Cameroon: Selected Issues

CAMEROON

SELECTED ISSUES

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CAMEROON

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ESTIMATING THE FISCAL MULTIPLIERS FOR CAMEROON¹

A. Introduction

1. Cameroon, like many other countries in sub-Saharan Africa, has increased public investment over the last decade in a bid to fill its large infrastructure gap. Cameroon's infrastructure gap was sufficiently large in 2010 that, if closed to the level of its middle-income peers, it had the potential to increase growth by 3.3 percentage points (Dominguez-Torres and Foster, 2011, and IMF, 2014). This gap was significantly larger than Gabon's (2.1 percentage point growth potential), but smaller than that of other CEMAC countries (average 3.7 percentage point growth potential) (Dominguez-Torres and Foster, 2011). In a bid to close this gap, the government launched an ambitious development plan in 2009 called Vision 2035 aimed at lifting Cameroon to emerging market status in 25 years via large public investments in infrastructure. As a result, over the period 2008–15 public investment averaged 5.1 percent of GDP, more than twice the average during 2000–07. Despite the ramp up in public investment however, economic growth in real terms was lower at 4.4 percent per annum on average during the same period, (4.3 non-oil GDP growth) versus 3.1 percent previously (4.9 non-oil GDP growth). While robust, such growth rates did not allow to significantly improve the welfare of the population which has been growing at around 3 percent a year (Figure 1).

Figure 1. Cameroon: Economic Growth and Public Investment
(Period average)

Sources: Cameroonian authorities; and IMF staff calculations.

Figure 2. Cameroon: Public Debt and Primary Balance, 2009–17

Sources: Cameroonian authorities; and IMF staff calculations.

2. The increased investment has been largely financed by nonconcessional debt. Public debt went from 10 percent of GDP after debt relief under the Highly Indebted Poor Country (HIPC) Initiative in 2009 to 33 percent of GDP in 2015 (Figure 2) (of which 24.5 percent of GDP is external debt—including foreign denominated debt and debt between countries of the Central African Economic and Monetary Community—CEMAC). Notwithstanding Cameroon's need to improve its infrastructure, the rapidly shrinking fiscal space exacerbated by the recent commodity price shock, has highlighted the

¹ Prepared by Kadima Kalonji, Margaux MacDonald and Moussé Sow.

need to rationalize spending while at the same time helping create the necessary environment for higher growth. As such, the debate over the impact of fiscal policy on economic activity has been at the center of policymakers' concerns (Figure 2). Particularly, given the fiscal consolidation underway in the context of the IMF-supported economic program, the question is being asked as what would be the impact of that consolidation on growth, and how can the consolidation be calibrated so as to minimize its adverse growth impact? This chapter aims at providing an empirical underpinning to fiscal policy reforms implemented by the authorities by estimating the size of fiscal multipliers in Cameroon, using a novel long quarterly data set and looking separately at the impact of changes in revenue, and government consumption and investment.²

B. Fiscal Multipliers: Theory, Model and Estimation

Theory

3. Theoretical channels linking fiscal policy and growth are strong, but varied. Neoclassical theory predicts two principal channels through which fiscal policy can affect output: First, by raising money via taxes, the negative wealth effects lead individuals to work more hours which, decreases real wages, and consumption and investment subsequently fall. Second, when governments increase spending, funded by future taxes, the theory suggests labor will be substituted intertemporally to the present and current output will rise. In New Keynesian models, on the other hand, government spending is propagated via increases aggregate spending and output, the extent of which depends on the marginal propensity to consumer. (Ramey, 2011) The size of the fiscal multiplier varies across these models, with the New Keynesians typically estimating multipliers, and specifically tax multipliers even smaller than spending multipliers, due to households' tendency to save a large portion of their after-tax income (Batini and others, 2014).

4. The impact of government spending and taxes depends on country characteristics and the stage of the business cycle. Multipliers tend to be larger in countries who are more industrialized, have lower levels of debt, have a fixed or pegged exchange rate regime, and have higher investment efficiency (Ilzetzki and others, 2013; Corsetti, Meier, and Müller, 2012; Furceri and Li, 2017; Born, Juessen; Müller, 2013; Abiad, Furceri, and Topalova, 2016). The impact of openness on the fiscal multiplier is, however, much more uncertain with mixed evidence in the empirical literature. Furthermore, while some evidence points to fiscal multipliers tending to be larger during periods of low or negative growth (Auerbach and Gorodnichenko, 2012; Woodford, 2011; Baum et al., 2012; Corsetti and others, 2012; Abaid and others, 2016; IMF, 2017; Chrsitian, Eichenbaum, and Rebelo, 2009; Woodford, 2011), more recent evidence suggests that multipliers may not differ by the amount of slack in the economy—at least in the US (Ramey and Zubairy, 2018). These results are captured using restricted samples, time-varying parameter models, regime switching models, and local projections methods, all of which allow model estimates to vary over time or business cycles and across country characteristics. Baum and others (2010) combine differences in both country level characteristics and over time using threshold VAR models, and find similar results.

² Quarterly fiscal revenue and expenditure data were provided by the Ministry of Finance of Cameroon, and were seasonally adjusted.

5. The impact of fiscal policy on growth also depends on the policy itself. The literature has found that, in general, spending multipliers tend to be larger than revenue or tax multipliers, though in emerging market some evidence points to the reverse (Batini and others, 2014; Ilzetzi, 2011). Amongst taxes themselves, in middle and high-income countries personal income taxes have a stronger negative impact on growth than corporate income taxes or property taxes, while a reduction in income taxes that coincides with an increase in value added taxes is associated with faster growth. In low income countries, however, the relationship is ambiguous. (Acosta-Ormaechea and Yoo, 2012). In terms of government spending multipliers, there is evidence that in developing countries government investment tends to have a greater impact on growth than does consumption spending (Ilzetzi et al., 2011).

6. Empirical estimates of average fiscal multipliers are wide ranging, but tend to be lower in low income countries. In developing economies, multiplier estimates are almost always below one and often negative. At a three-year horizon, Ilzetzi and others (2013) estimate the consumption multiplier in low income countries to be -0.4 and the investment multiplier to be 1.6, while Kraay (2012, 2014) estimates the spending multiplier to be between 0.4 and 0.5, and Ilzetzi and Végh (2008) estimate the consumption multiplier to be 0.63. Other studies estimate multipliers of a similar range (see Batini and others (2014) for an extensive list of studies and their estimated multiplier for low income and emerging economies). These estimates are slightly lower than those for emerging markets, which are typically estimated to be between 0.3–0.7 for government consumption and 0.6–1.1 for investment (Espinoza and Senhadji, 2011). In sub-Saharan Africa, recent estimates show that, on average, a one percent rise in public investment increases output by about 0.7 percent in the medium term, while the same rise in consumption will only increase output by about 0.5 percent, and a rise in government revenues has no significant effect on output (IMF, 2017).

7. Empirical estimates of country-specific fiscal multipliers are even more wide ranging, but tend to fall close to the average values for their respective income levels. While comparisons are difficult because of varying estimation methods, country-specific fiscal multipliers tend to be relatively small in low income and only slightly larger in emerging economies—as the average estimates indicate. Among some other sub-Saharan Africa countries, fiscal multipliers are estimated to be between 0.4–0.9 in South Africa (IMF, 2016), to be 0.15 on impact in Uganda (IMF, 2015), and to be 1 percent over a two-year horizon and 5 percent over five years in Nigeria (IMF, 2018)³. In other developing and emerging market regions estimates follow similar patterns: Paraguay’s estimated fiscal multipliers are between 0.1–0.9 for consumption and 0.4–2.0 for investment expenditure (David, 2017); in Brazil they are estimated to be 0.5 on impact for both consumption and tax (Matheson and Pereira, 2016); in Peru, the consumption multiplier is estimated to be zero and the investment multiplier 0.5 on impact, and 1.1 in the longer term (Vtyurina and Leal, 2016); and in Algeria, the estimated cumulative expenditure multiplier is 0.3 on impact, and ranges from 0.4 to 0.6 cumulatively in the longer term (Elkhdari, Souissi, and Jewell, 2018).

³ The shock corresponds to an increase in real public investment of 0.7 percent, public consumption of 0.6 percent, and tax revenue by 1.5 percent

Estimation Results

8. We estimate a structural vector autoregressive (SVAR) model with a vector of endogenous variables, Y_t : capital expenditure, current expenditure, total government revenue, and real GDP, in that order, using quarterly data from 1999 Q1– 2015 Q4 (See Annex 1 for model details). Figure 3 displays the impulse response function for real GDP following a one standard deviation shock to each of revenue (panel a.), capital expenditure (panel b.), and current expenditure (panel c). Table 1 displays the corresponding estimated cumulative multipliers for each fiscal variable. Our results are highly robust to changing the ordering of the endogenous macroeconomic variables and to the exclusion of the exogenous variables.

9. The impact from a positive shock to government revenues is found to be small and substantially lower than that of expenditure. We find that the cumulative revenue multiplier is not statistically different from zero at any point during the first three years following a shock. This could be explained by the low tax base and the limited power of the government to raise revenues. We note, however, that in the medium-run the cumulative revenue multiplier peaks at 0.37 after three years (Table 1). This is consistent with findings for low income countries in the literature using SVAR models.

10. We find that the current expenditure cumulative multiplier is higher than the capital expenditure one at 1.97 compared to 1.10 (Table 1). The capital expenditure multiplier is consistent with estimates in the literature (Ilzetzki, Mendoza, and Vegh 2013, Abiad, Furceri, and Topalova 2016), though slightly higher than the sub-Saharan African average (IMF, 2017). However, the higher current expenditure multiplier is uncommon and may be explained by the low productivity of public investment in Cameroon and frequent delays in capital project implementation as well as leakages through imports of capital goods. Indeed, the 2016 Public Investment Management Assessment (PIMA) found that Cameroon's relative efficiency gap with respect to the efficiency frontier—determined in relation to the best-performing countries—is around 50%, larger than the average efficiency gap of 40% for SSA countries (Box 1).

Box 1. Tax Potential and Spending Efficiency

Cameroon's tax-to-GDP ratio has averaged at around 13 percent over the last 5 years, about 3 percent below the SSA average. A cross-country empirical study found that countries with similar macroeconomic conditions and institutions than Cameroon can attain a tax-to-GDP ratio of up to 21 percent. Cameroon could boost its tax revenue by enhancing the efficiency of its tax collection and by reducing tax exemptions. Fund technical assistance has identified up to 2½ percent of GDP of potential additional revenue gains through enhanced tax administration efforts.

According to technical assistance by the IMF (IMF 2018) and a World Bank study (World Bank 2018), Cameroon's current and capital spending, including goods and services are burdened by high administrative costs (16 percent and 29 percent respectively of total current and capital expenditure). Furthermore, public investment is characterized by low efficiency as only two thirds of the investment spending contribute to the formation of the capital stock. The 2016 PIMA found an efficiency gap of 51 percent or almost double the average gap in low-income and emerging market countries.

Note: Red line is the estimated response, blue dotted lines are 90 percent confidence bands.

Figure 3. Baseline Model: Response of GDP to Fiscal Shocks

Source: IMF staff estimates.

Table 1. Baseline Model: Cumulative Fiscal Multipliers

Quarters ahead	Revenue Shock		Current Expenditure Shock		Capital Expenditure Shock	
	Estimate	90% CI	Estimate	90% CI	Estimate	90% CI
0	0.08	(-0.13 , 0.25)	0.82	(0.53 , 1.04)	0.07	(-0.32 , 0.36)
1	0.09	(-0.19 , 0.28)	0.98	(0.63 , 1.22)	0.16	(-0.28 , 0.47)
2	0.11	(-0.22 , 0.33)	1.09	(0.69 , 1.34)	0.27	(-0.22 , 0.60)
3	0.13	(-0.25 , 0.38)	1.20	(0.76 , 1.47)	0.38	(-0.17 , 0.71)
4	0.15	(-0.28 , 0.43)	1.29	(0.81 , 1.57)	0.47	(-0.12 , 0.82)
5	0.18	(-0.31 , 0.48)	1.39	(0.87 , 1.67)	0.56	(-0.09 , 0.92)
6	0.21	(-0.34 , 0.53)	1.48	(0.92 , 1.77)	0.65	(-0.06 , 1.02)
7	0.23	(-0.37 , 0.58)	1.57	(0.97 , 1.86)	0.74	(-0.03 , 1.12)
8	0.26	(-0.40 , 0.63)	1.65	(1.02 , 1.95)	0.82	(-0.02 , 1.20)
9	0.29	(-0.43 , 0.68)	1.74	(1.07 , 2.03)	0.89	(-0.003 , 1.29)
10	0.32	(-0.47 , 0.73)	1.82	(1.11 , 2.12)	0.97	(0.004 , 1.37)
11	0.34	(-0.51 , 0.78)	1.89	(1.14 , 2.20)	1.04	(0.01 , 1.44)
12	0.37	(-0.55 , 0.82)	1.97	(1.18 , 2.27)	1.10	(0.00 , 1.51)

Source: IMF staff estimates.

Robustness Checks

11. We find our results to be robust to alternative specifications. Specifically, we try alternative definitions of fiscal expenditure and revenue variables as well as reversing the order of the fiscal variables and find broadly similar multiplier estimates. To further test the robustness of our results, we use a local projections model in addition to the SVAR.⁴ The cumulative multipliers are plotted in Figure 4—noting that these figures are not impulse response variables, but the estimated cumulative multiplier directly. Results are broadly robust to those estimated in the SVAR model. In this case, the cumulative total revenue multiplier is significant for approximately the first year after the shock, but over the medium-term horizon becomes statistically insignificant. The estimated capital expenditure fiscal multiplier is roughly equal to that of the SVAR model, peaking at 1.2 six quarters after the shock.

⁴ See Jorda, 2005 and IMF, 2017 for a detailed description of the local projections method and implementation and interpretation of the cumulative impulse response functions.

The main difference from the SVAR model is that the current expenditure shock is estimated to have a non-significant impact on output.

C. Conclusion and Policy Implications

12. Our analysis shows that revenue and capital expenditure multipliers in Cameroon are small and comparable to those of other sub-Saharan African and low-income countries. The revenue multiplier is close to nil which implies that revenue-based fiscal consolidation would be less harmful to growth in the medium term. Compared to its peers in sub-Saharan Africa, Cameroon's revenue multiplier is smaller as is its tax burden relative to the regional average. Conversely, government expenditure can more significantly affect output in the medium term, although the consumption multiplier is unexpectedly much higher than the investment one. In fact, the capital expenditure multiplier in Cameroon is comparable to that of other SSA countries but the current expenditure one is much higher.

13. Fiscal consolidation through increased revenue would have the least negative impact on economic growth. To address its rapidly increasing public debt and rebuild fiscal and external buffers depleted by the double shock of lower commodity prices and higher security spending, Cameroon is engaging in fiscal adjustment. In order to limit the negative growth impact, the consolidation should be biased towards increasing government revenue. In the short-term, as revenue measures take time to yield results, some rationalizing of capital and current expenditure would be necessary, however. In that vein, it will be important to improve the efficiency of public investment to allow for greater productivity at lower levels and limit the rationalization of government consumption while preserving current spending in social sectors. Efforts to widen the tax base and increase domestic revenue to better align it with potential should also be strengthened and accelerated.

Annex I. Methodology

To study the impact of fiscal policy we use a structural vector autoregressive (SVAR) model with a recursive (Cholesky) identification scheme. We use quarterly data from 1999 Q1– 2015 Q4. Following Blanchard and Perotti (2002), we estimate the following model:

$$A_0 Y_t = \beta_0 + \sum_{l=1}^T A_{1,l} Y_{t-l} + A_{2,1} X_t + \varepsilon_t \quad (1)$$

Where A_0 and A_l are matrices of structural parameters and ε_t a vector of structural shocks with $E(\varepsilon_t | Y_1, \dots, Y_{t-1}) = 0$ and $E(\varepsilon_t \varepsilon_t' | Y_1, \dots, Y_{t-1}) = I_n$. To identify these parameters, we draw upon a Cholesky decomposition. To that effect, we must establish the recursive ordering of our vector of endogenous variables, Y_t . We assume the following causal relationship for our main specification: expenditure, revenue, and GDP. That is, we assume GDP cannot affect government spending contemporaneously, which is reasonable given lags in fiscal policy implementation and consistent with existing literature (see, for example, Ilzetzki, Mendoza, and Vegh (2013) and Blanchard and Perotti (2002)).

The impact multiplier $k_0 = (\Delta Y_0)/(\Delta F_0)$ measures the response of output (ΔY_0) to a fiscal shock (ΔF_0) at the initial period ($t=0$), i.e. when the fiscal shock occurs. The cumulative impact of fiscal policy shocks over the medium-term of horizon T is computed as the sum of the changes in output from the current period until the period T divided by the sum of changes in the fiscal policy variable over the same period, $k_T^{LT} = \sum_{t=0}^T \Delta Y_t / \sum_{t=0}^T \Delta F_t$.

For the main model, the current period trade balance (as a ratio to nominal GDP), the real effective exchange rate, and the interest rate are included as exogenous variables, X_t . The model is estimated in levels and with two lags, as indicated by the Akaike information criterion (AIC) and likelihood ratio tests.

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ASSESSING THE INCIDENCE OF FISCAL POLICY ON POVERTY AND INEQUALITY¹

Despite impressive economic growth since 2000, poverty and inequality rates remain high in Cameroon, with increasing regional disparities. This chapter assesses the distributional impact of existing fiscal policy instruments in Cameroon and explores reforms that could enhance the redistributive function of these instruments. The analysis finds that current social assistance spending is relatively small as compared to regional peers, and that indirect transfers have weak or negative redistributive impacts. Simulations show that scaling up direct transfers especially in the rural areas can effectively reduce poverty and inequality, and that improving tax compliance and reforming existing energy price and subsidy programs could improve the redistributive impact of fiscal policy and revenue performance simultaneously.

A. Introduction

1. Cameroon has witnessed a significant acceleration in growth rates in recent years. Real GDP growth averaged 4.0 percent from 2000 to 2012, below its regional peers and other emerging and developing countries, where growth averaged 5.6 and 6.2 percent, respectively (Figure 1a.). However, growth in Cameroon has accelerated in recent years, despite a slowdown mainly caused by the oil shock, and reached 5.3 percent in 2013–16, exceeding the same peer groups who grew at 3.8 and 4.6 percent respectively during the same period. Higher public investment (Figure 1b.) and expanding services have contributed to the recent growth acceleration and should continue to raise Cameroon’s growth potential.

¹ Prepared by Chuling Chen, and Jon Jellema (Commitment to Equity Institute, CEQ), with inputs from Du Prince Tchakote and Maya Goldman (CEQ). This chapter has benefited from discussions with the Cameroonian authorities and the World Bank. The authors thank colleagues at the National Statistics Institute of Cameroon for providing the data and supporting documentation, and at the World Bank for detailed government expenditure data.

2. However, in spite of this strong growth record, poverty has declined only slightly with increasing regional disparities (Figures 2a. and 2b.). According to the 2001 and 2014 National Household Surveys, the overall poverty rate has declined only slightly from 40.2 to 37.5 percent, while the total population in poverty has increased from 5.8 to 6.6 million. At the same time, disparity of poverty in urban and rural areas and among different geographic regions has been rising. While the incidence of urban poverty declined significantly from 17.9 to 8.9 percent, the rural poverty rate rose from 52.1 to 56.8 percent. Poverty is highest in the three northern regions and in the north-west, which together comprise 74 percent of the poor population. Moreover, the deteriorating security situation since 2014 in the northern regions and the worsening crisis in the anglophone regions could have exacerbated the poverty situation, in light of the rising influx of refugees and internally-displaced persons.

3. Inequality has risen. The still-high poverty and rising disparities between urban and rural populations and among regions worsened the inequality situation, as reflected in the Gini coefficient which rose from 42.2 in 2001 to 46.6 in 2014. A similar trend was found by other inequality studies using different income concepts (Figure 3a.). Inequality is also higher than average compared with lower-income and lower-middle-income countries in Sub-Saharan Africa. Although urban poverty is much below that of rural areas, urban inequality is high and at comparable levels.

4. Fiscal policy is the main instrument to address Cameroon's poverty and inequality challenges. Understanding how effective fiscal instruments are in terms of redistribution will help determine fiscal policy options that can enhance revenue and ensure that the goal of inclusive and equitable growth can be reached at the same time. This chapter will use the fiscal incidence analysis developed by the Commitment to Equity Institute to first assess the effectiveness of the redistributive function of existing fiscal instruments, and then draw some policy implications based on the results of the analysis and simulations of various policy options.

B. Assessing Existing Fiscal Policy Instruments

Main Fiscal Instruments

5. Both revenue and expenditure tools are available to achieve redistribution. Revenue policy tools include a progressive personal income tax system, the value-added tax (VAT), excise and customs taxes with certain exemptions, and other taxes such as the special tax on petroleum products (TSPP) (Text Table 1). Personal income taxes (PIT) accounted for about 15 percent of total revenue between 2012–17, while VAT is the largest revenue tool (Figure 4). Expenditure tools include direct cash and near cash transfer programs, indirect transfers such as pensions and subsidies, and in-kind transfers such as free or subsidized government services in education and health.

Text Table 1. Main Tax Instruments

PIT	From 10% for monthly CFAF 2 billion, to 35% of above 5 million
CIT	30% since 2003, 15% for capital gain
VAT	17.5% since 2005
Tariffs	CEMAC tariff regime, 0, 5, 10, 20 and 30 percent brackets
Excise	Full 25%, reduced 12.5%
Other	TSPP (CFAF 120/65 for gasoline and diesel), oil transit rights, etc

Source: Cameroonian authorities.

Figure 4. Cameroon: Revenue Sources, 2017
(in percent of total)

Sources: Cameroonian authorities; and IMF staff calculations.

Figure 5. Cameroon: Government's Primary Spending, 2014
(in percent of total)

Sources: Cameroonian authorities; and IMF staff calculations.

6. Social spending is low compared to regional peers. Although spending on education, health and social protection represents the largest share of the budget (Figure 5), its share in terms of GDP remain low as compared to regional peers (Figures 6a and 6b.). In particular, spending on social assistance is among the lowest in sub-Saharan Africa (SSA) at less than 0.1 percent of GDP, while pensions, social assistance (90 percent health-related) and subsidies represent the bulk of social protection, with small labor market programs. The main policy instruments are in-kind transfers (70 percent) and fee waivers (20 percent), which are less efficient than cash transfers.

Data and Methodology

7. A fiscal incidence analysis is used to analyze the impact of the main fiscal instruments on poverty and inequality. The building block of the fiscal incidence analysis is the construction of a pre-fiscal income, the market income, which is income before any tax or public transfers. Then different post-fiscal income concepts are constructed to reflect taxes paid and income received via public transfers. The main categories of post-fiscal income include: (i) disposable income, which adds to the market income cash and near cash transfers after direct personal income taxes and social contributions; (ii) consumable income, which adds to the disposable income indirect subsidies such as fuel or food subsidies and subtracts indirect taxes such as VAT or excise; and (iii) final income, which adds to the consumable income in-kind transfers such as free or subsidized government services in health and education programs after copayments or user fees from these programs. Once the different income concepts are established, the poverty and inequality indices are reassessed based on the updated income to see their impact on poverty and inequality.

8. The fiscal incidence analysis is based on microeconomic household data. The analysis constructs the income concepts and measures the impact on each household's budget, and thus a comprehensive national household survey is essential for the analysis. We used the 4th Cameroon

Household Survey (*Enquête Camerounaise Auprès des Ménages*, ECAM 4, 2014) in this study. In addition, a supply and use table reflecting the production structure of the economy is used to estimate the effective rates of indirect taxes, which measure the indirect impact from price increases for intermediate products to final consumers. The direct and indirect taxes and public transfer information are obtained from the detailed 2014 fiscal data.

Main Findings

9. The redistributive function of the direct and indirect transfers is weak. Personal income taxes and cash and near cash transfer programs had almost no impact on poverty and inequality (Figures 7a. and 7b.), mainly due to their small size. The impact is also very small for indirect transfers mainly from VAT exemptions and energy subsidies. In fact, poverty slightly increased at the consumable income level, partly because the indirect tax burden exceeded indirect transfers received, while inequality remained largely unchanged. The results are consistent in both rural and urban areas.

10. In-kind transfers play the main role in reducing poverty and inequality. At the final income level, where value of in-kind services through education and health are accounted for, the poverty and inequality reduction is more significant, where poverty declined by 5 percentage points nationally, and the Gini coefficient declined from 44 to 41 (Figures 7a. and 7b.). The results are similar in both rural and urban areas, with a slightly higher impact on poverty in the urban areas, where poverty declined from 12 to 7 percent from consumable to final income, as compared to 59 to 52 percent in the rural areas, and a slightly higher impact on inequality in the rural areas, where the Gini coefficient declined from 39 to 36 as compared to 36 to 35 in the urban areas, reflecting the relatively larger share of income from these services in the generally poorer rural areas.

11. Poorer households received a higher share of their disposable income from the fiscal transfers but their purchasing power as compared to richer households did not change much (Figures 8a. and 8b.). Indirect transfers from energy subsidies accounted for 1.3 percent of total disposable income for the bottom half of the population, and in-kind services represented an even

bigger share at 13.1 percent from education and 4.1 percent from health. In the rural areas where poverty is higher, these accounted for 18.7 percent of the total disposable income, as compared to 18.2 percent in the urban areas. However, in terms of the net cash position which measures the purchasing power after including the indirect transfers and indirect taxes, rural and urban households are affected similarly - the net cash position deteriorated by 6.1 percent for the bottom half of the urban population and 5.2 percent for the rural. In other words, though poverty is more prevalent in rural areas, fiscal policy is not delivering larger impacts in these areas.

12. Richer households benefit more from spending on energy subsidies. Although poorer households received a larger share of disposable income as indirect transfers, the bulk of these transfers actually went to richer households, who generally consume more of the subsidized energy products and VAT—or customs tariffs—exempt goods. For example, in 2014 households in the top 50 income percentiles received around 78 percent of electricity subsidies, 96 percent of gasoline subsidies, and 67 percent of kerosene subsidies. The pattern is more pronounced in urban areas, where the shares were 86, 96 and 86 percent respectively (Figure 9a.). The distribution is relatively more even in rural areas for electricity and kerosene subsidies, but 93 percent of the total gasoline subsidies still went to the wealthiest 50 percent of households (Figure 9b.). At the same time, rural households received 34 percent of total electricity subsidies, 13 percent of total gasoline subsidies, and 61 percent of total kerosene subsidies.

13. In-kind transfers are progressive, but richer households in the urban areas benefited more.

The population in the 5 lowest income deciles received around 55 percent of in-kind transfers in education and 48 percent in health (Figure 10a.). However, in urban areas, richer households still benefited more from those transfers, although the urban areas only received 35 percent of the total spending in them (Figure 10b.). In rural areas most of the spending went to the population in the 5 lowest income deciles, who received 70 percent of transfers in education and 67 percent in health (Figure 10c.).

C. Policy Simulations

14. A wide range of reforms could enhance the redistributive function of existing fiscal policies and instruments. These include for example increasing cash and near cash transfer programs and better targeting indirect transfers such as VAT exemptions and energy subsidies. However, the fiscal implications on revenue and expenditure and the impact on poverty and inequality of these reforms need to be identified before a desirable policy mix can be determined. This section presents the results of policy simulations from the fiscal incidence analysis and provides some insights on the redistributive impact and fiscal implications of some potential reforms. It should be noted that the analysis is of a partial equilibrium nature, and in most cases measures only the direct impacts of policies on income and welfare concepts and does not take into account substitution effects or other optimization behaviors of the households in response to policy changes that would take place in a general equilibrium setting.

15. Increasing the coverage of cash and near cash transfer programs can effectively reduce poverty and inequality. The combination of high poverty and low social assistance spending on cash and near cash transfer programs prompts the question of “how much would it cost to reduce poverty significantly by just augmenting the coverage of cash and near cash transfer programs?” Simulations show that, in order to reduce poverty from 37.5 to 15 percent, the fiscal costs would range between 2.3 to 3.9 percent of GDP, with targeted programs² more cost-effective. To halve the poverty gap, the fiscal cost would be around 3 percent of GDP, equivalent to more than CFAF 65 000 per poor person. With current total social assistance spending at less than 0.1 percent of GDP and total current

² The targeted transfers try to rank and identify the poor individuals who with the given transfer can just reach above the poverty line, until the remaining share of poor individuals reaches the poverty reduction target.

spending at around 12 percent of GDP, the poverty reduction can only be gradual with augmenting the cash and cash transfer programs alone, although significant financing has been provided in this area by international development partners such as the World Bank. A combination of cash transfer and other reforms could be more cost effective in reaching the poverty reduction goals.

16. Improving the targeting of indirect transfers can be both revenue-enhancing and progressive. As indicated earlier, the existing indirect transfer programs such as VAT exemptions and energy subsidies are not effective in redistribution: richer households receive the majority of the spending on indirect transfers, although these transfers represented a much smaller share of their disposable income, and their impact on poverty and inequality is negligible. These programs also generate nontrivial fiscal costs in terms of foregone revenue.³ Based on the household survey data, the total fiscal cost was 0.2 percent of GDP for VAT exemptions on fish, flour, milk, and rice, and 1.6 percent of GDP for all exemptions. The fiscal cost for existing energy subsidy programs for the household was 1.1 percent of GDP.⁴ Therefore, eliminating these exemptions would create fiscal space for more effective direct cash and near cash transfer programs.

VAT Exemptions

17. Eliminating VAT exemptions would have a relatively small impact on poverty and inequality. Completely eliminating all VAT exemptions would increase poverty by 1.4 percentage points, and leave inequality almost unchanged. This is partly caused by the low effective rate of VAT at 8.4 percent, as compared to statutory rate of 17.5 percent. However, if higher collection efficiency is assumed, for example at 15 percent and 30 percent, poverty could worsen by 5 and 9 percentage points respectively (Figure 11a.), while inequality would remain almost the same (Figure 11b.), reflecting the worsening income for all.

³ Based on a study conducted by the authorities, tax expenditures totaled 2.6 percent of GDP in 2016.

⁴ The total electricity and fuel subsidies reached more than 2 percent of GDP in 2014.

18. The poverty impact can be alleviated with transfers to the poor households which would also help lower inequality. If the savings from VAT exemptions are transferred to the poor, the poverty impact could be reduced from 0.5 to 0.2 with 15 percent efficiency improvement, and 0.9 to -4.4 percentage points with 30 percent efficiency improvement (Figure 11a.). Inequality would also be reduced (Figure 11b.). The impact is again stronger for the rural areas, with poverty reduced by 6 percentage points even with transfers and 30 percent of efficiency improvement, and a Gini coefficient reduction of 9.6.

Energy Subsidies

19. Eliminating the energy subsidies and allocating the savings to the poor would effectively reduce poverty and inequality. Removing the energy subsidies alone would raise poverty slightly by 0.9 percentage point (Figure 12a.), leaving inequality largely unchanged (Figure 12b.). The results are similar for both urban and rural areas. However, if the savings from these subsidies are used for cash transfers to the poor households, the poverty impact could be attenuated, and inequality would decline. The impact is much stronger in rural areas, where poverty could increase by 0.9 percentage points, but the Gini coefficient could decrease by 2.2. In urban areas the poverty and inequality impacts would be less significant.

Figure 12a. Cameroon: Change in Poverty Rate from Elimination of Energy Subsidies
(percentage point)

Sources: Cameroonian authorities; CEQ; and IMF staff calculations.

Figure 12b. Cameroon: Change in Gini Coefficient from Elimination of Energy Subsidies

Sources: Cameroonian authorities; CEQ; and IMF staff calculations.

20. Spending on education and health could focus on efficiency improvements at current levels before being scaled up. While in-kind transfers in education and health sectors are found to be effective, improving the spending efficiency by redirecting the educational resources towards the needy regions and households and decentralizing the health spending to primary care facilities in the poorer regions will enhance their redistributive impacts without additional resources. Further augmentation of the education and health spending should also enhance the poverty and inequality reduction.

D. Conclusions and Policy Recommendations

21. The distributional impact of fiscal policy in Cameroon could be substantially enhanced to tackle poverty and inequality challenges. The low coverage of cash and near cash transfers, lack of targeting of indirect transfers such as energy subsidies and VAT exemptions, and still modest and relatively inefficient spending on education and health leave much room for desirable reforms. The relative weak redistribution function of current fiscal policies results in poorer households receiving less benefits than the indirect tax burden on the consumptions activities, although current policies have a favorable but small impact on inequality.

22. Reforms to enhance the progressivity of indirect transfers are needed. Existing energy subsidy programs could be more progressive if reforms can be introduced to direct more benefits to the poorer households. In addition, administered energy prices distort the market and may also lead to over-consumption and higher subsidy spending. Simulation analysis shows that eliminating energy subsidies and using the savings to increase targeted cash transfers to the poor could be both cost effective in reducing inequality and budget deficit-neutral, while the poverty impact could be offset by transfers. Revenue-side measures such as elimination of exemptions could lead to a significant reduction of poverty and inequality with more efficient tax collection. Further increasing in-kind services would reduce poverty but without more targeting inequality would remain unchanged. A mix of revenue and expenditure reforms could be used to reach a desirable balance between the fiscal cost and gains from poverty and inequality reduction.

23. Broader fiscal policy reforms are needed to support enhanced redistribution. Increasing spending on direct transfers and in-kind services will require more resources, which can be generated through the ongoing efforts to enhance non-oil revenue mobilization. Improving spending efficiency can also enhance the redistribution impact of existing fiscal instruments and provide additional fiscal space. In addition, price liberalization in certain sectors such as electricity and fuel prices could help reduce market distortions and wasteful consumption, while generating savings in terms of a reduced need for state subsidies.

24. Reducing the urban-rural poverty gap would be essential to achieve a reduction in inequality. Although inequality is similar in urban and rural areas, national inequality is high due to the large disparity between the two groups. The distributional impacts from different policy options also differ in the two groups, and policy mixes should be tailored to maximize their redistributive impact.

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ADDRESSING GENDER GAPS IN CAMEROON TO ENHANCE INCLUSIVE GROWTH¹

A. Introduction

1. The government's growth and employment strategy recognizes the promotion of gender equality as key to achieving inclusive growth and meeting the SDGs. The 2035 Vision of Emerging Cameroon states that "Cameroon, an emerging country, builds on the principles of good governance where women and men can enjoy the same rights and participate equally and in an equitable manner to the development". Implementation has followed, with a rapid reduction of Cameroon's gender inequality index (GII)² in recent years, to just above the Sub-Saharan Africa (SSA) average. But remaining gender gaps prevent women from fully participating in the economy. Women suffer more from poverty and unemployment and tend to work in low paying activities. Women's access to education and health access is lower than for men. Almost 40 percent of women are married before age 18, resulting in fertility and maternal mortality rates well above the SSA average.

2. An increasing body of literature highlights the role of gender equality in enhancing inclusive growth. Gender equality has been associated with high income and faster growth (IMF 2015; Hakura et al 2015; Duflo 2012; and Kochhar et al 2017), better income distribution (Hakura et al 2015; Gonzalez et al 2015; Ashan et al 2017), more economic diversification (IMF 2016), and better access to finance (Aslan et al 2017). Staff estimates indicate that Cameroon GDP per capita growth could increase by ¼ percentage point if its GII score was brought down to the SSA average and to more than 1 percentage point if it is brought to average of the 5-main emerging Asian countries (Indonesia, Malaysia, Thailand, Philippines and Vietnam) or the 5 leading Latin American economies (Brazil, Chile, Colombia, Mexico and Peru).

3. This chapter maps and benchmarks key gender gaps in Cameroon in terms of opportunities and outcomes and assesses the macroeconomic cost of gender gaps in Cameroon. Policy considerations to address remaining gender gaps aim at ensuring a level playing field, and do not represent a normative stance on Cameroon's social, cultural or religious norms. Given the economic costs to remaining gender gaps in Cameroon, enhancing women's contribution to the economy would support the government's development agenda.

B. Gender Gaps in Cameroon

Overview of Cameroon's Performance in Addressing Gender Gaps

4. Gender inequality indicators are improving but progress is still needed in term of women's access to assets and political empowerment. Cameroon recorded a rapid improvement of

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² The GII is an inequality index compiled by the United Nations Development Program (UNDP) that measures gender inequalities in three aspects of human development—reproductive health, empowerment, and economic status.

its GII between 1995 and 2015, almost catching up with the SSA average (Figure 1). Cameroon's GII significantly improved in 2010–12 and declined further in 2013 as both opportunities (health) and outcomes (labor participation and political empowerment) for women improved. The recent improvements reflect the implementation of the 2012 electoral code in the 2013 municipal, legislative and senatorial elections that resulted in more elected women, and the adoption of the new National Gender Policy in 2015 (Box 1). The 2017 global gender gap index (GGGI)³ of the World Economic Forum ranked Cameroon above the Central African Economic and Monetary Community (CEMAC) and West African Economic and Monetary Union (WAEMU) countries and about the average SSA countries on both the overall GGGI and its sub-indices. Cameroon performance on the OECD's Social Institutions and Gender Index (SIGI)⁴ shows the importance of improving the legal and institutional system mainly regarding non-land assets ownership and violence against women as well as ensuring that existing statutory laws are applied.

Figure 1. Cameroon: Gender Inequality Indices, 2010–17^{1/}

Sources: UNDP; World Economic Forum; OECD; and IMF staff calculations.

^{1/} The indices are subject to uncertainty around the point estimate. Rankings reflect the relative, not the absolute, performance of the country.

³ The GGGI measures gender gaps between women and men in four key areas: health, education, economy and politics to gauge the state of gender equality in a country.

⁴ The SIGI is an index focused on the causes behind gender inequalities. The SIGI uses 12 social institutions indicators grouped into 5 categories: family code, physical integrity, son preference, civil liberties and ownership rights.

Box 1. The National Gender Policy

The authorities' 2015 National Gender Policy Paper (NGP) aims at providing an environment that protects women, provides equal access to social services and equal right and opportunities. Relying on Sustainable Development Goal no 5 on gender equality and empowerment of women and girls, the NGP relies on 4 pillars: (i) creating a conducive environment for social protection and equitable access to social services, (ii) ensuring equal rights and opportunities in resources control, (iii) creating conditions for equal participation to development actions, and (iv) ensuring institutionalization of gender in public/private affairs.

Progress to date includes amendments of the Criminal Code and its provisions against gender discrimination and sexual harassment. In the education system, specific trades such as a Master's Degree in Gender and Development have been introduced at universities. Free primary schooling has contributed to increasing girl-to-boy enrollment ratios. Collective weddings organized by the ministry in charge of women empowerment contribute to reduce women's vulnerabilities amid unrecognized cohabitation by the law.

Gender Inequality in Outcomes

5. There have been noticeable improvements in women's economic empowerment with Cameroon outperforming its peers (Figure 2). While the male labor participation rate was almost flat between 1990–2016 going from 80 to 82 percent, women's labor participation rate increased from 55 to 72 percent (UNDP), contributing to significantly reducing gender gaps. The World Bank enterprise survey shows a larger share of women owners of business, full-time workers, and among top managers compared to peer countries except for Rwanda.

Figure 2. Cameroon: Women's Economic and Political Empowerment, 2016 or latest

Sources: WDI; the World Bank's enterprise survey; UNDP; Index Mundi; and IMF staff calculations.

6. However, gender gaps persist mainly in terms of access to formal work and equal earnings. Women receive about 67 percent of men's earning for similar jobs, and only 66 percent of the estimated men's income in PPP dollar term. Several factors contribute to these gaps: (i) weak bargaining power for better pay; (ii) women working mostly in low-skilled and low-paying jobs⁵, and (iii) high women's unemployment, with a female-to-male ratio of 1.4 in 2015 (UNDP). This ratio declines to 1.2 among youths partially due to government programs targeting women and improved access to education for young women.

7. Political empowerment needs to be sustained especially in senior public positions at the level of Cameroon's regions. Women's advocacy campaigns have paved the way to growing female participation in the political sphere. The 2012 electoral code required, without setting quotas, that women be included on candidates lists for municipal, legislative and senatorial elections. As a result, women representation to the Parliament reached 31 percent in 2017 (13.9 percent in 2010), to the Senate 20 percent (26 percent with the newly elected senate), to town councils (16 percent), and among mayors (8 percent). However, there are only 17 percent of women in cabinet positions, and no women among regional governors. Women represent a ¼ of legal professionals (judges, bailiffs, notaries, and lawyers).

Women's Access to Health

8. Progress in the health sector has been slow, especially for women. Over 1990–2015 The maternal mortality rate only declined from 728 to 596 deaths for 100,000 live births to stay well above the average SSA (474) and comparator countries (figure 3). Births attended by skilled health personnel remains low (65 percent). The HIV prevalence rate for women, 5.6 percent in 2016, is almost twice that of men. In addition, the fertility rate remains high, 4.7 children per women, as a result of high unmet family planning (24 percent of married women) and limited use of modern contraception, mainly in rural areas. Violence against women is pervasive with 51 percent of women reporting to have experienced physical or sexual violence in their lifetime (OECD).

9. Low and inefficient health spending contributes to low health outcomes. Health spending in Cameroon is very low 1.2 percent of GDP in 2015 below the average SSA of 2.3 percent of GDP. Wages account for about 1/5 of total health budget. In 2016, 44 percent of non-wage budgets was spent at the central level (up from 22 percent in 2014). Primary health facilities in the regions are poorly funded with large leakage, receiving less than 50 percent of their intended funds (World Bank, Public Expenditure Review 2018). Thus, out of pocket health spending is higher in Cameroon relative to peer countries. The unequal regional distribution of health spending contributes to large disparities in regional health outcomes (Figure 3). Addressing these inefficiencies in health spending at given spending levels could bring significant gains in health outcomes (measures by the health adjusted life expectancy) in Cameroon of little more than 4 years, the 7th largest in SSA, Grigoli and Kapsoli (2013).

⁵ The 2010 employment survey shows that 9 out of 10 women are employed in the informal sector and larger share of men are employed in the public and formal private sectors respectively 7.2 percent (4.3 percent for women) and 5.2 percent (1.9 percent for women).

Figure 3. Cameroon: Health Performance, 1990–2015

Sources: Cameroonian authorities; UNDP; World bank; and IMF staff calculations.

Women's Access to Education

10. Government policies in the education sector are helping to improve educational outcomes for both men and women, however disparities remain in terms of gender, region, income, and ethnicity. Cameroon has mandatory and free primary education and the government has put in place programs, often in conjunction with development partners, to enhance access to education especially for the most vulnerable including girls. Compared with peer countries and the average SSA country, Cameroon's education gender gap is larger in primary and secondary education while it is narrower in the tertiary education suggesting a relatively better retention rate for women at upper school levels. Barriers to female access to education include poverty, juvenile pregnancies, and early marriage with 13.4 percent of girls married before age 15 and 38.4 percent before age 18 (Table 1, Figure 4).

11. There are large disparities in access to education across regions, reinforced by an uneven allocation of public education spending. For example, education spending per student allocated to the Far North is 2.2 times lower than that of the Littoral, and overall primary enrollment rate in the Far North is only 65 percent. The female male ratio in primary school enrollment is also less than 80 percent in the northern regions against around 100 in the Littoral. The share of education spending has declined from 14.6 to 12.5 percent of total spending between 2014 and 2016. Compared to peer countries, Cameroon spends less in education 3 percent of GDP in 2015 compared to 7.3 percent in Senegal and 5.2 percent in Kenya.

Women's Access to Finance

12. Access to finance is low in Cameroon, remaining well below the average CEMAC and SSA, but with a lower gender gap. Female account ownership is 10.2 percent compared with 26.2 percent for SSA countries, while the gender gap in account ownership is only 4 percent against 6.8 percent for the average SSA (Figure 5). The gap drops to 2.2 percent for borrowing from a financial institution. Women's use of informal financial service is as high as that of men.

13. Gender gaps in financial inclusion remain conditioned by socioeconomic characteristics and financial innovations seems to benefit women more. Women have a higher ratio of account ownership than men (negative gender gap) for the categories of (i) poor, the first two income quintiles;⁶ (ii) completed tertiary education; and (iii) received a salary in the last 12 months. Financial innovation tends to benefit women in Cameroon. The proportion of women using a credit card, having a mobile account, and using a mobile phone to perform a transaction were larger compared to men in almost all socio-economic categories. This highlights the beneficial role that financial innovation and fintech could play in fostering women's access to finance.

⁶ The authorities reported 17 development partner-supported projects targeting women and vulnerable populations in the regions and areas mostly dominated by the poor at end-2017 supported by African Development bank, Canada, France, Germany, IFAD, the Islamic Development Bank, Netherland, UNDP, World Bank etc.

Figure 4. Cameroon: Education Performance, 2016**Gender Parity Index In School Enrollment, 2016 and most recent date**
(in percent) **Gender Gap in Mean Years of Schooling, 2015**
(in percent) **Poverty Rate and Gender Gap in Primary School Enrollment by Region, 2014**
(in percent) **Pupil-Teacher Ratio in Primary Education by Region, 2014**
(in percent) **Education Spending per Student by Region, 2016**
(US dollars) **Education Spending per Level by Region, 2016**
(CFAF; total in percent of consumption)

Sources: Cameroonian Authorities; UNDP; World bank; and IMF staff calculations.

Figure 5. Cameroon: Gender Gaps in Account Ownership, 2014

Sources: 2014 Global FINDEX; and IMF staff calculations.

Legal and Institutional Aspects of Gender Inequality

14. Cameroun has ratified several international treaties that promote gender equality and prohibit violence against women, but progress in transposing their dispositions into national law has been slow.⁷ The country's labor code and the general statute of the civil service prohibit any form of discrimination including on gender. However, the 2017 criminal code (Box 2) and the 1981 civil code continue to include discriminatory provisions against women and do not fully protect women against domestic violence. The legal marriage age is 15 for women compared to 18 for men. According to the 2018 Women, Business and the Law, there are still regulations that restrict women's employment and legally preventing them, without a permission, from getting a job and applying for a passport and a national identity card. Women can perform an economic activity and own property; however, the husband can prevent the wife from working for the household's interest, and he has the right to administer, sell or mortgage shared marital properties without the wife's consent.

⁷ Cameroon signed the UN Convention on the Elimination of all forms of Discrimination Against Women (CEDAW) in 1994, and its Optional Protocol in 2005 and (i) the Maputo Protocol on the Rights of Women in Africa in 2012.

Table 1. Cameroon: Key Gender Indicators, 2016 and Most Recent Available Data

	Cameroon	Kenya	Rwanda	Senegal	Gabon
<i>percent unless otherwise indicated</i>					
General					
Human development index ranking	153	146	159	162	109
Population growth	2.6	2.54	2.43	2.83	2.3
Fertility rate (<i>number of child per women</i>)	4.71	3.85	3.89	4.77	4.43
Women's unmet demand for family planning	24	26	21	30	26.5
Child married by 15	13.4	6.2	0.8	12	5.6
Child married by 18	38.4	26.4	8.1	32.9	21.9
Partity of parental rights in marriage	yes	part	part	no	no
Partity of parental rights after divorce	part	yes	yes	part	no
Economic participation and opportunity					
Female male labor participation rate	88	86	105	64	72
<i>Labor participation female</i>	72.1	62.9	88.4	33.6	42.9
<i>Labor participation male</i>	82	72.7	84.1	52.8	59.4
Firms with women top managers (female/male)	30	15	25	16	...
Wage equality for similar work (female/male)	67	68	86	69	...
Women access to land	part	part	part	part	part
Women access to non-land assets	no	part	part	part	part
Own account worker ratio (female/male)	128	...	111	115	...
Female employment in agriculture	62	75	75	57	27
Unemployment share (female/male)	142	135	106	173	200
Educational Attainment					
Female, male literacy rate	83	88	89	64	95
Female, male net primary education enrollment rate	90	104	102	110	97
Female, male net secondary education enrollment rate	88	94	116	77	...
Female, male tertiary gross enrollment ratio	77	70	76	60	...
Health and Survival					
Maternal mortality rate	596	510	290	315	291
Adolescent fertility rate (per 1000 women aged 15-19)	104.6	90.9	26.3	78.6	99.9
Prevalence of gender violence in lifetime	51	41	56	...	54
Birth attended by skilled health personnel	64.7	61.8	90.7	...	89.3
Political Empowerment					
Women in parliament	31.1	19.4	61.3	41.8	14.2
Women in ministerial positions	17.1	22.7	47.4	20	...

Sources: World Economic Forum; World Development Indicators, UNICEF; USAID; and Index Mundi.

15. In addition, customs and traditions weigh heavily against implementing and improving the law. Cameroon is a socially, culturally and religiously diverse country with two legal systems (English common law and the French civil law). In rural areas, customary laws are often used to settle domestic and property disputes which often tend to deprive women from their rights. In the case of inheritance, most cultures in Cameroon tend to provide a larger share to men, despite the legal provisions that grant equal right to women and men. In addition, the prevalence of gender based violence is high (51 percent of surveyed women) often unreported because it remains widely and socially accepted (Time, 2014) (Table 1).

Box 2. The New Penal Code and Women's Empowerment

As far as gender equality is concerned, public opinion recognizes improvement in the new penal code adopted in July 2016 which replaced the 1967 version. One of the major improvement is the equal criminalization and lifting of discrimination regarding adultery. Under the provisions of Article 361, both men and women are subject to the same sentence. Nevertheless, polygamy remains the default matrimonial regime, which adversely differentiate women against men.

The new penal code punishes instigators of early and forced marriages, recognized as such for every boy and girl under 18. This progress remains to be considered in the civil code under revision, which differentiates the legal age of marriage at 15 for girls and 18 for boys. In addition, genital mutilation, sexual harassment, preventing girl from attending school, eviction from the matrimonial home and excessive demand for bride-price for marrying a girl are now punished under the criminal code.

C. Macroeconomic Impact of Gender Gaps in Cameroon and Potential Gains

16. Economic gains from further reducing gender inequality could be significant. Using the estimates of the determinants of growth in a panel of 115 advanced, emerging market, and developing economies (IMF, 2015), a decomposition exercise highlights the impact of gender inequality in explaining differences in average real GDP per capita growth rates in Cameroon compared to SSA and some benchmark Asian (Asean 5) and Latin American (LAC 5) countries.⁸ Figure 6 highlights that female legal equity contributed to ½ percent of GDP points to the growth deficit with SSA and the gender inequality contributed to ¼ percentage point. These contributions become even larger when compared to Asean5 or LAC5 where they could reach 1¼ percentage point, pointing out to significant gain Cameroon could get in reducing gender gaps.

17. Reducing gender gaps could enhance women's access to finance, and, in turn, reduce income inequality. Aslan et al (2017) found that gender gaps in access to financial services are positively and significantly related to income inequality. This is consistent with previous findings (IMF, 2016) that narrowing the gender gap in financial inclusion by 10 percentage points could decrease gender gap in labor participation rates by 2 to 3 percentage points which benefits growth and productivity.

D. Policy Recommendations

18. Cameroon has made rapid and significant progress in reducing gender inequality in recent years, and stands to gain from further reducing remaining gender gaps, including by:

- *Pursuing ongoing efforts to translate approved international treaties that promote gender equality into domestic laws and issue implementation decrees to operationalize existing laws.* Widespread implementation of the new penal code will ensure better protection of women against violence and harassment. It will also help address early marriage and discrimination against girl's school

⁸ The Asean 5 countries are Indonesia, Malaysia, Philippines, Thailand and Vietnam. The LAC 5 countries are Brazil, Chile, Colombia, Mexico and Peru.

enrollment, thus contributing to improve women's health, lowering adolescent birth rate, and maintaining girls longer at school. Providing training (to judges, local officials, and traditional leaders) and awareness campaigns on legal rights and regulation changes, especially in rural areas, could support the shift from customary laws to statutory laws.

- *Moving to more gender responsive budgets while increasing budgetary resources and allocations to the education and health sectors.* The implementation of the 2017 social protection strategy combined with scaling-up of the cash transfers project and performance based financing in health could improve both the efficiency and the impact of public social spending on the most vulnerable including women. Education and health spending should be increased with an allocation across regions that reflects funding needs and a higher share of spending allocated to primary education and health care.
- *Encouraging women's entrepreneurship and access to formal work, and eliminating remaining legal barriers to women's access to property and enhancing women's education.* This will help enhance overall revenue at national level through better access to well-paid jobs, investing in profitable business and accessing credit, thus contributing to reducing inequality while promoting inclusive growth.
- *Continuing to support increased women's political participation.* The 2018 senatorial elections resulted in more elected women. Maintaining that trend with the legislative and municipal elections scheduled later in the year could help accelerate legal and institutional reforms aimed at protecting and promoting women. Furthermore, efforts to promote women at cabinet level and upper managerial positions in the civil service need to be pursued.

Figure 6. Cameroon: Macroeconomic Impact of Gender Inequality

Sources: UNDP; WDI; and IMF staff calculations.

^{1/} LAC 5 are: Brazil, Chile, Colombia, Mexico, and Peru and ASEAN 5 are: Indonesia, Malaysia, Philippines Thailand, and Vietnam.

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MACROFINANCIAL LINKAGES IN CAMEROON¹

A. Introduction

1. Cameroon has shown greater resilience than other CEMAC countries to the twin oil and security shocks affecting the region, but vulnerabilities remain. Having a more diversified and less oil-dependent economy helped. Cameroon's fiscal deficit was 6.2 percent of GDP at end-2016 compared to 7.2 percent for the CEMAC average, and growth was 4.5 percent compared to -1 percent for the CEMAC average. In addition, the development partner-supported consolidation program approved in June 2017 has started to yield results as fiscal and external buffers are being gradually rebuilt. Nonetheless, real GDP growth decelerated in 2017, reaching 3.2 percent, and private sector credit fell to 2 percent in March 2018 (y/y). Banking system vulnerabilities remain high due to banks' large sovereign exposures (Figure 1).

¹ Prepared by Mamadou Barry.

2. This chapter aims to identify financial risks and mitigating measures that could help prevent future crises and/or limit their impact. After a brief overview of the Cameroon financial sector, the chapter analyzes its links with the rest of the economy to identify sources of vulnerabilities that could amplify future shocks. The analysis focuses on the bank and public-sector nexus including SOEs, some of which may pose systemic risks due to their high-indebtedness and persistent losses. Additional vulnerabilities stemming from the large and less regulated microfinance sector and the rapidly-growing mobile money market are also considered.

B. Overview of the Banking Sector in Cameroon

3. Cameroon's bank-dominated financial system is the largest in the CEMAC region, but remains shallow and highly concentrated.

Total banks' assets at end-2017 stood at 26.8 percent of GDP (40 percent of the CEMAC banking system's assets), up from 23.1 percent of GDP in 2010. However, private sector credit to GDP was 15.3 percent compared to 28.5 percent for the SSA average at end-2016. The 4 largest banks accounted for 59.2 percent of the total assets at end-2017 (Table 1). In addition, Yaoundé and Douala, the country's two largest cities, generate about 90 percent of total banks' credits and deposits.

Table 1. Cameroon: Banking Assets, End-2017

	Number	CFAF billion	% of GDP	Market share
Assets				
Banks	14	5,308	26.9	100.0
4 largest banks	4	3,143	15.9	59.2
Foreign-owned banks	9	3,422	17.3	64.5
Domestic private banks	3	1,376	7.0	25.9
Domestic public banks	2	271	1.4	5.1
Banks in difficulties	4	688	3.5	13.0
Microfinance Institutions (2016)	412	768	3.9	100.0

Sources: BEAC; and IMF staff calculations.

4. Cameroon's banking system continues to show overall resilience to the twin oil price and security shocks, with some improvements in prudential ratios. (Table 2) After declining to

9 percent at end-2016, the system—wide capital adequacy ratio increased to 10.7 percent at end-March 2018 to stay above the CEMAC regulatory requirement of 8 percent. Banks remain profitable. Liquidity conditions have improved since mid-2017 owing to the easing of the government's liquidity constraint following budget support disbursements. BEAC refinancing declined to CFAF 72 billion at end-2017, an improvement from the high liquidity demand that reached the bidding ceiling of CFAF 200 billion in most of the first half of 2017.

Table 2. Cameroon: Financial Soundness Indicators, 2014–18

	Cameroon					CEMAC		
	2014	2015	2016	2017	Q1-18	2014	2017	Q1-18
Capital adequacy								
Capital/risk-weighted assets	11.4	10.1	9.0	10.3	10.7	13.8	15.5	17.5
Base Capital/ risk-weighted assets 1/	9.1	9.3	7.6	8.2	...	12.6	14.5	...
Non-performing loans less 1/	10.3	8.9	12.1	9.8	...	15.8	33.6	...
Capital/Assets 1/	8.4	8.3	7.5	7.9	...	9.1	14.8	...
Asset quality								
Loans in arrears/total loans	12.3	12.5	14.1	13.0	15.0	11.7	17.5	19.7
Non-performing loans/total loans 1/	9.7	9.3	10.7	11.0	...	9.1	14.8	...
Large exposures (> 25 % of equity)/equity	125.3	162.1	157.1	157.8	168.7	116.4	160.5	155.0
Results and profitability								
Return on Assets (ROA)	0.8	0.7	0.7	0.7	...	1.0	0.6	...
Return on Equity (ROE)	14.8	14.1	17.0	14.0	...	14.9	8.5	...
Liquidity								
Reserves/total deposits	27.7	24.3	18.0	21.1	23.5	40.0	16.0	...
Liquid assets/Total assets 1/	23.0	23.1	23.2	22.9	...	29.5	23.4	...
Liquid assets/ST liabilities	139.5	147.5	148.7	142.9	181.7	156.3	154.3	184.5
Total deposits/Total loans	141	128.9	128.2	134.8	136.2	149.8	124.6	125.0

Sources: BEAC; COBAC; and IMF staff calculations.

¹ Data from the IMF Financial Soundness Indicators database; and the data in Q1-2018 is not yet available.

5. However, banking system vulnerabilities remain. There are significant variations across banks on meeting the prudential ratios. Four banks (13 percent of banks' total assets) are in distress with 3 of them having negative capital. Also, Cameroon's structurally high ratio of loans in arrears² was aggravated in the first quarter of 2018 to 15 percent. Together with declining economic activity, this continues to constrain private sector credit growth, which declined from 14 to 2 percent (y/y) between 2014 and March-18. The construction, extractive industry, and finance and services sectors are the most affected by impaired loans as well as the SMEs with 39 percent of their loans impaired. Banks' sovereign exposure has also significantly increased going from 11.2 to 16.9 percent of total assets in 2014–17 as most governments in the region resorted to issuing more bonds to finance their larger deficits (Box 1).

C. Macrofinancial Linkages

6. The main channel through which macrofinancial linkages operate in Cameroon is the sovereign-bank nexus, both with the Cameroonian public sector including loss-making SOEs, and the other CEMAC governments as mapped in Figure 2.

² Loans in arrears is a wider definition of non-performing loans that includes all loans with past due payments.

Fiscal-Financial Linkages

The importance of the public sector in Cameroon makes it the main source of macro-financial linkages through the impact of fiscal policy operations on the rest of the economy and the existence of an important and diverse SOE sector. These links operate both directly through banks' exposure to the government but also indirectly through the private sector balance sheet's response to public sector operations.

Direct Channels Through Credit and Deposits

7. The large increase in Cameroonian banks' sovereign exposure has raised their vulnerability to a government default. Banks' exposure to the government debt represents 1.7 times the system-wide capital and 7.7 times the system-wide excess capital. Thus, banks are highly vulnerable to a government default or to an increase in the Cameroonian sovereign risk rating for non-observance of the regional convergence criteria.³ Figure 3 shows the number of banks not respecting capital requirements at various levels of government default, and indicates that with a haircut of 12.4 percent on Cameroonian debt, the banking system's capital adequacy ratio will fall below the minimum requirement. Also, when the haircut exceeds 65 percent, each of the 14 banks, except two, fail to respect the capital adequacy ratio. At this point however, a default by Cameroon appears unlikely.

8. The increase in bank lending to the government has been accompanied by a decline in private sector credit growth and a large decline in credit to SMEs. Despite excess liquidity in the banking system and the possibility of refinancing government securities at the BEAC, the large borrowing from the government between 2014 and 2017 was accompanied by a 3 percentage points decline in the share of private sector credit to total credits. Credits to SMEs declined by 47 percent in 2017, leading to a reduction of its share of total private sector credit of 10 percentage points between 2014 and 2017.

9. On the liabilities' side, banks could be adversely impacted by the implementation of the Treasury Single Account (TSA), a key reform envisaged by the authorities.⁴ Traditionally, the government of Cameroon holds large deposits in banks that built their business around these virtually no-cost resources. Thus, eventually transferring these deposits to the TSA will deprive banks from substantial interest income obtained from investing these resources, and will also complicate liquidity conditions for 10 of the 14 banks (Figure 3). For these reasons, a gradual approach for extending the TSA in close collaboration with the BEAC has been favored and supported under the ECF-supported program. The authorities have defined a strategy for a gradual expansion of the TSA's scope, starting by conducting a census of all accounts, closing dormant accounts, and preparing a calendar for gradually closing existing accounts.

³ The COBAC has introduced a non-zero risk weight on debt issued by CEMAC countries not respecting the region's convergence criteria in 2017: a weight of 20 percent for missing the fiscal balance criterion, 65 percent for missing the one on arrears, 10 percent for missing the one on the debt ceiling, and 5 percent for missing the one on inflation.

⁴ The TSA reform consists of transferring to the Treasury all public accounts held in commercial banks to the exception of those belonging to SOEs.

Figure 3. Cameroon: Impact of Fiscal Risks on Banks' Soundness and Credit Provision, 2012–17**Number of Banks that do not Meet Capital Requirements and Cameroon Government's Default Rate, 2017** **Number of Banks that do not Meet Liquidity Requirements and Cameroon Government's Deposit Withdrawal Rate, 2017** **Credit to the Government and Credit to the Private Sector, 2012–17 (in percent of GDP)** **SMEs' Deposits and Credits, 2014–17 (in percent)**

Sources: BEAC; COBAC; and IMF staff calculations.

Indirect Channels through the Accumulation of Arrears to the Private Sector

10. Government arrears are potential source of risk to financial sector stability that could limit credit supply. Government suppliers and contractors often borrow from banks to fulfill their contractual agreements. Thus, delays in their payment could lead to a buildup of NPLs. The large government arrears (Figure 4), and the increased payment delays of government bills, were associated with an increase in banks' loans in arrears. Loans in arrears increased from 13 to 15 percent in the first quarter of 2018 following the large end-2017 accumulation of expenditures float (unpaid bills with a maturity of less than 90 days). Banks have been mitigating the impact of these arrears on their loan portfolio by restructuring overdue loans, limiting new loans to SMEs, and providing smaller loan amounts. The authorities conducted an audit of the end-2016 stock of domestic arrears at end-2017 and have prepared a plan to gradually repay them over the coming years.

Links originating from States Owned Enterprises (SOEs)⁵

11. SOEs in Cameroon play a key role in the economy despite a value added of less than 1 percent of GDP.

SOEs hold monopolies in key sectors of the economy including in energy, telecommunication, water, and export cash crop agriculture. SOEs are also large providers of formal employment and account for about one sixth of total public jobs. SOEs affect the financial sector through several channels including: (i) directly in the form deposits and loans; (ii) indirectly through their fiscal relation with the government (taxes, subsidies, and contingent liabilities), and SOEs arrears accumulated toward their suppliers.

Figure 4. Cameroon: Government Arrears and Float, 2015–Q1–18
(in percent of GDP)

Sources: Cameroonian authorities; and IMF staff calculations.

12. The financial conditions of SOEs have deteriorated, with 8 of the 12 companies experiencing net losses in 2016 including two with negative capital including SONARA (oil refinery). SOEs' value added ratio to GDP declined by more than half between 2011 and 2016 owing to a sales' contraction of 35 percent and a wage bill increase of 29 percent, driven by CAMTEL, the Douala Port, the oil-refinery company SONARA, and the Cameroun Development Corporation (CDC, in the agriculture sector). This deterioration highlights the need for a better control of SOEs' operating costs. As a result, the cumulative overall net profit of the SOE sector has become negative since 2012 when SONARA started incurring continuously large losses followed recently, by CDC and SODECOTON (*Société de Développement du Coton*) in the agriculture sector. In addition, government transfers have been larger than the combined SOEs tax and dividend payments.

13. SOEs' arrears have been increasing with the potential of affecting both the government and the private sector. SOEs' arrears have almost doubled since 2013 to reach 3.4 percent of GDP (1.8 percent of GDP in 2013), driven by SONARA (53 percent) and CAMTEL (13 percent) (Figure 5). About two-third of these arrears are tax arrears, which generate revenue gaps for the government. The increasing arrears to social security could lead to an increase in pension contributions and/or government subsidies to compensate shortfalls. The other categories of arrears of about 1 percent of GDP associated with the supplier debt of about 2⁶ percent of GDP could affect the private sector's balance sheet and lead to rising NPLs. A possible cause of these arrears is the buildup of account receivables mostly due to SONARA and the utility companies (CAMTEL, CAMWATER, and CDE), which could originate from unpaid subsidies by the state and cross SOEs debt.

⁵ This analysis in this section relies on the 12 largest SOEs selected among the 26 SOEs that provided certified balance sheets or tax returns for the preparation of the 2018 budget. Those 12 SOEs represent 90 percent of the 26 SOEs' total capital and the same proportion of their total debt.

⁶ The decline in supplier debt between 2014 and 2016 comes from the decline of oil prices that helped SONARA to repay part of its supplier debt and from the use of CFAF 100 billion from the 2015 US\$750 million Eurobond to retire a public bond held by SONARA in 2016. SONARA reduced its supplier debt by 30 percent each year in 2015–16.

Figure 5. Cameroon: Build-up of Contingent Liabilities from SOEs, 2009–17

Value-added has been declining while wages have been increasing...

Value-Added to GDP and Wages to Total Sales, 2009–16 (in percent)

Cumulative net profits have become negative...

Net Profits, 2009–16 (in percent of GDP)

...causing government net payments to increase...

Government Net Payments to SOEs, 2009–16 (in percent of GDP)

...and arrears to build up as well as account receivables.

Arrears and Account Receivables, 2009–16 (in percent of GDP)

Contingent liabilities remain high.

Contingent Liabilities, 2014–16 (in percent of GDP)

SONARA is the major contributor to the risks originating from SOEs.

Share of SONARA, 2016

Sources: Cameroonian authorities; and IMF staff calculations.

Note: Data after 2014 come from the *livre vert* that was prepared by the government on SOEs for the 2018 budget. The data from the previous period come from the 2014 study, by the IMF team, on SOEs in Cameroon.

14. SOEs' debt remains high and could translate into fiscal costs given the heightened vulnerabilities and accumulated losses in the sector.

Total contingent liabilities defined as total debt plus non-tax arrears, have averaged 9.4 percent of GDP between 2014–16 (Table 3). Short-term contingent liabilities are about 6.5 percent of GDP (57 percent held by the insolvent SONARA). Even after accounting for SOEs' own funds, contingent liabilities stay above 7.3 percent of GDP at end-2016. In that regard, the financial analysis and risk assessment of SOEs that were attached to the 2018 budget were good steps taken by the government to increase awareness about these risks.

Table 3. Cameroon: Contingent Liabilities from Main SOEs, 2014–17

In percent of GDP		Total		
		2014	2015	2016
Arrears (1)	1/	3.0	3.8	3.4
o/w Tax liabilities (i)		1.7	2.5	2.2
Gross debt (2)		8.1	7.5	8.1
Gross debt and arrears (3)=(1)+(2)		11.1	11.3	11.5
Contingent liabilities (3)-(i)	2/	9.4	8.8	9.4
Bank's direct loans to SOEs		...	...	0.8
Account receivables		5.7	5.6	4.2
o/w from the government (ii)		1.5	1.4	0.7
Net arrears to the government (i)-(ii)	3/	0.2	1.2	1.5

Sources: Cameroonian authorities, "Livre Vert"; and IMF staff calculations.

1/ Sum of tax liabilities, pension liabilities, and other debt.

2/ Sum of pension liabilities, other liabilities, financial debt, and debt to suppliers.

3/ Tax liabilities net of government's liabilities to SOEs.

15. The analysis of the SOEs-banks nexus shows that SONARA is the main driver of risks to the banking system.

The 12 SOEs in the sample are net debtors with a ratio of total deposits to banks' assets of 1.4 percent and a ratio of total credits to banks' assets of 2.3 percent, at end-2017. Short term instruments dominate both SOEs deposits and credits (90 percent of sight deposits and 73.4 percent of short term debt). SONARA accounts for 65 percent of SOEs' deposits and 62 percent of SOEs' credits and it has 87.9 percent of its debt maturing within a year. SODECOTON and CAMTEL

Table 4. Cameroon: Direct Risks to Banks Stemming from SOEs, 2006–17

	Number of banks	
	2016	2017
Positive net exposure (credit-deposit) to the 12 SOEs	10	8
Positive net exposure to SONARA	5	6
Liquidity Ratio		
Not respecting (baseline)	3	5
Not respecting after the 12 SOEs withdraw all their deposits	4	7
Not respecting after SONARA withdraw all its deposits	4	7
Capital Adequacy Ratio 1/		
Not respecting (baseline)	3	3
Not respecting after the 12 SOEs default	8	7
Not respecting after SONARA defaults	7	6
Not respecting after SONARA defaults on its net exposure to banks	6	6
Large exposure (for banks with positive capital)		
Large exposure to a single borrower (45 percent of capital)	2	2
Large exposure to a single borrower (45percent of capital) due to SONARA	2	2

Sources: BEAC; COBAC; and IMF staff calculations.

1/ In 2017, a full SOEs default will cost 2.3 percent of total bank's assets, a full SONARA default will cost 1.4 percent, and when SONARA's deposits are used to repay part of its defaulted loans, the losses decline to 0.6 percent.

had large loans in 2 banks at end-2016 which they largely repaid in 2017. Thus, SONARA remains the main source of direct SOEs risks to the banking system in terms of large exposure and liquidity risks

and credit risk (Table 4). Among the 6 banks that have net positive exposure to SONARA: one bank has negative capital; three banks will fail to meet minimum capital requirement if SONARA defaults; while two banks will lose 85 percent and 50 percent of their respective excess capital.

External-Financial Linkages

The main external linkages in Cameroon hinge on banks' exposure to other CEMAC countries' sovereign debts.

16. **Cameroonian banks are the largest holders of non-resident bonds in the region, making most of them exposed to sovereign default in the region.**

Cameroonian banks' exposure to CEMAC countries has increased from 5 to 8 percent of total assets between 2015 and 2017 with 57.5 percent held toward Chad (48 percent) and Congo two countries in difficult fiscal and debt situation. Already, in H1-2017, the forced rollover of Chadian and Congolese bonds associated with delays in Cameroonian government payments strained Cameroonian Banks' liquidity conditions causing the refinancing ceiling to be binding for several months. The situation only reverted after the program approval in late June. In addition, Figure 6 shows that all banks would fail to respect the minimum capital requirement if CEMAC countries (excluding Cameroon) defaulted, except for 3 banks that are not exposed to these countries due, for two banks, to the nature of their activities.

Figure 6. Cameroon: Number of Banks that do not Meet Minimum Capital Requirements and CEMAC Governments' Default Rate, 2017

Sources: BEAC; and IMF staff calculations.

Monetary and Financial Sector Risks

Financial sector shocks that affect the rest of the economy can be generated from changes in monetary policy, regulations, or spillover from the rest of economy in which case the financial sector could become an amplifier of shocks. The existence of ailing banks and the structurally high NPLs as well as fragilities in MFIs and mobile money (Box 1) add to the risks originating from the financial sector.

17. The tighter regional monetary and financial policy impacted on banks' appetite for government bonds. The increase of the policy rate by 50 basis point to 2.95 percent in March 2017, resulted in higher government bond yields and led the Treasury cash situation to severely tighten in most of 2017. The 3-month T-bill rate went from 2.85 to 3.52 percent between January and December 2017. In addition, implementation of the COBAC's non-zero risk weight rules on Cameroonian banks affected banks' solvency ratio and large exposure requirements, as Cameroon's non-compliance with the arrears and fiscal deficit convergence criteria brought its sovereign risk weight to 85 percent. Applying this weight leads to a large deterioration of banks' solvency ratios,

(Figure 7). To mitigate these impacts, in October 2017, the COBAC allowed banks located in countries with an IMF program to request a derogation for up to three years provided corrective measures are taken (see IMF country report No. 18/9). Banks should also be more pro-active in developing a larger investor base for sovereign bonds.

Figure 7. Cameroon: Impact of Monetary Policy and Regulatory Changes on Banks and on Government Financing, 2016–17

Sources: BEAC; COBAC; and IMF staff calculations.

1/ The assessment was conducted as of end June 2017 instead of end-2017 because of lack of clarity on whether some banks have already started applying the rule at end-2017 in which case the impact would be double counted.

18. Maintaining unresolved ailing banks could lead to rising contingent liabilities and to maintaining moral hazard that could weaken the financial sector. The broad estimation of contingent liabilities arising from the resolution of ailing banks was 0.7 percent of GDP, some of which have already materialized with the nationalization of one of the banks and the transfer of its impaired loans to the government assets management company (SRC) in exchange for a 0.3 percent of GDP long-term government bonds.

19. The high level of NPLs hurts confidence in the financial system and absorbs bank resources that could otherwise be lent to customers. Access to credit in Cameroon is the second

impediment to doing business which is partly explained by large unpaid loans in the banking system. Large NPLs increase borrowing cost as more collateral value will be required and higher interest rate are charged due to high default risk.

20. Finally, the increased interdependence between banks and the MFIs and the rapidly growing mobile banking without proper regulation could be source of vulnerability to the financial sector (Box 1). Several banks rely on the MFIs deposits and could suffer from lack of liquidity if those deposit are to be taken away, especially with the largest MFI been granted a bank license and will be allowed to deposit at the BEAC and to provide large credit. Also, the mobile money sector is bringing a fierce competition to MFIs and money transfer institutions that could amplify vulnerabilities in these sectors in the absence of adequate regulation.

Box 1. Risks to the Financial Sector Stemming from Microfinance Institutions and Mobile Banking

The increased interdependence between banks and the less supervised MFIs could represent a source of vulnerability to the financial sector. MFIs play a key role in Cameroon but suffer from weak capacity and governance, lax supervision, large exposure to connected parties, and high credit risk. The bank-MFIs nexus in Cameroon is complex and requires close monitoring to mitigate risks to the financial sector. Having no access to the central bank, MFIs put the bulk of their deposits in commercial banks which in return provide them credits. This creates a strong interdependence mainly as some banks are owned by MFIs, while big banks increasingly use MFIs (sponsorship and/or direct ownership) to access a larger customer base. The largest MFI, with a 25 percent market share, was recently authorized to operate as a bank reinforcing that interrelation.

The rapidly-expanding mobile financial services requires an enabling regulatory framework that preserves financial stability and limits frauds. Long constrained by low competition in the telecom and internet markets, mobile money penetration is increasing, with an increasing number of financial services offered. Access to mobile money has increased from 8 to 29 percent of the adult population while the volume of transactions has dramatically increased from CFAF 7.5 billion to CFAF 3,447 billion in 2012–17. This rapid growth requires security controls and a regulation to prevent fraud and abuse, limit money laundering and terrorism financing in a region experiencing insurgency and terrorist activities. With the easy access to mobile money services and expanding service offered, the MFIs and money transfer institutions are losing market share weakening their balance sheet.

D. Stress Tests on the Impact of Macro-Financial Risks on Banks

21. A stress test conducted using banks' balance sheets at end-2017 confirmed the dominance of sovereign risks in the banking sector in Cameroon and the deterioration of banks assets quality stemming from worsening economic conditions. Figure 7 summarizes the result of stress tests at various levels of risks. It shows that the system-wide risk-weighted assets ratio (RWA) (Figure 8) would decline by 4.4 percent following a 25 percent haircut on Cameroonian government debt, by 3.5 percent due to a 25 percent haircut on other CEMAC countries' debt, and by 2.7 percent due to full default on SONARA. Also, banks are vulnerable to increased NPLs stemming from

worsening private sector balance sheets. Another test related to the increase of the BEAC policy rate was neutral due to the nature and the composition of banks' portfolio—sight deposits, representing about 70 percent of total deposits, do not bear interest payments, and short-term credits, which account for 57 percent of total credits, react positively to interest rate hikes. Finally, banks are little exposed to exchange rate risks.

E. Conclusions and Policy Recommendations

22. The analysis of macro-financial linkages in Cameroon has showed the dominance of sovereign risks in the banking sector in Cameroon including SOEs. To address these risks, several actions need to be taken or reinforced in various areas:

- **Addressing the fragilities in the financial sector while reinforcing monetary policy operations and the regulatory and supervisory environment through:**
 - Addressing the structurally high NPLs, by removing information asymmetries by broadening access to CIP-FIBANE-CASEMF platform, the launching of the creditor information database for MFIs, enhancing the availability and management of collateral with computerization of registries (lands, movable assets), improving contract enforcement, and the training of judges in charge of banks conflicts.
 - Moving ahead with planned resolution of the ailing banks and transfer their NPLs to the public asset management company (SRC) using the recently-updated pricing methodology would be important to reinforce the system-wide capita while limiting the fiscal cost.

- *Reducing banks' dependence to public funds* by gradually transferring public deposits to the TSA in line with the newly prepared government strategy.
- *Enhancing the ongoing BEAC efforts to modernize its monetary policy framework* and develop the interbank market, improve liquidity provision to banks, reduce the need for holding government security (used as collateral for getting liquidity). In addition, reinforce the COBOAC onsite supervision, implement the new MFIs regulation while putting in place an innovation friendly regulation for mobile banking.
- ***Building fiscal buffers to control borrowing needs and to better withstand shocks through a steadfast implementation of the ECF program's fiscal consolidation strategy.*** Avoiding the buildup of government payment arrears will require : (i) improving revenue collection and reducing tax exemptions to expanding the base; (ii) controlling spending through better spending prioritization and investment efficiency and the preparation of a credible budget; (iii) strengthening PFM by eliminating exceptional budget procedures and adopting the new CEMAC directives; and (iv) improving treasury management by expanding the TSA coverage and improving the management of correspondent accounts. In addition, the government should also eliminate the use of direct bank lending by issuing T-bonds and T-bills to meet its borrowing needs while expanding its investor base by attracting non-bank institutions and households.
- ***Improving the management and governance of SOEs to limit contingent liabilities and risks to banks.*** The authorities are encouraged to continue the good practice of providing, together with the budget law, a financial analysis of all SOEs that shows the required subsidies and contingent liabilities. The preparation of credible budgets with adequate provision for subsidies and utility bills to be paid periodically would be important to avoid future cross debts between SOEs and the government. For SONARA, a transparent and flexible oil pricing mechanism that guarantees fair returns to each participant (marketers, public entities, and retailers) and a stable fuel tax, and allows a passthrough of international price fluctuations to domestic prices should be defined.

FINANCIAL INCLUSION IN CAMEROON¹

A. Introduction

1. Access to finance in Cameroon is low, unevenly distributed, and represents a key impediment to private sector development. Cameroon's financial system is the largest in the CEMAC, but bank account ownership is only 12.2 percent compared to 29 percent on average in Sub-Saharan Africa (SSA) (FINDEX survey, 2014)². Access to finance is reported as the second most problematic factor to doing business after corruption (2017 Africa Competitiveness Report). In addition, the poorest regions are the least well-served by formal financial institutions (Figure 1).

Figure 1. Cameroon: Macro-criticality of Financial Inclusion, 2014, 2016

Access to finance is a top barrier to doing business in Cameroon,

Cameroon: Most Problematic Factors for Doing Business, 2016

... due to a shallow financial sector, ...

Credit to the Economy and Money Supply, 2016
(in percent of GDP)

... and low access to financial services, ...

Having an Account, 2016
(in percent of age 20 and older)

... which is unequally distributed across regions.

Cameroon: Poverty Rate (2014) and Banks and MFIs Branches by Region, 2016

Sources: Cameroonian authorities; World Economic Forum; 2014 Global FINDEX; and IMF staff calculations.

¹ Prepared by Mamadou Barry and Du Prince Tchakote. This chapter uses third party indicators that are subject to uncertainty around the point estimate. Rankings may reflect the relative, not the absolute, performance of the country.

² The FINDEX 2018 was only recently released and couldn't be used for the preparation of this paper.

2. Financial inclusion is a key government priority. The government's 5-year National Strategy for Financial Inclusion (NSFI), expiring at end-2018, focused on increasing access to finance for youth, women, and small and medium enterprises (SMEs) through targeted programs that promote job creation and SMEs financing. The NSFI resulted in the creation of a credit registry platform (CIP-FIBANE-CASEMF)³, a new regulation for the MFIs and noteworthy progress in mobile money penetration. The government is in the process of updating the strategy, and launched in late 2017 a FINSCOPE⁴ financial sector survey to inform the revised NSFI. Preliminary results of the survey show improved access to financial services; however, Cameroon continue to trail peer countries in access to bank account.

3. This chapter benchmarks financial inclusion in Cameroon compared with peer countries, looks into the determinants of financial access and proposes some policy recommendations to boost financial inclusion.

B. Financial Sector Development and Access

Financial Sector Overview

4. Cameroon's bank-dominated financial system is the largest in the Economic Community of Central African States (CEMAC). As of end-December 2016, the financial sector in Cameroon comprised 14 banks (3 wholesale banks, 10 retail banks, and one specialized in SMEs finance) with a network of 281 branches, 409 microfinance institutions (MFIs) (1595 branches), a postal saving network (CAMPOST) with 250 branches, a pension fund, a mortgage finance institution, 6 quasi-banking institutions,⁵ and 26 life and non-life insurance companies (Table 1). Total financial sector assets were estimated at 40 percent of GDP, with two-thirds held by banks.

5. The banking system is expanding but remains shallow and highly concentrated. Banks' balance sheets expanded by almost two-third since 2010. The number of banks is also rising, with two new licenses recently granted, including for the largest MFI⁶ that will consolidate the position of the banking system. However, compared to peer countries, the banking system remains shallow, private sector credit to GDP was 15.3 percent at end-2016, compared to 28.5 percent for the average SSA and 33 percent for Kenya. Bank assets are concentrated, with the 3 largest banks accounting for 50 percent of the total (70 percent for the 5 largest banks). In addition, Yaoundé and Douala, the country's two largest cities, generate about 90 percent of total banking system credits and deposits.

³ CIP=Centrale des Incidences de Paiements ; FIBANE=Fichier Bancaire Nationale des Entreprises ; and CASEMF=Cadre de Suivi de l'Activité des Etablissements de Microfinance.

⁴ The FINSCOPE is survey developed by FINMARK trust with the main objective to measure and profile the levels of access to and uptake of financial products/services (both formal and informal) in a particular country, across income ranges and other demographics.

⁵ The National Investment Company (SNI), African Leasing Company, Alios Finance, Société de Recouvrement des Créances du Cameroun (SRC), Société Camerounaise d'Équipement (SCE), and Pro-PME.

⁶ Crédit Communautaire d'Afrique CCA, a second-category MFI, holding about 25 percent market share, has been granted a bank license by the COBAC in March 2016, and is awaiting the government's final approval. The second license was granted to Bank of Africa, a Moroccan bank.

Table 1. Cameroon: Financial Sector Overview, 2016

	2010	2011	2012	2013	2014	2015	2016	2016	
								Number branches	
	(in percent of GDP)								
Commercial banks	23.1	24.5	23.0	24.6	25.1	25.6	26.5	14	281
Top-5 large commercial banks	16.9	17.7	16.4	17.8	17.4	18.1	18.6	5	0
Major foreign owned banks	12.9	13.8	12.5	13.4	13.2	13.8	13.1	4	0
Locally-owned banks	5.9	5.8	5.5	6.0	6.0	5.9	7.1	4	0
Other quasi-banking institutions	0.8	0.7	0.7	0.9	0.8	0.9	0.9	6	27
Microfinance institutions	3.5	3.3	3.1	3.2	3.6	4.0	4.0	409	1,595
Category 1	1.5	1.4	1.3	1.5	1.5	1.9	1.7	366	576
Category 2	2.0	1.9	1.8	1.7	2.1	2.1	2.3	40	1,012
Category 3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3	7
Insurance companies	3.0	2.8	2.7	2.8	2.7	2.7	2.8	26	154
Life	1.4	1.3	1.3	1.5	1.4	1.4	1.4	16	...
Non-life	1.6	1.5	1.5	1.4	1.3	1.3	1.4	10	...
Pension fund	3.2	3.1	2.9	2.7	2.5	2.4	2.3	1	37
Mortgage financial institution	1.5	1.7	1.7	1.9	1.6	1.5	1.6	1	11
Postal saving institution	0.7	0.8	0.7	0.7	0.6	0.5	0.8	1	250
Stock market capitalization	0.7	0.7	0.7	0.8	0.9	0.9	0.8	1	1
Total financial system	36	38	36	38	38	39	40	459	2,356

Sources: Cameroonian authorities; BEAC; and IMF staff calculation.

6. The microfinance sector and mobile banking are expanding. MFIs are more spread-out than banks, with a stronger presence in rural areas. MFIs suffers from poor governance, weak asset quality, and split supervision responsibilities between the government and the COBAC (*Commission bancaire de l'Afrique centrale*, the regional regulatory body). Mobile banking, with new licenses granted in 2018, is growing fast offering a wide range of services. The insurance sector remains underdeveloped but with good growth prospects. It is fragmented and quite concentrated dominated by health, vehicles and transport insurance (75 percent of total sales). The insurance penetration rate for life insurance is low around 2 percent at end-2016.

7. Other financial sector entities suffer from operating losses and weak governance and oversight. It includes: (i) the Cameroonian Postal Service (CAMPOST) mostly operating in the hinterland, it offers postal banking services, money orders and transfers, and IT solutions (data center, interconnectivity, voice on IP, tele-conferencing, and video surveillance) mainly offered to MFIs; (ii) the *Crédit Foncier du Cameroun* (CFC) a state-owned mortgage institution promoting real estate. It is funded by 2.5 percent withholding tax on public and private sector salaries and deposits from clients. Its NPLs amount to 26 percent of total assets; and (iii) the state-owned pension fund *Caisse Nationale de Prévoyance Sociale*—CNPS, providing pension services to private sector and the state-owned enterprise (SOE) employees covering about 1 million individuals.

8. The remaining actors include other quasi-banking institutions, the stock exchange and forex bureaus, which are quite marginal. The Douala Stock Exchange has only three listed companies, all public, since its inception in 2006, with limited trading and capitalization, below 1 percent of GDP. The recent merger with the Libreville stock exchange could bring more private companies. At end-2016, the Ministry of finance reported 25 licensed forex bureaus, operating mostly in Douala and Yaoundé.

Access to Financial Services

9. Overall access to financial services in Cameroon is low with high recourse to informal services. The 2014 Findex survey shows that only 12.2 percent of the population has an account at a financial institution, the lowest in the combined CFAF Zone excluding Niger. The access ratio drops to 7.7 percent when measured by saving in a financial institution and to 1.9 percent for borrowing from a financial institution. Low access to formal finance is offset by a large recourse to informal finance (more than half of the adult population) mostly using “*Tontines*” (Box 1). However, informal finance being often associated with elevated costs (36–60 percent annualized interest rate), small credit’s size, and high risks due to lack of regulation.

10. The degree of financial inclusion depends on socio-economic conditions. Access to finance varies across gender, income level, education level, and the nature of employment. The population at the 3-upper income quintile has a ratio of account ownership of 18 percent, about 9 times higher than the ratio held by the bottom two quintiles (about 2 percent). The adult population with primary or lower education has an account ownership ratio of 5.4 percent compared with a ratio of 20 percent for the population having a secondary and higher education. Large disparities also exist between salaried and non-salaried workers, underscoring the importance of reducing poverty through the provision of quality education and jobs in boosting financial inclusion in Cameroon (Figure 2).

Box 1. “Tontines” and Financial Inclusion

Also known as Njangui in the Anglo-Saxon culture, the “*tontines*” broadly refers to a group of persons sharing common ties—region, tribe, friendship, colleagues—who decide to meet on a regular basis to put together their savings to provide financial solutions to their members or community. Originally, it was intended to provide in-kind support to a member such as collective work in farming, building a house or during celebrations. It expanded in the wake of the 1990’s CEMAC banking crisis. the “*tontines*” offer three types of instruments: periodic contributions, saving and loans, and solidarity funds.

First, periodic contributions consist in channeling members’ contributions to a different beneficiary until a round is closed¹. Second, *tontines* offer an opportunity to save and access to credit. Usually, interest rates hover around 3–5 percent per month equivalent 36–60 percent annually, and maturities do not exceed 3 months. Third, solidarity funds are form of an insurance policy that cover a range of issues including health, and family events experienced by members and predefined relatives, provided that the member is contributing regularly.

The authorities recognize the tontines’ prevalence and complementarities with the financial sector, which they intend to leverage in their revised NSFI. Tontines’ funds mostly transit through Tontines’ dedicated accounts in banks and MFIs held by the group leader. Mobile money is also facilitating Tontines’ transactions and could help bringing more Tontines’ users to the formal financial sector with the creation of i-Djangui platform since 2016. Belonging to a Njangui also offer loan opportunities from banks and MFIs via collective and moral guarantees. Finally, some Tontines will move to MFI (category 1—collecting saving and extending loan to members only) as they gain sound financial base.

¹ For example, a Njangui of 12 participants with a monthly stake of \$5 per person will distribute \$60 (= \$5*12 persons) every month to a beneficiary drawn in advance. The total turnover of the round is \$720 (\$60*12 months).

Figure 2. Cameroon: Financial Inclusion, 2014
Having an Account
 (in percent of age 15 and above)

Using Mobile Phone to Make Payments
 (in percent of age 15 and above)

Borrowed or Saved from a Bank
 (in percent of age 15 and above)

Borrowed or Saved Informally
 (in percent of age 15 and above)

Financial Inclusion by Gender
 (in percent)

Account Ownership: By Income Level
 (in percent)

Account Ownership: By Education Level
 (in percent)

Account Ownership: By Wage Employment and Gender
 (in percent)

Sources: 2014 Global FINDEX; and IMF staff calculations.

Role of Microfinance and Mobile Money in Improving Access to Finance

11. The MFI sector in Cameroon plays a significant role in financial access especially in the poorest regions, however it faces challenges. MFIs represented 15 percent of total bank assets and was serving about 11 percent of the adult population at end-2016. Although MFIs are present in rural and poverty-stricken areas and are often the only alternative for gaining access to financial services, they remain, like banks, concentrated in Yaoundé and Douala with also a strong presence in the western regions including in the two Anglophone regions. MFIs suffer from poor governance, heavy owners' interventions,⁷ elevated connected party lending, weak credit risk assessment (loans in arrears remains around ¼ of total loans), and poor capitalization.

12. Recently implemented reforms at the national and regional levels could reinforce stability and promote the development of the sector. The approval of a new regional MFIs' regulation in 2017 could reinforce the oversight and credibility of the sector. The 2017 regulation clearly divides roles between stakeholders especially MFIs' owners in charge of organizing internal and external controls, the ministry of finance operating administrative control, and the COBAC solely in charge of supervision. The regulation caps credit to individual clients, increases minimum capital required, frames conditions for granting loans to related parties and requires category-1 MFIs to regroup under umbrella bodies (comprising a minimum of 5 MFIs) within a 24 months period. Nevertheless, specific regulations framing these requirements are yet to be enacted by COBAC.

13. The mobile money market is growing fast and contributing to increasing financial inclusion. Initiated in 2012, mobile money has been growing fast: the number of mobile money accounts penetration has increased from 9 percent of adults in 2012 to about 28 percent in 2016 (figure 3) and it continued to grow in 2017 benefiting the poor regions. The FINSCOPE survey shows that the Far North, the poorest region in Cameroon, have the highest access to mobile money after Douala and Yaoundé. In addition, whereas mobile money transaction amounts have regulatory caps and are restricted within the CEMAC region,⁸ they are estimated to have reached CFAF 3.5 trillion (17.5 of GDP) in 2017 up from 0.3 trillion in 2016 due the large array of services that they cover (bill pay, money transfer,

⁷ Some first category MFIs (which receive deposits from and lend to members only) originate from graduating unregulated tontines making it difficult for the owners to adjust and embrace good management and governance practices.

⁸ Mobile money transactions are capped at CFAF 3 million per day; CFAF 5 million a week, and CFAF 10 million a month; transaction costs across operators could increase up by 5–10 times.

tax payments, etc.) Mobile money's growth potential remains high since less than a quarter of cellphone subscribers were using mobile money as of 2016.⁹ The sector will also benefit from the government approval of two mobile money licenses in early-2018, bringing the third mobile operator to the market and extending the service to two additional banks. Only 5 out of 14 banks are using mobile banking and the MFIs are not yet authorized to use it.

C. Determinants of Financial Inclusion in Cameroon

14. The 2014 Findex survey identified several barriers to account ownership in Cameroon.

(Figure 4). These barriers are dominated by lack of money with 47 percent of respondent which is well below the SSA average of 71 percent and CEMAC average 61 percent. This is followed by the inability to get an account (36 percent), cost (30 percent), and religion (28 percent). Obstacles to account ownership such as religion, lack of trust, and no need of financial services, which dominate in Cameroon compared to the average for SSA, can only be addressed progressively, through schooling and enhanced financial literacy. Distance to financial institutions and lack of documentation and money are less problematic to account ownership in Cameroon compared to peer countries, however, the situation is very different across regions in Cameroon—The Far North region with 74 percent poverty rate has only 2.6 bank per 100,000 people and MFI branches compared with the Coastal region, 13.4 percent poverty rate and 17.6 bank and MFI branches per 100,000 people.

15. An empirical estimation confirms that low financial inclusion in Cameroon is strongly influenced by country-specific characteristics. Using a probabilistic model similar to the one used by Deléchat et al., 2018 (Annex 1), we found that individual characteristics such as education, wage employment, high income, as well as institutions that favor financial deepening and guarantee equal rights to both women and men captured by the OECD's index of social institutions and gender inequality (SIGI) contribute to high financial inclusion. The indicator variable for Cameroon is strongly negative and significant in both the world and the SSA samples. A low level of education has a stronger negative effect in Cameroon, almost the double of its effect in the world sample. Despite lower overall access to finance women seem not to be financially constrained in Cameroon. The gender gaps in access to finance seem to hinge on gaps that exists outside the financial sector (see

⁹ The Telecom regulatory agency has identified 19.5 million mobile phone subscriptions with the three mobile operators in 2016 with 3.8 million mobile accounts created. The number of accounts reached 6.4 million, with only half operational in 2017.

Chapter III). Women with tertiary education and wage employment in fact tend to be more financially included than men.

D. Conclusions and Policy Recommendations

16. Low and unevenly distributed access to finance in Cameroon with high recourse to informal services continues to hamper private sector-led growth. To foster greater financial inclusion, the authorities' revised national strategy could usefully consider the following:

- *Promoting education and enhancing financial literacy.* As also confirmed by the FINSCOPE survey results, the large recourse to the costly informal financial sector is supported by the lack of information about opportunities in the formal sector.
- *Improving financial infrastructure could help address some obstacles to financial access.* In this regard, it would be important to accelerate the reform towards (i) expanding access to client databases to all financial institutions, (ii) enhancing the use of collateral by computerizing the movable collateral registry and the cadaster, and (iii) training judges in the resolution of banking conflicts while working toward the creation of commercial courts.
- *Accelerating the resolution of ailing banks and distressed MFIs, and addressing the high level of NPLs could restore confidence and boost credit provision.* The resolution of the ailing banks and improving governance in the MFIs will reinforce the stability in the financial sector along with reduced NPLs could lower cost of financing.
- *Enhancing the regulatory environment for MFIs and mobile money.* In the MFI sector, accelerating the implementation of the 2017 regional regulation requiring first category MFIs to regroup under umbrella bodies would help facilitating control and supervision. Finally, it is important to ensure that a regulatory framework for mobile money is put in place that guarantees both stability and innovation while protecting the consumers.

Annex I. Empirical Strategy and Results

1. We used the model specification used by Deléchat et al. (2018) and apply it to the detailed information on individuals from the Findex database combined with macroeconomic data. We estimate the following relationship across countries (j) and individuals (i) with a Probit regression:

$$\text{Financial inclusion}_{ij} = \beta'(\text{Individuals-characteristics})_{ij} + \gamma'(\text{Country-characteristics})_j + \rho'(\text{policies and Institutions})_j + \tau'(\text{others})_j + \varepsilon_{ij}.$$

In this specification, the variables are defined as follows:

- *Financial inclusion*, differently defined from Delechat and al 2018, is an indicator variable that access to formal financial service is defined as having an account in a financial institution, saving in a financial institution, borrowing from a financial institution, or using a mobile account.
- *Individual-characteristics* capture the individual's socio-economic characteristics, such as gender, education, age, nature of employment and income level.
- *Country-characteristics* are structural country characteristics, including the level of development (GDP per capita), the structure of the economy (captured by oil-exporter status), and population density.
- *Policies and Institutions* represent policies at the country level, comprising both general policies and those which affect financial inclusion.
- *Others* are dummy variables that captures commonalities of SSA and Cameroon individuals.

2. The main findings, summarized in Annex Table 1, are the following:

- Globally, individual characteristics such as having a tertiary and higher education, being formally employed, and belonging to the top income quintile significantly contribute to improving the probability of being financially included, while being a woman and, poor and less educated lead to lower access to finance. In addition, financial inclusion seems to benefit from higher population density, high income level, and being a non-oil exporter.
- The SSA indicator variable was positive after controlling for the individual characteristics which have stronger effects when the model is restricted to SSA countries only. The success of mobile money in providing access to finance to a wide range of individuals could explain this result. This phenomenon seems to be taking place across all SSA countries as shown by the coefficient of country specificities and policy variables that came all insignificant in explaining differences in financial inclusion across SSA countries, Model (5) and (6).

Annex Table 1. Determinants of Financial Access

	Full Sample		SSA		Full Sample		SSA	
	All	Female	All	Female	All	Female	All	Female
Individual characteristics	Financial Access				having an account in a financial institution			
female	-0.1916*** -0.0401		-0.1469*** -0.04		-0.1994*** -0.0401		-0.1402** -0.0426	
Cameroon female interaction	0.1043 -0.1189		0.1206 -0.1216		0.0253 -0.1234		0.0453 -0.1325	
Primary education and less	-0.4813*** -0.0469	-0.4838*** -0.0615	-0.5375*** -0.0471	-0.5662*** -0.0686	-0.5119*** -0.047	-0.5192*** -0.0626	-0.7039*** -0.0496	-0.7766*** -0.0713
Tertiary education and up	0.3840** -0.1221	0.138 -0.204	0.6475*** -0.0703	0.5770*** -0.1167	0.3687** -0.1285	0.1787 -0.198	0.7159*** -0.0751	0.5487*** -0.1286
Age	0.0757*** -0.0062	0.0651*** -0.0087	0.0391*** -0.0066	0.0332*** -0.0093	0.0692*** -0.0063	0.0546*** -0.0088	0.0424*** -0.007	0.0425*** -0.0101
Age squared	-0.0008*** -0.0001	-0.0007*** -0.0001	-0.0003*** -0.0001	-0.0003* -0.0001	-0.0007*** -0.0001	-0.0006*** -0.0001	-0.0003*** -0.0001	-0.0003** -0.0001
Wage employment	0.4132*** -0.0476	0.5116*** -0.0694	0.7003*** -0.0468	0.8286*** -0.0739	0.4261*** -0.0473	0.5265*** -0.0691	0.7466*** -0.0482	0.9098*** -0.0773
Bottom 20 percent income	-0.2212*** -0.0525	-0.1475* -0.0685	-0.2477*** -0.0545	-0.2385** -0.0759	-0.1961*** -0.053	-0.1358 -0.0702	-0.2505*** -0.0607	-0.2624** -0.0843
Top 20 percent income	0.3441*** -0.0539	0.3371*** -0.0744	0.3284*** -0.0468	0.2481*** -0.0703	0.2812*** -0.0542	0.3104*** -0.0748	0.3382*** -0.0483	0.2419*** -0.0718
Country characteristics								
Population density	0.0657*** -0.0084	0.0566*** -0.012	0.2889*** -0.0504	0.3067*** -0.0728	0.0790*** -0.0084	0.0676*** -0.012	0.3802*** -0.0573	0.3887*** -0.0838
GDP p.c. ppp	0.011 -0.0244	-0.0259 -0.0333	-0.4823*** -0.0514	-0.4671*** -0.0769	0.0419 -0.0245	-0.0022 -0.0335	-0.2144*** -0.0582	-0.2019* -0.0879
Fuel Exporter	0.1851*** -0.035	0.1173* -0.048	0.4298*** -0.088	0.3174* -0.1276	0.3347*** -0.0343	0.2329*** -0.0467	0.3569*** -0.0956	0.1711 -0.1404
Policies and institutions								
Mean years of schooling	0.0828*** -0.0113	0.1265*** -0.0152	0.2224*** -0.0142	0.2328*** -0.0212	0.0778*** -0.0114	0.1209*** -0.0155	0.1263*** -0.0155	0.1287*** -0.0236
Financial development	2.8437*** -0.1056	2.5976*** -0.1427	2.2755*** -0.2349	2.1577*** -0.3474	3.2055*** -0.1084	2.9668*** -0.1454	2.2166*** -0.2544	2.0107*** -0.3808
Institutions (ICRG) 1/	0.0042 -0.0023	0.0177*** -0.0032	0.0240*** -0.0041	0.0280*** -0.0062	-0.0022 -0.0023	0.0083** -0.0032	0.0288*** -0.0047	0.0394*** -0.0071
Social discrimination against women (SIGI) 2/	-0.9378*** -0.117	-1.0293*** -0.1625	1.4352*** -0.1627	1.4324*** -0.2454	-0.8929*** -0.1169	-1.0228*** -0.1613	1.1169*** -0.1762	1.1099*** -0.2651
Others								
SSA	0.8269*** -0.0414	0.8426*** -0.0601			0.7214*** -0.04	0.7022*** -0.0578		
CMR	-0.8208*** -0.0817	-0.8161*** -0.0891	-0.8885*** -0.0866	-0.8164*** -0.0968	-0.4553*** -0.0833	-0.5277*** -0.0946	-0.5745*** -0.0916	-0.6328*** -0.1081
Constant	-3.4128*** -0.2905	-4.0890*** -0.4116	-1.2025** -0.388	-1.5973** -0.5682	-3.4190*** -0.2936	-3.7312*** -0.4148	-3.2089*** -0.4474	-3.9714*** -0.6696
Number of observations	73,654.00 World	39,316.00 World-Female	20,855.00 SSA	10,094.00 SSA-Female	73,654.00 World	39,316.00 World-Female	20,855.00 SSA	10,094.00 SSA-Female

Standard errors in parentheses

* p<0.10 ** p<0.05 *** p<0.01

Sources: FINDEX 2014; OECD; The PRS Group; World Bank; and IMF staff calculations.

1/ ICRG: International Country Risk guide rating from the PRS group

2/ SIGI: Social Institutions and Gender Index, from OECD

- The Cameroon indicator variable came strongly negative and significant in both the world and the SSA samples reinforcing previous point made of poor financial access in Cameroon. Despite lower overall access to finance women in Cameroon seem not to be financially constrained. An interaction variable between female and Cameroon came positive but insignificant. Also, restricting the sample to Cameroon, model (7–9), the female indicator variable remains insignificant when additional controls are added to the model. This suggests that differences in access to finance between men and women hinge on gaps that exists outside the financial sector.
- A low level of education has a stronger negative effect in Cameroon, almost the double of its size in the world sample. Tertiary education and wage employment are strongly associated with women's financial access. Income appears not significantly related to women's financial access but being in the top income quintile significantly and positively contributes to men's access to finance.

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