

Liberia Women's Entrepreneurship Diagnostic

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Executive Summary

Women-managed firms comprise about one-third of all formal firms in Liberia, and data tentatively shows that they have lower revenues than men-managed firms. Using a decision tree akin to the Hausmann, Rodrik and Velasco Growth Diagnostic framework, this study finds insufficient evidence that the binding constraints to women entrepreneurs in Liberia lie in access to finance rather than the fundamental business models of women entrepreneurs, i.e. their returns to investment. Moving onto potential government failures, there is insufficient evidence that what little gender difference there is in tax administration is based on the entrepreneurs' gender itself, by the reckoning of businesswomen interviewed. This study also finds no significant difference between men- and women-managed formal firms in their level of competition from informal firms, and similarly little difference between the formal women and men-managed firms in their perception of informality being a constraint. It seems that general corruption and regulatory red tape are serious problems for anyone doing business in Liberia, but there is insufficient evidence that it is discriminatory by gender. However, the balance of evidence, especially on workarounds, points to sexual harassment at international borders and domestic checkpoints being a specific binding constraint, though perhaps a less important one.

Women's general tenure insecurity over land and buildings, whether rural or urban, customary or statutory, is a binding constraint towards investing in improvements of such real property for their businesses, albeit not as binding or fundamental as some other constraints. In terms of potential coordination failures, access to business networks and market information is a binding constraint for women entrepreneurs, partly reflected in the symptom of their segmentation into lower-value activities. The balance of evidence on cultural norms about women's roles in the household does not rise to the level of a binding constraint for women SME entrepreneurs over male counterparts. In terms of infrastructure, there is insufficient evidence that electricity and water are binding constraints for women entrepreneurs. Transportation is a binding constraint for women entrepreneurs in Liberia, although not the most binding one. Human capital in both business and technical or sector-specific aspects is clearly a binding constraint for women entrepreneurs in Liberia.

As the study attempts to uncover some of the causal linkages among the various binding constraints, a syndrome emerges where cultural norms and human capital are two of the most fundamental factors underlying constrained women's entrepreneurship in Liberia, as illustrated in the following graphic, explained in more detail in the conclusion section. Further analysis might point to other root causes, and potential ways to address these constraints.



Background & methodology

One of the U.S. Government’s Development Objectives in its partnership with Liberia is sustained, market-driven economic growth to reduce poverty. In public discussions, President Sirleaf has recognized the potential contribution of women as economic agents to the Liberian

private sector.¹ The World Bank also has pointed out that “empowering [women entrepreneurs] to create jobs by facilitating their graduation from the informal to the formal sector and by helping them move up from microcredit to the small and medium enterprise sector will provide significant economic gains.”² To identify opportunities for inclusive growth relevant to women entrepreneurs and complement the 2009 gender analysis that USAID commissioned, USAID conducted this Women’s Entrepreneurship Diagnostic (WED).³ The WED incorporates USAID’s increasing focus on evidence-based policy-making to improve aid effectiveness, following the 2005 Paris Declaration on Aid Effectiveness, as well as the policy focus on inclusive growth following the 2010 Presidential Policy Directive for Global Development.⁴ At the same time, aspiring women entrepreneurs face different barriers than do their male counterparts, warranting tailored designs for them. As with other development objectives, one key step to better designed programming is identifying the most binding constraints to the outcome, i.e. those constraints that, if overcome, will unleash the greatest impact.

This diagnostic concludes with a prioritized short list of binding constraints by applying the Hausmann, Rodrik and Velasco (HRV) decisional framework best known for its role in Growth Diagnostics. These are most likely not the same binding constraints that one would find for overall growth and private investment in Liberia, nor indeed for women’s economic empowerment, only those for gender gaps in small and medium enterprise (SME) entrepreneurship in the country.

Similar to the HRV framework, this one applies four tests of differential diagnostics for women entrepreneurs compared to men entrepreneurs to check for binding constraints at each node of the tree on the next page:

1. The shadow price (real economic cost) of the constraint is high
2. Women entrepreneurs seek to bypass or get around the constraint
3. Co-movement: when the constraint is relaxed, women entrepreneurs’ investment increases
4. Constraint-intensive women-managed firms do worse.⁵

¹ Liberia: 'Positive Mentoring, Education and Partnering Promotes Women's Entrepreneurship,' Says President Sirleaf. 11 OCTOBER 2012

<http://allafrica.com/stories/201210121236.html?viewall=1>

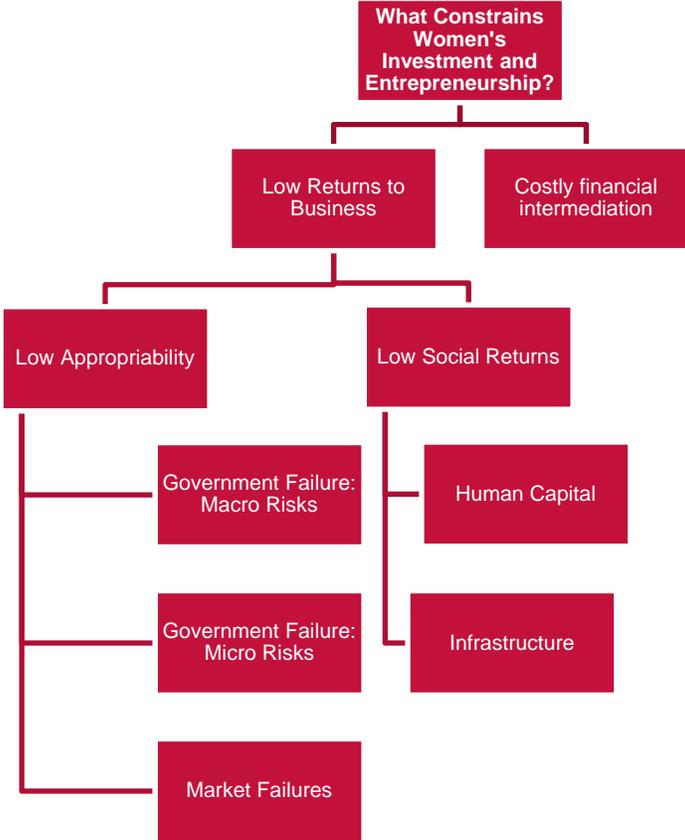
² World Bank, 2007. Liberia Gender Needs Assessment.

³ See attached document “The Women’s Entrepreneurship Diagnostic”

⁴ See Michael Crowell (2012) “Development Cooperation Approaches to Inclusive Growth” for a summary of the USAID policy framework for “broad-based” or “inclusive” growth with direct recognition of development outcomes relevant to disadvantaged groups such as women, the poor, and certain ethnicities.

⁵ See also Ricardo Hausmann, Bailey Klinger, and Rodrigo Wagner (2008) “Doing Growth Diagnostics in Practice: A ‘Mindbook’”. CID Working Paper No. 177 and Lant Pritchett (with Preya Sharma) (2008) “Implementing Growth Analytics: Motivation, Background, and Implementation.”

The analytical process involves dissecting the tree from the top down, eliminating what is not a binding constraint and ultimately concluding with an identification of the “most binding constraint” to women’s investment and entrepreneurship in Liberia. In many contexts as well as in Liberia, there is a dearth of gender-disaggregated data of firm performance over time and across different sizes, so that tests number 3 and 4 can seldom be used. At the same time, subjective perception alone is not sufficient to decide “bindingness”. As with the HRV framework, ultimately the analyst needs to use good judgment as well as objective data and expert opinion to rank constraints; part of this is asking why something is a constraint, and whether there is some other underlying causal relationship.



1. Investment supply: cost of capital

The first question is, do businesswomen have the same level of investment demand or investment supply as businessmen? If there is a problem in the latter, i.e. financial intermediation, why is that the case?

2. Investment demand:

- a. Low appropriability: Can businesswomen get or keep the returns from their businesses? Why or why not?

- i. Macro risks: tax rates and administration
 - ii. Market failures: sectoral segmentation, information and household demands
 - iii. Micro risks: corruption, registration, property rights
- b. Low social returns: Do women have the right business models for the highest returns? Why or why not?
 - i. Do women entrepreneurs have different access to infrastructure such as power and transportation?
 - ii. Do businesswomen have the human capital to maximize commercial returns?

The author used quantitative data from the World Bank’s 2009 Enterprise Survey, as well as reports of other national surveys, cited throughout this report; assessments, reports and interviews with USAID implementing partners, and other NGOs, donors and the Ministry of Commerce; and conducted several informal focus groups and other interviews with women entrepreneurs and industry associations in Monrovia.

Women-owned/managed firms in Liberia

Based on the World Bank’s 2009 Enterprise Survey in Liberia, 29.9 percent of Liberian formal firms were women-managed, much higher than the 15.3 percent average for Sub-Saharan Africa.⁶ In the same year about 53 percent of formal firms were female-owned, also much higher than in Sub-Saharan Africa (33 percent). Regardless of the gender of the top manager, most firms were owned by men (see Table 1). Building Markets’ supplier registry, in contrast, had 34 percent women-owned firms and 33 percent women-managed firms registered in 2013.⁷ In any case, in this study we focus on management rather than ownership of firms as a better indicator of the woman’s decision-making role.

In the Enterprise Survey, formal women-managed firms did not differ substantially in age from men-managed ones, on average being quite old (11 years, see Table 2). They were significantly more likely to be sole proprietorships, and much less likely to be partnerships, limited or otherwise.

⁶ A basic limitation of the data is that the 2009 Enterprise Survey was limited to formal firms in manufacturing and services only; and more importantly, of the 150 firms surveyed, only 48 reported the gender of the top manager, and only 11 of those firms had a female top manager. Among the already few women-managed firm respondents, it is also not meaningful to ask which type of firms performed better.

<http://www.enterprisesurveys.org/~media/FPDKM/EnterpriseSurveys/Documents/Profiles/English/liberia-2009.pdf>

⁷ Building Markets. June 2013. *Market Overview Report*. Building Market’s database is to support buyer-supplier connections and while very comprehensive, does not represent a random sample of Liberian firms.

Table 1: Female ownership and management in Liberia

Gender of top manager	Largest owner is female	Largest owner is male	Owner gender unknown
Female	10%	80%	10%
Male	12.5%	75%	12.5%

Source: WB Enterprise Survey 2009

Table 2: Characteristics of firms by gender of manager

Economy	Subgroup Level	Age (years)	Percent of firms with legal status of privately held Limited Liability Company	Percent of firms with legal status of Sole Proprietorship	Percent of firms with legal status of Partnership	Percent of firms with legal status of Limited Partnership
All		15.3	37.1	41.9	8.4	5.9
Sub-Saharan Africa		13.1	24.0	55.4	9.8	5.5
Liberia		8.5	5.3	77.8	14.0	2.0
Liberia	Top manager is female	10.7	19.9	25.2	54.9	0.0
Liberia	Top manager is male	11.0	18.9	1.5	62.4	13.6

Source: WB Enterprise Survey 2009

Contrasting this to the much higher of employed females who were self-employed than males (see Table 3), and the robust ratio of female to male labor force participation (90.3 percent), it seems that there are many more women-owned/managed microenterprises with fewer than 5 employees than women-managed small and medium enterprise (SMEs) with more than 5 employees. Capacity utilization among formal, women-managed manufacturing firms was at 75 percent in 2009, not significantly different from the 72.3 percent for men-managed equivalents.⁸

⁸ World Bank Enterprise Survey, 2009.

Table 3: Self-employment rates in Liberia, 2010

Self-employed, female (% of females employed)	91.1
Self-employed, male (% of males employed)	72.3
Self-employed, total (% of total employed)	81.7

Source: WDI

Table 4: Mean annual sales, 2009

	Mean annual sales, thousands LRD	Mean annual sales, USD
Liberian firms	14,070	187,601
Women-managed firms	22,894	305,251
Men-managed firms	4,710	62,799

Source: WB Enterprise Survey

It appears from the above table that those women-managed firms who were established did exceedingly well in terms of annual sales, and nearly five times as well as the average men-managed firm.⁹ A very different picture is reflected in the supplier database of a USAID-supported project, however, in 2013 (see Table 5), which includes close to 1500 registered businesses in USAID-focus counties (including Montserrado County). This suggests that one outlier women-managed firm in the small Enterprise Survey sample skewed the distribution, and that women-managed businesses are not as large in terms of revenue.

Table 5: Averages sales in USD, 2013

	Average of USD sales last year
Men-managed	175,589
Women-managed	43,438
Total	131,106

Source: Building Markets supplier database, 2013¹⁰

Indeed, the World Bank Enterprise Survey data shows that in 2009, men-managed firms were growing at a much faster rate than were women-managed firms (Table 6). Also, there had been little turnover in firms, and most firms surveyed existed 3 years prior. This seems still to be the case—one IFC Business Edge advisor noted that most SMEs in Liberia are established institutions with the same contracts with customers, and that there is little dynamism and turnover.

⁹ There was one outlier women-managed firm whose annual sales was four times that of the next biggest sales figure, and also four times the annual sales of the revenue of the biggest men-managed firm (in terms of revenue).

¹⁰ While this database is more recent than the Enterprise Survey, it was not taken from a random sample and the rest of the data points were not standardized enough for use in this analysis.

Table 6: Growth in sales

	Change in annual sales from 3 years ago (times) ¹¹
Women-managed firms	130
Men-managed firms	661

Source: WB Enterprise Survey 2009

Consistent with most economies, women-managed firms tend to have fewer employees:

Table 7: Firm size (number of employees)

Number of employees	Women-managed firms	Men-managed firms
5-19	63.6 %	51.4%
20-99	36.4%	29.7%
Over 100	0%	18.9%

Source: WB Enterprise Survey

Across gender of manager, most firms surveyed (from which agricultural firms were excluded) were in manufacturing and other services (see Table 8). There were some slight differences in sectoral patterns across gender, especially with women-managed firms missing in wholesale trade compared to men-managed firms, but also more likely to be in construction, basic metals, retail and hotel/restaurants. According to the World Bank, more women than men worked in agricultural processing and trading in rural areas in 2007, likely as microentrepreneurs.¹² At the SME level, it seems that Liberian firms in general are mostly excluded from the natural resource sectors with the most immediate growth potential, including mining, tree crops (rubber) and forestry¹³, and women-managed firms are missing in those sectors as well as agricultural exports.^{14,15}

¹¹ While these numbers seem extremely large, they reflect a very small sample size from the World Bank Enterprise Survey, as described previously, as well as the strong growth of these Liberian firms between 2006 and 2009 from a low base.

¹² WB Small-Scale Gender and Agriculture Survey (SSGAS), 2007.

¹³ World Bank, 2012. Inclusive Growth Diagnostic: Liberia.

¹⁴ World Bank, 2007. Gender Needs Assessment: Liberia.

¹⁵ A key question here, as with all such analyses, is whether established women-managed firms face the same binding constraints as do potential women-managed firms. Unfortunately, for one reason or another, current available data on established women-managed firms does not allow distinguishing among their experiences. Firm size distributions also vary greatly across countries. Anecdotally, one business advisor estimated that about half of current SMEs in Liberia started as microenterprises, which suggests that challenges for start-ups graduating into SMEs are relevant.

Table 8: Sector of firms by gender of manager

Sector	Percentage of women-managed firms	Percentage of men-managed firms
Other manufacturing	36.4%	35.1%
Garments	0%	8.1%
Basic metals	9.1%	0%
Chemicals	0%	2.7%
Plastics & rubber	0%	2.7%
Construction	9.1%	2.7%
Other services	18.2%	18.9%
Retail	9.1%	2.7%
Hotel & restaurants	9.1%	2.7%
Transport	9.1%	10.8%
IT	0%	2.7%
Total	100%	100%

Source: WB Enterprise Survey, 2009

Financial intermediation

Starting at the top of the tree, are women entrepreneurs more constrained in access to finance than are men? The best shadow price for credit is interest rates, but Enterprise Survey data on interest rates, loan collateral and loan applications were not available, sometimes due to confidentiality, or sometimes because respondents declined to report these data. Only 6.3 percent of female-managed formal firms reported having a bank loan or line of credit, showing access to formal credit that was slightly lower than male-managed firms (see Table 9).¹⁶ A similar pattern is reflected in the broader population: 1.9 percent of females aged 15 years and over had a loan for business purposes, lower than the 6.1 percent for males (2011 data, World Bank Global Findex.) According to the World Bank, in 2007 much fewer businesswomen could access larger loans, e.g. a credit line from the National Investment Commission of US\$5,000–\$25,000.¹⁷

¹⁶ This represents only two women-managed firms, and only one female-owned firm had a bank loan, so generalizable conclusions cannot be drawn from their loan application experiences and collateral requirements.

¹⁷ World Bank, 2007. Liberia Gender Needs Assessment.

Table 9: Access to finance

Economy	Subgroup Level	Percent of firms with a checking or savings account	Percent of firms with a bank loan/line of credit	Percent of firms not needing a loan	Percent of firms using banks to finance investments	Percent of firms using banks to finance working capital
Sub-Saharan Africa		86.6	22.0	34.7	15.1	19.9
Liberia		67.8	14.0	37.9	10.1	12.8
Liberia	Top manager is female	98.9	6.3	57.7	1.8	3.5
Liberia	Top manager is male	61.3	9.9	47.3	0.0	7.4

Source: WB Enterprise Survey 2009

In terms of women entrepreneurs working around this, the flip side of the relatively low access to credit in Liberia was that most firms, regardless of owner's gender, relied on internal financing for investments (see Table 10.) Of those firms with bank credit, it seems that female-managed firms tend to use credit for investment a bit more than male-managed ones, whereas the opposite is true for using credit to finance working capital. Nonetheless, of those female-managed firms without loans, 57.7 percent said they did not need the loan, significantly higher than compared to male-managed firms without loans.

Table 10: Sources of finance, finance as a constraint

Economy	Subgroup Level	Percent of firm establishments that purchased fixed assets in past year	Proportion of investments financed internally (%)	Percent of firms identifying access to finance as a major constraint
Sub-Saharan Africa			79.3	44.9
Liberia		69.3	79.8	35.0
Liberia	Top manager is female	81.8	95.4	43.4
Liberia	Top manager is male	64.9	94.4	42.3

Source: WB Enterprise Survey 2009

There was no data on finance over time that would allow checking for co-movement of women’s commercial investments and credit supply. Looking at the holdings of fixed assets¹⁸, women-managed firms had on average fewer real estate assets in terms of value (Table 11), although they had on average many more times the value of machinery, vehicles and equipment than men-managed firms in the Enterprise Survey. Also, branches of women-managed firms were more likely to have purchased fixed assets in the previous year (Table 10). Many businesswomen interviewed mentioned that they needed financing for machinery, vehicles and equipment, and that they lacked sufficient real property collateral to qualify for the amount of bank loans they needed. However, the lower holdings of real property at least may reflect a tendency for women entrepreneurs to concentrate in lower capital-intensity parts of their sectors, and explain their lower demand for credit compared to male entrepreneurs. In other words, it is hard to apply the fourth test on capital-intensive women-managed firms, because there are too few of them.

Table 11: Average book value of fixed assets in last fiscal year (LRD)

	Net book value of Machinery, vehicles and equipment	Net book value of land and buildings
Liberian women-managed firms	1,262,900,000	1,172,944,000
Liberian men-managed firms	3,158,300	5,405,503,000

Source: WB Enterprise Survey 2009

In the Enterprise Survey, there is little evidence that established women-managed firms find access to finance a bigger constraint than do men-managed firms, by their own reckoning (see Table 10). Many sources mention how few lenders operate outside Monrovia, although this is a constraint for rural businessmen as well as businesswomen. A USAID/Liberia project supporting productivity in the higher-value oil palm sector reported that while few male oil palm producers purchase mechanized equipment, women smallholders and a women’s producer group who obtained loans from an MFI or a commercial bank used the funds exclusively for inputs, production and bulk buying for trade. One reason none of the women purchases processing equipment is likely their lower awareness of the commercial returns from mechanized processing, as well as their lower mechanical knowledge.¹⁹

Even for those women who cannot access the right loans, it seems that this is mostly because of property rights issues for collateral and lower skill levels, not necessarily bank practices that discriminate against women.²⁰ Anecdotally, while many businesswomen’s first response to the question on constraints was access to finance, most of these responses seemed directed at some special consideration for them such as waiving specific loan requirements, or even soft grant funding. Many of these entrepreneurs seem more fundamentally to lack information and

¹⁸ Such as machinery, vehicles, equipment, land or buildings.

¹⁹ ACDI/VOCA & Winrock International. 2013. SHOPS Year 2 Progress Report.

²⁰ IRIN News, 2009. “LIBERIA: Banks to Women: No House, No Loan.” <http://www.irinnews.org/Report/83985/>; World Bank, *Gender Needs Assessment 2007*.

understanding of market demand and prices, and at least two NGOs focused on enterprise development did not think that the access to finance challenge was unique to women-managed SMEs, nor indeed to Liberia. The Minister of Commerce, during a consultation with USAID’s Senior Deputy Acting Administrator Charles North, suggested that women entrepreneurs’ real challenge was actively understanding and selling to market demand, rather than access to finance. **In sum, there is insufficient evidence that the binding constraints lie in access to finance rather than the fundamental business models of women entrepreneurs, i.e. their returns to investment.**

Appropriability

Macro risks: tax rates and administration

If the supply of finance is not the binding constraint, are there government or market failures that are? One shadow price of government failures in tax rates or administration could be measures of the amount of time entrepreneurs spent with officials. In the Enterprise Survey, while the number of visits with tax officials did not differ significantly between female or male-managed firms, the subjective perception of tax rates and administration as a major constraint was higher among women-managed firms (Table 12.) It seems plausible that these women-managed firms with significantly higher revenues than men-managed ones would attract more attention from all sorts of officials, including tax officials. **There is insufficient evidence that what little difference there is in tax administration is based on the entrepreneurs’ gender itself, by the reckoning of businesswomen interviewed.**

Table 12: Tax rates and administration

Economy	Subgroup Level	Number of visits or required meetings with tax officials	If there were visits, average number of visits or required meetings with tax officials	Percent of firms identifying tax rates as a major constraint	Percent of firms identifying tax administration as a major constraint
Sub-Saharan Africa		2.7	3.6	36.1	26.5
Liberia		6.5	7.0	19.0	13.0
Liberia	Top manager is female	4.5	4.5	34.3	34.3
Liberia	Top manager is male	5.1	5.8	14.0	8.2

Source: WB Enterprise Survey 2009

Informality or the decision not to register one's business sometimes reflects businesses' degree of unwillingness to pay posted taxes or comply with tax regulations. The 2007 Comprehensive Food Security and Nutrition Survey in rural areas found that among those who had businesses, women were more likely than men to have informal arrangements (only 4 percent of women had a registered business, compared with 14 percent of men).²¹ However, the perception among Liberian Enterprise Survey respondents of informal competitors being a constraint was lower than that for Sub-Saharan Africa by 10 percentage points (see Table 13). Most importantly, in terms of the shadow price of informality, **there was no significant difference between men and women-managed formal firms in their level of competition from informal firms, and similarly little difference between the formal women and men-managed firms in their perception of informality being a constraint.** Again, this points to tax rates and administration not being a binding constraint.

Table 13: Informal practices and perceptions

Economy	Subgroup Level	Percent of firms competing against unregistered or informal firms	Percent of firms formally registered when they started operations in the country	Number of years firm operated without formal registration	Percent of firms identifying practices of competitors in the informal sector as a major constraint
Sub-Saharan Africa		64.9	82.5	0.7	37.6
Liberia		66.2	73.8	0.6	22.9
Liberia	Top manager is female	62.9	97.2	0.1	31.4
Liberia	Top manager is male	60.7	98.0	0.0	33.9

Source: WB Enterprise Survey 2009

Micro risks:

Corruption & Regulations

As for microeconomic risks, an important area is government regulations and corruption. In terms of the shadow price, across specific interactions with the executive branch of government, women entrepreneurs were expected to give gifts or asked to pay bribes most of the time, and around twice as often as were men entrepreneurs (Table 14). For all public transactions, women entrepreneurs encountered informal payment requests over three times as often as their male counterparts did. Again, this could be attributed to the much larger average sales among women-managed firms in the same survey, but only if officials knew the real revenue of these businesses.

²¹ World Bank, 2007. Liberia Gender Needs Assessment.

Not surprisingly, women entrepreneurs in the Enterprise Survey were three times as likely as businessmen to identify corruption as a major constraint to their operations. However, women and men entrepreneurs were equally unlikely to see the courts system as a major constraint.

Table 14: Corruption

Economy	Subgroup Level	Percent of firms expected to give gifts to public officials "to get things done"	Percent of firms expected to give gifts in meetings with tax officials	Percent of firms expected to give gifts to get an operating license	Percent of firms experiencing at least one bribe payment request	Bribery depth (% of public transactions where a gift or informal payment was requested)	Percent of firms identifying corruption as a major constraint	Percent of firms identifying the courts system as a major constraint
Sub-Saharan Africa		34.9	18.2	19.8	23.2	18.4	37.2	14.5
Liberia		55.4	54.4	49.6	70.5	55.3	31.2	18.3
Liberia	Top manager is female	93.3	86.3	76.9	86.3	84.0	64.6	6.6
Liberia	Top manager is male	42.1	31.8	8.6	48.6	23.5	20.7	5.3

Source: WB Enterprise Survey 2009

As for the shadow price of specific regulations, women entrepreneurs generally spent more time dealing with government regulation requirements and obtaining an operating license, and were about five times as likely as their male counterparts to identify business licensing and permits as a major constraint (see Table 15). Some of this may, however, be attributed to weaker understanding of regulatory requirements among women entrepreneurs, based on some interviews with them. In the Enterprise Survey there was no significant difference between the perceptions of women and men entrepreneurs on customs and trade regulations as a major constraint, and a slightly lower perception among women entrepreneurs of labor regulations as a major constraint. Indeed, women traders interviewed stated that there was a going rate for bribes regardless of the gender of the trader.

On these various regulatory and corruption issues there was no data or reports of women entrepreneurs seeking to bypass the constraint, and indeed there was no gender gap in perceptions of informality as a constraint. Nor is gender-disaggregated data on these issues over time available. **It seems that general corruption and regulatory red tape are serious problems for anyone doing business in Liberia, but there is insufficient evidence that it is discriminatory by gender.**

Table 15: Regulations

Economy	Subgroup Level	Senior management time spent dealing with the requirements of government regulation (%)	Days to obtain an operating license	Percent of firms identifying business licensing and permits as a major constraint	Percent of firms identifying customs and trade regulations as a major constraint	Percent of firms identifying labor regulations as a major constraint
Sub-Saharan Africa		7.5	24.9	16.2		13.4
Liberia		7.5	16.0	17.5	14.7	11.9
Liberia	Top manager is female	17.1	17.9	32.5	18.2	7.3
Liberia	Top manager is male	10.8	11.1	6.3	16.2	13.3

Source: WB Enterprise Survey 2009

However, there have been reports of sexual harassment of international women traders, whose turnover is in thousands of US Dollars, at land crossings, according to a representative of the Liberia Marketers Association as well as UN Women. This is especially serious at the border with Cote d'Ivoire. Individual women traders who have complained to foreign authorities and whose confidentiality was not protected have been since blocked from crossing specific borders. One donor supporting the Association of Women in Cross-Border Trade noted that as a way to get around this issue, some women entrepreneurs choose to send their goods across in the name of a (male) truck driver and agent, and cross the border separately from their goods. To help women traders address this issue, UN Women has supported the Cross-Border Traders Association to issue membership cards to help identify the women as having access to advocacy channels with government agencies. Sexual harassment is also a challenge at internal checkpoints in Liberia, set up by various Government agencies, particularly because male security inspectors may physically inspect women traders.

The World Bank Enterprise Survey did not ask about sexual harassment at borders, including by inspectors, and there is no data on sexual harassment lessening at specific points in time. On the other hand, women outside of trade and wholesale did not mention this challenge in interviews.

The balance of evidence, especially on workarounds, points to sexual harassment at international borders and domestic checkpoints being a specific binding constraint, though perhaps a less important one.

Property rights

As a proxy for the shadow price of real property tenure, as shown in Table 11, fixed assets of women-managed firms tended to concentrate in machinery, vehicles and equipment, and these

firms had much lower average holdings of land and buildings compared to men-managed firms. The 2006 Comprehensive Food Security and Nutrition Survey found that 16 percent of women, compared to 33 percent of men, owned land. An even lower proportion--11 percent of women, compared to 20 percent of men--had title to land. On the books, Liberian marriage and inheritance laws give male and female surviving spouses and sons and daughters equal inheritance rights to movable and immovable property.²² However, women married under customary law are considered legal minors in Liberia.²³ In practice, many legal protections are not enforced, especially for land under customary tenure (i.e., not privately deeded).

For example, since most Liberian women marry outside their community of birth, they are considered outsiders in the community they live in and community leaders systematically favor men in land disputes.²⁴ Sons rather than daughters usually manage jointly inherited rural land, and daughters who do inherit tend to inherit smaller plots than do their brothers.²⁵ Divorced women and childless widows also often lose access to the land and tree crops that she may have planted or tended with her former/late husband. However, there are signs of improvements for rural women's land rights, especially in some clans that are more connected to the capital.²⁶ In Monrovia, where land deeds are common, regardless of who contributed funds for property purchase, Liberian men often purchase property in their own name or a third party's name. There is no requirement for spouses to be co-named on deeds during property purchases, nor are there public records of ownership and transfer of privately deeded property. As a way of bypassing this issue, some better educated, urban women purchase property in their own name or in a child's name to protect themselves against costly disputes in case of divorce or their husband's death.²⁷

Table 16: Access to land for firms

Economy	Subgroup Level	Percent of firms identifying access to land as a major constraint
Liberia		20.0
Liberia	Top manager is female	27.7
Liberia	Top manager is male	18.9

Source: WB Enterprise Survey 2009

²² World Bank, Women, Business & the Law database, 2011.

²³ OECD, Social Institutions & Gender Index (SIGI), 2012.

²⁴ Ibid.

²⁵ Namubiru-Mwaura, Evelyn L. et al. 2012. Land Policy & Institutional Support (LPIS) Project: Customary Land Tenure in Liberia: Findings & Implications drawn from 11 Case Studies.

²⁶ Namubiru-Mwaura, Evelyn L. et al. 2012. Land Policy & Institutional Support (LPIS) Project: Customary Land Tenure in Liberia: Findings & Implications drawn from 11 Case Studies.

²⁷ Jappah, Ruth et al. 2012. LPIS project: Women's Land Rights Study.

In terms of land use for commercial purposes, the MCC Threshold Program on land tenure found that married women who farm land with their husbands often have say over the proceeds from seasonal crops, but less say than their husbands in the cultivation process and over the proceeds from higher-value, tree crop sales.²⁸ Anecdotally, few unmarried and married tradeswomen have legal or actual use rights over land or houses, and thus cannot present the collateral needed for credit; whereas widows who do inherit property, in a way those who are not constrained in property rights, are able to borrow against it.²⁹ Not surprisingly, proportionally more women-managed firms find access to land a serious constraint (Table 16). However, there have not yet been sufficiently significant changes in women's land tenure rights in the past for corollary changes in women's entrepreneurship to be observed over time.

In sum, women's general tenure insecurity over land and buildings, whether rural or urban, customary or statutory, depends on a range of communal and family life factors that may be completely unrelated to market conditions, and is a binding constraint towards investing in improvements of such real property, in cases where they need the property for their businesses³⁰. Land and buildings are needed for a variety of sectors, from agriculture to wholesale trading.

Besides cultural norms, another underlying cause for weaker property rights for women is that women tend to have lower levels of education and awareness of legal rights and processes. For example, 32 percent of rural men and 28 percent of rural women in 2006 believed that the law did not allow women to own land.³¹ Women are even less likely than men to have the time, resources and knowledge to file a land dispute.³² **All this points to poor property rights in land and buildings being a binding constraint for women entrepreneurs, albeit not as binding or fundamental as some other constraints.**

Market Failures

Sectoral segmentation, networks and information

As discussed in the introductory section, there is some sectoral segmentation for women entrepreneurs compared to male entrepreneurs in Liberia. As a proxy for the shadow price of segmentation, women entrepreneurs are especially underrepresented in some traditionally male sectors with higher added value and growth potential such as wholesale; and in higher-value segments of agriculture, such as exports. It seems that the same reason for Liberian firms' overall

²⁸ Namubiru-Mwaura, Evelyn L. et al. 2012. Land Policy & Institutional Support (LPIS) Project: Customary Land Tenure in Liberia: Findings & Implications drawn from 11 Case Studies.

²⁹ IRIN News. <http://www.irinnews.org/Report/83985/>

³⁰ Namubiru-Mwaura, Evelyn L. et al. 2012.

³¹ World Bank, 2007, SSGAS.

³² Jappah, Ruth et al. 2012. LPIS project: Women's Land Rights Study.

absence in natural resource sectors also holds true for women entrepreneurs in these higher value added segments, which is their lack of information and coordination about where growth sectors in the economy are.³³ For example, one interesting pattern for the Goldman Sachs-supported 10,000 Women program in Liberia, which delivers an MBA-style program for underserved women, is that many of their graduates understand the market better—become less intensive in the information constraint--and improve their businesses afterwards by changing sectoral focus. These women entrepreneurs would either drop their previous line of business entirely, or add a new line to their business, such as moving into wholesale trade.

Related to these weaker networks is weaker access to market information, especially on trends in demands and prices in different sectors, and information about customers as well as suppliers. Another symptom of this is a common complaint among women entrepreneurs of difficulty finding appropriate packaging and labeling, although such vendors exist in Liberia. One woman entrepreneur interviewed bought a small packaging machine from a local supermarket as an attempt to bypass the constraint, since she did not know where to obtain industrial-strength equipment. Challenges linking to processing technology and services were also common complaints among women entrepreneurs in agriculture, and have persisted since at least 2007.³⁴ Reflecting a broader challenge of access to different media, men have greater access than women to radios (28 percent versus 15 percent).³⁵

As in many other countries, men and women entrepreneurs have different business networks and contacts. The 10,000 Women program found that one of their activities that participants appreciated the most was networking with loan officers, industry players and others for business purposes (as opposed to personal and social contacts), which was a new concept for them. On a more formal level, there have been at least two women-focused business associations that broke out of the established chambers of commerce because they felt that these were not meeting their needs—bypassing the networking constraint. In the Liberian Chamber of Commerce, for example, about 10 percent of members are women, despite the larger proportion of women entrepreneurs in the local economy. **In sum, access to business networks and market information is a binding constraint for women entrepreneurs, partly reflected in the symptom of their segmentation into lower-value activities.**

Mobility, household responsibilities

Finally, other cultural norms pose challenges for women entrepreneurs. The Liberian Marketers Association, USAID implementing partners, and others cited the childcare and other household responsibilities that women shoulder. To bypass this constraint, the Liberian Marketers Association, of whom the majority is women traders, set up subsidized childcare centers in three

³³ World Bank, 2012. Inclusive Growth Diagnostic: Liberia.

³⁴ World Bank, 2007. Liberia Gender Needs Assessment.

³⁵ Ibid.

markets. However, this constraint tended to be cited with regard to self-employed women in microenterprises, and there is no other evidence suggesting this is a binding constraint—indeed, one donor noted that in contrast to other African countries, there are some well-known and successful women entrepreneurs as role models in Liberia. **In sum, the balance of evidence on cultural norms about women’s roles in the household does not rise to the level of a binding constraint for women SME entrepreneurs over male counterparts.**

Social Returns

Infrastructure

In terms of electricity as a potential business constraint, the main difference between women- and men-managed firms seemed to be subjective perceptions, with 20 percentage points’ more (and the majority of) women-managed firms identifying electricity as a major constraint (see Table 17). Losses due to outages can be a measure of the shadow price for electricity, and generators are a common workaround for poor availability of electricity. However, there was no significant difference in their experiences with outages, although women-managed firms were more likely to use generators, and obtained more of their electricity from their generators. On the other hand, almost no businesswomen or donor partners mentioned electricity as a special constraint for women entrepreneurs. The story is similar for water (Table 18.) **There is insufficient evidence that electricity and water are binding constraints for women entrepreneurs.**

Table 17: Electricity

Economy	Subgroup Level	Number of electrical outages in a typical month	Duration of a typical electrical outage (hours)	Losses due to electrical outages (% of annual sales)	Percent of firms owning or sharing a generator	Proportion of electricity from a generator (%)	Percent of firms identifying electricity as a major constraint
Sub-Saharan Africa		8.9	5.3	5.1	44.3	12.9	49.2
Liberia		1.7	1.5	0.8	66.5	63.1	59.1
Liberia	Top manager is female	2.2	0.5	0.3	73.7	73.7	68.5
Liberia	Top manager is male	0.9	0.6	0.8	63.5	63.2	48.4

Significantly more women-managed firms cited transportation as a major constraint, although only a third of them saw it as problematic and the gender gap is smaller than that for perceptions

of electricity (see Table 18). While the Enterprise Survey asked about losses due to domestic shipping, which could be a good measure of the shadow price, respondents declined to answer this question.

Table 18: Water and transportation

Economy	Subgroup Level	Number of water insufficiencies in a typical month	Percent of firms identifying transportation as a major constraint
Sub-Saharan Africa		2.4	26.9
Liberia		2.3	39.3
Liberia	Top manager is female	2.7	33.2
Liberia	Top manager is male	2.3	22.3

According to the World Bank, “market women” are dominant in rural and rural-to-urban agricultural trade, which is a sector that relies much on transportation, or is transportation-intensive. “Women did 80 percent of all trading in rural areas in 2001 (MoA, 2002), and according to the SSGAS (2007), women make almost twice as many trips to the market as men: 8.4 a month, on average, compared with 4.8.”³⁶ This reflects the time cost aspect of the shadow price of transportation. In interviews with women entrepreneurs in agricultural processing, production and trading, almost all of them cited the poor road system, especially between Monrovia and rural areas, as a serious constraint. Transportation costs are a large portion of these traders’ costs, reflecting a high shadow price, and limit their ability to act on some market information, even if they had it. There is no systematic information that the author could find on how women entrepreneurs might bypass this issue (the second test) or whether market women have lower returns compared to other businesswomen (the fourth test), nor on the effect of any road improvements on market women’s returns (the third test). **In sum, transportation is a binding constraint for women entrepreneurs in Liberia, although not the most binding one.**

Human capital

Conceptually, the shadow price of human capital would be returns on education, especially business or technical education; but such data is not available in Liberia, nor indeed in most contexts. Instead we can look at literacy outcomes and enrollment ratios. Looking at general literacy rates, in 2010 there was an 8-percentage point gap between the literacy rates of women

³⁶ World Bank, 2007. Liberia Gender Needs Assessment.

and men, although this was smaller than the average gap for Sub-Saharan Africa (see Table 19). Literacy rates overall in Liberia are significantly lower than those in Sub-Saharan Africa.

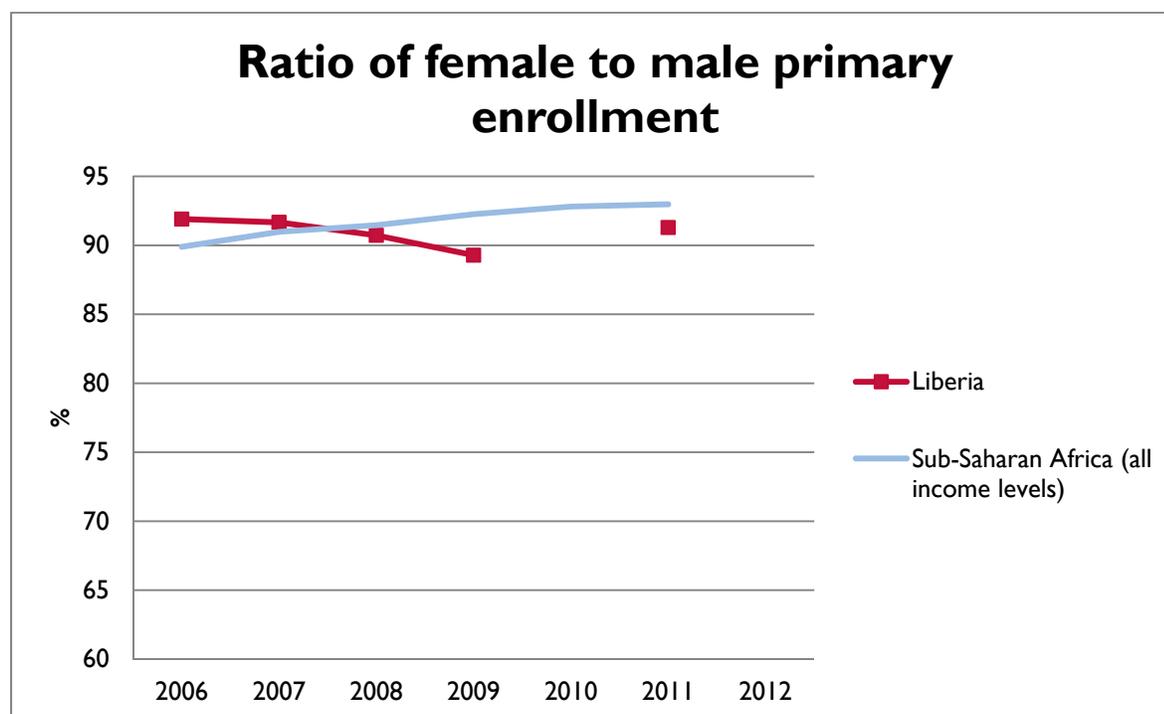
Table 19: Literacy rates across genders, 2010

	Literacy rate, adult female (% of females ages 15 and above)	Literacy rate, adult male (% of males ages 15 and above)
Liberia	56.8	64.8
Sub-Saharan Africa (developing only)	54.1	71.0
Sub-Saharan Africa (all income levels)	54.2	71.0

Source: WDI

Looking at enrollment, Liberia’s primary enrollment gender ratio has been less than equitable, and the gap has been slightly larger than that for Sub-Saharan Africa since 2008 (see Figure 1). The 2011 ratio for secondary enrollment³⁷ is also inequitable, although the gender gap is comparable to that for Sub-Saharan Africa.

Figure 1: Ratio of Female to Male Primary Enrollment³⁸

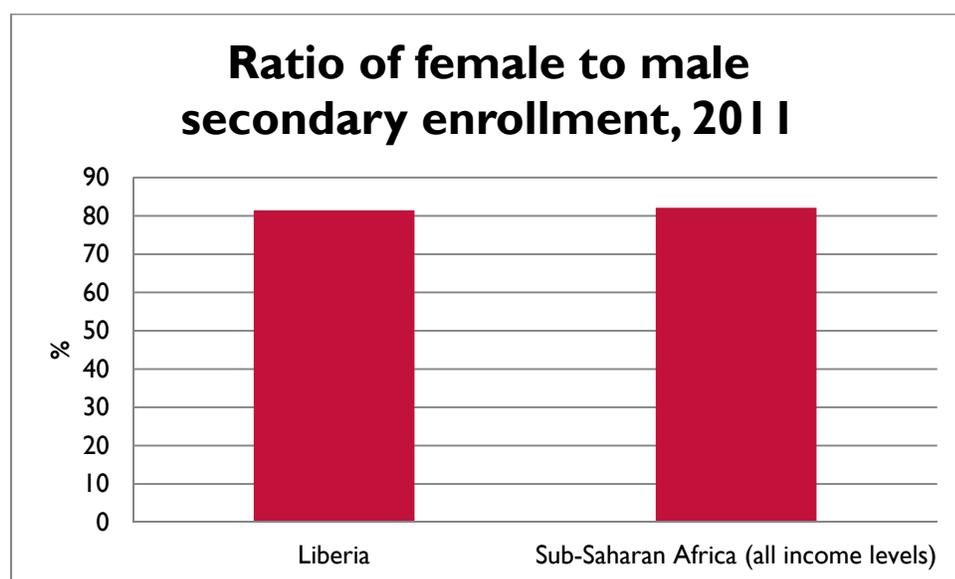


Source: WDI

³⁷ The only data point available in the last 10 years for Liberia

³⁸ The data for all Sub-Saharan Africa and developing Sub-Saharan Africa is so similar that the lines overlap in the graph.

Figure 2: Secondary enrollment in 2011



Source: WDI

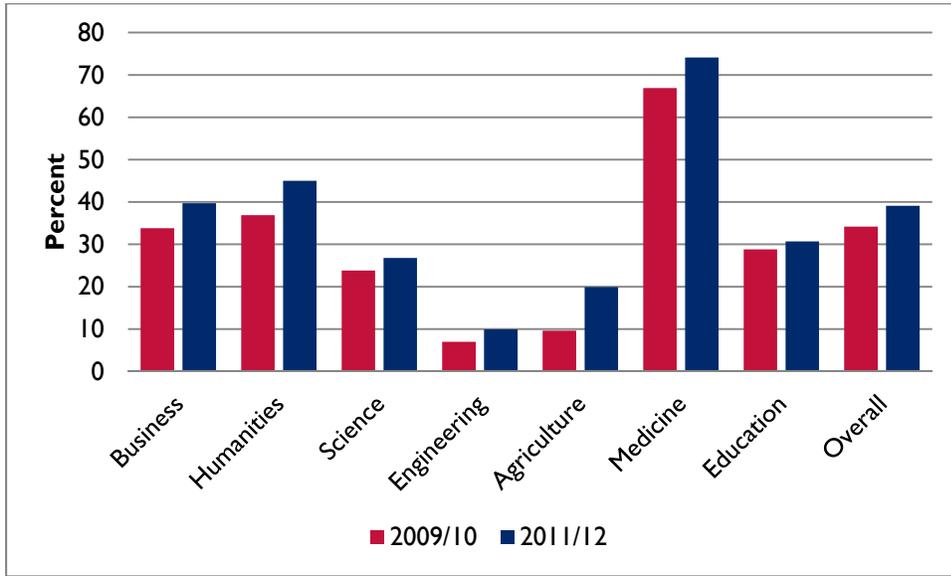
Not surprisingly, by the university level, there are much fewer women. In 2011, 39 percent of students enrolled in higher education were female, and the ratio is lower in more competitive institutions and majors.³⁹ For example, in 2012 University of Liberia received about 24,000 applications, of which about one-third were from women; and 28 percent of their student population was female. In associate degree programs, by contrast, 54 percent of students are female. As a result, although gender parity in higher education enrollment is slowly improving, only 0.7 percent of Liberia women have completed higher education, compared to 3.4 percent of Liberia men.⁴⁰ Women are also underrepresented in some of the more important university majors for Liberian entrepreneurship, including business, agriculture and engineering (Figure 3). While the gender gaps there are closing somewhat, growth of female enrollment in those tracks is still far behind that for humanities and arts (Figure 4). One important reason that female enrollment in agriculture has grown, for example, is the provision of scholarships for these students.⁴¹ (It is too early to know how much these future graduates who are less constrained in this regard might apply their knowledge in agricultural exports, for example; and also too early to tell if increased women's entrepreneurship will follow the narrowing gender gap in higher education.) This gendered streaming effect may be one reason for the segmentation of women entrepreneurs out of sectors like wholesale, or their lower representation in higher-value agricultural exports, ultimately reflecting fundamental social norms surrounding the work women should do.

³⁹ 2012. Diagnostic Paper for Higher Education in Liberia.

⁴⁰ 2010 Core Welfare Indicators Questionnaire.

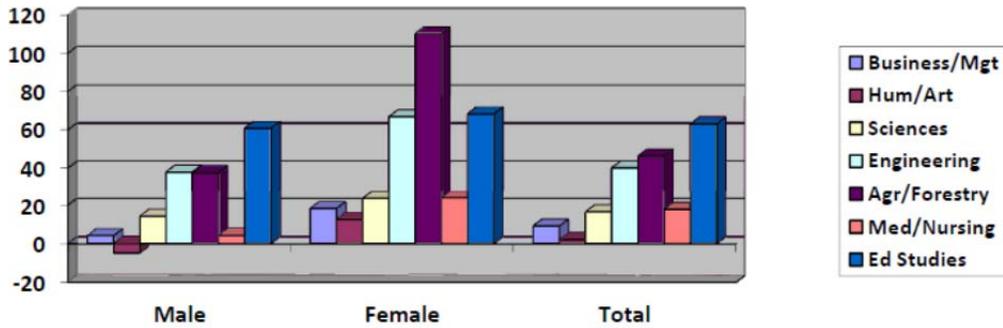
⁴¹ 2012. Diagnostic Paper for Higher Education in Liberia.

Figure 3: Share of female students in major areas of study, Liberia



Source: Higher Education Institutions Surveys

Figure 4: Growth rates for higher education fields of study by sex



Source: HEIs Survey 2009/10 and 2011/12

Indeed, in terms of business and technical skills specifically, women entrepreneurs had on average 6 fewer years' experience in their firm's sector than did their male counterparts (Table 20).

Table 20: Years of experience in firm's sector, 2009

Economy	Subgroup Level	Years of the top manager's experience working in the firm's sector
Sub-Saharan Africa		13.4
Liberia		11.9
Liberia	Top manager is female	7.3
Liberia	Top manager is male	13.3

Source: WB Enterprise Survey 2009

Women entrepreneurs' lower literacy and ability to write business plans have been cited as a constraint⁴², especially for rural women. Looking at actual financial practices in the general population, women were about as likely as men to save in 2011, but less likely to save more formally (see Table 21).

Table 21: Savings practices in Liberia, 2011

Indicator	2011
Saved any money in the past year, female (% age 15+)	34.0
Saved any money in the past year, male (% age 15+)	35.8
Saved at a financial institution in the past year, female (% age 15+)	11.1
Saved at a financial institution in the past year, male (% age 15+)	16.8

Source: World Bank Global Findex.

In a mini-focus group discussion with women entrepreneurs who have received multiple business trainings, including business planning, these entrepreneurs actively seeking to grow their small businesses identified further advisory services to help them understand their cost structure and set prices as their top need, and also requested technical training specific to their sector of business, as a way of bypassing the constraint. Similarly, some 10,000 Women participants who changed sectors requested technical advice on their new industry. **This is another symptom of human capital in both business and technical aspects being a binding constraint for women entrepreneurs.**

Human capital is clearly a binding constraint for women entrepreneurs in Liberia; what are some of the underlying causes? Lower enrollment rates for young women across educational levels and in specific subjects reflect a number of factors at work throughout their educational experience. Reports of transactional “sex for grades” in universities point to systematic sexual violence between male lecturers and female students, as well as broader sexual harassment of female students in university settings⁴³. (Male students, on the other hand, may

⁴² IRIN News.

⁴³ “Violence against women in Liberia: A dialogue with students.” Friday, 25 November 2011. <http://www.actionaid.org/2011/11/violence-against-women-liberia-dialogue-students>

trade manual labor for grades.) While the underlying reasons surely include a culture of impunity for perpetrators and blaming victims who lodge complaints, including by other females⁴⁴, poor lighting in evening classes is also a problem.⁴⁵ At the secondary school to university transition, awareness of employment prospects by major is weak, and those girls who are in secondary school generally benefit less from what instruction and information is available.⁴⁶ The resulting reliance on peer information and influence cannot be expected to change girls' and families' educational choices. The gender gap is also partly because across levels of schooling, teachers are predominantly male—reaching 95 percent by the senior secondary level--and their instruction often favors male students over female ones.

At the primary school level, children generally start their formal schooling late, but this is especially important for girls. They tend to start primary school around age 10-12, and may soon after become sexually active, or bear the brunt of household responsibilities. If they become pregnant or have children, these competing demands are amplified. Among families with fewer means, boys rather than girls are sent to school, since girls will be married off in the future. In rural areas in particular, safety concerns with distant schools⁴⁷ and limited toilet facilities also discourage families from sending their daughters to school. This is in fact a link back to the road infrastructure challenge.

Conclusions: the syndrome of binding constraints

Based on the balance of available evidence with the four tests for differential diagnostics applied throughout the decisional framework, the preliminary conclusion is that **the binding constraints that affect women entrepreneurs more than male ones are, in rough order of importance:**

1. Lower technical and business skills and experience;
2. Less access to networks and information;
3. Sexual harassment at international borders;
4. Insecure statutory and customary property tenure for women; and
5. Poor roads connecting rural areas to urban markets.

Some challenges that affect women entrepreneurs, but not any more than male ones, are:

⁴⁴ Koechlein, Liz. 2012. Preliminary Investigation of Gender-Based Violence in Liberian Schools.

<http://policy.rutgers.edu/academics/projects/presentations/AFE2012/Koechlein.pdf>

⁴⁵ "Liberian women battle against 'sex for grades' at universities." [Liz Ford](#). Monday 4 March 2013

<http://www.guardian.co.uk/global-development/2013/mar/04/liberian-women-battle-sex-grades-universities>

⁴⁶ 2012. Diagnostic Paper for Higher Education in Liberia.

⁴⁷ Ibid.

- Access to finance;
- Tax policy and administration;
- Corruption;
- Difficulties with business registration;
- Heavier household responsibilities; and
- Access to electricity.

All of the above constraint areas, apparently binding or not, could benefit from more representative data and further analysis (see post-script on data at the end of this document). This is especially true for sexual harassment at international borders, which requires carefully designed research tools; for property tenure, as little standardized information is available on what Liberian men and women might do with more secure real property tenure; for access to finance, to understand what interest rates and borrowing costs women and men entrepreneurs face; and for corruption, to tease out whether there are real differences between the type and scale of corruption that women and men entrepreneurs face, and why that might be the case. The preceding analysis has started to uncover some of the underlying roots of the binding constraints, although further analysis is needed to decide what fundamental causes, and therefore most effective solutions, might be. Below is a causal network that suggests some of these linkages (with arrows pointing from cause to effect), together forming the syndrome of constrained capacity for Liberian women entrepreneurs.

As shown in the diagram below, social norms around expected roles for women and girls, especially the expectation of marriage and their relationship with their natal and husband's communities, influences their access to education for literacy, technical and business skills; access to networks and market information; property tenure; and even experience trading at borders. Their weaker human capital and understanding of market demand and other actors, in turn, segments women more so than men into lower-value sectors and parts of the supply chain. Cultural norms around women's roles also mean that they are dominant in agricultural trading, which depends more on reliable road transportation. There are linkages among these factors as well, ultimately culminating in lower investment by women entrepreneurs, who tend to manage firms with less revenue, fewer employees, and slower growth. **Lower human capital emerges as the most binding constraint causing the gender gap, and social norms a key underlying issue. However, there are likely other underlying factors behind the various binding constraints that this diagnostic, and the above causal network, have not captured.** Projects seeking to address any of the binding constraints would need more on-the-ground assessment and adaptive learning in the data-scarce environment of Liberia.



Post-script on data

An implication of the overall dearth of economic data in Liberia that may not be immediately obvious, is that after gender disaggregation of the data that does exist, the sample size is often too small for more nuanced analysis. One recommendation would be that in funding any public surveys by donors or GoL agencies such as the HIES, USAID/Liberia could ensure representative, stratified sampling by gender; and consider funding business-focused surveys

such as the World Bank Enterprise Survey to answer specific questions, and increase their overall sample size for more detail on the fewer women entrepreneurs.

Annex: Interviewees

Organization	Role	Name
Building Markets/ Sustainable Marketplace Initiative	Market Researcher	Amy Lee Bruins
Business Start-Up Center Monrovia	Project Coordinator	William Reide Dennis, II
CIPE	Country Director, Nigeria	Omowumi Gbadamosi
CIPE	Consultant	Mike Olson
Food & Enterprise Development/ DAI	Chief of Party	Agnes Luz
Food & Enterprise Development/ DAI	Market Development Fund Manager	Gwendolyn Armstrong
IBEX Liberia/IESC	Chief of Party	Watchen Bruce
Liberia Chamber of Commerce	Former President	Monie Captan
Liberian Education Trust	President	Deborah Harding
Liberia Institute of Management	CEO	Avril Fortuin
Liberia Marketers' Association		Etta Hasrey
PROSPER program, ACDI/VOCA	Team leader	Peter de Waard
UN Women	Senior Program Manager	Emily Stanger
10,000 Women/ CHF International	Country Manager	Karen Anderson
COLIMBO, AWEP, Montseraddo Cross-border Traders' Association, and other business groups	Members and businesswomen	N/A