interpolation. Even still with these data interruptions, we did find some interesting enrolment patterns.

For Argentina it was very difficult to incorporate teacher and vocational schooling into the general secondary education numbers. This complicates the comparison because Van Leeuwen mixed all forms of education together. In Japan teacher training presented only a very small quantity of total secondary enrolment rates; therefore it did not present a fundamental difference in the outcome. Also, in Post-Second World War Japan the vocational training, and thus the teacher training, was not incorporated in the secondary enrollment figures because it became part of higher education. For Argentina secondary enrolment is more problematic, because teacher training constituted a bigger part than in Japan. We chose to look at general secondary education and not a specific other type of secondary schooling. We could not remove it from the Japanese dataset, but we know it only constituted a small part of the total amount of general enrolments.

Lastly, data is less than abundant for private institutions in Argentina, mainly because from the mid-nineteenth century until 1960, private institutions were severely restricted by the government. Whatever the reason, not much data can be found on these private institutions, for the nineteenth century. For Japan, Van Leeuwen took into account the number of pupils enrolled in the public and the subsidized and recognized private schools. Even though this could interfere with our investigation, we kept this in mind in

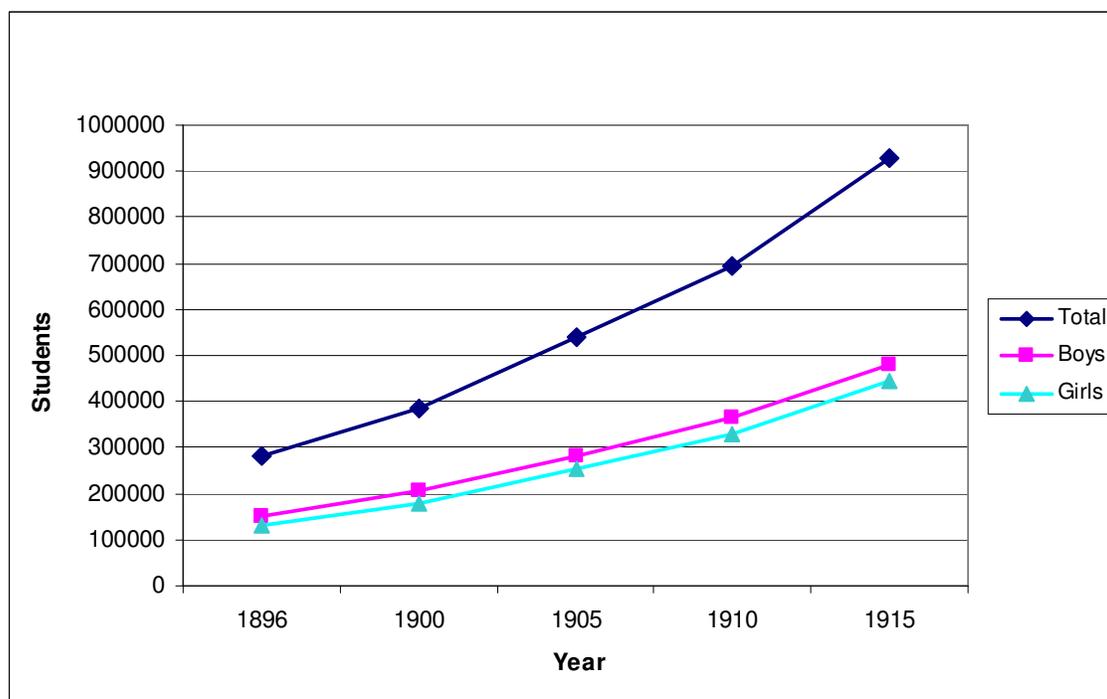
⁴⁶ When we discuss Japan only, we will use the term *Pacific War*. The Pacific war officially ran from 1937 until 1945 and Japan officially became part of the Second World War in 1941. When we discuss the Second World War for Argentina and Japan, we will name it the Second World War, but for Japan this also implies the three years before its official entry into the Second World War. We have done this to equalize the comparison, because Argentina had not part in the Pacific War, but it did in the Second World War. For Japan, the Second World War is not the same as the Pacific War, but that is implied here.

our analysis. It complicates the analysis, but having data on private institutions in Japan has our preference to leaving them out of the comparison.

2.2 Argentina and Japan – trends in primary education

Figure 1 presents the absolute numbers of enrolled girls and boys in primary education in Argentina in the period 1896-1915. Noteworthy is that although there are slightly more girls than boys in the overall period, both curves follow an identical growth pattern. The curve of and the distance between both lines remains the same. The similarity of the pattern indicates an equal enrolment for both sexes in the period 1896-1915.

Figure 1: Primary education enrolments in Argentina in absolute numbers, students per sex, 1896 -1915



Source: L'institute International de Statistique, *Annuaire international de statistique* (La Haye, 1920).

The figures are impressive, but can only receive credibility if primary education was not exclusively accessible to the elite. The elite have an exceptional position and could afford to send all their children to school, regardless of their sex. Therefore we should look at the GER to get an indication of participation of students. In 1880 the GER was 20%,

indicating more children were being educated than only the elite offspring. In 1915 the percentage rose to 68%.⁴⁷ Enrolment was not yet universal, but elite children were not the only youths being educated. Far more than half of the Argentine school-going population was receiving primary education, regardless of the sex of the child.⁴⁸ Full enrolment would be reached in the period between 1940/1945 and 1950/55, when the GER was respectively 91% and 97%.⁴⁹

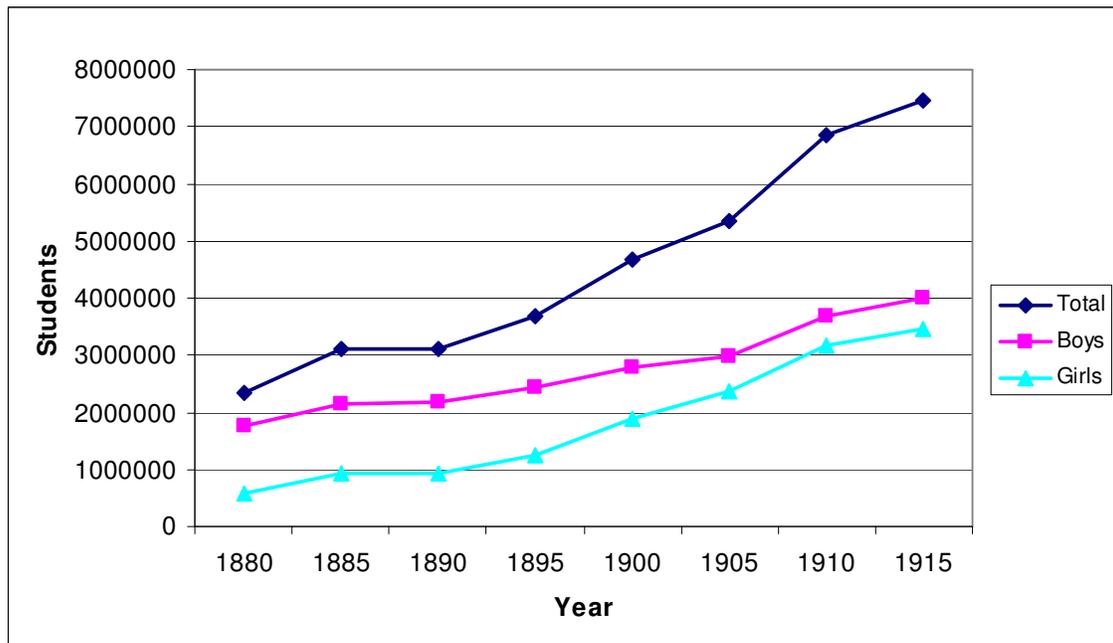
Figure 2 presents primary enrolment figures for Japan in the period between 1880 until 1915. Compared to Argentina, Japan started out with a larger difference between male and female enrolments in 1880. It is noticeable that after 1895 the gap between male and female enrolments started to close. After 1905 the enrolment patterns followed a similar path as observed earlier in Argentina in which the total proportion of female students was less, but the growth curves were the same for male and female alike. It was especially this similarity in the pattern of male and female enrolment that suggests gender equality.

⁴⁷ E. Frankema, *The historical evolution of inequality in Latin America: a comparative analysis, 1870-2000* (2008). See Table A.4.2.

⁴⁸ The school-going age in Argentina was between the ages of 6 and 14. More on this in chapter three.

⁴⁹ Frankema, *The historical evolution*.

Figure 2: Primary education enrolments in Japan in absolute numbers, students per sex, 1896-1915.



Source: B. van Leeuwen, *Human Capital and Economic Growth in India, Indonesia, and Japan: A quantitative analysis, 1890-2000* (2007).

Japan's GER was even more remarkable. In 1895 it had already reached 59% and in 1915 even 88%. In a much earlier stage than Argentina, Japan was well underway reaching almost full participation of the school-going age population in elementary education.⁵⁰ Argentina however, did start out with a more egalitarian education system.⁵¹

In *Figure 3* the initial difference in female enrolments between Japan and Argentina becomes even clearer because it shows the female *percentage* of enrolment rates for the period 1896-1915.⁵² We have set the benchmark for an egalitarian education system at the enrollment of at least 47% women, below this threshold the education system shows signs of inequality. This percentage was determined on the basis of the gender bias in

⁵⁰ Gross enrollment indicates participation, but is indifferent to whether or the not pupil belongs to the official age group. Nevertheless, if we a 100% gross enrolment ratio as almost complete participation, Japan reached this level already in 1933.

Own calculations based on data from:

B. van Leeuwen, *Human Capital and Economic Growth in India, Indonesia, and Japan: A quantitative analysis, 1890-2000* (2007).

⁵¹ Curiously, the same pattern can be seen between Indonesia and India. Although Indonesia had more equality in its primary enrolments, the gross enrollment ratio was quite low, whereas in India gross enrolment was higher but more gender unequal.

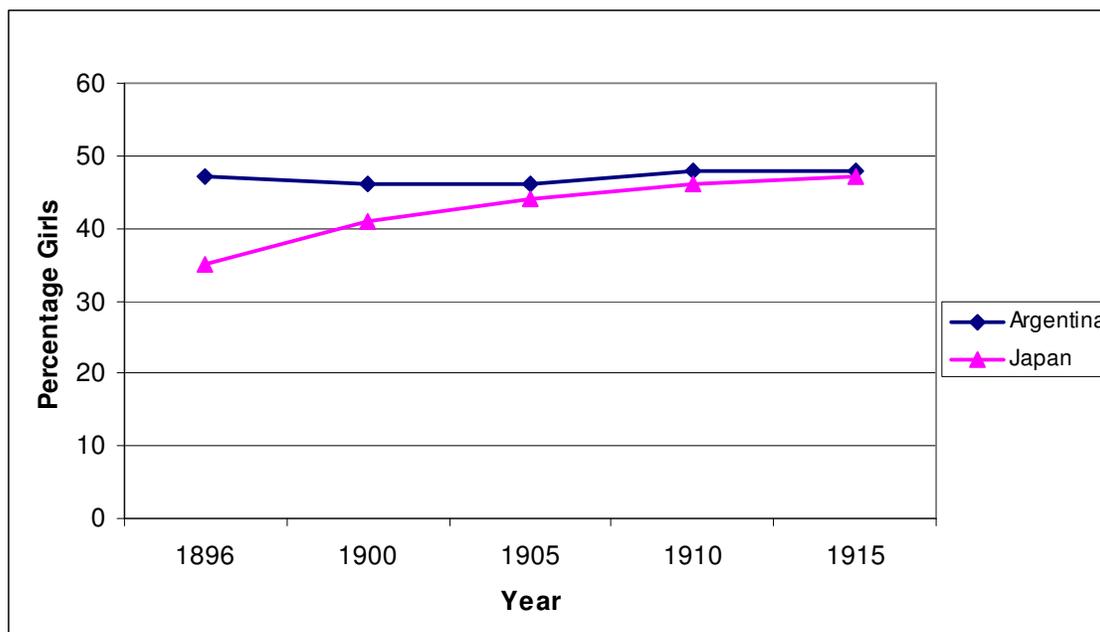
Idem.

⁵² The percentage presents the female proportion of total students enrolled in education, either primary or secondary. If the percentage of women is 47%, the percentage of men is 53%.

population composition. In 1895, the female share of the total population in Argentina was 47%.⁵³ The Japanese proportion of women was a higher 49% in 1898.⁵⁴ We took the lowest proportion of females as a yardstick to indicate gender equality in education.

Japan starts out with an unequal male-female balance in enrolment of 35% in 1896, when at the same time Argentina starts out with an equal 47% female enrolment. In 1915 however, Japan and Argentina both end up with a female enrolment level of 46.5% and 48% respectively. Equality in elementary enrolments was reached in both countries.

Figure 3: The female enrolment percentage in Argentina and Japan, 1896-1915.



Source: Figures for Argentina: L'institute International de Statistique, *Annuaire international de statistique* (La Haye, 1920). Figures for Japan: Own calculations based on data from: Van Leeuwen, *Human Capital and Economic Growth*.

What made Japan and Argentina extraordinary was that an equal primary education system was an exclusive Western phenomenon at the end of the nineteenth century. Another demonstration of the unusual equal pattern is illustrated by *Table 1a* and *Table 1b*. *Table 1a* displays the female enrolment percentage for India, Indonesia and Japan. From the

⁵³ L'institute International de Statistique, *Annuaire international de statistique, III Etat de la Population (Amérique)* (La Haye, 1919) 40-41.

This number was taken from the religious population only. However, the Catholic religion alone accounted for 99% of the population; therefore it does not distort the image of reality. *Idem*, 242, 244.

⁵⁴ L'institute International de Statistique, *Annuaire international de statistique, V. Etat et Mouvement de la Population (Afrique, Asie, Océanie)* (La Haye, 1921).

start, the Japanese 34% was unmatched by Indonesia and India, with a female enrolment proportion of 23% and 11% respectively. Japanese enrolments continued to rise until equality in 1915. In contrast, Indonesia started out with a reasonable percentage of 23%, but actually declined the following twenty-five years. The proportions of female students in primary education in India did rise, but only at such a slow pace that in 1915, the female primary enrolment percentage was not even half of that of Japan the same year. Japan was truly a Asian outlier in terms of gender equality in primary education.

Table 1a: Female primary enrolment percentage for India, Indonesia and Japan.

Primary education %			
	<i>India</i>	<i>Indonesia</i>	<i>Japan</i>
1895/6	11	23	34
1900	12	22	44
1905/7	14	22	44
1910	16	18	46
1915	19	15	47

Source: Own calculations based on data from Van Leeuwen, *Human Capital and Economic Growth*

Table 1b: Female primary enrolment percentage for Argentina, Brazil, Chile, Uruguay and Mexico

Primary education %					
	<i>Argentina</i>	<i>Brazil</i>	<i>Chile</i>	<i>Uruguay</i>	<i>Mexico</i>
1895/6	47	Na.	51	46	Na.
1900	46	Na.	54	47	36
1905/7	47	44	52	48	40
1910	48	Na.	Na.	48	41
1915	48	Na.	Na.	48	Na.

Source: Figures for Argentina, Brazil Chile, Uruguay and Mexico: L'institute International de Statistique, *Annuaire international de statistique* (La Haye 1920). Figures for Brazil: Repertório Estatístico do Brasil, *Quadros Retrospectivos N. 1* (Rio de Janeiro, 1941)

Table 1b presents the Latin American pattern in the period from 1895 until 1915. Argentina was not the only Latin American nation with a gender equal enrolment pattern in elemental schooling. Taking into account the historic inequality and persistent gender issues seen today, this equal enrolment pattern comes as a surprise. Chile and Uruguay already had a female enrolment percentage of 51% and 46% respectively in 1895. The first data that can be found on Brazil is from 1907 when the female enrolment percentage was 44%. Mexico lags behind, with 36% in 1900, but even that is still high compared to the

rest of the non-western world. Apparently, Latin America had a gender equal enrolment pattern in general, but we can state that together with Chile and Uruguay, Argentina had a front position in primary education.

None of these countries reached a full GER before 1914, so gender equality was reached at a very early stage in Latin America and Japan. While gender equality in primary education in Argentina was part of a regional Latin American pattern, the Japanese equalization was extraordinary for Asia; India and Indonesia were outmatched by the Japanese gender equal enrolment pattern by a considerable margin. Japan was even more of an outlier because its GER was already 88% in 1915 and already above 90% as of 1918. Indonesia only approximated a full GER much later in 1972 and India in 1985, a great deal later than Japan.

2.3 Breaking the pattern – secondary education

For secondary education we maintain a different proportion of women as a threshold of equalization in education.⁵⁵ From the United Nations ‘World population prospects’ we calculated the female percentage of the entire population in the age group of zero to four. For the period 1950 to 2000 this percentage was 49% in both countries.⁵⁶ Secondary education became equalized in 1948 in Japan at a female enrolment share of 50% and Argentina followed sixteen years later with a proportion of 49% in 1964.

Female enrolments in secondary education provide a very different pattern compared to primary school enrolments. Female enrolment in primary education rose from very early on, at the beginning of the installment of mass education and equalized within a very short time. Equality in secondary education in both Argentina and Japan came about at a much slower pace and very late compared to primary education. As shown in the above section, in both countries gender equality was reached in 1915 for primary education, so technically, women had received enough education to continue into secondary education. Japanese women did enroll in larger amounts in secondary schooling, albeit this trend started later than the growth of primary education. Yet Argentine women did not carry on into secondary schooling. After both reaching

⁵⁵ We do this because better data is available for the period 1950.

⁵⁶ Own calculations on the basis of: Population Division of the Department of Economic and Social Affairs of the United Nations Secretariat, *World Population Prospects: The 2008 Revision*, <http://esa.un.org/unpp>.

equalization in elemental education, Argentina and Japan embarked upon different growth paths in secondary enrolments.

A significant difference between Argentina and Japan was the initial disparity between the female enrolment percentage at primary and secondary level. The gap between these two percentages was not that high in Japan, starting out with a percentage of 25% and 20%, primary and secondary enrolments respectively. The gap between educational levels was much more pronounced in Argentina, reversing the pattern recorded earlier in primary education. Female primary enrolments were 35% in 1896, but secondary school enrolments seriously lagged behind with only 18% in 1930.⁵⁷ Japanese data on female enrolment can already be found as early as 1880. In 1880 the Japanese enrolment percentage of girls was already 20%⁵⁸, but dropped afterwards, to once again climb to 20% in 1900 and 30% in 1905.⁵⁹ That volume was maintained until just before the Second World War.

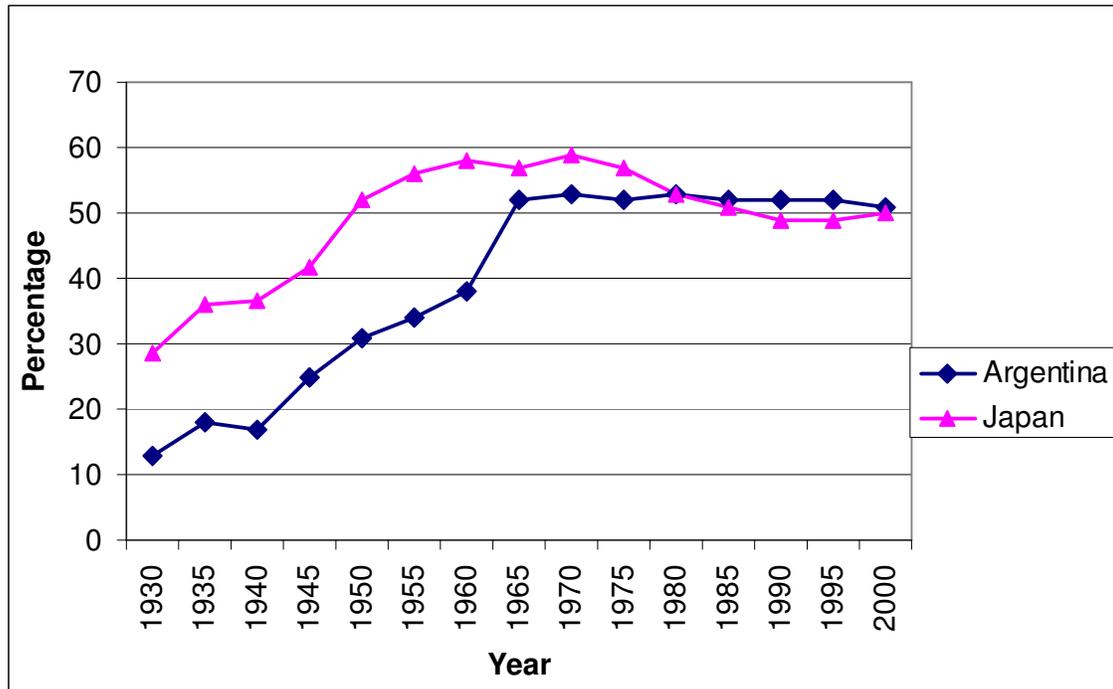
Figure 5 displays the female enrolment percentage for Argentina and Japan in secondary education in the period after 1930 until 2000. The Second World War presents an interesting break in the trend of female enrolments for Japan. After a period of stagnation of female enrolments at a percentage of 30%, from 1930 to 1935 female enrolments started to increase again. Most likely, the stagnation originated out of the world economic crisis starting with the Wall Street crash of 1929, which only reached Japan, and Argentina for that matter, a few years later. Clearly, in the period before the Second World War Argentina lagged behind, starting and ending with half the percentage that Japan had in the same period.

⁵⁷ Only at 1930 can we find the first data on female secondary enrolment. In our opinion, this tells us something about the low importance assigned to secondary education in total.

⁵⁸ Comparable to the 25% of primary enrolment that year.

⁵⁹ Own calculations based on data from Van Leeuwen, *Human Capital and Economic Growth*.

Figure 5: Female enrolment percentage for Argentina and Japan in secondary education, 1930-2000.



Source: Figures for Argentina UNESCO, *World survey of education, Part III, Secondary education* (Paris, 1958), UNESCO, *Statistical Yearbook* (1964, 1975, 1985) UNESCO online statistical database, Table 3F: Enrolment by grade in general secondary education found at: http://stats.uis.unesco.org/unesco/ReportFolders/ReportFolders.aspx?IF_ActivePath=P.50&IF_Language=en Figures for Japan: own calculations based on data from: Van Leeuwen, *Human Capital and Economic Growth*.

Japan went to war in 1937 with its invasion of China and the start of the second Sino-Japanese War. By annexing the Dutch and British colonies in 1939 and attacking Pearl Harbor in 1941, Japan entered the Second World War. In total, more than seven million men were in active military duty during the war.⁶⁰ Therefore it comes as no surprise that the female enrolment share expanded during the war. No such explanation can be provided for Argentina, which was officially neutral during the war, only entering on the Allied side at the very end of the war. The war was no catalyst on the increase of enrolments in Argentina. Argentina had its own demons to face. The period between 1930 and 1943 was deemed the ‘infamous decade’ because of all its political corruption, false elections and repressive policies.⁶¹ The second military coup of 1943 resulted in the election of president

⁶⁰ B. A. Cook, *Women and War: A Historical Encyclopedia from Antiquity to the Present* (Santa Barbara, 2006) 325.

⁶¹ M. Rapoport, Argentina In L. Bethell and I. Roxborough (eds.), *Latin America between the Second World War and the Cold War, 1944-1948* (New York, Oakleigh, 1992) 95.

Perón in 1946. Despite these internal struggles, *Figure 5* demonstrates that the 1940s witnessed a rise of the female enrolment share in secondary education; a rise that continued until 1965, when a female enrolment percentage of 52% was reached.

Although the female enrolment share rose in Argentina as of 1940, it would still take another twenty-five years before equalization was reached in secondary education. Japan already reached an equal enrolment percentage of 50% in 1948. Yet after that, the percentage of women enrolling in secondary education still climbed, reaching an all-time high in 1970 at a female enrolment percentage of 59%. In the years following 1970 the female enrolment percentage dropped eventually ending up at 49% in 1990 and ever since it has maintained about the same percentage. Two feasible reasons can be given for why women were enrolled for 35 years above the 50% limit.

Firstly, the Second World War had cost the lives of many young men, tilting the percentage of secondary enrolments in the advantage of women. Secondly, after the Second World War the American school system was implemented in Japan, making gender equality compulsory in secondary education. This development will be discussed in greater detail in the chapter about Japan, but for now, we can suffice by saying that women gained full access to secondary education. Most probably, not only women in the official age group accessed secondary education, but also outside the age group women were able to make a 'come-back'. Primary education was already widespread for years, so women possessed the necessary education skills to follow through in secondary education, even at a later age.

Argentine secondary school enrolments attained equality in 1964 when the proportion of female students reached 49%.⁶² Compared to Japan, equality in enrolments for both sexes was reached a quarter of a century later. Argentina's tardiness can be explained by a late start of the gender equalization process in secondary education. *Figure 5* demonstrates that Argentina's female enrolment percentage of 1930 was only 18%, when that of Japan was already 30%. Argentina's growth curve was not significantly slower than that of Japan. Argentina simply started out at a lower percentage. In Japan the process of secondary education had evolved more in alignment with primary education, at a very early stage. The causes for Argentina's long period of gender unequal stagnation in

⁶² We only have the data for the 1960 and 1965, 38% and 52% respectively. The average yearly growth percentage between these two dates is 2,8%. Equality was thus reached in 1964 at a percentage of 49%. Own calculations based on UNESCO statistical yearbooks (1964, 1975 and 1984).

secondary education were related to the causes of gender equality in primary education. This paradox will be explained further on in chapter four.

Surprisingly, the average female enrolment percentage stayed above 50% after reaching 52% in 1965. The surprise stems from the discrepancy between the primary and secondary enrolment percentages of girls after 1965. Generally, female enrolment in primary education was about 49% for the entire period after 1950. Where did the 3% surplus of female students come from? The argument is about the same as in Japan. Women had already received primary education for a long time and were now able to follow secondary education. Women outside of the official age group might have realized the necessity of education, and enrolled at a later age.

Even though equality in enrolments was reached in 1948 in Japan, full enrolment was not approximated until 1973 when the GER was 92%.⁶³ But in 1950 the GER was already 70%, a high degree of participation attained in a short time. In stark contrast Argentina's GER for secondary education was a low 21% in 1950.⁶⁴ A GER of 21% meant that secondary education was more than an elite phenomenon alone, but it was no mass education either. When we compare this to the GER of 1940, which was 7%, it does become obvious that something changed in the 1940s that set in motion a new era of mass education. Chapter four will discuss this turn of the tide. Nevertheless, even in 2000 full participation was not reached in Argentina, with a GER of 86%.

Overall Argentina fits much better within the Latin American pattern than Japan fits into the Asian pattern, but even Argentina was ahead until the 1980s in terms of GER. *Table 2* specifies both continental patterns by showing the GER for Argentina and Japan, plus some Latin American and Asian sample countries. We can see that the GER ratio for Mexico and Brazil was extremely low, 4% and 10% respectively in 1950. Argentina started to grow at a faster pace until 1960, after which the GER stagnated for about five years.⁶⁵ After 1960 Mexico and Brazil started to grow again, but both had GER in 1970 that was half of that in Argentina. In terms of participation in secondary education, Latin America has lagged behind for most of the century.

⁶³ Van Leeuwen, *Human Capital and Economic Growth*.

⁶⁴ UNESCO, *Statistical Yearbook* (1964).

⁶⁵ The stagnation in Argentina after 1960 can be explained by the exponential rise in enrolments of private institutions. 1960 was a key year because private education reached legal equality with official schools. M. Naradowski and M. Andrada, 'The Privatization of Education in Argentina', *Journal of Educational Policy* 16 (2001) 589.

Table 2: GER in secondary education in Argentina, Mexico and Brazil and India, Indonesia and Japan, 1950-2000

	Argentina	Mexico	Brazil	India	Indonesia	Japan
1950	21	4	10	17	3	70
1955	28	6	12	21	7	78
1960	32	11	11	29	7	82
1965	29	17	17	32	13	84
1970	44	22	27	25	13	88
1975	54	34	26	26	22	96
1980	57	47	34	31	37	98
2000	86	72	Na.	Na.	59	92

Source: Figures for Latin America, UNESCO *Statistical Yearbook* (1964, 1975, 1985). UNESCO, http://stats.uis.unesco.org/unesco/ReportFolders.aspx?IF_ActivePath=P.50&IF_Language=eng Table 5, enrolment ratios by ISDEC. Figures for Asia, Van Leeuwen, *Human Capital and Economic Growth*.

Japan diverges from the Asian gross enrolment pattern. India and Indonesia also have a particularly low GER compared to Japan, markedly Indonesia. The growth of the Indonesian GER can better be compared to that of Mexico. Respectively, Indonesia and Mexico started with a GER of 3% and 4% in 1950. The growth in GER is broadly similar until 1970 when Indonesia starts lagging behind. India sets off with a GER similar to that of Argentina in 1950, but is not able to raise it after 1965 until 1980.⁶⁶ The high rate of the Japanese GER does not find its match in this table, compared between Latin American and Asian Countries. Japan attained a Western system of education after the Second World War, with accompanying GERs.

In sum, while in primary education Argentina and Japan were comparable in terms of gender equality in enrolments, for secondary education this was not the case. Equality of female enrolment was reached 25 years later in Argentina than in Japan. Not because of a slower growth curve, but simply because the growth curve started to rise much later. In primary education, Japan was ahead in educational participation, but the GER of both countries proved that equality in education was not an elite phenomenon. We cannot come to the same conclusion for secondary education. Although Japan had a high GER, indicating a large participation in secondary education, it stood apart from not only the Asian, but also the Latin American pattern. Argentina lagged behind so much that even in 2000, full educational participation was not reached.

⁶⁶ In 1981 the GER has risen until 36% and in 1989 it had reached its peak at 54%. After that, the GER of India was in decline again. Van Leeuwen, *Human Capital and Economic Growth*.

What explains this discrepancy? The causes resulting in gender equality in primary education have not facilitated the same result in secondary education, at least not in Argentina. Nevertheless, the causes are interlinked. To explain how these factors were interlinked, we must first explain the factors resulting in gender equality in primary enrolment itself. The question at hand is what factors enabled gender equalization of enrolments in primary education and why did secondary education only naturally follow through in Japan, not in Argentina? Why did the female enrolment share only started to rise thirty years after the equalization of primary education?

Chapter three – Explaining equality in primary education

What factors accounted for a gender equal enrolment pattern in primary education in Argentina and Japan in the late nineteenth and beginning of the twentieth century? This chapter will argue that not economic factors were crucial in the development of a gender equal primary education system as illustrated in chapter two, but political factors were decisive. In demonstrating this, the possible relationship between GER and GDP per capita, the role that the parental cost problem and the rise of the secondary and tertiary sector played will be explored. Also, this chapter addresses why and how both governments implemented a mass primary education system that was compulsory and free. Lastly, we will show how cultural factors shaped political decision making. The CM will be used to perform a factor analysis in the form of a Boolean Matrix at the end of this chapter.

3.1 Did the economy contribute to an increase in female enrolments?

The first step towards creating a mass primary education system in any nation must be to attain a certain threshold of national income, above which governments were able to spend money on their national education systems. Both Argentina and Japan implemented a mass education system at the end of the nineteenth century, as illustrated in chapter two. Accordingly, both nations were economically situated above the threshold. Despite this similarity, Argentine affluence greatly surpassed that of Japan as the tenth wealthiest country in the world between ca. 1880 and 1914.

The chronicle of Argentina's economic take-off *and* of the acceleration of the Argentine primary education system starts in the 1880s under the administration of general Rocas. During his period in office political stability was finally attained after decades of unrest, and the economy was able to blossom.⁶⁷ A similar change in political and economic climate can be observed in Japan following the Meiji revolution and the restoration of the

⁶⁷ The term 'acceleration' implicated that mass education had already started before 1880. President Domingo Faustino Sarmiento (1868-1874), Argentina's 'great educator', had built the infrastructure for primary education. In 1871, the Argentine government became responsible for the educational infrastructure and maintenance by order of law 463. The start of general Rocas presidency has been chosen because primary education really takes off when social peace and economical prosperity allowed it to blossom. Proof of this can be found in the legal installment of education in the 1880s. In 1881 the National Council of Education was founded, which administrated national primary education. In 1884 law 1420 passed which stipulated that education was to be non-religious and free of charge. Law 1420 and Sarmiento will be discussed in further detail below.

emperor in 1868.⁶⁸ The emperor's desire was to make Japan a modern industrialized nation after Western model. During his administration heavy industry was created and financial reform provided the tax resources required to investment in these new economic activities.⁶⁹ However, it was not only political stability that boosted both economies.

Argentina's and Japan's economic development both advanced in the context the first globalization wave that washed over the world from about 1850 until 1913. Globalization entailed amongst other things increasingly lowered transaction costs. Specialization in certain products was encouraged because of the natural comparative advantages of different nations. Three important changes lay at the basis of this globalizing movement. The first change was the replacement of mercantilism for liberalism as the leading economic model after Adam Smith's *Wealth of Nations*. New notions of free trade, individual rights and equalities in opportunities spread nations across the globe. Secondly, two industrial revolutions provided the technological backing for globalization. Especially the second revolution, marked by innovations in electrical, chemical, steel and petroleum industries, proved crucial for the third element of globalization: the transport and communication-revolution. The transport and communication-revolution drastically lowered transaction costs, thus facilitating trade on a global scale. Important developments in steam engine technologies were used to propel steamboats and locomotives at the end of the nineteenth century. Later the combustion engine played a major role as cars further increased mobility. Innovations in the field of electricity such as the electric telegraph and the telephone facilitated communications. As of 1868 the typewriter started to play an important part in business communications and played a large role in bringing women into the office work force.⁷⁰ Partly as a result of globalization the standard of living in the Western world increased and in addition so did the demand for luxury products such as beef or silk.

Natural comparative advantage in combination with lowered transaction costs divided the world's countries in specialists of certain products. The European demand for beef and silk could be provided by specialist countries like Argentina and Japan. By the 1880s, Argentina and other Latin American countries transported beef and grain in large

⁶⁸ The Meiji revolution or Meiji restoration of 1868 is named after Emperor Meiji who subsequently ruled from 1868 until 1912.

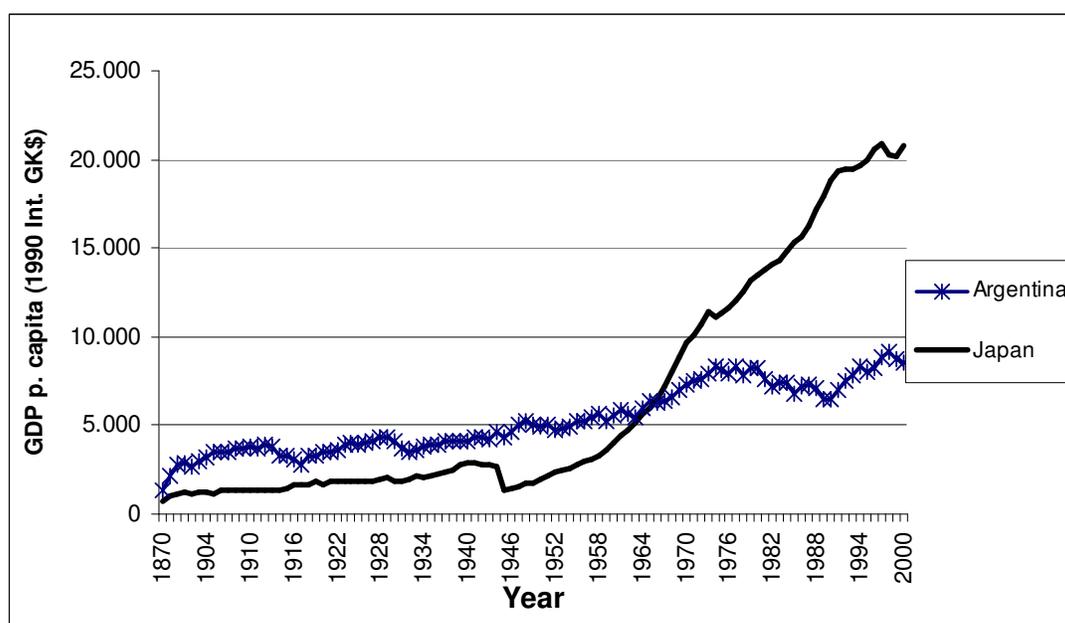
⁶⁹ G. C. Allen, *A Short Economic History of Modern Japan, 1867-1937* (London, 1981) 4.

⁷⁰ R. Cameron and L. Neal, *A Concise Economic History of the World: From Paleolithic Times to the Present* (New York, 2003) 197-205.

quantities to Europe by means of mechanically refrigerated ships.⁷¹ Whereas Argentina became a large exporter of primary products, the Japanese economy embarked upon a path of industrialization. Though starting with the exportation of raw silk, the revenues of this export were invested in the development of the silk industry.⁷²

Figure 6 shows the Gross Domestic Product (GDP) per capita for Argentina and Japan from 1870 until 2000 (Int. GK\$ 1990). In Argentina absolute GDP per capita rose in the period 1870 to 1912 and then again in the period after 1919 until 1931. In 1905 we can see that GDP per capita amounted 3479 dollars in Argentina. At the same time, the GDP per capita was 1157 dollars for Japan, 4642 dollars for the United States, 2894 dollars for France and 4520 dollars for Britain.⁷³ Argentine absolute GDP per capita thus resembled the GDP of other Western nations and Japan's absolute GDP was much lower.

Figure 6: GDP per capita in Argentina and Japan, 1870-2000 (1990 Int. GK\$)



Source: Maddison, *Statistics on World Population* at <http://www.ggdc.net/maddison/>.

⁷¹ L. Bértola and J. G. Williamson, Globalization in Latin America before 1940 In V. Bulmer-Thomas, J. H. Coatsworth and R. Cortés Conde (eds.), *The Cambridge Economic History of Latin America: Volume II: The Long Twentieth Century* (New York, 2006) 16.

⁷² D. Ma, 'Why Japan, Not China, was the First to Develop in East Asia: Lessons from Sericulture, 1850-1937', *Economic Development and Cultural Change*, 52 (2004) 369-394.

The silk industry was not the only industrialization, but was the first and fastest. Note that this change happened *after* the Meiji restoration in 1868, when the government of the new emperor Meiji directed all of society and economy towards modernization.

⁷³ A. Maddison, *Statistics on World Population, GDP and Per Capita GDP, 1-2006 AD* (2009), <http://www.ggdc.net/maddison/>.

The Japanese economy started out on a lower GDP per capita compared to that of Argentina, though as we will show later, it had a very respectable annual average growth of GDP per capita. Until the First World War the Empire of the Rising Sun had troubles financing its modernization plans *and* its expansionist aspirations within Asia. The first Sino-Japanese (1894-1895) and the Russo-Japanese war (1904-1905) were an economic drain on the Japanese economy. Even though the standard of living measured by GDP per capita was lower in Japan compared to Argentina's, next to other Asian nations, Japan did quite well. In 1905 the GDP per capita in Japan was 1157 dollars, much more than the 643 dollars for India and 711 for Indonesia in the same year, or the 545 dollars per capita in China in 1900.⁷⁴

Figure 6 also demonstrates that in the long run, Japanese absolute GDP per capita eventually greatly surpassed Argentine GDP per capita. After the war, Japan's economy boomed and the annual average GDP growth augmented as never before, at least until the first oil crisis in 1973. The economist Paul Samuelson once noted that four economic systems existed in the twentieth century: capitalism, communism, Japan without resources but everything works, and Argentina with resources but nothing works.⁷⁵ The economic mechanisms of both communist and capitalist countries were lucid, but it seemed unclear why post-Second World War, Japan has been so successful and why Argentina did poorly, while the countries factor endowment should lead to opposite outcomes.⁷⁶

Income inequality in Argentina and the external factor of the Second World War for Japan could have had something to do with this. After the war Japan's economy was in shambles; stripped of its empire and industrial capacities had been destroyed. Yet after the outbreak of the Korean War in 1950, the US placed large orders for Japanese goods. The *Japanese economic growth miracle* (1952-1973) took off and by 1970; Japan was the third greatest industrial power in the world.⁷⁷ The GDP per capita was 9.714 dollars in 1970, not bad compared to the GDP per capita of Western countries such as the UK, 10.767 dollars, France, 11.410 dollars and the U.S. with 15.030 dollars. In 1970, the GDP per capita for

⁷⁴ Idem.

⁷⁵ C. M. MacLachlan and D. Brinkley, *Argentina: what went wrong* (Westport, 2006) 185. The explanation of the author is that apparently other factors than economic ones play a significant role. We agree with him as we will show after discussing the economic situation in Argentina.

⁷⁶ This peculiarity shall be addressed in chapter four, when secondary education will be discussed, for which a similar oddity can be observed. Argentina had the resources and the reservoir of primary education to start a mass secondary schooling system, but did not. At the same time, the much poorer Japan did instigate a mass secondary schooling structure.

⁷⁷ Allen, *A Short Economic History* 188, 196-197.

Argentina was 7302 dollars. That might not seem like a much lower GDP than Japan's 9714 dollars, but keep in mind that Argentina was a wealthy country at the turn of the century, ahead in GDP until 1965 and did not enter battle in the Second World War. Economic growth in terms of GDP per capita was simply much lower in post-Second World War Argentina. Even before the war it showed some signs of economic retardation, in particular during the Great Depression and throughout the Peronist postwar period. The recession created by the First World War made the Argentine government switch to inward-looking economic policies and import substitution. Growth rates suffered under these conditions and Argentine economic development lagged.

Table 3 compares the gross enrolment rates of both Argentina and Japan from 1880 until 1950. It demonstrated that Japanese education followed a different path in GER than Argentine education. The Japanese female enrolment percentage lingered in comparison to Argentina's but its GER was much higher. The GER in Argentina noticeably lagged behind for the first fifty years compared to Japanese GER. After 1940 it started gaining on Japanese GER and even surpassed it in 1950, after the war had damaged Japanese educational infrastructure.

Table 3: Comparison of Gross Enrolment Rates in primary education for Argentina and Japan, 1895-1950

	GER Primary education	
	<i>Argentina</i>	<i>Japan</i>
1880	20	42
1895	30 ⁷⁸	59
1915	68	88
1930	76	98
1940	91	102
1950	97	89

Source: Figures for Argentina, E. Frankema, *The historical evolution of inequality in Latin America: a comparative analysis, 1870-2000* (Groningen, 2008). Table A.4.2

Figures for Japan: Van Leeuwen, *Human Capital and Economic Growth*

In 1915, the year when primary education became gender equal in Japan, Japanese GER was already 88%, approximating full participation in elemental education. Argentina's GER accounted for 68% that same year. Accordingly, though female enrolment was equalized earlier in Argentina, more absolute numbers of girls were going to school in

⁷⁸ Data on GER is unavailable available for Argentina for 1895 and 1915, so these numbers are the exact middle interpnctions between the years 1895 and 1910 and between 1910 and 1920.

Japan. Only when the Argentine primary GER approximated full participation in 1940 at a percentage of 91%, can we claim that gender equalization was complete.

The explanation for this divergence might be found in the educational infrastructure. Before the government became actively involved in the educational system of Argentina, schooling did not have a widespread foundation to lean on.⁷⁹ Japan however inherited a very wide spread and developed tradition of formal institutional education.⁸⁰ At the end of the Tokugawa period, half of the male and nearly 15% of the female population had received or were receiving some kind of organized education.

If we cross-examine the average annual growth rates of GDP per capita with the periods of rapid educational expansion measured by the annual growth percentage of GER, we find a weak relation between the two. *Table 4* compares the average annual growth rates of GDP per capita and average annual rise of GER in primary education for Argentina and Japan in the period between 1880 and 1950. In Argentine the periods between 1895 and 1915 and between 1915 and 1930 show that the expansion of education might have had a relation with economic growth; when economic growth was high, educational expansion was relatively high as well and GER expansion declines when economic growth decreases. Yet the period of fastest growth, between 1880 and 1895, the GER was not extremely high and in the period between 1930 and 1945 the annual average GER growth increased when economic growth remains low. Accordingly, if education can exponentially expand even when economic growth declines, we cannot speak of a relationship between a rise in GDP per capita and an expansion of education.

⁷⁹ Between 1500-1810, when Argentina was a Spanish colony, three kinds of schools existed: state schools established by a town council, religious (Roman Catholic) schools and private schools. After independence in 1810, education in the provinces depended on the strength of the governor. Some towns could not afford building state schools, therefore schools disappeared entirely in some provinces.

A. P. Dupre, 'Transforming Education: The Lesson from Argentina', *Vanderbilt Journal of Transnational Law*, 34 (2001) 11.

⁸⁰ In the 15th century Buddhist temples founded schools called Terakoya that taught samurai and merchants to read and write. In the second half of the eighteenth century a rapid process in the establishment of educational facilities took place. Clan schools were set up to fulfill the bureaucratic needs of the Tokugawa Empire and at the same schools martial arts were taught because peace corroded the warrior spirit. Terakoya teaching was expanded to lay children as well in buildings separate from the temples after the eighteenth century. At the beginning of the Meiji period, about 15.000 of these schools existed. There were some schools for girls and at a few schools etiquette was taught by the wife of the teacher. K. Shuichi and N. Toshio, *Understanding Japan: Japanese education* (1995) 21-22.

Table 4: Comparison of average annual growth rates of GDP per capita and average GER in primary education for Argentina and Japan, 1895-1950

	Argentina		Japan	
	GDP annual growth average (%)	GER annual growth average (%)	GDP annual growth average (%)	GER annual growth average (%)
1880-1895	3,7 ⁸¹	0.7	1.8	1.1
1895-1915	1.4 ⁸²	1.9	1.4	1.5
1915-1930	0.7	0.5	1.9	0.7
1930-1945	0.5	1.0	-0.7	0.4

Source: Figures for GDP per capita: own calculations on the basis of Maddison, *Statistics on World Population*, at <http://www.ggd.net/maddison/>

Figures for GER: Argentina: own calculation on the basis of: *Annuaire international de statistique* (La Haye 1920). UNESCO, *World survey of education, Part II, Primary education* (Paris, 1958), UNESCO *Statistical yearbook 1964*. Figures for Japan: own calculations of Van Leeuwen, *Human Capital and Economic Growth*

The figures for Japan do not provide much evidence to prove a clear relationship, though at first it seems it does indicate a possible relation between economic growth and educational expansion. The periods of 1880 until 1895 and 1895 until 1915 both had high GDP growth rates and on average a high annual augmentation of GER. However, the GER increases as economic growth declines, thus invalidating the hypothesis of a direct relation between educational expansion and economic growth. The pattern becomes blurred after 1915 because Japan already attained a GER of 88% that year. The last 20% of children, children in remote areas or with parents unwilling to consent to their children's education, were hardest to incorporate in the new mass education system. Hence, it is no surprise that the educational expansion after 1915 progressed less vigorous.

After trying to establish a relation between GDP and GER we would have preferred to provide a table with government expenditures on education in Argentina and Japan to determine to what extent governmental expenditure might have related to the extension of the GER. We were not able to do so due to a lack of systematic data but we can mention something about Argentine expenditures on education. Resources for primary education stemmed in large part from taxes imposed on foreign commerce, which volume rose significantly from the 1870s until the thirties. The Argentine National Council of Education engrossed 5% of the national budget in 1904 and 13% in 1934.⁸³ Yet this last 'national' council was only created as a governing body for Buenos Aires and the national

⁸¹ This figure actually represents the period 1870-1900, due to a lack of data.

⁸² Because of a gap in data to calculate the growth rates between 1895 and 1915, this growth rate average is taken for the period between 1900 and 1915.

⁸³ C. Newland, 'The Estado Docente and Its Expansion: Spanish American Elementary Education', *Journal of Latin American Studies*, 26 (1994) 456.

territories. Educational policy outside federal districts continued to be made and paid by the provinces, though they did receive a restricted amount of financial support for their elementary schooling system. After 1904, the Lainez Law centralized jurisdiction over educational matters by allowing the national government to establish elementary schools anywhere in the country, in order to boost educational facilities and quality.⁸⁴

In sum, at macro level economic affluence was needed to establish a mass primary education system and both nations possessed this basic threshold of wealth. Gender equality in Argentina was incorporated at the very beginning of mass education and uninfluenced by economic growth or decline. Yet, Argentina was much wealthier than Japan and even so the expansion of mass education was slower to develop in comparison to the Japanese. This could have two implications. Education might not have been provided by the government or education was unaffordable for parents.

Solving the parental cost problem

The government did provide a mass schooling system in both nations, but neither had reached full participation in education when schooling had become gender equal in 1915, though Japan was approximating it. As mentioned in the introduction, primary education in Argentina and Japan was compulsory after 1884 and 1885 respectively, though Japanese education became compulsory for girls only in 1908. If girls *had* to go to school, who paid for their schooling? The parental cost problem was a problem both nations faced, though in different ways. Argentina's GDP per capita was one of the highest in the world, but income inequality complicated the progression towards an egalitarian general schooling system; not all parents were able to afford schooling. Although society was formally organized in strict social classes with general inequality as a result, schooling could spread more evenly among the population in Japan because income equality was less of a problem.⁸⁵ Why the government invested in education will be discussed in part 3.2 on governmental incentives for education girls. Here actual policies and their implications for parents will be discussed.

The Argentine cost problem was partially solved by the government because compulsory education was free of charge right away in 1884, meaning no enrolment fees

⁸⁴ Mariscal and Sokoloff, 'Schooling, Suffrage, and the Persistence of Inequality in the Americas, 1800-1945' In S. Haber (ed.), *Political Institutions and Economic Growth in Latin America: Essays in Policy, History, and Political Economy* (2000) 178.

⁸⁵ The classes were the samurai, the chōnin (townspeople) and the nōmin (peasants).

and no charge for textbooks. As mentioned, resources for these measures stemmed from taxes on foreign commerce which rose after 1870 and Argentina thus certainly had the resources to invest in free education. To make compulsory schooling effective, several other measures were implemented over the next fifty years. Firstly, the state tried to provide an adequate number of schools within the reach of children's homes, thus trying to solve the geographical cost problem for parents. Secondly, the government implemented fines on an ascending scale for parents, guardians or others who failed to comply with the law. Reprimands were given after more than two days of absence. The only acceptable excuse for long term absence was that the pupil's home was too far removed from the nearest school, which as we have seen, was a government responsibility.⁸⁶

Nevertheless, in the period of 1890 until 1914, Argentine students faced economic difficulties. The "free education" did carry some expenses, such as the *one peso registration fee*, which could be a harsh burden on the lower income families. This fee had to be paid in March when the school opened, at a time when the families were already strapped for money because it was just before harvest season. The fee cost a family of 5.5 persons almost 4% of their monthly income. Opportunity costs also played an important role; children sent to school did not immediately contribute to the income of the family.⁸⁷

Geographical conditions also proved difficult even with the governments measures. In the Andes Mountains and other less densely populated areas children had to travel long distances to get to school and additionally many families migrated annually to the valley for their livestock and the children attended school on a part-time basis.⁸⁸

The above problems were more than exceptions, since full enrolment was not approximated until 1940s, but the government's measures did seem to have a large effect on the GERs. Argentine GER grew exponentially between 1880 and 1915 as demonstrated in *Table 3*. Solving of the cost problem did not affect the female enrolment share directly because those had been equal from the very start of our measurement. Nevertheless, because solving the parental cost problem was able to boost the GER, it raised the absolute number of girls going to school by implication. In sum, the underlying causes of gender equality in primary education must be found elsewhere, not in the parental cost problem,

⁸⁶ UNESCO, *World survey of education, Part II, Primary education* (Paris, 1958) 77-79.

The UNESCO world survey of education found these measures effective at the time of writing in 1958.

⁸⁷ H.A. Spalding Jr., 'Education in Argentina, 1890-1914: The Limits of Oligarchical Reform', *Journal of Interdisciplinary History*, 3 (1972) 54.

⁸⁸ *Idem*, 54-55.

but solving the parental cost problem had a positive effect on the general equalization of education.

The Japanese government also issued regulations that partially solved the cost problem for parents, but only after public protest and almost two decades after primary education became compulsory for boys. The 1885 *Elementary School Ordinance* provided compulsory primary education for boys and stipulated tuition fees at elementary educational level, which were an unpopular measure with the populace. Dissatisfaction and subsequent burnt schools were the result.⁸⁹ In 1900 the government decided to cancel out the tuition fee for primary schools.⁹⁰ The discontinuation of the tuition fee might have speeded up this process, but that seems unlikely because absolute female enrolment started rising before 1900 and did not substantially rise after 1900, as we can see in *Figure 2* in chapter two.

School lunches and other costs were still a burden carried by the parents and placed a strain on lower income families. After the Second World War, school lunches, regular activities and excursions were subsidized by the government for low-income families, so apparently it had been a problem before. Even with the cost problem only partially solved, the educational system worked well enough to provide elementary schooling for the majority of the school aged population; 88% of the school aged children were receiving education. Solving the cost problem for parents was not insignificant, but it did not inhibit a rise of the female enrolment share, which already rose before the tuition fee was abolished. Surprisingly, the compulsory nature of education was not needed to accomplish an approximately high female enrolment share.

The changing economy as an accelerator of primary education

The requirements of a changing economy might have also affected female enrolments and can be measured by the rise of the service sector and by the level of industrialization. Both became employers for newly schooled women and their presence affected female enrolments. Argentine industrialization can be ruled out quite easily as a determining factor in this period because Argentina barely industrialized until the 1930s, when it

⁸⁹ Shuichi and Toshio, *Understanding Japan* 26.

⁹⁰ UNESCO, *World survey of education, Part II* 628.

implemented a system of import substitution.⁹¹ Equalization of enrolments was already reached forty years prior to Argentina's industrialization process.

The start of the gender equalization process in education coincided with the expansion of the progression of industrialization in Japan. Japan was very much directed towards modernization, as exemplified by modern western nations such as the United States. Emperor Meiji and his government wanted to mold Japan into a modern industrialized nation as soon as possible. Right from the start education was seen as a tool to accomplish the desired modernization and industrialization.⁹² In the long run (1868-1945), investment in education was highly productive. Japanese assimilated new technologies, techniques and ways of scientific thinking with ease because its population was literate and technically well-trained. The new leaders mixed Western examples of education and industrialization with the traditional system of education and family values.⁹³

Women comprised a large part of the industrial labor force as temporary workers. During the beginning of the Meiji era, the entire women's working force was employed in agriculture. A generation later, women were incorporated in the textile industry as temporary workers.⁹⁴ In 1930 over half of the workers in factories with five or more employees were women and women comprised even 80% of the work force in cotton textiles industry.⁹⁵ Women were cheap labor; they earned less than men and were only temporarily employed because their main task lay within the family.

The problem of industrialization as a factor in the Japanese increase of female primary enrolments is that it is unclear why women needed education as temporal workers in the factories. Basic literacy had its obvious advantages. Yet women would not grow into higher positions in the factory as their status was transient. Was their labor that complex? No; women performed repetitive tasks, day in, day out, until they had kids and other women took their place. Their temporary and inferior positions within industry indicate that employment was an economic necessity, not a life-long commitment to the factory

⁹¹ J. C. Brown, *A Brief History of Argentina* (New York, 2003) 146.

⁹² Shuichi and Toshio, *Understanding Japan* 23.

Y. Godo and Y. Hayami, 'Catching Up in Education in the Economic Catch-up of Japan with the United States, 1890-1990', *Economic Development and Cultural Change*, 50 (2002) 3.

⁹³ Allen, *A Short Economic History* 3-4.

⁹⁴ R. J. Smith, 'Making Village Women into "Good Wives and Wise Mothers" in Prewar Japan', *Journal of family history: studies in family, kinship and demography*, 8 (1983), 71.

⁹⁵ W. J. Macpherson, *The economic development of Japan: 1868-1941* (Cambridge, 1987) 5.

like male employment was. In Japan compulsory education actually lowered the participation rate of potential workers.⁹⁶

According to Brian McVeighn “For many, post-primary education was unnecessary for women, since for most part they were not expected to take part in economic activities outside the home in the drive for modernization.”⁹⁷ This view offers a sneak-peek into why secondary education was not as gender equal as primary education. At the same time, it presents us with a problem. If modernization was not the essential drive towards educational equalization and women were not meant to take part in the economical activities, why then did they receive primary education in Japan? Apparently, other factors were more important.

Japan’s development was nothing like that of Argentina, where primary products were the main export product and therefore agriculture retained a more important position. Searching employment in industrialization was not an option for most Argentine women. The service sector offers quite another story. The globalization process after 1870 and especially its new communication technology enhanced the employment possibilities for women. The link between female education and employment in these new sectors was already underscored at a very early stage, especially by a small number of upper-class women. At an Argentine educational congress in 1882, one woman urged new working opportunities for women, and stressed that, as in “the highly advanced nations (...) positions in the administration of the postal services, telegraphs and railroads should be reserved for them.”⁹⁸

According to the 1895 and 1914 censuses, the majority of the economically active general population worked in commerce and services of which 10% in domestic service alone.⁹⁹ Some service sectors attracted more women than others, especially the growing teaching occupation, which became a recognized profession for women especially at primary schools. In 1890, 45% of enrollments in teacher training schools were women, in 1895 the number rose to 58% and to 85% in 1930.¹⁰⁰ Girls’ schools required women teachers, but boys’ schools had a mixed-gender staff.¹⁰¹ The service sector thus created new professional opportunities for women even though cultural changes at the same time

⁹⁶ Idem, 56-57.

⁹⁷ B. J. McVeighn, *Nationalisms of Japan: Managing and Mystifying Identity* (Boulder, 2002) 225.

⁹⁸ Rock, *State building and political movements in Argentina* 116.

⁹⁹ J. R. Scobie, *Argentina: A City and a Nation* (New York, 1964) 169.

¹⁰⁰ S. Gvirtz and J. Beech, *Going to School in Argentina* (Westport, 2008) 13.

¹⁰¹ MacLachlan and Brinkley, *Argentina: what went wrong* 20.

restricted them to certain jobs. This will become clear when we will discuss the importance of motherhood below.

Though Argentina did not rapidly industrialize until the 1930s, rates of urbanization were high. The ratio of urban population rose sharply between 1850 and 1914. In 1869, 25% of the population lived in cities of over two thousand inhabitants. In 1895 it raised to 37% and in 1914 to 53%.¹⁰² This increase happened simultaneously with the gender equalization of primary school enrolments and a rapid increase of the GER. Urbanization had an enhancing force on the rise of female enrolments and female employment. Urbanized areas provided the strongest incentives for the female workforce, because they encompassed the nerve centers of bureaucracy and commercial businesses, not to mention schools themselves. Urbanization could also possibly have influenced the equality of education, by showing examples of what advantages in job perspectives education can provide, even for women. A rise in urbanization might lead to a rise in female enrolments because of a higher density of jobs and schools in urbanized areas. Japanese urbanization increased as well and the population of nearly all major cities augmented after industrialization took off after 1886.¹⁰³

With the collected material so far, we can make a preliminary Boolean Matrix to aid the analysis of the different economic factors. *Boolean Matrix 1* illustrates the economic factor analysis of primary education. Mill's method of agreement can be clearly distinguished, because our Boolean matrix proceeds by elimination. Factors are eliminated as causes when they do not lead to gender equality in education. If a factor is present in either Argentina or Japan it will be scored with a 1, when absent it shall receive a 0. Furthermore, a third column is added to mark the factor with a level of significance. At 0, the factor is insignificant, 1 means the factor is moderately significant and a 2 indicate the factor is indeed significant. This index of significance is based on the analysis of the factors as was performed above.

¹⁰² Scobie, *Argentina* 276, Table 2.

¹⁰³ K. Fujita and R. Child Hill, *Japanese cities in the world economy* (Philadelphia, 1993) 31, 33.

Boolean Matrix 1: Economic factor analysis female primary enrolment

	Argentina	Japan	Significance (0/1/2)
Outcome: Gender equality in primary school enrolments	1	1	
Threshold in GDP per capita	1	1	2
Relation GER and GDP	0	0	0
Solving the parental cost problem	1	1	1
Industrialization	0	1	0
Service sector	1	0	1

As *Boolean Matrix 1* demonstrates, a certain threshold of national income, measured in GDP per capita, was present in both Argentina and Japan. The factor was significant because it was a prerequisite for government and parental spending on education in general. Only a weak relation between the expansion of education and GDP per capita growth was found and we would need more measurements to prove a strong relation. But because we are unconvinced that this factor was crucial we scored it as was an insignificant factor.

Both governments tried to solve the cost problem of the parents by paying the tuition fee for both girls and boys in primary schooling. Even before this decision, primary education was already gender equalized. Therefore, solving the cost problem seems to be insignificant at first sight. It did play an important role in increasing the GER, especially in Argentina. Therefore the factor was scored as moderately significant, because raising GER resulted in more girls going to school in absolute numbers. Still, it was not the factor that caused gender equality in the first place.

The rise of the Argentine service sector had an effect on female primary enrolment. Urbanization strengthened the effect that the rise of the service sector had on the enrolments of girls. In Japan, the teacher training was smaller than Argentina's and the service sector did not yet play a large role in the expansion of the female enrolment share. The Argentine importance of this factor makes the service sector moderately significant. The emphasis on industrialization reduced the need of women to have more education than primary schooling. Industrialization was present in Japan, but it was not a significant factor because it did not require women to have received an education.

Only one look at the Boolean Matrix confirms our suspicion that changes within the economy were not the main causes of female enrolment equality in primary education. Only the comparative threshold of GDP per capita in both nations can be marked as a significant factor. Solving the parental cost problem was important, but it was not what

instigated gender equality in primary education in the first place. What other factors can explain this gender equality? The answer can be sought in the important role the government played in the creation of mass primary education and its underlying ideology to do so and the popular views toward education for girls.

3.2 Government incentives for educating girls

The Argentine and Japanese government build a mass primary education system and provided the parents additional aid in sending their children to school, including the daughters. Why did both states invest such large quantities of government's budget on education for girls? What did they expect to get in return? One possible explanation involves the economic returns as discussed above. Women could find employment in especially the service sector resulting in an increase in returns to education and a positive contribution to the economy as a whole. Yet these economic reasons were of a secondary nature. The underlying reasons for the Argentine and Japanese government to install gender equal mass primary education in the period after 1880 can be summarized by the term *civilizing education*.

Civilizing education provided a means for the Argentine government to enlighten its subjects and to mold the country into a national and cultural unity, thus creating loyal Argentines. The desire was actually translated into the constitution in 1853. Article 67, paragraph 16 states that the goals of the government were to “..promote the prosperity of the country, the progress and well-being of all provinces and the advancement of enlightenment by formulating plans for general an universal education.”¹⁰⁴ Civilizing or *patriotic education* was a reaction to several problems within Argentine society and at the same time part of an intellectual movement with long political roots.

The incentive for civilizing education was triggered by the large immigration flow into the country, in particular between 1880 and 1890 and 1905 and 1915.¹⁰⁵ The newcomers contributed to a rapid increase in population but also to problems of integration.¹⁰⁶ The two largest immigrant groups in Argentina were the Italians and the

¹⁰⁴ UNESCO, *World survey, Primary education* 78.

Mitchell, *International historical statistics: the Americas*.

¹⁰⁵ S. Galiani and P. Gerchunoff, 'The labor market' In G. D. Paolera and A. M. Taylor (eds.), *A New Economic History of Argentina* (New York, 2003) 128, Table 5.2

¹⁰⁶ Spalding Jr., 'Education in Argentina' 32.

Jews, immigrating in large numbers after 1880.¹⁰⁷ Other groups included Asians, Irish and the Spanish. Immigrants were not seen as troubling from the very beginning. On the contrary, the Argentine elite at first welcomed the European newcomers, hoping they could inhabit the vastly under-populated parts of the country. A second reason for their welcome was that the liberal part of the government saw immigrants as another way to improve and ‘civilize’ the population.¹⁰⁸

Yet immigration was accompanied by a variety of unexpected problems. The lack of integration was one of them. Especially the Jewish, Irish and Italian immigrants formed their own communities and retained their own language and culture. The lower social standing of the majority of immigrants was another problem. Generally coming from the lower ranks of society within their own nations, these immigrants were not the hotbed of civilization envisioned by the governmental elite. Additionally, some Argentine eyes viewed the Irish, Italian and Jewish immigrants as coming from backward societies and the retaining of their own culture was therefore unwanted.¹⁰⁹ Argentina was and is a country always in search of its own identity, in large part because of its immigrant legacy. “It is said that an Argentine is a Spaniard who speaks like an Italian, dresses like a Frenchman, and thinks he is British.”¹¹⁰ Education could give direction to the Argentine identity.

The universal primary education system created at the end of the nineteenth century formed a solution to the assortment of integration and class problems. First-generation immigrants might not be easily integrated; the second-generation would have received Argentine *patriotic education*, hence turned into dedicated Argentines.¹¹¹ The goals of civilizing and molding the population into an Argentine cultural unity would only have a limited effect if girls were not included in primary education next to boys. The girls were the future mothers, schooling their children to read, write and speak in their own language. Teaching these girls Spanish and Argentine culture would therefore affect future

¹⁰⁷ D. W. Foster, M. F. Lockhart and D. B. Lockhart, *Culture and customs of Argentina* (Westport, Connecticut, 1998) 5-7.

¹⁰⁸ Immigration itself was assigned a civilizing influence by the Argentine elite, because European ‘blood’ entered Argentina through immigration. European origins were considered to be superior over all other in the nineteenth century and according to Darwinist thought, it was no coincidence that the populace on the Argentine social fringes was mostly of non- or partial-European origin. Therefore the immigration policy was specifically directed towards the sparse indigenous population, the mestizos (half European, half-indigenous), the blacks and the marginal Creoles, hoping to civilize these peripheral groups. Like education, immigration was a way to civilize and mold the population into a cultural unity. Idem, 7, 18.

¹⁰⁹ Newland, ‘The Estado Docente’ 455.

¹¹⁰ Foster, Lockhart and Lockhart, *Culture and customs* 40.

¹¹¹ J. H. DeLaney, ‘Imagining “El Ser Argentino”’: Cultural Nationalism and Romantic Concepts of Nationhood in Early Twentieth-Century Argentina’, *Journal of Latin American studies*, 34 (2002) 639.

families. If anything, young women were the main objective of the mass civilization and education wave.

Japanese motives for including women in compulsory education were remarkably similar to Argentina's. Civilizing, or patriotic, education presented the key to a modernized nation without the loss of the all traditional cultural values and a way to mold the country into a social and cultural unity. The inclusion of women proved necessary, otherwise no structural change was possible and differences in class would still be latently present in society, especially by means of marriage. Yet the inclusion of women was surprising because Meiji leaders inherited a social and intellectual tradition from the Tokugawa period that tended to see women as inferior to men, therefore encompassing them a lower rank in society.¹¹²

Emperor Meiji and his government had multiple significant reasons for including girls in Japan's primary education system. Above all, there was a drive towards modernizing the nation. According to the Japanese rulers the class system needed to be torn down to accomplish the modernization goals.¹¹³ Peasants freed from their feudal constraints would be able to improve their yields and could count on governmental support.¹¹⁴ The elimination of feudal restrictions would also mean commoners could work in the new industrial projects as promoted by the government. The abolishment of the class system to some extent resembled the Argentine pattern, where a large group of immigrants needed to be integrated into the culture. Not an outside culture needed to be integrated in Japan, but different classes of society and by means of a general education system this goal could be attained.

According to Emperor Meiji "...the principal purpose of education was to develop respectful and loyal citizens..."¹¹⁵ a belief he shared with the Argentine ruling elite. Emperor Meiji had good reason to instruct his people with patriotism and loyalty. The opening to the West had created certain predicaments within Japanese society. The import of Western techniques, education, and people in period directly after the Meiji Restoration of 1868 until the 1880s resulted in an unintentional import of Western culture.

¹¹² P. Cave, *Primary School in Japan: Self, Individuality and Learning in Elementary Education* (Abingdon, New York, 2007) 152.

¹¹³ *Library of Congress Country Studies - Japan*, at [http://lcweb2.loc.gov/cgi-bin/query/r?frd/cstdy:@field\(DOCID+jp0035\)](http://lcweb2.loc.gov/cgi-bin/query/r?frd/cstdy:@field(DOCID+jp0035))

¹¹⁴ The Meiji government introduced new crops, better methods of cultivation and agricultural schools and colleges.

¹¹⁵ T. Brameld, *Japan: culture, education, and change in two communities* (New, York, 1968) 231.

Imperial doubts on westernization already started to rise in the same time span, especially when the emperor's subjects started to demand things as religious freedom in the 1870s as a direct result of Western cultural influence. Although nationalism was technically a Western import product, it became clear that Japanese nationalism and Westernization were antagonists.¹¹⁶ Japanese nationalism stressed that the state was an end to which the individuals were the means. The influences of Western culture emphasized the state was the means, and the individual the end. Already in 1878 had the emperor pinpointed the heart of the problem, westernization “lamented the general decay of public morals, for which he blamed the influx of western learning”.¹¹⁷

The emperor and his closest advisors decided that modernization had gone too fast and too far. Moral education should re-establish public moral among his subjects. The 1890 *Imperial Rescript on Education* emphasized the essence of moral education. The Imperial Rescript was neo-Confucian in morality, affirmed the divine origin of the emperor and emphasized that the sentiments of loyalty and patriotism should be cultivated by means of education.¹¹⁸

After the death of Emperor Meiji in 1912 and the liberal intermezzo of emperor Taishō, after 1926 nationalism and militarism took prevalence over imperial worship as a goal in education, though moral education maintained its importance next to it. During the 1920s and 1930s education increased its nationalistic content, as Japanese leaders became resentful of the West after World War One and Western influence on Japan.¹¹⁹ To instruct the people with these ideas of obedience and nationalism, not only men should be educated. What better way to instruct these values then trough educating the future mothers? This also explains why secondary education for women was less fast to develop. Patriotism was something that could be instilled at primary education.

To what extent were these political goals and incentives to include women in education determined by cultural factors? To investigate this question, the background of Japanese moral education will be analyzed in-depth and subsequently the same will be done for Argentine civilizing education.

¹¹⁶ M. Fumio and U. Yoshimichi, 'Part Two: Buddhism' In K. Hideo and J. F. Howes (eds.), *Japanese Religion in the Meiji Era* (Tokyo, 1956) 145, 153.

¹¹⁷ T. Misco, 'Understanding Japan through the Lens of Moral Education', *The Social Studies*, 95 (2004) 63.

¹¹⁸ A failed experiment to reach the goals of instilling patriotism and good morals of Emperor Meiji before moral education was the attempt to install an official state religion, State Shinto. More on this subject will be discussed in the section on cultural factors.

¹¹⁹ P. Stearns, *Schools and Students in Industrial Society* (Boston; New York, 1998) 133.

3.3 Background of Japanese moral education

Moral education and the position it assigned to the women in society was firmly rooted in Japanese Neo-Confucianism. Neo-Confucianism became the official philosophy during the Tokugawa period and made the family the basis of Japanese elite society.¹²⁰ Confucianism provided a hierarchical social system, in which each person should act according to their status to create a harmoniously functioning society and ensure loyalty to the state. In addition, Japanese Neo-Confucianism entailed the idea that family stability and social responsibility were human obligations, ideals that were later reflected in moral education.¹²¹ At the time of the Meiji revolution, Neo-Confucianism was securely fermented among the elite, affecting politics and education.¹²²

Confucianism in general held a low opinion of women and limited her to housework and family services.¹²³ Because of the paternal aspects of Confucianism, the idea of a public male sphere and private female sphere became widespread, resulting in a restriction of the female sphere.¹²⁴ Divorce as well as marriage would become increasingly difficult for noble women and their main function was to be a good and obedient wife and produce children.

Traditional values had not always been gender unequal. In the twelfth century, women could inherit property and manage it themselves. Even in Tokugawa Japan, peasant women continued to have freedom of movement and decision power. At the beginning of the Meiji era, lower-class women were by Confucianism because it was the ideology of the ruling elite. Rural communities, composing nearly 84% of the population in 1883¹²⁵, put less emphasis on male absolute authority and more on cooperation of family members within a common enterprise. Because all family members were an economical asset to the family, women had more influence within the family. A family of commoners was therefore more likely to be gender equal than an upper-class family to which women ‘only’ contributed children.

¹²⁰ Not to be confused with the official state religion, which was Buddhism. Religion and philosophy co-existed in Japanese history, but do influence each other. Neo-Confucianism was a Japanese evolved form of Confucianism, influenced by Buddhism and Daoism.

¹²¹ U. S. Library of Congress, ‘Japan: A Country Study’ In R. E. Dolan and R. L. Worden (eds.), *GPO for the Library of Congress* (Washington, 1994), <http://countrystudies.us/japan/62.htm>.

¹²² Yao, *An introduction to Confucianism* 126-127.

¹²³ Idem 183.

¹²⁴ R. Davies and O. Ikeno, *The Japanese Mind: Understanding Contemporary Japanese Culture* (Boston, 2002) 62.

¹²⁵ Allen, *A Short Economic History* 64.

However, during the Meiji period when social classes had to be integrated, all women had to acknowledge the restrictions that elite Confucianism implied because “The customs of farmers are not to be made general customs - instead we must go by the practice of samurai and noblemen.”¹²⁶ All women were denied legal rights and subjected to the will of the heads of households.¹²⁷ Even though women became legally constrained, at the same time girls’ education spread because of two reasons. State Shinto failed its attempt to replace other existent religions and moral education would take its place. Also, thoughts about women and their function within the state and family changed under influence of a mix of Confucian and Western thought.

After the Meiji Restoration, the government chose Shinto as the new state religion to replace Tokugawa favored Buddhism, because Buddhism symbolized all evils of the Tokugawa period. Shinto was a mix of several polytheistic folk religions and State Shinto was mostly an ethical cult, based on ancestral worship to which the Meiji government added emperor worship. The three official doctrines of State Shinto were; to embody respect for the gods and love for Japan, to preach heavenly reason and the way of humanity and to revere the emperor and obey the authorities.¹²⁸ The hierarchical nature of Confucianism was reflected in these official doctrines. Religion could serve as a powerful way to instill Confucian values on Meiji subjects; everyone would be part of the State religion, all layers of society and importantly, both genders.

State Shinto failed its effort to become Japan’s main religion. Buddhism retained too much of its traditional strength and Christianity became increasingly popular as it accompanied the import of Western culture and techniques. Every attempt to suppress either Buddhism or Christianity led to Buddhist revolt or protest from the West. Eventually, the government gave in to the pressures, issuing freedom of religion in the 1889 constitution. Shinto was still state-sponsored, but its already small influence rapidly declined. By then the Meiji government did not need State Shinto anymore. The government had found a better or in any case more modern way to imprint its subjects with the love of the emperor and fatherland.

¹²⁶ Smith, 'Making Village Women' 73.

¹²⁷ *Library of Congress Country Studies -Japan*, at [http://lcweb2.loc.gov/cgi-bin/query/r?frd/cstdy:@field\(DOCID+jp0091\)](http://lcweb2.loc.gov/cgi-bin/query/r?frd/cstdy:@field(DOCID+jp0091))

¹²⁸ K. Hideo and W. Tsuneya, 'Introduction: Religion during Tokugawa' In K. Hideo and J. F. Howes (eds.), *Japanese Religion in the Meiji Era* (Tokyo, 1956) 3-4.

H. Ichirō and T. Yoshio, 'Part One: Shinto' In K. Hideo and J. F. Howes (eds.), *Japanese Religion in the Meiji Era* (Tokyo, 1956) 37.

Education was the new way to go. Compulsory primary education could also instill patriotism and loyalty towards the emperor and could serve the modernization goals at the same time. Moral education included women in Meiji Japan because the perspective of women had changed under influence of a combination of Confucian and Western thought. The Neo-Confucian emphasis on the family integrated with the modern Western thought of motherhood as the basis of a nationalist state.¹²⁹ Social expectations for women changed from just ‘good wives’ in the Tokugawa period to ‘good wives and wise mothers’ (*ryōsaikenbo*) in the Meiji period, as a result of the reformed education system, which made women responsible for the education of their children.¹³⁰ A *ryōsaikenbo* needed two things, obedience and education, the first one to be accomplished by means of the second. Once again primary education was used as a tool, to instruct women in motherhood and thus affect the ‘production’ of good sons.

The lower classes were not taken aback when compulsory education turned out to encompass boys as well as girls, even in the same classroom, but most common people did not welcome the new alien Confucian and Western education. Also, because education was not free at the beginning of the Meiji era, parents were burdened with the educational cost, on top of the 1873 land tax and the new taxes on product such as sake and tobacco. The discontent over the new school system was demonstrated in the 1870s by burning down school buildings.¹³¹ The persistence of the government in the compulsory nature of the education system and the lifting of tuition fees in 1900 both resulted in a rise of GERs nonetheless. Culturally, the new moral education did have the anticipated effect of consolidating the family as the cornerstone of Japanese society; young girls were making a much bigger deal out of marriage and virginity until marriage while at the same time, the divorce rate descended.¹³²

The moral education system implemented these in essence alien ideas about women in society, resulting in a paradox. Girls received an education in large numbers, irrespective of social standing or income level; a clear improvement of the period before. However, this education intended to affirm or make clear that the female position in society was restricted to housework, not the pursuit of a career. Their position was indoors, taking care of the children, obeying the male patriarch within the household and within the state, the husband and emperor respectively.

¹²⁹ Cave, *Primary School in Japan* 152.

¹³⁰ Davies and Ikeno, *The Japanese Mind* 179.

¹³¹ Shuichi and Toshio, *Understanding Japan* (1995) 26.

¹³² Smith, ‘Making Village Women’ 78-83.

3.4 Background of Argentine civilizing education

Civilizing education in Argentina was not only formed as a reaction against immigration. It was also the result of an intellectual movement with extensive historic roots. The ideology behind civilizing education was the Latin American wide phenomenon of *positivism*. The French philosopher Auguste Comte (1798-1857) created the philosophy of positivism as an explanation of the development of human societies.¹³³ Positivism was an ideological continuation of the Enlightenment, emphasizing the necessity of an integrated reorganization of society based on education. The expected benefits of this reform were a greater political cohesiveness, economic growth, a general modernization of society and importantly, the elimination of religious values. The state played a central role. It created a mass education system, controlled and centralized by reformist elites.¹³⁴

Not all positivist thought lead to the creation of mass education. Positivism could even turn malicious when added to Social Darwinism. According to Peter John Bakewell “Positivism and Darwinism thus instructed (...) that possession of riches was part of the natural order of things, an outcome of their inherent superiority, and that conscious attempts to improve the conditions of the poor were doomed to failure because they contradicted natural laws.”¹³⁵ Such a purist interpretation of Positivism could be found in Brazil, Chile and Mexico. In Argentina, similar positivist beliefs had some following. A strong indication of this lies in the installment of mass education itself. Mass primary schooling services were set up, but secondary or higher education remained untouched by the federal government and remained an elite phenomenon.¹³⁶

The Argentine intellectuals responsible for the creation of a mass education system were influenced by the more constructive side of European positivism. This *generation of 1880* as they were called, asserted the governmental responsibilities of civilizing the populace.¹³⁷ As representatives of the Argentine bourgeoisie, they considered themselves to be liberal, pro-individualism and personal rights, but believed Argentine realities still limited political democracy. Their goals were to transform Argentine traditional ways into

¹³³ P. J. Bakewell, *A history of Latin America: empires and sequels 1450-1930* (Malden, 1997) 420.

¹³⁴ Newland, 'The Estado Docente' 455.

¹³⁵ Bakewell, *A history of Latin America* 421-422.

¹³⁶ Also, the provincial governments frequently received insufficient funding to install mass education. The peripheral education services lagged behind, creating a drag on the Argentine GER.

¹³⁷ The generation of 1880 was a group of intellectuals starting their career in 1880, afterwards quickly assuming dominating positions in the nation's educational, political and economic life.

a modern nation, prepared for nationalism of the twentieth century.¹³⁸ Modernization was not even the ultimate goal for all ruling intellectuals. Civilizing the lower-classes stemmed from a genuine concern about its well-being and education could eradicate problems like alcoholism and prostitution.

Education was an important tool in accomplishing these goals.¹³⁹ President Domingo Faustino Sarmiento (1868 – 1874) was one of the important forerunners of this positivist influenced intellectual movement. He was the first to invest heavily in education and implemented a nationwide educational system. Sarmiento defended the women's right to education as a way to prepare her for motherhood. As the first to give moral education to her child, she could influence the kind of man he will become in society.¹⁴⁰ Sarmiento himself said that “men shape the laws” but “women shape the customs” because of their role as mothers and educators of their children.¹⁴¹ Two additional objectives were added to defend lower class female education next to the intergenerational effects of education. Women themselves could be socialized to fit within a modern society and women could be made capable of securing their own well-being, thus not ending in poverty and prostitution.¹⁴²

An important part of the civilizing education as well as Argentine immigration policy was a direct result of European intellectual influence on Argentina. Nineteenth century Argentina deemed everything European as superior, including its people. This concept of superiority was explained by Sarmiento as ‘Civilization versus barbarism’, loosely translated meaning European or Hispanic superiority versus non-European inferiority. Gauchos, nomadic plainsmen, offspring from indigenous women and Spanish colonial soldiers were the ultimate accumulation of barbarism.¹⁴³ According to David Foster “Sarmiento’s disjunction of civilization versus barbarism, regarding civilization as superior (...) allows one to see the extent to which foreign culture holds a secure, yet complex place in Argentine imagination”. The desire to resemble a Western education system might have added to the gender equality of primary education.

Positivism later turned into *cultural nationalism*, a critique to especially this European outlook. Ricardo Rojas, journalist and author of the book *La restauracion*

¹³⁸ I. S. Wright and L. M. Nekhom, *Historical dictionary of Argentina* (Metuchen, 1978) 351.

¹³⁹ Idem, 351.

¹⁴⁰ E. Garrels, ‘Sarmiento and the Women Question: From 1839 to the *Facundo*’ In: T. Halperin Donghi, I. Jaksic, G. Kirkpatrick and F. Masiello (eds.), *Sarmiento, Author of a Nation* (Berkeley, 1994) 277, 287.

¹⁴¹ Rock, *State building* 115.

¹⁴² Garrels, ‘Sarmiento and the Women Question’ 285.

¹⁴³ Foster, Lockhart and Lockhart, *Culture and customs* 12-13.

national considered the Argentine educational system to be lacking ‘national personality’ and a ‘lack of defined national personality had led Argentina mindlessly to adopt an eclectic mix of foreign education systems that had nothing to do with Argentine reality.’¹⁴⁴ By emphasizing history and literature, the educational system should reflect a national character. The basic idea behind education stayed the same and so did the role that was assigned to women. Both positivists and cultural nationalists believed that the ‘evolution’ of a nation’s society could speed up by means of education. This ideological legacy of education has influenced later times as well. Peron blatantly used schooling and textbooks to imprint children with his own socialist and paternalist ideologies, the *justicialismo*.

The Catholic Church

A possible cultural barrier in the process of integrating girls into the primary educational system was the Roman faith and its institution the Catholic Church. In 1895, 99% of the population was Catholic.¹⁴⁵ Catholic education was not hostile toward female primary education, but unlike the protestant religion, it did not require its followers to be able to read the bible. The church and the Argentine state have a long history of strife. At first the Catholic Church had a monopoly on charity and education. The first attempt to break this monopoly was in 1823 when Rivadavia, a minister of government, created the *Sociedad de Beneficencia* (Benevolent Society). Rivadavia saw women as an under-utilized economical asset. Education was seen as a way to promote the economical inclusiveness of women and chose upper-class women as his board of directors. However, these women were devout Christians and did not share Rivadavia’s desire to challenge the Catholic Church. The *Sociedad* administered all female primary and secondary schools within Argentina until the 1870s. Small wonder that when primary education was removed from the Church in 1884, a few hundred upper-class women protested publicly against this measure.¹⁴⁶ Not only were they devout Catholics, control of female education lay in the hands of upper-class women and the government’s educational take-over would take that out of their hands.

However, we would expect more than a single protest against a girl-inclusive educational system founded on lay principles, in a nation of 99% Catholic inhabitants. We

¹⁴⁴ DeLaney, 'Imagining "El Ser Argentino"' 630-631.

¹⁴⁵ L'institute International de Statistique, *Annuaire International de Statistique, III. Etat de la population (Amérique)* (La Haye, 1919). 40-41.

¹⁴⁶ Rock, *State building* 102, 114.

have encountered a serious lack of sources on this specific topic, especially on how the population outside the elite experienced the change in schooling. The answer we can provide is twofold. Firstly, of all Latin American nations, the Argentine Catholic Church was comparatively underdeveloped.¹⁴⁷ Its weak hold on the nation might explain such weak protesting against the new schooling changes, where girls and boys were taught alike. Secondly, the changes were not protested because no virtues or values had really fundamentally changed. Schools were still divided by sex. Both state and church saw the family as the foundation of a “peaceful, orderly society”, the woman as subordinate to male authority and motherhood as the central role for women in the family. Traditional gender roles within the family remained largely untouched.¹⁴⁸ The goal of educating women to improve their skills as mothers was something to which no devout Catholic could object. Only when Peron started to change these fundamental values, trying to actively include women into the work force, did the Catholics clash with the values of the state. By that time, the female enrolments in primary education had been equal for over half a century.

3.5 Conclusion - explaining gender equal enrolments

To enhance the transparency of the factor analysis we have created another Boolean Matrix, *Boolean Matrix 2*. *Boolean Matrix 2* is an overview of the factor analysis in primary education. We added the new possible causes to the earlier discussed economic factors. The first factor is the general incentive of the government to invest in education. Government incentives were present in both countries and extraordinarily important, because only the government could implement a mass education system, as private education in these countries only fulfilled the needs of the elite.

¹⁴⁷ Idem, 113.

¹⁴⁸ J. Rodriguez, *Civilizing Argentina: science, medicine and the modern state* (Chapel Hill, 2006).

Boolean Matrix 2: Female primary education factor analysis (1880-1945)

	Argentina	Japan	Significance (0/1/2)
Outcome: Gender equality in primary school enrolments	1	1	
Threshold in GDP per capita	1	1	2
Relation GER and GDP	0	0	0
Solving the parental cost problem	1	1	1
Industrialization	0	1	0
Service sector	1	0	1
Government incentive to invest in education	1	1	2
Modernization/ industrialization drive	0	1	1
Creating a cultural unity	1	1	2
Affected by westernization	1	1	2
Cultural barrier formed by religion	0	0	2

The modernization drive was an important factor for Japan to install mass primary education, but not in the first place to women. In the eyes of the Meiji government, women were not going to be part of the official modernization process; their place was at home with the children. Therefore it is scored as only moderately significant. In Argentina, modernization was not one of the top priorities, because economically it was doing very well exporting primary products. Culturally, Argentina desired to become more like a Western nation. Cultural unification of the nation did receive top priority, as a consequence of immigration and Western views on nationalism and motherhood. The same needs for unification and patriotism can be found in Japan. It imposed the culture and ethics of the elite on its populace in the name of becoming a civilized cultural unity, while at the same time, these ethics were being influenced by Western thought of motherhood. In *Boolean Matrix 2*, both options are scored as present and significant in Japan as well as Argentina.

Neither in Japan nor Argentina did religion present a serious barrier against female enrolments in primary education. Even before the installation of mass education in Argentina in the 1880s, some education for women was available. Upper-class women affiliated with the Church played a large role in this education.

Ideas about women and their role in society changed in the period after 1880 as they came to be seen as key actors in changing society by passing their civilized knowledge on to their children. In Japan, it was the new education that induced a change in family values, not the old religion, Buddhism, or the new, State Shinto. The peasant values were replaced by neo-Confucianism, a philosophy which attitudes towards women lowered their position in society. It is not a barrier here, scored as such with a 0, but for secondary education, this ethical adjustment creates a situation where the government did not see any need to install female secondary education.

In a nutshell, the key factors that can be distilled from the Boolean Matrix were that a certain wealth threshold should be obtained and the government needs strong incentives to invest in education. The most important incentive was the creation of a cultural unity, affected by western thought. In Argentina and Japan, it was the need to create a cultural unity and an emphasis on nationalism and patriotism that instigated the first steps toward a gender equal primary educational system. Unexpectedly, religion formed no insurmountable barriers against female enrolment.

Patriotism, nationalism and unity could be imprinted with primary education, so why would women need more education? The complex framework that Argentina and Japan chose as their paths do not form a model which can be followed by other nations as well. It is for example possible to instigate a mass primary education system without government aid. The US provides a good example. We are not suggesting that exceptions are impossible. We are only demonstrating that these two countries, both from very different continents, share some remarkable similarities in the path followed toward reaching gender equal enrolments in 1915.

Lastly, we are puzzled by one final question. What can explain Argentina's lag on GER, even though it was ahead on gender equality in enrolments? Income inequality could explain this unequal nature of education. Primary education was free of charge, but it was not cost-free; opportunity costs and other small schooling expenses could still be a problem to some parents.

Geography was also a problem; the state might be responsible for the provision of schools in the neighborhood to provide education for everyone, but what if they did not? Immigrants arrived in the great port city of Buenos Aires and even with the best efforts of the government, most of them would stay there. Besides, the national government was there as well. Their direct lower-class surroundings were being educated and they had less control over proceedings of education in the rural provinces. Would the children or the

parents complain to the government when the nearest school was too far off? Probably not. Argentina was a vast country and only the Buenos Aires delta was truly urbanized. Parents and children were too far removed from the other incentive to get an education than government policy, namely the prospect of a better paid job. Also, if parents could not see the benefits of sending their children to school in due time they had better uses for them in the field right now. The GER was therefore low, but enrolment is equal for both boys and girls.

In Japan, it were the female enrolments that lagged behind, not the GER. The rapid expansion of the textile industry, an employer of both women and children, tilted the priorities of lower-class. Before marriage they could get temporary jobs in local factories and later in life their matrimonial obligations restricted their work to the family. The incentives of schooling that existed in urbanized areas were therefore different than in Argentina and not leading to a higher enrolment of women. In the end, would primary education ensure women of a better paid job in Japanese society? If they could, they preferred to take their chances with the textile industry, which was already an improvement of the harsh rural life. Ultimately, education was unavoidable due to governmental persistence and the compulsory nature of education.

Chapter four – Secondary education: the division of the trend

Unlike the pattern observed for primary education, the evolution of gender equal secondary education was different in Japan and Argentina. How can this divergence be explained? It seems that both nations followed different growth paths toward the equalization of secondary education, as shall become apparent in the analysis. This means that makeup of factors analyzed for primary schooling did not necessarily lead to the same outcome in secondary education. So what factors are responsible for variations in gender enrolment patterns in secondary education in Argentina and Japan in the twentieth century? We will discuss similar factors as in chapter three, with the exception of the external factor of the Second World War, which was a catalyst in the equalization of the secondary educational services of Japan. Japan's progression in secondary education can be divided into two parts because of the war externality. Secondary education developed as a natural continuation of the expansion of female enrolments, first in primary than in secondary education. Compared to primary schooling the road toward equalization was longer and accompanied by more ups and downs. After the Pacific War this 'natural' course of female enrolments was interrupted and U.S. involvement after the war created a completely equalized education system. Argentine female enrolments can also be partitioned into two sections of history, namely before and after President Juan Domingo Perón opened access to all levels of education for all strata of society in 1945, for girls and boys alike. Before this time, secondary education saw little natural continuation of growth in female enrolments in secondary education, despite the equalized female enrolments in primary education.

In short, Japan's secondary education for girls blossomed at a much earlier stage compared to those of Argentina. Japan did well especially in equalizing gender enrolment, but could also boast a high GER. Argentina was behind on both fields, only started to grow somewhat after 1940. What explanation for these discrepancies can we find in the economic development of both countries?

4.1 Economic influences on secondary education for women

The trends of gender equalization in secondary school enrolments were nothing alike in Argentina and Japan. Japan started out with the fairly high female enrolment figure of 20%

in 1880, comparable to its 25% in primary education. Past 1890 it increased to around 30% until 1905 and remained that percentage in the period between 1905 and 1934. The stagnation was interrupted by a short enrolment peak between 1920 and 1926, when the female enrolment percentage sharply mounted to 37% and subsequently it dropped to 30% again. The Second World War was an external factor that influenced the gender equalization process, during the war itself, but also afterward when the U. S. imposed its own education system on Japan. Equalization of the enrolment of both genders was required and a female enrolment percentage of 50% was reached in 1948. The female enrolment percentage remained above the 50% limit the following 35 years. Full enrolment was approximated in 1973 when the GER was 92%. Argentina's growth in secondary female education enrolment was very weak until 1940, when general and female enrolments started growing interrupted until equality was reached 1965 at a percentage of 52%. Afterwards, the percentage remained over 50% until 2000, at the end of our time frame. The Argentine GER was extremely low compared to Japan's. At 1930 it was only 4% and full enrolment was not even reached in 2000, when the GER was 86%.

What economic causes laid behind this diversity in secondary female enrolment? Chapter three demonstrated that in the period of 1880-1945 Argentina did have the material backing to provide a mass secondary education system. It did instigate a gender equal primary educational system, though mass education was somewhat slower to develop. Secondary education barely grew in terms of female enrolment or general enrolment. In the same period, when Japan was clearly poorer than Argentina, the female share of enrolment in secondary education continued to rise, as did the general enrolment. Thus a high economic growth was not the explanatory factor in the provision of female secondary education. *Table 5* confirms this point. *Table 5* illustrates the average annual growth of GDP per capita, the female enrolment share (FE%) in secondary education and the GER for Argentina and Japan between 1895 and 2000.

Table 5: Comparison of average annual growth of GDP per capita, the female enrolment share in secondary education (FE%) and the GER.

	Argentina			Japan		
	GER Annual average growth ¹⁴⁹	FE% Annual average growth	GDP Annual average growth	GER Annual average growth	FE% Annual average growth	GDP Annual average growth
1895-1915	Na.	Na.	Na.	0,7	0,5	1,4
1916-1930	Na.	Na.	1,7	2,2	-0,1	1,9
1931-1945	0,3	0,5	0,5	1,8	0,8	-0,7
1946-1973	1,5	0,9 ¹⁵⁰	2,3	0,6	- ¹⁵¹	8,0
1974-2000	1,3	-	0,4	0,0	-	2,3

Source: Figures for GDP per capita: own calculations on the basis of Maddison, *Statistics on World Population*, at <http://www.ggd.net/maddison/>

Figures for FE% and GER: for Japan, own calculations of : Van Leeuwen, *Human Capital and Economic Growth*. For Argentina: own calculations on the basis of UNESCO, *World survey of education, Part III, Secondary education* (Paris, 1958), UNESCO *Statistical yearbook 1964, 1975, 1985*.

UNESCO online statistical database, Table 3F: Enrolment by grade in general secondary education at: http://stats.uis.unesco.org/unesco/ReportFolders/ReportFolders.aspx?IF_ActivePath=P.50&IF_Language=eng

The Argentine GDP per capita from 1916 until 2000 was marked by heavy fluctuations, while the GER and the female enrolment share remained largely constant. Both the GER and the female enrolment share increased after 1946, but the speed of GER expansion did not drop after the GDP did in the period between 1974 and 2000. The participation of female students was already equal in this last period, so we have removed it from the table to prevent confusion.

No positive relation can be discovered for Japan, neither between the expansion of the GER and the female enrolment share, nor between GDP growth in relation to either GER or the female enrolment expansion. Between 1895 and 1915, it seemed like GDP growth might have influenced the expansion of female enrolments and enrolments in general. However, from 1916 until 1930 GDP per capita growth was unable to prevent a decline female enrolments, though it was able to increase GER. Accordingly, it were *male* enrolments that were stimulated by this economic growth. Yet when economic growth turns negative, both the GER and female enrolments rise. Conclusively, there was no

¹⁴⁹ Due to a data gap, the period was adjusted to 1945-1975 and 1975-2000.

¹⁵⁰ Data is only available in steps of five. This number actually represents the period between 1945 and 1975.

¹⁵¹ As of 1948, enrolments in Japan were equalized. We have removed the percentage from the list to prevent confusion. We have done the same for both Argentina and Japan in the period 1973-2000, both enrolments are equalized in this period.

direct relation. An interesting observation is that female enrolments were already equal before the economic take-off after the Second World War.¹⁵²

In sum, the Argentine economic situation probably influenced enrolments in the period of 1930 to 1945 and in the period 1946-1965. As for Japan, the economy might have influenced enrolment directly only the period amid 1895 and 1915. Given that no other period expressed a direct relation between GDP, GER and the female enrolment share, this is unlikely. Economic growth was not necessarily directly linked to increases in female enrolments and education in general. More factors were involved in the complex puzzle that equalized secondary school enrolments. Still, let us pursue our initial path; what effect had the parental cost problem and the enlargement of the industrialization and the service sector on female secondary school enrolments?

Parental cost problem

Why did girls not continue into secondary education after finishing elementary schooling in Argentina, and why did they in Japan? In Japan the abolition of secondary schooling fees was not necessary to increase the proportion of female students. In wealthier Argentina, the parental cost problem proved to be a large obstacle in sending children to school in general. The impact of the solution of the parental cost problem was substantial on female secondary education.¹⁵³ In Argentina before Perón, the decentralized nature of education divided the secondary schooling infrastructure between wealthy and poor provinces and secondary education was not provided on a large scale. After Perón's rise to power, secondary schooling became free of charge but not compulsory. Even without this obligation, the female share of enrolments doubled between 1940 and 1950 from 17% to 31%.¹⁵⁴ Perón's motivations for solving the cost problem will be explained in the discussion of the political factors.

Another important reason for the disparity between the volume of female secondary school enrolments education in Argentina and Japan is the availability of

¹⁵² Which makes us wonder whether a well educated female workforce might have added something to this booming economic period?

¹⁵³ We do need to keep in mind that this enlargement was largely a result of an increase in general enrolments, and not necessarily directed at the female gender. The best way to expand female enrolments is to expand general enrolments. These general enrolments boomed after the opening of access to education, and so did the share of female enrolments. Still, the expansion in the 1940s proved to be the first step toward a more equal education system.

¹⁵⁴ UNESCO, *World Survey of Education, Part III, Secondary education* (1958)
UNESCO, *Statistical yearbook* (1964)

secondary schools. Argentina and Japan differed in government policy toward secondary education. Japan did not offer much secondary schooling infrastructure for girls, but did allow private institutions to fill this gap. Post-primary education in Argentina was decentralized and provinces strapped for money had difficulty implementing secondary education. Private institutions were hindered in their attempt to fill this gap and could not reach an audience beyond the extent of the elite offspring. This will also be discussed in greater detail in the political analysis.

The historical income inequality in Argentine society presents another reason why female secondary enrolments did not reach beyond a small share of the female population before Perón. In a wealthy nation like Argentina, income inequality caused an uneven spread of education because only the elite were able to afford secondary schooling. Social and income inequality was entrenched in Argentina since Spanish colonization, as explained in the chapter one, and only exacerbated in the twentieth century. The Argentine well-organized landowning elite could also block public efforts to install mass secondary public education, unwilling to be burdened with the costs of a public education system.¹⁵⁵ We lack sufficient data on private institutions in Argentina, but it is likely that secondary education could be provided for the elite in regular public schools. The hurdles the government put up for private education and the fact that most families were poor and not able to afford secondary schooling; public secondary schooling in effect became schools for the rich.

For poor families, opportunity costs played a large role in the assessment of the necessity of female secondary education. Children ended primary education at the age of fourteen, old enough to help provide for the family. Without the compulsory nature of education, economic necessity entices poor rural families to keep their children at home. Women can help weaving, cooking, they can help on the land and attend to younger siblings. Besides, does the family have enough money to provide for itself while a son or daughter can go get educated? The opportunity costs of education were high and poor parents would thus need stronger incentives to send their children to school; will the son or daughter obtain a better paid job after secondary education?

In both Japan and Argentina, urbanization and the rise of the secondary and tertiary sector increase incentives to female education. The role of urbanization in enhancing the female enrolment share has been explained in chapter three. Teacher training was a very

¹⁵⁵ Frankema, *The historical evolution* 199.

popular type of secondary education, but next to professions as teachers, women could work in other service occupations such as for example the railway administration. The percentage of the population working in the service sector increased somewhat over time, starting at 38% in 1914. In 1947, the share of the service sector became 43%. The percentage remained forties was retained until 1970, afterwards increasing again in 1991 to a percentage of 63%.¹⁵⁶ Thus, between 1947 and 1970 almost half of the working population was employed in the service sector. Overall, these type of jobs required more skills than just literacy and as a result women who desired such jobs needed some post-primary training. They also faced competition from men, who had received secondary education in greater numbers before women did. Also, vocational schooling was not provided for most women before the war, neither in Japan nor Argentina. Female curriculums changed after the war in Japan, and women were able to follow through post-primary technical education but women still preferred to take courses in humanities, even until this day.¹⁵⁷

Japan already arrived at a female enrolment share in secondary education of 30% before the Pacific War. Female enrolment did noticeably lag for a long time around 30% and without the external factor of the Second World War, equality would have taken much longer. The parental cost problem was not solved by the government in Japan, so education was mostly paid for by the parents, which was impressive, because these girls would for most part not be earning an income.

The rise in consumption of non-agricultural goods and services such as education indicates that more people were willing and able to send their children to school, including their daughters.¹⁵⁸ Education had become a consumer product for the upper and middle class parents, not directly used to provide additional income. Female secondary education further educated girls in motherhood, increased their social standing and to enabled them to find a well-educated husband. Most educated women had no place in the modernization process, though some girls were able to use their secondary education, becoming 'career girls'. These reasons for education will be explained in discussion of cultural factors below.

¹⁵⁶ Galiani and Gerchunoff, 'The Labor Market' 147.

¹⁵⁷ McVeigh speaks of "a strong tendency of college women to avoid 'masculine subjects' such as math, science, law and engineering." The explanation for this is the gender definitions that have already been constructed. We believe that the same goes for secondary education. McVeigh, *Nationalisms of Japan*.

¹⁵⁸ E. S. Crawcour, 'Industrialization and Technological Change' In P. Duus (ed.), *The Cambridge History of Japan: The Twentieth Century* (Cambridge, 1988) 415.

After the Second World War Japan passed the *Fundamental Law of Education* in 1947 under American pressure, which emphasized equality and opportunity in education. It stated that education should be compulsory, free of religion and politics and it forbade discrimination on the basis of gender, amongst other things.¹⁵⁹ In the period after the Second World War until the 1970s, the Japanese government took measures to help disadvantaged social groups. School lunches, textbooks, regular activities and excursions were subsidized by the government for low-income families. To equalize educational conditions in remote areas, laws passed to provide salary supplements for teachers to take positions in remote areas and transport subsidies were granted to those children living on small islands.¹⁶⁰ The cost problem was thus solved for the lower part of secondary education that became compulsory after the war. For the last three years of higher secondary schools, able poor students were helped by a system of scholarships.¹⁶¹

Another post-war aspect of the Japanese gender equalization of secondary school enrolments was the augmentation Japanese wealth and consumption. The distribution of income moved toward greater equality, thanks to postwar reforms.¹⁶² Parents could afford to send their girls to school, even to senior high schools that were not yet free of charge. The ‘consumption revolution’ began in 1958 and when carried further into the sixties evolved into a leisure boom. The leisure boom increased the demand for services, especially those in tourist and entertainment industries.¹⁶³ An increase in the service sector in general meant an increase in employment opportunities for women. Before the war, this was different because educated women did not really have a place in the modernization process and the teacher occupation was not a feminine profession as it was in Argentina.

All these factors combined, the compulsory nature of secondary education, government aid towards poorer families, a higher level of wealth and relatively equal distribution of that prosperity ensured that the female enrolment share could reach its maximum postwar and eventually the GER did the same. We can only speculate about whether or not Japan would have managed to do so without the externality of the Pacific War. The trend does seem to tell us education would have been equal in the long run, but the speed would have been slower and more importantly, the nature of female education would have been completely different. It would have probably taken a very long time

¹⁵⁹ UNESCO, *World Survey of Education, Part III* 739.

¹⁶⁰ W. K. Cummings, *Education and Equality in Japan* (Princeton, 1980) 9.

¹⁶¹ UNESCO, *World survey, Part III* 743.

¹⁶² Y. Kōsai and A. Goble, ‘The postwar Japanese economy, 1945-1973’ In P. Duus and J. W. Hall (eds.), *The Cambridge History of Japan* (Cambridge, 1988) 512-513.

¹⁶³ Allen, *A Short Economic History* 193.

before the character and goals of female education would have changed. The analysis of the political factors will say more about the character of female education before the war. The question for the political analysis is what political factors caused Argentina and Japan to differ in the equalization of secondary education and which political causes can be distinguished that led to the eventual equalization of enrolments?

4.2 Political and cultural factors - Japanese versus Argentine incentives

Two important political differences between Argentina and Japan led to different outcomes in secondary education. The first was that both governments had a limited interest in women's secondary education before the 1940s. Consequently, secondary education was mostly decentralized or arranged by private institutions in both countries and only for a very small part set by the central governments. Argentina lacked the governmental incentives to install a mass secondary education system and private institutions were bound by too much governmental restriction to become a large factor. Japanese secondary schooling kept in evolving on the same pace and with the same incentives as it did for primary schooling, only the growth commenced at a later period. The government did not play a massive role in this. Japan already had a long tradition of private secondary schools, even for women.

Secondary education changed its structure and proportion of female students after two radical breaks in the Argentine and Japanese political structure; the rise of Perón in Argentina and the Second World War in Japan. Though we do not pursue the goal of analyzing the development of the GER's, female enrolment was closely related to it. Therefore we have to keep in mind that political measures can increase absolute numbers of women going to school, but that their impact is measured by GER. Japan increased its female secondary school enrolments first, so for the sake of chronology that is were the story of secondary schooling for women begins.

Pre-war Japanese female secondary education: good wives and wise mothers¹⁶⁴

The *School System promulgation* of 1872 ordered girls' high schools (*jagakkō*) to be built,

¹⁶⁴ This section draws in large part on the work of McVeighn, *Nationalisms of Japan*. His work is one of few describing secondary education for women before the war.

but the pace of establishment was slow.¹⁶⁵ A girl could go to either a private girls' high schools, where the curriculum was less advanced than in male middle schools, or simply attend a male middle school.¹⁶⁶ The rationale behind girls' secondary education remained essentially the same as in elemental education; women were to become *ryōsaikenbo*, good wives and wise mothers. The *jagakkō* provided a general education of reading, history and morals, but it also added 'practical education', an advanced course in becoming a good wife and wise mother. Significant was that the *jagakkō*'s did not lead to universities or working life,¹⁶⁷ and women had no official place in the modernization process.¹⁶⁸ Consequently, secondary education was mainly a consumer product in pre-Second World War Japan.¹⁶⁹

Private schools played a fundamental role in the development of female secondary and tertiary education, especially Christian missionary schools. Women who attended private secondary schools came mostly from middle- and upper-class urban families. Christian missionary schools, who took a very active role in the development of secondary education for women, placed a main emphasis on the study of foreign languages, chiefly English and French. The western influence also revealed itself in other parts of the curriculum. For example, it emphasized respect for women and stressed the inherent value of the individual rather than a person's use as a tool of the state. The contemporary popularity of all things Western added to the attractiveness of these schools. By 1890, 45 private mission schools existed, three times more than the number of public *jagakkō*.¹⁷⁰

Mission schools eventually influenced public schools as well. In particular, the general style of education was very popular. The public school mix of general education and character-cultivation was inspired by the curriculum of Christian high schools. It should be noted that the Christian institutions, with their stress on freedom and individuality were a departure from the nationalism and good wives and wise mother

¹⁶⁵ Shuichi and Toshio, *Understanding Japan* 28.

¹⁶⁶ McVeighn, *Nationalisms of Japan* 225.

Women were supposed to follow their own track of schooling thought.

¹⁶⁷ D. Pomatti, 'Westernization and English Education in the Meiji Public Schools', *Foreign Languages and Literature*, 32 (2007) 124.

¹⁶⁸ In practice, they did have a place in the modernization process. They were an important labor force in the factories because of they could be paid less than men and were exceptionally temporary workers, unlike men who often received lifelong employment. No investments needed to be made in women, as their employment was temporary and enough female labor supply was present to replace them. However, they did not intellectually have a place in the modernization and innovation progress.

¹⁶⁹ Of course, there were exceptions to this. In the 1920s and begin 1930s the modern concept of 'career girl' became popular among a small part of the female population. These career girls started their own small organizations that were kept under very strict control by government agencies.

Cook, *Women and War* 323.

¹⁷⁰ McVeighn, *Nationalisms of Japan* 226.

ideology thought in public schools. Perhaps because of this Western competition, or perhaps because of the economic upturn of the 1920s, educational spending doubled in female higher education. Secondary education for women became more accepted and popular. The drive toward more female secondary education faded in the 1930s when the rise of ultra-nationalism reinforced all orthodox conservative views on the women's place in society. Only two private female middle schools opened in this period.¹⁷¹

The changes in the Japanese education system in relation to secondary schooling relied heavily in the success of Christian mission schools. The Japanese government placed no obstructions to private education, which the Argentine government would, as will be demonstrated in the discussion of political and cultural factors of Argentina. Japan had a longstanding tradition of private institutions of Western learning (*yōgakujaka*) and of private institutions of Chinese learning (*kanga kujuka*).¹⁷² Japanese mission schools founded at the beginning of the Meiji era were Protestant. Unlike catholic educational facilities, Protestant missionary schools did not have to answer to the rigid hierarchy of the Catholic Church and were free to install schools as they desired. Therefore it was easier for them to adapt to Japanese needs. Their education stressed the teaching of foreign languages, a field well suited for women. It was harmless, because not many women would pursue a career based on secondary schooling in languages. Yet it did enhance social status; women who were trained in foreign languages increased the possibility to marry a highly educated man, who would like pursue a career in international business or diplomacy. Even in 1980 women were still inclined to study foreign languages for the same reason.¹⁷³

Why did women not follow through directly with secondary education after elementary education in Argentina? The political factors that explain the rationale behind this were quite straightforward. In the eyes of the government, the goals of education for women were fulfilled after primary education. Universal elementary education had provided a means for the Argentine government to eradicate cultural diversity and to civilize the nation. Motherhood was emphasized, partly because of civilization tactics, part because of the cultural heritage of the Catholic faith, professed by 99% of the country. Primary education ensured that women were literate in Spanish, loyalty and nationalism was

¹⁷¹ Idem, 230.

¹⁷² Shuichi and Toshio, *Understanding Japan* 11, 17, 28.

¹⁷³ E. Beauchamp, 'Education' In T. Ishida and E. S. Krauss (eds.), *Democracy in Japan* (Pittsburgh, 1989) 238.

embedded in their hearts and they knew how to be good mothers for their sons. Teacher training was the most chosen schooling for upper- and later middleclass women being the only acceptable occupation for women. Many lower-class women worked in agriculture or in manufacturing and no post-primary education was required in those sectors. In addition, the data we examined is of general secondary education and was meant to prepare for an academic career, but women rarely entered universities. Women were not supposed to have a career, as many girls were reminded of during their lessons in motherhood at primary school.

The Argentine central government therefore had no desire to interfere with secondary schooling and decentralized it, making the different Argentine counties responsible for secondary education. Education in the poor peripheral provinces suffered the most from this measure, as they lacked the resources to build a mass secondary education system. In primary education, quality of schooling already suffered; attendance in the provinces was below those in the Buenos Aires province.¹⁷⁴

Argentine private schools did not take over the role of the government in female education as they did in Japan, though the data available to investigate to what extent this did not happened is limited. Why did such a development not take place in Argentina? In the first place Catholic education was secularized in 1884, when Law No. 1420 decreed lay education to be the norm, so Christian mission schools as visible in Japan were not created to a large extent in Argentina. Only in 1943 did the Catholic nationalist regime re-install Catholic education and that even ended in the last years of Perón's reign. More importantly, private institutions could exist in nineteenth and twentieth century Argentina, but until 1960 all certifying examinations had to take place in public schools to legitimize diplomas. This increased the costs and practicality of private institutions, consequently reducing their use in Argentina.

Argentine female enrolments and especially enrolments in general started to rise after the 1943 coup and the election of Colonel Juan Perón in 1946 because education played a vital part in the Peronist regime's policies. Distinctive about Perón's educational policies was the redistribution of education among different social groups. Between 1945 and 1949, Perón opened access to post-primary education to the lower classes. The female

¹⁷⁴ A. P. Dupre, 'Transforming Education: The Lesson from Argentina', *Vanderbilt Journal of Transnational Law*, 34 (2001) 13.

share of enrolments increased from 17% to 31% in 1940 and 1950 respectively. At the same time the GER expanded explosively from 8% in 1945 to 21% in 1950.¹⁷⁵

Two phases can be distinguished in Perón's educational reform. The first phase was the democratic revolution of education, intended to provide every Argentine child with an education. Perón accelerated the building of primary and rural schools, stimulated provincial governments to build more schools, considerably increased the education budget and for the first time in Argentine history created a Ministry of Education.¹⁷⁶ Poor students were provided with scholarships and free meals.¹⁷⁷ The second phase constituted of changes in educational content. Secondary schools received a new course in which students were taught the principles of the Peronist party, the *justicialismo*.¹⁷⁸

What possible incentives motivated the Peronist government to expand access of education and why was this expansion successfully incorporating women? The Peronist philosophy behind this could have been threefold. Firstly and most likely, Perón was a *realpolitikus* that used the expansion of education to establish a carefully constructed electoral base.¹⁷⁹ Educational access was not specifically directed at women, but simply opened access to all levels of education. The GER rose and accordingly, so did the proportion of female secondary school students. A second reason for the expansion of education in general was that Perón aimed to modernize the nation, in particular its industrial base and for this skilled labor was needed. If that were the case the educational expansion was once again not directed at women, because in Argentina, women had no official place in the industrial sector. Lastly, the educational expansion could stem from a sincere belief in democratization. If so, this belief probably was more likely related to the efforts of Perón's spouse, Eva Duarte Perón, better known as Evita, to include women in education, work and enfranchisement.

¹⁷⁵ UNESCO, *World Survey of Education, Part III*.

UNESCO, *Statistical yearbook* (1964).

¹⁷⁶ Dupre, 'Transforming Education' 14.

S. Gvirtz and J. Beech, *Going to School in Argentina* (Westport, 2008) 17.

¹⁷⁷ M. E. Rein and M. Grenzeback, *Politics and Education in Argentina, 1946-1962* (Armonk, London, 1998) 5.

The intrusive political policy in education was not appreciated by many teachers. Mass discharges and suspensions of primary and secondary school teachers silenced dissidents against the Perónistas and the educational policy. Unsurprisingly, the quality of education suffered.

Dupre, 'Transforming Education' 13.

¹⁷⁸ Rein and Grenzeback, *Politics and Education* 6.

¹⁷⁹ H. A. Spalding Jr., *Organized Labor in Latin America* (New York, Hagerstown, San Francisco, London, 1977) 167-170.

The enfranchisement of women and female education were closely related. Perón and Evita undeniably saw women as potential targets for political mobilization. Why did the Peronists succeed in attaining successes in both secondary education and the female ballot where feminist groups had failed before 1945? It was chiefly Evita that promoted the female ballot and other rights for women. Her main targets were *descamisadas* and Catholic women, who were appealed by Evita's explicit public emphasis of motherhood and Catholic values.¹⁸⁰ Although she thought women should be able to vote and pursue education, women's natural place was still at home. In this respect, she did not diverge a lot from the attitudes of the Catholic Church.¹⁸¹

Even though a women's place was at home, their natural activities included education and charity.¹⁸² To perform these natural tasks, especially in education, women themselves needed an education. The female enfranchisement was seen as an extension of her natural activities. Thus, two elements were combined: traditional values were reinforced but at the same time, improvements were made in the social participation of women. To Argentina's Catholic traditional society Peronist feminism proved to be a harmless variant of feminism. In return, Perón obtained a group of adherent followers. In the election of 1951, women played a large role in his reelection.¹⁸³

The Argentine Catholic Church expressed no active opposition to the expansion of education and the inclusion of women.¹⁸⁴ This lack of opposition also had its roots in a Catholic *realpolitik*. Education had been out of the hands of the Church since 1884, but when after the 1943 revolution, the military government reinstated Catholic education. Catholic nationalists received top positions in education. Perón continued this alliance with the Catholic nationalists and in turn, he secured legitimacy for his regime and support of the Catholic Church. The Church was satisfied as well because, in the tradition of Argentine schooling policy, it saw the education system as a means to instill spiritual values in Argentine youth and society. Once again, the Church posed no barrier towards female education, even at the secondary level.¹⁸⁵

¹⁸⁰ *Descamisadas* means 'the shirtless ones' or 'women of the people'.

¹⁸¹ M. B. Plotkin, *Mañana es San Perón: A Cultural History of Perón's Argentina* (Wilmington, 2003) 172.

¹⁸² Idem, 180.

¹⁸³ Brown, *A Brief History* 210.

¹⁸⁴ Although the Argentina Catholic Church had never explicitly said nor encouraged this inclination.

¹⁸⁵ When the Peronization of education was introduced after 1950, conflicts between Church and the regime increased. The two ideologies of Peronism and Catholicism competed for the hearts of the Argentines. At the end of his presidency Perón felt he did not need the Church anymore. He canceled privileges of the Church and abolished compulsory Catholic religious instruction in the schools. We must note that these actions took place after the death of Evita Perón in 1952, who was more cautious in her relations with the Church and perhaps had more sincere in her religious convictions.

Overall education and the inclusion of women expanded the electoral base of Perón in several ways. He gained much popular support by providing free education. By means of this all-accessible education a new generation was indoctrinated by the *justicialismo*.¹⁸⁶ The inclusion of women in all these measures was cunning because it almost doubled Peronist following. Yet the price paid for education access to all was that education though equalized in terms of female enrolment share and GER, the dropout rate was very high, teachers' salaries and the quality of education were exceptionally low. Political factors had added to gender equal secondary education, but not necessarily to a qualitative educational system.

The Second World War influence on Japanese female education

The Second World War was a significant external factor in determining the structure of the educational system. Both thoughts about women's place in society and their legal status changed under the war's influence, all started by the shortage of skilled men because of the war. After the occupation of China in 1937 and the attack on Pearl Harbor in 1941, Japan's workforce was redirected towards war industry. At the end of the Second World War, more than seven million men were in active military duty and women were called upon to replace them at factories, farms and offices.¹⁸⁷ Women needed to replace men in particular in the segments of medical care and education and the proportion of female students increased.¹⁸⁸ The exact amount of increase is hard to establish because the proportion of female students also increased as more men left secondary schools. But there is no doubt that women needed to replace men and their need for education resulted in an enlargement of their enrolment share. Even in the three years before the war female secondary enrolments increased in preparation.

War-time propaganda also influenced the female position in society. When the war hit Japan proper in 1944 via US strategic bombing, a propaganda campaign was initiated to lift the morale of the population. Part of the campaign was a positive reflection of the contribution of women to the eventual victory, which completely changed the image of women in the mass media. No longer were they only perceived as *good wives and wise*

Rein and Grenzeback, *Politics and Education* 27.

¹⁸⁶ Because Perón was forced to leave the political scene in 1955 by a military coup the actual effects of the *justicialismo* on the long range remain unclear.

¹⁸⁷ Cook, *Women and War* 325.

¹⁸⁸ McVeighn, *Nationalisms of Japan* 230.

mothers with their responsibilities within the home, they now contributed to the whole of society.¹⁸⁹

When the war came to an end and Japan was rebuilt, the educational system was also recreated and reformed. The occupied Japan of 1948 had to accept U.S. infringement on its educational system and the U.S. recreated education in the image of its own schooling system; equal in general and in gender. The main American postwar goal was to democratize Japan. By democratizing education and infusing it with democratic principles, American policymakers believed that Japan could be transformed. To avoid elitism, wide access to education was imbedded.¹⁹⁰ Already in late 1945, the U.S. government gave some directions for reforms. Militaristic and nationalistic tendencies should be removed for the teachers, state support for Shinto should end and moral education should be suspended, along with history and geography.¹⁹¹

American motivations to occupy and reform Japan were formed by the Cold War; a continuation of conflict after 1948 between two 'superpowers' the United States and the Soviet Union. After the fall of China to communism in 1949 and the outbreak of the Korean War in 1950, America realized that a weak and impoverished Japan would not serve American strategic interests.¹⁹² The second educational mission sent to Japan by the U.S. in 1950 had to make sure education lived up to the democratic standards set by the U.S. government.¹⁹³

The result of the American effort was that Japan copied the American education system known as the 6-3-3-4 system. Six years of elementary school, three in junior high, three in senior high and four at university. The first nine years were compulsory and free at public schools.¹⁹⁴ Co-education of the sexes became mandatory, but not all schools adhered to this regulation. Especially the pre-war era girls' schools remained the same and as a result 60% of the schools in 1994 were single-sex high schools.¹⁹⁵ Nevertheless,

¹⁸⁹ Cook, *Women and War* 324.

¹⁹⁰ Especially higher education should avoid elitism according to Thomas. It seems that the Americans took an equalized secondary education for granted.

J. E. Thomas, *Modern Japan: A Social History since 1868* (London, New York, 1996) 269.

¹⁹¹ Beauchamp, 'Education' 229-230.

The next step in the reform of education was to send the first United States Educational Mission to Japan (USEMJ) in 1946, headed by Dr. G.D. Stoddard to make a report on the reconstruction of education in Japan. Shuichi and Toshio, *Understanding Japan* 31.

¹⁹² Allen, *A Short Economic History* 189-190.

¹⁹³ Thomas, *Modern Japan* 278-279.

¹⁹⁴ In contrast, Argentina's secondary education became only compulsory and free for nine years by law in 1993.

¹⁹⁵ K. Fujimura-Fanselow and A. Kameda, 'Women's Education and Gender Roles' in Japan In J. Gelb and M. L. Palley (eds.), *Women of Japan and Korea: Continuity and Change* (Philadelphia, 1994) 48-49.

enrolments in secondary education were equal for both sexes as of 1948 at the implementation of the American system.

The exact structure of American education did not last long. After seven years when Japan regained its independence some changes were made to recentralize education.¹⁹⁶ However, democratic education and gender equality were not renounced. Japan's lack of a unified religious doctrine such as State Shinto and the removal of moral education after the war left a void of moral instruction that was filled by the beliefs in liberalism and democracy and thus in equality of opportunities.¹⁹⁷ The shift was accompanied by a shift towards individuality that created a generation gap, as happened in the entire Western world. In a survey of 1951, 80% of the parents found their children to be 'badly behaved'.¹⁹⁸

On the whole the background of Japanese education was one of gender equalization in secondary education and a rapid process of change in thought about the women's position in society during the Second World War. To this background the U.S. imposed a gender equal educational system and it is most likely that this background added to the acceptance of this gender equality in secondary education in the long run. The lack of this outside factor on Argentina meant that gender equality and equality in general in secondary enrolments came at a slower pace.

4.3 Conclusion - Factors explaining the division in female enrolment equalization

Why was the Argentine secondary educational system not able to increase its share of female students, and what factors account for Japan's success? *Boolean matrix 3* presents the conclusion of our factor analysis for and an answer to this question. As in chapter three we scored a threshold of wealth measured in GDP per capita with a 1 in both countries, similar to our Boolean matrix of primary education. This threshold remained significant as

¹⁹⁶ American education placed large emphasis on decentralization to keep the schools 'close to the people' but this did not fit into the Japanese tradition. In the vast country of the United States decentralized education was organically grown. Japan was a densely populated island, had long-established racially homogenous population and was more centralized. Therefore it places more emphasis on cooperation and harmony and the notion that the education system should serve the needs of the state, not the potential of the individual. A centralized educational system fitted those needs, not a decentralized one. Cummings, *Education and Equality* 7.

¹⁹⁷ Godo and Hayami, 'Catching Up in Education' 21.

¹⁹⁸ Misco, 'Understanding Japan' 63.

the basic requirement for government and parental spending on education in general. No clear connection between economic growth and educational expansion was found, whether in GER's or in female enrolments. Therefore, this factor is scored as not present in both countries and insignificant.

Boolean Matrix 3: Factor analysis of secondary education

	<i>Argentina</i>	<i>Japan</i>	<i>Significance (0/1/2)</i>
Outcome: Gender equalization in secondary school enrolments	0	1	
Threshold in GDP per capita	1	1	2
Relation GDP p.c., GER and FE%	0	0	0
Solving the parental cost problem	1	0	2
Industrialization	0	1	0
Service sector	1	1	1
Secondary education as consumer product	0	1	2
<i>Government incentives to install secondary education</i>	0	0	0
Private institutions	0	1	2
Cultural barrier formed by religion	0	0	2
The Second World War	0	1	2

Solving the parental cost problem proved crucial in Argentina. The moment education became free, and not even compulsory, the female share of enrolments plus the GER grew substantially. Pre-war Japan did not address the parental cost problem other than abolishing the tuition fee. The stagnant 30% female enrolment percentage indicates that the parental cost problem might have been an issue. The different results in female secondary schooling can possibly be explained by the different paths of economic progress chosen in Argentina and Japan. Modernization, basically the motto of Meiji Japan, led to

the rise of a middle class and emphasized the consumptive nature of female secondary education. Also, a more equal distribution of wealth expands education. High inequality in Argentina, maintained by a large landowning elite, produced an obstruction to increasing secondary school enrolments in general. Boosting the GER was the best way to expand education for women as we have seen after Perón's rise to power. In primary education there were good political reasons to provide education. Yet after primary education, the 'civilization' was completed and the absence of a middle class impeded a further evolution of education.

Argentina remained an exporter of primary goods, only industrializing in the 1930s and was in no need for a mass skilled labor force. Private institutions were severely restricted in Argentina because the government wanted to curtail the power of the Church. No such laws were passed in Japan and private institutions could flourish. Demand for these institutions led to a female enrolment percentage of 30%, very high if we assume that this was only the middle-and upper-class.

Industrialization was present in both countries, albeit in Argentina it only emerged in the 1930s. In both nations, the same problems can be registered. Industrialization did not add to female secondary education because technical education, was no accepted field of study for women. Next to that, industrialization offered women temporary jobs at factories. Women were enticed to work in these factories in the period between primary school and marriage. Because secondary schooling was not compulsory nor free, many urban women entered the industrial labor force. We have scored industrialization in both nations as a 1, but also as insignificant because it did not add to female enrolment expansion. If anything, it was a barrier towards secondary education for women.

In Japan, lower-class women worked in industrialization but middle- and upper-class women were not supposed to have a career of their own. Just like primary education, pre-war education stressed the good wife, wise mother ideology. Still, it became fashion to become a career girl in the 1920s, but this had a backlash in the 1930s. Because of this recoil, the service sector is scored with a moderately significant 1. In both countries, the tertiary sector created career opportunities, but the women's place was still at home. Women worked out of economic necessity, when economic circumstances forced them to.

The service sector formed an important factor in the secondary schooling of women, especially in the teacher training program. In administrative positions, women still needed to compete with men, but teacher training led to a feminine career in Argentina. The service sector as a factor is therefore present in Argentina but its workings did not

directly affect general female enrolments. It became a necessary but insufficient condition; therefore it is scored as moderately significant.

Government incentives to install mass secondary schooling were not present in both countries, yet the number of female enrolments in secondary education rose in Japan. Government incentives were thus an insufficient factor in the equalization process in secondary education. The absence of government incentives was accompanied by a boom in mostly Christian private institutions in Japan, though we have no direct figures to what extent it affected enrolments. We do find it an important factor, because even without government investment in education, female secondary education still expanded on a private basis. The obstacles that private institutions in Argentina had to overcome in combination with the low GER implied that education was not privatized in Argentina, but that it was still an elite phenomenon in public secondary schools itself. The lack of private institutions and government investment in education, in combination with the high inequality of Argentine society resulted in a low secondary school enrolment share of women and a low GER in general.

In neither nations did religion or philosophy form a significant barrier to secondary schooling. Since we expected an opposite outcome, we have scored this factor as significant. In pre-Perón Argentina, the Catholic religion did not oppose secondary education but did oppose to working women. Only the teacher occupation was viewed as an acceptable ad natural female career. In addition, during the first five years after 1943, the Church finally regained its position in education and wanted to implement its values on the young generation of Argentines. Japanese neo-Confucianism merged with Western thought on motherhood and made secondary education to some extent acceptable. Once education was accessible to women, a small number of women even started a career in the 1920s. Lastly, the Second World War culturally and legally changed the female position in society and gender equalized secondary education. The absence of catalyst factor in Argentina meant that secondary education was slower to develop.

Chapter five – Conclusion: gender equalization of education in Argentina and Japan

Undeniably, gender equality in enrolments was attained at a very early stage in the introduction of mass primary education. The comparison of long-term trends in female enrolments in two non-Western nations demonstrated that the gender equalization of education was not solely a Western phenomenon. In primary education both Argentina and Japan attained gender equality by 1915. Argentina proved stronger and faster in equalizing enrolments, but Japan attested greater vigor in attaining a high GER. In secondary education, Argentina did not continue its path of gender equal education, nor provided much secondary education in general until Perón's rise to power in the 1940s. The 1940s present a radical break with previous enrolments; all of the sudden female enrolments rose and kept on doing so until 1964, when female enrolments reached equality. In Japan, the process transpired more gradually as a natural continuation of primary education. Still, also Japan's gender equalization in secondary education was eventually boosted by its own radical break, namely the Second World War.

How did the tenth wealthiest nation in the world and a much smaller island in the Pacific reach gender equality in their primary education systems between 1880 and 1915? What factors caused this gender equalization of education? Above all, gender equality in education was determined by politics, not by economic factors. The relation between the primary GER and GDP per capita was weak and even non-existent on a secondary school level. The economy obviously must produce enough revenue to install a mass gender equal schooling system, but it was the central government that distributed these revenues and decided to include women in education. Female primary education became compulsory and even free of charge.

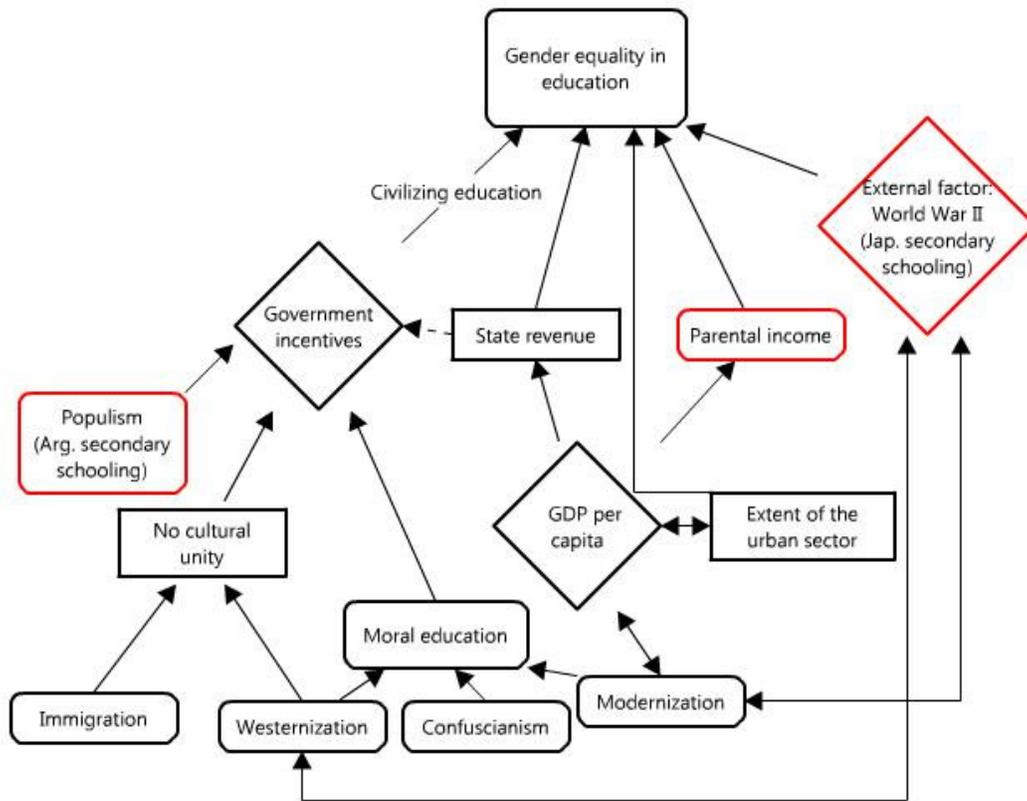
The reasons to do so were contextualized and historically set in the period of the late nineteenth century. Globalization, immigration, contact with the West and specific local cultural features such as Confucianism and Positivism determined the government's incentives to education. Globalization, immigration and modernization threatened the cultural unity of both nations and education was to instill patriotism and at the same time civilize the next generation. The incorporation of girls in this education was crucial as they would be the future mothers. Their curriculum resembled this emphasis on motherhood.

Confucianism or Catholicism were both factors that limited the traditional social sphere of women and that did not actively promote female education. Yet they proved to be no intractable barrier, once again because of a combination of historical context-bound factors. The Church was relatively weak in Argentina and the government could centralize primary education. Japanese Neo-Confucianism merged with Western thought on motherhood and an emphasis on language education, further incentives to include women in education.

In secondary education private Christian institutions presented an additional path toward education for girls, next to secondary education by the government. In Argentina, legislation hindered the bloom of private institutions and children in general were depended on provincial secondary education. The parental cost problem then became a serious problem as parents did not have money to provide secondary education and the state did not install free education. When Perón opened access to education by lowering the parental costs, the proportion of female students and the GER in general boomed. In Japan, secondary education progressed naturally, but was interrupted by the Second World War and American influence. Post-war, Japan became equalized in terms of GER and female enrolment percentage.

Flowchart 1 presents a comprehensive scheme of causal factors of gender equalization in education in Argentina and Japan. All factors presented in the flowchart were scored as significant in the different *Boolean Matrixes*. Flowchart interconnects these significant factors, thus facilitating a look into the relations between all significant factors. In the left lower corner the cultural factors can be found that led to the equalization of primary education and to some extent secondary education. These factors accumulate in government incentives. More in the middle are the economic factors in which state revenues are linked with government incentives, but there is not direct link between GDP per capita and education. The extent of the urban sector comprehends the service sector as industrialization and this combination has an effect on the gender equalization of education. The factors in red are factors that were important for secondary education specifically. The Perón, the Second World War and solving parental cost problem caused the female enrolment proportion to rise.

Flowchart 1: Factors leading to gender equality in education



Most striking about the findings of this study is that the female position in society became increasingly constrained to the private sphere at the turn of the century. Education did not belong to this private sphere, but somehow, specific female needs were being used to obtain an education. Cultural weaknesses were transformed into educational possibilities and can later be used in again to obtain more rights and education. Therefore, equalization of education was mostly a gradual process, not a revolution. For secondary education, even before the external factor of the Second World War kicked in, Japanese enrolments were well on their way to becoming gender equalized. In Argentina, income inequality and the parental cost problem in combination to low government actions were problematic in the further development of secondary education until Perón.

In general, unequal societies provide unequal educational systems and vice versa. In terms of gender equality, Japan and Argentina were able to install a gender equal mass primary education system despite their social or economically unequal societies. It is encouraging to see that the attainment of gender equality in education has historic precedence and thus *can* be reached before other millennium goals are accomplished. Even

though this historical precedence came to pass under specific historically contextualized circumstances, we have demonstrated that governmental policy was of vital interest to the gender equalization of education and even of education in general.

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