



HAITI

SELECTED ISSUES

April 2020

This Selected Issues paper on Haiti was prepared by a staff team of the International Monetary Fund as background documentation for the periodic consultation with the member country. It is based on the information available at the time it was completed on December 23, 2019.

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International Monetary Fund
Washington, D.C.



HAITI

SELECTED ISSUES

December 23, 2019

Staff Report prepared by a staff team of the IMF for the Executive Board's consideration on January 24, 2020. The staff report reflects discussions with the Haiti authorities in November 2019 and is based on the information available as of December 20, 2019. It focuses on Haiti near and medium-term challenges and policy priorities and was prepared before COVID-19 became a global pandemic and resulted in unprecedented strains in global trade, commodity and financial markets. It, therefore, does not reflect the implications of these developments and related policy priorities. The outbreak has greatly amplified uncertainty and downside risks around the outlook. Staff is closely monitoring the situation and will continue to work on assessing its impact and the related policy response in Haiti and globally.

Approved By
**Western Hemisphere
Department**

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CONTENTS

INEQUALITY IN HAITI: BACKGROUND AND POLICY OPTIONS	4
A. Introduction	4
B. The Role of Government Policies in Combatting Inequality	6
C. Income Inequality between Rural and Urban Areas	7
D. Gender Inequality	9
E. Policy Advice	10
FIGURES	
1. Regional Inequality Comparison using Gini Coefficients	4
2. Inequality Indicators	5
3. Regional Tax Collection and Social Spending	6
4. Rural Poverty and Financial Inclusion	7
5. Gender Inequality	10
References	13
SOCIAL PROTECTION SPENDING	15

A. Stock-taking of Existing Social Policies	15
B. The Limited Effectiveness of Social Spending	17
C. The New National Policy	21
D. Policy Considerations	21

BOX

1. Terminology and Methodology Note on Social Spending	16
--	----

FIGURE

1. Government Social Spending and Technical and Financing Support	20
---	----

TABLES

1. Main Existing Social Protection and Promotion Programs	19
2. Illustrative Template of Reform Implementation	24

References	25
------------	----

ENERGY SECTOR REFORM 26

A. Executive Summary	26
B. The Energy Sector in Haiti	27
C. Estimating Energy Sector-Related Losses	33
D. Socio-Economic Implications	36
E. Evidence from International Experience	38
F. A Proposal for Energy Sector Reform in Haiti	41

BOXES

1. Estimating the Cost of Fuel Subsidies	36
2. International Household Energy Expenditures	37

FIGURES

1. Electricity and Fuel Market Structures	29
2. Fuel Price Comparison	30
3. Electricity Grids and Power Generation	31
4. Electricity Consumption in Haiti	32
5. Estimated Cost of Retail Fuel Subsidies	33
6. Fuel Subsidies by Product	35
7. Electricity Subsidies	37
8. Household Expenditure and Subsidies by Income Group	39

TABLES

1. Price Structure for Distributors vs. Non-Distributors (2017)	30
2. EDH Budget and Electricity Price Overview	40

ANNEXES

I. Lessons from International Energy Price Reforms	45
II. <i>Petrocaribe</i> in Haiti	47
III. Experience from Recent Fuel Reform Attempts	48
IV. Experience from Electricity Sector Reform Attempts	49
References	50

HAITI'S CROSS BORDER TRADE WITH THE DOMINICAN REPUBLIC 51

A. Background	51
B. Cross-Border Informal Trade	51
C. Drivers and Implications of Cross-Border Trade	53
D. Recommendations	55

BOX

1. Disparity in Bilateral Trade Statistics	53
--	----

FIGURE

1. Bilateral Trade Flows with the US and the World	53
--	----

TABLE

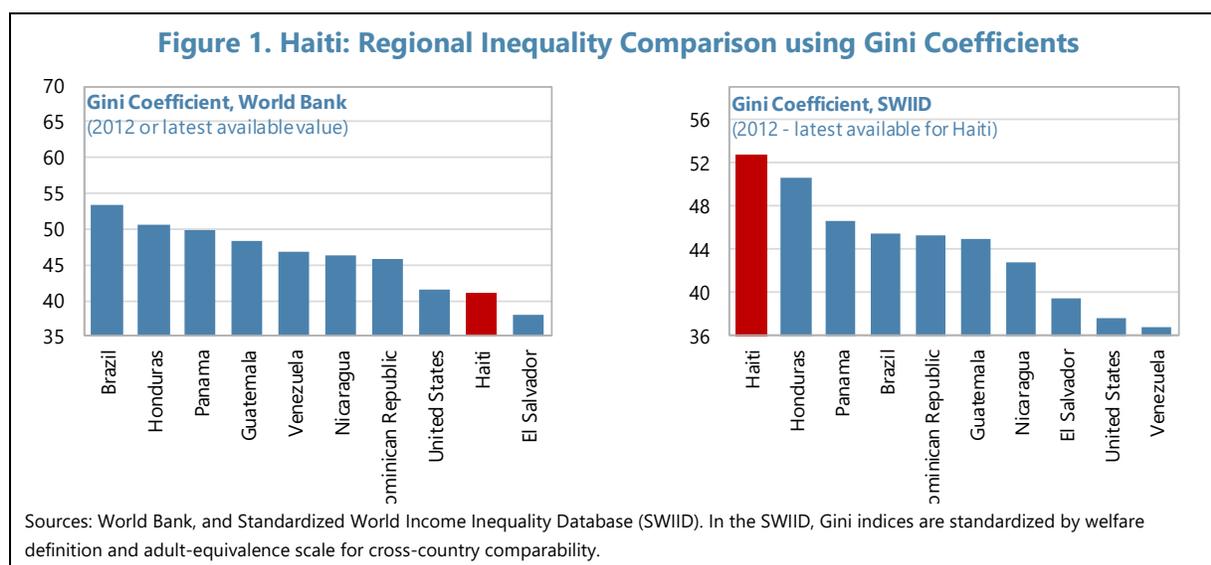
1. Tariff Revenue Implications from Under-Reporting of Imports	54
--	----

References	56
------------	----

INEQUALITY IN HAITI: BACKGROUND AND POLICY OPTIONS¹

A. Introduction

1. Despite some recent improvements, inequality in Haiti remains high. Notwithstanding improvements in education indicators and life expectancy (Figure 2), income inequality has continued to widen. According to various cross-country datasets, Haiti remains among the most unequal countries in the world as measured by the Gini coefficient (Figure 1). This is related to a concentration of resources in the hands of a small but powerful group of elites, many of whom have dominated entire sectors of the Haitian economy since the Duvalier era, when they were granted monopoly rights in key industries and exclusive import licenses for major consumables (Singh et al, 2015). The persistence of such high levels of inequality is due in part to the weakness or absence of channels of resource redistribution, such as targeted transfers and a social safety net.

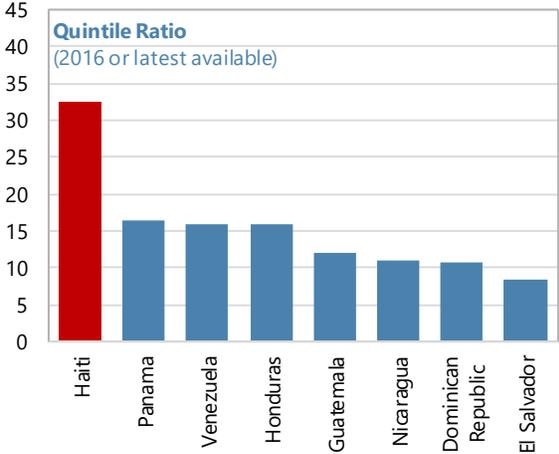


2. Income inequality can hamper economic growth and development. In theory, the effect of inequality on growth is ambiguous: on the one hand, it should promote entrepreneurial activity and foster innovation, while on the other hand it can reduce long-term growth potential via underinvestment in human and physical capital and the effects of political instability and social unrest. Empirically, there is no consensus in the literature on which effect prevails in the long run or which way the causality goes. However, recent IMF studies link greater income equality with better growth outcomes. Ostry, Berg and Tsangarides (2014) find that lower net inequality (*post-tax* and transfers) is robustly correlated with faster and more durable growth when examining net inequality across countries. More specifically, an increase in the income share of the poorest 20 percent of the population is associated with higher growth outcomes over the medium term, whereas an increase in the income share of the top 20 percent is linked to lower growth (Dabla-Norris and others, 2015a).

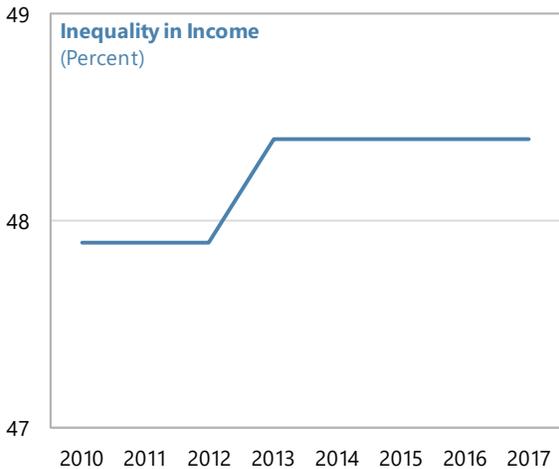
¹ Prepared by Marina Rousset (WHD).

Figure 2. Haiti: Inequality Indicators

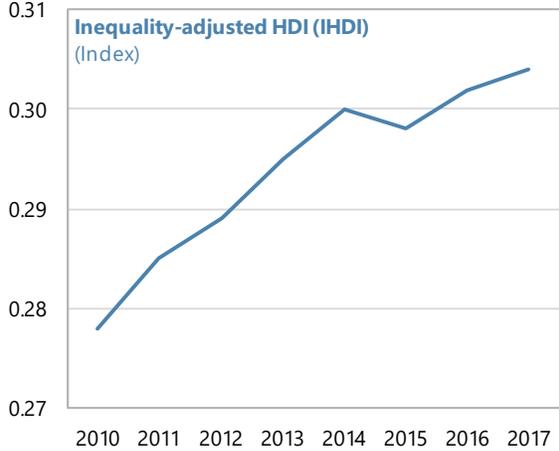
Haiti has the highest rate of inequality in the region.



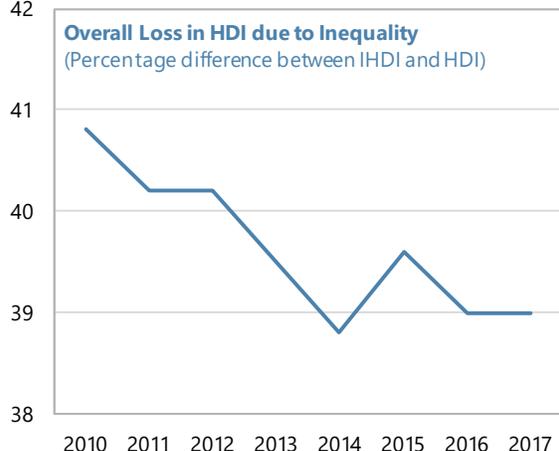
Income inequality has increased since 2010.



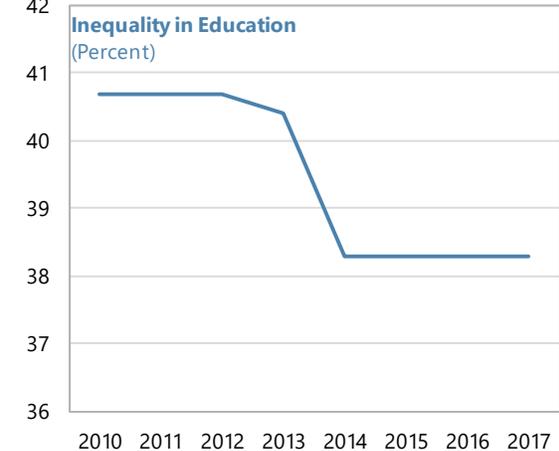
However, inequality-adjusted HDI has improved...



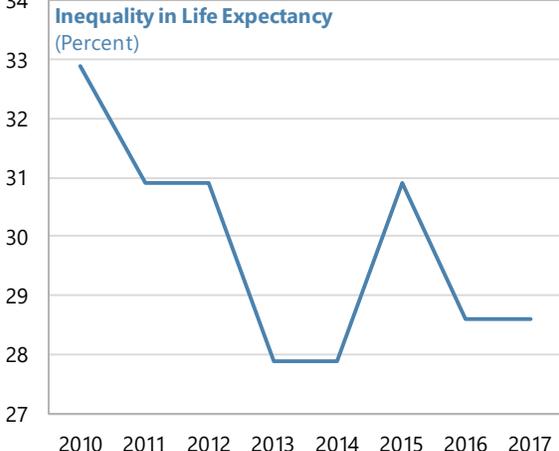
...and human development losses due to inequality have fallen.



Access to education has become slightly more equal...



...while inequality in life expectancy broadly declined.

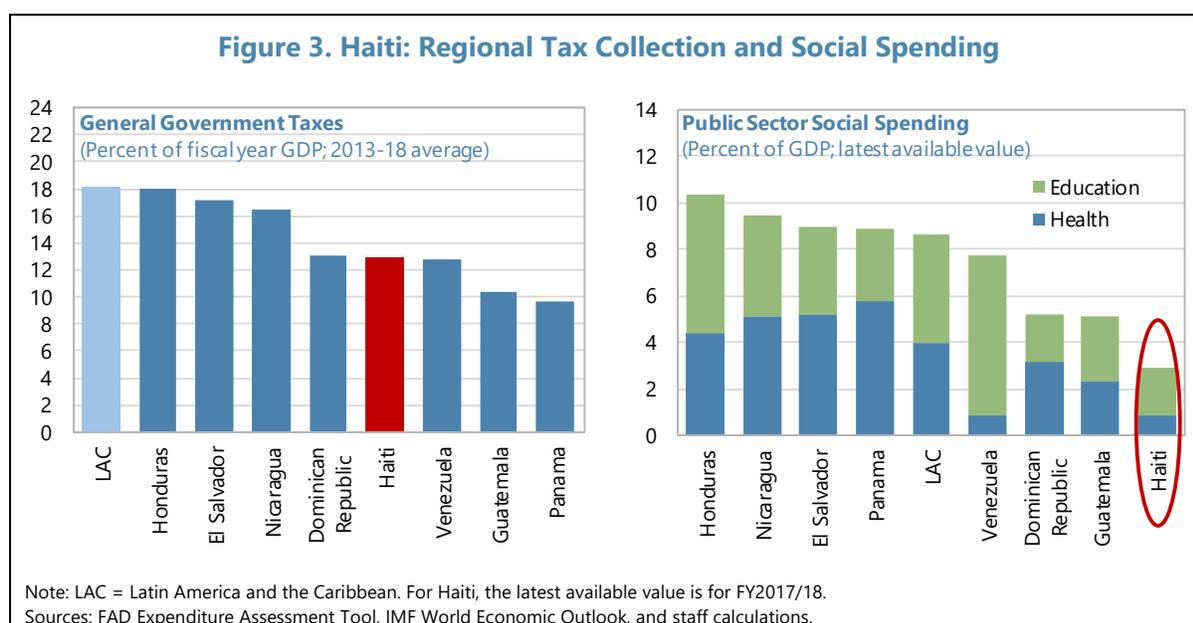


Source: United Nations, Human Development Report.

B. The Role of Government Policies in Combatting Inequality

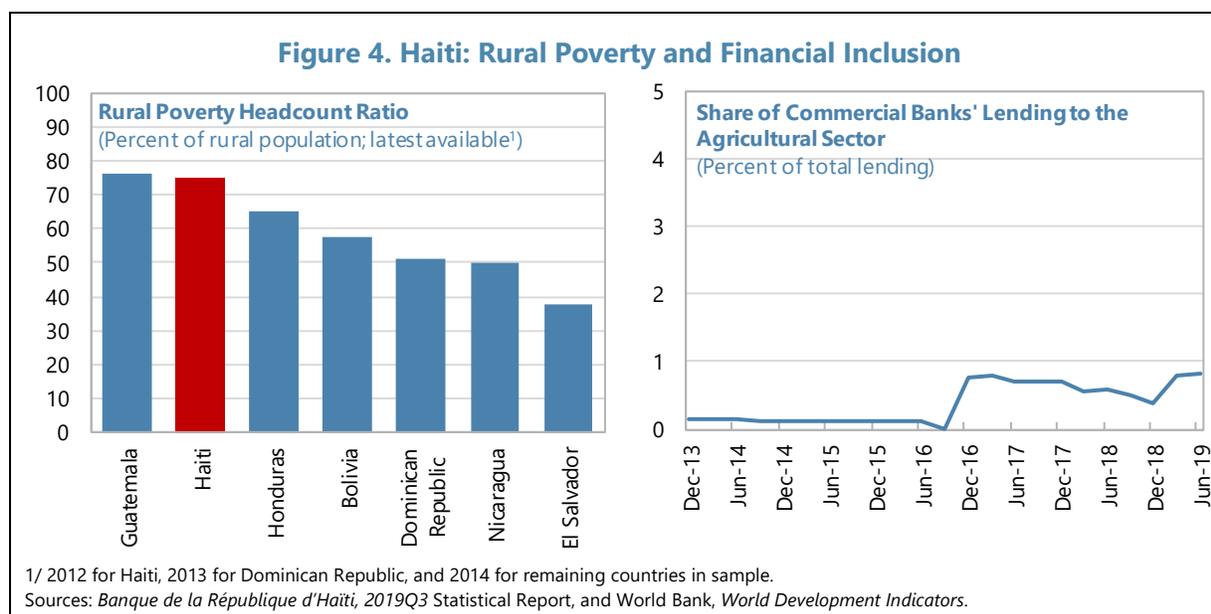
3. Policies promoting inclusive growth must be designed to balance efficiency and equity concerns at the onset. In the context of low-income countries, greater equality can come as a by-product of growth-enhancing policies. For example, improved revenue collection combined with well-targeted cash transfers and increased infrastructure spending simultaneously reduce inequality and improve growth (Ostry, Berg and Kothari, 2016). Furthermore, spending on education can be both pro-growth and pro-equality, as long as access to education is not restricted. Improving the efficiency of infrastructure and education spending can provide both the fiscal space to finance inequality reducing initiatives and encourage investment, thus boosting growth (Fiscal Monitor, 2017).

4. Fiscal policy plays an important redistributive role in mitigating income inequality, but this redistributive capacity is limited in many LICs, including Haiti. Fiscal policy is an important instrument that helps policymakers tackle inequality both directly through taxes and subsidies—and indirectly through in-kind transfers such as health and education spending. To promote inclusive growth, fiscal policy has three major tools at its disposal: progressive income taxation, health and education spending, and a social safety net (Fiscal Monitor, 2017). In developing economies, the use of these tools is severely restricted by low overall levels of tax revenues and transfers and a lack of tax-structure progressivity (Bastagli, Coady, and Gupta 2015). In the Latin America and Caribbean region, Haiti appears at the lower end of the tax collection distribution with an average of 13 percent of GDP over the last five years (Figure 3, chart 1). It also has very low levels of safety-net transfers consisting mainly of tuition assistance and nutritional support programs backed by various development and humanitarian partners.



5. Haiti's social safety net is currently fragmented, limited in reach, and underfunded, although reforms are in the works. Efforts are underway to identify the most vulnerable segments of the population (WFP, 2017) and the authorities have made progress to develop a national social

protection and promotion policy (*PNPPS*).² Social spending on health and education in Haiti is very low relative to comparator countries and the region overall (Figure 3, chart 2). Progressivity of income taxation can also be improved: as discussed in the 2013 SIP, the top rate of 30 percent applies to incomes that are over 2000 percent higher than Haiti's per-capita GDP (Bessaha and Bova, 2013).



C. Income Inequality between Rural and Urban Areas

6. Income inequality in Haiti is particularly pronounced between rural and urban households. According to Haiti's latest household survey (2012), more than half of the population resides in rural areas, where almost 70 percent of households are considered chronically poor; the comparable figure for urban areas is 20 percent. While country-wide extreme poverty declined from 31 percent in 2000 to 24 percent in 2012, it remained largely the same in rural areas over this period (World Bank, 2014a). The political and economic crisis of the past year has likely caused a significant deterioration in poverty and inequality indicators. A high incidence of rural poverty is not uncommon among developing economies where opportunities for education, employment, and access to technology tend to be concentrated in metropolitan areas. It is the entrenchment of rural poverty combined with its relatively elevated rate compared to other countries in the region that highlight rural versus urban income inequality as particularly problematic in Haiti (Figure 4, chart 1). Since urban-rural gaps account for a large fraction of inequality within and across countries (Young, 2013), combatting rural poverty is an essential step toward reducing income inequality in Haiti.

7. Job creation and income diversification are essential for rural poverty reduction. In Haiti, the self-employed are much more likely to experience poverty than formal-sector employees, and those working in agriculture are far more likely to be poor than others (Verner, 2008). Over

² The *PNPPS* (*Politique Nationale de Protection et Promotion Sociale*) is a national initiative led by the ministry of social affairs and labor (MAST) and the ministry of planning and external cooperation (MPCE), drafted in June 2019, aiming at broadening and improving the social safety net (see SIP on Social Protection Spending).

three quarters of the rural population in Haiti works in agriculture, and half has agricultural activity as its sole source of revenue (World Bank, 2014b). Lifting the productive capacity of the sector, particularly through improved irrigation systems, is an obvious starting point for addressing rural poverty. However, due to the structure of rural land ownership (i.e. small farmable plots and a lack of land titles), poor soil quality, and climate-related vulnerabilities, a large share of the rural poor cannot sustain a family through agricultural activity alone. In other words, subsistence farming is not usually possible.

8. Provision of basic services is key. The rural poor are primarily smallholders, sharecroppers, and informal waged workers who depend on a diverse strategy of income-generating activities (Verner, 2008), with higher shares of off-farm formal employment associated with lower incidence of poverty. This group lacks basic services, such as access to healthcare, clean drinking water, and sanitary waste management, with only 11 percent of the rural population having access to electricity as compared to 63 percent in urban areas, and 16 percent having access to improved sanitation facilities versus 48 percent in the cities. Access to these services is not only desirable for social and humanitarian reasons, but also for productivity and economic efficiency purposes: people are more productive when they are healthy and can work longer hours when they have electricity. Expanding targeted public investment in rural communities could simultaneously expand access to basic services, improve labor efficiency, and provide employment opportunities for the rural poor, generating more inclusive growth and sustainable community development.

9. Greater financial inclusion would help to close the rural/urban income gap. Economic inclusion is multidimensional and means “easing access to quality education, nutrition, healthcare, finance, and markets to all our citizens”. It is a necessity for sustainable growth and “...obviously, a moral imperative” (Rajan, 2015). In the Haitian context, economic inclusion requires better connectivity between remote rural areas and urban zones with access to markets and services. According to the World Bank’s Rural Access Index, 50 percent of Haiti’s surface remains poorly connected, with two-thirds of rural dwellers living in poorly-connected areas. In the medium term, better connectivity requires better infrastructure and transportation. In the long term, it means more comprehensive delivery of services—including financial—to the countryside. Financial inclusion policies that reduce participation costs primarily benefit the poor and are associated with lower inequality in low-income countries (Dabla-Norris and others, 2015b).

10. Currently, the financial needs of the rural poor are sustained by microfinance institutions, financial cooperatives, humanitarian programs, and remittance providers. According to the World Bank’s 2017 FINDEX, Haiti has the second-lowest financial inclusion score in the region, after Nicaragua, with only 33 percent of the adult population having a bank account. While lending to the agricultural sector picked up in late 2016, it remains below 1.0 percent of commercial banks’ total lending portfolio (Figure 4, chart 2), despite agriculture being identified as one of the priority sectors for development. Moreover, fewer rural households receive remittances when compared to urban households, and the difference is especially large among the poor (World Bank, 2014c). Microfinance institutions along with savings and deposit cooperatives, which fill the financing gap for the rural poor, are numerous and growing but lack regulation and supervision

since the law drafted in 2012 bringing them under central bank supervision has not been ratified by Parliament. This underscores the need for better integration of formal financial services to rural clients, such as through reduced participation costs (fees, collateral and documentation requirements) and greater supervision of existing lending institutions.

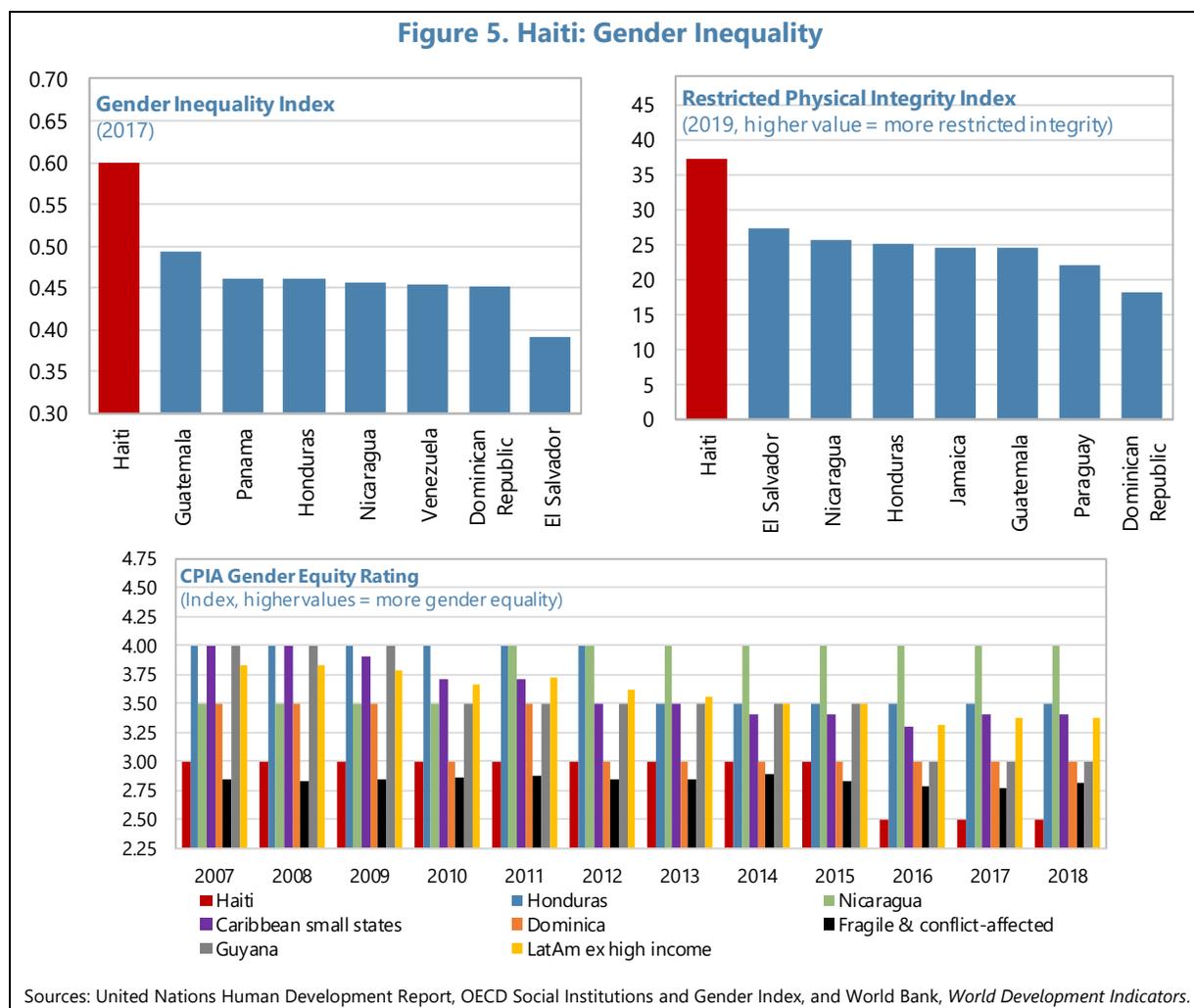
11. Greater financial inclusion could also be reached via solutions outside of traditional banking practices, including through fintech initiatives. Technologies such as mobile money may help increase financial inclusion for people living in remote areas and other underbanked populations (Berkmen and others, 2019). In Haiti, where the delivery of formal banking services to the countryside is lacking, leapfrogging to new-generation low-cost solutions may in fact be preferable, provided financial-integrity and cybersecurity risks can be properly managed. In fact, projects involving distributed ledger technology aimed at poverty reduction in rural communities are already underway in Haiti (see Box 1 in Berkmen and others, 2019). In addition, the 2015 National Financial Inclusion strategy spearheaded by the BRH is a step in the right direction. In the long run, the success of fintech initiatives at reaching poor communities and thus reducing inequality hinges on supportive government policies, including those aimed at improving the business climate.

D. Gender Inequality

12. Gender inequality is another important socioeconomic issue in Haiti that merits immediate attention and policy response. Haitian women earn, on average, 32 percent less than men. About a third of this earnings gap can be explained by factors such as age, number of children, education, and industry of employment, while the remaining two-thirds is unexplained, suggesting some gender discrimination in the labor market (World Bank, 2014c). The gender earnings gap is largest in the urban areas and is greater than in any other Latin American or African country. In rural areas, female-headed households (of which 62 percent are poor) are much more likely to fall below the indigence poverty line than are male-headed households (54 percent are poor). Haitian women are less likely than men to have an account at a financial institution or at a mobile network (Demirgüç-Kunt et al, 2017). Moreover, after staying low and unchanged for ten years, Haiti's gender equity rating dropped further in 2016, signaling a deterioration in the quality of institutions and policies that promote gender equity (Figure 5, chart 3). These conditions are not likely to have improved during the last one-two years of crisis.

13. Low access to education and healthcare and a high incidence of gender-based violence hamper economic opportunities for Haitian women. Among comparator countries, the labor force participation gap is the smallest in Haiti at 10 percent while the education gap is largest (many other countries in the region report higher rates of secondary education among girls than boys). While adolescent birth rates are relatively low, the maternal mortality ratio is five times higher than the regional average since many births take place outside a healthcare facility (Human Development Report; World Bank 2014c). Gender-based violence is another important contributor to gender inequality, with nearly one third of married women experiencing spousal violence and

13 percent of all women experiencing sexual violence (Figure 5, chart 2)³. Despite notable progression the legislative front, such as criminalizing rape and domestic violence in 2005, gender-based crime remains widespread, underreported, and uncontested.



E. Policy Advice

14. Policies to address income inequality in Haiti include pro-growth reforms and realignment of fiscal policy with the needs of the poor.

- To make growth more inclusive and sustainable in the long run, improved **revenue collection** and an efficient and a more progressive income tax system are necessary. Revenue collection needs to be strengthened (see Staff Report) and become more decentralized, as municipalities currently collect only a fraction of potential revenues, constraining their capacity for local service delivery.

³ Social Institutions and Gender Index, OECD: sub-index captures social institutions that limit women's and girls' control over their bodies, increase women's vulnerability, and normalize attitudes toward gender-based violence. This includes formal and informal laws, norms and practices that fail to protect women's physical integrity..."

- On the expenditure side, improving infrastructure as well as education and health services combined with higher **spending efficiency** on these growth-enhancing priorities would benefit all segments of the population.
- Scaling up **public investment** in the medium term can simultaneously help Haiti meet its Sustainable Development Goals, stimulate growth, and reduce the income gap. Identifying infrastructure bottlenecks most relevant to the rural poor could be a good starting point.
- Targeted social-support programs as well as unconditional cash transfers can contribute significantly to poverty reduction.^{4,5} Given the lack of administrative capacity to effectively monitor compliance with program conditions, unconditional transfers may be more appropriate in low-income countries and fragile states, including Haiti (see Staff Report and SIP on Social Protection Spending). In Latin America and the Caribbean, 28 economies already have unconditional transfer programs in place (World Bank, 2015).
- The recently-tabled *PNPPS* is an excellent starting point to better coordinate existing support programs and build a broader and more efficient safety net in Haiti.
- Successful implementation of the *PNPPS* will require a long-lasting policy commitment, cross-agency and intragovernmental cooperation, and a sustainable financing strategy (see SIP).

15. Labor markets and financial inclusion play an integral role in reducing poverty and the urban/rural income gap.

- A large share of full-time formal jobs in Haiti are concentrated in the apparel industry, which is supported by favorable terms of access to the U.S. market. Maintaining these trade preferences would support **formal employment** in the medium term, while in the long run Haiti needs to increase its **competitiveness** by improving the business climate, reducing political uncertainty, and streamlining its wage-setting process.
- Low employment accessibility is another barrier to inclusive growth. Overcoming this barrier is a multi-step approach: in the medium run, it involves better **connectivity** between residences and job sites—including through improved transport efficiency, coordinated land use, and greater affordability of public transport (Lozano-Gracia et al, 2017). In the long run, it means delivering formal jobs to the countryside, both through public works and private-sector development, which President Moïse’s *Caravane du Changement* reform program aimed to boost.
- In addition, it means improving and diversifying the revenue stream for those employed in agriculture and the informal sector. This would involve access to basic **infrastructure** and **education** and increased **financial inclusion**. While a larger share of adult population takes out loans in Haiti than in other low-income countries, most of the credit comes from family, friends,

⁴ When properly targeted at the most disadvantaged, these programs have been associated with declines in the Gini coefficient and human-capital impacts (Bastagli and others, 2012).

⁵ Evidence shows that unconditional cash transfer programs raise consumption levels of food, health, education, and hygiene, and perceptibly reduce inequality (World Bank, 2015).

or private money lenders, and only 10 percent from institutional lenders (World Bank, 2014c). A comprehensive strategy to make financial services more available, affordable, and less burdensome to initiate would help reach the financially-underserved segments of the population, including those in rural communities.⁶ Such a strategy should be accompanied by a financial literacy program and fintech-based initiatives in addition to traditional banking, all with an appropriate level of supervision.

16. In addition to being a moral imperative, addressing gender inequality is necessary for generating broad-based and inclusive growth.

- Policies to promote **equal access to basic services** such as education and health, including prenatal and maternal care, and upgrading the **legal framework** to reduce gender-based violence will strengthen Haiti's human capital and increase its long-run growth potential. Specifically, school-level interventions have been shown to reduce social acceptability of gender-based violence, which require training for teachers and school administrators.
- Formal **employment opportunities** for women need to be expanded. A good start would be to implement the 30 percent quota reserved for women in public-sector appointments, which was introduced in 2012 but never enforced.

⁶ Haiti developed a National Financial Inclusion Strategy in 2014 with support from the World Bank and other international development partners and created a Financial Inclusion Unit at the central bank in 2017 to monitor its implementation. However, progress has been slow, hampered by lack of data and administrative challenges.

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SOCIAL PROTECTION SPENDING¹

Haiti is one of the poorest and most unequal societies globally. This paper provides an overview of the current social context in Haiti and coverage and effectiveness of social safety nets. Existing social programs suffer from volatile financing and are fragmented, poorly targeted, and undermined by weak governance. As a new national policy on social protection and development is being prepared by the government, this paper builds on the literature and lessons from recent experiences to examine policy options to effectively reduce poverty and inequality. It argues in favor of a comprehensive strategy focused on a few quasi-universal cash transfer programs with simple demographic and/or geographic targeting. The programs must include systematic annual reports and be supported by a communications strategy and sustainable financing plans.

A. Stock-taking of Existing Social Policies²

1. Social policy has historically been underdeveloped in Haiti. With few resources and low capacity, the engagement of the Haitian government on social policies has been limited. The first modern public social security organizations created in the late 1960s have remained weak and underdeveloped (World Bank, 2016). Government spending in the three main social sectors—social protection, health, and education—is complemented by: i) programs funded and managed by development partners; ii) semi-independent contributory insurance schemes; and iii) domestic private spending.

2. Total government spending on social sectors peaked at 5.7 percent of GDP in 2013. After the catastrophic 2010 earthquake, a surge in **foreign** financial and technical support contributed to a proliferation of projects and interventions. Most public social spending at that time was allocated to education (3.5 percent of GDP), reflecting the authorities' priorities. The remainder was divided between health (0.8 percent of GDP) and other general social protection programs (1.4 percent of GDP). These levels are comparable to the averages for low-income countries but well below those of other Latin American and Caribbean (LAC) countries (Figure 2).

3. Government-financed social protection spending in Haiti has declined sharply since 2010. At its peak, the national social assistance strategy called *Ede Pèp* consisted of a wide array of programs aimed at protecting vulnerable populations. At the time, these government programs were funded in roughly equal part by the *Petrocaribe* agreement, by the public treasury, and by special taxes on remittances and international phone calls (Figure 2).³ While *Petrocaribe* ended in April 2018, revenues from the special taxes decreased to 0.3 percent of GDP from 0.5 percent of GDP per year during FY2013-FY2017. Other budget resources allocated to social protection have also dwindled,

¹ Prepared by Matthieu Bellon (FAD) and Frederic Lambert (WHD).

² See SIP on Inequality for data on poverty and inequality. Recent data on social indicators in Haiti is limited. Based on developments over the past five years, most social indicators are not likely to have improved (see Box 1).

³ Under the *Petrocaribe* agreement between Venezuela and Haiti started in 2007, Venezuela supplied fuel to Haiti with concessional financing for a portion of the imports (SIP on Energy Sector Reform, Annex II). The Haitian government could use the proceeds from domestic fuel sales to finance investments and social programs.

largely because social protection spending has been displaced by rising spending on energy subsidies (see SIP on energy sector). Consequently, many of the *Ede Pèp* programs have stopped operating and assessing the level of activity in those remaining is difficult because of their fragmentation and a general lack of oversight.

Box 1. Terminology and Methodology Note on Social Spending

Social Assistance (non-contributory programs)	Social Insurance (contributory programs)
<ul style="list-style-type: none"> • Health assistance programs (health expenditure for vulnerable populations) • Education assistance programs (education expenditure for vulnerable populations) • Other general social protection programs 	<ul style="list-style-type: none"> • Health insurance • Pensions

- This note distinguishes between different forms of **social** programs—also called social protection and social safety nets. All social spending and programs have in common the objective of addressing vulnerabilities by preventing individuals from falling into poverty and by helping the poor to exit poverty. There are two types of programs that differ based on their financing sources: i) programs that are financed by workers and employers' contributions, possibly along with government subsidies, are defined as **social insurance** programs and include health insurance programs and pension schemes; ii) other programs that are financed by the government and/or development partners and that do not rely on private contributions are defined as **social assistance**. This note uses the term "social protection" to cover the full spectrum of programs included in social insurance and assistance (i and ii above), public and private.
- Social assistance and insurance programs operate across different social sectors, such as health, education, labor, gender and agriculture. Because of the lack of data on social protection, **social spending** sometimes corresponds to a broader category of expenditure that includes total spending in social sectors, even if some of the beneficiaries are not vulnerable. The definition of social protection used in this note is thus a subset of "social spending".
- **Data.** Data quality and availability are challenging because of the multiplicity of actors, different definitions of social protection, and the lack of systematic reporting. A comprehensive overview of spending on social protection would require disaggregated data spending. This note relies heavily on the comprehensive World Bank 2016 report entitled "Better Spending Better Services", the most recent and comprehensive attempt at collecting data consistently across social programs. The study is based on data from FY2013 (FY ending September 30)—the year the last household survey was completed—and is complemented whenever possible with more recent data. All available time series later than FY2013 show that social spending has decreased, suggesting that social conditions are likely to have deteriorated since then.

4. Total spending on social protection, education and health has largely been funded and complemented by development partners, although that support has declined. Some development partners have financed the government's social programs (*Petrocaribe*, World Bank and InterAmerican Development Bank-IDB) including with a technical assistance component, while others have favored fully independent programs funded and operated by NGOs (e.g., USAID programs are operated by CARE). Independent social programs financed by development partners were estimated at about 0.5 percent of GDP in 2013. In addition, development partners have also financed independent programs amounting to 1.9 percent of GDP for health programs and 0.5 percent of GDP for education in 2013 (World Bank, 2016). The downward trend in overall support from development partners since 2013 suggests that the authorities should not count on higher levels going forward.

5. Beyond government and development partner assistance, social protection is also provided under three contributory insurance programs (see Table 1). The Office of Work Accidents, Illness and Maternity (OFATMA) under the Ministry of Social Affairs and Labor (MAST) provides work injury and disability insurance to both private and public workers. Pension schemes are run by the National Office for Old Age Insurance (ONA) for the private sector and by the Directorate for Civil Pensions (DPC) in the Ministry of Finance (MEF) for the public sector. Social insurance contributions (from employers and employees) represented about 1.2 percent of GDP in 2013, over 90 percent of which came from private sector worker contributions. Total spending under these three programs remained slightly below 2 percent of GDP from 2013 to 2018. These programs have typically run surpluses because, with current Haitian demographics, there are many more contributors than beneficiaries for now.

B. The Limited Effectiveness of Social Spending

6. Coverage of all existing public social assistance programs is low and fragmented, and transfers are poorly targeted. Despite the large number of programs, institutions, and partners, coverage of the population is relatively low (Table 1). Only about 8 percent of the population received non-contributory social assistance benefits such as scholarships, food aid or transfers in 2012 (World Bank, 2016). Coverage is progressive as the population of the two poorest quintiles are twice as likely to receive assistance relative to the top two quintiles. However, coverage is uneven and young children (pre-school-age) are under-represented among beneficiaries, which is a concern given their vulnerability. Child labor is a significant issue in Haiti. In contrast with the progressivity of coverage, social assistance transfers are regressive as their amount increases with income (Figure 1).

7. Few Haitians are covered by existing contributory social insurance programs and their sustainability has recently been undermined by weak governance. Access to contributory programs is out of reach for most Haitians because of the high level of informality. It was estimated that only 400,000 workers, or around 10 percent of wage workers and less than 4 percent of the population, were insured in 2012. Most households with social insurance belong to the highest consumption quintile and live in the Port-au-Prince area (World Bank, 2016). The operating surplus at ONA—the largest contributory program—have recently turned into deficits. The 2019 report from the audit court *Cour Supérieure des Comptes et du Contentieux Administratif* (CSCCA) raised concerns about ONA's sustainability due to weak governance, poor portfolio choices, and misuse of funds.

8. The impact of social spending has been limited due to low capacity, fragmented programs, and a lack of continuity due to volatile financing. Haiti would benefit from a cohesive and coordinated national strategy. Reports from the *Commission Économique pour l'Amérique Latine et les Caraïbes* (CEPALC), World Bank and IDB highlight the fragmentation of social policies as a major source of inefficiency. At over 20, there are too many different programs, and many are too small, with narrow target groups. These programs are supervised by nine ministries and executed by 11 public agencies and ministries. Development partner support is not well coordinated and future financing is always uncertain. To some extent, fragmentation reflects the absence of a national strategy and low capacity, with the latter compounding the former. Furthermore, monitoring, analysis and evaluation of results are generally missing, preventing the application of lessons from experience

to inform current policies. Estimates from the last household survey (2012) suggest that social assistance and insurance programs contributed to reducing the poverty headcount by only one percent (World Bank, 2016).

9. Despite gradual improvements and total spending levels comparable to other low-income countries (LICs), health outcomes remain relatively low, implying that public spending has been comparatively inefficient. Health indicators have improved, with life expectancy rising by 9 years and child mortality declining by 8 percentage points from 1990-2016. While noteworthy, this is a slower pace than the average improvement in all LICs. The poorest continue to benefit the least from health services (World Bank 2016). Health service utilization in percent of the population is about 20 percent lower on average than LIC peers, because the density of medical staff to hospital beds is below average, despite similar levels of public spending. Health facilities are judged to have low efficiency because of low consultation-per-medical personnel ratios and excessive share of administrative staff.

10. Education outcomes and government spending on education are at comparable levels to LIC peers, though affected by fraud and misuse. Education attainments and learning indicators have improved but, based on existing data up to 2013, are still relatively low. The literacy rate of adults in 2013 was close to 80 percent while 45 percent of the population had completed secondary school (high school). This exceeded by a small margin LIC country averages of 60 and 40 percent, respectively (World Bank 2016). Gains are due mostly to increased access to private schools—less than 15 percent of schools are public—and to increased public financing through school canteen programs and tuition waivers under the *Programme de Scolarisation Gratuite et Universelle* (PSUGO) and topped up by development partners' tuition waiver program (Table 1).⁴ In 2013, the government reported that over 0.5 percent of GDP was spent on waivers supporting approximately 1.4 million students. However, implementation challenges have plagued PSUGO and independent reports (ULCC 2013, CCSCA 2019) have repeatedly pointed to fraud, such as “ghost” schools and nonexistent student beneficiaries. While 70 percent of the education budget is allocated to salaries, on par with other LAC countries, it is heavily skewed towards administrative or non-teaching staff. The quality of service delivery in education is poor and disparities across regions are wide (World Bank, 2016).

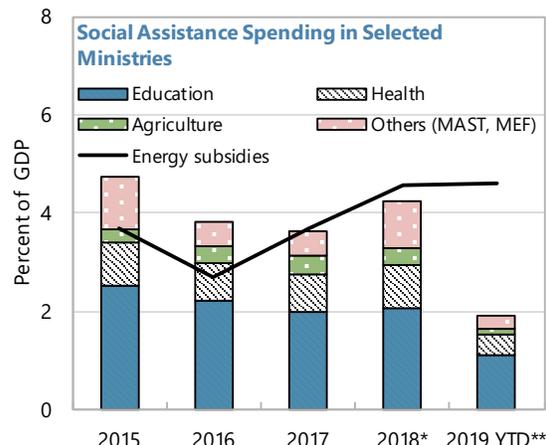
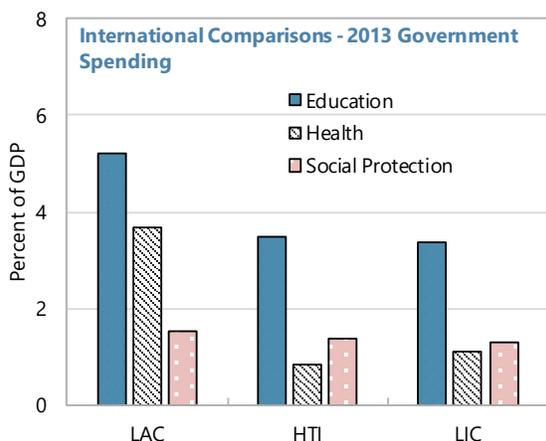
⁴ PSUGO is financed from the government budget and from special taxes on international phone calls collected by the telecom company CONATEL and on international money transfers collected by the Central Bank, both of which are accumulated in the National Education Fund (FNE).

Table 1. Haiti: Main Existing Social Protection and Promotion Programs

	Ministry	Program/Institution	Objectives / Services Delivered	Beneficiaries	Financing	Development partners
Social insurance	Social Affairs and Labor/ Finance	OFATMA (<i>Office d'Assurance Accidents du travail, Maladie Maternité</i>)	Insurance against labor injuries, maternity issues, and disabilities	Approximately 500,000 persons including 100,000 dependents	Worker and employer contributions + government subsidies	
	Social Affairs and Labor	ONA (<i>Office National d'Assurance vieillesse</i>)	Private sector pensions, Housing (mortgage), Micro-credit	400,000 pension contributors and 3,000 pensioners (2014)	Worker and employer contributions	
	Finance	Civil Servants Pension (<i>Direction de la Pension Civile</i>)	Public sector pensions	70,000 contributors and 14,000 pensioners (2014)	Public workers contributions	
Social assistance	Finance	FAES (<i>Fonds d'Assistance Economique et Sociale</i>) (<i>Kore Pep</i> , Social housing, school building, micro-finance)	Cash transfers to mothers with school-age children (<i>Ti Manman Cheri</i>) and students (<i>Kore Etidyan</i>), in-kind transfers (<i>Panyè Solidarite, Kantin Mobil, Resto Communautaire</i>), micro-credit (<i>PAIP, Ti Kredi</i>)	Varying and unknown	Government budget + donor financing	IDB, WB, Petrocaribe (Venezuela)
	Finance	BMPAD (<i>Bureau de Monetisation des Programme d'Aide au Développement</i>)	Food (rice) and energy subsidies, house building	housing for 16,100 households over 2011-2016	Donor financing	WB, Petrocaribe (Venezuela)
	Social Affairs and Labor	CAS (<i>Caisse d'Assistance Sociale</i>)	Transfers to old people (<i>Kore Ti Gran Moun</i>) and people with disabilities (<i>Kore Moun Andikape</i>). Subsidized restaurants (<i>Resto Communautaire</i>)	6000 old-age beneficiaries	Government budget (labor tax)	
	Social Affairs and Labor	Kore Lavi	Improving nutrition (food vouchers and sensitization) + micro-credit	18,200 households get vouchers + 36,000 micro-credit institutions	Donor financing (ending soon)	USAID
	Social Affairs and Labor	IBESR (<i>Institut du bien-être social et de la Recherche</i>)	Foster care		Government budget + donor financing	UNICEF
	Social Affairs and Labor	EPPLS (<i>Entreprise Publique de Promotion de Logements Sociaux</i>)	Social housing		Government budget and donor financing	IDB and others
	Social Affairs and Labor	ONM (<i>Office National de la Migration</i>)	Welcoming of returning migrants		Government budget	
Social assistance in education	Education	PSUGO (<i>Programme de Scolarisation Gratuite et Universelle</i>)	Tuition waivers	1,156,000 students (official numbers for 2015-16)	Government budget + National Education Fund (special taxes)	
	Education	PNCS (<i>Programme National de Cantines Scolaires</i>)	School meals	816,000 students (25% of total)	Government budget + donor financing	
	Education	EPT (<i>Projet Education pour Tous</i>)	Tuition waivers and school meals in vulnerable areas	438,000 tuition waivers		IDB, WB
Social assistance in health	Health	PASMISSI and Kore Fanmi project	Health services			WB
Social development in agriculture	Agriculture	PMDM, PTTA, RESEPAG and SECAL	Direct subsidies to farmer to buy inputs to help with: natural disaster resilience (PMDM), technological development (PTTA), agricultural public services (RESEPAG), food security (SECAL)	35,000 farmers for the PTTA	Donor financing	IDB (PMDN, PTTA), WB (RESEPAG), AFD (SECAL)
Regulation	Social Affairs and Labor	Labor Department, ONART (<i>Office National de l'Artisanat</i>)	Improving labor conditions, Training programs, and skills validation	30 companies covered by the HOPE agreement are inspected (40,000 workers)	Government budget	
	Social Affairs and Labor	CSS (<i>Conseil Supérieur des Salaires</i>)	Minimum wage			

Source : « Protection et promotion sociales en Haïti, document-cadre pour une politique nationale » (2018), WBG 2016

Figure 1. Haiti: Government Social Spending and Technical and Financing Support



Sources: World Bank, World Development Indicators, Haitian authorities and Staff calculations.

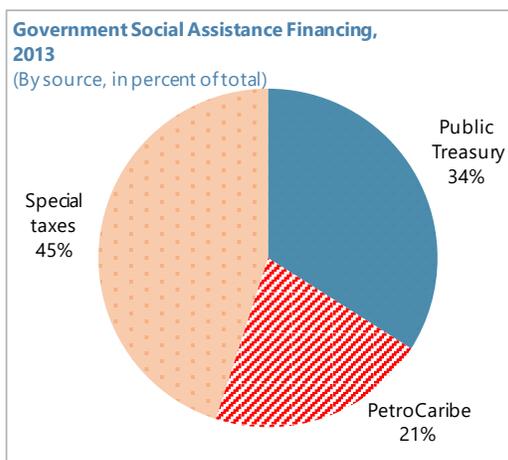
Notes: LICs defined as country with a GNI per capita, calculated using the World Bank Atlas method, of \$1,025 or less in 2018. LAC excludes high income countries.

Sources: Authorities data and Staff calculations.

Notes: Social spending in line ministries only includes qualified spending and excludes administrative costs.

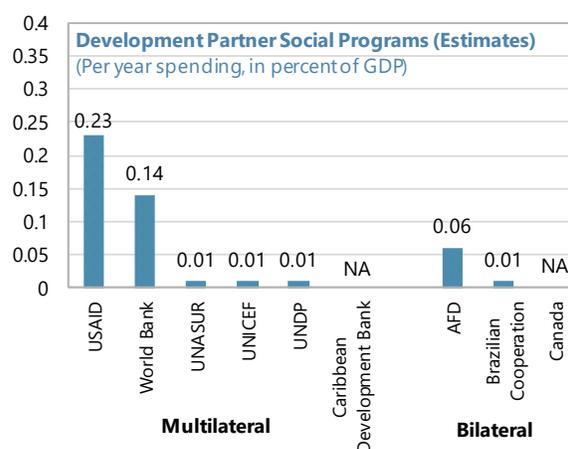
* unavailable data for Others;

** Cumulative flows up to the 3rd quarter, unavailable data for Others.



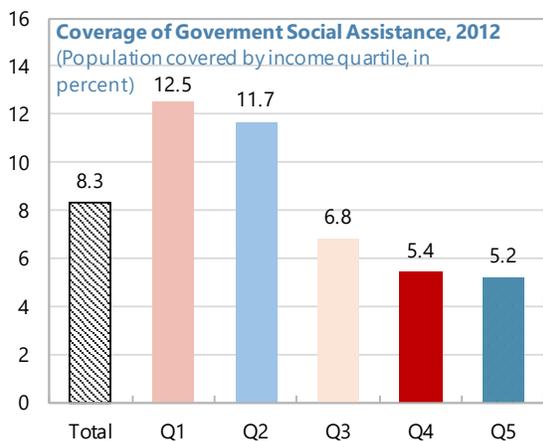
Note: Total government assistance spent was 1.4 percent of GDP.

Sources: FAES, *Primature*, Ministry of Education (MENFP), Ministry of Social Affairs and Labor (MAST), WB and IMF staff calculations.

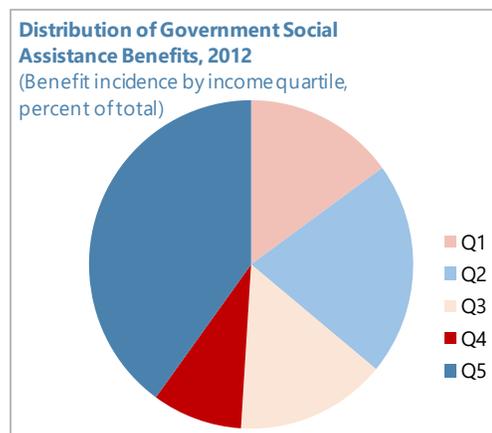


Note: For AFD, Brazilian Cooperation and Canada: with social programs operated by the WFP. For AFD and Canada: with social programs implemented by the WB. For AFD and Canada: with social programs implemented by the UNESCO.

Sources: World Bank and IMF staff calculations.



Sources: ECVMAS 2012, World Bank and IMF staff calculations.



Sources: ECVMAS 2012, World Bank and IMF staff calculations.

C. The New National Policy

11. The new *Politique Nationale de Protection et de Promotion Sociales (PNPPS)* is a very welcome national initiative led by the ministry of social affairs and labor (MAST) and the ministry of planning and external cooperation (MPCE).⁵ The ministries of health, education, and women's conditions and four public organizations participate in the relevant drafting sub-commissions.⁶ Sub-commissions have collaborated with international organizations and civil society organizations (CSOs).^{7,8} A first draft of the policy was submitted for national consultation in June 2019. A revised draft was expected to be presented to the government for approval by the Council of Ministers by the end of 2019. This inclusive approach is an excellent starting point to prepare a home-grown and more effective and efficient social safety net. Ideally, the implementation plan should quickly articulate some short-term actions to address urgent needs as well as to maintain momentum and traction.

12. The PNPPS assigns three objectives to social protection: (1) breaking the inter-generational transmission of poverty by supporting children's health, development, and education; (2) creating conditions so that all individuals can get out of poverty; and (3) creating conditions of equality of people and eliminating discrimination related to gender, age, and disability.

13. While aiming to provide universal coverage, the PNPPS focuses on four strategic priorities: (1) childhood; (2) labor, employment and employability; (3) health and social security, and (4) resilience to shocks. The corresponding social protection schemes will prioritize rural populations living in extreme poverty and the most vulnerable.

D. Policy Considerations

Key goals in the design of the PNPPS should be to reduce fragmentation and overlap and boost ownership. In this context, and drawing from the literature and international experience, the following recommendations present important features that would contribute to attaining those goals.

14. Given the conditions in Haiti, cash transfers to households would be preferred over other forms of assistance that are more complicated to administer. The literature generally finds a positive effect of cash transfer programs on poverty, education, health, and nutrition indicators.⁹

⁵ The last three-year plan for poverty reduction in 2014 "Thinking and Fighting for a Haiti without Poverty: Action Plan for Accelerating the Reduction of Extreme Poverty" (PAARP) is now outdated.

⁶ The Bureau of the Secretary of State for Integration of the Handicapped (BSEIPH), the Directorate of Civil Protection (DPC), the Office of Citizen Protection (OPC), and the Socio-Economic Assistance Fund (FAES).

⁷ ECLAC, ILO, IADB, PAHO/WHO, UNICEF, UN WOMEN, WFP, WBG.

⁸ The American Chamber of Commerce, the Alternative insurance Company, the Alliance for Disaster Risk Management, the Center for the Promotion of the Women Workers, the Chamber of Commerce and industry, the Economic Forum of the Private Sector and Haitian Unions.

⁹ See, for example, Parker, Susan and Petra Todd (2017) "Conditional Cash Transfers: The Case of *progres/Oportunidades*," *Journal of Economic Literature*, 55(3), 866-915; Banerjee, Abhijit, Paul Niehaus and

(continued)

In-kind support such as *Panyè Solidarité* and *Kantin Mobile* require the government to buy food products and redistribute them. This assumes that the government has this administrative and logistical capacity and at the lowest cost. It also presents opportunities for leakages. The May 2019 report of the CSCCA could not confirm the data provided by the administrative unit set up within the Ministry of Finance, the *Fonds d'Assistance Economique et Sociale* (FAES), on the distribution of food baskets or free meals.

15. International experience and the recent literature suggest that the best strategy for Haiti would aim for quasi universal coverage of basic needs. Given the limited resources available for social protection, this would involve broad demographic or geographic targeting of beneficiary groups. Recent research has found more refined targeting, based on income for example, less effective in countries not able to identify beneficiaries or lacking capacity to implement (Banerjee et al. 2019). While much of the population is poor in Haiti and could benefit from social assistance, some social spending would aim for simple targeting of groups in ways that are easy to implement, for instance all children under some age cutoff. For example, providing average annual transfers of US\$150 to all households yields an upper bound estimate for total transfers of US\$345 million (4 percent of GDP).^{10, 11} Blunt targeting, for example by demographic or region, would lower total costs to more feasible levels. The goal is to strike a balance between more universal, simple-to-administer programs and cheaper but more complicated conditional and/or targeted programs that involve greater costs and more capacity to administer, implement, and monitor.

16. Staff recommend that implementation of the PNPPS could focus on three unconditional cash transfer schemes: (1) to households with children under a certain age and/or with pregnant women, (2) to people with disabilities, and (3) to old people aged 65 and above. Focusing on those three categories of beneficiaries is consistent with the strategic priorities set by the PNPPS, addresses Haitians' strong sensitivity toward and against social assistance which is perceived as a charity handout, and factors in the limited availability of resources. The lack of conditionality is motivated by the likely difficulties for the most vulnerable households to comply with conditions and by lack of administrative capacity to monitor compliance.¹²

17. Effective social programs have to be complemented with improvements in the delivery of health and education services. In view of the large gaps in health and education, supply side reforms in health and education are needed. Conditions for cash transfers, such as school attendance or vaccinations, could only be considered after improvements in education and health infrastructure actually improve the availability and access to services. Policy makers should work with development partners to support public investment and improvements in these areas.

Tavneet Suri (2019), "Universal Basic Income in the Developing World," NBER Working Paper, 25598; Abramo, Laís, Simone Cecchini and Beatriz Morales (2019), *Social programmes, poverty eradication and labour inclusion. Lessons from Latin America and the Caribbean*, ECLAC.

¹⁰ The program for mothers of school-age children that was supported by the WB provided cash transfers of US\$100 per year for mothers with one child, US\$150 for mothers with two children, and US\$200 for mothers with three children or more. The program ended in 2018 because of financing issues.

¹¹ Total costs would need to additionally account for administration costs.

¹² For instance, if access to schools is limited in rural areas, conditionality on school attendance would not be feasible.

18. Existing social programs need to be rationalized. Small programs that do not effectively contribute to the objectives defined in the PNPPS should be phased out. Social insurance programs and large or relevant social assistance programs that meet PNPPS objectives would need to be reformed and transitioned to the new simplified and more efficient cash transfer schemes. Rationalizing existing programs should be complemented by an overhaul of current agencies whose credibility has been undermined by allegations of mismanagement and misuse of public and donors' funds.

19. The PNPPS would need to involve a sustainable financing strategy based on domestic resources. In the context of declining development partner support and given the questionable impact of foreign-financed programs in terms of fragmentation and on program ownership, an appropriate financing strategy has to rely on domestic resources. To finance social programs, the government should boost customs revenue mobilization and reduce unproductive public spending, particularly on goods, services and energy subsidies. Any reform to the energy sector or subsidies must be preceded by effective mitigating measures addressing the adverse impact of such a reform on key groups affected, particularly the most vulnerable (see SIP on Energy Sector). Short and medium-term budget formulation should include a coherent and comprehensive framework that specifies explicitly the financing sources for social spending at different horizons.

20. Delivering unconditional cash transfers to broad groups requires the proper identification of potential beneficiary groups.¹³ The development of the MAST Information System (SIMAST), a database containing detailed socio-economic information will facilitate such identification.¹⁴ SIMAST is being developed with technical assistance from development partners and currently covers 1.2 million individuals (14 percent of the population). The marginal cost of increasing coverage by one percent is estimated at US\$350,000 implying a total one-off cost of US\$28.4 million (0.4 percent of GDP) to achieve full coverage of the population. Potential shortcomings of SIMAST include that it may not be expanded to cover dangerous urban areas, it will need regular updates, and its financing could end. Over the long term, national coverage based on a modernized national identification system could be envisaged and possibly coordinated down the road with other government functions like taxpayer IDs.

21. The national policy should designate one sole institution to coordinate and develop a robust and secure system to deliver social assistance benefits. Building capacity and institutions is as important as the design of social programs. The delivery of social services in Haiti has involved fraud and corruption and a lack of accountability, and the credibility of the agencies involved has been undermined by allegations of mismanagement of public and donors' funds. To avoid the risk of fragmentation and program interruption, the government should give the primary coordination role

¹³ Individual identification with biometric details could reduce duplication and fraud risks and may strengthen the security of cash payments if the individual ID number is linked to a mobile account. However, India's experience with the "Aadhaar" identification system offers a cautionary tale, especially in regions where internet access is unreliable. Smart cards with a microchip storing information accessible without internet access, may be a better alternative.

¹⁴ There is a consensus among technical and financial partners to unify efforts and focus on developing the SIMAST. The SIMAST has been used in projects by USAID, the WFP, CARE, Action Contre la Faim, the EU, the Red Cross, Concern Worldwide and others. SIMAST is made available by MAST employees whose work is funded by the WFP. Updates and extensions of the database have so far been financed under one-off projects by development partners.

to the MAST since its central role in designing and executing social protection is established by the organic law 24/11/1983 and reinforce its capacity.

22. Developing digital financial services to support financial inclusion would be a critical for implementing large-scale cash-transfer schemes. The *ex-post* assessment of the response to Hurricane Matthew emphasized the operational challenges related to cash-based initiatives, including cash-transfer delivery through mobile phones: Catholic Relief Services and others “met challenges with beneficiaries not having access to phones, not being comfortable with the system, not having SIM cards that worked with mobile money, not having coverage at disbursement sites, and provider agents not ‘seeing’ transfer amounts on beneficiary phones...”.¹⁵ The 2015 Financial Inclusion Strategy of the *Banque de la République d’Haïti* (BRH) aims to develop new mobile financial services which may provide reliable cash distribution channels.

23. All existing and new programs should report systematically and annually on their activities, coverage, resources received and transferred, beneficiaries, and administration costs. In the medium term, this could be delegated to an independent organization, like the *Observatoire National de la Pauvreté et de l’Exclusion Sociale* (ONPES) mentioned in the last national plan for poverty reduction in 2014. Involving development partners and CSOs in the oversight of the implementation of the PNPPS would be crucial to limit leakages and mismanagement risks.

24. Proactive communications will be essential for the success of the PNPPS. Communications should work towards building broad public support for comprehensive reforms, with a focus on social protection. The government should aim to advance understanding of the links between unpopular revenue mobilization reforms and the sustainable development of social protection programs. Close monitoring of benchmarks and targets is needed and should be appropriately communicated to build trust in public institutions.

Horizon	Measures
1-2 years	<ul style="list-style-type: none"> • Build a national consensus on the PNPPS • Define and develop a financing strategy to support the PNPPS • Create an independent oversight agency (strengthen ONPES) • Rationalize existing programs • Strengthen oversight, governance and sustainability of the existing programs to be retained • Extend SIMAST coverage • Develop a mobile cash transfer system (or an efficient alternative system) • Initiate a plan to improve health care and education infrastructures, in particular in rural areas • Implement a pilot project for assistance to households
2-6 years	<ul style="list-style-type: none"> • Continue to extend SIMAST coverage to close to 100 percent of the population. • Implement and scale-up cash-transfer schemes across the country. • Assess/audit the schemes annually (coverage, cost, incidence).

¹⁵ CRS Haiti, ‘The Vendor Effect’: Hurricane Matthew Response. A cash transfer programming learning study (2018).

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ENERGY SECTOR REFORM¹

A. Executive Summary

1. It is well known that the energy sector in Haiti generates large fiscal and economic efficiency losses. Only one third of the population has access to electricity, and of those with access, many are free riders who are not billed or do not pay. Technical losses, low administered tariffs, high costs, mismanagement and theft have resulted in chronic deficits at the state-owned electricity company, *Electricité d'Haiti* (EDH). Retail fuel prices are also administered since 2011 and have barely increased in local currency (gourde) terms despite large swings in international prices and a fast depreciating exchange rate.

2. Direct fiscal losses related to the electricity sector and fuel trade were estimated at 4.5 percent of GDP in FY2018, and at 6.5 percent of GDP in FY2019.² These comprised foregone fiscal revenues, budget transfers to cover losses of EDH and fuel prices fixed below cost, fuel transfers (inputs in kind), and guarantees. These have contributed to large deficits, public debt and arrears build-up. Energy sector-related losses have risen over time. When the fixed retail price of fuel was not sufficient to cover the charges and fees due suppliers, excise taxes and custom duties were waived to cover the shortfall. Eventually by 2018 the retail price fell below world market prices, resulting in a direct budget expense (goods and services) which, in addition to foregone revenues, amounted to about 2.7 percent of GDP. At the same time, the estimated losses from the electricity sector amounted to about 1.8 and 1.9 percent of GDP in FY2018 and FY2019 respectively.

3. Broader economic and social losses would add up to a much higher bill. For fuel subsidies alone, losses related to resource misallocation, the opportunity costs of displaced productive spending, and other externalities are estimated by FAD at another 4.7 percent of GDP (“post tax”)³. The latter include estimated costs related to things like pollution and traffic congestion that raise health spending, including from traffic accidents. Energy subsidies and market rigidities distort resource allocation, encourage over-consumption, crowd out more productive government spending, and worsen the external balance, among other things. There are also the social costs of very regressive energy price subsidies as well as dead weight losses related to graft and corruption linked to the structure of the market.

4. Several key decisions since the mid-2000s put Haiti in its current predicament. In 2007, Haiti agreed to an arrangement with Venezuela under the *PetroCaribe* Agreement whereby fuel was supplied with concessional financing for a portion of the imports with the aim of financing “development projects” with the proceeds from fuel sales. Second, after the 2010 earthquake, the authorities fixed retail prices for humanitarian reasons, abandoning a 1995 law requiring adjustment

¹ Prepared by Matthieu Bellon (FAD) and Rand Ghayad (WHD).

² Fiscal year ends September 30th.

³ The recent IMF paper on energy subsidy reform (2018) used the national VAT rate to compute the benchmark fuel taxation level and added a corrective (Pigouvian) tax to charge for related externalities: CO₂ emissions, local pollution, congestion, public health costs, etc..

in fuel prices to match supply cost variations. This resulted in lower tax revenues as excise taxes and customs duties on fuel products were compressed to compensate for import price increases and exchange rate depreciation. After committing in 2018 to gradually reducing fuel subsidies under a Fund Staff Monitored Program (SMP), the government decided to implement a one-time increase in prices of about 50 percent in July 2018. This sparked massive social protests and led to an immediate reversal in the hikes. Since then, intermittent social unrest and a protracted political crisis have led to fuel market disruptions and mounting fiscal losses, including build-up of arrears.

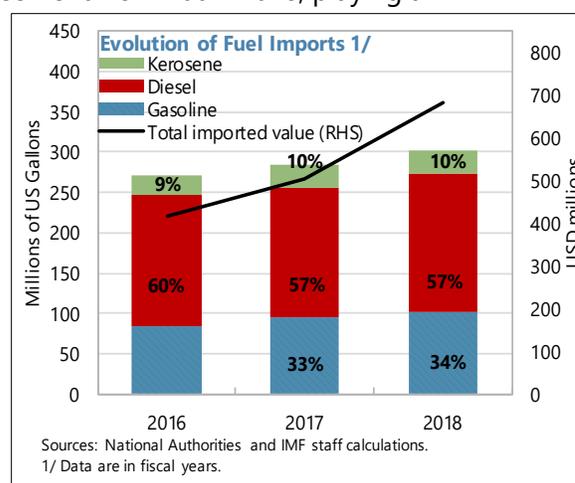
5. Ensuring fiscal sustainability and higher rates of growth in Haiti will not be possible without fundamental reform of the energy sector. This should be well prepared after broad consultation with stakeholders, well communicated, and implemented only after introducing mitigating measures for the most vulnerable groups in society. The eventual adoption of automatic fuel price mechanisms would be an important element of a sustainable solution, as would new regulation of the fuel import/ trade sector and the electricity sector, including with empowerment of an independent regulator. It would likely need new management at EDH, an overhaul of the utility's administration, and an investment program to render it financially viable. Addressing these issues will require strengthening the grid system, reforming the tariff structure, improving metering, and implementing systems and controls to limit theft, among other things.

B. The Energy Sector in Haiti

Market Structure of the Petroleum Sector

6. There is no fuel production or refining in Haiti. The following petroleum products are imported: Gasoline 91, Gasoline 95, Gasoil (Diesel), Kerosene, a smaller quantity of JET-A1 for the air transportation industry, and crude oil for electricity production. Gasoil accounted for more than 50 percent of total imports over the last three years. The consumption of Kerosene, which is mainly used for lighting and cooking, is relatively low compared to total imports.

7. Until April 2018, the government controlled the import of petroleum products. The Autonomous Office of Monetization of Development Assistance Programs (BMPAD) under the MEF was responsible for implementing the *Petrocaribe* agreement from 2007–2018, playing an intermediary role between importers and suppliers. Under *Petrocaribe*, fuel products were imported from Venezuela and resold to private oil companies (Figure 1). The government paid only a portion of the imports in cash and the remainder was financed by a loan under concessional terms. Imports outside of *Petrocaribe* were also controlled by BMPAD through an opaque tendering process. After April 2018, Venezuela stopped delivery of oil under *Petrocaribe*, forcing Haiti to buy petroleum products on the Caribbean and U.S. spot markets. BMPAD managed the process from April 2018–March 2019 by issuing requests for bids.



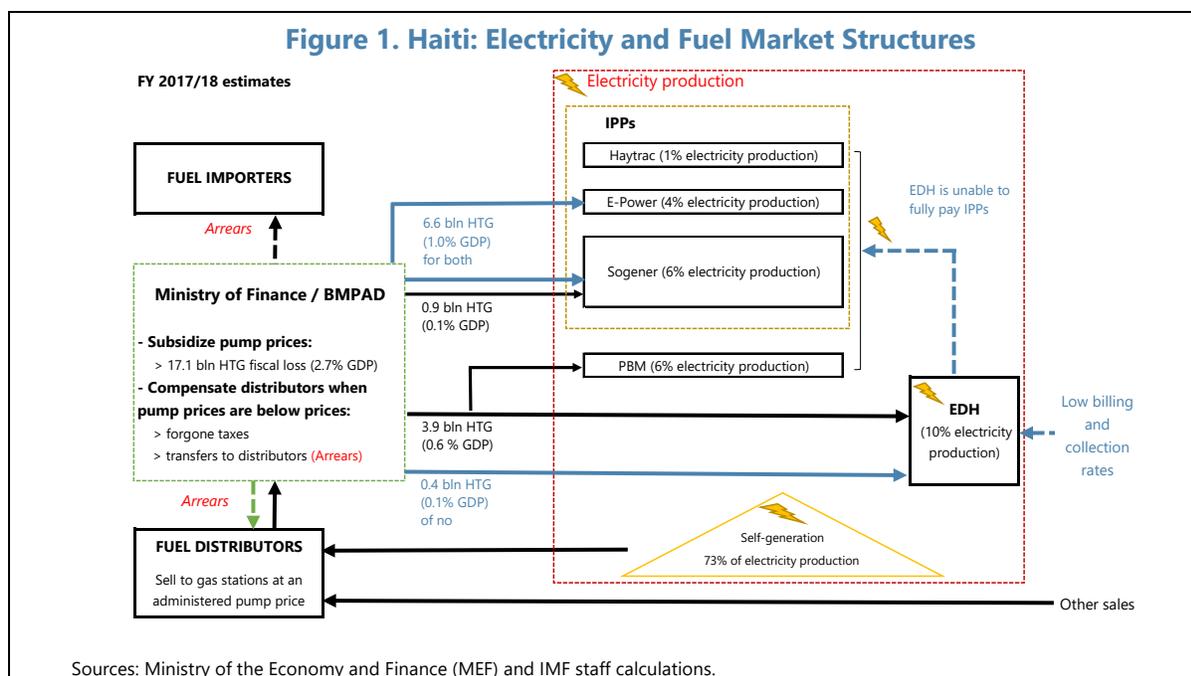
8. The end of BMPAD’s intermediary role in March 2019 coincided with a political crisis and policy vacuum. With the end of *Petrocaribe* in 2018, BMPAD had become an unnecessary intermediary between foreign suppliers and local distributors. With the liberalization of imports in March 2019, independent power producers (IPPs) began to purchase directly from importers who then supplied petroleum products at CIF prices directly to private distributors and non-distributors. This also meant that distributors could no longer recoup losses related to price by underpaying BMPAD for fuel purchases.⁴ Consequently, the government started accumulating arrears to distributors. Arrears were reported at 4.8 billion gourdes in September 2019. Since FY2018, the government has made direct transfers to distributors to cover the margins specified in the price structure and fuel import costs. With BMPAD’s finances deteriorating rapidly and payment delays to foreign suppliers, fuel shortages emerged in August 2019.

9. The fuel importing and distribution process in Haiti is illustrated in Figure 1:

- Fuel purchasers import about 300 million U.S. gallons per year. Under *Petrocaribe*, Haiti received roughly 14,000 barrels of oil per day (bpd). Haiti paid the market price, in cash, for a portion varying between 40 and 75 percent and the remainder was financed by Venezuela over 25 years at 1.0 percent interest.⁵ The proceeds from domestic sales combined with deferred import payments were to be used by the government for economic development.
- Proceeds from the purchase of fuel were deposited in BMPAD accounts at the state-owned commercial bank (BNC) and the BRH.
- Fuel was sold to distributors (235 million U.S. gallons in total) who in turn sold it to gas stations at the administered pump price. The rest was sold to IPPs and EDH for electricity production and distribution. Fuel distributors were compensated by the state about 27 U.S. cents, on average, for every gallon of gasoline sold to customers.
- Due to its inability to meet electricity demand, EDH subcontracted some electricity generation to IPPs. The three IPPs, Haytrac, E-Power, and Sogener, generate about 11 percent of total electricity production in Haiti.
- Subsidized fuel, including in-kind shipments, is also delivered to EDH and the IPPs Sogener and PBM (Petion-Bolivar-Mart). PBM, a Haiti-Venezuelan-Cuban joint state enterprise, generates about 6 percent of Haiti’s on-grid electricity.
- The private sector also relies on self-generation. More than 70 percent of all electricity consumed in Haiti is produced by small scale diesel-powered generators owned by households and businesses.

⁴ Oil companies used to recoup losses by importing fuel at a market price lower than the Caribbean price specified in the administered price structure, thereby increasing margins. They also deferred payments, or accumulated arrears, towards BMPAD. When BMPAD folded, the option to defer payments ended but administered prices are still based on the Caribbean posted price and thus still providing a source of additional margin.

⁵ The portion paid in cash represented a suppliers’ credit to be settled within 90 days. Shipping charges were prepaid and the cash and loan portions were determined based on FOB prices on a shipment-by-shipment basis.

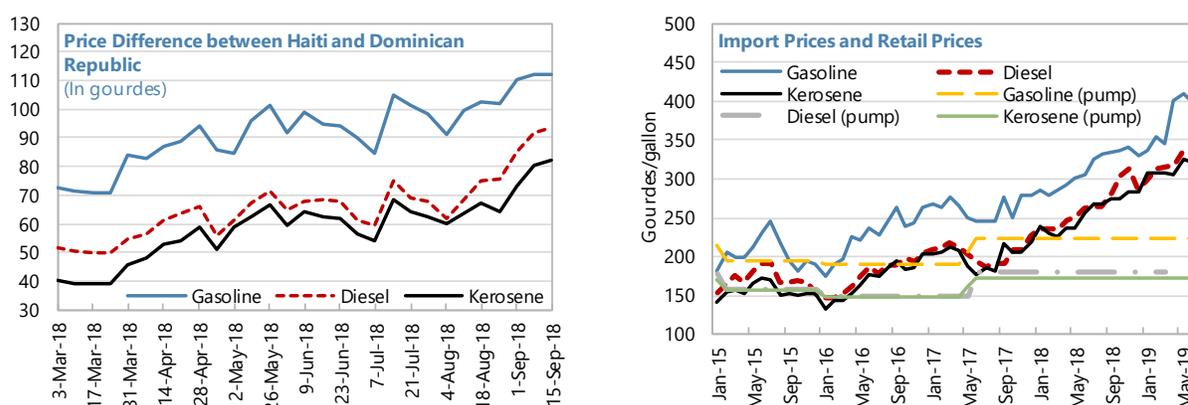


10. Retail fuel prices at the pump are fixed by the government. With the humanitarian situation following the 2010 earthquake, the Government of Haiti (GoH) halted the automatic price adjustment mechanism for fuel products in place since 1995. Gasoline, diesel and kerosene prices were frozen in nominal local currency terms. Under the earlier mechanism, any change in international prices greater or equal to 5 percent triggered a price change at the pump.

11. Shortfalls in price below cost have been covered by the government. There are two different price structures, one for distributors and another for non-distributors: non-distributors do not pay the margins of distribution but are required to return 60 percent of this margin to the state (Figure 2). As a result, non-distributors pay more taxes but their price is lower than that paid by consumers. When the difference between the fixed pump price and the import price was not sufficient to cover charges and fees, excise taxes and custom duties were adjusted/waived to compensate distributors. As the difference widened further in recent years, the government started to provide direct budget transfers to distributors in addition to forgoing taxes and duties (Figures 2, 6).

12. As a consequence, administered fuel prices in Haiti are much lower compared to the region. With the exception of two *ad-hoc* price increases in March 2011 (30 percent) and 2017 (20 percent) and a temporary increase from July 2014 to February 2015, the price freeze means that all international price volatility has been absorbed by the government. Retail fuel prices in Haiti are now among the lowest in the Caribbean—about 50 percent lower than in neighboring Dominican Republic (Figure 2). The large difference in oil prices/subsidies between Haiti and the Dominican Republic (DR) had created a strong incentive to smuggle petroleum products to the higher-priced destination, increasing the budgetary burden for Haiti (see SIP on cross border trade with the DR).

Figure 2. Haiti: Fuel Price Comparison



Sources: Ministry of the Economy and Finance (MEF) and IMF staff calculations.

Table 1. Haiti: Price Structure for Distributors vs. Non-Distributors (2017)

	Diesel ^{1/}		Kerosene ^{2/}		Gasoline ^{3/}	
	Distributors (HTG)	Non-Distributors (HTG)	Distributors (HTG)	Non-Distributors (HTG)	Distributors (HTG)	Non-Distributors (HTG)
CIF Price	157.06	157.06	175.17	175.17	152.63	152.63
Financial Fees	7.07	7.07	7.88	7.88	6.87	6.87
Total Customs Value	164.13	164.13	183.06	183.06	159.5	159.5
Verification Fees	9.85	9.85	10.98	10.98	9.57	9.57
Customs Duties	24.62	24.62	18.31	18.31	63.8	63.8
Port Fees	0.69	0.69	0.69	0.69	0.64	0.64
Excise Duties	25.05	25.05	23.05	23.05	3.31	3.31
Ex-Customs Price	224.33	224.33	236.08	236.08	236.82	236.82
Fuel Tax	1	1			1	1
Companies' Margin	13.75	13.75	11.89	11.89	16.88	16.88
Transport Province	1.56	1.56	1.56	1.56	1.56	1.56
Distributors' Margin	19.89	0	16.72	0	21.4	0
Subtotal	260.53	240.64	266.25	249.53	277.66	256.26
Excise Variable	4	4	0.44	0.44	6.8	6.8
Stabilization Margin	-85.53	-85.53	-93.69	-93.69	-60.46	-60.46
Recovered Excise		11.94		10.03		12.84
Price	At the Pump: 179	Non-Dist Price: 171.04	At the Pump: 173	Non-Dist Price: 166.31	At the Pump: 224	Non-Dist Price: 215.44

Source: Ministry of the Economy and Finance (MEF).

1/ In July 4, 2018

2/ In July 14, 2018

3/ In January 5, 2018

Market Structure of the Electricity Sector

13. Per capita energy consumption in Haiti is the lowest in the Caribbean at less than 100 kWh annually. Most (75 percent) of total energy consumed in the country comes from wood burning and charcoal. Petroleum products provide about 20 percent of total consumption and electricity accounts for the remaining 5 percent. About 65 percent of the energy produced in Haiti is consumed by residences, 19 percent by industry, 12 percent in transportation, and 4 percent by services. Less than 35 percent of households are connected to the national electricity grid, of which only 12.5 are connected legally.

14. EDH is in charge of transmission, distribution, and some generation of electricity in Haiti. EDH runs ten separate unconnected distribution grids that are characterized by large average technical, commercial and collection losses (ATC&C). Daily blackouts have forced most businesses and many households to install private generators. While EDH provides most of the power in Haiti, most of that electricity is produced by IPPs that have signed power purchase agreements (PPAs) via indirect negotiations rather than through competitive bidding procedures. Three IPPs (Sogener, E-Power, and Haytrac) and a tri-national enterprise (PBM, Petion-Marti-Bolivar) produce most of the IPP power (Figure 3).

15. EDH generates around 10 percent of the country's energy, with the rest coming from IPPs and PBM. About 90–95 percent of Haiti's on-grid electricity production comes from thermal sources—evenly split between diesel and more efficient heavy fuel oil. The remainder is produced by EDH's hydropower plants. The 2018 renovation of the large Péligre dam is expected to provide cheaper electricity and increase the share of hydropower in the energy mix, although volatile rainfall in 2019 prevented it from running at full capacity. By provider, EDH produced just 10 percent of Haiti's electricity in 2017 (Figure 3). PBM produced 6 percent of Haiti's on-grid electricity and IPPs produced the rest, led by Sogener, a Haitian private enterprise that is the base load power source for Port-au-Prince (meaning it satisfies minimum demand). E-power, the second most important IPP, is financed by the IFC and is active in both Port au Prince and the rest of the country.

16. To attenuate supply constraints and unreliable service, the private sector has resorted to self-generation. In the absence of a reliable on-grid supply, more costly self-generation via small generators has expanded significantly and now collectively produces more electricity than the official grid, both at the household and commercial level. Even so, only about one quarter of households have access to electricity, with charcoal providing the main energy source for the majority. While some businesses use self-generation as a hedge against blackouts, many have disconnected totally from the grid. This raises the country's oil import bill, particularly since self-generation is relatively expensive and inefficient, has caused deforestation and environmental degradation, hurts competitiveness and aggravates the financial situation of EDH since it loses viable, paying clients.

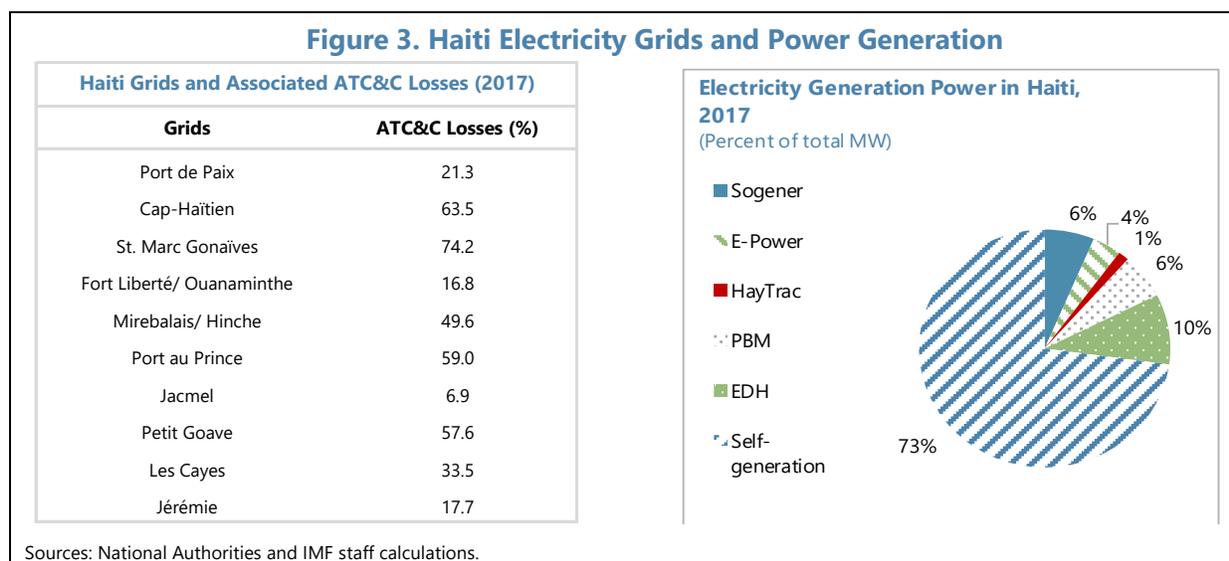
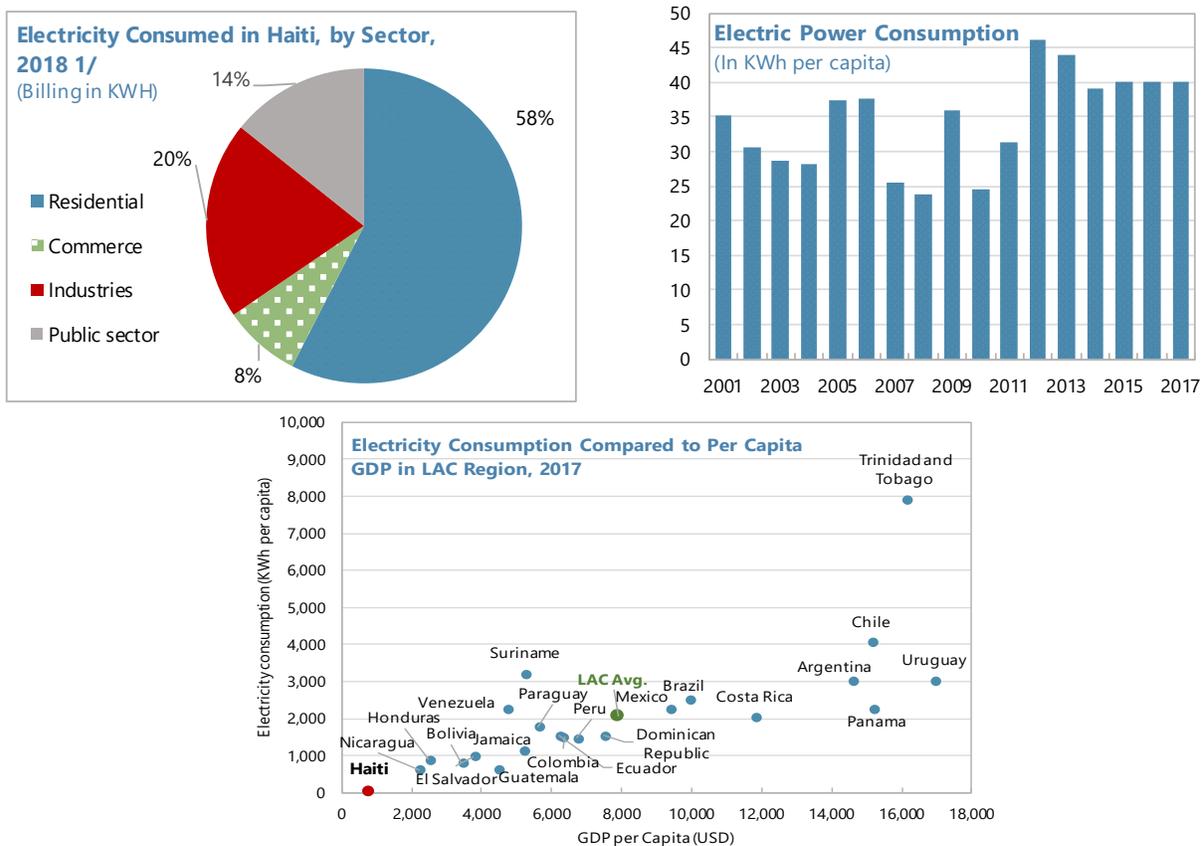


Figure 4. Haiti: Electricity Consumption in Haiti



Sources: National Authorities, World Bank, IEA Statistics and IMF staff calculations.

1/ Data is based on EDH billing; it shows a fraction of total electricity delivered by EDH and, thus a fraction of electricity consumed.

17. Billing and collection performance at EDH is woeful. Less than half of the electricity supplied to the grid was billed in FY2017 and FY2018, and of the accounts billed, only about 82 percent of the total sold were collected in FY 2018. A combination of weak governance at EDH and flawed systems and controls have led to large losses, including from theft and secondary market middlemen who intervene in the provision of electricity. Not all consumers on the grid have a meter, including many that are illegally connected, making it impossible to measure consumption or collect payment. Where meters have been installed, EDH often lacks the capacity to read or send bills. There is also theft or skimming at collection points, non-payment by government entities, particularly municipalities with very limited revenue sources, or connections to the grid operated by middlemen and organized gangs, among other things. Fighting electricity theft is very challenging given high levels of insecurity and corruption.

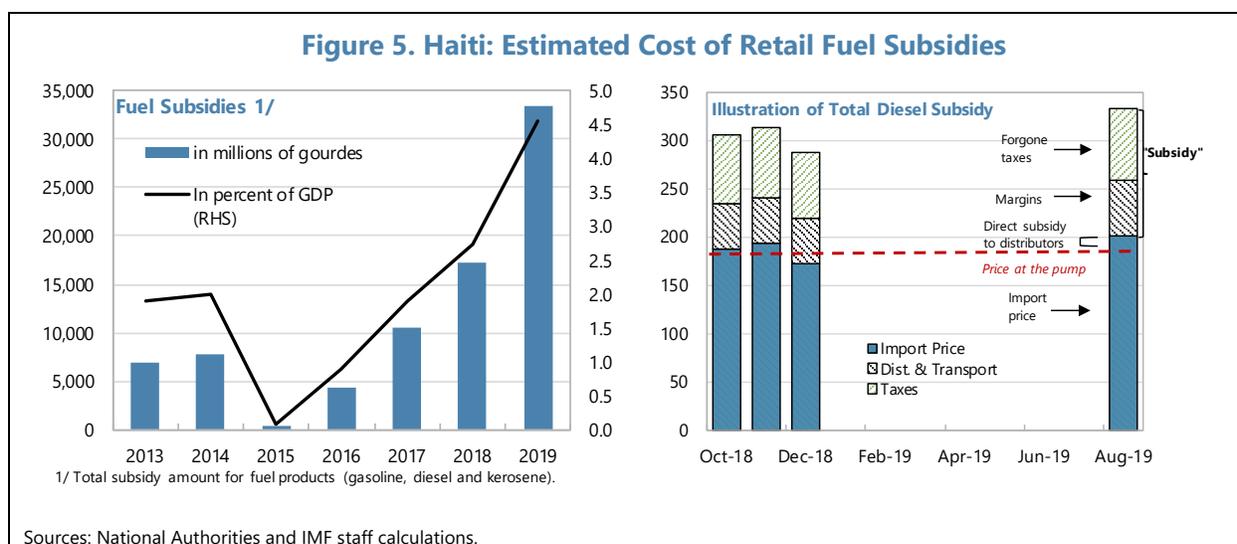
18. Haiti has one of the lowest electricity consumption rates in the world. Haiti is the 88th most populous country in the world but ranks 184th in total electricity consumption (Figure 4). Per capita electricity consumption was 39 kWh in 2014, eighty times lower than the regional average according to Worldwatch Institute (2014) and the World Bank. As the majority of the grids are old and unreliable and its reach is limited, technical and non-technical electricity losses are very high. EDH estimates that 20 percent of households near the capital are paying customers, but the figure is under 10 percent everywhere else, including just 3 percent of households in the north-west.

C. Estimating Energy Sector-Related Losses

Fuel Subsidies

19. Retail fuel prices have been below the cost of supply since mid-2018 (Figure 6). The price should cover the import cost (CIF) plus charges for transport and distribution, and taxes. However, with prices rigidly administered since 2010, the gap between administered and cost recovery prices has been covered by foregone tax revenues or direct budget transfers. The newly-elected Moïse government implemented fuel price increases in 2017 following an agreement with transport unions: the gasoline price was increased by 19 percent (HTG35 per gallon), diesel by 20 percent (HTG30 per gallon), and kerosene by 17 percent (HTG25 per gallon). Although full pass-through parity was not achieved, the agreement provided for future adjustments to reach full parity in the medium term.

20. This contributed to a vicious circle of monetized fiscal losses and depreciation, now compounded by supply disruptions. Monetized fiscal shortfalls have contributed to exchange rate depreciation which has fueled further subsidy-related losses. With fuel prices fixed in local currency, these costs surged in 2018–2019. The gap between cost-recovery and administered prices increased from 55 percent (105 HTG per gallon) in September 2018 to 84 percent (160 HTG per gallon) in June 2019, mostly caused by gourde depreciation (33 percent)—equivalent to monthly subsidies of 0.3 percent of GDP. About 60 percent of this was forgone revenues and the remainder took the form of direct budget expenses financed in part—since the end of BMPAD—by arrears accumulation to distributors (Figure 5).



21. In theory, 'efficient' prices should cover supply costs, relevant taxes, and additional amounts reflecting negative externalities (IMF 2015). Information on the gap between the existing and 'efficient' levels of fossil fuel prices is a helpful benchmark for analyzing and reviewing policy trade-offs related to fuel price reform, including the welfare impacts of moving to efficient prices, the socio-political challenges, and differences across countries (Box 1). Options and alternative policies can then be evaluated to help policymakers assess tradeoffs, prioritize reforms, and communicate the case for reform.

Electricity Sector Losses

22. Chronic losses by EDH are covered by the budget. The state subsidizes the electricity sector in four different ways (Table 2, Panel C): (i) tax revenues collected by EDH but never transferred; (ii) the provision of free fuel to PBM and EDH thermal plants; (iii) payment guarantees in the form of electricity purchases from IPPs on behalf of EDH; and (iv) through the payment of fuel purchased by Sogener, supposedly in exchange for incomplete payments by EDH for electricity supplied. EDH routinely pays late charges on its billings from IPPs, continues to maintain unpaid debts to them, and in the past has borrowed from the state bank BNC to fund operations. The financing of EDH through transfers, arrears, and loans is neither clear nor transparent.

23. Electricity tariffs have been administered in nominal terms and rarely adjusted since 2009. The average price charged by IPPs to EDH in 2017/18 was in the range of 14 Gourde cents/KwH while the price charged by EDH was 11 cents (Table 2, Panel A). This means that EDH incurred a loss on every residential consumer, even before losses from failure to bill or collect. Commercial and industrial users paid about 20 cent per KwH more (plus fixed charges), but over time have opted for self-generation powered by diesel fuel since that produces electricity at comparable rates on a more reliable basis. EDH provides electricity for only about 14 hours per day.

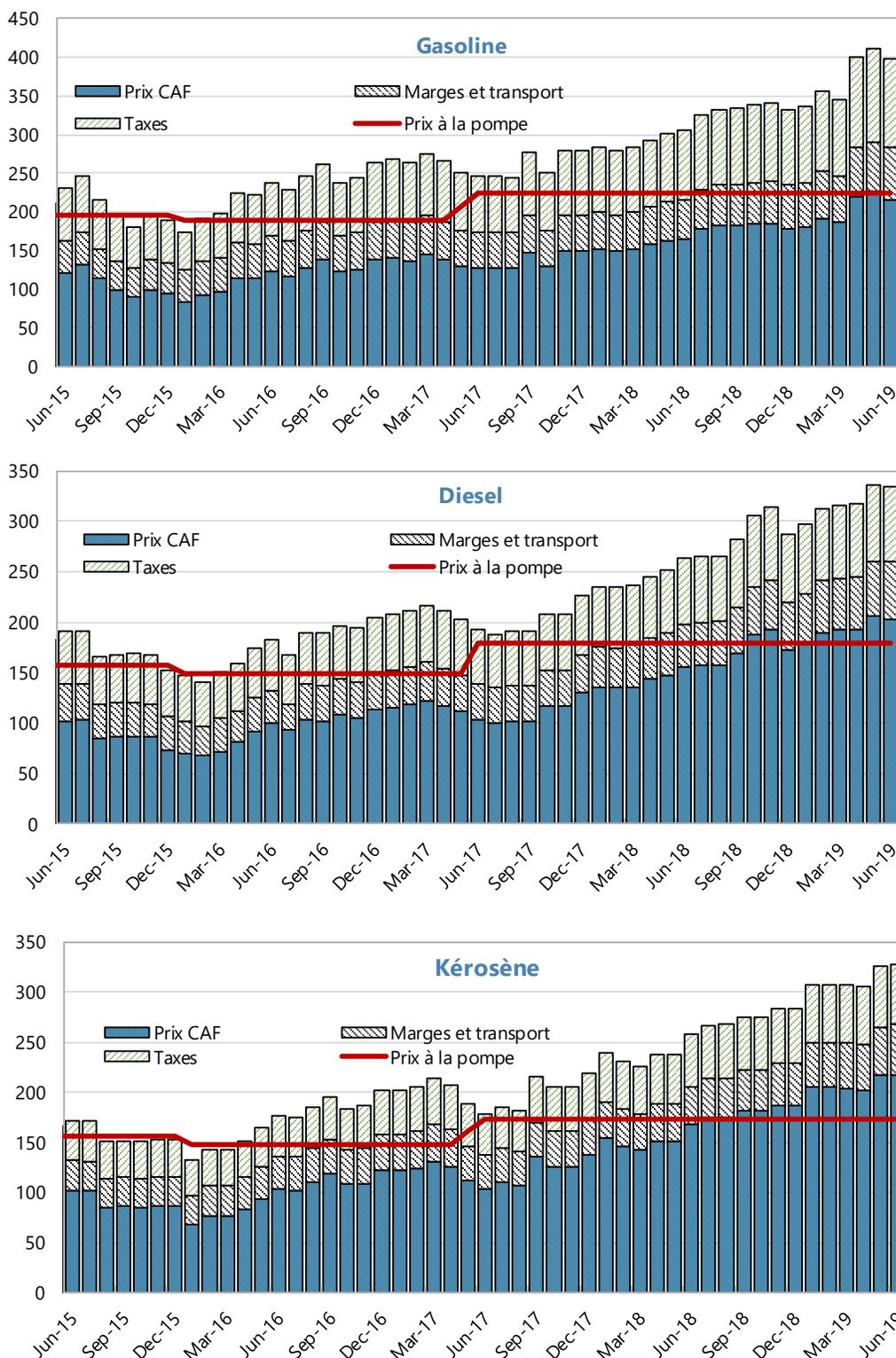
24. Very low revenue collection, high generation costs and low rigid prices add up to chronic deficits at EDH. The cost to the nonfinancial public sector (NFPS) deficit of electricity-related losses has hovered around HTG 10 billion over the last 5 years, reaching HTG billion (1.9 percent of GDP) in FY2019 (Figure 7). EDH reports do not include information about financing. Fiscal data suggest that the EDH deficit is financed indirectly by government transfers, as detailed above.

25. The revenue collection and financial performance of EDH will be a critical issue to address in any reform. In 2018, only about 45 percent of the electricity generated was invoiced. The cash recovery index (CRI) increased to over 55 percent during the first half of FY2019 following reforms initiated under the SMP (Figure 7).⁶ Aside from collection, invoicing and overall revenues are constrained by management problems, serious governance issues, and excessive expenditures related to expensive and inefficient oil-based power generation, onerous IPP contracts, and a large wage bill, which has increased during the past few years.

26. Some collection gains were achieved through a combination of governance reform and suspension of electricity to nonpayers. Governance reforms included the installation of meters and the implementation of a phased action plan when bills were not paid. A simple counterfactual exercise assuming a CRI of 90 percent instead of 38 percent in FY2018 would translate into collection gains equivalent to 1.0 percent of GDP (Table 2, Panel B). Notwithstanding these gains, EDH would still fail to cover its costs and incur a deficit of 0.5 percent of GDP.

⁶ The CRI measures the percentage of power purchases paid for by consumers. The CRI is equal to: [(Energy billed by EDHs) x (Consumer bills paid to EDHs)] / [(Energy purchased by EDHs) x (Total billing of consumers by the EDHs)].

Figure 6. Haiti: Fuel Subsidies by Product

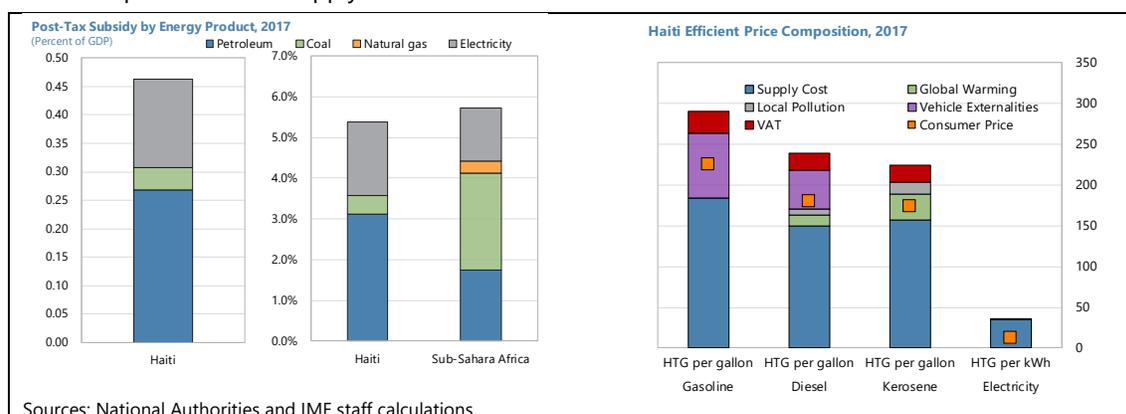


Sources: National Authorities and IMF staff calculations.

Box 1. Estimating the Cost of Fuel Subsidies

Economically 'efficient' fossil fuel prices have three basic components (IMF, 2018):

- **The economic cost.** For traded products, such as gasoline and diesel, this can be measured by the international reference price as reflected in the cost faced by importers or the revenue foregone by domestically consuming rather than exporting the product. For non-traded energy, such as electricity, the supply cost is the domestic production cost or 'cost-recovery' price, with fuel inputs evaluated at international reference prices.
- **Environmental costs.** For fossil fuel use, this includes the impact on global warming, local air pollution, and other costs associated with the impact of road vehicles like accidents.
- **Revenue-raising considerations.** IMF guidelines apply consumption taxes to fuels similar to other goods, i.e., the VAT rate on final fuel consumption—based on prices reflecting supply and additional margins reflecting the public costs of related externalities (b. above)—but not on intermediate purchases.
- **Retail (pump) prices in Haiti are well below the efficient price and the gap is increasing.** Drawing on the commonly accepted estimates of fossil fuel subsidy costs, the average cost of all post-tax externalities was estimated by the Fiscal Affairs Department at around HTG65 per gallon, about 40 percent of the supply cost.¹



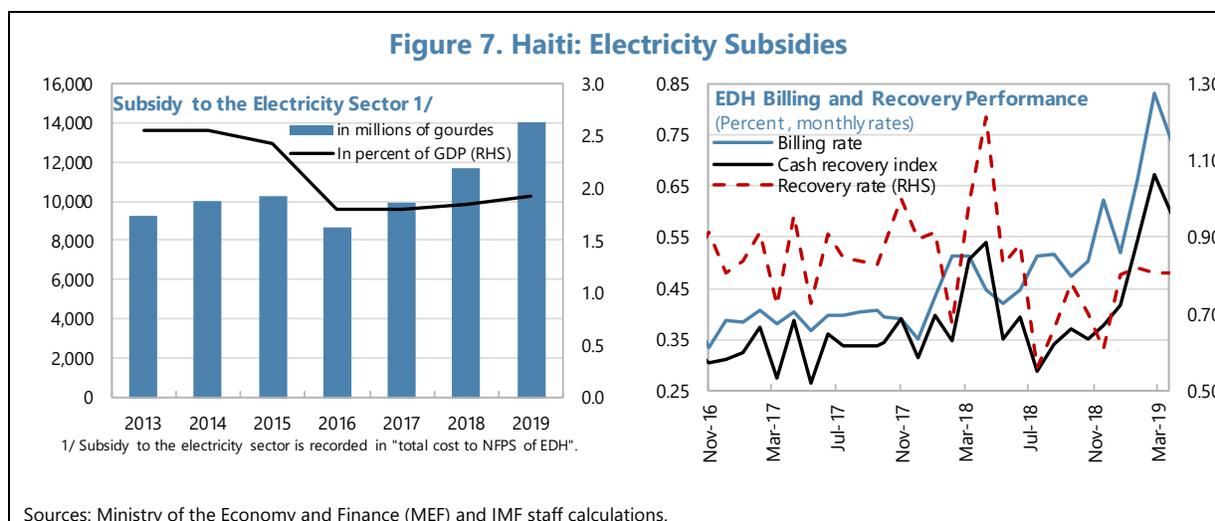
¹Pre-tax subsidies arise when energy consumers pay less than the supply cost of energy, including transportation and distribution costs. Post-tax subsidies are the sum of pre-tax and tax subsidies, where tax-subsidies arise if energy taxes are too low. Energy should be taxed in the same way as any other consumer product plus an adjustment for negative externalities such as the effect of energy consumption on congestion, climate change, etc.

D. Socio-Economic Implications

Economic and Environmental Aspects⁷

27. Energy subsidies, if large and persistent, can have serious costs. The literature is unequivocal on the perverse fiscal, economic and social consequences of energy subsidies, including higher deficits and public debt and crowding out of public spending on health, education, infrastructure, and social programs. Subsidies distort market signals, are regressive, and aggravate climate change and local pollution, congestion, and public health costs.

⁷ All data discussed in this section, unless noted otherwise, is from the 2012 "Enquête sur les Conditions de Vie des Ménages après le Seisme" (ECVMAS 2012). (Survey of Household Living Conditions after the Earthquake).



28. Losses of the state energy company together with energy subsidies have compromised fiscal and external sustainability in Haiti. Since 2012, subsidies alone have raised public debt by 18 percent of GDP (including arrears). Energy subsidies also complicate budget management due to price volatility. In recent years, subsidies have become a drag on Haiti's long-term growth and competitiveness by diverting resources away from other spending priorities, discouraging efficiency-enhancing investment in the energy sector and alternative energy, and diverting resources into non-viable or capital-intensive activities. A recent study (IMF, 2014) suggests that pricing of fuel products is below efficient levels in most LAC countries, including Haiti.

Box 2. International Household Energy Expenditures

Internationally, maximum average expenditure on urban transport is estimated at about 25 percent of monthly household income. Monthly averages in Haiti are high when compared to other cities in Latin America and in Africa.

City and country	Percentage of household income spent on transport	Year	Source
Port-au-Prince, Haiti	17,3%	2014	World Bank, 2014
Lagos, Nigeria	13,8%	2007	Kumar & Barrett, 2008
Lima, Peru	12,2%	2009	CAF, 2010
Dar es Salaam	11,6%	2007	Kumar & Barrett, 2008
Caracas, Venezuela	11,1%	2009	CAF, 2010
Abidjan, Cote d'Ivoire	10,1%	2007	Kumar & Barrett, 2008
Nairobi, Kenya	10,1%	2007	Kumar & Barrett, 2008
Santiago, Chile	10,0%	2009	CAF, 2010
Bogota, Colombia	9,8%	2009	CAF, 2010
Buenos Aires, Argentina	9,5%	2009	CAF, 2010
Montevideo, Uruguay	8,1%	2009	CAF, 2010

Note: Households in Haiti spend on average US\$30 /month on electricity and electricity substitutes (such as lighting, batteries). However, rural/urban and departmental averages vary greatly, and the poorest half of the population spends much less than this average.
Sources: Ferro and Taillandier (2017), « Study on oil pricing reform and subsidy mechanism for urban transport ». World Bank. Scaling-up Renewable Energy Program (SREP) Investment Plan for Haiti, SREP/SC.13/5

Equity and Social Implications

29. Subsidized fuels are mainly consumed by the wealthiest households in Haiti. Poor households consume very little fuel, both in absolute terms and as a share of total consumption, consistent with the literature on the incidence of fuel subsidies (Arze del Granado, Coady, and Gillingham; Coady, Flamini, and Sears). On average, poor households spend only 112 Gourdes per year on fuels, or 0.1 percent of their annual budget. In comparison, average annual expenditure on petroleum products in the richest decile is 18,900 Gourdes, or 5.7 percent of total consumption (Figure 8). As a result, the poor receive only 1.6 percent of total subsidies accruing directly to households.

30. An increase in fuel prices affects mostly the richest group of the population. Since fuels (gasoline and diesel) are a very small part of poor households' consumption basket, the direct effect of a price increase is negligible (Figure 8). Considering a reduction in subsidies leading to a 30 percent rise in fuel prices, the price increase would reduce the real consumption of the average poor household by less than 0.05 percent, whereas households in the richest decile would experience a 1.65 percent decline in consumption. However, there would be indirect, second-round effects on the price of food and transportation. Overall losses are estimated at 1.7 percent for the bottom quintile of the income distribution and above 2.8 percent for the top quintile. A World Bank (2016) report also estimated that 80 percent of rural households—among the poorest in Haiti—use kerosene as the main source of fuel and would be disproportionately affected by an increase in its price.

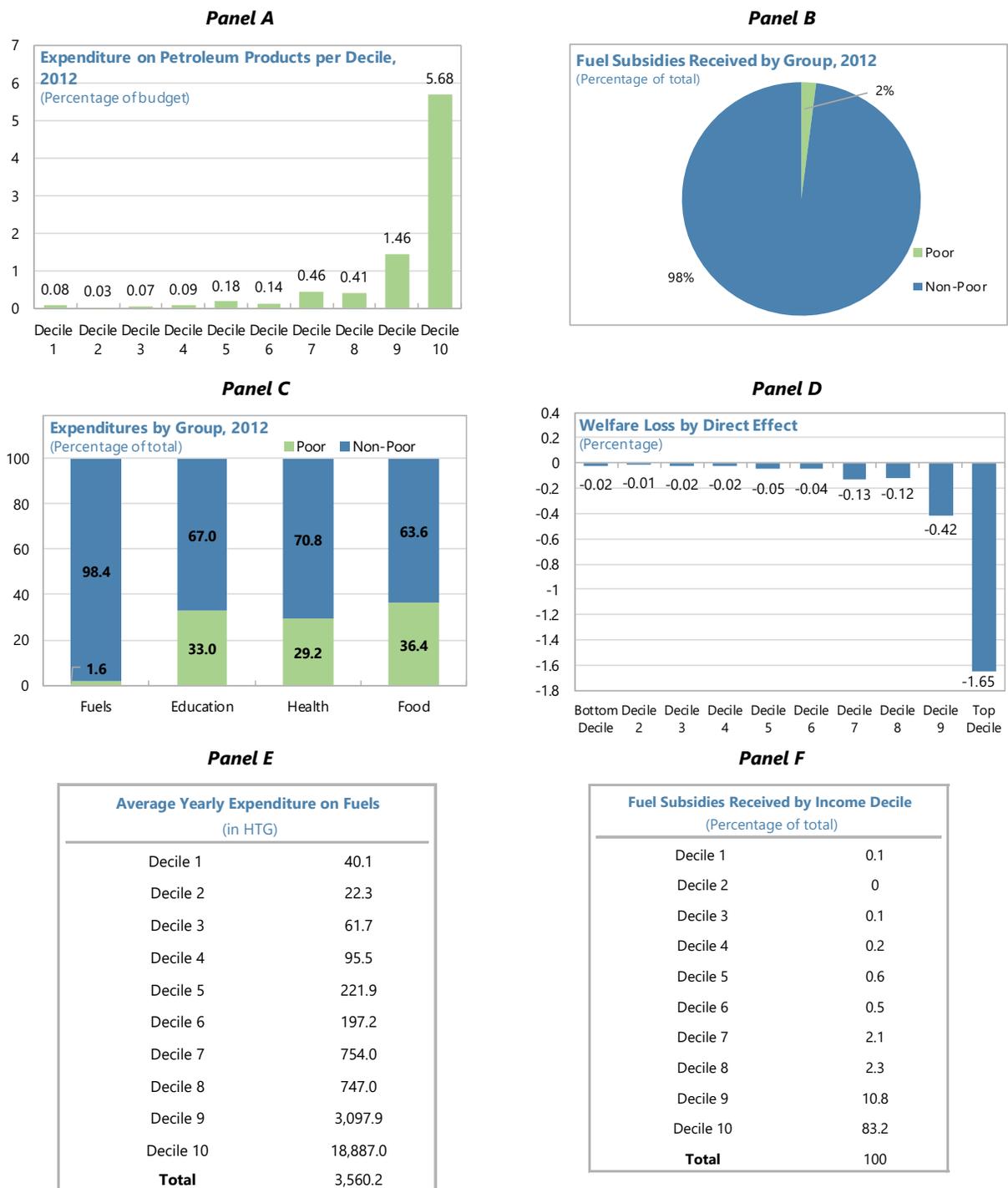
E. Evidence from International Experience

31. International experience with energy sector reform points to a number of challenges. Political constraints have often prevented or derailed reform, so understanding the political economy is critical for maximizing the probability of a successful reform strategy. Challenges arise from many aspects, including: (a) lack of information or understanding by the authorities and the public regarding the magnitude and shortcomings of subsidies (Ghana, Mexico, Nigeria, the Philippines, Uganda, and Yemen); (b) lack of government credibility and administrative capacity (Indonesia in 2003 and Nigeria in 2011); (c) concerns regarding the adverse impact on the poor (Iran and Nigeria); and (d) concerns regarding the adverse impact on inflation, international competitiveness, and volatility of domestic energy prices.

32. While the strategy has to be case-by-case, recent experience suggests the following ingredients can help to overcome barriers and increase the likelihood of implementation:

- Develop a comprehensive and appropriately sequenced reform plan.
- Develop a far-reaching communication strategy.
- Include subsidy reform as part of broader reform of the energy sector, including regulation, governance, and transparency.
- Implement mitigating measures in advance and to coincide with reforms.
- Implement compensating social assistance before and during energy subsidy reform.
- Move to an automatic pricing mechanism that is removed from the political process.

Figure 8. Haiti: Household Expenditure and Subsidies by Income Group



Sources: ECVMAS (2012), World Bank, and Ministry of Finance (MEF).

Table 2. Haiti: EDH Budget and Electricity Price Overview

Panel A. Prices and Costs: FY2017/18 Average Prices in HTG/kWh				
Production			Distribution	
IPP sale prices to EDH	EDH production costs		EDH sale price	
Sogener	15.5	EDH plants	NA	11.2
Haytrac	14.2	PBM plants	13.7	
E-power	11.4			

Sources: EDH FY2017/18 budget and IMF staff calculations.

Panel B. EDH Budget				
FY2017/18 EDH budget (in million gourdes)	Actual (with 38% CRI)	(% of GDP)	Counterfactual (with 90% CRI)	(% of GDP)
Total revenues	4,546	0.7	10,728	1.7
Electricity sales	4,452	0.7	10,634	1.7
Electricity billed	5,301	0.8	11,225	1.8
Electricity supplied	11,815	1.9	11,815	1.9
Other revenues	94	0.0	94	0.0
Total costs	14,048	2.2	14,048	2.2
Fuel costs (power plant inputs)	4,372	0.7	4,372	0.7
Electricity purchased from IPPs	5,841	0.9	5,841	0.9
Wage bill	1,726	0.3	1,726	0.3
Sales tax to be transferred to the government	378	0.1	378	0.1
Other costs	2,110	0.3	2,110	0.3
Balance	-9,502	-1.5	-3,320	-0.5
Financing from the government (EDH subsidies)	10,799	1.7	3,320	0.5
Errors and omissions	-1,297	-0.2	0	0.0

Sources: EDH FY2017/18 budget and IMF staff calculations.

Panel C. Electricity Subsidy Overview		
FY2017/18 Subsidy Components	% of GDP	% of Total
(i) Sales tax collected by EDH but not transferred	0.1	3.2
(ii) Free fuel to EDH and PBM power plants	0.6	33.1
(iii) Electricity purchase from IPPs on behalf of EDH	1.0	56.2
Subtotal: EDH subsidy	1.7	92.6
(iv) Free fuel to Sogener power plants	0.1	7.4
GRAND TOTAL	1.8	100.0

Sources: National Authorities and IMF staff calculations.

F. A Proposal for Energy Sector Reform in Haiti

33. Any reform proposals for the fuel and electricity sectors should undergo a broad process of consultation and communication with all stakeholders. Broad consultations with relevant stakeholders should take place in advance to better inform the analysis and design of reforms. This should include parliament, civil society, labor, and key segments of the private sector. Public programs that mitigate the impact on key groups together with a strategic communications plan are needed to lay out in advance the rationale and end-goals, trade-offs, methods, mitigating measures, and timing of reform to the public. In this context, the following recommendations outline the key principles of reform without pre-judging the precise modalities, including sequencing and mitigating measures, which should be developed only after consultations.

Reform Priorities in the Fuel Sector

34. A gradual, sequenced, and differentiated approach would help alleviate the impact on the most vulnerable groups and ease the transition, thereby raising the probability of success.

The experience of many countries has shown that the inflation response following the increase in petroleum prices tends to be short-lived and less than anticipated. Nonetheless, gradualism in eliminating subsidies would lower political economy risks by phasing and softening price transmission effects and their negative impact on the purchasing power of low-income households. Applying a different approach by product (differentiated) would help target the impact of reform.

- a) **Kerosene subsidies should not be touched until late in the reform process, if ever.** As noted above, kerosene is consumed mostly by the lower income quartiles (Figure 8, ¶19): over 50 percent of households use kerosene as the main source of lighting and over 80 percent of rural households use kerosene as the main source of fuel (World Bank, 2016). In urban settings, reliance on kerosene is mostly amongst the bottom quartile of the income distribution. Since an increase in the price of kerosene would be felt by the most vulnerable segments of the population, and since kerosene subsidies account for less than 10 percent of total subsidy costs, they should be addressed much later in the process, if ever.
- b) **Gasoline subsidies could be changed gradually, only after introducing mechanisms to mitigate the impact on the transport sector (¶28).** Gasoline is used more by middle-income groups directly in car use and indirectly through public and quasi-public transport—the *tap-tap* taxis.⁸ In 2014, it was estimated that two thirds of public transport services used gasoline and the remainder diesel. Price and subsidy reforms to gasoline should be gradual and be preceded by innovative ways to limit the impact on the cost to public transport providers and consumers.
- c) **Diesel prices could be first in line for reform since most of the subsidy benefits accrue to higher income groups.** Diesel is mostly used for luxury cars and household/business power generation. Reducing subsidies on diesel should be first in line and would be the most progressive step since diesel is consumed more by the top income quartile and the price elasticity of demand is likely to be very low, if not zero. The impact could however be difficult for

⁸ “Tap-taps” are privately-owned small buses or pickup trucks providing collective transportation. They comprise almost 40 percent of the vehicle fleet in Haiti (World Bank, 2016).

small and medium sized businesses who rely on self-generation to run their operations and consideration should be given about how to support these groups during the transition.

35. The plan should aim to eventually restore an automatic fuel price mechanism and move prices toward their 'efficient' level in the long term. The future price setting structure should be based on market prices and provide appropriate margins for transportation and distribution. The current level of taxation should be preserved such that foregone revenues are eliminated, followed by reduction in direct subsidies. (Arrears to domestic suppliers would need to be registered and restructured or unwound in a transparent manner.) In the long-run, the plan should move toward an automatic price adjustment mechanism to ensure appropriate pass-through of changes in import prices and depoliticize price adjustments. The adoption of a new price mechanism would present an opportunity to revise the 1995 pricing formula and taxation structure to account for externalities while achieving a desired level of smoothing of short-term price fluctuations (Coady *et al*).

36. Stakeholder consultation and consensus building is crucial to win support. International experience shows that outreach to parliament and influential beneficiaries directly affected by subsidy reform plays a positive role in reform. In Haiti, support from the transport sector and oil importer are two key stakeholders the government needs to engage to build support for reform.

37. A visible and scalable social protection program able to offset the impact on vulnerable groups is a pre-requisite. Even if a small fraction of existing subsidies goes to the poorest, the reform could nonetheless have important consequences for those with little room for budget adjustment, especially because of pass-through increase in transport and food prices. Staff recommend measures to build a better social safety net—within the framework of the new national plan—with a few demographic-based unconditional cash transfer programs. These could help also mitigate the impact of energy reform on the poor.⁹ Staff recommend starting the reduction in the fuel subsidies only after identifying and launching a channel for the delivery of mitigating measures, including after a pilot program (see SIP).

38. Specific targeted measures for the transport sector and users should be included. While transport providers are directly affected, they may not be the most vulnerable group. Nevertheless, they are an important and vocal constituency in the country and their interests must be addressed as part of the package. Building on recent work by the World Bank, measures to lower costs in the transportation sector could be developed in exchange for a commitment to limit or stagger increases in tap-tap fares.¹⁰ Other structural measures to lower costs could include support to finance the replacement of old vehicles for newer more efficient ones, reduce administration costs, and eventually improve transportation infrastructure and roads that would lead to the optimization of tap-tap routes.¹¹

⁹ Successful reforms, like in Iran in 2010, included quasi universal cash transfers (see Annex I).

¹⁰ The last successful fuel price increase in May 2017 followed a negotiated agreement between the government and tap-tap unions. Both parties agreed on a one-time increase in fares.

¹¹ The average age of Port au Prince transport vehicles is substantially higher than in comparable cities like Abidjan, Bamako, and Kigali. Replacing the fleet with more energy-efficient vehicles would allow for savings in maintenance and fuel costs (World Bank, 2016).

39. A clear communication strategy should be prepared and launched prior to any reform.

Development of a strategy and implementation of communications should precede any reform actions and include discussion of the rationale and end-goals, trade-offs, methods, timing, and most importantly, the mitigating benefits to be provided to lessen the impact. In particular, the rationale should stress that present losses (much dead-weight) caused by energy policies, equivalent to 6.5 percent of GDP in FY2019, would be freed up for spending on social assistance, education, health and infrastructure—a reallocation toward more productive, higher return activities that would drive private sector growth and employment. The plan should involve outreach that is inclusive and possibly interactive, such as a public forum or town hall, and include public service announcements that educate in plain language why reform is in the public's best interests. Innovative methods tailored to Haiti's situation should be explored, drawing on successful experiences elsewhere (e.g., rap songs about monetary policy deployed by the central Bank in Jamaica).

40. More generally, the overall regulatory framework would need to be reviewed and adapted to meet the needs of an evolving structure.

It should cover regulation, accountability, and market power issues, among other things and pave the way for the promotion and development of renewable energies. Discussions should be carried out on how to reduce reliance on fossil fuels through greater efficiency in the generation and use of power and the development of renewable sources of energy, namely geo-thermal, solar and wind.

Reform Priorities in the Electricity Sector**41. Reform of the power generation sector should focus on three areas: performance of the public utility, reform of tariffs, and regulation of the sector.**

Weak governance, theft, inadequate regulation, and low investment have formed a destructive cycle in Haiti's electricity sector. The overall legislative framework governing state-owned enterprises (SOEs) should be strengthened and regulation of the electricity sector overhauled. First, the dedicated unit within the Ministry of Economy and Finance (MEF) that oversaw the management of EDH and other SOEs should be re-activated and strengthened. Second, the authorities need to develop and implement a financial performance monitoring system for EDH (and other SOEs). Third, the government should prepare and publish annual consolidated financial performance reports for EDH (and SOEs).

- d) Reform of the electricity utility EDH is the top priority.** This would include revising legislation, strengthening the role and independence of the newly established regulator, and installing new management contracts until the governance legislation of SOEs is revised. It is not clear why 100 percent of EDH customers cannot be billed. Revenues should be increased by raising billing and collection rates significantly, including over time with the installation of remotely-controlled meters, remote payment systems—starting with large customers—and eventually renovation of the grids to reduce technical losses. Additionally, cost reductions could be achieved with the renegotiation in due course of supplier contracts awarded on the basis of transparent and competitive public tenders. Improved management and governance at EDH should lead to better cash flow for more investment to improve raise capacity and efficiency, capturing customers who currently depend on self-generation.

e) Reform of electricity tariffs should be considered and targeted first at those able to pay.

The government should prepare a plan to increase tariffs following a rationale and sequence like the one proposed above for the fuel sector. Any increase in electricity tariff should be preceded by consultation with stakeholders, communication campaign, and implementation of mitigating measures, and should be phased progressively on higher income users and larger accounts.

f) Review and strengthening of regulation in the sector is needed to ensure a transparent and level playing field for a configuration involving a blend of public and private operators.

While that might involve an end to the monopoly over the distribution and sale of electricity, regulation should put all operators on a level playing field, remove opportunities for rent-seeking and corruption, provide systems to control and reduce theft, ensure accountability and transparency, reduce universal subsidies, and include medium term objectives to expand the electricity grid in a way that strengthens productivity and efficiency, and lowers pollution.

Reforms of EDH and the sector should be part of a long-run strategy aimed at crowding in private investment, transitioning to a cleaner production mix, and expansion of electrification to remote off-grid areas.

Annex I. Lessons from International Energy Price Reforms

A. Lessons from Electricity Subsidy Reform

Mitigating Measures		Lessons
Kenya	<p>To address social objectives and affordability concerns, a number of measures have been adopted. These include:</p> <ul style="list-style-type: none"> • A rural electrification program that has helped increase the number of connections from 650,000 in 2003 to 2 million at present. • A revolving fund for deferred connection fee payments (financed by donor funds). • Commercial bank loans for connection fees, and a “life-line” tariff (below costs) for households that consume less than 50 kWh a month, which is cross-subsidized by rates imposed on larger consumers. 	<ul style="list-style-type: none"> • Improving the technical and administrative efficiency of state-owned companies was significant in eliminating hidden costs. • The establishment of a relatively sound regulatory framework (including a regulator that is considered to be largely effective and independent) has also been vital to the durability of the reform process and has encouraged greater private sector participation in generation capacity.
Uganda	<ul style="list-style-type: none"> • The key explicit mitigating measure to power tariff reform is the lifeline tariff for low-income consumers. • Uganda has a lifeline tariff for poor domestic consumers for power consumption up to 15 kWh a month. This lifeline tariff has remained unchanged at USh 100 per kWh. 	<ul style="list-style-type: none"> • Increasing power tariffs alone will not be enough. Performance is equally affected by high levels of distribution network losses and under-collection of bills. • The utility’s financial sustainability needs to be pursued through measures to improve efficiency. Regulatory policies can help provide utilities with appropriate incentives to improve efficiency. • Tariff increases require a careful strategy for communication and implementation. A large portion of the media considered increasing tariffs a pro-poor measure.

B. Lessons from Fuel Subsidy Reform

Mitigating Measures		Lessons
Ghana	<ul style="list-style-type: none"> • Elimination of fees for state-run primary and secondary schools. • An increase in public-transport buses. • A price ceiling on public-transport fares. • More funding for health care in poor areas. • An increase in the minimum wage; and investment in electrification in rural areas. 	<ul style="list-style-type: none"> • A constant dialogue with stakeholders and civil society at large about the cost of subsidies is necessary to maintain commitment to the reform. • Supportive research and analysis are important for convincing the public of the benefits of reforms. • Visible mitigating measures increase the likelihood of success.

Namibia	<ul style="list-style-type: none"> • A zero-rate value-added tax on selected food items, rebate facilities for food importers, and a food distribution program to feed the most vulnerable. • Rural pump prices are subsidized as part of the socioeconomic policy of the government. This is achieved by subsidizing transportation costs to remote areas to ensure that the pump price in remote areas is not inflated by retailers' transport costs. 	<ul style="list-style-type: none"> • Comprehensive planning and gradual implementation were key to success. • Reforms were implemented gradually which allowed enough time for consensus building between the government and various stakeholders. • Price adjustments that employed smoothing mechanisms helped prevent social unrest.
Niger	<ul style="list-style-type: none"> • Following negotiations with the civil society and private sector operators, a direct subsidy to the transport sector was introduced (tickets modérateurs). • The discontinuation of the subsidy on fuel products created room for a 19 percent increase in social spending in the 2012 budget compared to 2011, with particular emphasis on investment in education. The public wage bill was increased to accommodate the recruitment of 4,000 teachers. 	<ul style="list-style-type: none"> • Promoting an understanding of the issues by society as a whole is important. • Being transparent about the costs of the subsidy by an explicit budget line proved very useful in Niger. • Planning an adequate public information campaign also played a crucial role in ensuring the support of the society for reform. In Niger, there were debates on TV and radio about this issue. • Sufficient time to explain, negotiate, and implement the reform must be allowed. Building reform momentum, stakeholders' consensus, and social support requires time. • Engaging partners can help to ensure that there is sufficient information about the problem and put pressure to launch the reform process. Ensuring that mitigating measures reach the most affected groups is crucial.
Nigeria	<ul style="list-style-type: none"> • Increasing mass transit availability by facilitating the procurement of diesel-run vehicles (subsidized loans, reduced import tariffs, etc.) to established operators. In the first step of this program, the government intended to import 1,600 buses within months. 	<ul style="list-style-type: none"> • The government must establish credibility for its promise that the proceeds from the removal of the subsidy will actually be used for the benefit of the broad population. • Thorough research on the costs and beneficiaries of subsidies is important for bolstering the case for subsidy reform.

Annex II. *Petrocaribe* in Haiti

1. ***Petrocaribe* was an agreement established in 2005 through which Venezuela exports oil and derivatives to Caribbean and Central American countries using concessional financing.** *Petrocaribe* allowed countries to make up-front payments to Venezuela for a share of the total cost of imports. Up-front payments ranged from 30 percent to 95 percent of the cost, priced at market values. The higher the current oil price, the smaller the share the beneficiary paid up front. The remaining balance was loaned at 1–2 percent interest rates, with repayment periods ranging from 17 to 25 years.
2. **For about 10 years, Haiti benefited from concessional financing under the *Petrocaribe* Agreement.** Haiti joined the initiative in March 2007 and started benefiting from the agreement in October 2007. Haiti reliably supported Venezuela in regional forums such as the Organization of American States (OAS) and United Nations. Financing inflows were calculated as a proportion of Haitian purchases of oil products from PDVSA (*Petroleos de Venezuela*, the state-owned Venezuelan oil company).
3. **The sale of oil products in the domestic market generated considerable financing resources for the government.** As of end-FY 2018, the stock of *Petrocaribe*-related debt was US\$1,825.5 million (20.2 percent of GDP). This entire debt stock was accumulated between 2010–18 since Venezuela cancelled all of Haiti's pre-2010 *Petrocaribe* debt (US\$395 million) after the 2010 earthquake.
4. ***Petrocaribe* resources were used to finance investment projects and support the electricity sector.** All related investment decisions were published in a resolution in the official gazette listing the projects and the amounts to be financed. Disbursements were reported in BMPAD's webpage on a regular basis. The BMPAD website containing information on the projects financed with *Petrocaribe* resources is available at <http://www.bureaudegestion.gouv.ht/index.php>. Although the budget included information about capital spending financed with these flows, their use did not follow the same rules applied for treasury resources, including on procurement.
5. ***Petrocaribe* flows served as a crucial source of financing in post-earthquake Haiti and their termination last year has led to substantial fiscal strain.** The end of *Petrocaribe* flows has constrained investment spending and the financing of the electricity sector. The shock to growth has hit domestic tax revenues and international reserves.

Annex III. Experience from Recent Fuel Reform Attempts

- 1. In 2017, the newly elected President Jovenel Moïse was able to raise retail prices by 20 percent on average after extensive media outreach and discussions with civil society and transport unions.** The government had negotiated with unions an increase in transportation fares to compensate drivers and promised the development of a health insurance for the sector and the construction of parking spaces. However, the government failed on delivering on the promises. With no subsequent price increase, the fiscal costs from subsidies started rising again.
- 2. To help pave the way for another ECF, staff and the authorities agreed in February 2018 on a Staff-Monitored Program (SMP) for the period March-August 2018.** A key reform at the heart of the program was the full elimination of the sizable fuel tax subsidy by end-June 2018—a measure that was supported by the Fund and international donors. The authorities were advised by staff of the Fund and the World Bank to strengthen the social safety net and develop a communications strategy to help mitigate the social impact of this measure. EU and IDB provided additional technical assistance.
- 3. The government announced, on July 6th, an increase in prices for gasoline (38 percent), diesel (47 percent) and kerosene (51 percent).** However, it suspended the price hikes the following day, before they could be implemented, amid widespread and occasionally violent protests. The move was met by strong opposition from public transportation drivers and also urban populations, even though other regions and segments of society were likely to have been more vulnerable.
- 4. While a package of measures had been developed to mitigate the social and political impact of the fuel price reform, these measures were neither communicated to the public nor implemented, because of the lack of implementation capacity and their likely ineffectiveness.** The package included subsidized meals for students and workers, transport vouchers for workers, health insurance for transport providers, enhancement of an existing maternal support program, distribution of seeds and fertilizer in rural areas, and public works to support employment.
- 5. Some other ideas considered included: (i) Compensate taxi (Tap-tap) drivers with the aim of maintaining unchanged public transport fares after reform.** This strategy was deemed impractical because of the absence of a register of participants in public transportation. (ii) Directly compensate workers who use public transport. However, the available register of workers comprised only workers in the formal sector, a minority of the labor force and not necessarily the most vulnerable. (iii) Compensate food producers. This was deemed inefficient since it would introduce distortions in the local food production market. There was also uncertainty about how to ensure that benefits would be passed on to consumers.

Annex IV. Experience from Electricity Sector Reform Attempts

1. Several reform attempts took place over the last decade by donors through a number of projects designed to improve the operations of EDH. Most of these projects have largely failed in strengthening EDH as a result of corruption and poor management controls. These projects have been somewhat timid in terms of the reforms or were weakened after approval because of political pressure.

2. For example, a USAID-funded project to strengthen EDH initially contemplated a quasi-management contract, with incentives for performance, where the consulting firm would have significant control of EDH, including hiring and firing of staff. But eventually, the Government of Haiti converted this contract to technical assistance contract, where the consulting firm was limited in its role to providing advice to management of EDH and supporting the procurement of some equipment. Improvements of efficiency under this contract were minor. Because of this poor performance, USAID reprogrammed more than \$100 million originally intended for the power sector in Haiti, to other sectors in Haiti and to other countries. The USAID-funded program was one of a multitude of efforts by many donors, including also the World Bank and the IDB.

3. More recently, there have been a number of efforts undertaken as part of the World Bank and IDB investment operations aimed at improving the power system. These efforts have been largely unsuccessful. Lack of success is the result of a failure to reform EDH, which in turn is a result of lack of political will. Additionally, an important, and recent initiative by USAID provides support for the *Caracol* Power Plant. USAID initially provided funding for the construction of 10 MW diesel-fired plant and distribution network. Afterwards, USAID funded a management team under the National Rural Electric Cooperative Association (NRECA) and now ATC&C losses are under 10%, and all other efficiency indicators have also improved.

4. The government of Haiti has allowed private sector investment in electricity generation to compensate for EDH's inability to supply sufficient power. Three private power producers generate electricity for EDH. The most recent entry, E-Power, opened a 32 megawatt, USD 56 million, IFC-financed heavy fuel-oil powered generation plant in Port-au-Prince in 2011. The National Regulatory Authority of the Energy Sector in Haiti (ANARSE), a state body created by decree in February 2016, concluded prequalification rounds for regional and mini electricity grids and power production, in October 2018 and March 2019 respectively. ANARSE is expected to start issuing tenders in 2019 for concessions for public private partnership for these regional and mini grids.

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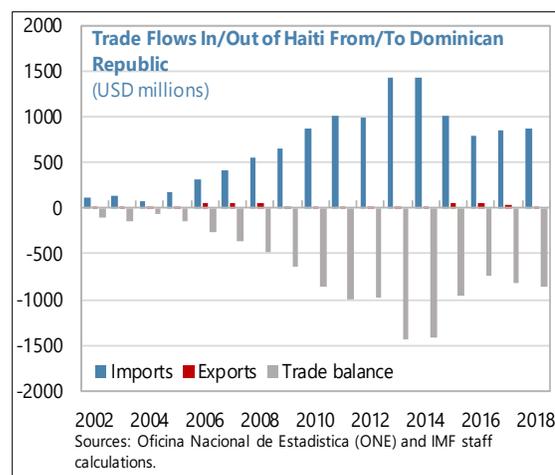
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HAITI'S CROSS BORDER TRADE WITH THE DOMINICAN REPUBLIC¹

A. Background

1. Official trade statistics with the Dominican Republic (the DR) are lopsided. The border between these two countries, which spans 360 kilometers, is very porous and much trade goes unrecorded, particularly Haitian imports from the DR. The purpose of this study is to estimate the magnitude of informal cross-border trade between Haiti and the DR, and assess its impact on tax and customs revenues in Haiti. The main findings show that informal trade is estimated to represent an important chunk of bilateral trade with the DR, equivalent to about 50 percent of the official data, and that foregone tax revenues amount to about 7 percent of total revenues. Further observations are made about non-fiscal costs of informal trade. The paper reflects on priority areas to improve customs' effectiveness and strengthen compliance and border control.

2. Haiti's trade deficit with the DR has increased significantly over the last two decades. More than 25 percent of Haiti's recorded imports come from the DR. Haitian imports from the DR rose from US\$208 million in 2002 to about US\$875 million in 2018, after peaking at US\$1.5 billion in 2012. Haitian exports to the DR are small at US\$51 million, or less than 10 percent of imports. Most bilateral trade (85 percent) moves overland. Anecdotal evidence suggests that a significant share of imports from the DR—mostly food items—are not officially recorded, while goods going unrecorded to the DR—mostly fuel products—are minimal.



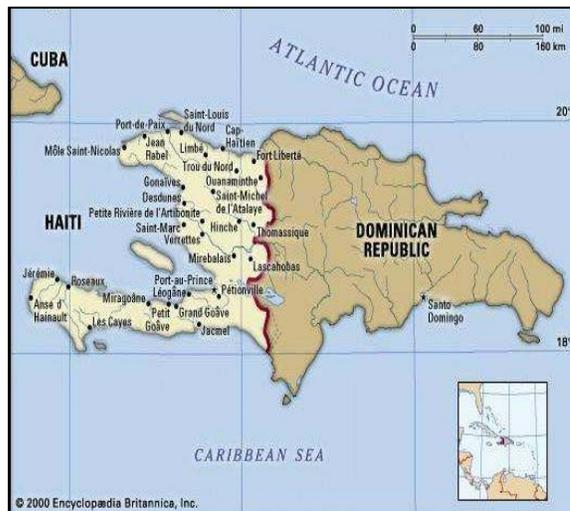
B. Cross-Border Informal Trade

3. The border is porous with hundreds of poorly monitored or unmonitored crossing points. The border region attracts Haitians from other parts of the country who are looking to take advantage of the additional employment and trade opportunities. The populations of the Haitian communities in the border zone for which data is available have grown by nearly 4 percent annually over the last 10 years compared to 1.3 percent in the rest of the country (Duret, 2010). However, the border area on the DR side is thinly populated as the incidence of extreme poverty there is twice the national average (UNDP, 2013).

4. An important share of Haiti's imports from the DR are not registered. Informal trade refers to goods that are unrecorded on official government records and/or that fully or partly evade

¹ Prepared by Rand Ghayad (WHD).

payment of duties and charges. Such goods include commodities that pass through unofficial routes and avoid customs controls, as well as goods that pass through official routes yet involve illegal practices such as under-invoicing, lower tariff payments, misclassification (i.e., falsifying the description of products), or bribery of customs officials (Box 1). Merchandise traded informally can cover both small volumes transported by individual traders across the border by foot, as well as larger volumes transported by other means.

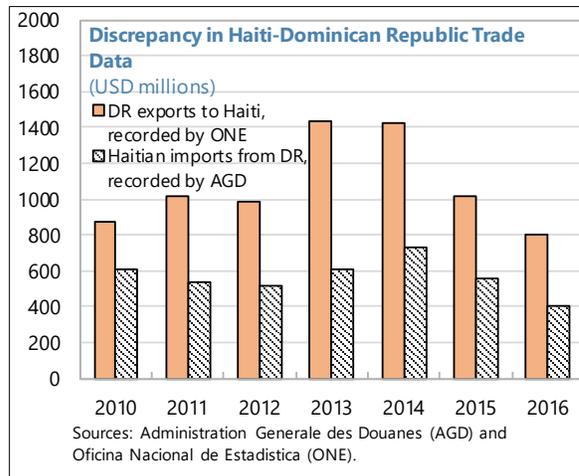


5. There are significant discrepancies in trade flows reported by the Haitian and the DR authorities.

Estimating the extent of informal cross-border trade can be done by comparing Haiti’s customs data with that of its trading partners. Corresponding “mirror” trade statistics point to a large negative gap between Haiti’s recorded imports and the corresponding DR exports as recorded by the DR. In 2016, the total value of formal exports from the DR to Haiti was valued at US\$800 million, while the total value of Haiti’s formal imports from the DR was estimated at US\$400 million.² As a result, US\$400 million is the estimated approximate value of unrecorded imports, about 50 percent of the official data on exports from the DR.

6. The difference between Haiti’s recorded imports and corresponding exports from the DR cannot be explained by freight-related costs.

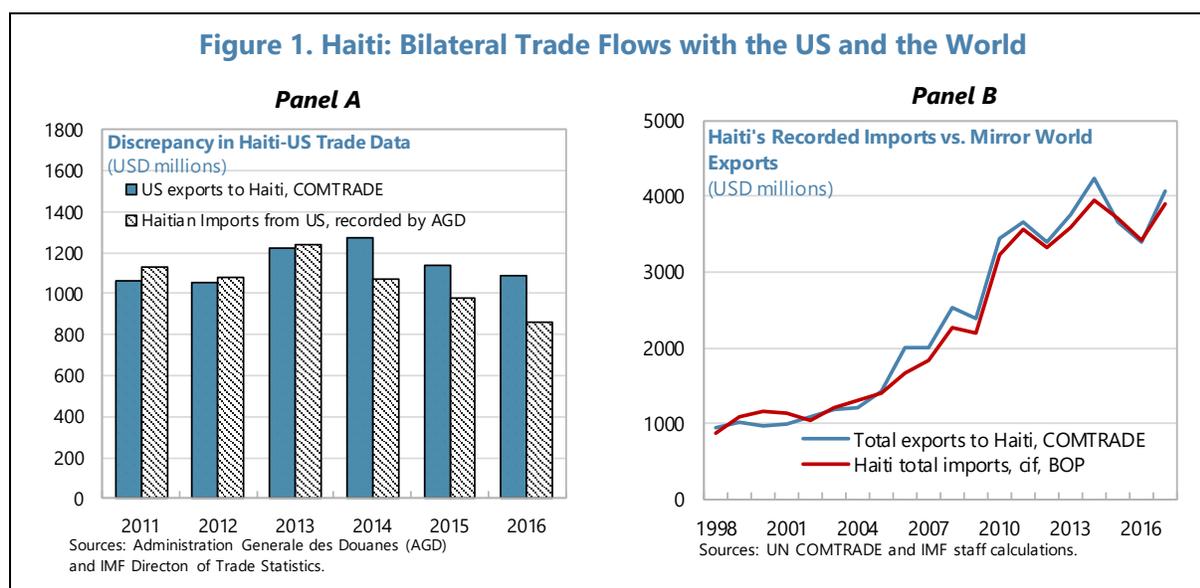
In principal, the value of imports recorded from one country should be higher, or at least as high, as the corresponding value of exports recorded by the trade partner in a common currency. As a rule of thumb, the OECD (2005) estimates “Cost-In-Freight” (CIF) values paid by the importer should generally be about 10 percent higher than “Free-On-Board” (FOB) values received by the exporter. However, the value of DR exports to Haiti exceeded the corresponding import value recorded by Haiti by about US\$400 million in 2016— a much larger discrepancy that goes in the opposite direction, implying that other factors must be in play .



7. By contrast, other trade flow data does not suffer from large unexplained discrepancies. Panel A of the figure below plots the value of Haiti’s recorded imports from the U.S. and the

² Data on Haitian imports come from the *Administration Generale des Douanes* (AGD) which collects, among other things, data on the taxes paid, value of imported goods, and information on the importing person/institution. Trade data in the DR are collected by the *Direccion General de Aduanas* (DGA) which has a more advanced reporting system with data collected at highly disaggregated levels.

corresponding U.S. exports to Haiti. In this case, the discrepancy between US exports to Haiti and corresponding Haitian imports from the US has averaged around 6 percent over the period 2011-2016. In addition, the ratio of CIF imports to FOB exports calculated on the value of Haiti's total imports to the sum of export values reported by all other partner countries was minimal, averaging about 0.99 during the last 20 years, implying that insurance and shipping related costs cannot account for the difference.. (Panel B).



Box 1. Disparity in Bilateral Trade Statistics

Disparity in mirror statistics can be attributed to both methodological and economic factors:

- Misclassification of products by customs offices can drive discrepancies when the same good is recorded under different commodity codes by either the importing or the exporting party.
- Misclassification of source country of imports.
- Overinvoicing of exports by exporting countries, for example if firms try to benefit from VAT exemptions on exported goods.
- Cross-border smuggling, whereby imported goods are not recorded at entry into the country, for example to avoid duties or other official levies, or because they are illegal products.
- Undervaluation or under-invoicing in order to maximize profits, or misreporting of products to take advantage of differences in tax rates across products.
- Timing or lag effects related to the delay between recording of exports from the exporting country (the DR) and delivery to customs authorities in the importer (Haiti).

C. Drivers and Implications of Cross-Border Trade

8. Haiti's informal trade with the DR is likely related to weak institutions, poverty, and corruption. Households and small businesses are incited to escape trade-related regulations and duties when price disparities arise between formally and informally traded goods. In addition, Haiti's limited monitoring and enforcement capabilities and alleged widespread corruption could enable individuals and small enterprises to conceal activities and evade taxes. Informal cross-border trade can also arise if officially traded goods are subject to complex, non-transparent, or divergent

regulatory requirements such as customs formalities, quality controls, or sanitary standards that raise trade transaction costs. Finally, loss of government legitimacy and weak law enforcement facilitates the conduct of informal trade and undermines the rule of law. This reduces the general sense of obligation to comply with civic and legal obligations and can result in a vicious circle.³

9. Large scale unrecorded trade has important fiscal implications. Table 1 presents a simple calculation of the possible loss of revenue from under-reporting of Haiti's imports from the DR based on the assumption that unreported imports would be subject to the overall average tariff estimated in a given year. Revenue forgone as a result of Haiti's unrecorded imports is estimated at about US\$78 million in 2016, or 7 percent of total domestic revenues.⁴ The government also loses revenues through legal loopholes. A 2015 World Bank study found that powerful, family-based economic groups benefited disproportionately from fiscal and customs duties incentives, paying duties that were 13 percent lower on average than those paid by other companies in the same sector.

Table 1. Haiti: Tariff Revenue Implications from Under-Reporting of Imports

USD millions	2010	2011	2012	2013	2014	2015	2016
Recorded Tariff Revenue	66.1	92.3	69.9	70.8	78.1	69.4	78.5
AGD Recorded Imports from the DR	604.9	535.5	520.2	607.4	731.5	554.2	400.4
Average Tariff (percent)	11%	17%	13%	12%	11%	13%	20%
Dominican Republic exports published by COMTRADE	802.0	1013.6	1037.4	1042.9	1423.2	1012.2	800.2
Imports recorded at Haitian Customs	604.9	535.5	520.2	607.4	731.5	554.2	400.4
Unrecorded Imports	197.1	478.1	517.2	435.5	691.7	458.0	399.8
Estimated Lost Tax Revenue, Average Tariff	21.5	82.4	69.6	50.8	73.8	57.4	78.4
Lost Tax Revenue (percent of domestic revenue)	2.8%	8.5%	6.7%	4.7%	6.7%	4.7%	6.9%

Source: IMF staff's calculation based on data from AGD and UN COMTRADE.

10. In the long-run, informal trade can have negative economic and developmental effects. While informal trade can enhance income earnings and employment opportunities for poor households, it creates unfair competition vis-à-vis formal traders and reduces the incentives to invest in the formal economy. Second, informal cross-border trade lowers the effectiveness of measures put in place to ensure quality controls and product regulatory standards. Third, unregistered trade flows lead to unreliable external trade statistics which might hinder the formulation of appropriate trade and structural policies. Finally, inaccurate trade data could distort analysis of the traded sector and external sustainability, and mislead macro policies.

³ Smart (2013) observes that the inability to eradicate smuggling reflects social attitudes regarding the legitimacy of government rules. Perry *et al* (2017) show that the general perception that governments are corrupt undermines tax morale and rule of law.

⁴ The country-level approach has the disadvantage of measuring tariffs using an average rate applied to all products, possibly introducing aggregation bias into the estimates of tariff evasion. However, the results were similar using both trade-weighted average tariffs and simple averages of tariff rates.

D. Recommendations

11. **The implications of informal trade reinforce the need to strengthen border security.**

Haiti has made efforts in the past to strengthen border control with the help of the UN stabilization force and in 2015 contracted with a foreign company to improve border-surveillance capabilities and enhance manpower capacity. However, the contract was not executed and Haiti remains unable to secure its borders against illicit trade activities. To address concerns, anti-smuggling and anti-fraud capabilities should be enhanced. Custom officers in Haiti are known to have faced political pressure and the threat of physical violence (CSIS, 2019). In addition to strengthening border security, surveillance capabilities, and intelligence, efforts should work to minimize the use of discretion at the border by implementing a risk-based inspections regime and requiring pre-arrival, online declarations, and tax payments.

12. **Reforms are needed to enhance the administrative structures that monitor cross border trade.**

The Haitian authorities have signed various cooperation agreements with Dominican customs directors over the years to combat contraband and customs fraud. The two countries recently revived these efforts and aim to establish joint centers for information-sharing and to conduct joint surveillance. While this initiative is very welcome, other measures recommended in recent technical assistance (TA) provided by the Fund should also be implemented. Priority areas include adopting a new organizational structure to clarify roles and responsibilities; streamlining customs policies and procedures; broadening the use of ASYCUDA World to reduce the degree of discretion given to customs officers; improving control and monitoring of exemptions; and enforcing cooperation agreements with the DR to facilitate the digital exchange of information between the two countries, essential to ensuring that goods cross the border legally and efficiently.

13. **A revised trade regime consisting of simplified documentation formalities and lower trade-related fees could be introduced to formalize low value cross-border transactions.**

Measures discussed in the framework of the WTO Negotiations on Trade Facilitation also have the potential to reduce informal cross-border trade. These measures include simplifying and reducing documentation requirements and formalities; streamlining transit and clearance processes; expediting the release and clearance of goods from customs custody; and enhancing transparency and predictability of trade-related regulations and fees. Such measures lower the incentive for corruption and enhance the efficiency of controls at the border, thus improving compliance with trade-related regulations. Finally, additional efforts to assist traders in understanding and complying with existing trade regulations could further reduce informality.

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- World Bank Group, Trade and Competitiveness Global Practice, “Brief Analysis of Market Functioning in Haiti: Background Paper for Systemic Country Diagnostic for Haiti,” May 2015, 21. The study found that companies belonging to these elite groups would maintain eligibility for “infant industry protections” by simply dissolving firms that aged out and creating new ones.