

# **Central America Social Expenditures and Institutional Review**

## **Panama**

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**Education Global Practice  
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Social Protection and Labor Global Practice  
Latin America and the Caribbean Region**



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## Acronyms

AAUD	Authority of Urban and Domestic Sanitation
ADePT	World Bank’s Software Platform for Automated Economic Analysis
ALMP	Active Labor Market Program
AUPSA	Panamanian Authority of Food Security
CA	Central America
CCT	Conditional Cash Transfer
CEPAL	<i>Comisión Económica para América Latina</i> (Economic Commission for Latin America)
CONADIS	The National Council on Disability
CONAVIH	National Commission for the Prevention and Control of HIV (CONAVIH in its Spanish acronym)
CSS	Social Security Fund (Caja de Seguro Social)
DEA	Data Envelope Analysis
DPT	Diphtheria, pertussis (whooping cough), and tetanus
ECD	Early Childhood Care
EDSTATS	World Bank Education Statistics Database
EEC	Estrategia de Extensión de Cobertura
FECE	Fund Equity and Quality in Education. Fondo de Equidad y Calidad en la Educación
GDP	Gross domestic product
GINI	The Gini coefficient
HIS	Health Information Systems
HIV	The human immunodeficiency virus
HMN	Health Metrics Network
HN	Hospital del Niño
HRH	Human resources for health
HST	Hospital Santo Tomás
ICEFI	<i>Instituto Centroamericano de Estudios Fiscales</i> (Central American Institute for Fiscal Studies)
ICGES	The Gorgas Commemorative Institute of Health Studies
ICT	Information and communications technology
IDAAN	Institute of Aqueducts and National Sewage
IDB	Inter-American Development Bank
IFARHU	Instituto para la Formación y Aprovechamiento de Recursos Humanos
IHR	International Health Regulations
INADEH	<i>Instituto Nacional de Formación Profesional y Capacitación para el Desarrollo Humano</i> (National Institute for Professional Training)
ION	Instituto Oncológico Nacional
ITS	Institutos Técnicos Superiores

LAC	Latin American and the Caribbean
LAC7	Argentina, Brazil, Chile, Colombia, Ecuador, Mexico, and Peru
LMIC	Lower middle Income Country
M&E	Monitoring and evaluation
MDG	Millennium Development Goal
MEDUCA	Ministry of Education
MEF	Ministry of Economics and Finance
MIC	Middle-Income Country
MIDA	Ministry of Agrofisheiy Development
MIDES	Ministry of Social Development
MINJUMNFA	Ministry of Youth, Women, Children and family
MITRADEL	Ministry of labor
MMR	Maternal Mortality Rate
MOF	Ministry of Finance
MOH	Ministry of Health
NCD	Non-communicable disease
NGO	Non-governmental Organization
OECD	Organisation for Economic Co-operation and Development
PAHO	Pan American Health Organization
PAIL	Programa de apoyo a la inserción laboral
PAIPI	Plan de Atención Integral a la Primera Infancia
PAISS	Package of Health Care Services
PHC	Primary Health Care
PISA	Program for International Student Assessment
PSE	Public Sector Efficiency
PSP	Public Sector Performance
PSPV	Health Protection for Vulnerable Populations
RBF	Results-based financing
RO	Red de Oportunidades CCT.
RUB	Single Beneficiary Registry (Registro Unico de Beneficiarios, RUB).
SENADIS	National Secretariat for Disability
SENAPAN	<i>Secretaría Nacional para el Plan de Seguridad Alimentaria y Nutricional</i>
SENACYT	Secretaria Nacional de Ciencia Tecnologia e Innovacion
SIMEPESS	Monitoring and Evaluation System of the National Health Strategic Plan
SPL	Social Protection and Labor
SSEIR	Social Sector Expenditure and Institutional Review
TB	Tuberculosis
UNDP	United Nations Development Program
WHO	World Health Organization

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## I Executive Summary

**Panama has experienced impressive and significant economic growth, emerging as one of the better performers in Central America in recent years** and one of the fastest growing economies worldwide. From 2003 to 2013, Panama has averaged an annual GDP growth rate of approximately 7 percent, surpassing the average GDP growth in Central America. It has also emerged as one of the fastest growing economies worldwide. Even during the economic crisis of 2008-2009, its economy continued to grow albeit at a lower rate.

**In parallel, Panama has made good progress in significantly reducing poverty and in improving almost all of its key human development indicators.** Poverty notably declined by 12.5 percentage points from 38.3 percent in 2006 to 25.8 percent in 2014 and inequality declined from 53 in 2007 to 51 in 2013. Panama has shown a consistent trend of improvement in almost all social indicators, making the most progress in reducing unemployment (53 percent), undernourishment (47 percent), and increasing labor employment (10 percent) between the two periods 2000-2006 and 2007-2014. Some of its other notable achievements include universal coverage in primary education and reduced child mortality rates.

**However, Panama continues to face challenges in improving certain indicators and in closing the enrollment gaps across quintiles and across urban and rural areas.** For example, while it has attained universal coverage in primary education, secondary education coverage remains low. Attendance rates of secondary education, especially in upper education are exceedingly unequal across quintiles. In 2013, only 46.2 percent of the lowest income quintile were attending upper secondary education compared to 88.6 percent of the richest quintile. In addition, while Panama has reduced child and maternal mortality rates, it has experienced declines in assisted deliveries and immunization coverage rates, as well as increased TB incidence. Moreover, individuals from rural poor and indigenous households have lower health outcomes compared to other parts of the country.

**Although per capita spending on the social sectors in Panama is among the lowest in LAC, increasing overall spending in the social sectors remains limited due to the widening fiscal deficit; there is also room to improve spending efficiency.** Panama's per capita social public spending is the second highest in Central America although, at \$386, it is less than a third of Costa Rica's per capita social public spending and just slightly higher than that of El Salvador's (\$381) which has a much lower per capita income. However, differences exist among sectors, with per capita spending on education remaining lower than most other countries in the region while per capita health spending is relatively higher than other countries. While there may be a need to increase expenditures, in the case of education, for example, which is low relative to international standards or to improve access to health services of indigenous rural populations, the extent to which the Panama can do so is limited by its fiscal situation, with government

expenditures having exceeded revenues since 2009. Also, budget execution rates have decreased from 94 percent in 2007 to 88 percent in 2012 suggesting some institutional issues that would need to be addressed. Also the efficiency and effectiveness analyses results indicate that overall social public spending in Panama is considered less effective but efficient than most of the other LAC countries. This means that, on average, other LAC countries get a higher return (improvement in social indicators) per dollar of social public spending. Thus, in view of its fiscal and institutional constraints, Panama would need to focus on enhancing the effectiveness and efficiency of its social spending.

**This note recommends that Panama prioritize three main aspects:** a) improving the effectiveness of social public spending by further enhancing the pro-poor and pro-indigenous features of targeting mechanisms; b) reducing inefficiencies in the various sectors, for example, by improving the coordination between the Ministries of Education, Health, Social Development, and CSS to minimize duplication of efforts and resources; and c) strengthening planning, budgeting, and information tools and systems, legislation, and institutions to support implementation and track progress toward Government goals. Sector-specific challenges aligned with these broad objectives are addressed below.

### **I.1.1 Education**

**Although public spending on education has increased in real terms, its share of GDP remained constant and is still low based on international standards.** Between 2007 and 2013 public spending on education increased in real terms at an annual average rate of 3 percent. Nevertheless, the percentage of GDP invested in education decreased in the last few years from 3.9 to 3.4 percent, indicating that it did not take advantage of recent growth to boost investment in education. The percentage of GDP dedicated to education is still low in comparison with other countries. In 2013, Panama public spending on education accounted for 3.4 percent of GDP. This level of spending is lower than both the LAC average (4.9 percent in 2010) and the OECD average (5.6 percent in 2010).

**Panama has reached universal primary education coverage, but secondary education coverage remains low relative to comparable countries in the region.** Panama's gross enrollment rate in pre-school is 70.7 percent. The gross enrollment rate for primary education was 132.2 percent in 2013. In the same year, gross enrollment in lower secondary education reached 100.9 percent. However, enrollment drops drastically to 68.5 percent in upper secondary. Access to primary education is comparable to the best performers internationally and secondary education is in line with the country's GDP. Nevertheless, enrollment in secondary education is still low when compared with countries with similar characteristics like Costa Rica and Colombia.

**There are large differences across quintiles and regions in enrollment and graduation rates for lower and upper secondary levels.** Access to secondary education, especially in upper education is exceedingly unequal across quintiles. In 2013, only 46.2 percent of the lowest quintiles had access to upper secondary education as opposed to 88.6 percent among the richest quintile. In the same way, graduation rate decreases significantly across quintiles. In 2010, lower secondary's graduation rate was 57 percent. Graduation rate in upper secondary was only 39 percent with significant variance across provinces.

**Panamanian students perform poorly when placed in an international context and there are significant achievement gaps between public and private schools.** In 2009, Panama participated in the Program for International Student Assessment (PISA) of the OECD. According to PISA's results, Panamanian students performed at very low levels, especially when compared with other countries in the Latin American region or countries with similar GDP per capita. There are also significant gaps in student achievement across different groups. Additionally, the education young people receive must be made more relevant so that they can adapt to the new demands of society and the labor market.

**Moving forward, there are five areas of strategic importance for the education sector.** First, promoting greater access and completion rates especially at the upper secondary level via the implementation of other interventions to prevent especially the most vulnerable students from dropping out. These include: (a) provision of good quality infrastructure in rural and indigenous population regions, (b) creation of deferred scholarships that delay rewards until the completion of pre-set benchmarks, (c) support to teen pregnancy reduction programs, (d) stimulation of socio-emotional learning, and tutoring availability. Second, increasing the quality of education, by prioritizing teacher's quality. Third, improving the balance between autonomy and accountability in order to allocate resources efficiently. In particular, the consultation with municipalities, principals and teachers in all major decisions regarding spending, hiring, firing and changes in curriculum could be prioritized. Forth, strengthening and institutionalizing a monitoring and evaluation system in the sector including a systematic measurement and publication of educational results indicators and standardized tests; and finally strengthening the options at the post-secondary level, by developing further technical non-university degrees and facilitating the permeability of the two learning "tracks".

### **I.1.2 Health**

**Panama is an upper middle income country with increasing health expenditures per capita and health care spending above the Latin America and Caribbean (LAC) regional average.** Panama's per capita health expenditures have risen continuously from 2001 to 2013, and are above the LAC average. In addition, Panama's current total health expenditures as a percentage

of Gross Domestic Product (GDP), are higher than the regional average for Latin America and the Caribbean.

**Two public institutions, the Ministry of Health (MOH) and the Caja de Seguro Social (CSS), provide the majority of health services in the country.** The MOH holds the stewardship role and is responsible for establishing and approving national health policies. It also provides a package of health services, although limited, to any individual accessing care at a MOH facility. The CSS also provides health services and covers just above 80 percent of the country's total population which are made up by those who directly contribute to the CSS system and their direct beneficiaries.

**Panama's relatively high spending on health has yielded positive results in certain health outcomes, however, challenges remain with regard to other outcomes.** Panama has made progress towards the Millennium Development Goals (MDGs) having met the MDG 4 target for child mortality, but further work is needed to reach MDG 5 related to maternal mortality. The country has also made progress in reducing malnutrition among children, yet has experienced declines in assisted deliveries and immunization coverage, and stagnant HIV incidence rates and increased incidence of tuberculosis. In addition, noncommunicable diseases represent the largest burden of disease in the country.

**Inequality, in terms of access and quality of health care for the rural, indigenous population is also a main concern.** The disparity in health outcomes is due largely to inequitable health access for the poor, with the majority of medical care centralized in the wealthier urban areas. The inequitable access to health services is further accentuated by the concentration of the health workforce in the urban areas as opposed to the rural, indigenous areas.

**On the institutional side, the Government has successfully implemented several reforms in the health sector although a number of important ones remain to be implemented.** As of 2013, the country had completed 75.5 percent of the International Health Regulation Requirements, aside from moving forward with other reforms such as implementing the Extension of Coverage Strategy to remote rural areas, reforming the Health Code, and certification and recertification system of medical personnel. However, there are still changes that could be made to improve efficiency and accountability in the system. In particular, significant efficiency gains are expected by enhancing the coordination between the MOH and the CSS to reduce duplication of efforts and resources. By continuing to address the fragmentation across the MOH and the CSS, coordination can be further improved and health service delivery better integrated for improved health outcomes. In addition, mechanisms through which civil society could participate to hold the MOH accountable remain limited and could be increased.

**In moving forward, recommended short-term priorities in the health sector focus on two main areas:** (1) Toward an Equitable Health System: (a) continue to strengthen Primary Health Care (PHC) in rural areas via improved coordination and continuous mobile health team service delivery; (b) implement human resources management strategies to help address the rural/urban gap in health worker presence and distribution in the rural, poor areas of the country; and (c) identify actions to properly identify the elderly population at risk for NCDs and cross-check beneficiary data to determine whether they are enrolled in existing social protection programs appropriate to their context and (2) Toward an Integrated Health System: (a) support the MOH in its current review of the different results-based financing (RBF) approaches used under different schemes with the aim to develop one coordinated RBF mechanism with shared implementation and coordination channels for the rural, poor areas; (b) deepen the health expenditures review conducted as part of this study to identify factors behind the decrease in budget execution rates, especially in the case of CSS) and also ways to reduce CSS and MOH overlap; and (c) develop an action plan to integrate various health information systems into one nationally integrated health information system.

**Recommended medium-term priorities are centered on three main areas:** (1) focus on reducing maternal mortality and in improving maternal health, especially prenatal care and assisted deliveries, among indigenous and other rural poor women and, over time, review the PHC model provided through monthly mobile health team visits to provide recommendations for transitioning to permanent access to quality health services model; (2) strengthen screening and diagnosis for chronic diseases especially for the elderly, beginning with a focus on hypertension and diabetes to identify those most in need of health services; (3) based on a detailed review of public health expenditures, identify an initial set of cost cutting measures that could ensure sustainability with better resource targeting and use of incentive based programs; and (4) assess different scenarios for integrating health sector functions to strengthen MOH stewardship role and CSS role in service provision.

### **I.1.3 Social Protection**

**In the past decades, Panama has been developing a set of contributory and non-contributory programs and interventions aiming to reduce vulnerability, poverty, exclusion and inequality.** The paradigm shift in Panama's social policy and the fight against poverty meant redirecting and targeting action on the poorest population groups with a view to improving mechanisms of distribution and redistribution of incomes, services, and opportunities. The articulation and alignment of social promotion and protection programs, projects and actions has induced an institutional reorganization that is gradually forming new mechanisms for implementing public policies, but which have not yet become fully structured, developed and crystallized.

**Public spending in SPL is still moderate per international standards, but it has increased over the last few years both in real per capita terms and as a share of GDP.** Social Security accounts for the bulk of SPL spending, though this share has remained stagnant in the past few years. Social assistance spending remained stable between 2007 and 2013, but as a share of GDP it has declined since 2011. The exception is subsidies, which are on the rise, increasing on average 18 percent per annum from 0.2 percent of GDP in 2007 to 0.6 percent in 2013.

**Improvements in targeting of large interventions, such as the social pension and subsidies, are key to increase coverage among the poor, and expand other priority interventions, such as ALMPs.** There are large imbalances in terms of resource allocation and priorities. While the good targeted RO has relatively small coverage, the large social pension (120 a los 65) is poorly targeted. Subsidies should also be poverty targeted instead of consumption-based, to avoid large exclusion and inclusion errors. On the other hand, ALMPs are virtually non-existent and priorities to improve skills and reduce skill shortage calls for more meaningful investment in training and productive inclusion programs.

**The set of social protection policies and programs must be articulated in a system to maximize complementarities, efficiency, and impact.** For example, social transfers aimed at the same population, like RO, Beca Universal, and school feeding, should be better aligned to reduce administrative costs and maximize impact, understanding that each program has different objectives (RO tackles opportunity costs for enrolment and consumption support; Beca Universal encourages performance; school feeding promotes better nutrition to improve concentration). The contributory (CSS) and non-contributory (120/65) pensions systems should be aligned to offer incentives that do not entice non-contribution and informality in labor markets. Articulated social protection systems can facilitate efficiency gains by exploiting the synergy between different policies, institutions and programs.

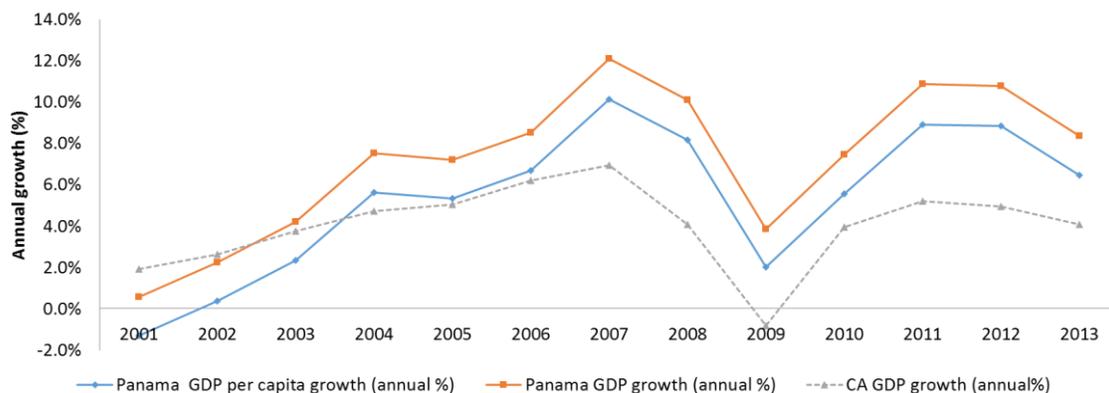
**This can be achieved through the creation and implementation of a single beneficiary registry that harmonizes and facilitates communication across programs for policy design and monitoring purposes.** As other LAC countries, Panama would benefit from the institutionalization of harmonized single beneficiary registries and social information systems to map socioeconomic conditions of the poor and vulnerable population and form the basis for analysis of program eligibility, system duplications, and design of new programs addressing other social risks. The Government is already undertaking these steps that need to be finalized and accompanied by appropriate legislation to mandate its use. This would support the consistency of information collection across programs and the linkages of information across same-household beneficiaries from different programs.

**MIDES should also strengthen its monitoring and evaluation capacity.** MIDES would benefit from strengthening monitoring and evaluation (M&E) activities for the main social programs. An improved M&E system is critical to gather relevant information about the situation of social programs, process that information, and provide adequate access to it in order to secure a timely and proper monitoring, and to support the design and implementation of impact evaluations (following the RO CCT example).

## II Context

**Panama has registered high economic growth, surpassing the CA average growth by far since 2003.** Although Panama's annual GDP growth was initially below the CA average GDP growth in 2001 and 2002, it has consistently outpaced the CA annual average from 2004 to 2013. From 2001 to 2013, Panama's GDP growth averaged 7.8 percent from 2001 to 2013, peaking at 12 percent in 2007 (Figure 1). Panama even grew during the global economic crisis (at 4 percent) and maintained good growth path afterwards, in contrast to the rest of the region. It is also one of the fastest growing economies in the world.

**Figure 1: GDP growth in Panama and Central America, 2001-2013**



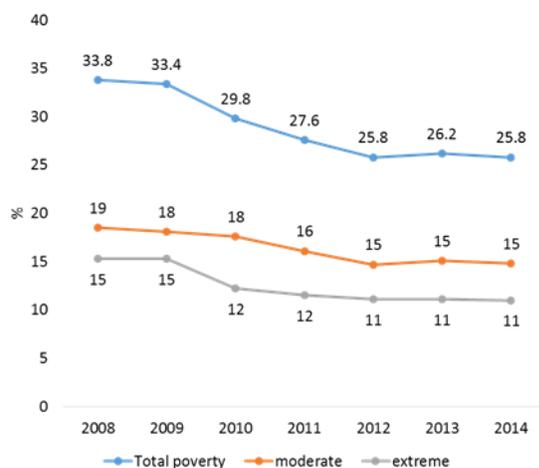
Source: IMF, World Economic Outlook Database, October 2014

**Growth contributed to significant poverty reduction, but not as much to decreases in extreme poverty and inequality, and poverty pockets remain in indigenous areas.** Poverty reduction in the country was greater than the LAC average in the last decade. Poverty notably declined by 8 percentage points from 33.8 percent in 2008 to 25.8 percent in 2014 (Figure 2). Thus, out of a population of about 3.6 million people, the number of Panamanians living below the national extreme poverty line declined by slightly more than 150,000 and those living below the overall poverty line declined by close to half a million.<sup>1</sup> However, there are other dimensions where growth has not been so inclusive: for instance, extreme poverty has become increasingly

<sup>1</sup> World Bank (2015), "Panama: Systematic Country Diagnosis"

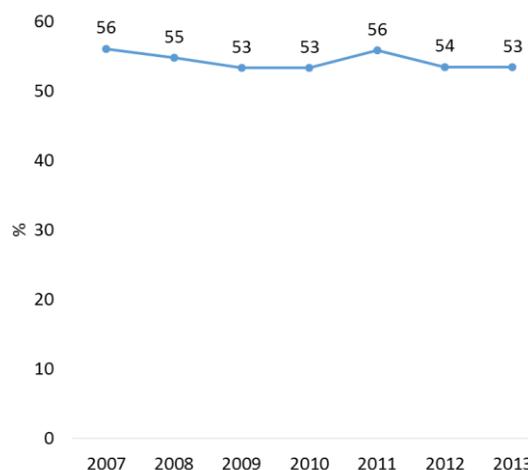
highly concentrated in remote geographic areas where indigenous peoples live, without much change in the last decade. Inequality based on the Gini index declined from 56 in 2007 to 53 in 2013 (Figure 3), but Panama's level of inequality remains higher than three other CA countries: El Salvador (0.45 in 2013), Nicaragua (0.46 in 2009) and Costa Rica (0.52 in 2013).

**Figure 2: Poverty headcount**



Source: Ministerio de Economía y Finanzas

**Figure 3: Inequality – GINI Index**



Source: World Bank SSEIR team's analysis of household surveys, authors' calculations using standardized ADePT software (Social Protection Module)

**Aside from reductions in poverty and inequality, Panama has also made progress in a number of human development indicators since 2000.** Table 1 compares trends in key education, health and social protection and poverty indicators with three comparator groups: i) the top 7 economies in the LAC region; ii) the remaining countries in the CA region; and iii) a set of 6 countries around the world that can be considered “comparator countries” based on certain criteria.<sup>2</sup> In order to show progress, the 14-year period (2000-2014) was split into two periods: 2000-2006 and 2007-2014. Panama shows a consistent trend of improvement in social indicators in almost all indicators although a few indicators slightly decreased (gross primary enrollment rates from 106 to 103, measles immunization rate from 96.1 percent to 95.9 percent and hospital beds/1,000 population ratio from 2.4 to 2.3). Compared to the three other comparator groups, Panama made the most progress in terms of reducing unemployment (53 percent); undernourishment (47 percent) and increasing labor employment (10 percent). On average, LAC7 countries and closest comparator (CC) countries have better indicators than Panama while Panama generally fared better in terms of a number of indicators compared to the average for the rest of CA.

<sup>2</sup> A group of appropriate international comparators (“comparator countries”) for Panama was defined based on five criteria: GDP per capita, GDP (size of the economy), population (total), population density, and percentage of population in rural areas. The comparators include: Bulgaria, Costa Rica, Lebanon, Lithuania, Malaysia, and Uruguay.

**Table 1: Selected Human Development Indicators, Panama, LAC, Central America, and Closest Income/Population Comparators, 2000-2014**

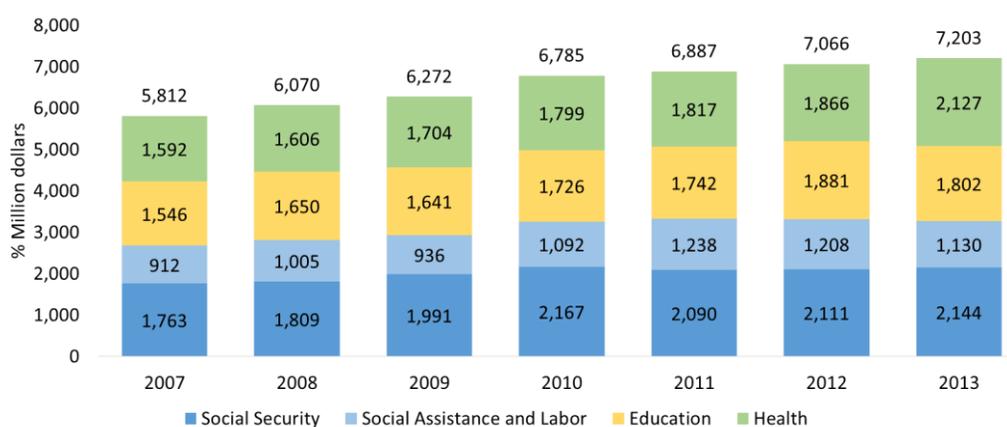
Indicator Name	Average								Change			
	Panama		LAC 7*		Rest of CA		Closest Comparators**		Panama	LAC 7*	Rest of CA	Closest Comparators**
	2000-2006	2007-2014	2000-2006	2007-2014	2000-2006	2007-2014	2000-2006	2007-2014				
<i>Education</i>												
School enrollment, preprimary (%gross)	52.4	64.1	65.8	85.7	47.4	58.4	67.7	79.6	22%	3%	30%	-45%
School enrollment, primary (%gross)	106.0	103.1	111.7	109.7	110.3	113.3	106.1	103.9	-3%	8%	-2%	1%
School enrollment, secondary (%gross)	66.8	71.4	78.8	87.9	59.8	72.8	90.3	86.2	7%	10%	12%	-32%
School enrollment, tertiary (%gross)	42.0	43.0	37.2	48.4	19.0	25.8	44.3	56.4	2%	-13%	30%	-61%
Primary completion rate, total (%)	91.4	95.2	98.4	102.1	78.4	90.7	98.0	96.5	4%	3%	4%	-23%
Pupil-teacher ratio, primary	24.4	23.6	24.5	23.2	32.0	27.6	17.2	14.4	-3%	4%	-5%	38%
Secondary completion, age 25+	41.7	47.5	36.0	41.8	20.5	23.8	46.8	57.5	14%	-24%	16%	-51%
<i>Health</i>												
Pregnant women with prenatal care (%)		95.8	93.7	96.0	87.6	92.8	90.1	94.8		-2%	2%	-9%
Undernourishment (% of pop)	21.9	11.6	11.9	9.8	17.5	16.3	5.0	5.1	-47%	2%	-17%	78%
Immunization, measles (% 12-23m)	96.1	95.9	95.2	94.5	93.0	92.9	88.4	91.8	0%	-1%	-1%	-2%
Improved sanitation facilities (% of pop)	68.7	72.1	79.4	83.9	69.3	74.0	95.3	96.2	5%	10%	6%	-17%
Improved water source (% of pop)	91.5	93.7	90.2	92.6	87.0	90.2	97.6	98.6	2%	-4%	3%	-6%
Hospital beds (per 1,000 people)	2.4	2.3	1.8	2.0	1.0	0.9	5.4	4.4	-5%	-19%	10%	-51%
Births attended by skilled health staff (% of total)	91.5	90.0	93.2	94.9	74.3	87.5	99.0	99.2	-2%	4%	2%	-22%
<i>Social Protection and Labor</i>												
Employment to population, 15+ (%)	56.2	61.8	58.6	61.3	58.5	59.8	50.7	52.2	10%	-5%	5%	-4%
Labor force participation, female (%)	46.4	48.7	49.3	52.8	42.3	45.7	43.0	44.5	5%	1%	7%	-20%
Unemployment, total (%)	12.0	5.7	8.7	7.0	5.2	5.5	9.4	8.0	-53%	53%	-20%	-25%
GINI index	55.8	52.2	53.6	50.0	51.8	49.1	38.8	39.8	-6%	3%	-7%	3%
Poverty headcount ratio, rural (%)	64.4	57.2	60.1	52.6	65.2	51.4	16.3	7.5	-11%	5%	-12%	24%
Poverty headcount ratio, urban (%)	23.6	18.5	37.4	23.0	44.2	38.3	27.2	13.8	-21%	101%	-38%	92%

\*Argentina, Brazil, Chile, Colombia, Ecuador, Mexico, and Peru. \*\* In terms of GDP, GDP per capita, population, population density and percentage of rural population: Bulgaria, Costa Rica, Lebanon, Lithuania, Malaysia, and Uruguay. Source: World Bank Development Indicators (2014).

### III Recent Trends in Social Spending in Panama

**Social spending increased in real terms and is a likely contributor to decreasing poverty and inequality.** From 2007 to 2013, social spending increased in real purchasing power parity terms by almost 24 percent (Figure 4). During this period, social security consistently had the largest share of overall social spending, followed by health, education, and then social assistance and labor. However, while both social security and social assistance and labor's share of total social spending remained constant throughout this period (around 30 percent and 16 percent respectively), health's share increased by 8 percent (30 percent in 2013 versus 27 percent in 2007) and education's share decreased by 6 percent (25 percent in 2013 versus 27 percent in 2007).

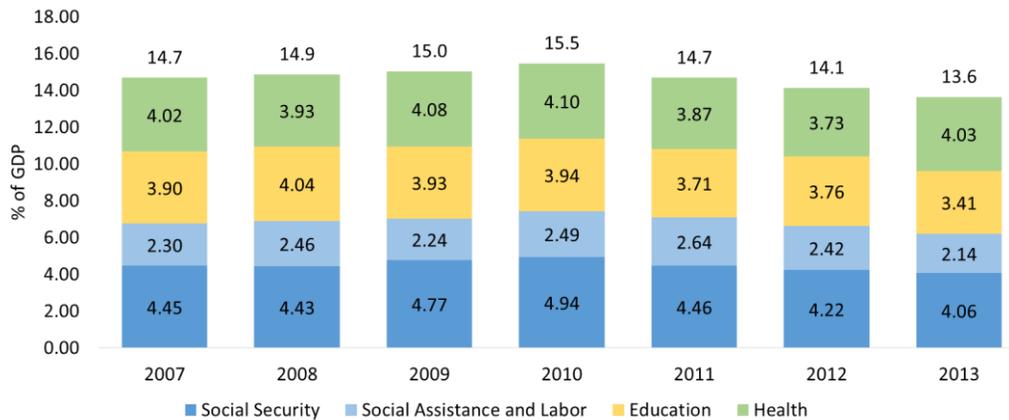
**Figure 4: Social Spending (PPP, US\$ million 2007)**



Source: World Bank SSEIR / ICEFI social spending database

**In the last few years, Panama's social spending as a percentage of GDP decreased.** From 2007 to 2010, social spending as a share of GDP progressively increased, peaking at 15.5 percent in 2010 (Figure 5). It has since progressively declined, reaching 13.6 percent in 2013. In terms of sectors, health's spending as a share of GDP in 2013 remained the same, while the shares of education, social security and social assistance decreased by 12.6 percent, 8.8 percent and 7.2 percent, respectively.

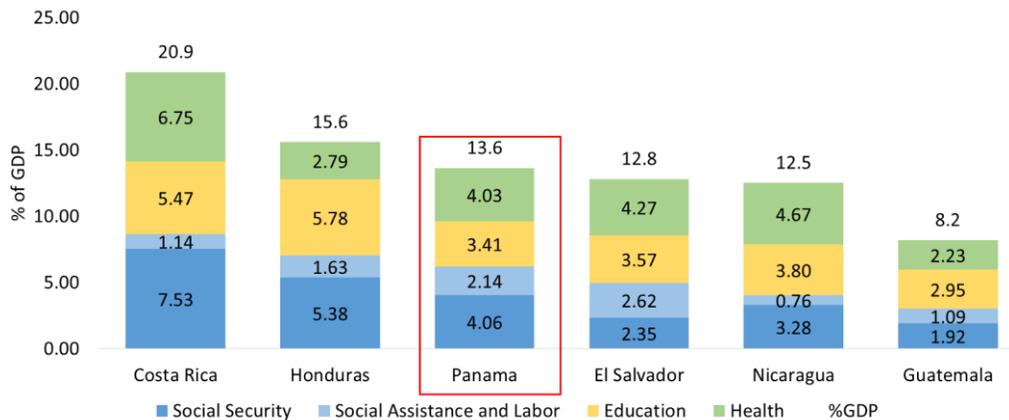
**Figure 5: Social Spending as a % of GDP by sector (%) 2007-2013**



Source: World Bank SSEIR / ICEFI social spending database

**Despite the recent reductions in social spending’s share of GDP, Panama is more or less in line with the CA average.** Panama’s overall social spending share of GDP ranks third, next to Costa Rica and then Honduras (Figure 6). In terms of sectors, Panama has the second highest social assistance and labor share of GDP in CA, second only to El Salvador. It ranks third in terms of both social security spending’s and health’s shares of GDP but ranks fifth (behind Honduras, Honduras, Costa Rica, Nicaragua, and El Salvador) in terms of education spending as a share of GDP.

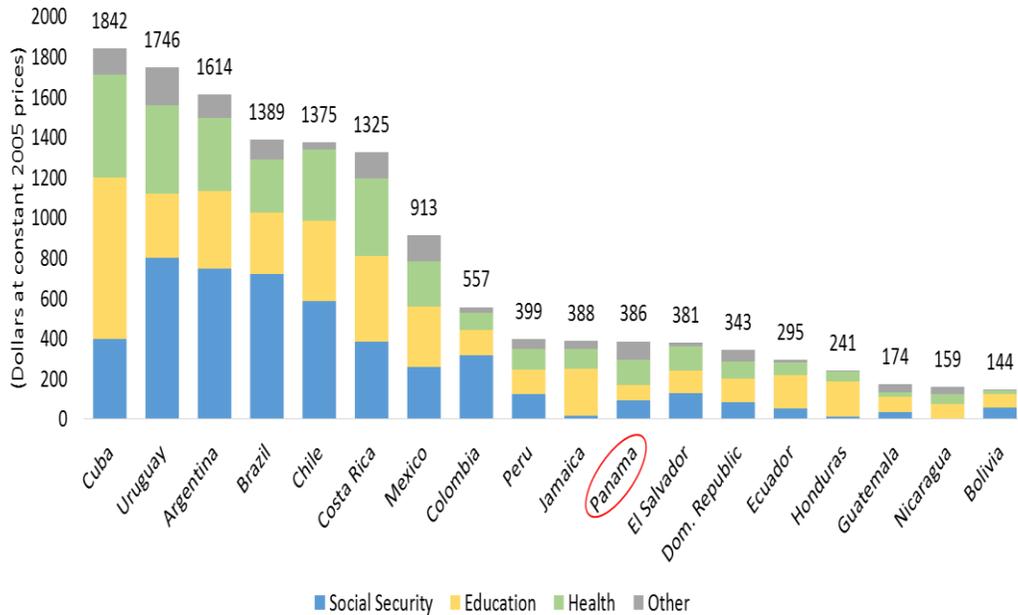
**Figure 6: Social Spending as a % of GDP by country, 2013 (%)**



Source: World Bank SSEIR / ICEFI social spending database

**Panama’s per capita social public spending is among the lowest in the LAC region.** Although Panama’s per capita social public spending is the second highest in Central America, it is less than a third of Costa Rica’s per capita social public spending. At \$386 in constant 2005 prices, Panama just spends slightly more than El Salvador (US\$381), a country which has a much lower per capita income (Figure 7).

**Figure 7: Per capita social public expenditure by sector (2012 or latest year available)**

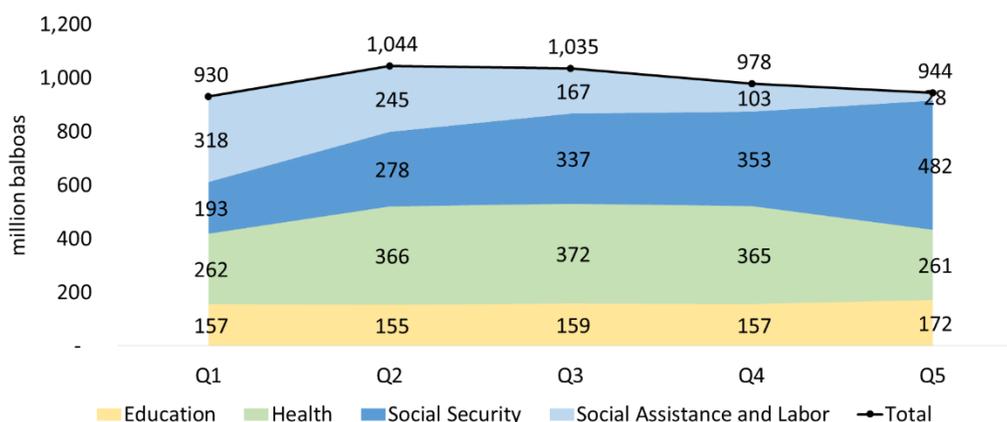


Source: ECLAC – CEPALSTAT

**Social public spending is not overall progressive mainly due to health and old age benefits.**

Figure 8 shows the distribution of social spending by sectors and quintiles. Public spending on education is almost equally distributed among different quintiles. Public spending on health is higher and concentrated on the middle, second lowest, and higher income quintiles. Moreover, social security spending is positively related to income, i.e. benefiting more the rich than the poor. Other social assistance and labor interventions (cash transfers, sickness and disability, etc.) are progressive since most of the spending is allocated to the first two income quintiles.

**Figure 8: Distribution of social spending by income quintiles, 2013**

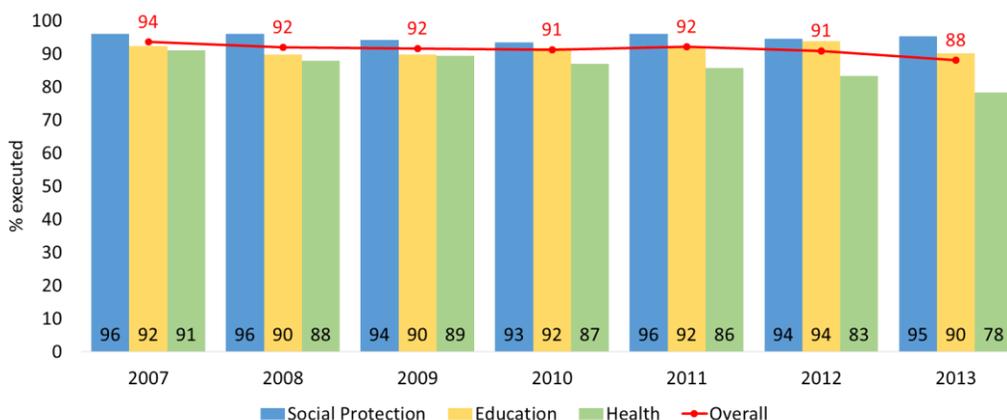


Source: World Bank SSEIR / ICEFI social spending database

Note: Distribution of spending was calculated based on the distribution of beneficiaries per sector. For education, the distribution of total students enroll in each level of education by income quintile was taken into account (due to data limitations, it was not possible to disaggregate between public and private students). For health, the distribution of the utilization of public health providers by income quintiles was considered (based on ENV 2008). For old age, we considered the distribution of pension’s beneficiaries by income quintiles and for social assistance the distribution of social assistance beneficiaries.

**Budget execution problems, particularly in health may partly account for Panama’s relatively lower per capita overall social sector spending.** Over-all budget execution for the social sectors declined from 94 percent in 2007 to 88 percent in 2013 (Figure 9). During this period, education and social protection’s budget execution rates only marginally decreased (i.e., from 96 percent to 95 percent and from 92 percent to 90 percent, respectively). However, the health sector’s spending relative to its budget declined from 91 percent to 78 percent, mainly due to decreases in the Caja de Seguridad Social’s recurrent budget execution rates.

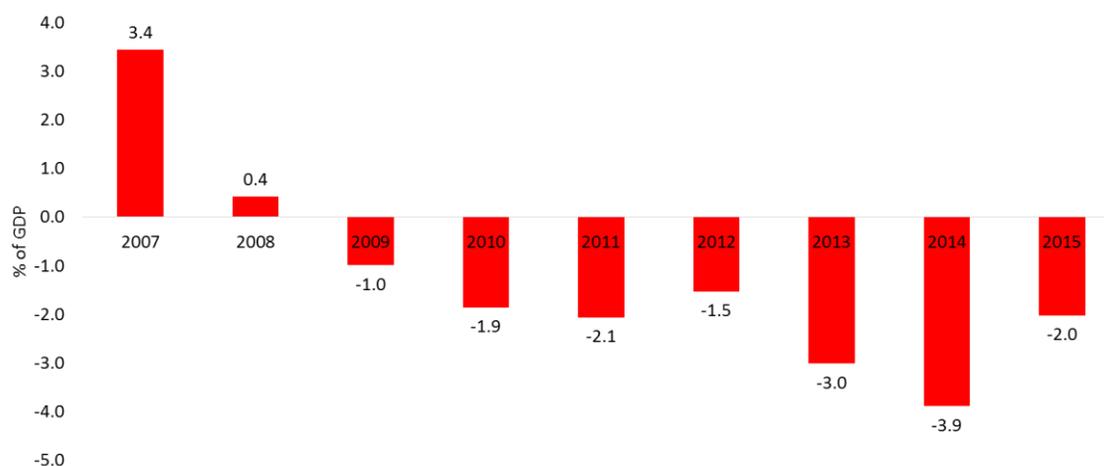
**Figure 9 Budget execution 2007-2013**



Source: World Bank SSEIR / ICEFI social spending database

**Deficits in recent years underscore the need to focus on spending.** Although Panama’s per capita social spending is among the lowest in the LAC region, increases in social spending may not be fiscally sustainable given the expenditure-revenue trends since 2009. In particular, while revenues exceeded expenditures in 2007 and 2008, expenditures have grown much faster than revenues since 2009, resulting in the largest fiscal deficit (3.9 percent of GDP) in 2014 (Figure 10). While it may not be possible in the short to medium term to increase expenditures, the analysis below indicates that there is room to improve the efficiency and quality of spending.

**Figure 10: General government overall balance, 2007-2015**



Note: IMF Estimations' Start After 2013

Source: IMF, World Economic Outlook Database, October 2014

**An analysis of social sector spending efficiency and effectiveness of the social sector shows that Panama’s spending is less effective but efficient compared to other LAC countries.** Figure 11 shows a comparison between the levels of Public Sector Performance (PSP) and Public Sector Efficiency (PSE) in Panama and in other LAC countries. The PSP is a composite indicator based on socioeconomic variables that are assumed to be the output of public policies. This indicator summarizes the effectiveness of public spending in improving social outcomes. The PSE indicator then relates PSP scores to the total public spending in these sectors. It represents the “public value” per public dollar spent (Box 1 provides additional information on the PSP and PSE analyses).

**Box 1: Public Sector Performance and Public Sector Efficiency Indicators**

We analyzed the relationship between social outcomes and spending using the Public Sector Performance (PSP) and Public Sector Efficiency (PSE) approaches developed by Afonso, Schuknecht, and Tanzi (2005, 2010).<sup>3</sup>

PSP is measured by constructing composite indicators based on observable social variables that are assumed to be the output of pursued social public policies. Specifically, the PSP for country  $i = 1, \dots, m$  with  $j = 1, 2, 3$  social sectors (education, health and social protection and labor) is determined by:

$$PSP_i = \sum_{j=1}^n PSP_{ij}; i = 1, \dots, n; \text{ with } PSP_{ij} = f(I_k), k = 1, \dots, r. \quad (1)$$

where  $f(I_k)$  is a function of  $k$  observable social indicators (for education, we take gross secondary enrollment and literacy rate; for health, we take maternal mortality and immunization rates; and for social protection and labor, inequality (measured by the Gini coefficient) and extreme poverty headcount (percentage of population earning less than \$1.25 a day)). To obtain PSP indicators we assign equal weights to each sub-indicator, computed as the average of the corresponding outcome indicators, each one of them normalized by its sample mean. The PSP indicator for each country is then obtained by averaging the values of all sub-indicators. Resulting PSP scores are then related to the average value of one of the normalized output indicators. Hence, countries with PSP scores in excess of one are seen as good performers, as opposed to countries with PSP values below the mean

PSE relates PSP scores to their cost in terms of public spending. PSE weights public sector performance in each social sector by the amount of relevant public expenditure that is used to achieve such performance. To compute PSE scores, public spending in each sector is normalized across countries, taking the average value of one for each of the expenditure categories ( $EXP_{ij}$ ). This is, for each country  $i = 1, \dots, m$  with  $j = 1, 2, 3$  social sectors, the PSE is defined by:

<sup>3</sup> The methodology follows Afonso, Schuknecht, and Tanzi (2005, 2010) for OECD countries, replicated later on in Afonso, Romero, and Monsalve (2013) for LAC.

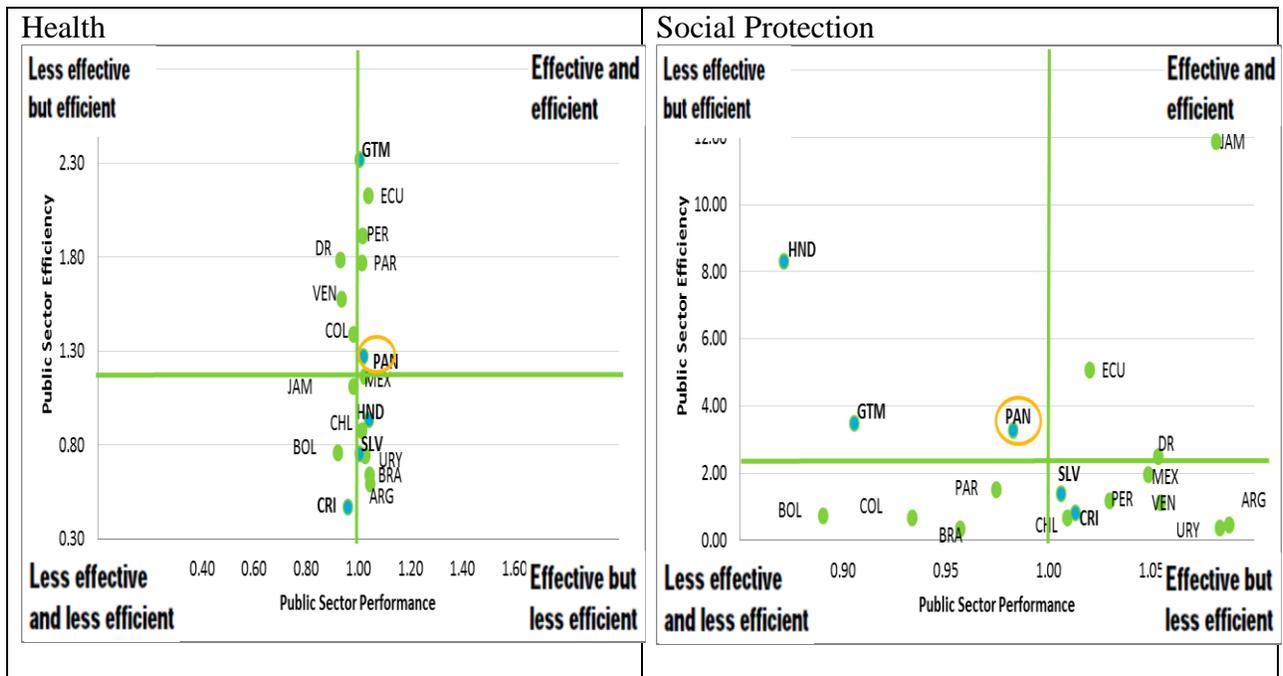
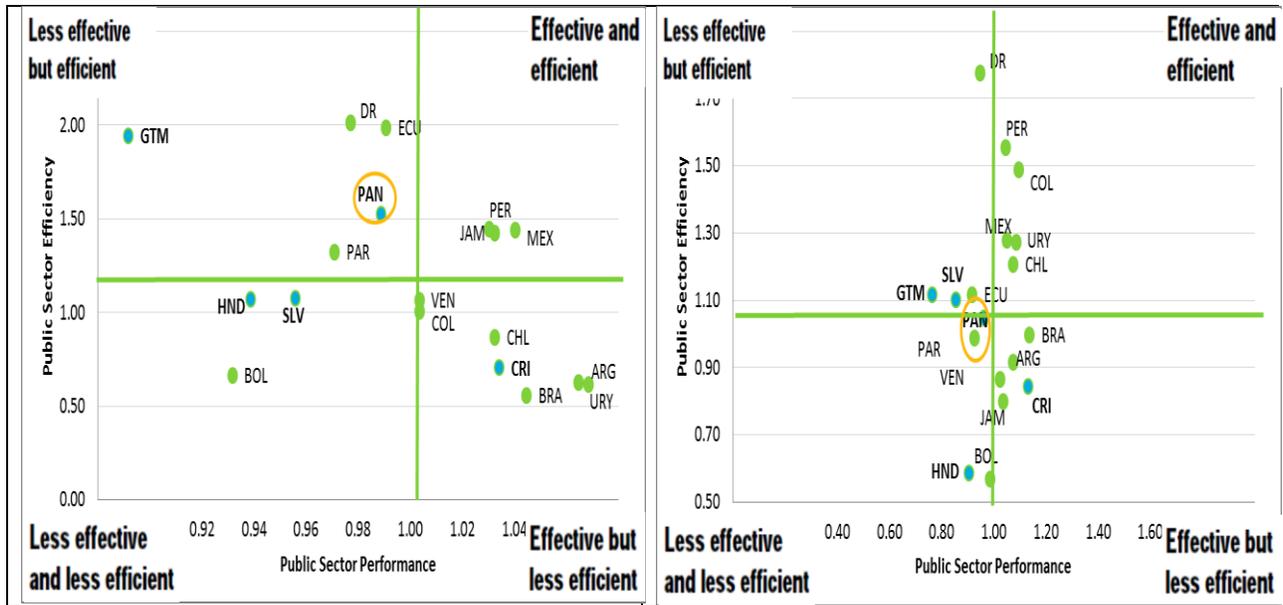
$$PSE_i = \sum_{j=1}^n \frac{PSP_{ij}}{EXP_{ij}}; \quad (2)$$

Figure 11 illustrates the efficiency and performance assessment by placing the countries into four quadrants taking into account those two dimensions. Countries classified as good performers are located in the two right-hand side quadrants which are then split into more efficient (upper quadrant) and less efficient (lower quadrant) performers. On the other hand, the two left-hand side quadrants depict cases of lower performance; the lower left-hand side quadrant, in particular, includes a sub-sample of less effective and less efficient countries. The overall social public spending in Panama is considered *less* effective but efficient than most of the other LAC countries. This means that Panama is among the countries that obtain lower results in terms of social indicators without taking into consideration the costs incurred to achieve them but this also means that the country gets a higher return (improvement in social indicators) per dollar of social public spending. However, there are differences across sectors. Whereas the education sector is classified as a less effective and less efficient sector, the social protection sector tends to be as *a less effective, but efficient sector*, while health is classified as *both marginally more efficient and effective*. In other words, when compared to other LAC countries, Panama's education sector tends to achieve lower outcomes (gross secondary enrollment and literacy rate) at a higher cost; the SPL sector appears to achieve lower outcomes (inequality and extreme poverty) but at a lower cost and its health sector achieves better outcomes (maternal mortality and child immunization rates) at lower cost.

**Figure 11: Public Sector Performance and Efficiency in Panama and LAC, 2010**

Overall	Education
---------	-----------

Panama Social Sector Expenditure and Institutional Review



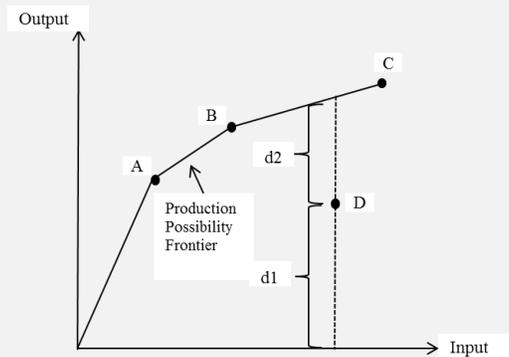
Source: World Bank SSEIR team's, authors' calculations using CEPAL and WDI databases

A LAC “production possibility frontier” analysis shows that Panama could increase its social performance by as much as 3 percent with the same level of public social spending. Figure 12 shows the production possibility frontier for total social public spending for LAC, applying the data envelope analysis (DEA) using the PSP scores as an output and social-public spending-to-GDP ratios as an input. Based on the DEA analysis (explained in Box 2), Panama

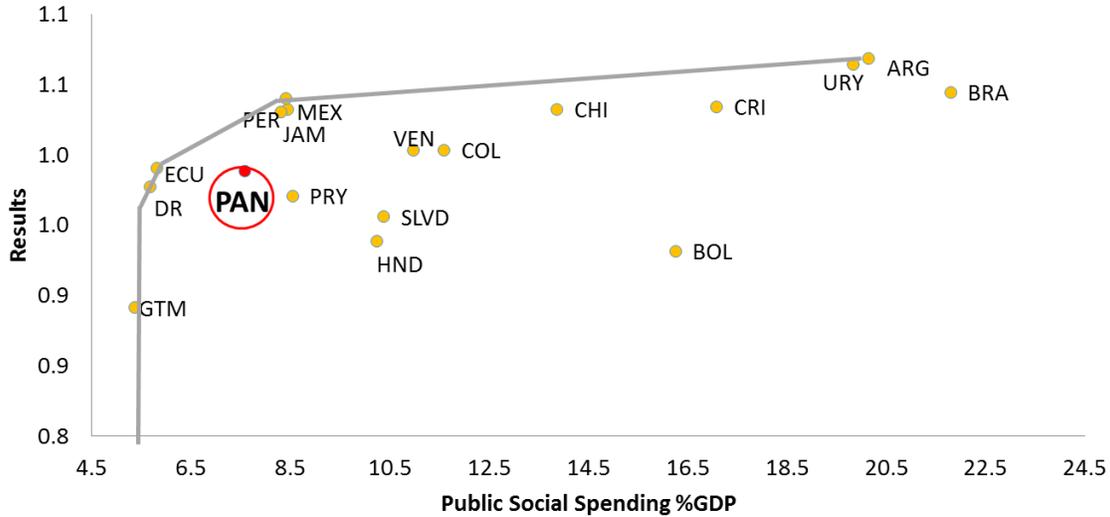
could move toward the LAC “production possibility frontier” and increase its social performance by 3 percent, with the current level of public social spending.

### Box 2: DEA Methodology

The DEA methodology, developed by Farrell’s (1957), assumes the existence of a convex production frontier to construct an envelope around the set of observations. DEA compares each unit with all other units, and identifies those units that are operating inefficiently compared with other units’ actual operating results. DEA presents two approaches: 1) input-oriented shows by how much input quantity can be proportionally reduced without changing the output quantities; 2) output-oriented assess how much output quantities can be proportionally increased without changing the input quantities used. Efficiency for each unit can be measured by computing the distance to the theoretical efficiency frontier (or compared to the best practice units). DEA provides an efficiency rating that is generally denominated between zero and 1, which will interchangeably be referred to as an efficiency percentage between the range of zero and 100%. The best practice units are relatively efficient and are identified by a DEA efficiency rating of  $\theta = 1$ . The inefficient units are identified by an efficiency rating of less than 1 ( $\theta < 1$ ). The Figure illustrates the single input single output DEA production possibility frontier. Countries A, B and C are efficient with output scores equal to 1. On the other hand, country D is not efficient, since its score  $[d2/(d1+d2)]$  is below unity.



**Figure 12: Production Possibility Frontier (Data Envelope Analysis) for Total Social Public Spending, Panama and LAC, 2010.**



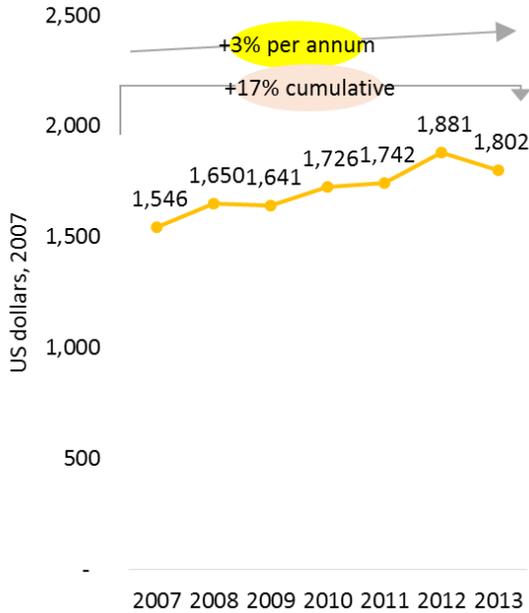
Source: World Bank SSEIR team's, authors' calculations using CEPAL and WDI databases

## IV Performance and Challenges in Education

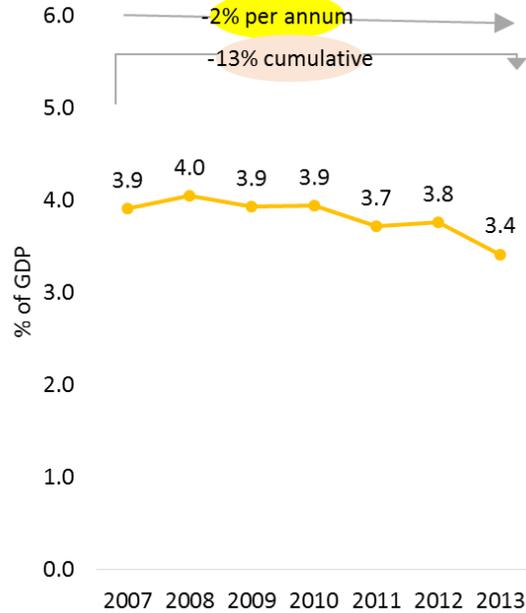
### IV.1 Recent Evolution of Education Public Spending

**Public spending on education has increased in real terms but decreased slightly as percentage of GDP and is still low for international standards.** Between 2007 and 2013 public spending on education increased in real terms at an annual average rate of 3 percent (Figure 13). Nevertheless, the percentage of GDP invested on education decreased an average 2 percent per annum (3.4 percent of GDP in 2013 vs 3.9 percent of GDP in 2007) (Figure 14). Therefore, Panama did not take advantage of recent growth to fully boost investment in education. The percentage of GDP dedicated to education is still low in comparison with other countries. In 2013, Panama public spending on education accounted for 3.4 percent of GDP. This level of spending is lower than both the LAC average (4.9 percent in 2010) and the OECD average (5.6 percent in 2010). Public education spending as a share of GDP is low too when compared with countries with similar GDP per capita Bulgaria (4.1), Costa Rica (5.5), Lithuania (5.37), Malaysia (5.13), and Uruguay (4.5) (Figure 15).

**Figure 13: Real public spending on education (US\$ 2007 million)**



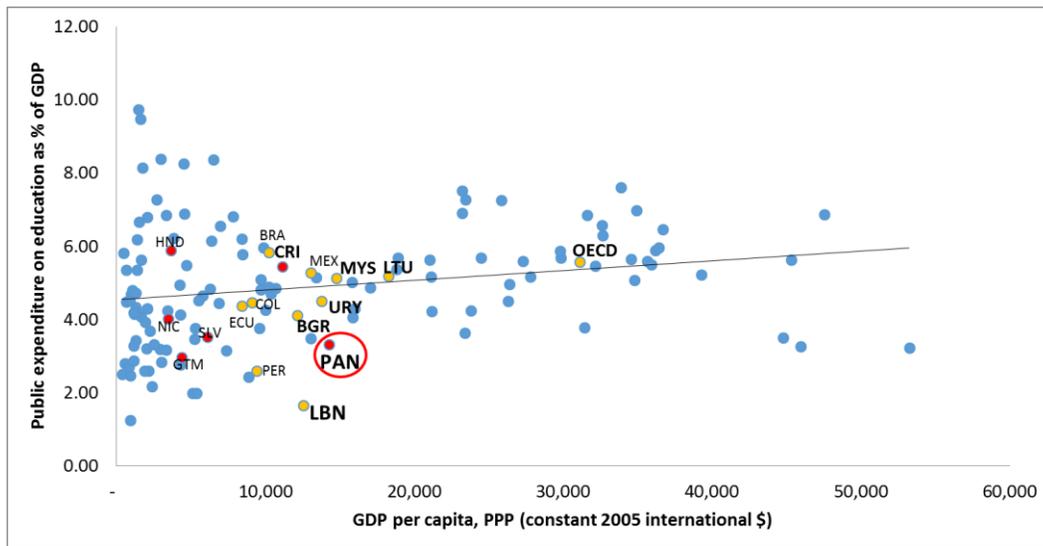
**Figure 14: Public Spending on Education as a % of GDP**



Source: World Bank SSEIR / ICEFI social spending database

Source: World Bank SSEIR / ICEFI social spending database

**Figure 15: Public spending on education as % of GDP vs GDP per capita, PPP (constant 2005)**

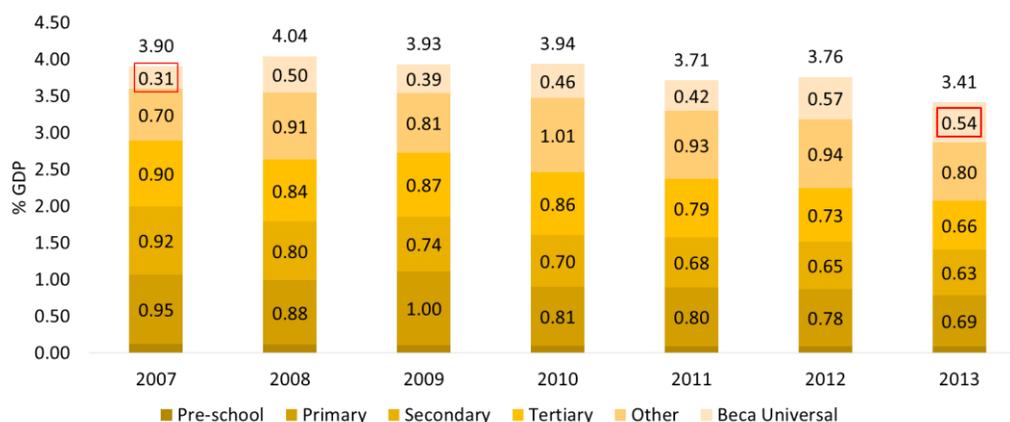


Source: World Bank SSEIR / ICEFI social spending database for Central America. EdStats for rest of the countries. 2010 figure for OECD members. Note: Closest peers in terms of GDP, GDP per capita, population, population density and percentage of rural population: Bulgaria (BGR), Costa Rica (CRI), Lebanon (LBN), Lithuania (LTU), Malaysia (MYS), and Uruguay (URY)

**Netting out the effect of scholarships, public spending in education decreased across all levels, especially in secondary education.** Education spending decreases across all educational

levels when the category “other” and the scholarship “Beca Universal”<sup>4</sup> are not taken into account (Figure 16).<sup>5</sup> The “other” category includes administrative spending and some scholarships. This category increased at an annual average rate of 2 percent from 2007 to 2013. Public spending on the scholarship “Beca Universal” increased an annual average rate of 10 percent in the past few years (which is 16 percent of the total public spending on education in 2013)<sup>6</sup>. But besides that, all other spending by educational level has decreased. Public spending in pre-school education as a percentage of GDP decreased from 0.12 percent in 2007 to 0.09 percent in 2013. In the same period, spending in primary education as a percentage of GDP decreased 0.26 percentage points, secondary education 0.30 percentage points, and tertiary education 0.24 percentage points. Overall, secondary education was the level with the highest drop in spending as a percentage of GDP from 2007 to 2013 and went from being the second biggest share to being the fourth, only higher than pre-school education.

**Figure 16: Public spending by educational level as a % of GDP (%) 2007-2013**



Source: World Bank SSEIR / ICEFI social spending database

Note: “Other” refers to spending in education not definable by level, educational subsidiary services, research and development in education and unspecified spending.

**Total public enrollments increased and per student spending fell, especially for secondary education.** Between 2007 and 2013, total per student public spending in pre-school, primary, and secondary education decreased on average by 1 percent per year, from \$1,131 to \$1,064 (Figure 17). However, per student spending had variations across all schooling levels. Since 2007, spending in pre-school education slightly decreased (on average by one percent per year),

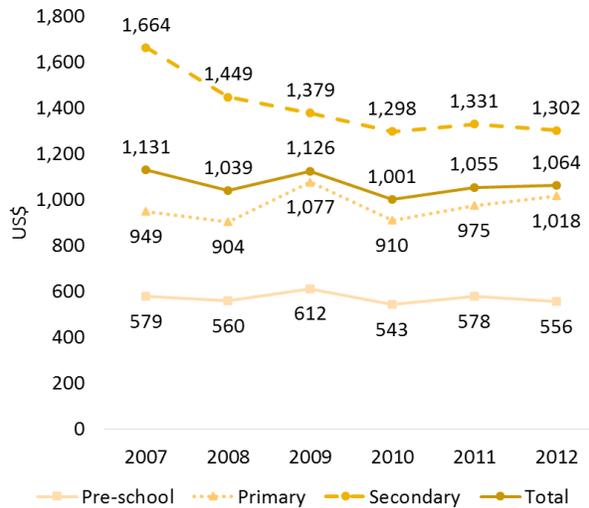
<sup>4</sup> For more information on “Beca Universal” (Universal scholarship) refer to the box on page 41 or the more detailed explanation in social protection and labor section (V.2).

<sup>5</sup> The Panamanian educational system is structured in the following levels: Pre-school (ages 4 to 5), Primary (grade 1 to 6, ages 6 to 11), Secondary (lower secondary from grade 7 to 9, ages 12 to 14; and upper secondary from grade 10 to 12, ages 15 to 18) and Tertiary (ages 19 to 24).

<sup>6</sup> Scholarship is distributed in many categories inside the public spending in education, but the biggest share is in other, specifically in spending in education not definable by level.

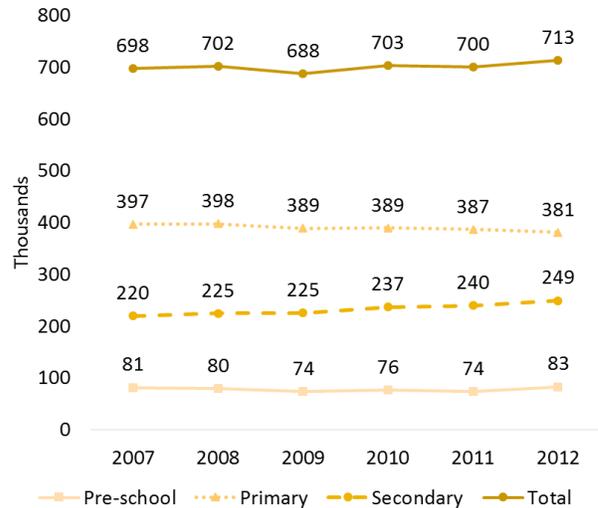
but it increased by 1 percent per year in primary education. The biggest change in per student spending was in secondary education, which decreased 5 percent per year since 2007, while total enrollment grew on average 3 percent per year (Figure 18). Panama’s secondary per student public spending as a percentage of GDP is still low by international standards (Figure 19). In real terms, the secondary per student spending declined from \$1,664 in 2007 to \$1,302 in 2013.

**Figure 17: Per student public spending by level (PPP US\$ 2007)**



Source: World Bank SSEIR / ICEFI social spending database

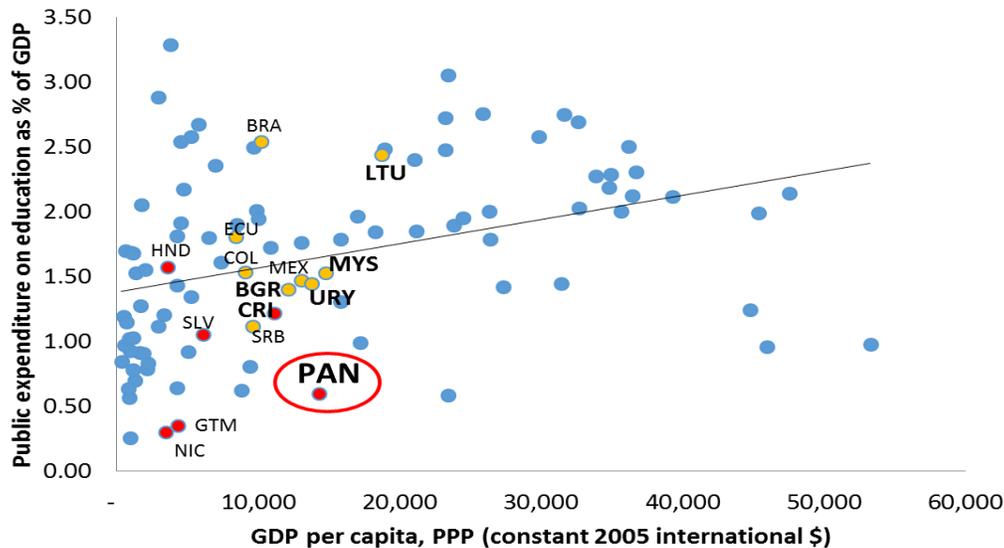
**Figure 18: Public enrollment by level (thousands)**



Source: \*Preliminary results. Enrolment level: MEDUCA.

Note: “total” is the sum of pre-school, primary, and secondary education. Tertiary and other are not added.

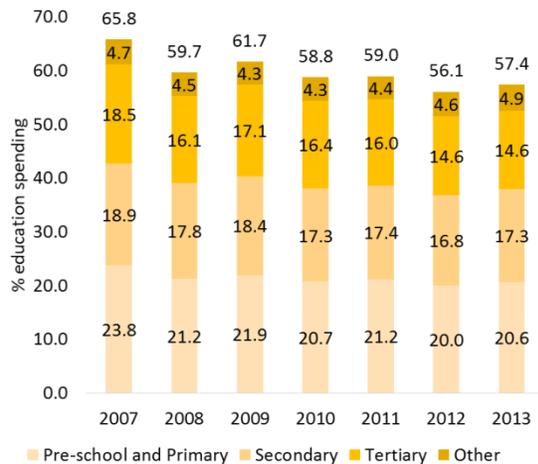
**Figure 19: Secondary per student public spending as a % of GDP per capita and GDP per capita (PPP)**



Source: World Bank SSEIR / ICEFI social spending database for Central American countries and Edstats for the rest. Note: Closest comparators in terms of GDP, GDP per capita, population, population density and percentage of rural population: Bulgaria (BGR), Costa Rica (CRI), Lebanon (LBN), Lithuania (LTU), Malaysia (MYS), and Uruguay (URY)

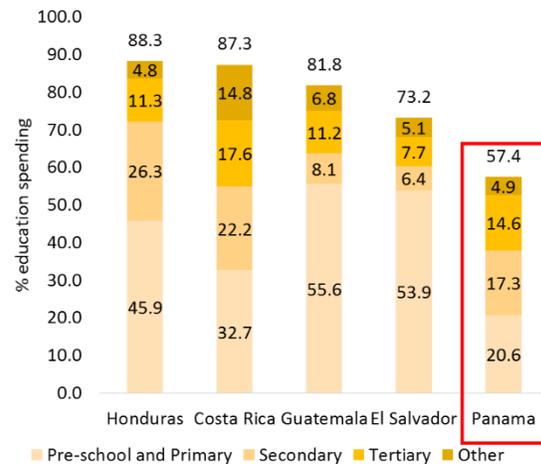
**Panama's wage bill as percentage of public education spending decreased, allocating more to scholarships (*Beca*) and to infrastructure spending.** In 2013, the wage bill accounted for 57.4 percent of the education spending, which is 8.4 percentage points lower than the 65.8 percent of the education spending committed to pay teachers' salaries in 2007 (Figure 20). However, in real terms, the wage bill increased from \$509 million in 2007 to \$791 million in 2013. The distribution of wage bill as a percentage of GDP across levels of education remained the same from 2007 to 2013, the highest share devoted to pay teachers' salaries in primary education and the lowest to pay tertiary education teachers. Additionally, the wage bill as a percentage of public education spending in Panama is behind other countries in Central America (Figure 21). For instance, in Costa Rica, Honduras and Guatemala the wage bill accounted for more than 80 percent of total education spending and in El Salvador the amount was 73.2 percent. Panama allocates more resources as a share of education spending to other categories such as scholarships and infrastructure than other CA countries.

**Figure 20: Panama wage bill as % of total public education spending, 2007-2013**



Source: World Bank SSEIR / ICEFI social spending database

**Figure 21: Wage bill in Central America as % of total public education spending**



Source: World Bank SSEIR / ICEFI social spending database

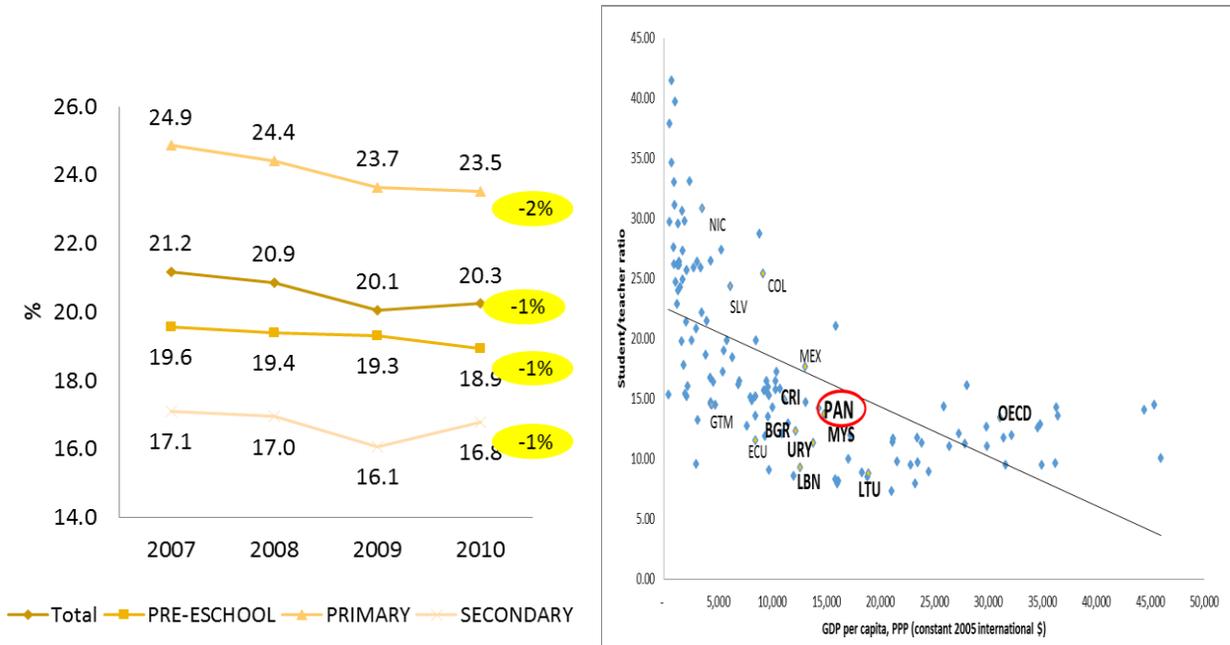
Note: “other” refers to spending in education not definable by level, educational subsidiary services, research and development in education and unspecified spending.

**Even though student/teacher ratio have fallen for all levels of education (and is close to OECD standards for secondary education), teachers’ wages have become less competitive over the past years.** Despite the declining trend in the wage bill as a percentage of GDP, the student/teacher ratio in 2010 was 4 percent lower than in 2007. It decreased at an average rate of 2 percent per year (Figure 22). The improvement in the student/teacher ratio is mainly due to an increase in the number of teacher across all levels of education, especially in secondary education, where the number of teachers increased 10 percent from 2007 to 2010. Moreover, in 2012 the student/teacher ratio in secondary education was almost comparable between Panama (14.2 students per teacher) and OECD members (13.5 students per teacher) and higher than most comparable countries. It was lower than other Central American countries such as Nicaragua (30.8), El Salvador (24.4), Costa Rica (14.9) and Guatemala (14.7) (Figure 23). This increase in the number of teachers was accompanied by a deterioration of the teachers’ salaries since 2007. Teachers’ wages have become less attractive when compared to other professional workers. Teachers’ hourly salaries in Panama were comparable to other professional workers in 2000, but they were 11 percent lower in 2010 (Figure 24). However, most of the teachers (52 percent), in primary education, do not complain about their salaries<sup>7</sup>.

**Figure 22: Student-teacher ratio**

**Figure 23: Student/teacher ratio in secondary education in relation to GDP per capita, 2012**

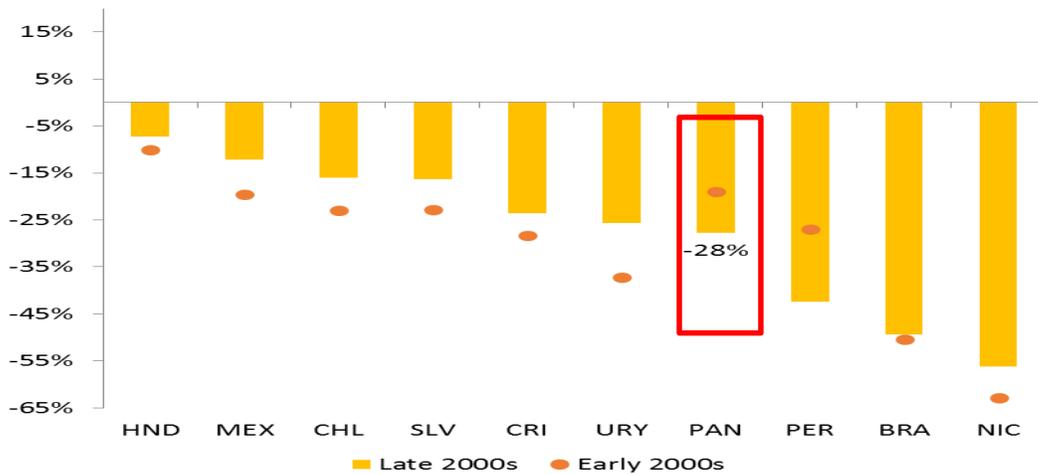
<sup>7</sup> World Bank (2012), “Better Jobs in Panama: The Role of Human Capital”.



Source: Ministry of Education (Ministerio de Educación; MEDUCA)

Source: Edstats. Note: Closest comparators in terms of GDP, GDP per capita, population, population density and percentage of rural population: Bulgaria (BGR), Costa Rica (CRI), Lebanon (LBN), Lithuania (LTU), Malaysia (MYS), and Uruguay (URY)

**Figure 24: Average per hour teachers' salary relative to other professional workers, circa 2000 and 2010**

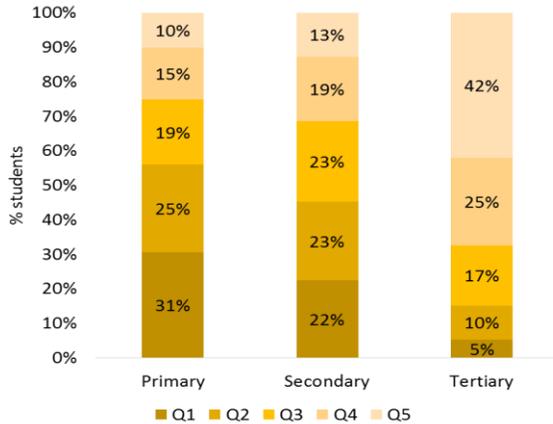


Source: World Bank SSEIR team's analysis of household surveys, authors' calculations, and labor market data for 10 LAC countries, in Bruns, Barbara and Luque, Javier, *Great Teachers: How to raise student learning in Latin America and the Caribbean* (Washington: 2015) The World Bank Group).

**Furthermore, education spending is not targeted to the poorest.** Figure 25 reports the share of students across all levels of education: primary secondary and tertiary. It shows that 42

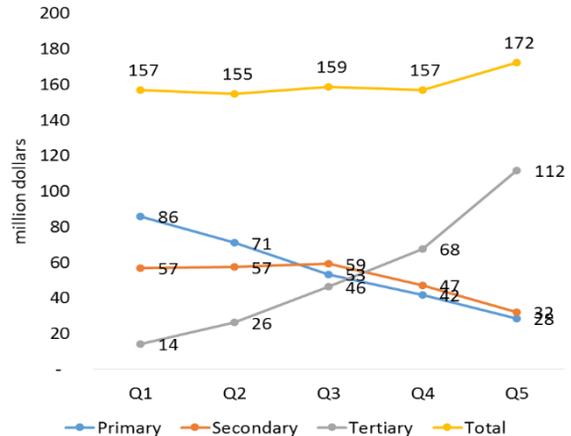
percent of the students enrolled in tertiary education are from the highest income quintile. In contrast, the share of students from the first two quintiles is only 15 percent. This stands in stark contrast with the figures for both primary and secondary education. Figure 26 then computes the share of spending allocated across quintiles. The figure is again clear that spending is highly regressive given the large per student spending and the large enrollments from higher quintiles in tertiary education.

**Figure 25: Total Students by educational level and quintiles, 2013**



Source: World Bank SSEIR team’s analysis of household surveys, authors’ calculations using standardized ADePT software (Education Module)

**Figure 26: Public Spending by educational level and quintiles, 2013**



Source: World Bank SSEIR / ICEFI social spending database

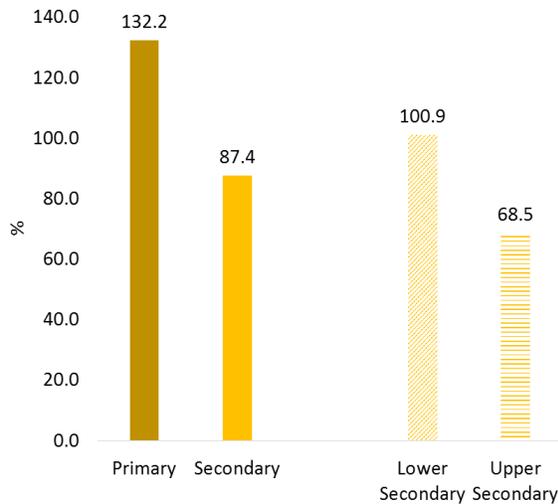
## IV.2 Performance of Education Indicators

**Panama has reached universal primary education coverage, but its secondary education coverage remains low.** The gross enrollment rate for primary education was 132.2 percent in 2013. In the same year, gross enrollment in lower secondary education reached a 100.9 percent. However, the indicator drops drastically to 68.5 percent in upper secondary (Figure 27). Panama’s gross enrollment rate in pre-school is 70.7 percent. Hence, enrollments in primary education are comparable to the best performers internationally and secondary education is in line with the country’s GDP (Figure 28). Nevertheless, enrollment in secondary education is still low when compared with countries with similar characteristics like Costa Rica and Colombia.

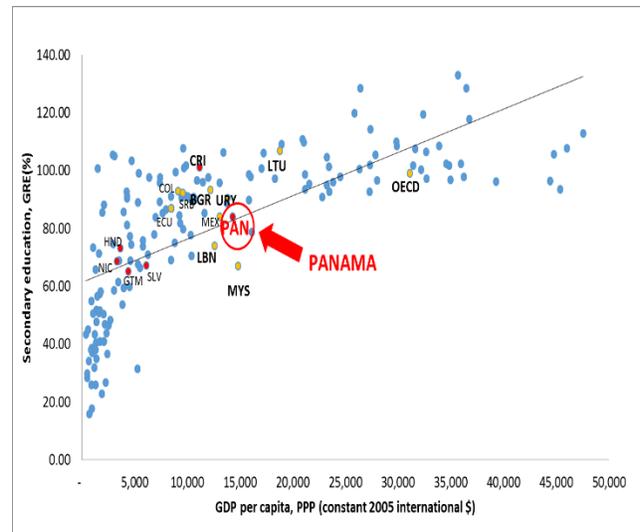
**Figure 27: Gross enrolment rate by educational level 2013**

**Figure 28: Secondary education, gross enrollment rate (%) vs GDP per capita 2012**

## Panama Social Sector Expenditure and Institutional Review



Source: World Bank SSEIR team's analysis of household surveys, authors' calculations

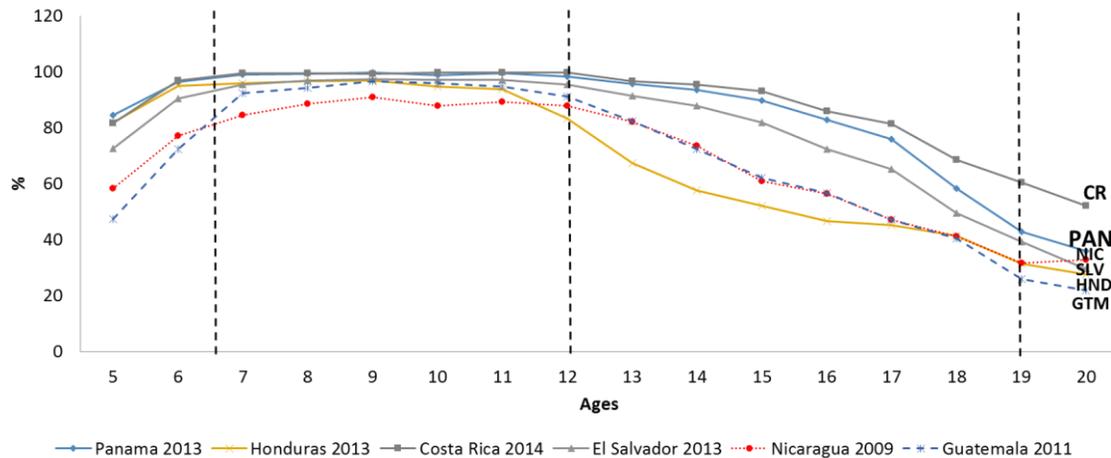


Source: EdStats. Own calculations based on Contraloría data for Panama. Note: Closest comparators in terms of GDP, GDP per capita, population, population density and percentage of rural population: Bulgaria (BGR), Costa Rica (CRI), Lebanon (LBN), Lithuania (LTU), Malaysia (MYS), and Uruguay (URY)

**In Panama the enrollment rate by age is high compared to the other Central America countries, but it follows a similar pattern of evolution.** Panama's enrollment rate of students aged 5-20 is higher than that of most of the other Central America countries in almost every age (Figure 29). It has the highest enrollment rate of 5 years-old students and universal primary enrollment as in Costa Rica. Nevertheless, Panama's enrollment rate has the same pattern as in other fellow countries. Pre-school enrollment (age 5) is lower than enrollment in primary education and then starts decreasing again in secondary education. In Panama, as in Costa Rica and El Salvador, the enrollment rate starts decreasing constantly around age 15, while for the other countries it begins to decrease at a younger age.

**Figure 29: Enrolment rate in Central America countries, students aged 5-20**

## Panama Social Sector Expenditure and Institutional Review



Source: World Bank SSEIR team's analysis of household surveys, authors' calculations

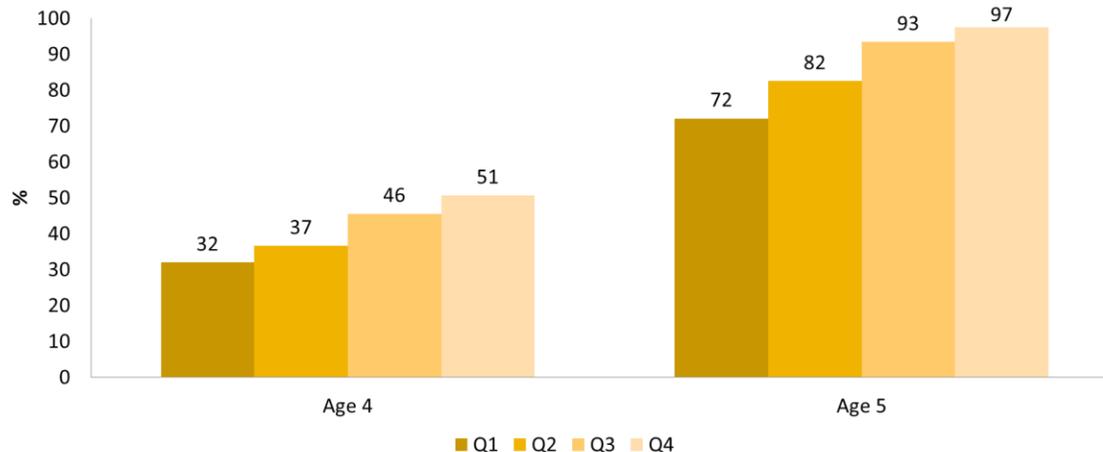
**Education access gaps due to income inequality start early in life, with a low share of children aged 0-5 attending ECD centers.** Differences between students in urban and rural areas are magnified at the secondary level but they start early in the system. Several studies have found that early childhood development reduces the likelihood of school failures in the future<sup>8</sup>. Attendance rate of children aged 0-5 in ECD centers has increased but disparities remained across quintiles. In 2008, only 6 percent of the 3 year-olds children and 41 percent of the 4 year-olds<sup>9</sup> were attending school. The attendance rate to ECD centers of the 5 year-old children increased from 79 percent in 2008 to 85 percent in 2012<sup>10</sup>. However, within the country, large gaps exist in enrollments to ECD centers between the richest and poorest households. At the age of 4, the attendance rate to ECD in 2013 was 32 percent and 51 percent for poorest and richest quintiles, respectively (Figure 30). The attendance rate of 5 year-old children from the highest quintile was 97 percent in contrast to 72 percent from the lowest quintile. According to a survey made by the United Nations Development Program (UNDP, 2014), 54.5 percent of Panamanian children not in pre-school do not know how to write a single letter. This statistic contrasts with 17.9 percent of those who attend pre-school<sup>11</sup>.

<sup>8</sup> Almeida et al. (forthcoming), "How to prevent secondary-school dropout: Evidence from rigorous evaluations."

<sup>9</sup> MEDUCA (2008). "Plan Estrategico periodo 2009-2014, Meduca para toda la vida".

<sup>10</sup> Ibid shows that the attendance rate in 2008 is very similar to the one obtained in the household survey: 81%.

<sup>11</sup> UNDP (2014). "Informe Nacional de Desarrollo Humano - Panama 2014".

**Figure 30: School attendance rate of children aged 4-5 by quintiles 2013 (%)**

Source: World Bank SSEIR team's analysis of household surveys, authors' calculations

**A plan to improve Early Childhood Development has been prepared, and its implementation is contingent on the approval of the Integrated Road for ECD Care Law.** In 2009, the Panamanian government adopted the Plan for Early Childhood (Plan de Atención Integral a la Primera Infancia; PAIPI). Nevertheless, the system still has some weaknesses in terms of quality of early childhood education, including not accounting for cultural differences across regions, especially in the indigenous territories. Especially in rural and less populated areas, there is also need for higher quality parenting programs to support early on the cognitive and socio emotional development of children and get them school ready. In 2013, a bill called Integral Road for Early Childhood Care<sup>12</sup> was designed to overcome some of these problems and to institutionalize arrangements required to ensure the coordination across the institutions involved in early childhood development (e.g., health, education and social assistance). However, as of June 2014, the bill has not yet been approved as law.<sup>13</sup>

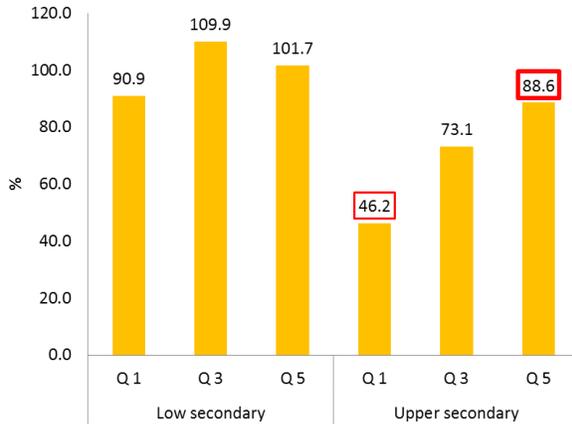
**Furthermore, there are large differences across quintiles and regions in attendance and graduation rates for lower and upper secondary levels.** Attendance of secondary education is exceedingly unequal across quintiles, especially in upper secondary education. In 2013, only 46.2 percent of the lowest quintiles attended upper secondary education as opposed to 88.6 percent among the richest quintile (Figure 31). In the same way, graduation rate decreases significantly across quintiles. In 2010, lower secondary's graduation rate was 57 percent. Graduation rate in upper secondary was only 39 percent with significant variance between provinces (Figure 32). For instance, the graduation rate in upper secondary in Darien was only

<sup>12</sup> Consejo Asesor de la Primera Infancia de la República de Panamá (2011) "Plan de Atención Integral a la Primera Infancia"

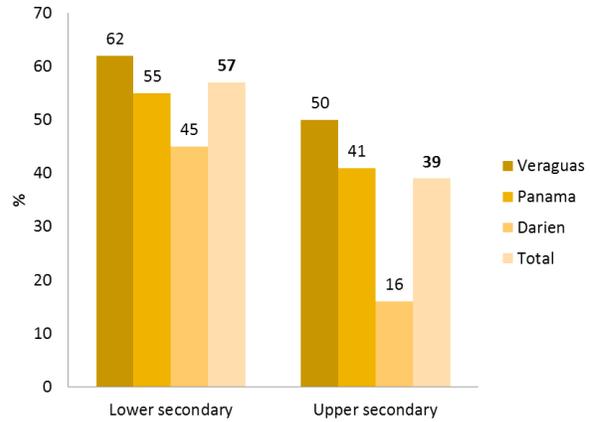
<sup>13</sup> UNDP (2014), Ibid.

16 percent in 2010. Darien is the province with the lowest average income in Panama<sup>14</sup> (excluding the three “*Comarcas Indigenas*”<sup>15</sup>).

**Figure 31: Gross attendance rate by quintiles 2013 (%)**



**Figure 32: Graduation rate by level, selected provinces (2010)**



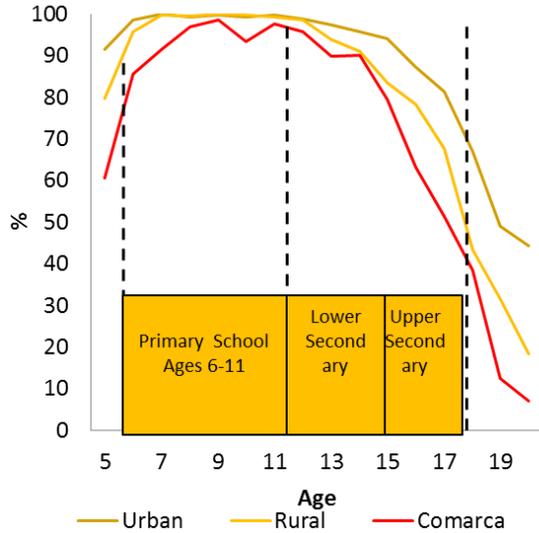
Source: World Bank SSEIR team’s analysis of household surveys, authors’ calculations using standardized ADePT software (Education Module) Source: MEDUCA

**There is a significant gap in enrollments in upper secondary education across urban and rural areas.** Differences in enrollment between students who live in urban and rural areas increase at the secondary level particularly at the upper secondary level (15 to 17 years old). The enrollment rate for 17 years-old students in urban area was 81 percent in 2013, while the same indicator was only 68 percent and 51 percent for rural and indigenous students of same age (Figure 33). These differences in enrollments have led to a considerably lower attainment in rural areas where only 51.6 percent of young people aged 15 to 19 has completed lower secondary (nine years of schooling), compared to 72.9 percent in urban regions (Figure 34). The enrollment rate by gender is almost the same between girls and boys, but girls have a higher enrollment rate at the age of 15, which is the beginning of upper secondary education (Figure 35). Consistently, girls aged 15-19 have more years of schooling (Figure 36).

<sup>14</sup> Moreno (2012), “Distribución del ingreso de los hogares: Encuesta de propósitos múltiples”.

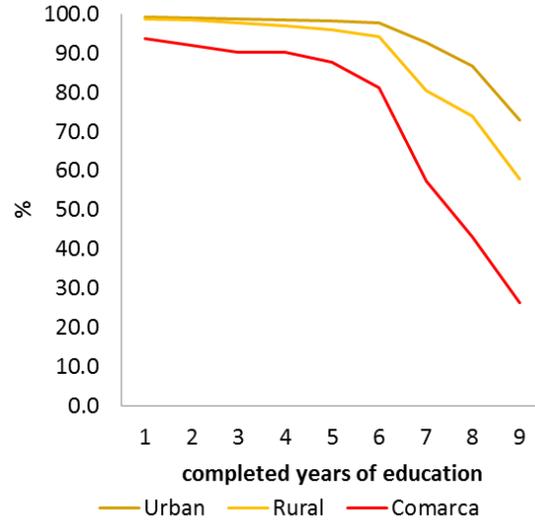
<sup>15</sup> Territories of indigenous people in Panama are called comarcas. In Panama, there are three comarcas indígenas as equivalent to a province: Emberá-Wounaan, Kuna Yala and Ngöbe-Buglé.

**Figure 33: Enrolment (%), ages 5-20 (2013) by location**



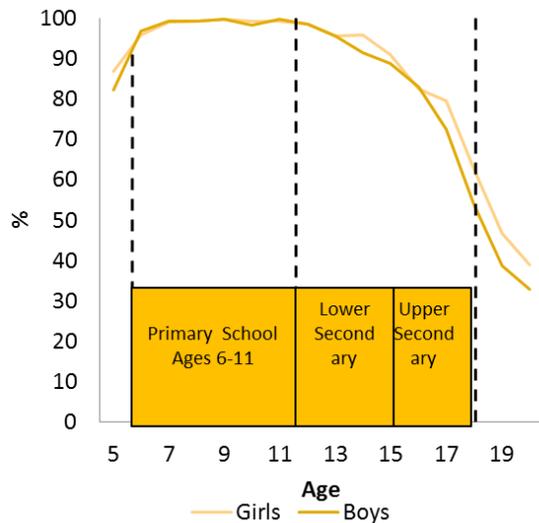
Source: World Bank SSEIR team's analysis of household surveys, authors' calculations

**Figure 34: Attainment, ages 15-19, by geographic location (2013)**



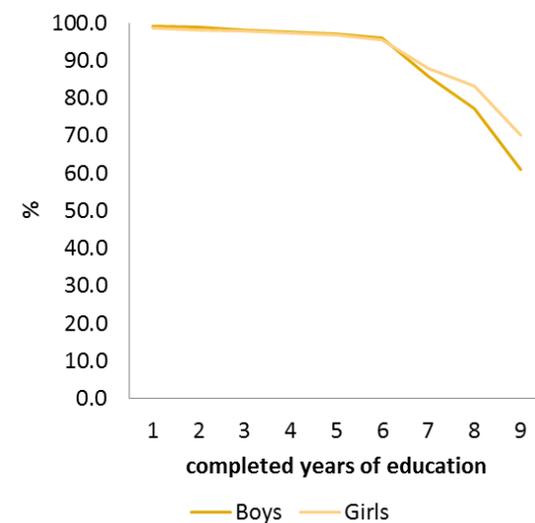
Source: World Bank SSEIR team's analysis of household surveys, authors' calculations

**Figure 35: Enrollment rate of students aged 5-20 by gender (2013)**



Source: World Bank SSEIR team's analysis of household surveys, authors' calculations

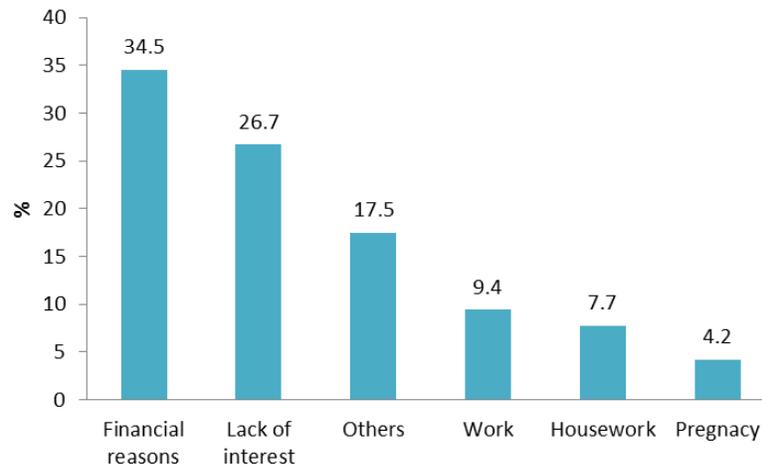
**Figure 36: Attainment, ages 15-19, by gender (2013)**



Source: World Bank SSEIR team's analysis of household surveys, authors' calculations

**Lack of funding continues to be the primary reason for dropout at the upper-secondary level.** A 2008 regional study found that 34.5 percent of the Panamanian upper secondary students cited financial reasons as the main cause for school dropout (Figure 37). The government of Panama has since launched “Beca Universal” to mitigate the financial burden of education.<sup>16</sup> However, in 2015 a MEDUCA and UNICEF teacher survey found that “lack of financial support” was still the main reason for student dropout according to Panamanian teachers<sup>17</sup>. Teachers also noted teenage pregnancy (58%), criminal and gang involvement (55%), lack of help with homework (54%), lack of confidence in the economic value of school (53%), and indecision (53%) as other major causes of evasion. While programs such as “Beca Universal” and “Red de Oportunidades” have started to address the link between student dropout and financial reasons, a more comprehensive and aggressive portfolio of programs may be required to address the multiplicity of factors at play in student dropout and in order to produce meaningful structural progress.

**Figure 37: Main reasons why students aged 15-17 drop out of school in Panama (2008)**



Source: Programa Estado de la Nación. (2011). “Cuarto Informe Estado de la Región en Desarrollo Humano Sostenible”

**Looking forward, reducing dropout at the upper-secondary level, will require a focus on teen pregnancy reduction policies, deferred scholarships, socio-emotional training, and early-warning systems.** In a review of all major policy interventions seeking to reduce school dropout, Almeida, Fitzsimons & Rogers (2015) evaluate the relative effectiveness of these programs. They find that different types of policies are more effective at the upper secondary level of education, in contrast to lower secondary level of education where conditional cash

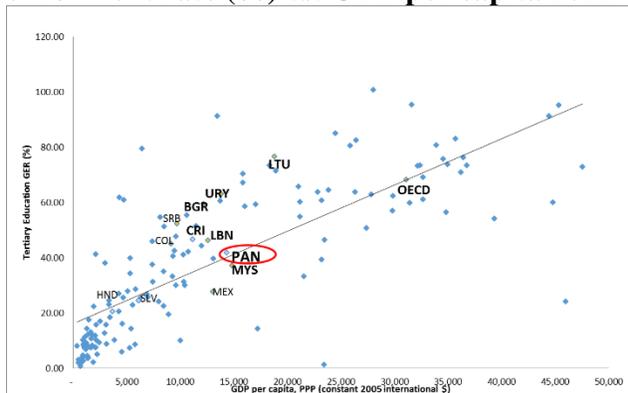
<sup>16</sup> “Beca Universal” (Universal Scholarship) is a major educational initiative of the Panamanian government to improve educational outcomes and retention. Student-focused and performance-based, this cash scholarship encompasses all educational levels and regions to provide more than 600,000 payments a year for 180,000 eligible children with a total budget of US\$125M. A more comprehensive discussion of “Beca Universal” can be found on section V.2 of this report.

<sup>17</sup> MEDUCA & UNICEF (2015) “Factores Asociados al Abandono del Sistema Educativo en la Transición Escolar”

transfers are most effective. For the upper secondary level, deferred scholarships (which delay a substantial portion of the reward until the completion of pre-set benchmarks) have been shown to reduce dropout. More importantly, programs that address teen pregnancy become especially important in this stage to raise the aspirations of girls and the likelihood of them completing the education cycle. On the supply side, early evaluations of experiments with socio-emotional training, including cognitive-behavioral interventions, suggest that these interventions can have large payoffs for at-risk students. Finally, early warning systems are promising tools to improving targeted interventions like academic tutoring and socio-emotional training<sup>18</sup>.

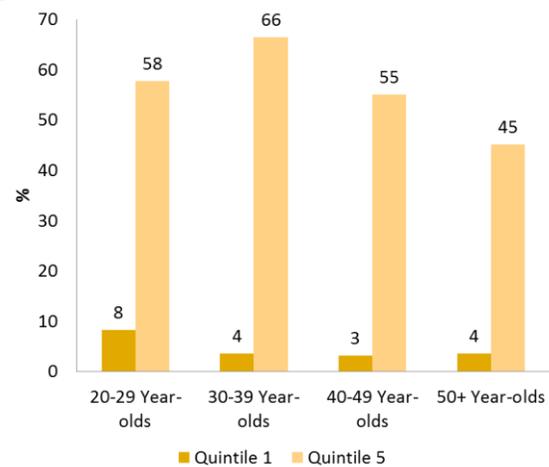
**Enrollments in tertiary education are in line with other similar countries, but there are barriers to entry for individuals from lower income quintiles.** Tertiary enrollment rate in Panama (42 percent) is in line with the average of countries with similar GDP per capita (42 percent) and countries such as Costa Rica (47 percent) and Malaysia (37 percent) (Figure 38). The difference between the poorest and the richest in terms of access to tertiary education is significant (Figure 39). In 2013, only 8 percent of the people between 20 and 29 years old from the lowest quintiles had some higher education. In the same year, 58 percent of the people in the same group but in the highest quintile had some higher education.

**Figure 38: Tertiary education, gross enrollment rate (%) vs. GDP per capita 2012**



Source: World Bank SSEIR / ICEFI social spending database for Panama and Central America. EdStats for the rest of the countries. Note: Closest comparators in terms of GDP, GDP per capita, population, population density and percentage of rural population: Bulgaria (BGR), Costa Rica (CRI), Lebanon (LBN), Lithuania (LTU), Malaysia (MYS), and Uruguay (URY)

**Figure 39: Percentage of population by age group with some higher education, by quintile (2013)**



Source: Household survey, authors' calculations using AdEPT.

**Additionally, the education young people receive must be made more relevant so that they can adapt to the new demands of society and the labor market.** In Panama, the ratio of professionals to technicians is three to one when projects like the expansion of the Canal require

<sup>18</sup> Almeida, Rita, Fitzsimons, Emla, & Rogers, Halsey. Forthcoming. How to prevent secondary-school dropout: Evidence from rigorous evaluations. World Bank

five technicians for every professional<sup>19</sup>. The regular system in Panama has two types of formal tertiary education: universities and technical institutes (Institutos Técnicos Superiores; ITS). In 2010, the tertiary education enrollment was 157,786 students; 88 percent of students at the tertiary level were enrolled in university and only 12 percent in ITS. From those enrolled in universities in 2012, only around 7 percent were pursuing a technical degree<sup>20</sup>. This is true even when more than half of the students graduating from high school come from technical-vocational training<sup>21</sup>. The inadequate education of the workforce is one of the top 3 business environment constraints, according to 2010 data. Therefore, the unmet demand for skilled labor has intensified competition for workers and the hiring of foreign work workers<sup>22</sup>. This lack of well-trained workers with vocational skills may adversely affect economic growth in the near future<sup>23</sup>.

**In spite of the positive economic returns to education, there are concerns among youth on the access to high quality jobs.** According to *Latinobarometro* (2011), Panama is one of the countries where few young people believe that university education provides access to a good job (Figure 40). Only 36 percent of Panamanians surveyed strongly agree that university provides access to a good job. This is below the average in LAC (38 percent) and most of Central American countries such as Costa Rica (50 percent), Honduras (45 percent), El Salvador (41 percent) and Guatemala 39 percent. Nevertheless, returns to education are higher in Panama than in Honduras, Costa Rica and El Salvador (Figure 41). Tertiary education institutions are surprisingly not using information to ensure that students know what jobs are available in the labor market and what skills those jobs need, as well as which programs are the best and least costly for specific types of learning and training.

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<sup>19</sup> UNDP (2014), “Informe Nacional de Desarrollo Humano - Panamá 2014.”

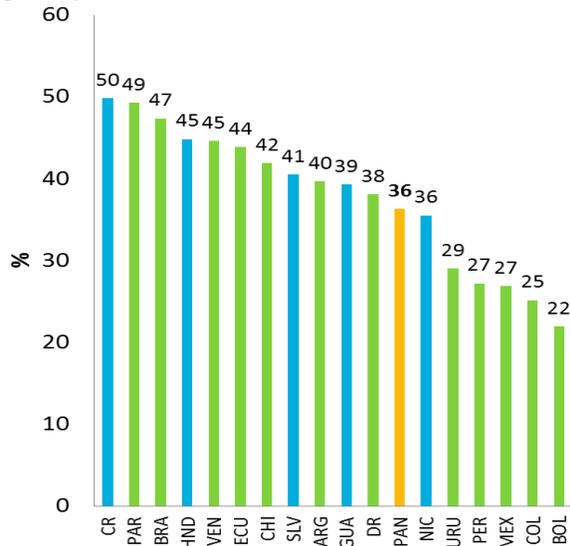
<sup>20</sup> Castillo and Fiedler (forthcoming), “La Educación Técnica Vocacional y Profesional en Panamá y su relación con el empleo”.

<sup>21</sup> Castillo and Fiedler (forthcoming) graduates from the technical-vocational trainings available in high school: autotronics, construction, electricity, electronics, refrigeration and air conditioning mechanics and computer technology.

<sup>22</sup> UNDP (2014) “Informe Nacional de Desarrollo Humano - Panamá 2014”

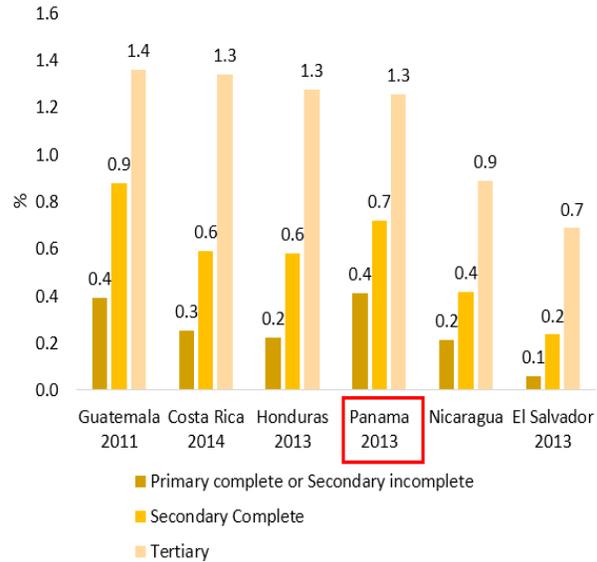
<sup>23</sup> Castillo and Fiedler (forthcoming), *ibid*

**Figure 40: Do you strongly agree that university education provides Access to a good job?**



Source: World Bank SSEIR team's, authors' calculations using Latinobarometro 2011

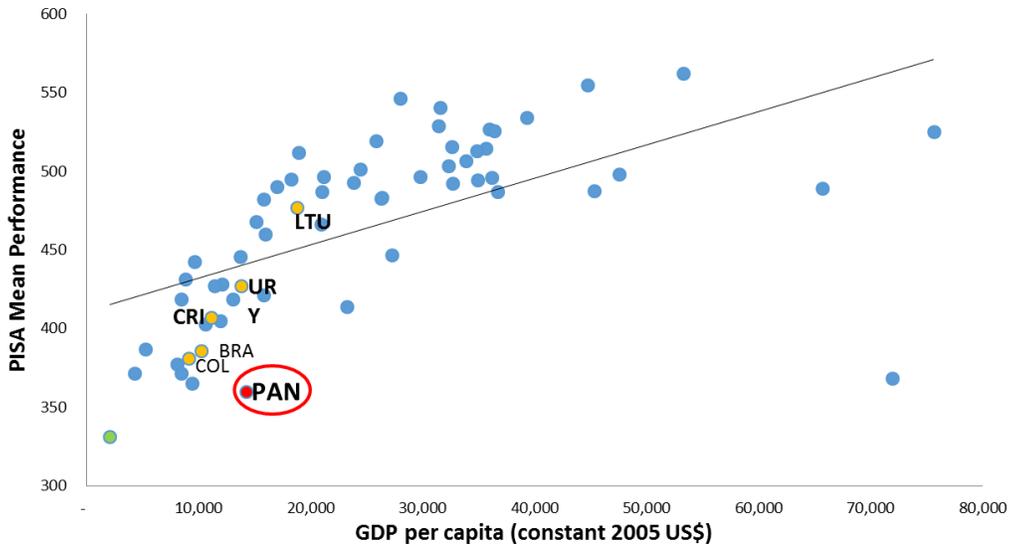
**Figure 41: Returns to education (control group: primary incomplete or less)**



Source: World Bank SSEIR team's analysis of household surveys

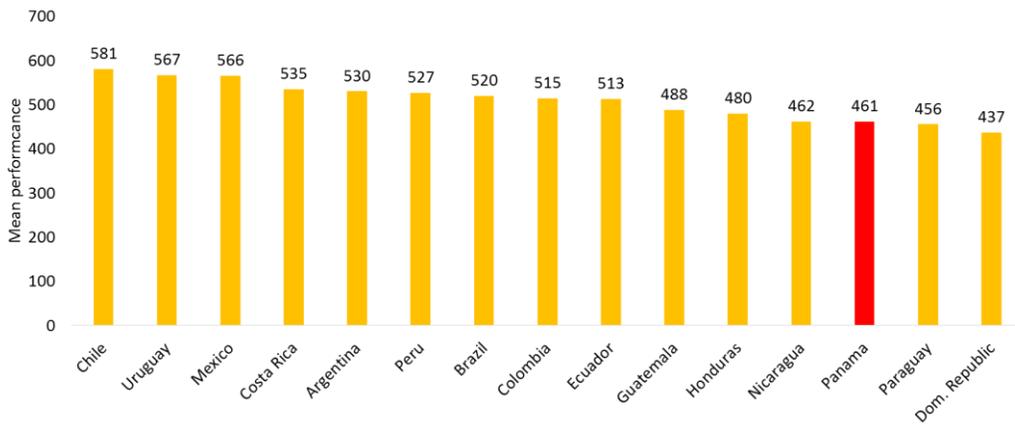
**Panamanian students perform poorly when placed in an international context and there are significant achievement gaps across quintiles and between public and private schools.** In 2009, Panama participated in the Program for International Student Assessment (PISA) of the OECD. According to PISA's results, Panamanian students performed at very low levels, especially when compared with other countries in the Latin American region or countries with similar GDP per capita (Figure 42). Moreover, the latest results from the TERCE examination of Latin American students by UNESCO show that Panama is among the worst performers in TERCE in reading and in mathematics (Figure 43). There are also significant gaps in student achievement across different groups. For instance, students in private schools outperform students in public schools. Also, students from the lowest quintiles, in both public and private schools, have a much lower score than that of the highest quintiles. The difference between public and private gets wider in the highest quintile (Figure 44).

**Figure 42: PISA 2009 Mathematics Mean Score by country (15-year-old students) vs. GDP per capita PPP**



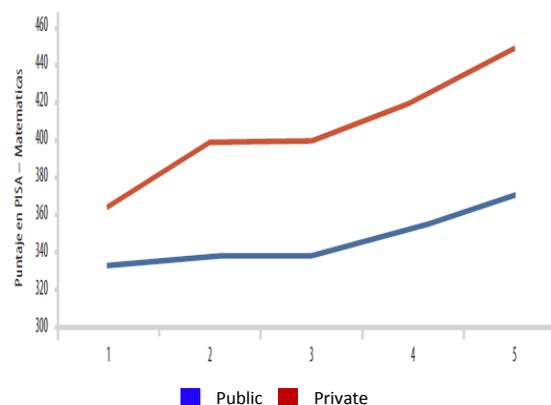
Source: PISA 2009, EdStats

**Figure 43: LLECE: Mean performance on the mathematics scale for 6th grade students, total**



Source: Edstats

**Figure 44: PISA 2009 Mathematics Mean Score by school type and income quintile in Panama**



Source: Human Development Network, World Bank (2012)

**Furthermore, consistent with the decreasing spending per student, perception on quality of public education has declined over time.** The share of Panamanians surveyed by the Latino Barometro that said they were “very satisfied” with the way the public education works declined from 21 percent in 2007 to 14 percent in 2011. Accordingly, even though MEDUCA has imposed limitations for the installment of private schools in Panama<sup>24</sup>, the enrollment rate in private schools increased from 13 percent in 2008 to 16 percent in 2014. This scenario is consistent with the growing number of parents not satisfied with the quality of education in the public system<sup>25</sup>. Government initiatives such as “Panama Bilingue” bring to the forefront the key importance of skills and competencies in future job attainment, in this case, foreign languages.<sup>26</sup> Private schools provide an early edge over this type of competencies, and this edge may explain part of their attractiveness. Thus, more programs like “Panama Bilingue” can help bridge the quality perception gap between the public and private systems.

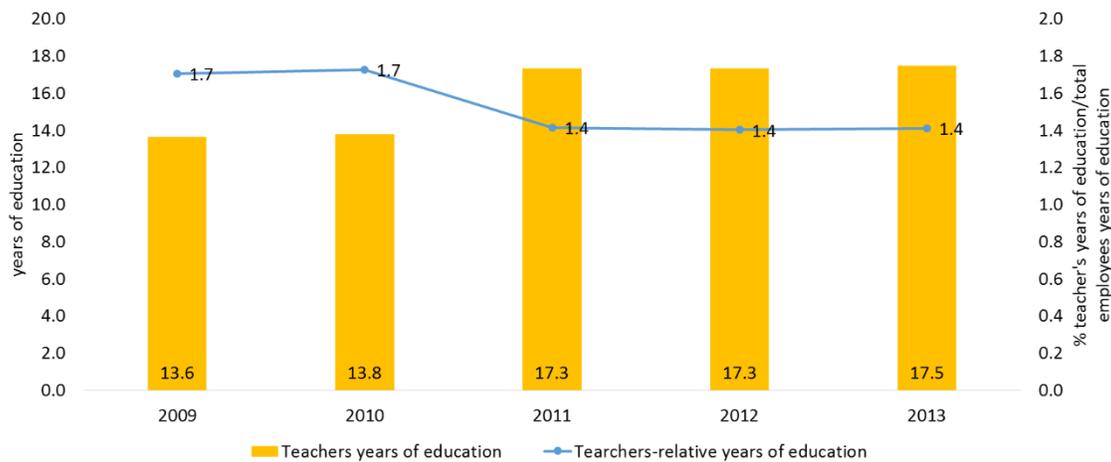
**Recent improvements in teachers’ years of education may be difficult to translate into increased learning, as those coming into the profession are not necessarily the best equipped.** According to Bruns et al.<sup>27</sup> average education levels for teachers have risen across the

<sup>24</sup> Planells (2014) discusses the anecdote where the Private Schools Union (Union Nacional de Centros Educativos Particulares de Panamá; UNCEP) is in conflict with the Consumer Protection Agency (Autoridad de Protección al Consumidor y Defensa de la Competencia; ACODECO) because they want to limit the ability of private schools to set prices and freely choose school uniforms.

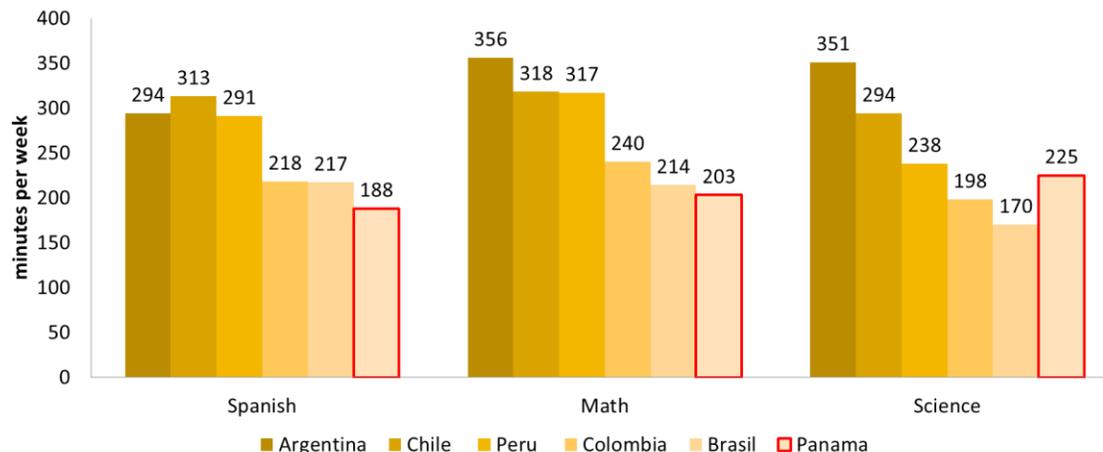
<sup>26</sup> “Panama Bilingue” (Bilingual Panama) is an initiative from the Ministry of Education to improve education quality through better teacher training, specifically targeted towards the perfecting of teachers’ and students’ foreign language skills. The program is set for the 2014-2019 period with an annual investment of 10 million dollars, and seeks to reach 2,000 teachers per year, and better prepare 20,000 high school students and 30,000 elementary level students.

LAC region. Panama (together with Costa Rica and Peru) are on top of the list. For instance, teachers' average years of education in Panama increased from 13.6 in 2009 to 17.5 in 2013 (Figure 45). However, increases in teacher's educational attainment do not necessarily translate into improvements in students' learning outcomes. To start with, Latin America is not attracting the high caliber individuals it needs to build world-class education systems. Virtually all countries in the region appear trapped in a low-level equilibrium of low standards for entry into teaching, low quality candidates, relatively low and undifferentiated salaries, low professionalism in the classroom and poor education results<sup>28</sup>. This low professionalism in the classroom is also reflected in the amount of time Panamanian teachers devote to teach. According to PISA-OECD (2009) the instructional time in Panama in Spanish and Math were the lowest when compared to other countries like Colombia, Chile or Peru (Figure 46).

**Figure 45: Teacher's average years of education 2009-2013**



Source: World Bank SSEIR team's analysis of household surveys, authors' calculations

**Figure 46: Minutes per week by course**

Source: PISA-OCDE (2009)

**Efforts have been made in teachers' training but the evidence show shortcomings especially in math and natural and physical sciences.** Panama invest annually 4 percent of the Fund Equity and Quality in Education (Fondo de Equidad y Calidad en la Educación; FECE) in teacher training, this was approximately \$1,472,475 in 2013<sup>29</sup>. According, to MEDUCA<sup>30</sup> this resources are sufficient to train around 32,000 teachers per week nationwide. Also, since 2010, Panama has implemented a program to train teachers in how to apply information and communications technology (ICT) in the classroom<sup>31</sup>. However, the results obtained by the tests applied by SENACYT<sup>32</sup> (2014) show serious shortcomings of teachers, especially in mathematics as well as in natural and physical sciences<sup>33</sup>. For instance, in the test taken by primary education teachers, on average, the percentage of right answers in math was 51.4 percent and in natural and physical science was 62.7 percent<sup>34</sup>.

**In addition, a compressed teachers' wage distribution hinders incentives for better qualified teachers and improved performance.** Research over the last decade provides compelling evidence that teacher quality critically impacts learning achievement<sup>35</sup>. However, the evidence suggests that teacher policies generally across the Latin-American region, and in Panama particularly, have not been able to produce the critical mass of quality teachers required<sup>36</sup>. In Panama, a very compressed teacher's salary structure could be driving talented women and men out of the teaching profession. There is little chance of getting a low or high

<sup>33</sup> Planells (2014), "Institucionalidad y gobernanza en el sistema educativo Panameño."

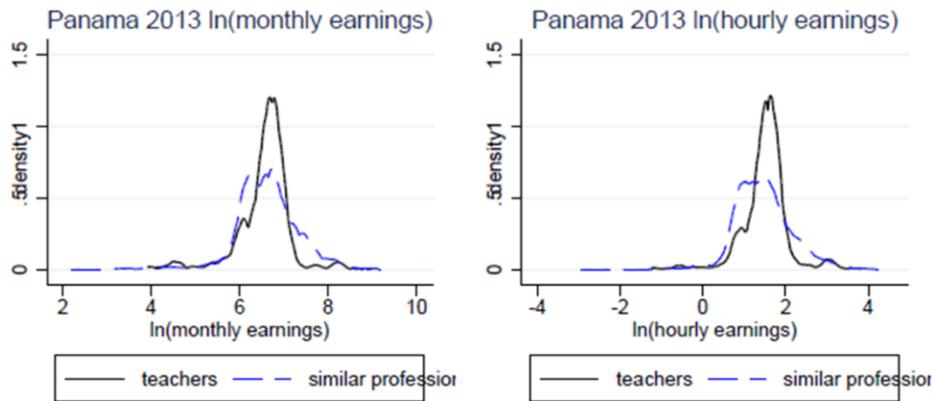
<sup>34</sup> SENACYT (2014), "Reporte del laboratorio de evaluación de los aprendizajes y de la enseñanza."

<sup>35</sup> Almeida et al. (forthcoming), "How to prevent secondary-school dropout: Evidence from rigorous evaluations."

<sup>36</sup> Bruns et al. (forthcoming), "Building Better Teachers in Latin America and the Caribbean."

wage (Figure 47)<sup>37</sup>. As a consequence, individuals that tend to be less productive would earn relatively more as teachers, while those more productive would earn less<sup>38</sup>, producing negative incentives. Besides, the absence of an updated teacher career progression constrains the opportunity to attract, retain and develop better teachers<sup>39</sup>.

**Figure 47: Wage distribution for teachers compared with other professional occupations, 2013**



Source: World Bank SSEIR team's analysis of household surveys, authors' calculations

**In spite of the recent increase in spending, overall the school system still has poor and unequal access to high quality infrastructure.** Since 2011, the Panamanian government has increased the public education spending in infrastructure. The amount of money invested in public school infrastructure increased from 2 percent of the total spending on education in 2008 to a 12 percent in 2012 (Figure 48). Many studies have found that the quality of school infrastructure significantly influences the learning of Latin American and Caribbean students<sup>40</sup>. And the gaps were important as of 2006. According to MEDUCA (2010), only 67 percent of primary schools in Panama had electricity and 59 percent have access to safe water. Furthermore, there are large inequalities across provinces. For instance, in 2010, 92 percent of primary schools in San Miguelito had access to electricity, but only 23 percent of primary schools had access to

<sup>37</sup> Bruns et al. (forthcoming), *ibid*.

<sup>38</sup> Hernani-Limarino (2005), "Are Teachers Well Paid in Latin America and the Caribbean? Relative Wage and Structure of Returns of Teachers."

<sup>39</sup> Planells (2014). "Institucionalidad y gobernanza en el sistema educativo Panameño."

<sup>40</sup> Duarte et al. (2011), "Infraestructura escolar y aprendizajes en la educación básica Latinoamericana: un análisis a partir del SECE."<sup>40</sup> Planells (2014), *ibid*

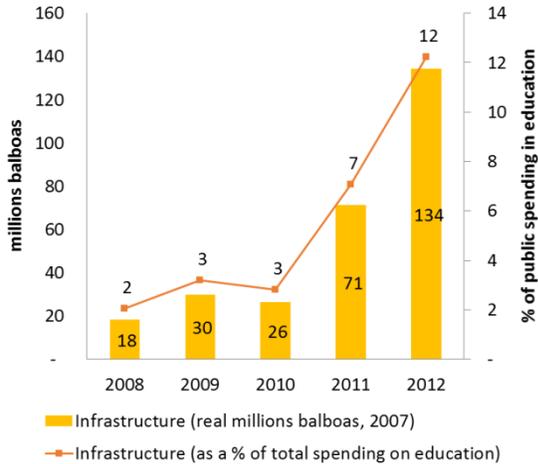
<sup>40</sup> Beca Universal is a program managed by IFARHU which consists of a monthly payment of US\$20 (US\$180 annually), conditional to academic achievement, to all students in public schools and certain private schools with annual fees lower than US\$ 1,000. The program has reached approximately 480,000 beneficiaries in 2012.

<sup>40</sup> The Red de Oportunidades is a program managed by Ministerio de Desarrollo Social (MIDES). Consists of a monthly payment of US\$ 50 to households in poverty or extreme poverty under the condition that school-age children attend classes, among other requirements. The program reached roughly 70,000 households in 2012.

<sup>40</sup> Almeida, Fitzsimons and Rodgers (forthcoming) conduct a review of evidence of policy options to prevent upper secondary dropout.

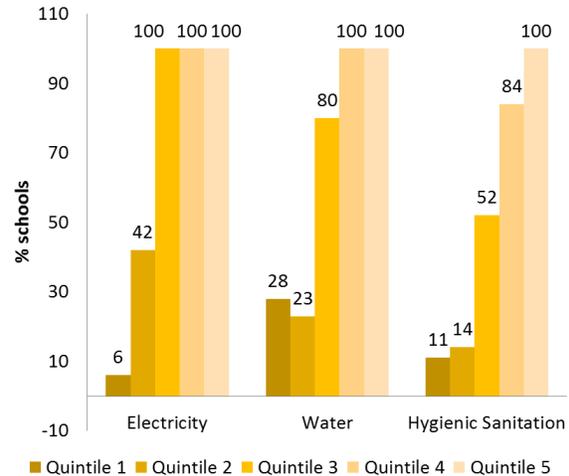
electricity in Comarca Embera, which is a territory of indigenous population (Figure 49). Besides, Panama is below the LAC average in access to all basic supplies.

**Figure 48: Panama, public education spending on infrastructure 2008-2012**



Source: Contraloría

**Figure 49: % Schools with basic supplies Panama by quintiles (%)**

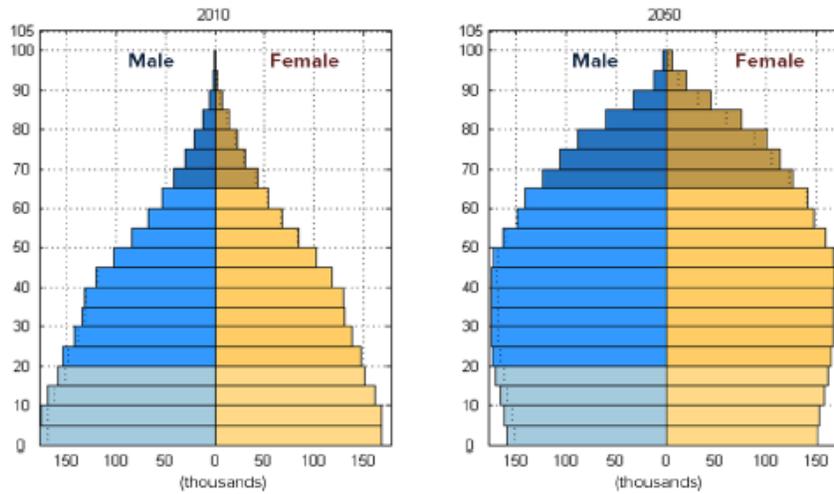


Source: SERCE-UNESCO (2006)

**Over the next two decades, the projected increase in the student population will require an increased number of teachers (and of funding) to keep current coverage at the primary and secondary levels.** Demographically, Panama has been transitioning from an expansive population pyramid in 1950 to a population pyramid in 2010 much more line with its level of development. Looking forward, UN projections (United Nations, 2013) estimate a continuation of this trend towards a near-stationary population distribution by 2050 (Figure 50). In the next two decades, however, the student population should continue to grow. Bruns and Luque (2015) project a 2.9 percent increase in the Panamanian student population aged 4-18 between 2010 and 2015. Figure 51 shows that, by 2025, to maintain the current student-teacher ratio (and assuming constant enrollment ratios), Panama will need a 4.2 percent increase in the number of teachers<sup>41</sup>.

<sup>41</sup> Bruns, Barbara and Luque, Javier, *Great Teachers: How to raise student learning in Latin America and the Caribbean* (Washington: 2015) The World Bank Group.

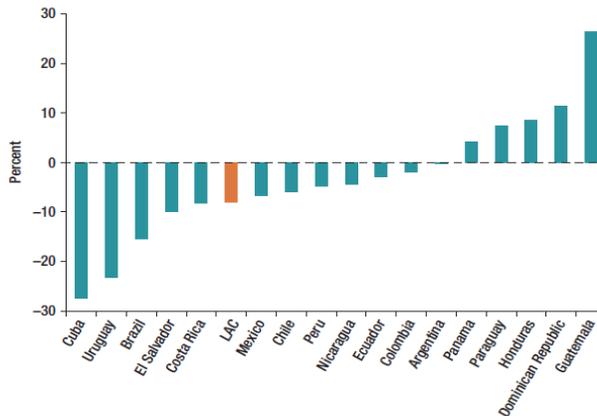
**Figure 50: Demographic trends in Panama 2010 compared with 2050  
Total Population by Age group and Sex;**



Source: ICPD, *Country Implementation Profiles: Panama* (2012). Population Pyramids are based on medium variant of the 2010 revision of the World Population Projections (WPP) by UN Population Division.

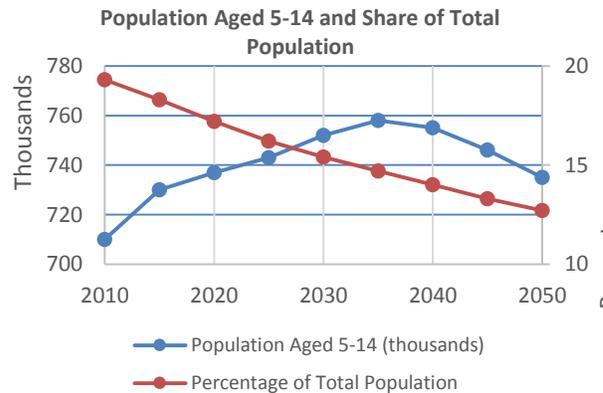
**This scenario contrasts with that of most Latin American countries with more advanced stages of population aging.** In these countries, the forecasted decrease in student enrollment allows them to eventually reallocate resources to improve quality by even maintaining the number of teachers and dedicating the increased funding towards quality (**Error! Reference source not found.**). In contrast, in the next two decades, Panama will likely need increases in investment to increase school quality. In particular, the UN estimates (United Nations, 2013) show that student enrollment will reach a peak around 2035, after which the population aging process may allow to increase quality by maintaining actual funding levels (Figure 52).

**Figure 51: Projected change in the stock of teachers needed in LAC, 2010-2015**



Source: Bruns, Barbara and Luque, Javier (Washington: 2015) *Great Teachers: How to raise student learning in Latin America and the Caribbean* The World Bank Group

**Figure 52: Demographic Projections in Panama: Projections on Student Population**



Source: United Nations (2013) *World Population Prospects: The 2012 Revision, Volume II, Demographic Profiles* (ST/ESA/SER.A/345)

### IV.3 Institutional Arrangements

#### Legal framework and key players

**The Political Constitution of 1971 established the foundation and structure of Panamanian education.** Education in Panama is legally grounded on a group of seventeen articles (91 to 108) of the Constitution of 1971 and its modifications between 1978 and 2004. Key constitutional principles with regards to education include: i) the universal right to education, ii) the assignment of responsibility to the state of the management of public education, iii) the freedom to teach, iv) the right of private educational institutions to exist and compete with the public system, v) the free access to education for all pre-university levels, and vi) the compulsory nature of basic general education. Regarding higher education, the Constitution also guarantees the autonomy of the *Universidad Oficial del Estado* (Official State University) to organize curricula and empowers the legislature to create regulatory arrangements for the creation, approval, and supervision of education programs.

Panama presents a heavily centralized education system, but changes in education are being increasingly framed by a complex network of actors from the government, the private sector, and civic society such as advisory councils (CONACED), business associations (COSPAE, FUNTRAB), public-private partnerships (CNC), institutions of non-formal education (INADE), teacher unions (MPU, ASOPROF), and private institutions of education.

**While the Ministry of Education centralizes many functions in the system, other actors (workforce, unions, the private sector, and the public) are gaining a powerful influence in the institutional framework and decision-making process.** The Ministry of Education (MEDUCA) is the main player in the daily operations and supervision of education in Panama. The education system is comprised of both public and private institutions (Figure 53 and, for a more detailed explanation, see Planells [2014]). Traditionally the *Comisión coordinadora de la educación nacional* supports Meduca in the pedagogical areas and CONACED is a consulting body, including prominent representatives of the academic and civil society. Institutions such as the *Consejo para la Asistencia Ocupacional (COSPAE)* gather representatives from the business sector to help elevate the quality and competitiveness of the education system; the *Fundación del Trabajo (FUNTRAB)*, which unites business and union leaders, had led proposals for educational reforms. The *Centro Nacional de Competitividad (CNC)* is another important association of multiple sectors (business associations, workforce, and high government officials), which has effectively pushed for better coordination and partnerships between the public and private sectors with initiatives such as “Competiveness Forums”. Finally, the *Instituto Nacional de Formación Profesional y Capacitación para el Desarrollo Humano (INADE)* is another institution that continues to gain

relevance, as it provides an alternatives for student to exit formal education towards programs that combine high-level technical education alongside traditional vocational training.

**Teacher unions play an important role in the education system, and exert political influence through the media, political campaigning, protests and strikes.** The unions became especially relevant during reforms of teacher-related issues, such as the recent revision of the *Ley Orgánica de Educación* and the legislation of the *Ley de Carrera Docente*. Some of the major teacher unions are the *Magisterio Panameño Unido (MPU)* and the *Asociación de Profesores de Panamá (ASOPROF)*. Private education, also called “*particulares*”, are another important and growing actor in the educational supply, encompassing in 2014 16 percent of student enrollment. The sector provides an alternative and thus competition and accountability to the public system, while filling gaps left by public institutions. In effect, private education has benefited from increasing demand of qualified workers and a general lack of satisfaction with public offerings. Similarly, the private sector has gained a more robust role and participation in education as the economy continues to grow, labor training needs become more sophisticated, and vocational training gains predominance.

**Figure 53: Education sector: Main internal institutions**



The previous sections have discussed some of the sector’s most important issues. The three main challenges or policy opportunities to improve the delivery of high quality education to Panamanian children (see Planels, 2012) are discussed below.

**Lack of coordination across the different sector players**

**The regulatory framework overseeing the education sector in Panama is complex and uncoordinated.** The laws range from the national Constitution<sup>42</sup>, to laws approved in the *Asamblea Legislativa*, presidential or ministerial executive degrees (*decretos ejecutivos*) or resolutions signed by the education minister/secretary. Often these resolutions and decrees are unilaterally defined with a reduced consultation of the main education players ultimately resulting in poor coordination and ownership of the decisions by the civil society. This creates conflicts across different players, promotes centralization of decisions in the political power and fosters discretion and uncertainty in the definition of rules and roles in the sector. One clear example is the lack of strategic vision and coordination in the area of TVET, where laws and regulations are complex, and often attribute overlapping roles to different players. For example the *Ley Orgánica de Educación* (artículo 15) recognizes a coordinating role to MEDUCA in the areas of technical education and training. According to this law, MEDUCA should lead the coordination with INADEH. In parallel, *Decreto Ley No. 8 del 15 February 2006* (Consejo de Gabinete, 2006) created INADEH as the main state body for TVET. And, at the tertiary level, the *Ley Orgánica de la Universidad de Panamá* establishes that the four public universities should have full academic, administrative and financial autonomy for the areas of technical education. (Asamblea Nacional, 2005). Moving forward, coordination across the different education players including the private sector especially in tertiary education and technical education and training programs could be strengthened.

#### **Outdated legal framework related to teacher selection and career development**

**The *Ley de la Carrera Docente*, defined in the Constitution, has never been approved and all hiring decisions are highly concentrated in MEDUCA.** Instead, some of the most important issues are regulated by the *Ley Organica de educacion* (Titulo IV). This law, however, does not regulate any issues related to the collective bargaining or solving on the job conflicts. In practice, all the hires, promotions and fires of teachers or school staff have been throughout the years extremely concentrated in MEDUCA. In addition, only few have a temporary nature. One important recent achievement has been, however, the implementation of a more efficient online system to locally request and fill new hires: *Modulo de Necesidades del Sistema de la Administracion de la Estructura de personal (SAEP)*. Finally, teacher pay is traditionally delinked from performance, with some of the special pay increases being defined *ad-doc* and with significant time delays.

**Teacher training programs are also insufficient outdated and have produced limited results.** Over the years, there has been an effort to improve teacher training, traditionally executed by the *Dirección Nacional de Recursos Humanos* in close coordination with the *Direcciones Regionales de Educación* and the *Coordinaciones de Recursos Humanos*. The

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<sup>42</sup> There is a group of 17 articles in the constitution (art. 91 al 108) which are part of chapter 5 del título III de la CONSTITUCIÓN POLÍTICA de 1972 y sus modificaciones de 1978, 1983, 1993, 1994 y 2004 (CONSTITUCIÓN POLÍTICA DE LA REPÚBLICA DE PANAMÁ, 2004).

training include different modules including teacher quality, ethical issues and leadership, however, in practice it presents insufficient results. The tests led by SENACYT have shown that there are still large skills gaps in most teachers especially those in the areas of science (including Physics and Math) (see, *Secretaría Nacional de Ciencia y Tecnología* (SENACYT, 2014). In practice, the training is also offered to a reduced number of teachers (estimated at 1,850 as of 2012 according to Plannel, 2014). Moving forward, the legal framework overseeing teacher career and and pay could be updated so that it becomes more flexible and quality oriented. Autonomy and accountability in managing local school staff could also be promoted.

### **Lack of solid monitoring and evaluation framework**

**Even though MEDUCA regularly presents programs and organizes forums, the quality and frequency of data collection can be significantly improved.** MEDUCA regularly organizes discussion forums and presentations on their main programs and initiatives. However, a systematic focus and a monitoring and evaluation culture in the education sector is far from existing. For example, until 2010, MEDUCA published regularly basic education statistics including average years of schooling per graduate, indicators of internal efficiency, share of schools with water, electricity and internet, the student-teacher ratio, share of teachers with qualifications, share of multi-grade schools ( see Ministerio de Educación de Panamá, 2010). However, since then these indicators are no longer systematically available.<sup>43</sup> Furthermore, few initiatives by independent organizations are aimed to fill out this data gap. And the costs for this lack of data and precision are high. For example, it is extremely difficult to access information on the real per student spending, often with information poorly accounted and double counting of financial incentives.

**Moving forward, it would be critical for MEDUCA to revamp the reliability of their data and education indicators (e.g. fostering the participation in standardized tests) and invest more resources in the monitoring and evaluation of programs.** It would be essential for the ministry to improve the accounting of information on the investments or costs of education. The most reliable information on spending is still the one published by the *Controladuría General de la República* but it is only available with a two-year lag. In addition, there is a strong consensus that there is need create a national evaluation system promoting the comparison of indicators and results across schools and regions (e.g., Consejo Nacional de Educación (CONACED), 2006). There are also no standardized tests regularly collected to evaluate students or teachers, school or regional directors/supervisors. Also, Panama last participated in PISA in 2009. Thus, it would also be critical to promote the regular participation of Panama in regional and international initiatives such as PISA with the ultimate aim of improving the international benchmarking of education results.

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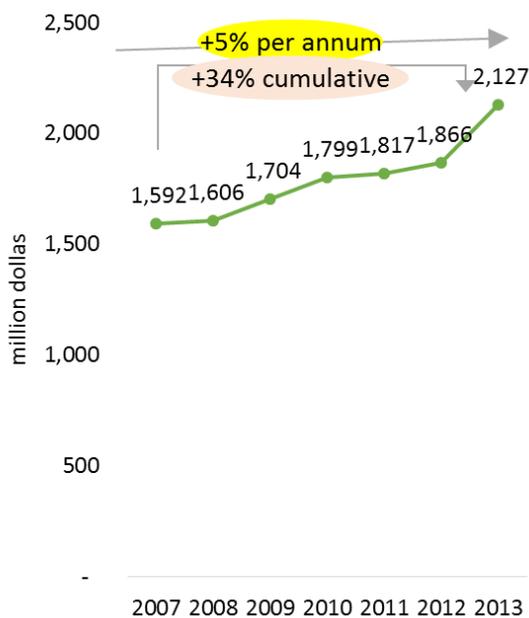
<sup>43</sup> For example in the 2010 Meduca report there were 155 indicators included while in the 2013 report there were only 19 ( Meduca, 2010, 2012).

## V Performance and Challenges in Health

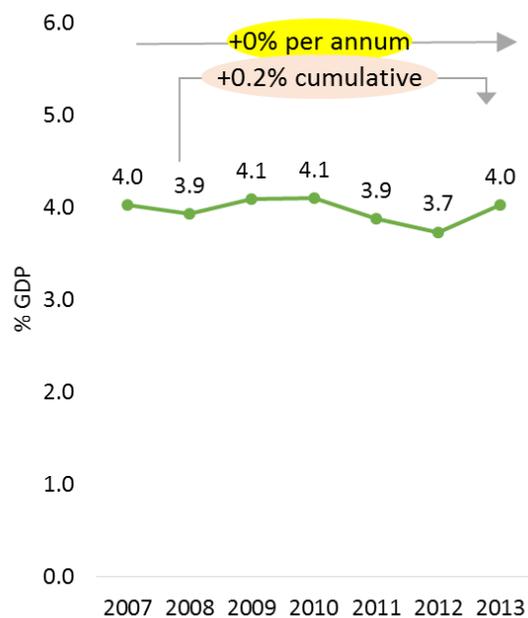
### V.1 Recent Evolution of Health Public Spending

**Public spending on health grew in real terms but remained constant as a percentage of GDP.** From 2007 to 2013, public spending in health grew at 5 percent per year on average and 34 percent cumulatively (Figure 54). In 2007, public spending on health was US\$1, 592 and continued to increase throughout the years reaching US\$2,127 in 2013. Despite the increase in real public spending in health, public spending on health as a percentage of GDP remained constant at 4 percent from 2007 to 2013 period (Figure 55). This can be explained by Panama’s growth in GDP across this same period.

**Figure 54: Public Spending on Health – Constant dollars – PPP (2007)**



**Figure 55: Public Spending on Health as a % of GDP (%)**

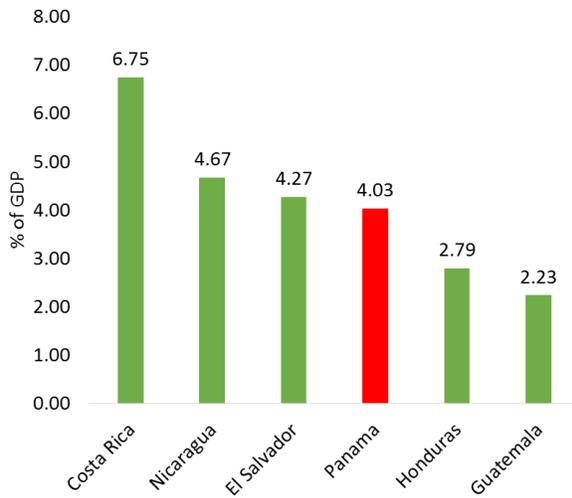


Source: World Bank SSEIR / ICEFI social spending database

Source: World Bank SSEIR / ICEFI social spending database

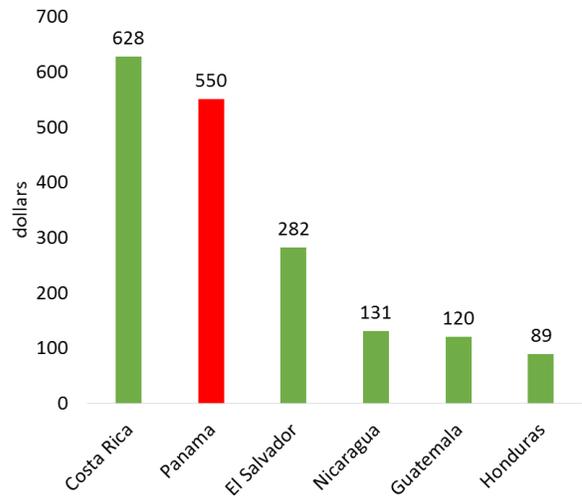
**Panama’s public spending on health as a percentage of GDP among the lowest in CA but among the highest in real per capita terms.** In comparing Panama with its neighboring Central American countries, the public spending on health as a percentage of GDP in Panama (4.03 percent) is behind Costa Rica (6.75), Nicaragua (4.67) and El Salvador (4.27) (Figure 56). However, per capita public spending on health is second to Costa Rica and far above the other Central American countries of El Salvador, Honduras, and Guatemala (Figure 57).

**Figure 56: Public Spending on Health as a % of GDP by countries**



Source: World Bank SSEIR / ICEFI social spending database

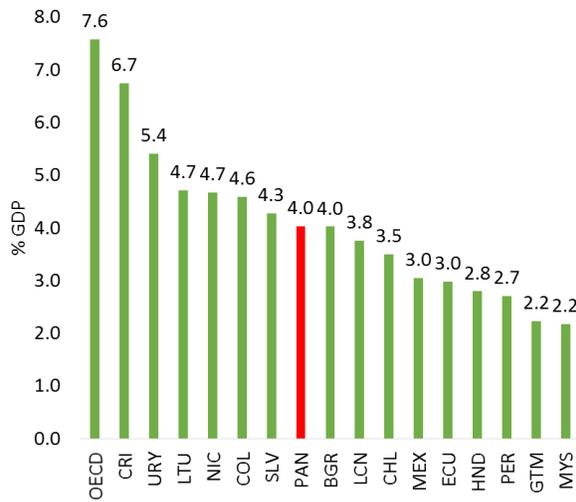
**Figure 57: Public Spending on Health – Per capita Constant dollars – PPP (2007) by countries**



Source: World Bank SSEIR / ICEFI social spending database

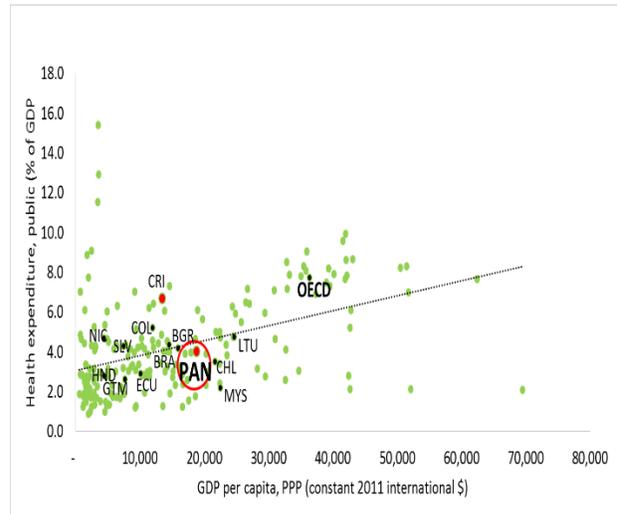
**Panama’s public health expenditures are in line with its GDP compared regionally and globally.** In 2013, Panama’s public health expenditures accounted for 4.03 percent of GDP and its GDP per capita was \$ 18,793(PPP constant 2011 international). In comparing Panama to countries outside of Central America with similar GDP per capita, Panama is above Chile, Mexico, Ecuador, Peru, and Malaysia. It is on par with El Salvador and Lichtenstein and below the OECD average, Costa Rica, Uruguay, Lithuania, Colombia, Nicaragua, Brazil, and Bulgaria (Figure 58). In addition, , Panama’s public health expenditures as a percentage of GDP falls right on the GDP line indicating that its level of expenditure is in line with its GDP (Figure 59).

**Figure 58: Health expenditure, public (% of GDP)**



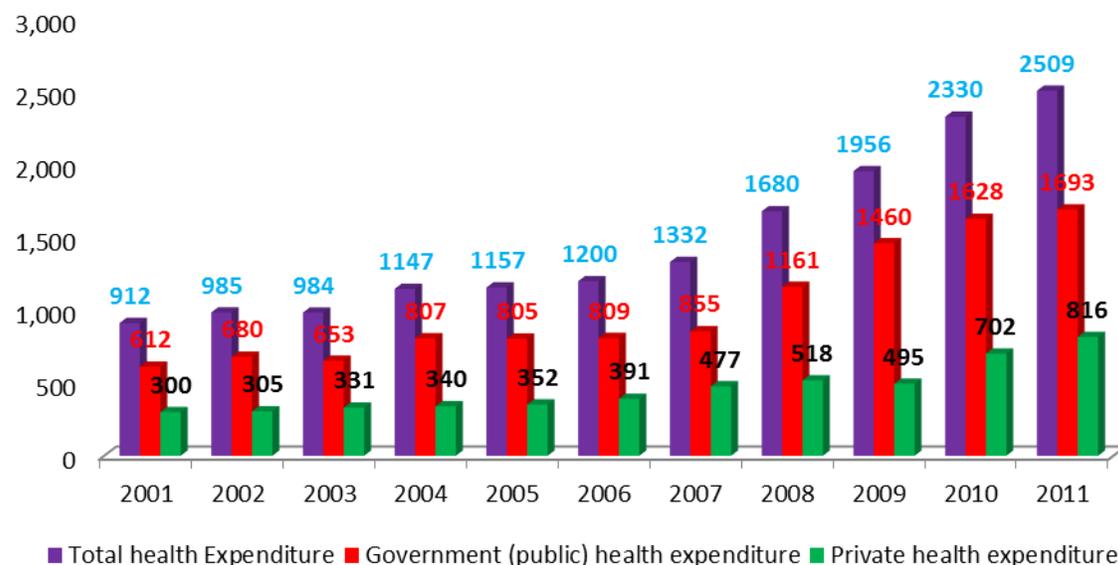
Source: World Bank SSEIR / ICEFI social spending database for Central America except Nicaragua. WDI for the rest of the countries. Note: Bulgaria, Costa Rica, Lithuania, Malaysia, Uruguay with similar GDP per capita as Panama.

**Figure 59: Public Health expenditure (% of GDP) vs GDP per capita, PPP 2012**



Source: World Bank SSEIR / ICEFI social spending database for Central America except Nicaragua. WDI for the rest of the countries. Note: Bulgaria, Costa Rica, Lithuania, Malaysia, Uruguay with similar GDP per capita as Panama.

**Since 2001, Government real health expenditures have increased but have continued to absorb a constant share of Panama’s health expenditures.** In 2001, the Government covered 67 percent of the country’s health expenses. Across the 2001 to 2012 period, this figure reached its highest point in 2009 with the Government absorbing 75 percent of the country’s health expenses. However, in 2010 and 2011 the Government’s share of the country’s total health expenditures decreased to 70 and 67.5 percent respectively. As a result, despite the yearly fluctuations, overall, the average percentage of health expenditures absorbed by the Government has remained at a constant level. Private health expenditures have increased in real terms and continue to represent approximately 33 percent of total health expenditures across the 2001 to 2011 period (Figure 60).

**Figure 60: Estimates of Health Spending in Panama (US\$ million in constant terms)**

Source: Panama Ministry of Health 2013. Situación de salud de Panamá.

**Pharmaceutical expenditures in Panama have steadily increased, requiring more attention to availability, affordability and quality of medicines.** Total expenditures on pharmaceuticals have steadily increased from USD101.6 million in 2007 to \$226.5M in 2012, a large share of which are for the treatment of chronic diseases, followed by the use of medicines to address more complex diseases and the inclusion of new vaccines in the immunization scheme.<sup>44</sup> In light of the increasing pharmaceutical expenditures, the MOH has been implementing the National Policy on Medicines since 2009. Also, the Government's 2010-2015 National Health Policies mandate the health system to redefine the supply chain of medicines to assess how processes can be strengthened and to ensure availability, affordability, and quality of medicines. In order to oversee progress, the availability and flow of information on medicines would also need to be improved.

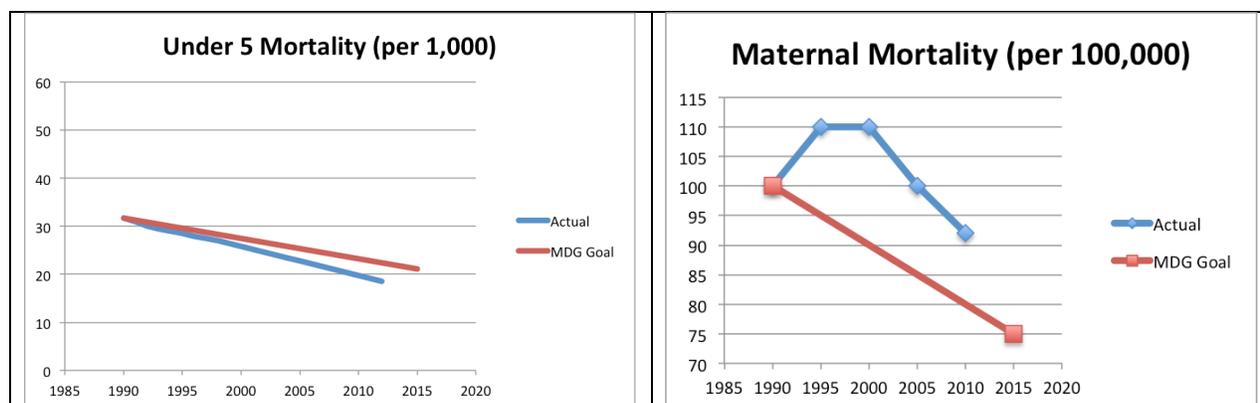
## V.2 Performance of Health Indicators

**Panama has made progress towards the MDGs having met the MDG 4 target to reduce child mortality, yet further work is needed to reach the MDG 5 target for maternal mortality.** As the country works to achieve the MDG goals, they have seen a drop in the mortality rate of children under-five from 33 per 1,000 live births in 1990, to 20 in 2011, surpassing the MDG 4 goal for child mortality and falling below the regional average of 23 (Figure 61). Maternal mortality has also seen a decline from 100 deaths per 100,000 births in

<sup>44</sup> Instituto Conmemorativo Gorgas de Estudio de la Salud. Acceso, Gasto y Disponibilidad de los Medicamentos en Panamá, 2007-2012. Documento Diagnóstico.

1990 to 92 in 2010, but the country is still far from achieving the MDG 5 target rate of 75 by 2015 and has a higher incidence of maternal mortality compared to the regional average of 80.<sup>45</sup>

**Figure 61: Panama's Progress towards meeting the MDGs for U5MR & MMR**



Data Source: WDI 2013 (World Bank World DataBank).

**Overall, Panama is seeing mixed results in key health outcome indicators despite having made progress related to child health.** Mortality of children under-five is steadily declining, dropping from 32 per 1,000 live births in 1990 to 19 per 1,000 live births in 2012, having surpassed the MDG 4 target. Likewise, malnutrition among children under-five has decreased, dropping from 5.1 percent in 2003 to 3.9 percent in 2008 when measured by weight (Table 2). However, maternal mortality rates remain high having risen to 110 per 100,000 live births in 2000 and then decreasing to 92 per 100,000 live births in 2010, still higher than the regional average and the MDG 5 target. The prevalence of HIV among individuals ages 15-49 has declined from 1.2 percent in 2003 to 0.8 percent in 2011, still higher than the regional average of 0.4 percent in 2011. Incidence of tuberculosis (TB) has seen a slow rise, increasing from 47 per 100,000 people in 1990 to 48 in 2011.<sup>46</sup> Immunization coverage for children 12 to 23 months has also seen mixed results. Measles vaccination coverage has increased from 95 percent in 2003 to 97 percent in 2011. DPT vaccination coverage on the other hand has declined from a 98 percent coverage rate in 2003 to 87 percent in 2011. The percentage of women having deliveries by skilled health professionals has risen from 86 percent in 1992 to a high of 93 percent in 2003, but fell more recently to 89 percent in 2009.

**Table 2: Trends in MOH Facility Expansion, 1990 to 2012**

Indicator	Starting Value	Year	Mid Point Value	Year	Latest Value	Year	Progress
Maternal Mortality (per 100,000 births)	100	1990	110	2000	92	2010	Mixed: Rates initially rose before dropping to current levels.
Under Five Mortality Rate	32	1990	24	2003	19	2012	Positive: Steady Decline

<sup>45</sup> World Bank DataBank, 2013.

<sup>46</sup> World Bank DataBank, 2013.

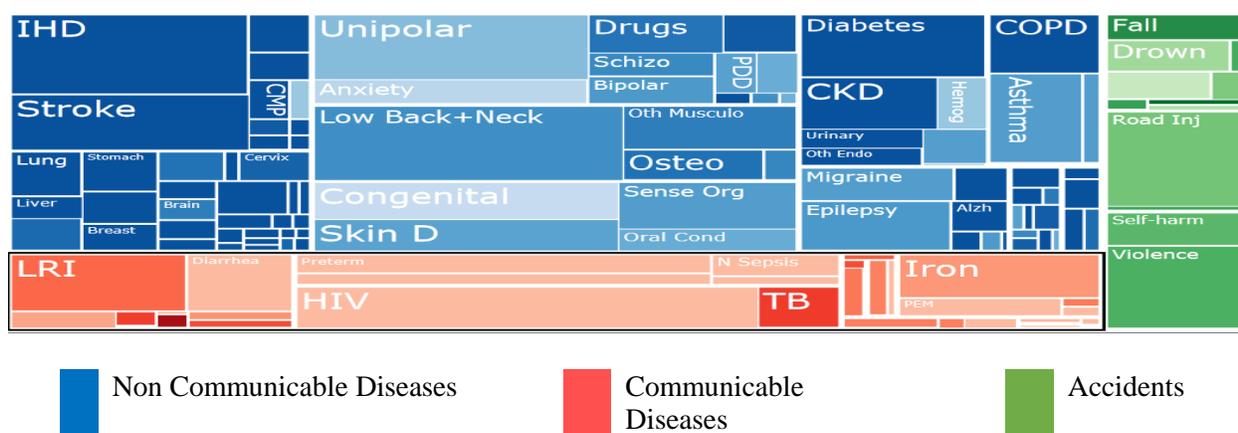
Panama Social Sector Expenditure and Institutional Review

(per 1,000 live births)							in the deaths of children <5
Malnutrition for Children <Five (measured by weight)	--	--	5.1%	2003	3.9%	2008	Positive: Reduced rates of malnutrition
Prevalence of HIV (% of pop. Ages 15-49)	0.8	1990	1.2	2003	0.8	2011	Mixed: Recent Decline in HIV but stagnant overall
Incidence of TB (per 100,000 people)	47	1990	47	2003	48	2011	Poor: Slight increase TB incidence
Immunization Coverage for DPT (% of children ages 12-23 months)	86%	1990	98%	2003	87%	2011	Mixed: Increased coverage and then a recent decline close to original levels.
Immunization Coverage for Measles (% of children ages 12-23 months)	73%	1990	95%	2003	97%	2011	Positive: Steady increase in immunization coverage
Percentage of births attended by skilled health staff	86%	1992	93%	2003	89%	2009	Mixed: Initial increase but then recent decline in the % of women having deliveries by doctors.

Data Source: WDI 2013 (World Bank DataBank)

**Panama is also facing the burden of Non-communicable diseases (NCDs) which are the leading causes of mortality and morbidity in the country.** According to 2010 WHO data, NCDs accounted for 69 percent of all deaths in Panama with the four leading causes being cardiovascular diseases, cancers, respiratory diseases, and diabetes. This epidemiological transition towards NCDs (Figure 62 reflects the distribution of the disease burden) is projected to have major economic consequences with direct impacts on household income and spending, productivity as well as national income. In this regard and in the face of ongoing fiscal difficulties encountered by the State, more attention must be paid to the resource requirements and financial sustainability of NCD prevention programs.

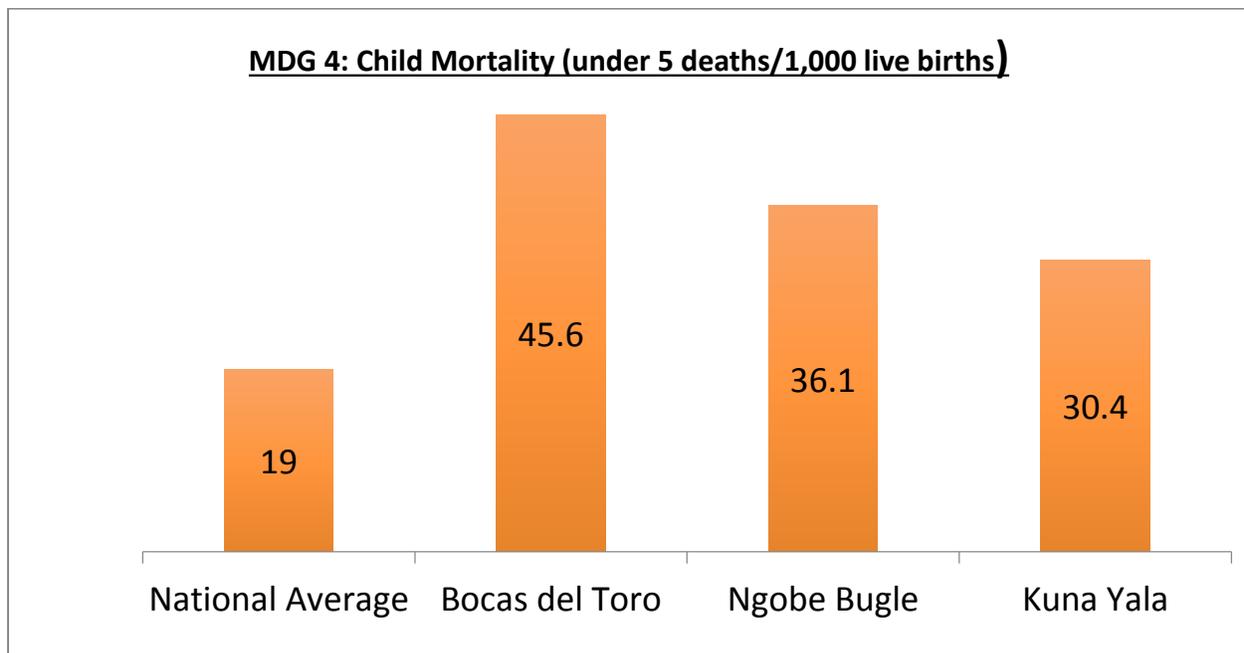
**Figure 62: Panama’s Distribution of its Burden of Disease**



Source: International Health Metrics Institute

**One of the greatest challenges facing the health sector is the inequality that exists in terms of access and quality of health care for the rural, indigenous population.** While health outcomes are improving in many of the key areas, individuals from rural poor and indigenous households experience lower health outcomes compared to other parts of the country. For instance, Figure 63 shows that mortality rates for children under 5 in Bocas del Toro and the indigenous areas Ngobe Bugle and Guna Yala are higher than the national average. The child mortality national average is 19 percent while child mortality in Bocas del Toro, Ngobe Bugle, and Guna Yala rates are 45.6, 36.1, and 30.4 percent, respectively.<sup>47</sup> Infant mortality in the rural areas is also much higher than the national rate of 11.9 per 1,000 live births, with rates of 26.6 in Bocas del Toro and 22.3 in Guna Yala per 1,000 live births.<sup>48</sup> The disparity in health outcomes is due largely to inequitable health access for the poor, with the majority of medical care centralized in the wealthier urban areas.

**Figure 63: Panama’s Child Mortality Rate, National Average compared to Rural and Indigenous Areas**



Source: MOH 2013

**The inequitable access to health services is further accentuated by the concentration of the health workforce in the urban areas as opposed to the rural, indigenous areas.** Panama has a rate of 32.8 health workers (doctors, nurses, and dentists) per 10,000 people which surpasses the

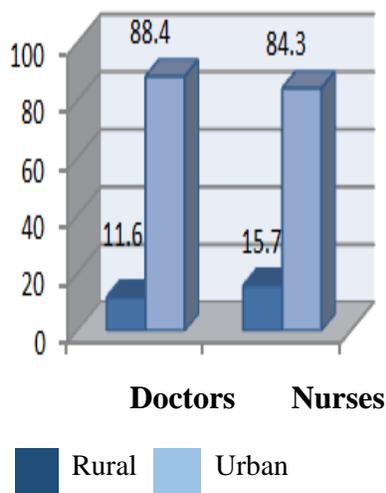
<sup>47</sup> Indicadores Basicos de Salud, Panama 2009-2010. Ministerio de Salud de Panama y la Organizacion Panamericana de la Salud.

<sup>48</sup> Health in the Americas 2012: Panama Country Chapter. Pan American Health Organization.

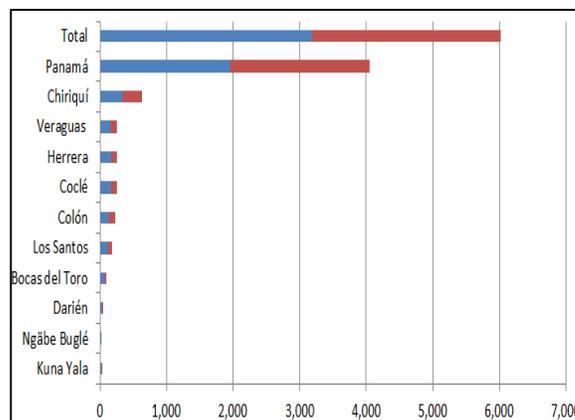
goal established by the Pan-American Sanitary Conference of 25 per 10,000.<sup>49</sup> However, a further look at this rate reflects inequalities in the distribution of health personnel. Only 11.6 percent of doctors and 15.7 percent of nurses provide services in the rural areas of the country (Figure 64)<sup>50</sup>. This means that while a doctor in the province of Panama has a catchment population of 422 patients, a doctor in Bocas del Toro and Ngäbe-Buglé have catchment populations of 1,293 and 7,125, respectively<sup>51</sup>. In addition, 2,099 of the country's total of 2,843 medical specialists, 74 percent, are concentrated in the province of Panama (Figure 64). This is in stark contrast to the low number of medical specialists in the rural areas of Chiriquí (282), Bocas del Toro (28), and Darién (5), which is further felt in the indigenous comarcas of Guna Yala (2) and Ngäbe-Buglé (0)<sup>52</sup>. This unequal distribution of health workers is further strained by 49 percent of doctors and nurses working at the secondary level of care, 32 percent working at the third level of care, leaving the primary level as the least attended with only 19 percent.<sup>53</sup>

**Figure 64: Geographic (Urban vs Rural) Distribution of Health Workers**

**Distribution of Doctors and Nurses by Rural and Urban Areas, 2012**



**Distribution of Medical Specialists by Province, 2012**



Source: Developed by study team based on 2012 data provided by INEC 2012

<sup>49</sup> WHO/PAHO (2011). Manual de Medición y Monitoreo. Indicadores de las Metas de Recursos Humanos para la Salud. Washington DC, EEUU

<sup>50</sup> Authors calculation based on 2012 data from INEC on the distribution of doctors by región, specialization, and sex.

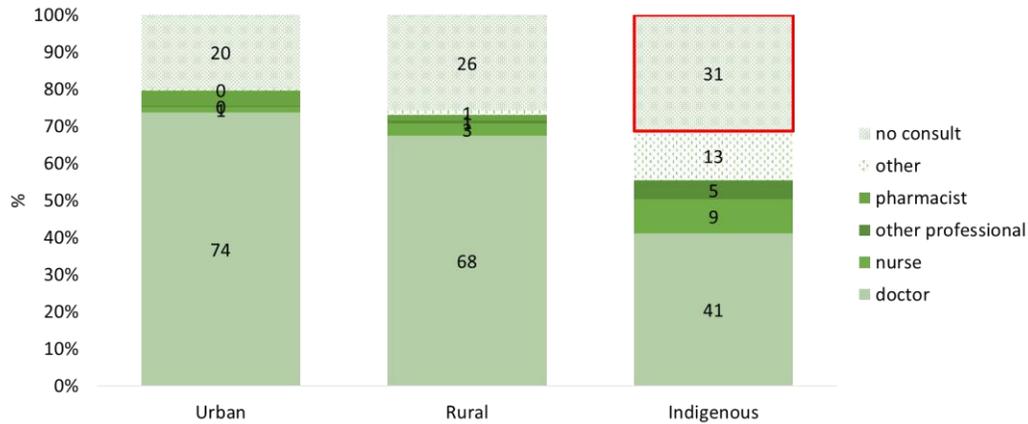
<sup>51</sup> Contraloría General de la República (2013). Camas, médicos(as), odontólogos(as) y enfermeras(os) en las instalaciones de salud en la república, por área: marzo de 2008-11 y 2012, según institución, provincia y comarca indígena. Panamá, Panamá

<sup>52</sup> Ibid 7

<sup>53</sup> Ibid 7

**As a result of the disproportionate distribution of health personnel, indigenous peoples have limited access to doctors.** Only 41 percent of indigenous individuals consulted with a doctor compared to 74 percent of urban dwellers and 68 percent of rural dwellers (Figure 65). In addition, a higher percentage (31%) of indigenous peoples do not consult any health professional when ill compared to those living in urban areas (20%) and even rural areas (26%).

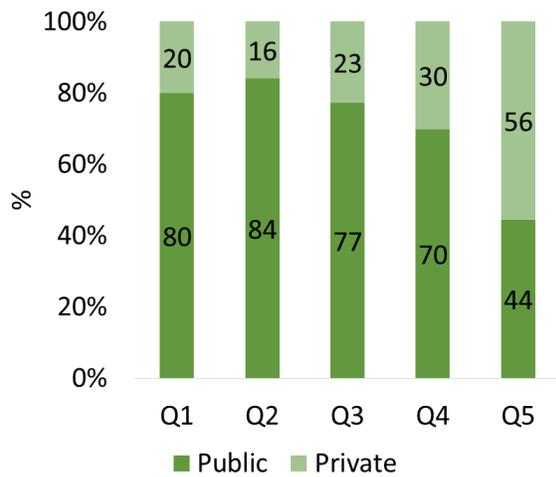
**Figure 65: Professional consulted by area and indigenous population, 2008**



Source: World Bank SSEIR team’s analysis of household surveys, authors’ calculations using ENV, 2008.

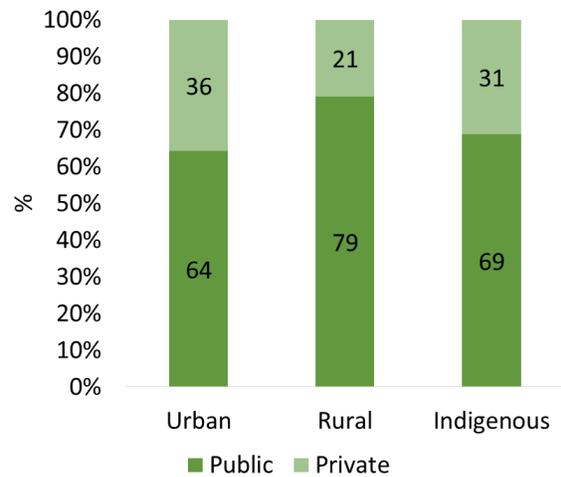
**Most of the sick consult public providers.** A significant proportion of the population including indigenous peoples use public providers when ill with the exception of households in the highest income quintile, majority of whom use private services (Figure 66 and Figure 67). Also, the use of public facilities is higher in rural areas (79%) compared to urban areas (64%).

**Figure 66: Utilization of health providers by quintile, 2008**



Source: World Bank SSEIR team's analysis of household surveys, authors' calculations using ENV, 2008.

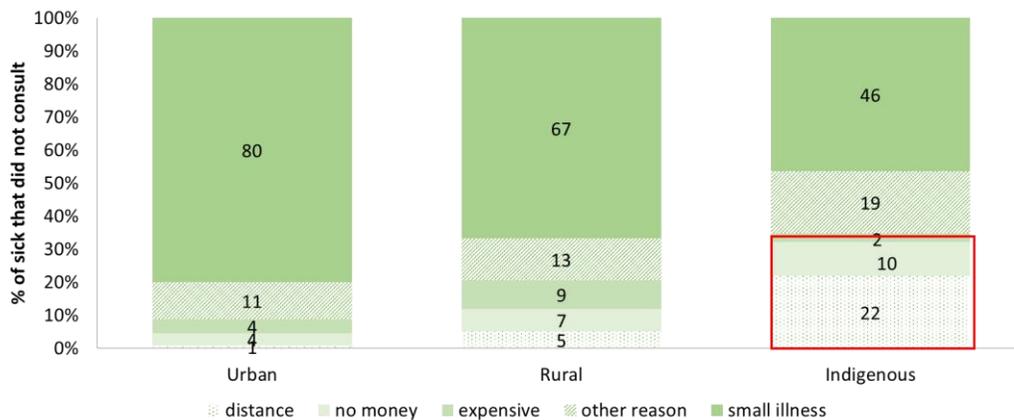
**Figure 67: Utilization of health providers by area and indigenous population, 2008**



Source: World Bank SSEIR team's analysis of household surveys, authors' calculations using ENV, 2008.

**Distance is a significant factor for not seeking care among the indigenous.** Although the main factor cited for not seeking care is common among urban, rural and indigenous populations in Panama, distance is the second major factor cited by indigenous peoples for not to seeking care. (Figure 68). In addition, financial (expensive or no money) factors also play an important role in not seeking care for both rural and indigenous populations.

**Figure 68: Reasons for no consultation by area, 2008**



Source: World Bank SSEIR team's analysis of household surveys, authors' calculations using ENV, 2008.

**Despite the level of public expenditures on health and economic growth the country has experienced in recent years, the share of out of pocket costs have also risen.** Total health expenditure increased between 2003 and 2011, resulting in higher than average levels of spending compared to the rest of the Central America and Caribbean region. The average amount of money spent on each person for health more than doubled from \$315 in 2003 to \$703 in 2011, rising above the regional average of \$661. Health expenditures now account for 8.2 percent of GDP in 2011 compared to 7.6 percent in 2003 and are higher than the regional average of 6.7 percent. Because Panama provides universal health coverage, the government absorbs a significant and constant share of health expenditures, covering 67.5 percent of health expenses in 2011, up from 66.4 percent in 2003, yet constant compared to 67 percent in 2001.<sup>54</sup> Individuals are also incurring a greater burden of the expense with out of pocket expenditures rising from 80.9 percent in 2005 to a high of 84.4 percent in 2009 and then back down to 82.5 percent in 2011.

**Although Panama's public spending on health is relatively high in the region, budget execution has decreased in recent years especially for the CSS.** Health sector public spending relative to its budget declined from 91 percent in 2008 to 78 percent in 2013. The CSS's overall budget execution rates decreased from 87.5 percent in 2007 to 73.7 percent in 2012. During this period, its capital budget execution rate tended to be low (around 50-60%) but its recurrent budget execution rate was 92 percent in 2007 and declined to 78.8 percent in 2013. On the other hand, the MOH's overall budget execution rates tended to be over 91percent from 2007 to 2012, but it decreased to 88 percent in 2013. Its recurrent budget execution rates were above 93 percent from 2007 to 2013. However, its capital budget execution rates decreased from 89 percent in 2007 to 65 percent in 2013. The main reasons behind these decreases would need to be identified.

**Panama's above average health expenditures have generated mixed health outcomes pointing to efficiency gains that can be made by addressing the fragmentation across the MOH and CSS to better coordinate and integrate health service delivery.** The health system is fragmented with two different funding sources, resulting in duplication and inefficiencies. The Ministry of Health (MOH) and the Social Security Fund (Caja de Seguro Social, or CSS) both finance Panama's public health sector. The CSS covers 81.4% of the population that are either directly insured or are dependents of the insured and provides pensions, medical services, and workers compensation. The remaining less than 20 percent are covered by the MOH network which provides services to the entire population, financed through general taxes.<sup>55</sup> Both the CSS and MOH run primary, secondary, and tertiary care health facilities across the country and each has established its own health information system with independent modules that are not linked

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<sup>54</sup> World Bank Data Bank, 2013.

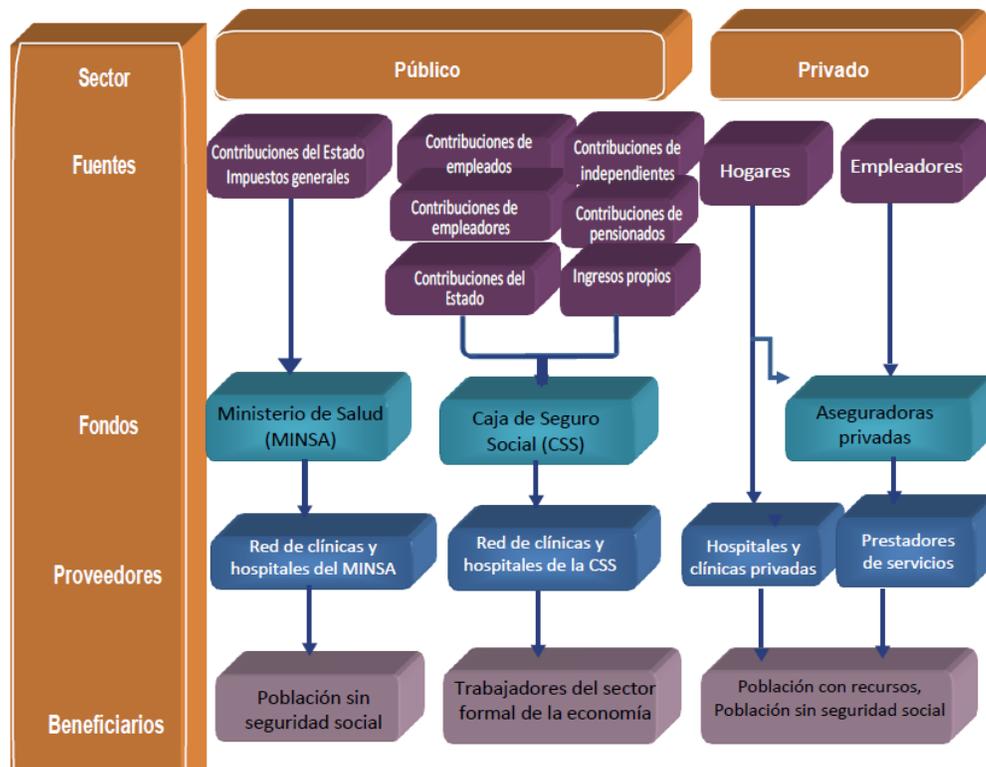
<sup>55</sup> In 2009 the CSS had 2,754,761 beneficiaries out of a population of 3.4 million people. Source: Internal Document, Panama - Strengthening the Performance of Basic Health Services, April 2011.

across institutions. Despite reform efforts to merge the two funding streams of Panama’s public health sector, they remain separate and inefficiency and duplication of services continues to exist.

### V.3 Institutional Arrangements

**Panama’s Ministry of Health and the CSS are the two major provider of health services in the country.** Panama’s Ministry of Health (MOH) holds the stewardship role of the health sector in Panama. MOH is responsible for establishing and approving national health policies. This is stipulated in the 1968 Decreto de Gabinete which created MOH, determines its structure and functions, and establishes the norms for integration and coordination among health sector institutions. Article 4 of this same Decree recognizes the existence of the services of the Caja de Seguro Social (CSS) and the need for further coordination between MOH and CSS. Article 5 leaves the door open for the establishment of health services by other entities, public or private, with the condition that they coordinate their services with MOH. MOH provides health care services to any person accessing care, national or foreign, although with a more limited package of health services compared with other providers. This contributes to the segmentation of the health services offered in the country. Figure 69 below provides an overview of the structure of Panama’s health system

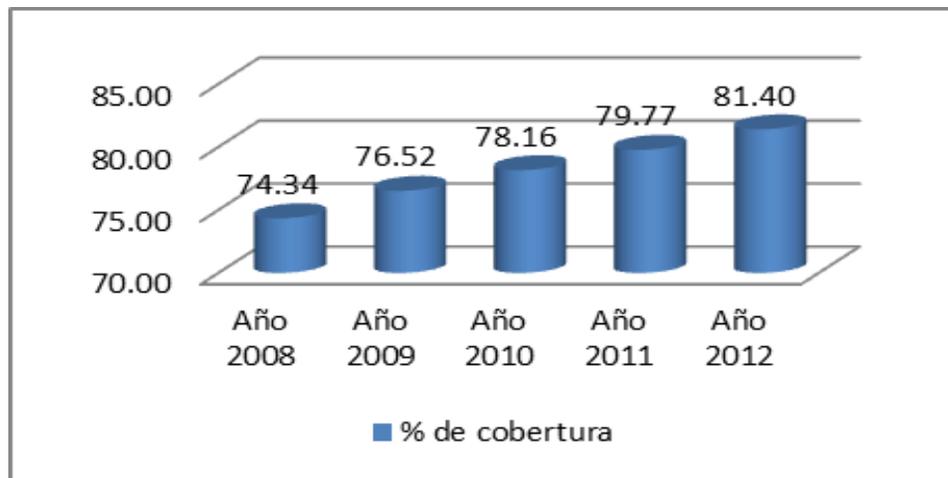
**Figure 69. Structure of Panama's Health System**



Source: MOH 2013. Situación de salud en Panamá. Panamá, Panamá

**The CSS provides health services to its insured population who include the contributors and their direct beneficiaries.** These services are not only for health, but include social security for cases of illness, maternity, disability, old age, widow, orphans, funerals, work-place accidents, and professional illness. The beneficiary population of the CSS which includes those directly insured and their dependents made up 81.4 percent of the total population in 2012 (Figure 70).<sup>56</sup> However, the percentages of health care provided by MOH and CSS do not coincide with these figures. On the one hand, some of the hospitals in the country's interior areas are managed by the CSS, which also provides care to the uninsured. For these cases, a compensation system exists for the services delivered from MOH to the CSS. In 2012, MOH provided care to 33 percent of those insured by CSS in its public facilities. If this percentage is added to the estimated 20 percent of the population not insured by the CSS, MOH ended up covering more than 50 percent of the health services provided to the population.

**Figure 70. Percentage of Coverage of the Population by the CSS in Panama, 2008-2012**



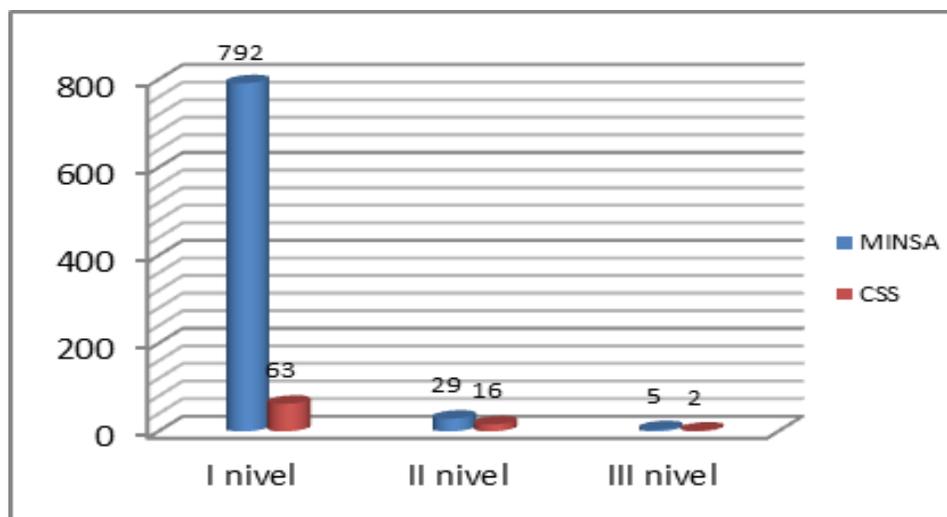
Source: Developed by study team based on 2012 data provided by INEC 2012

**MOH and the CSS both manage primary and secondary care public health facilities across the country and have concentrated tertiary care facilities in Panama City.** In 2013, Panama had a total of 907 health facilities, of which 826 belonged to MOH and the remaining 81 to the CSS. MOH has 792 primary level care facilities with presence in every region of the country, 29 secondary care level facilities, and 5 tertiary care facilities, the latter being all in Panama City. The CSS has 63 primary care facilities, 16 secondary care, and 2 tertiary care, the latter also

<sup>56</sup> MOH 2013. Indicadores Básicos de País 2012. Panamá, Panamá

being all in Panama City (Figure 71). The CSS does not have health facilities in the indigenous comarcas<sup>57</sup>.

**Figure 71. Health Facilities by Level of Care**



Source: Developed by study team based on 2013 data provided MOH and CSS, Listado de instalaciones de salud. Año 2013. Panamá, Panamá.

**Panama has three public hospitals that do not depend hierarchically on MOH nor on CSS.**

These are Hospital Santo Tomás (HST), Hospital del Niño (HN), and the Instituto Oncológico Nacional (ION). These three reference hospitals each have their own Board of Trustees,<sup>58</sup> which include MOH (and CSS in the case of ION), who make strategic, operational, and administrative decisions in each hospital. The budget is assigned as part of the National Budget, through MOH's budget. For this, the hospitals negotiate their budgets directly with MOH. Once the budgets are approved, the management of the hospital is left to the Board of Trustees, in line with the general norms of the Controller General and the Ministry of Economics and Finance. The HST and HN primarily provide care to the uninsured, while ION provides care to the insured population.

**The private sector, be it for or non-profit, also provides care to part of the population.** This care is provided by private health insurance in the case of private health clinics, or by way of agreements with MOH, and private financing in the case of NGOs. According to information from MOH, in 2013, there were 15 private hospitals in the entire country, with a package of health services that varies greatly from one to the other. The General Controller of the Republic estimates that the private sector covers approximately 6 percent.

<sup>57</sup> Ministerio de Salud – CSS (2013). *Listado de instalaciones de salud. Año 2013.* Panamá, Panamá.

<sup>58</sup> Law 4 de 10 of April de 2000 established the Hospital Santo Tomás; Decree Law 17 of 1958 created the Hospital del Niño; Law 11 of 1984 established the National Oncology Institute.

**In addition to MOH and the CSS, implementation of public health policies would also require the participation of other entities.** Table 3 describes these institutions below.

**Table 3. Role in the Health Sector of Panamanian Public Institutions**

<b>Institution</b>	<b>Role</b>
The Gorgas Commemorative Institute of Health Studies (ICGES)	Shares the stewardship role with MOH in the area of health sector research <sup>59</sup> , being the principal producer of this type of research in the country. ICGES coordinates the bioethics committees responsible for regulating health research.
National Secretariat for Disability (SENADIS), in coordination with the National Council on Disability (CONADIS)	Responsible for coordinating the implementation of policies related to the care of disabled individuals, including sanitary interventions. <sup>60</sup>
Panamanian Authority of Food Security (AUPSA)	Coordinates with the MOH for the quality control of food and nutrients
Ministry of Economics and Finance (MEF)	Assigns Budget to each Ministry and state institution and resolves requests for budget modifications or extraordinary allocations. Decides which institutions form part of the health sector when determining which activities to finance from the Health Sector Strategic Plan.
Government Ministry through its Department of Migration, Civilian Protection, and National Police	Collaborates in the control of illnesses and vectors at the borders.
Institute of Aqueducts and National Sewage (IDAAN)	Coordinates with MOH on the interventions for maintenance and improvement of the environmental health network.
Ministry of Agrofisheiy Development (MIDA)	Participates in the elaboration and implementation of the anti-pandemic strategic plan and in the implementation of the International Health Regulations (IHR).
Ministry of Education(MEDUCA)	Collaborates with MOH in the implementation of health plans in the education sector.
Authority of Urban and Domestic Sanitation (AAUD)	Has the responsibility of managing the urban, commercial, and home sanitation services, as

<sup>59</sup> Law 78 of 2003, which restructured and organized the ICGES.

<sup>60</sup> <http://www.senadis.gob.pa>

	well as sanitary land-fills, specifically in the district of Panama.
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Source: Developed by study team based on interviews conducted as part of the SSEIR, 2014

**In addition to the institutions indicated in Table 3 above, professional associations such as the College of Physicians, associations of specialists or other unions, play a role in the development of policies, either by way of a direct request from MOH or through pressure.** Health Committees are inter-sectorial locations that were created in 1970 to strengthen primary care in the health centers. They have the capacity to name administrative personnel. The general perception is that these committees have lost their original community focus to serve other interests. The medical societies play an important role in the development and implementation of health policies, as they are generally called on to participate in topics of their expertise. This is not the case with the unions of professionals.

**MOH and the CSS are both accountable to various entities.** MOH is accountable to the Government itself through Cabinet meetings as well as in having to present reports to the *Secretaría de Metas* (Goal Secretariat, which is part the Ministry of the President, and on budget utilization to the Ministry of Economics and Finance. It is also accountable to the legislative body, the Assembly of Deputies, to which it is required to submit annual reports.

**MOH is also accountable to the Controller General who authorizes its expenditures based on the Constitution.** MOH is serving as a pilot for a new accountability program with the Controller General's Office. For this, MOH has created an Accountability Department that sends quarterly reports to the Controller General. Previously there had only been one expenditure control/review, while at present there exists a complete accountability system in all of MOH's health facilities throughout the country. Through the reports, MOH provides updates on expenses incurred and its operations within the assigned budget. MOH's counterpart is the Office of Accountability in the Controller General's Office.

**Existing mechanisms through which civil society can participate in holding MOH accountable are limited.** There exist some NGOS comprised of users, patients, and syndicates. The one existing mechanism for civil society participation in the health sector is through attending the sessions of the Assembly of Deputies where the annual report is presented. Civil society does participate in committees with a more multi-sectorial focus such as the National Commission for the Prevention and Control of HIV (CONAVIH in its Spanish acronym) and the National Commission for the Disabled (CONADIS).

**The CSS has internal and external accountability checks, the latter in common with MOH.** The CSS is accountable internally to its Board of Directors, and presents an annual report on the programmatic and financial implementation. Like MOH, the CSS also presents an annual financial report to the Assembly of Deputies and the Cabinet. In the case of the Controller General's Office, the CSS maintains the previous control system and has not implemented the new accountability system.

## *Key Reforms*

### **Integrated Health System**

**The principal health sector reform that has been attempted in the last years has been the integration of MOH and CSS health services.** In 2009, following a long negotiation in a Health Discussion Table, a draft legislation was presented to transform the public system of health services. The Government presented the draft legislation to the Assembly that remained undiscussed, primarily due to the opposition from the professional unions.

**In 2013, attempts were made to formulate draft legislation to focus the level of services to be each provided by the CSS and MOH.** If approved, this law would have assigned provision of health services at the secondary and tertiary level of care for the entire population including hospital management to the CSS while MOH would be responsible for the implementation of primary level care health programs. However, unions opposed this attempt.

**Although integration has not been achieved, the level of coordination between MOH and CSS has improved.** This is especially notable in the management of some facilities such as regional hospitals and the new Primary Care Centers in Innovative Health (CAPSI in its Spanish acronym) and in the management of human resources for health. Additionally, there are a number of standing collaboration agreements between both institutions in the areas of hospital care, hemodialysis, transplants, academic, oncology, surgical care, and others.

### **Strategy to Extend Coverage of Basic Health Services**

**In 2003, in an effort to address the issue of inequitable health access for the poor, MOH implemented an expanded national program, Estrategia de Extensión de Cobertura (EEC).** This program aimed to extend coverage of and increase access to primary health care services. The program included the delivery of the Integrated Package of Health Care Services (PAISS in its Spanish acronym) to remote, rural, and indigenous areas, using capitation payments that created financial incentives for providers to achieve better results—a results-based financing (RBF) approach. After five years of the PAISS experience, MOH took the EEC to the next level by launching the Health Protection for Vulnerable Populations (PSPV in its Spanish acronym) program in 2008, providing health services to the rural poor by way of mobile health teams. This was launched using a RBF approach, financing capitation payments to the health regions, in this way providing financial incentives to increase coverage and improve performance.

**Both PAISS+N and PSPV provide a common package of prioritized health services while differing in their target populations.** The package of health services includes 15 services in the areas of health promotion and prevention and care targeted to the poor in rural, hard to reach areas. The prioritized health services are delivered through mobile health teams made up by a doctor, nurse, nurse technician, nutritionist, environmental health technician or health educator, and a driver). The community-based teams are composed of health promoters, community

birthing assistants, social auditors, local women monitors, members of the health committees and of the rural aqueduct board. PAISS+N targets the indigenous population and PSPV targets the rural poor.<sup>61</sup>

### **Conditional Cash Transfers**

**At the beginning of 2006, the Government of Panama launched a Conditional Cash Transfer (CCT) program called the Network of Opportunities, or Red de Oportunidades (RdO).** RdO was launched as a national strategy for the alleviation and reduction of extreme poverty, and to foster a comprehensive approach to development policies. To support the consolidation of this Network the Government of Panama received support from the World Bank and the Inter-American Development Bank (IDB) for the implementation of the Social Protection Program, RdO. The goal was to strengthen the RdO to improve living conditions in the homes of extremely poor residents in indigenous rural areas and marginal urban areas of the country, and specifically aims to enhance human and social capital among the target communities of the RdO. The program disburses cash transfers to extremely poor rural, indigenous and urban marginal families to encourage them to invest in the human capital of their children by (i) maintaining school attendance of school-age children and (ii) ensuring pregnant mothers and children under-5 visit health providers according to the country's health protocol. As part of the program, MOH seeks to (i) contribute to an increase in coverage of preventive maternal-child health care services for children aged 0-5 years and pregnant and lactating women in designated communities in the provinces and (ii) improve service quality with the introduction of culturally appropriate activities aimed at changing alimentary behavior and improving child care practices in the home and the community.

### **Human resources for health (HRH) management**

**Reform efforts have also touched the area of HRH.** The approval of the certification and recertification system of medical personnel aims to improve the quality of health care<sup>62</sup> with the goal of achieving the international certification of hospitals. A needs assessment has been conducted in support of HRH planning. MOH identified the need for specialists and increased the number of vacancies to 150 in 2014, compared with the 40 in 2009.

### ***Other reforms***

**The reform of the Health Code<sup>63</sup> is underway.** The Health Code dates back to 1947. Some actors, especially the professional unions have expressed their dissatisfaction with the process

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<sup>61</sup> Perazzo A., Carpio C., Verification of Performance in Results-Based Financing: The Case of Panama's Health Protection for Vulnerable Populations (PSPV) Program. Forthcoming November 2014.

<sup>62</sup> Ley 43 de 2007, del regimen de certificación y recertificación de los profesionales, especialistas, y técnicos de las disciplinas de la salud.

<sup>63</sup> Ley 66 de 10 de noviembre de 1947.

followed to process the reform arguing that it was centralized and closed to consultations. The reform of the draft legislation for the contracting of international personnel was also challenged although it was passed with a specific law.

**The implementation of the Monitoring and Evaluation System of the National Health Strategic Plan (SIMEPESS in its Spanish acronym) is being implemented.** The SIMEPESS aims to reform the area of planning and budgeting for results. This has not yet been implemented in all of MOH's facilities. In support of the Monitoring and Evaluation (M&E) function to support Panama's health sector, the Ministry of Health undertook an assessment of its current information systems in 2007 by the Health Metrics Network. As a result of this assessment, a strategic plan to strengthen the Health Information Systems (HIS) was developed. Presently the MOH has 16 HIS sub-systems that feed into the national HIS and the CSS has 17 modules to support its monitoring and decision-making in the sector. The MOH and CSS have both indicated that they will take steps to integrate both institution's systems to better inform national decision-making in the country related to the health sector. At present, MOH and CSS maintain an open dialogue in this area, however, concrete steps to be undertaken are still being discussed.

**Panama's implementation of a number of legislative reforms<sup>64</sup>, structures, and capacities required by the International Health Regulations has been successful.** As of 2013, the country has completed 75.5 percent of the International Health Regulation requirements as shown in Table 4 below.

**Table 4. Results of MOH Self-Monitoring of the Implementation of the International Health Regulations Requirements in Panama, 2011, 2012 (April), and 2013 (January)**

N°	Questionnaire Sections	2011	2012	2013
		% achieved	% achieved	% achieved
1	National Legislation, Policy, and Financing	100	100	100
2	Coordination and communication of the CNE	71,4	64,3	78,57
3	Surveillance	69,6	87,0	82,61
4	Response	77,3	81,8	88,00
5	Preparation	53,3	53,3	52,94
6	Risk Communication	77,8	66,7	44,44
7	Capacity of Human Resources	16,7	50,0	85,71
8	Laboratory	76,9	69,2	90,48
9	Entry Points	81,8	81,8	73,33
10	Zoonoses events	76,9	100,0	100,0
11	Food Safety	72,2	77,8	85,71
12	Chemical Events	7,1	7,1	56,25
13	Emergencies related to radioactivity	7,1	42,9	43,75
	TOTAL	61,0	68,4	75,74

Source: MOH. 2013. Epidemiology Department

<sup>64</sup> Ley 38 de 2011 adopts the International Health Regulations and its annexes.

**In line with the reforms, MOH and CSS have developed a proposal for a new model of care for the country.**<sup>65</sup> If it were to be approved, both institutions would have the obligation to implement the model. The proposal for the new model was developed in 2012 and it is awaiting ministerial approval.

**Related to this point, the CSS after having been seen as implementing exclusively curative model, approved a Modernization Plan for Primary Health Care**<sup>66</sup> **in 2012.** This Plan applies the principles of renewed Primary Health Care<sup>67</sup>. This plan foresees restructuring into a network the primary health care services provided by CSS, organizing services in two levels of care (primary level of care and specialized ambulatory secondary level of care), applying a management model based on results, and granting the primary care centers with support functions for technical and administrative management. At the same time as this plan was approved, CSS invested in the remodeling of the hospitals and construction of others, including a Hospital City (*gran ciudad hospitalaria*) in Panama City which has been strongly criticized due to being contradictory to the principles of primary care.

## VI Performance and Challenges in Social Protection and Labor

### VI.1 Recent Evolution of Social Protection and Labor Public Spending

**In the past decades, Panama has been developing a set of contributory and non-contributory programs and interventions aiming to reduce vulnerability, poverty, exclusion and inequality.** The Social Protection and Labor (SPL) sector in Panama is composed of social security (contributory and non-contributory), social assistance (universal and selected), subsidies (gas and electricity) and few labor market interventions.

**Public spending on SPL increased over the last few years in real terms but slightly decreased as a share of GDP and is still moderate per international standards.** SPL spending in real terms grew substantially in the last decade, raising on average 6 percent per year rising from 1,337 million balboas in 2007 to 1,886 million balboas in 2013 (Figure 72). As a share of GDP, SPL spending grew from 6.8 percent of GDP in 2007 to 7.4 percent of GDP in 2010 but decelerated in the last few years to 6.2 percent in 2013 (Figure 73). Given strong GDP growth in Panama in the last decade, this means that the increase in SPL spending in real terms has not keep paced with GDP/revenue growth. Still, the SPL sector in Panama accounts for the

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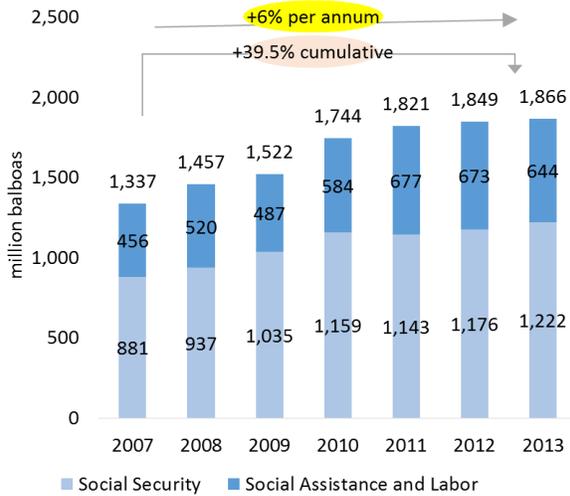
<sup>65</sup> Ministerio de Salud (2012). *Modelo de Atención Individual, Familiar, Comunitaria, y Ambiental*. Panamá, Panamá

<sup>66</sup> Caja de Seguro Social (2012). *Plan de Modernización de la Atención Primaria en Salud*. Panamá, Panamá

<sup>67</sup> Resolution CD 44.R6 del Consejo Directivo de la Organización Panamericana de la Salud en 2003.

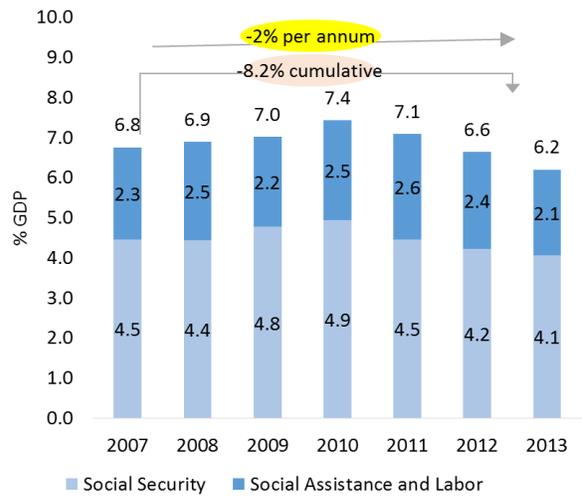
largest share of social spending—roughly 47 percent. As a share of GDP, overall SP spending in Panama is below Costa Rica (8.66 percent) and Honduras (7.01 percent), though higher than El Salvador (4.97 percent), Nicaragua (4.05 percent) and Guatemala (3.01 percent) (Figure 74).

**Figure 72: Public spending on SPL constant local currency (2007)<sup>68</sup>**



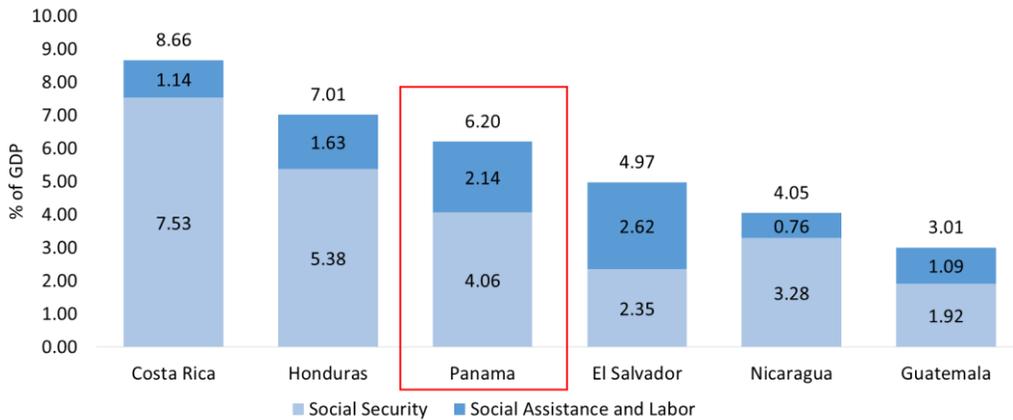
Source: World Bank SSEIR/ICEFI Social Spending Database.

**Figure 73: Public spending on SPL as a % of GDP (%)**



Source: World Bank SSEIR/ICEFI Social Spending Database.

**Figure 74: Public Spending in SPL as a % of GDP (%) by countries, 2013**



Source: World Bank SSEIR/ICEFI Social Spending Database

**Panama has an important range of SPL interventions oriented to different groups of the population.** Social security schemes include both contributory benefits (pensions, occupational risks, and health insurance) and non-contributory ones (social pension, *120 a los 65*). Active

<sup>68</sup> Social security spending includes spending on old age. Social assistance and Labor includes: Sickness and disability, survivors, family and children, social exclusion n.e.c. R&D Social protection, Social protection n.e.c., subsidies and active labor market benefits.

labor market programs are limited and include the national training institute INADEH, the program supporting labor market insertion (PAIL) and the program service run by the Ministry of labor (MITRADEL). A set of social assistance interventions also works across the country, the majority currently managed by MIDES and IFARHU for scholarships (*Beca Universal*). For all programs, the budget allocated decreased in the last few year though increased number of beneficiaries. Most important programs in terms of payments and beneficiaries are: *Invalidez, Vejes y muerte* (contributory pension), *120 a los 65* (social pension), *Red de Oportunidades* (conditional cash transfers), and *Beca Universal* (scholarships) (Table 5)<sup>69</sup>. And a wide range of subsidies, more notably electricity ones (FET) have important budget allocation (FET is in fact the main non-contributory SP spending in Panama).

**Table 5: Main SP programs in Panama**

Classification	Institution	Program	Description	Spending as a % of GDP		Beneficiaries	
				2009	2013	2009	2013
<b>According to their function, these programs were classified in Old Age, sickness and disability and in the case of maternity allowances in cash transfers.</b>	CCSS	Invalidez , Vejes y Muerte	Disability, old age and death:	3.61	<b>3.02</b>	175,906	<b>189,248</b>
	MIDES	120 a los 70	Conditional cash transfer program to older adults subject to the use of health services.	0.12	<b>0.25</b>	39,272	<b>90,124</b>
	CCSS	Riesgos Profesionales	Occupational risks	0.36	<b>0.32</b>	6,178	<b>6,483</b>
	CCSS	Enfermedad y Maternidad	Sickness and maternity	0.24	<b>0.22</b>	37,540	<b>40,495</b>
<b>ALMPs</b>	INADEH	Programa de Inversión en Formación, profesional dual y capacitación de desarrollo humano	Training	0.37	<b>0.18</b>	108,467	<b>110,095</b>
		PAIL	Program supporting labor market insertion				<b>493</b>
	MITRADEL	Job placement service	Job placement service				<b>5,000</b>
<b>Cash Transfers</b>	MIDES	Red de Oportunidades	Conditional cash transfer to households in extreme poverty, associated with the use of health, education and capacity building	0.07	<b>0.1</b>	69,759	<b>72,773</b>

<sup>69</sup> Following the IMF classification and for comparison purposes, the amount spent on the scholarship *Beca Universal* was included in Education. However, due to the importance and relevant of this program, it will be analyzed in the SPL section.

Panama Social Sector Expenditure and Institutional Review

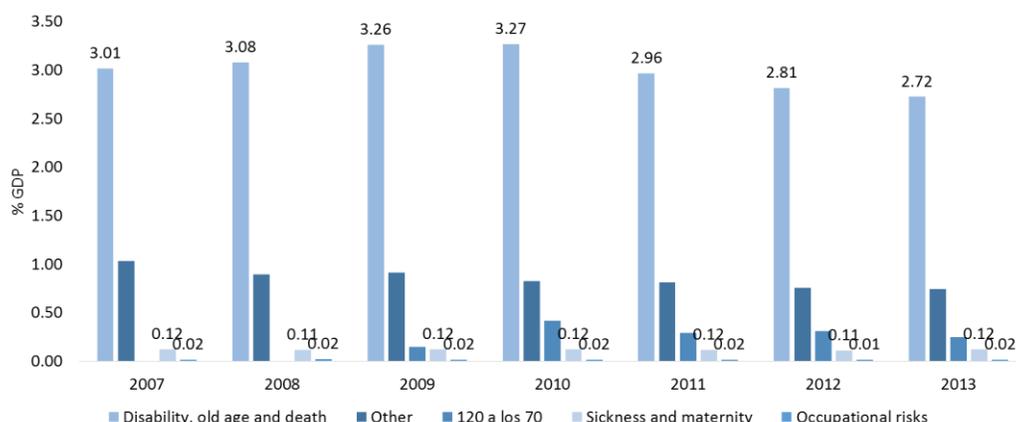
	<b>MEP</b>	Beca Universal*	Universal Scholarship conditional on school performance and attendance.	<b>0.21</b>		<b>478,574</b>
	<b>MIDES</b>	Angel Guardian	Transfers conditioned program for persons with a severe disability condition.	<b>0.01</b>		<b>5,140</b>
<b>Other</b>	<b>CENTRAL GOV</b>	Subsidio a los uniformes y útiles escolares	Subsidy to uniforms and school supplies	<b>0.07</b>	604,000	<b>800,000</b>
	<b>MIDES</b>	Bono Familiar de Alimentos – SENAPAN	Bonus food family	0.01	9,200	
	<b>MINSAL</b>	Programa de Alimentación Complementaria	Feeding programme, improve the diet of pregnant women and children in areas of vulnerability and poverty and extreme poverty	0.04	58,333	
	<b>MINISTRY OF LABOR/FAI RHU</b>	Beca para la Erradicación para el trabajo Infantil	Scholarship for child labor eradication	0	384	<b>1,482</b>
	<b>IFARHY</b>	Beca de Asistencia a población vulnerable	Scholarship assistance to vulnerable population	0.03	19,501	
	<b>MINISTRY OF HOUSING</b>	Fondo solidario de Vivienda	Housing solidarity fund	0.01	600	<b>4,500</b>
<b>Subsidies</b>	<b>MEF</b>	Subsidio al transporte público (Diesel)	Public transport subsidy (diesel)	0.03	<b>0.03</b>	
	<b>MEF</b>	Fondo de estabilización tarifaria (FET)	Rate stabilization fund	0.21	<b>0.43</b>	
	<b>CENTRAL GOV.</b>	Subsidio al Gas Licuado	Subsidy to the gas tank	0.24	<b>0.24</b>	
	<b>CENTRAL GOV/MEF</b>	Subsidio a la tarifa del METROBUS	Subsidy of the rate of the METROBUS		<b>0.07</b>	

Note: Total beneficiaries correspond to households for Red de oportunidades, Bono familiar de alimentos – SENAPAN. For Programa de Alimentación complementaria, the number of beneficiaries corresponds to schools. \* The universal scholarship is included in the table but its spending is classified in the education sector following the IMF classification of functions.

**Social Security accounts for the bulk of SPL spending, and this share has remained stagnant in the past few years.** The social security sector in Panama is large and spending has increased in recent years on average 6 percent per annum, from 881 million balboas in 2007 to 1,222 million balboas in 2013 (Figure 72). Nevertheless, the share of SPL spending attributable to social security has remained stable around 65 percent between 2007 and 2013. As a share of GDP, social security spending decreased 0.4 percentage points from 2007 to 2013 (Figure 73). Compared to the CA region, Panama's spending in social security is close to the regional average, with its share to GDP being below Costa Rica's (7.5 percent) and Honduras; (5.4 percent) (Figure 74). The social security sector is administered by the Panamanian Social Security Institute, and includes health insurance and contributory pensions. Social security spending decreased as share of GDP mainly through the budget allocated to invalidity, old age and death, which accounts for two-third of spending followed by the amount spent on the social

pension *120 a los 70*. On the other hand, spending on occupational risks and sickness and maternity leave has remained stable as a share of GDP (Figure 75).

**Figure 75: Social Security spending by main categories, 2007-2013 as a % of GDP**

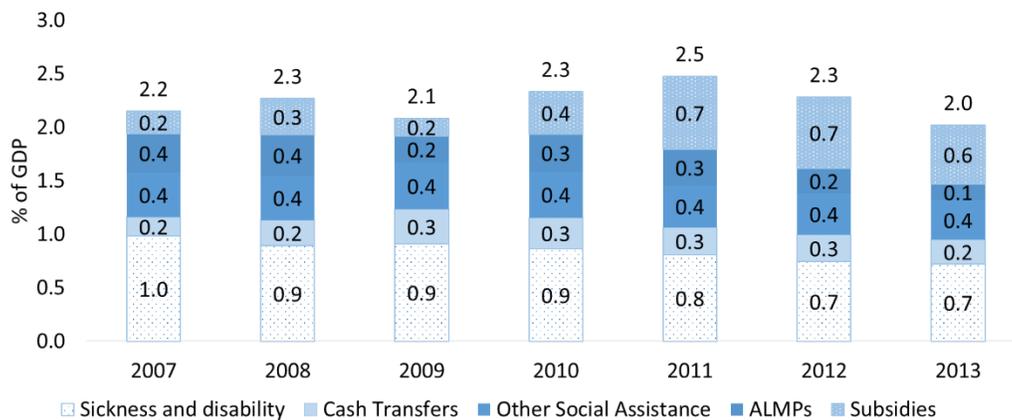


Source: World Bank SSEIR/ICEFI Social Spending Database. Note: The “Other” category includes pensions to education and other sectors.

**Social assistance spending remained stable between 2007 and 2013, but as a share of GDP it has declined since 2011.** Spending on non-contributory programs increased as a share of GDP from 2.2 percent in 2007 to 2.5 percent in 2011, but later reverted down to 2 percent in 2013 (Figure 76). Among main components, subsidies are on the rise, increasing on average 17 percent per annum from 0.2 percent of GDP in 2007 to 0.6 percent in 2013. Besides subsidies, cash transfers programs also grew to a more modest 4 percent per annum in the last few years<sup>70</sup>. All of the other components of the social assistance system have decreased as a shared of GDP. As a shared of SPL spending, subsidies and sickness and disability takes up the bulk follow by cash transfer and active labor market programs. Compared to its neighbor, social assistance spending is high, in particular due to the budget allocated to sickness and disability, and subsidies (2 percent as a shared of GDP vs 1.4 percent of GDP for the rest CA countries), only behind El Salvador (Figure 77).

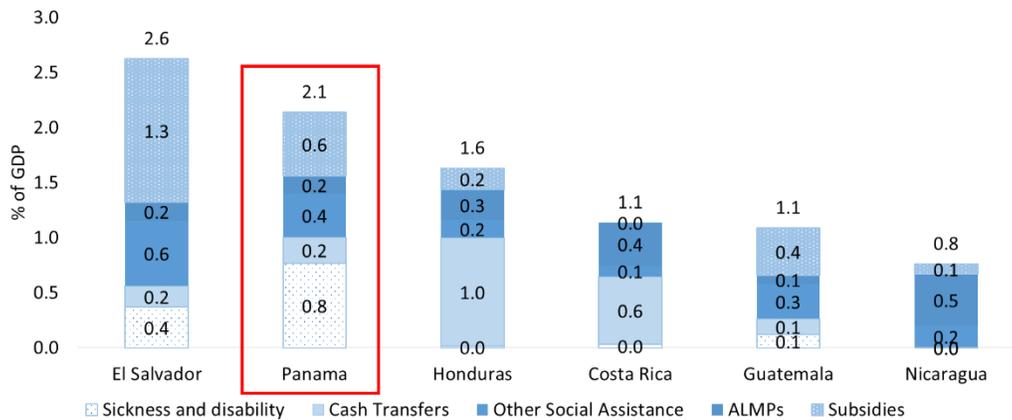
<sup>70</sup> Cash transfers exclude the amount spent on Universal Scholarship. This amount was included in Education spending following the IMF classification.

**Figure 76: Social Assistance Spending as a % of GDP 2007-2013**



Source: World Bank SSEIR/ICEFI Social Spending Database

**Figure 77: Social Assistance Spending by countries as a % of GDP, 2013**



Source: World Bank SSEIR / ICEFI social spending database

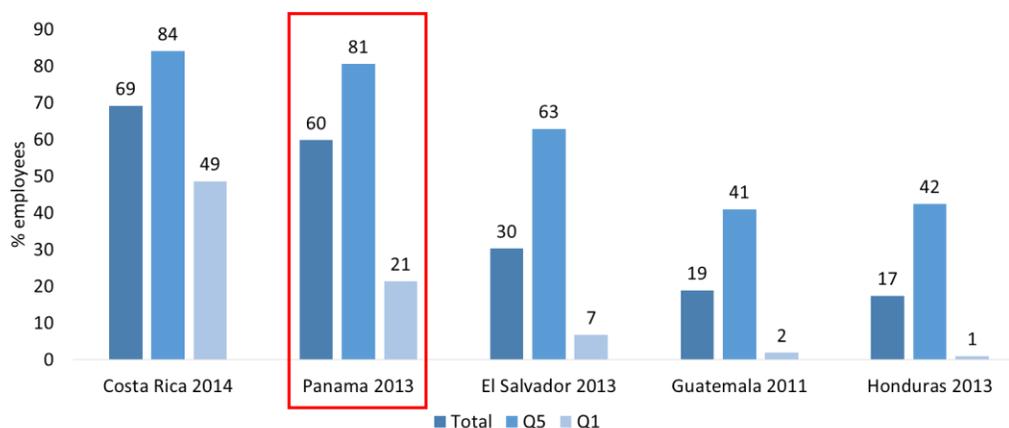
## VI.2 Performance of Social Protection and Labor indicators

### VI.2.1 Social Security

**The pension system covers a large and growing portion of the population, and its coverage is one of the highest in Central America.** The pension system consists of multiple regimes, with different characteristics in its administration, design, and target population. The general scheme is administered by the Social Security Fund, *Caja de Seguridad Social*, and provides benefits to old-age, disability, death; illness and maternity and occupational risk. The system covers all private and public sector workers, national and foreigners, including independent or self-employed workers. Historically benefits are funded through a sharing scheme, but since January 1, 2008, individual accounts were introduced as a second pillar of the system. Compared

to CA countries, Panama is one of the countries with the highest contributions to the system, only surpassed by Costa Rica, though still limited among the poor (Figure 78). Overall, the share of employees contributing to the system has increased in recent years from 54 percent in 2007 to 60 percent in 2013 (Figure 79).

**Figure 78: Share of workers contributing to SS by countries**

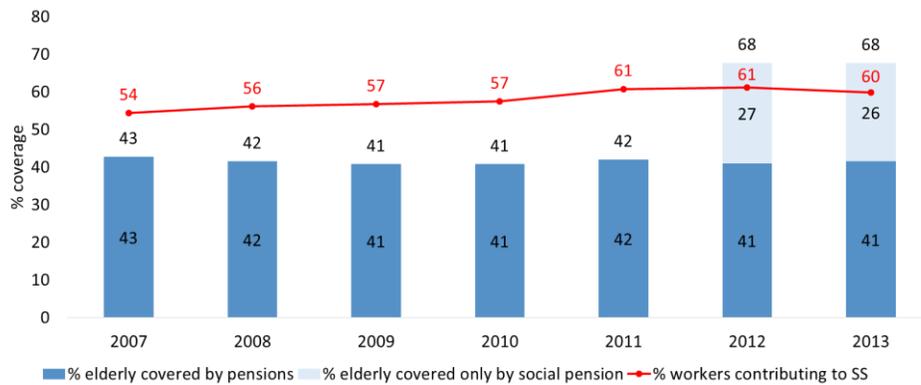


Source: World Bank SSEIR team's analysis of household surveys, authors' calculations.

**Financial sustainability concerns of the contributory system have triggers parametric reforms, most notably an increase in contributory rates.** Panama's population is in a demographic transition process, it is ageing; and this impact the social security system. In 2010, for every 100 older adults (60+ years of age) there were 56 pensioners and retirees affiliated to the CSS. The ratio of pensioners to contributing affiliates shows that for every 100 CSS contributors there are 16 CSS pensioners (CEPAL). In order to achieve sustainability, has been increasing from a base of 9.5% in 2004 to 22% in 2014 (CEPAL).

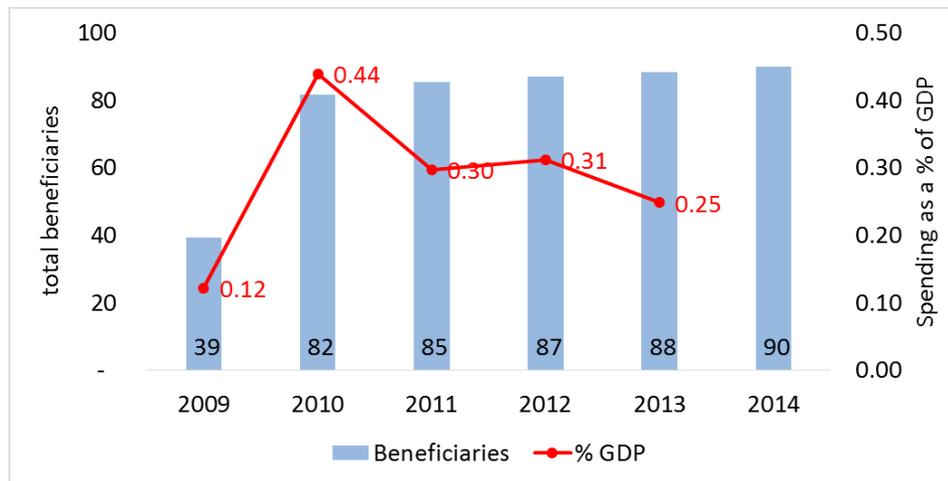
**The share of elderly covered by the pension system increased in the last few years, mainly through the introduction of non-contributory pensions.** The share of elderly covered by the pension system grew from 43 percent in 2007 to 68 percent in 2013 (Figure 79). This has been mostly achieved thanks for the introduction of the social pension in 2012. Access to the contributory system remained around 40 percent and the social pension benefited the rest. The non-contributory social pension was launched in 2009 called as *100 a los 70* providing 100 balboas per month to elderly. In 2010, a new law specified a poverty and vulnerability target population. In 2014, the age eligibility was reduced to 65 years and the benefit increased to 120 balboas, and the program was renamed *120 a los 65*. As a counterpart to the transfer, the beneficiaries have to attend health checkups and participate in informative psychological and medical activities. The number of beneficiaries from the social pension reached 90,000 beneficiaries in 2014; however, this expansion has not been accompanied by an expansion of the spending as a % of GDP (Figure 80).

**Figure 79: Access to social security 2007-2013, %**



Source: World Bank SSEIR team’s analysis of household surveys, authors’ calculations. Note: The social pension “120 a los 70” began in 2009 but the Household survey included the variable since 2012.

**Figure 80: Social pension: Total beneficiaries vs spending as a % of GDP**

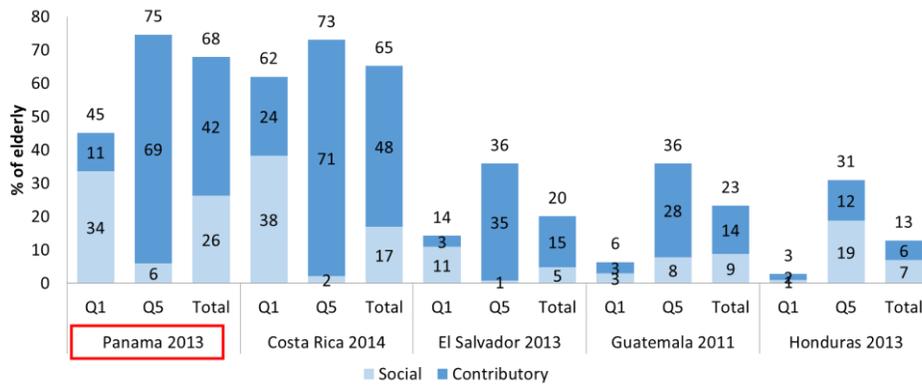


Source: World Bank LAC Social Protection Database.

**The share of elderly covered by the pension system is the highest in the CA region but still more than 50 percent of the poorest elderly do not have access.** The pension system covers 68 percent of the population over 65 years old (Figure 81), which is the highest rate in Central America and among the highest out of all other Latin America and the Caribbean countries.<sup>71</sup> However, there is still a large portion of the poor elderly that did not receive any pension. For instance, the coverage among the poorest quintile is almost half than for Costa Rica (45% vs 62% in Costa Rica). Still, it is important to notice that prior to the introduction of the social pension, barely 5.3 percent of the elderly in the lowest quintile were covered (data for 2007) (Figure 82).

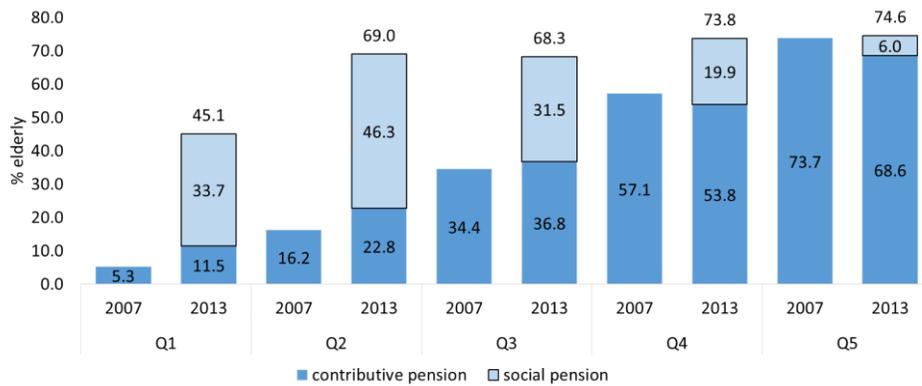
<sup>71</sup> See Ribe, Robalino, and Walker (2010).

**Figure 81: Elderly covered by quintiles by countries (%)**



Source: World Bank SSEIR team’s analysis of household surveys, authors’ calculations.

**Figure 82: Elderly covered by quintiles 2007 vs 2013 (%)**



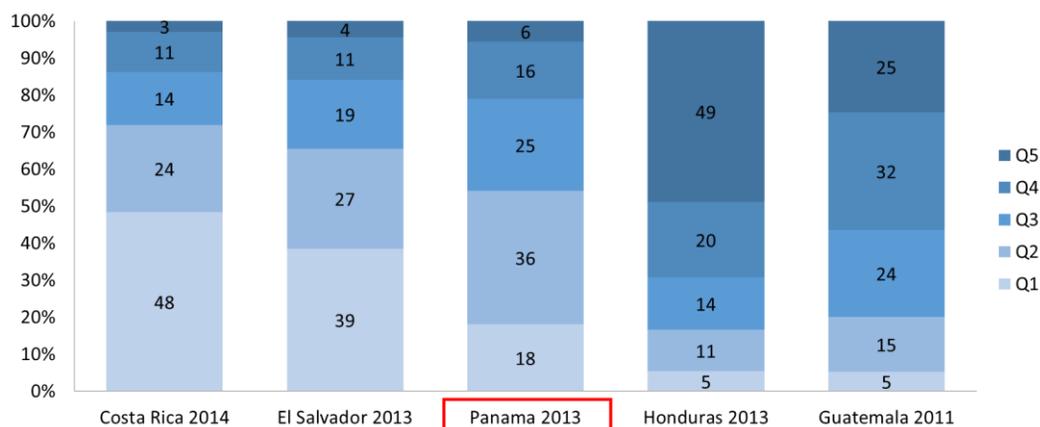
Source: World Bank SSEIR team’s analysis of household surveys, authors’ calculations

**Coverage among the poorest can be improved by improving targeting accuracy.** With respect to distribution of beneficiaries, the social pension seems in need for an improved targeting mechanism. Only 18 percent of the social pension beneficiaries belong to the first quintile which is much lower than Costa Rica (48%) and El Salvador (39%) (Figure 83). Moreover, around 22 percent of the beneficiaries of *120/65*, conceptually aimed at the poor and vulnerable elderly, belong to the top 40 percent of income groups. Given existing budget constraints and the limited operational capacity to carry out recertification of beneficiaries, a large number of eligible elderly are not entering into the Program and remain uncovered, especially in remote areas (exclusion errors).<sup>72</sup> Taking into account that the budget allocated to social pension is the highest among social assistance programs, the government could save

<sup>72</sup> Rubalcava and Torres, 2015. *Evaluación de Impacto del Programa 120 a los 65. Consultoría para el Banco Mundial. Evaluación de Impacto Social y de Pobreza (PSIA).*

around 50% of this budget (0.12 percent of GDP or 50,050,000 balboas in 2013) and invest it in improving targeting accuracy and coverage among the poor and in other selected interventions.

**Figure 83: Social Pension – Distribution of beneficiaries (Targeting Accuracy) % elderly**



Source: World Bank SSEIR team's analysis of household surveys, authors' calculations.

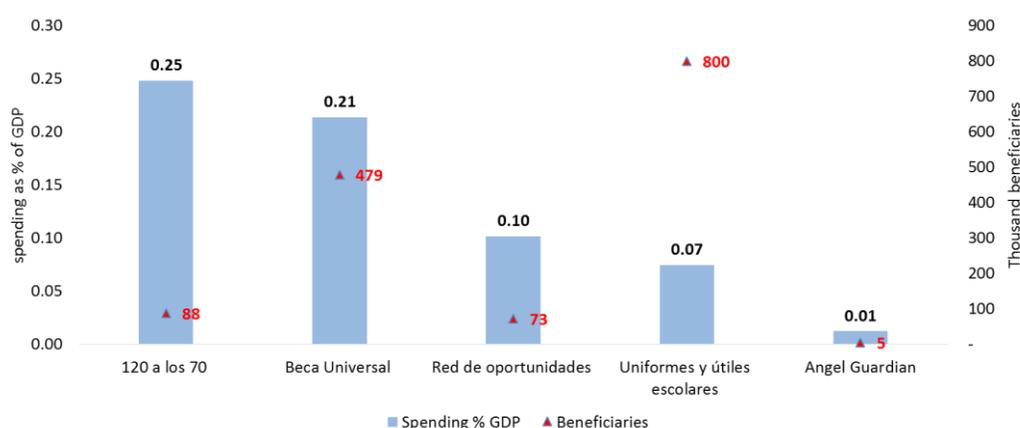
**Improving social pension coverage and targeting can result in significant poverty reduction of the elderly population and their respective households.** Almost 25 percent of the people aged 65 and more live under the poverty Panama's poverty line. *100 a los 70* (the predecessor of *120 a los 65*) has a positive impact on both poverty and extreme poverty reduction of the individuals receiving the transfer and the homes they live in. The simulation predicts that the program could result in 11.2 percentage points reduction in total poverty and 6.7 percentage points in extreme poverty if the program was universal (or perfectly targeted).

## VI.2.2 Social Assistance

**During the last decade, Panama has expanded the coverage of social protection programs through a number of cash transfers.** The main social assistance programs in Panama are: the Conditional Cash Transfer *Red de Oportunidades* (RO), covering nearly 70,000; *Beca Universal* (scholarships) covering more than 600,000 students at the national level; the non-contributory pension program *120 a los 65*, covering 100,000 elderly beneficiaries; school supplies (*Uniformes y Útiles Escolares*), and social assistance transfer for people with disabilities, *Ángel Guardian*, with 10,000 beneficiaries. Of all programs, the social pension has the largest spending (0.25 percent of GDP) followed by the scholarship (0.21 percent of GDP), CCT (0.10 percent of GDP) and the schools supplies (0.07 percent of GDP). In terms of coverage of the population, the largest program are the educational interventions followed by the social pension and the CCT. *Ángel Guardian* is the smallest program in terms of amount spent and beneficiaries (Figure 84). In general, social assistance programs have more coverage in rural areas, among extreme

poor and among those in the lowest quintile (Table 6). However, there is still substantial number of poor and extremely poor population that are not covered in programs which aim to benefit the poor, for instance RO covers less than 40 percent of the extreme poor and of those belonging to the first quintile<sup>73</sup>. On the other hand, there is still an important portion of non-poor households that are covered mainly by the scholarship and school feeding, mainly due to their universal approach. Potential improvements in coverage have been limited by the operational capacity of these three programs (i.e., they lack enough personnel to carry out enrolment and outreach) and sometimes weak eligibility and targeting instruments that have resulted in long waiting periods for program uptake.

**Figure 84: Total spending and Beneficiaries, main SA programs, 2013**



Source: World Bank LAC Social Protection Database. Note: Total beneficiaries of Red de Oportunidades correspond to households.

**Table 6: Coverage, Main Social Assistance Programs, 2013 (% households)**

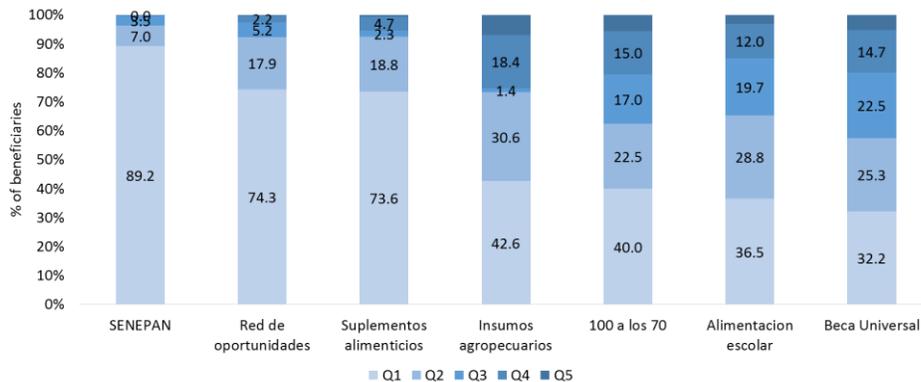
Programs	Area (%)		Poverty Status (%)			Quintiles (%)				
	Rural	Urban	XP	MP	NP	Q1	Q2	Q3	Q4	Q5
Beca Universal	53.9	37.2	66.1	57.5	32.1	65.4	55.5	48.3	32.7	11.7
Alimentacion escolar	53.6	28.0	65.2	54.2	23.6	64.7	52.4	37.2	22.3	6.0
Red de oportunidades	26.2	1.8	36.5	10.2	2.2	36.0	9.4	3.1	1.3	0.1
100 a los 70	10.9	4.4	13.1	7.4	4.4	12.8	7.7	5.8	4.4	2.0
Suplementos alimenticios	4.9	0.4	6.6	2.0	0.4	6.8	1.8	0.3	0.4	0.1
SENEPAN	2.9	0.0	4.3	0.8	0.1	4.4	0.3	0.2	0.0	0.0
Insumos agropecuarios	0.7	0.1	0.7	0.6	0.2	0.6	0.6	0.0	0.3	0.1

<sup>73</sup> While the RO Program achieved the target goal of 70 percent of families with children in *comarcas*, there is still at least 20 percent target in areas with 90 percent poverty rates. Similarly, some elderly poor are still excluded from the 120/65 program, especially in the *comarcas* where an estimated 15,000 individuals have been recently registered. *Angel Guardian* has already registered 10,000 individuals from a target 55,000 potential beneficiaries

Source: World Bank SSEIR team’s analysis of household surveys, authors’ calculations using standardized ADePT software (Social Protection Module).

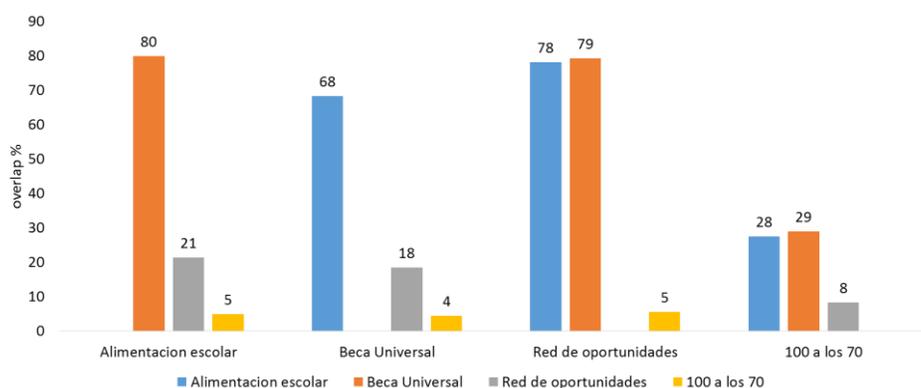
**Targeting accuracy can also be enhanced in social assistance interventions.** There are opportunities to improve targeting and thus free resources to increase coverage of social assistance programs among the poor. Most programs like school feeding, scholarships, social pension, and agricultural subsidies are spread almost equally across income groups. For instance, other the scholarship program is distributed mostly to students in the three highest quintiles (43 percent of scholarships beneficiaries) (Figure 85). Food security programs, SENEPAN and Suplementos Alimenticios, and the CCT are the most progressive of the major programs, and quite well targeted. In addition, there is duplication of benefits in particular, between the scholarship and other interventions. Of those families that receive school feeding program, 80% received the scholarship. Those who benefited from Red de Oportunidades, almost 80% also benefited from the scholarship. Finally, those families receiving the social pension almost 30 % received the scholarship (Figure 86).

**Figure 85: Distribution of beneficiaries’ main SA programs, 2013, % households.**



Source: World Bank SSEIR team’s analysis of household surveys, authors’ calculations using standardized ADePT software (Social Protection Module).

**Figure 86: Overlap SA programs**

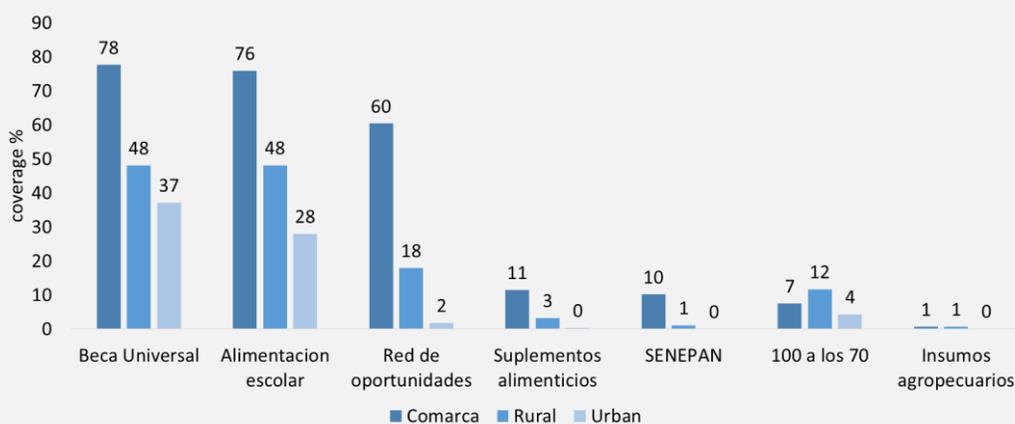


Note: Number of households receiving transfer from program X given that they have received transfers from program Y. Source: World Bank SSEIR team’s analysis of household surveys, authors’ calculations using standardized ADePT software (Social Protection Module).

**Box 3: Social Assistance programs – Coverage and Targeting accuracy by rural, urban and comarcas.**

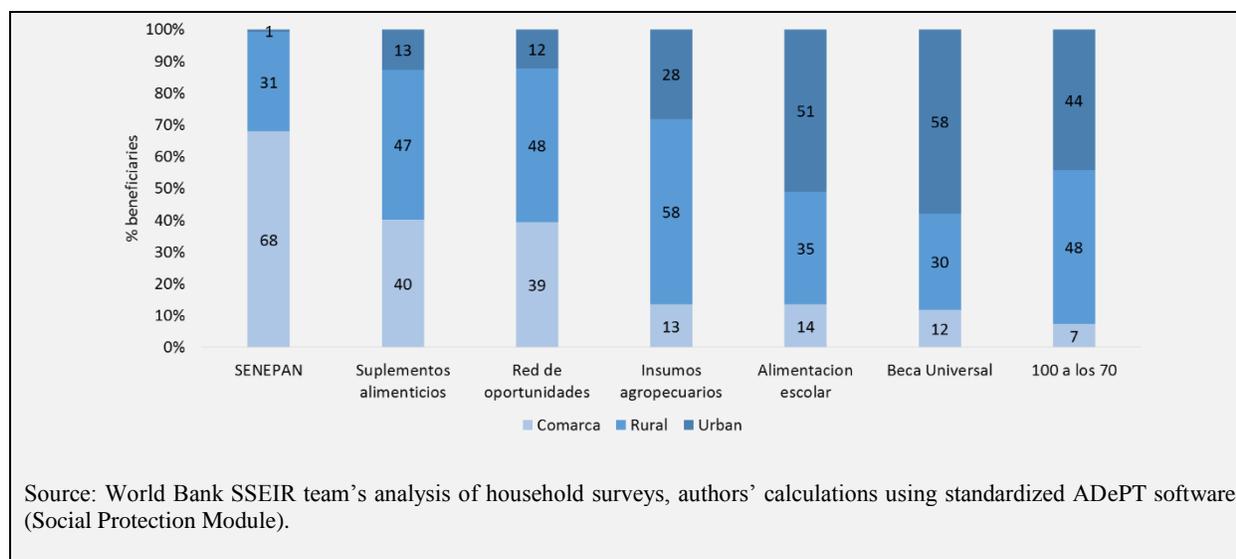
**High and increasing social assistance coverage in comarcas.** Social assistance coverage is higher in comarcas than in rural and urban areas. The universal scholarship has the highest coverage (78 percent) followed by the school feeding (76 percent) and the CCT (60 percent). As a shared of beneficiaries, most SA interventions are concentrated in urban areas.

**Social Assistance coverage in comarca, rural and urban areas 2013**



Source: World Bank SSEIR team’s analysis of household surveys, authors’ calculations using standardized ADePT software (Social Protection Module).

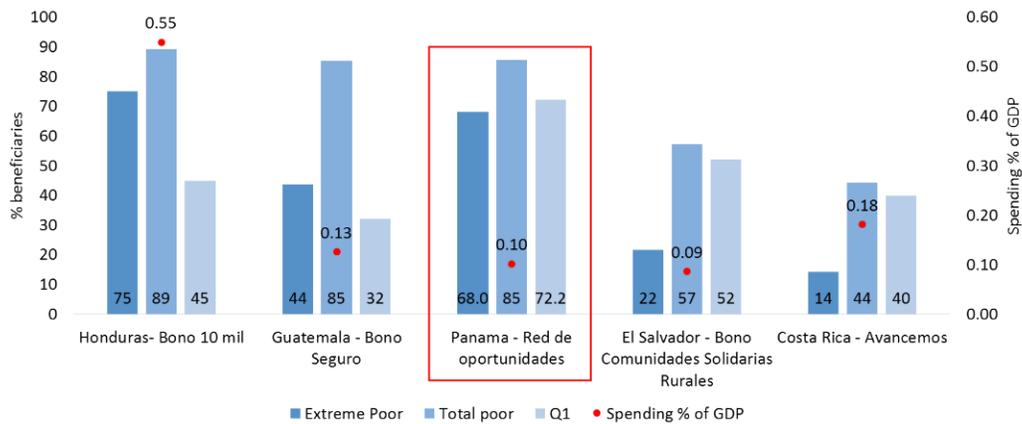
**% Social Assistance beneficiaries by comarca, rural and urban areas 2013**



**The CCT Red de Oportunidades (RO) program was launched in 2006 and has been Panama's main strategy for reducing extreme poverty.** The program consists of the delivery of cash transfers conditional on households in extreme poverty B /. 50.00 dollars through a bimonthly payment through the Banco Nacional de Panama and mobile payments, received by women, associated with the use and utilization held services of health, education and capacity building. In 2013, Red de Oportunidades covered 36.5% of extreme poor and 10.2% of moderate poor. Coverage is much higher in rural areas than urban areas (26.2 percent vs 1.8).

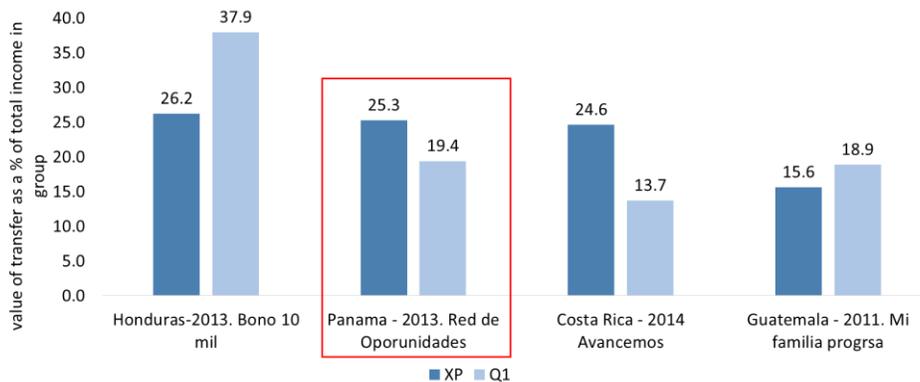
**Compared to other countries, Panama's CCT is among the best targeted, measured by the percent of the beneficiaries classified as extreme poor, total poor and beneficiaries belonging to the first quintile covered.** CCT targeting accuracy in Panama is high: 85% the CCT's beneficiaries are poor compared with 44% in Costa Rica 44% and 57% in El Salvador, and equal to Honduras and Guatemala which are countries with much higher poverty incidence (Figure 87). It is also the top country in terms of beneficiaries belonging to the first income quintile (72%), and only behind Honduras in terms of targeting the extreme poor (68%). Nevertheless, the total amount spent in the program is among the lowest in the region with 0.10 percent of GDP compared to Honduras with 0.55 percent, Costa Rica 0.18 percent and Guatemala 0.13 percent. As a share of household incomes, the generosity of the CCT is 25% for extreme poor and 19% for those in the first quintile which is above than Costa Rica and Guatemala, but below Honduras (Figure 88).

**Figure 87: Public Spending and % beneficiaries main CCTs by country**



Source: World Bank SSEIR team’s analysis of household surveys, authors’ calculations using standardized ADePT software (Social Protection Module).

**Figure 88: Generosity main CCTs**

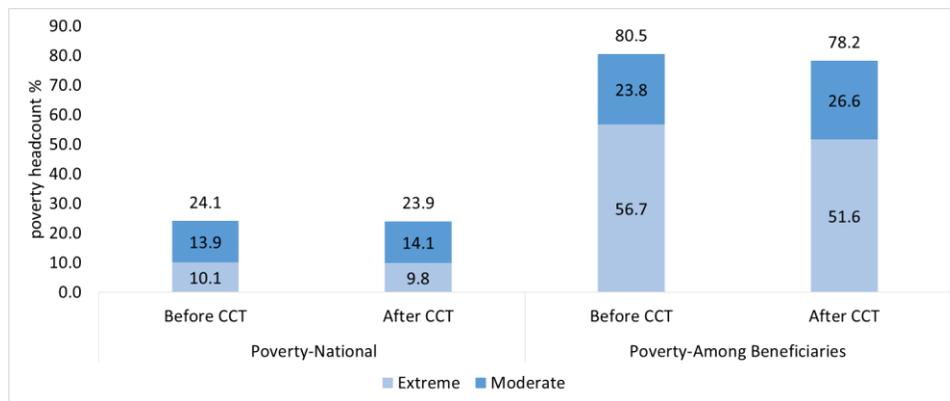


Source: World Bank SSEIR team’s analysis of household surveys, authors’ calculations using standardized ADePT software (Social Protection Module).

**Preliminary estimation suggest that Panama’s CCT RO, has an impact on poverty (especially extreme poverty), use of health services, and in school enrolment, particularly in primary and lower secondary education.** Estimates using 2013 household survey data and national poverty lines showed that the CCT can attribute a reduction of 2.3 percentage points in total poverty and 5.1 percentage points in extreme poverty among beneficiaries. At the national level, the CCT seems to have reduced the extreme poverty by 0.3 and total poverty by 0.1 percentage points (Figure 89). Moreover, estimates using the same source show that the CCT may have an impact on enrollment and attendance, especially at the primary level. For the extreme poor, primary and lower secondary enrollment rates are almost double among children that benefited from the program compared to those that did not receive any benefit. For instance, the enrolment rate among those with RO is approximately 44% compared to around 16% for

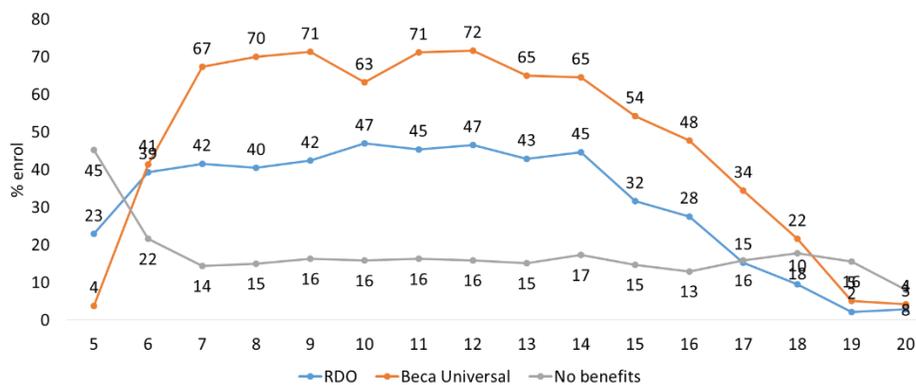
those that did not receive any benefit (Figure 90). Furthermore, the results of the programs impact evaluation also indicate that the program has a positive impact on school enrolment of both children under and above 5 years as well as school attendance days of the latter group in urban, rural and indigenous areas. Additionally, the program showed positive impact in reducing for both acute diarrheal disease and acute respiratory infection in children below 5 years old and in prenatal care of pregnant women in rural and indigenous areas. The data indicates that pregnant women participating of the program are more likely to attend prenatal care that those are not beneficiaries as well as attending a higher number of control groups in rural and indigenous areas.

**Figure 89: Impact CCT on poverty, 2013**



Source: World Bank SSEIR team’s analysis of household surveys, authors’ calculations using standardized ADePT software (Social Protection Module).

**Figure 90: Enrollment rates age 5-20 for extreme poor, 2013**

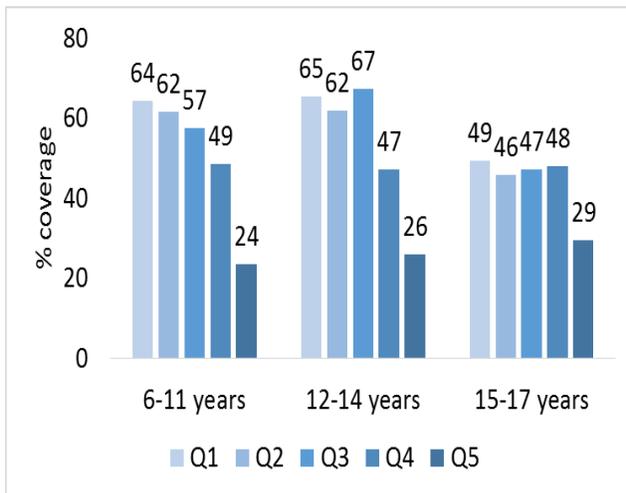


Source: World Bank SSEIR team’s analysis of household surveys, authors’ calculations.

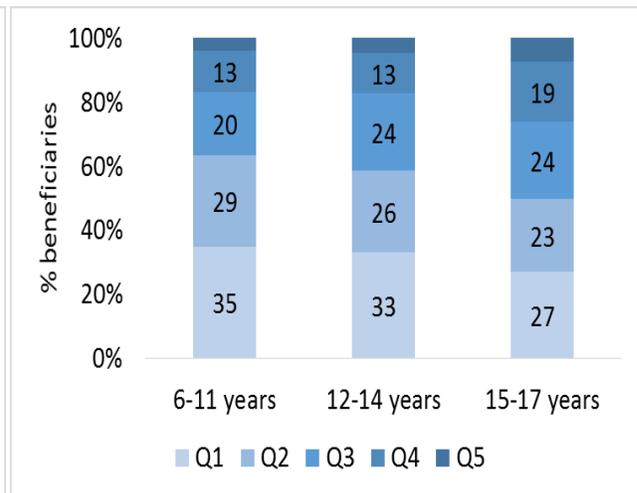
**The universal scholarship *Beca Universal* is awarded to children and adolescents who do not have any other assistance grant conditional on school performance and school attendance.** In 2009, the government launched the universal scholarship with the objective to promote the retention and reintegration into the formal education system. It's a grant in cash

(US\$ 180 per year) paid on a quarterly basis and its use is intended for the purchase of uniforms, books, school utensils, and food for the beneficiary students. Coverage across all income quintiles in high but in particular, among the lowest quintiles (Figure 91). However, the share of beneficiaries belonging to the first quintile is very low and decreased with the age (Figure 92). This is because low income children are more likely to drop out at lower levels of education. Among the extreme poor, the enrolment rates are higher for those who benefited from the universal scholarship in particular in primary and lower secondary education (Figure 90). The probability of attendance among those who benefited from the scholarship is around 66 percent compared to RO (44 percent) and those with no benefits (around 16 percent)

**Figure 91: Coverage (%) Beca Universal, 2013 (individuals)**



**Figure 92: % of Beneficiaries Beca Universal, 2013 (individuals)**



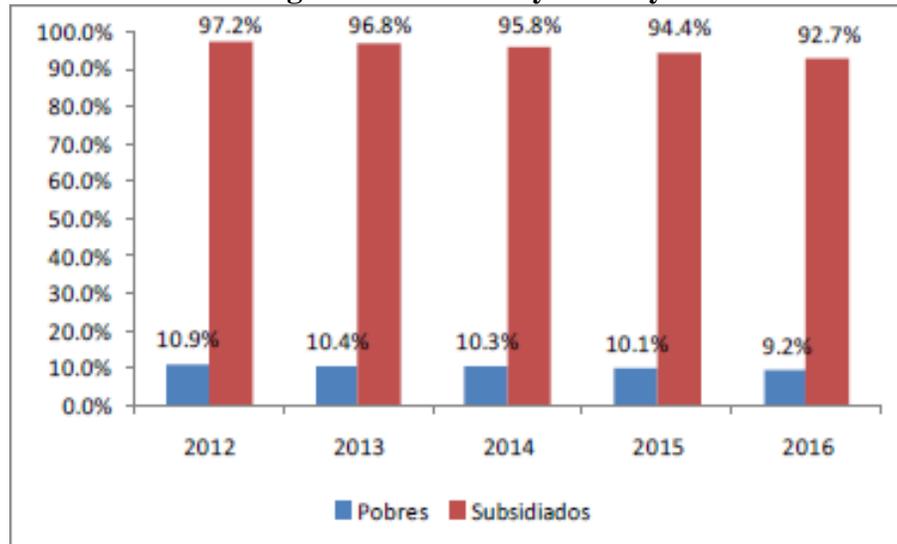
Source: World Bank SSEIR team’s analysis of household surveys, authors’ calculations.

**Other SA programs include disability benefits and feeding programs.** For instance, Angel Guardian is CCT program for families in extreme poverty who have a child with disabilities. The program benefited 5,140 individuals and allocated 0.01% of GDP. The *Secretaría Nacional para el Plan de Seguridad Alimentaria y Nutricional (SENAPAN)*, under MIDES has a program that provides a voucher for certain types of foods previously selected and varies depending on the household consumption. SENAPAN spent 0.01% of GDP in the program and benefited 9200 families (Table 5).

**Other income support strategies include electricity and gas subsidies, though these are highly regressive interventions.** Panama spends important resources in electricity and gas subsidies, 0.6 percent of GDP in 2013. Figure 93 shows the subsidized households and households in poverty for the period 2012-2016. A subsidy to buy gas tank of 25 lbs started in 1992 and was later reformed in 2009. Electricity subsidy is intended for residential users consuming under 500 kwh in low voltage single rate. Using the Censo 2010, it was shown that the average consumption is well below the threshold set in 2012 (253 versus 500 KWh KWh-month-month (Gallardo). Therefore, the subsidy as designed as way to minimize the probability

of not benefit poor households, but also ends up benefiting almost all non-poor households, those that would be able to pay without electricity tariff discounts. Moreover, since the extreme poor do not have access to electricity, they do not benefit from the subsidy. The important filtration resources resulting from the fact providing subsidies to non-poor households could be used for other social programs.

**Figure 93: Electricity Subsidy**

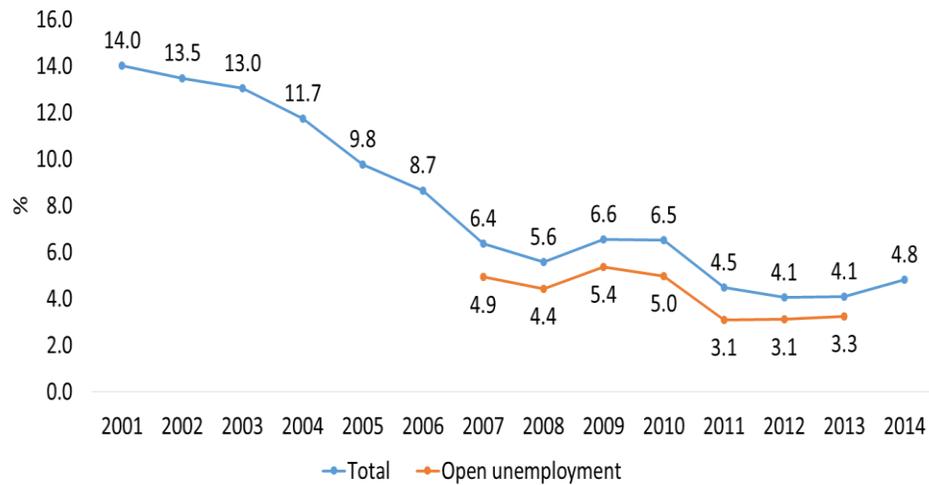


Source: Gallardo

### VI.2.3 Labor Market Policies and Programs

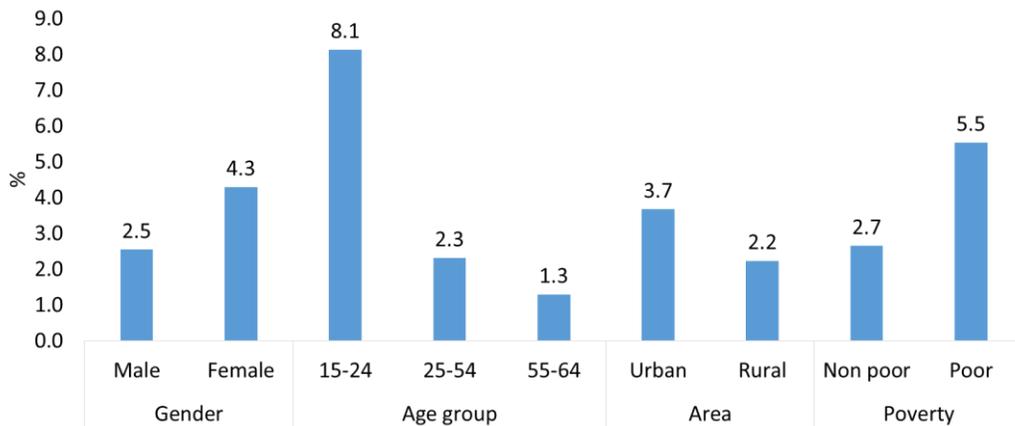
**High and sustained economic growth has contributed to reduce unemployment rate; however it is still high among the youth.** The good economic growth in Panama in recent years has been accompanied by reduction in the unemployment rate. In 2001 the unemployment rate was 14% and reduced to 5.6% in 2008. In 2009, when the international crisis took place, the unemployment rate raised to 6.6% but since then, has been declining reaching 4.1% in 2013 (Figure 94). Even though recent improvements, unemployment rate is still high among the youth and among those with secondary education (Figure 95). For instance, youth unemployment rate reached 8.1 percent, more than twice the national rate. Unemployment rate is also concentrated in urban areas reaching 3.7 percent in contrast with 2.2 percent in rural areas. Moreover, unemployment is still high among those with secondary education and has been increasing for those with tertiary education (Figure 96). Among those unemployed, the share with secondary complete or more education has increased in the last few years (Figure 97).

**Figure 94: Unemployment rate**



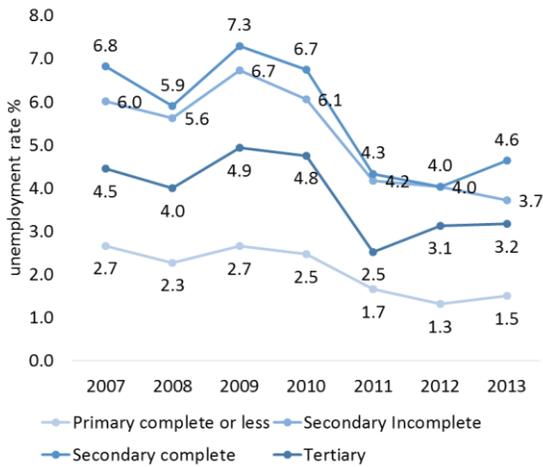
Source: Contraloria and SSEIR

**Figure 95: Unemployment rate by groups, 2013**

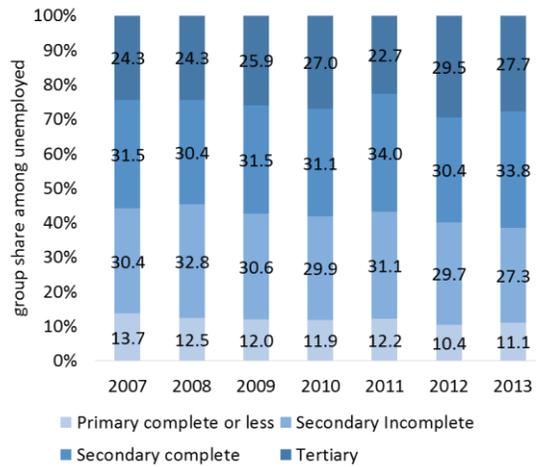


Source: World Bank SSEIR team's analysis of household surveys, authors' calculations using standardized ADePT software (Labor Module).

**Figure 96: Unemployment rate by education (%)**



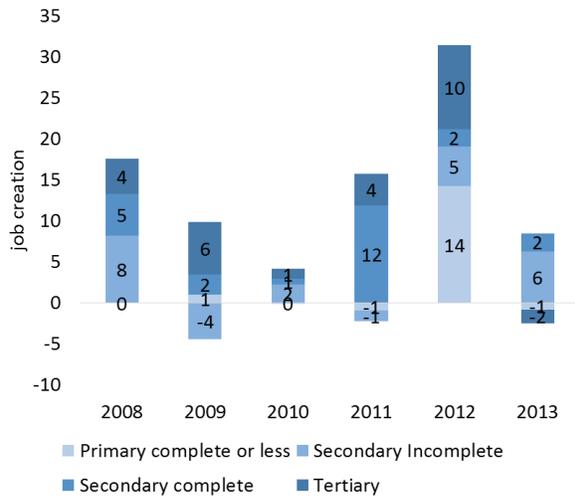
**Figure 97: Group share among unemployed (%)**



Source: World Bank SSEIR team’s analysis of household surveys, authors’ calculations using standardized ADePT software (Labor Module).

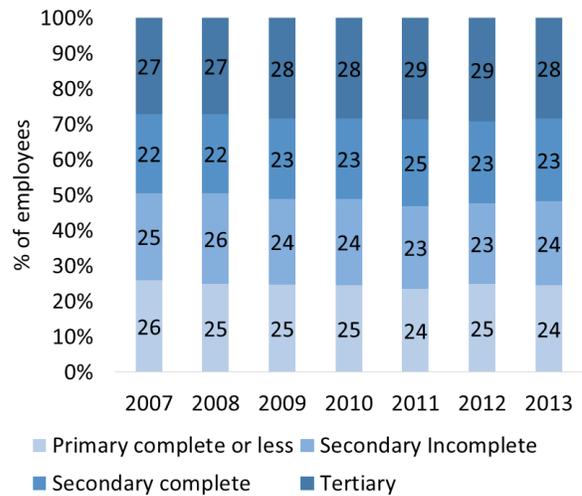
**Evidence is also highlighting a shortage of skilled workers.** Changes in the labor market did not favor the low-skilled and job creation has concentrated in high skilled workers. From 2007 to 2013, total employment increased for workers with tertiary or complete secondary education (Figure 98). Moreover, in 2013 more than 50% of employees had higher education or completed secondary education (Figure 99). In contrast, labor demand for low skilled workers decreased in that same period. All economic sectors increased demand for high skilled workers especially in services, retail, hotels and restaurants and transport. As consequence, wages increased the most for high-skilled workers than for low skilled workers (Figure 100). In fact, from 2007 to 2013, the real wage for workers with tertiary education increased by 26 percent while the real wage for workers with primary education increased 11 percent.

**Figure 98: Job creation by educational level 2008 - 2013**



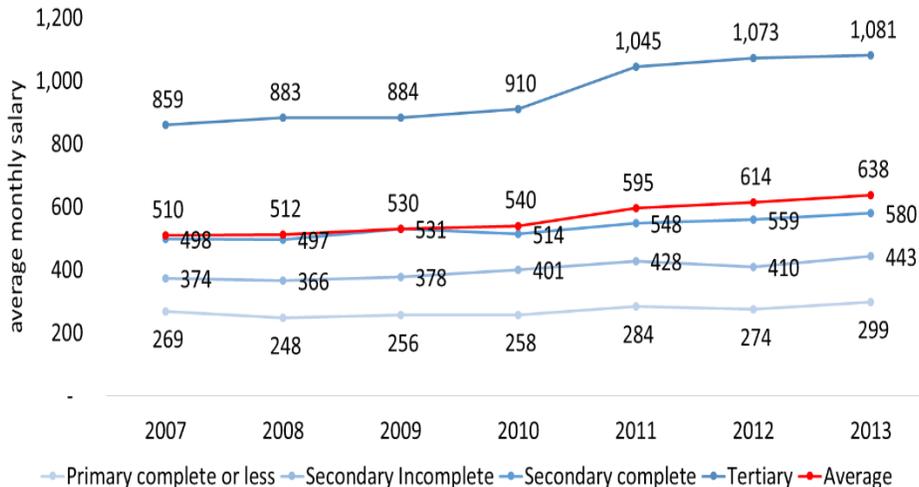
Source: World Bank SSEIR team's analysis of household surveys, authors' calculations using standardized ADePT software (Labor Module).

**Figure 99: Share of employees by educational level 2007-2013**



Source: World Bank SSEIR team's analysis of household surveys, authors' calculations using standardized ADePT software (Labor Module).

**Figure 100: Real wages by education**

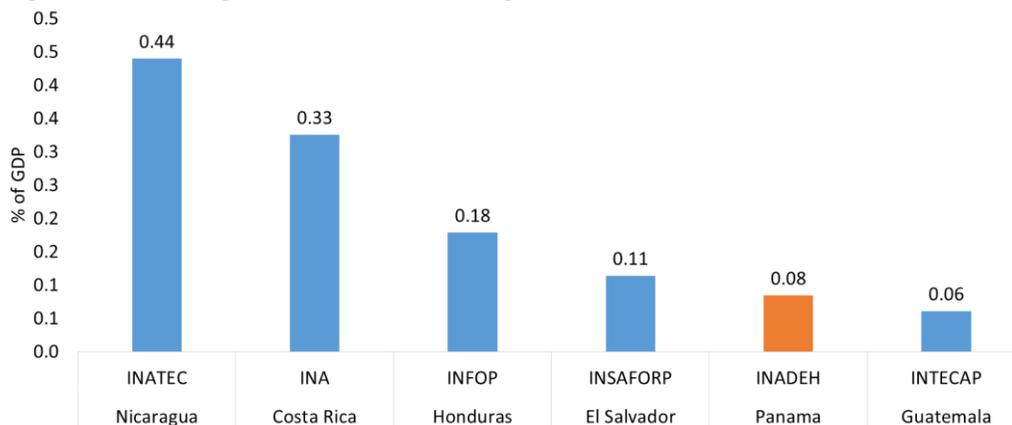


Source: World Bank SSEIR team's analysis of household surveys, authors' calculations using standardized ADePT software (Labor Module).

**However, Panama's spending on Active Labor Market Programs ALMPs is very low compared to its neighbors, though the Government is taken steps to increase coverage to meaningful levels.** Panama spends 0.08 percent of GDP in ALMPs which is lower than most Central American Countries (except for Guatemala, 0.06 percent of GDP) (Figure 101). The main institutions that provide ALMPs are the National Professional Training Institution (Instituto Nacional de Formación Profesional y Capacitación para el Desarrollo Humano, INADEH) and the Ministry of Labor (Ministerio de Trabajo y Seguridad Social). ALMPs consist of very few programs aiming the youth. PAIL supports labor market insertion (only covered 493 individuals

in 2013). The job placement service is run by the Ministry of Labor (provided services to almost 5,000 individuals in 2013). A pilot youth apprenticeship program, Panama ProJoven, which aims to provide apprenticeship subsidies to 10,000 graduates from technical secondary education (as of 2015, coverage is around 1,000 individuals). And the different occupational training courses provided by the National Professional Training Institute (INADEH), with 10,000 individuals graduates in 2013. As consequence, in 2014 the government launched the new Employment Policy. The Employment Policy is a Government strategic document that defines priority sectors for economic growth and the resulting employment and skills needed required to support those sectors.

**Figure 101: Budget of Public Training Institutions in Central America, 2013**



Source: World Bank SSEIR / ICEFI social spending database

**The National training institute, INADEH aims to develop and implement training policies and strategies, as well as design and provide training programs for public and private sector.** One of the INADEH's activities is development and provision of training programs in basic labor skills for unemployed, poor and vulnerable. In the last few years, INADEH enrolled over 450 thousand individuals, and completed training of more than 280 thousand people across Panama.<sup>74</sup> In its product range are hundreds of courses in 16 areas of training recently expanded to 31 technical areas. In 2013, 44,221 participants graduated in different areas of training

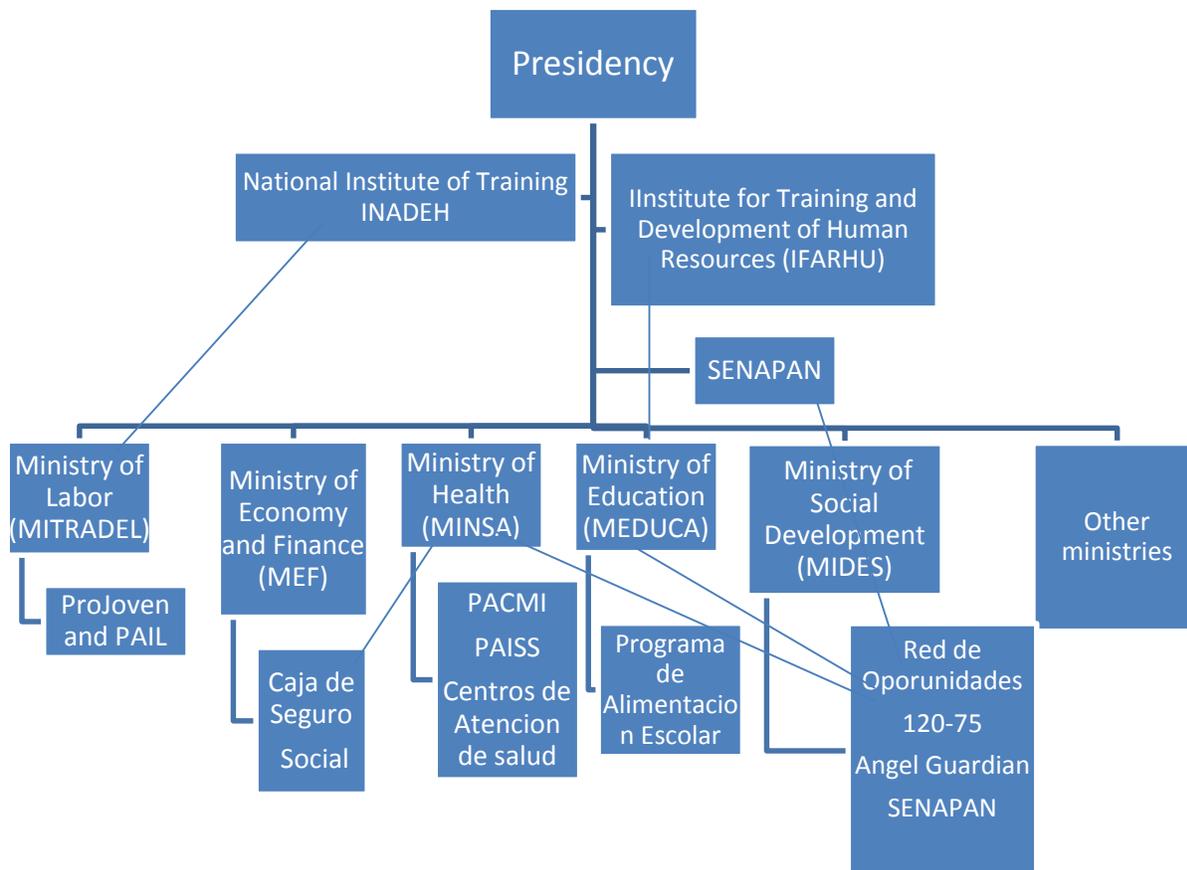
### VI.3 Institutional Arrangements

**The lead institution in the SPL sector is the Ministry of Social Development (MIDES); however, SPL interventions in Panama involve other institutions as well.** MIDES was created by Law 29 of August 1, 2005. Its institutional appearance has been the result of the reorganization of what was at the time, the Ministry of Youth, Women, Children and family (MINJUMNFA: November 1997 - July 2005). MIDES manages most of the major SPL interventions in Panama such as the CCT and the Social Pension. Contributory social assistance

<sup>74</sup> La Educacion Tecnica Vocacional y Profesional en Panama y su Relacion con el Empleo, Almeida et al., World Bank, 2013.

programs are basically centralized by the Social Security Fund (CCSS) dependent on the Ministries of Economy and Health. Non-contributory interventions, involved in its implementation the ministries of Health, Education and Social Development. Increasing the impact of interventions requires integrating the actions in three areas (health, education and social development) and four institutions (Ministry of Health, Ministry of Education, CCSS, and MIDES). For instance, The CCT Red de oportunidades covers a wide range of interventions involving heavy demands coordination between MIDES, Ministry of Health, and Ministry of Education (IDB, 2009); food interventions also required coordination between SENAPAN and the MoH (the national plan against child malnutrition, developed in 2006 tries to overcome the problems of coordination). To provide job training to improve the skills, coordination mechanisms between the INADEH and MITRADEL must be strengthened to articulate a real demand identification system of training and employment; and create mechanisms for consultation and care of the demand of productive sectors (Strategic Plan 2010-2014).

**Figure 102: SPL- Main institutions**



**The Ministry of Social Development’s (MIDES) 5-year plan has focused on the need to increase the efficiency of social transfers and enhance their role as vehicles out of poverty.** MIDES’ plan aims to strengthen the role of the social protection system in facilitating the transit

of poor and vulnerable households towards economic autonomy, reducing dependence on programs and encouraging participation in interventions of productive development and employability.

**Social protection programs are still not articulated and miss potential operational synergies that weakens the impact on the target population.** Social protection programs have been created with different objectives, registration forms, and eligibility conditions. These registration and information collection differences limit the capacity to establish linkages between beneficiaries of different programs. For instance, the RO Program administered by the Ministry of Social Development (MIDES) is aimed at mitigating poverty and uses a proxy means test (poverty) targeting instrument to identify the extreme poor. *Beca Universal*, on the other hand, is aimed at reducing school dropout, is administered by a different institution (IFARHU), and does not distinguish by socioeconomic level but by educational performance, as it provides a cash transfer to students having passing grades. While education related co-responsibilities are present in RO (school attendance) and Beca Universal (grade performance), there are no operational linkages between MIDES and IFARHU, in spite of a significant fraction of households receiving both transfers. In the poorest income quintile, about 40 percent of school aged children live in households that receive RO transfers, and a quarter of them also receive Beca Universal. A more effective policy addressing attendance and performance might be possible if these programs are better aligned in terms of their operations, eligibility or benefit structure.

**Panama is working on the creation of a Single Beneficiary Registry (Registro Unico de Beneficiarios, RUB).** In order to optimize SPL interventions, the Government of Panama has recently started to work on a Single Beneficiary Registry (RUB) under the coordination of the Ministry of Social Development (MIDES). The RUB will consist of an effort to consolidate a database that contains structured and systematic information about current and potential beneficiaries of the different social programs. The RUB will contain information of potential and / or actual beneficiaries of the programs concerned, the socioeconomic characteristics of households and their environment. The basic objective is to understand and quantify RUB who and how are the current and potential beneficiaries of social programs in order to maximize its positive impact on the target population. Similar records systems are successfully implemented in countries in the region such as Argentina, Brazil, Colombia, Costa Rica, Chile and Mexico.

## VII Conclusion and Policy Recommendations

### VII.1.1 Education

**Although Panama’s public spending on education has increased in real terms, its share of GDP decreased between 2007 and 2013 and has remained low based on international standards.** While it has reached universal primary education coverage, secondary education coverage remains low relative to comparable countries in the LAC region. Moreover, there are large differences across income quintiles and regions in terms of access and graduation rates for lower and upper secondary levels. In particular, access to upper secondary education is exceedingly unequal across income quintiles. Furthermore, education quality is an issue with Panamanian students having performed at very low levels based on Program for International Student Assessment (PISA) results, especially when compared with other Latin American countries or countries with similar GDP per capita. Based on these challenges, we summarize below the main policy recommendations for the education system in the country.

**Education priorities will involve promoting a greater access and completion rates for upper secondary education and decrease within country inequalities.** Although Panama has accomplished the Millennium Development Goals (MDG) of achieving universal primary education, it still faces low enrollment and completion rates for upper secondary education. These problems are higher for at risk groups from the lowest quintiles making it more difficult for them to overcome poverty. Available data indicate that the main reasons for dropping out of school in Panama are financial reasons<sup>75</sup>. Panama has two conditional cash transfer programs aiming to assure school attendance: *Becas Universales*<sup>76</sup> and *Red de Oportunidades*<sup>77</sup>. Nevertheless, while these programs represent positive initial steps to reduce dropout rates, recent data suggests that these interventions have not been sufficient<sup>78</sup>. Beyond conditional cash transfers, teen-pregnancy reduction policies, deferred scholarships, socio-emotional training, and early warning systems produce the largest reductions in dropout at the higher secondary education. Looking forward, a more equitable education system is also necessary to offer timely and appropriate support to the vulnerable groups through a diverse portfolio of interventions ranging from financial incentives, non-financial incentives and pedagogical and socio-emotional interventions. In the short-term, the following measures are recommended: (a) Deepen the restructuring of the general and technical curricula to make it more engaging, “hands on”, and

<sup>75</sup> Programa Estado de la Nación (2011), “Cuarto Informe Estado de la Región en Desarrollo Humano Sostenible.”

<sup>76</sup> Beca Universal is a program managed by IFARHU which consists of a monthly payment of US\$20 (US\$180 annually), conditional to academic achievement, to all students in public schools and certain private schools with annual fees lower than US\$ 1,000. The program has reached approximately 480,000 beneficiaries in 2012.

<sup>77</sup> The Red de Oportunidades is a program managed by Ministerio de Desarrollo Social (MIDES). Consists of a monthly payment of US\$ 50 to households in poverty or extreme poverty under the condition that school-age children attend classes, among other requirements. The program reached roughly 70,000 households in 2012

<sup>78</sup> MEDUCA & UNICEF “Factores Asociados al Abandono del Sistema Educativo en la Transición Escolar” (2015)

attractive for youth (and to the labor market in the case of the technical courses); (b) Evaluate the cost-effectiveness of the existing cash programs in actually reducing dropout rates; (c) Piloting and evaluate modifications in the targeting and design of *Bolsa* and Red to ultimately improve coverage and effectiveness among the at risk/vulnerable groups. In the medium term (3 to 5 years) the government could facilitate access to upper secondary education both through more supply and demand side interventions, in particular by (a) providing good quality infrastructure in rural and indigenous population regions, (b) creating deferred scholarships that delay rewards until the completion of pre-set benchmarks, (c) implementing teen pregnancy reduction programs for women, (d) stimulating socio-emotional learning, (e) increasing tutoring availability, and (f) boosting early-warning systems of school dropout.

**Increasing the quality of general and technical education, through more motivated and prepared teachers.** Standardized international tests have shown that education quality is a main issues in the Panamanian education system. Moreover, the unmet demand for skilled workers has led to intense competition for trained workers, the need to bring foreign talent, and a larger constraint in economic growth. To increase the quality of education in Panama, teacher quality is a key priority. An effective teacher policy reform can help reduce the student-teacher ratio to a level that is low compared to international standards and takes into account the projected population of Panama. It can also attempt to recruit better teachers, groom them through in-service training and effective evaluation, and motivate them through professional growth and adequate recognition. To increase the relevance of education in Panama, a second key priority is the expansion of training of technicians and other vocational degrees for whom demand is high and expected to continue growing. In the short term, the following recommendations are to: (a) Ensure that teachers' salaries are attractive for recruiting high quality teachers; (b) develop incentives (financial or non-financial) for top performing teachers; and (c) increase the enforcement of more instructional time in the classroom. In the medium term, the Government could consider: (a) raising accreditation standards for university based programs to increase the quality of teacher training and more generally the quality of higher education; (b) introducing well-defined career progression and financial rewards linking career progression with performance and training; and (c) increasing the collaboration between the central government and municipalities, principals and teachers in decision making process.

**Improving the balance between autonomy and accountability is a key ingredient to allocate resources efficiently that the government is missing.** The lack of consensus between government and other internal and external actors in the education system is restricting the implementation of a more effective way to allocate resources. In the short to medium term, it is recommended that the Government consult with municipalities, principals and teachers in all major decisions regarding spending, hiring, firing and changes in curriculum. There is evidence that pedagogical interventions and parental and community involvement in school management have positive effects on students outcomes. In addition, in the medium-term, it is recommended that the Government consider promoting the community and school management involvement of parents accompanied by more training/education.

**Strengthening and institutionalizing a monitoring and evaluation system in the education sector.** Recently published statistics only include data on enrollment. Thus, the actual available data facilitate tracking coverage but does not offer any evidence to inform policy decisions and to enable following up on issues like efficiency and quality. Similarly, learning outcome data is missing. Therefore, systematic measurement, publication of educational indicators and standardized tests results are needed. In the short term, it is recommended that the government (a) ensures all new policy pilots are tested and evaluated with rigorous empirical strategies (program evaluation) and (b) strengthens and systematizes data collection efforts. In the medium-term, it is proposed that the government develops and implements a systemic approach to monitoring and evaluation in the education system.

**Diversifying options at the tertiary level, developing technical non-university degrees and facilitating the transition of students between tertiary institutions.** Panama would benefit from strengthening links between MEDUCA and educational institutions, including the National Institute of Training for Human Development (Instituto Nacional de Formación y Capacitación para el Desarrollo Humano; INADEH) and the Ministry of Labor and Workforce Development (Ministerio de Trabajo y Desarrollo Laboral; MITRADEL). It also needs to strength public and private partnership in education to form high quality technicians.

## VII.1.2 Health

**Panama's relatively high public spending on health has yielded mixed results.** Panama's public spending on health grew in real terms from 2007 to 2013 and was one of the highest in Central America, contributing to reductions in child and mortality rates and child malnutrition. On the other hand, other outcomes have worsened. For example, assisted deliveries and immunization coverage decreased and TB incidence increased. Moreover, non-communicable diseases have increased, becoming the leading causes of mortality and morbidity in the country. In addition, inequality in terms of access and quality of health care for the rural, indigenous population remains a major concern and there is room for improving the equitable distribution of resources, especially health personnel across areas/regions. Also, the share of out of pocket spending out of total health expenditures has increased from 80.9 percent in 2005 to 82.5 percent in 2011.

**On the institutional side, the Government has successfully implemented several reforms in the health sector although a number of important ones remain to be implemented.** As of 2013, the country had completed 75.5 percent of the International Health Regulation Requirements, aside from moving forward with other reforms such as implementing the Extension of Coverage Strategy to remote rural areas, reforming the Health Code, and certification and recertification system of medical personnel. However, there are still changes that could be made to improve efficiency and accountability in the system. For example,

significant efficiency gains are expected by enhancing the coordination between the MOH and the CSS to reduce duplication of efforts and resources. In addition, mechanisms through which civil society could participate to hold the MOH accountable remain limited and could be increased.

**In moving forward, the Government of Panama could consider the following short term recommendations in the health sector:**

- a. **Continue to strengthen Primary Health Care (PHC) in rural areas through the use of mobile health teams and well-defined coordination channels among the different service providers in rural areas.** Human resource management strategies can have some impact on improving access to PHC in rural areas. At the same time, maintaining activities that are underway to provide PHC in these remote locations such as the use of mobile teams must be reinforced especially in the short-term to continue to improve access to health care in these remote rural areas. Strategies could focus on closing the gap between the existing demand for providers and the present supply of professionals both in number and according to specialty, as well as in improving coordination among different service providers.
- b. **Implement human resource management strategies to better address inequities and improve results by reviewing incentives and performance management policies currently governing over Panama's health workforce.** Despite constituting an estimated 70 percent of the health sector budget, HRH continues to show problems of scarcity and poor distribution of health care professionals. Given the particular geographic, demographic and ethnographic characteristics of the country's population and their health care requirements, it is recommended that the Government review existing policies and identify new incentives that could have a positive impact on health workforce performance and that could address issues of scarcity and distribution.
- c. **Strengthen identification of elderly population at risk to address NCDs.** Identify a set of actions to properly identify the elderly population at risk for NCDs and cross-check beneficiary data to determine whether they are enrolled in existing social protection programs appropriate to their context.
- d. **Support the MOH in its current review of the different RBF approaches used under different schemes with the aim to develop one coordinated RBF methodology with shared implementation and coordination channels for the rural, poor areas.** The MOH is currently reviewing the different RBF schemes implemented under the different health service delivery strategies, e.g., PSPV, PAISS, etc. This review will surface good practices under each scheme, lessons learned, and will outline differences in the implementation of each scheme particularly in how verification, payments, and results monitoring are conducted. The result from this review would define one common RBF scheme to be applied

across one shared health services delivery strategy to strengthen the implementation in the rural, poor communities

- e. **Identify areas within the health expenditures that can be managed more efficiently and be linked to health outcomes.** Currently, the two sources of public funding for health services, the CSS and the MOH, overlap in providing health care services to the uninsured, doubling financial efforts into a single area of health care provision. In addition, public sector health budget execution rates have significantly declined since 2007. A more in-depth study would be needed to understand areas of duplication across the MOH and CSS, as well as main factors behind the decrease in budget execution rates, particularly in the case of the CSS. .
- f. **Develop and implement an action plan to integrate the various, independent health information systems into one national health information system to support Panama in its evidence-based policy and decision-making to ensure health service delivery to the areas most in need.** Panama's health sector has the systematization of health information as one of its overarching priorities. This process began in 2007 with Panama's participation in the Health Metrics Network (HMN) diagnosis of its current health statistics system. Based on the HMN diagnosis, an estimated 16 health information sub-systems were identified but new sub-systems have emerged since that date. The development and implementation of an action plan to improve the functioning, coordination, and use of the overall health information system would progressively allow for decision making based on evidence and facilitate tracking of progress toward established sector goals.

**In the Medium term (three to five years), it is recommended that the Government focus on three main areas:**

- a. **Reducing maternal mortality.** It is recommended that Panama focus on improving maternal health, especially prenatal care and assisted deliveries, among indigenous and other rural poor women. Because of the present difficulties in access to care in rural communities, there is much room for improvement on maternal mortality rates. Continuous efforts in areas such as human resource incentives, RBF methods to improve both access and quality of PHC will have a progressive positive impact on the status of maternal mortality. The Government has committed to reducing the maternal mortality rate by including maternal and child health as priority focus areas of its Extension of Coverage Strategy. Over time, the Government could reformulate the PHC model provided through monthly mobile health team visits to transition toward permanent access to quality health services.
- b. **Strengthen NCD prevention focus, targeting the elderly.** In the case of the elderly population, strengthen MOH efforts on screening and diagnosis for chronic diseases, beginning with a focus on hypertension and diabetes to identify those most in need of health services. This would also involve determining whether the beneficiary is registered in any

social program and if not, proceed with the registration of the beneficiary in the appropriate program.

- c. **Controlling rising costs.** Health care costs have been rising steadily in Panama. As a percentage of GDP, Panama spends considerably more than other countries in the region. In order to ensure the long-term sustainability of the sector, public expenditure would need to be controlled through a combination of cost-cutting, better targeting of resources, and incentive based programs to improve the efficiency of funds used. Also, continuing to support and strengthen the RBF methodology which is currently in place in the PHC rural setting, would contribute to improved results for money spent or value for money. Progressively thinking of expanding this type of methodology into other health care settings may prove useful in adding to this goal.
- d. **Improving coordination of health sector functions.** The Government of Panama would need to assess different scenarios for the integration of health sector functions to strengthen the MOH stewardship role and the CSS's role in service provision. Currently, MOH performs a stewardship role and also provides services in certain regions of the country. It would be critical to have a data-supported understanding through a detailed assessment of the true costs and coverage of the services provided by both the MOH and CSS to identify ways to achieve a better distribution of responsibilities within the health sector in order to achieve cost-effectiveness both in stewardship and service provision.

### VII.1.3 Social Protection and Labor

**In the past decades, Panama has been developing a set of contributory and non-contributory programs and interventions aiming to reduce vulnerability, poverty, exclusion and inequality.** The paradigm shift in Panama's social policy and the fight against poverty meant redirecting and targeting action on the poorest population groups with a view to improving mechanisms of distribution and redistribution of incomes, services, and opportunities. The articulation and alignment of social promotion and protection programs, projects and actions has induced an institutional reorganization that is gradually forming new mechanisms for implementing public policies, but which have not yet become fully structured, developed and crystallized.

**Public spending in SPL is still moderate per international standards, but it has increased over the last few years both in real per capita terms and as a share of GDP.** Social Security accounts for the bulk of SPL spending, though this share has remained stagnant in the past few years. Social assistance spending remained stable between 2007 and 2013, but as a share of GDP

it has declined since 2011. The exception is subsidies, which are on the rise, increasing on average 17 percent per annum from 0.2 percent of GDP in 2007 to 0.6 percent in 2013.

**Improvements in targeting of large interventions, such as the social pension and subsidies, are key to increase coverage among the poor, and expand other priority interventions, such as ALMPs.** There are large imbalances in terms of resource allocation and priorities. While the good targeted RO has relatively small coverage, the large social pension (120 a los 65) is poorly targeted. Subsidies should also be poverty targeted instead of consumption-based, to avoid large exclusion and inclusion errors. On the other hand, ALMPs are virtually non-existent and priorities to improve skills and reduce skill shortage calls for more meaningful investment in training and productive inclusion programs.

**The set of social protection policies and programs must be articulated in a system to maximize complementarities, efficiency, and impact.** For example, social transfers aimed at the same population, like RO, Beca Universal, and school feeding, should be better aligned to reduce administrative costs and maximize impact, understanding that each program has different objectives (RO tackles opportunity costs for enrolment and consumption support; Beca Universal encourages performance; school feeding promotes better nutrition to improve concentration). The contributory (CSS) and non-contributory (120/65) pensions systems should be aligned to offer incentives that do not entice non-contribution and informality in labor markets. Articulated social protection systems can facilitate efficiency gains by exploiting the synergy between different policies, institutions and programs.

**This can be achieved through the creation and implementation of a single beneficiary registry that harmonizes and facilitates communication across programs for policy design and monitoring purposes.** As other LAC countries, Panama would benefit from the institutionalization of harmonized single beneficiary registries and social information systems to map socioeconomic conditions of the poor and vulnerable population and form the basis for analysis of program eligibility, system duplications, and design of new programs addressing other social risks. The Government is already undertaking these steps that need to be finalized and accompanied by appropriate legislation to mandate its use. This would support the consistency of information collection across programs and the linkages of information across same-household beneficiaries from different programs.

**MIDES should also strengthen its monitoring and evaluation capacity.** MIDES would benefit from strengthening monitoring and evaluation (M&E) activities for the main social programs. An improved M&E system is critical to gather relevant information about the situation of social programs, process that information, and provide adequate access to it in order to secure a timely and proper monitoring, and to support the design and implementation of impact evaluations (following the RO CCT example).

## Appendix

**Appendix 1: Matrix of Short – and Medium-Term Options for Policy Reform**

Options for Policy Reform	Short term (1-2 years)	Medium term (3-5 years)
<b>Education</b>		
Promote greater access and completion rates for upper secondary education and decrease within country inequalities.	Rethink the general and technical curriculum to make it more engaging and attractive for youth (and to the labor market for technical courses). Evaluate the cost-effectiveness of the existing cash programs in actually reducing dropout rates; Piloting and evaluate modifications in the targeting and design of <i>Bolsa</i> and Red to ultimately improve coverage and effectiveness among the at risk/vulnerable groups.	Facilitate access to upper secondary education through (a) providing good quality infrastructure in rural and indigenous population regions, (b) creating deferred scholarships that delay rewards until the completion of pre-set benchmarks, (c) implementing teen pregnancy reduction programs for women, (d) stimulating socio-emotional learning, (e) increasing tutoring availability, and (f) boosting early-warning systems of school dropout;

<b>Options for Policy Reform</b>	<b>Short term (1-2 years)</b>	<b>Medium term (3-5 years)</b>
Increase the quality of general and technical education	<p>Evaluate teachers' salaries so that they are attractive for recruiting high quality teachers.</p> <p>Develop financial or non-financial incentives for top performing teachers and students.</p> <p>Increase the enforcement of more instructional time in the classroom.</p>	<p>Raising accreditation standards for university based programs to increase the quality of teacher training.</p> <p>Introduce well defined career progression and financial rewards linking career progression with performance and training.</p> <p>Increase the collaboration between the central government and municipalities, principals and teachers in decision making process.</p> <p>Promote the community and school management involvement of parents accompanied by more training/education.</p>
Strengthen and Institutionalize a Monitoring and evaluation system in the Education Sector	<p>Ensure all new policy pilots are tested and evaluated with rigorous empirical strategies (program evaluation).</p> <p>Strengthen and systematize data collection efforts.</p>	<p>Develop a systemic approach to monitoring and evaluation in the education system.</p>
<b>Health</b>		

<b>Options for Policy Reform</b>	<b>Short term (1-2 years)</b>	<b>Medium term (3-5 years)</b>
Towards an Equitable Health System	<p>Continue to strengthen Primary Health Care (PHC) in rural areas via improved coordination and continuous mobile health team service deliver</p> <p>Implement human resources management strategies to address health personnel distribution gaps in poor rural areas.</p> <p>Strengthen actions to identify elderly population at risk of NCDs and verify/cross-check that they are included in social programs that can support them in addressing their condition.</p>	<p>Reformulate the PHC model provided through monthly mobile health team visits to transition toward a model providing permanent access to quality health services</p> <p>Reduce maternal mortality by focusing on improving maternal health, especially prenatal care and assisted deliveries, among indigenous and other rural poor women. Continue efforts in human resource incentives and RBF methods to improve both access and quality of PHC to progressively decrease maternal mortality.</p> <p>Improve NCD screening and prevention focus, targeting the elderly</p>
Towards an Integrated Health System	<p>Support MOH in its current review of the different results-based financing (RBF) approaches used under different schemes with the aim to develop one coordinated RBF methodology with shared implementation and coordination channels for the rural, poor areas.</p> <p>Conduct detailed health expenditures review and identify main factors behind decreases in budget execution rates especially in the case of the CSS, and ways to reduce CSS and MOH overlap</p> <p>Develop action plan to integrate various health information systems into one national health information system.</p>	<p>Based on review of public health expenditures, implement cost cutting measures to ensure sustainability with better resource targeting and use of incentive based programs</p> <p>Assess different scenarios for integrating health sector functions to strengthen MOH stewardship role and CSS role in service provision</p>
<b>Social Protection</b>		

Panama Social Sector Expenditure and Institutional Review

Options for Policy Reform	Short term (1-2 years)	Medium term (3-5 years)
Reduce inclusion/exclusion errors	<ul style="list-style-type: none"> <li>• Improve targeting of key SA programs such as Social pension and the CCT.</li> <li>• Revise overlapping and eligibility criteria's of the CCT, the Universal Scholarship, gas and electric subsidies, etc.</li> <li>• Enhance the role of promotores (responsible for disseminating information to beneficiary families on the functioning of programs).</li> <li>• Improved coverage of the extreme poor mainly for the CCT.</li> <li>• Improve articulation/coordination of social programs</li> </ul>	Build up and mandate use of single registry
Development of a <i>single social information system.</i>	<ul style="list-style-type: none"> <li>• Built on the Single Beneficiary Registry (RUB) for developing a Single Registry (SR)</li> </ul>	<ul style="list-style-type: none"> <li>• Strengthening of the monitoring and evaluation capacity in MIDES to harmonize the design, operation and monitoring of social protection programs</li> </ul>
Expand ALMPs	Evaluate performance of INADEH	Implement reforms in INADEH Expand employment services

**Appendix 2: Household Surveys databases– Source and definition of variables**

<b>Countries</b>	<b>Period</b>	<b>Household Surveys</b>	<b>Educati on</b>	<b>Social  Protec tion</b>	<b>Labor</b>	<b>Health</b>
<b>Costa Rica</b>	2007-2014	Encuesta de Hogares de Propósitos Múltiples (EHPM) 2007-2009. Encuesta Nacional de Hogares (ENAHO) 2010-2014. Encuesta Nacional de Salud en Costa Rica (ENSA-2006). Encuesta de Ingresos y Gastos (ENIGH) 2012-2013.	EHPM, ENAHO	EHPM, ENAHO	EHPM, ENAHO	ENSA, ENIGH
<b>El Salvador</b>	2007-2013	Encuesta de Hogares de propósitos múltiples (EHPM) 2007-2013	EHPM	EHPM	EHPM	EHPM
<b>Guatemala</b>	2006, 2011	Encuesta nacional de condiciones de vida ENCOVI 2006 and 2011	ENCOVI	ENCOVI	ENCOVI	ENCOVI
<b>Honduras</b>	2007-2013	Encuesta Permanente de Hogares de Propósitos Múltiples (EHPM) 2007-2013. Demographic and Health Survey (DHS) 2011-2012.	EHPM	EHPM	EHPM	DHS
<b>Nicaragua</b>	2005-2009	Encuesta Nacional de Hogares sobre medición de nivel de vida EMNV 2005 and 2009	EMNV	EMNV	EMNV	EMNV
<b>Panama</b>	2007-2013	Encuesta de Hogares (ECH) 2007-2009. Encuesta de Mercado laboral (EML) 2010-2013. Encuesta Nacional de Niveles de Vida (ENV) 2008	ECH, EML	ECH, EML	ECH, EML	ENV
<b>Methodology: Classification ensures consistency across countries.</b>						
<b>Education</b>	Classification ensures consistency across educational levels: primary education 6 years and for secondary education 6 years.					
<b>Social Protection</b>	Follows World Bank - Aspire classification.					
<b>Labor</b>	Follows ILO classification					
<b>Health</b>	Follows ADePT - Health classifications.					
Results: Most tables are produced using the ADePT software - Social Protection, Labor, Education and Health.						

**Appendix 3: Social spending databases– Source and definition of variables**

<b>Social Spending: Corresponds to budget executed by centralized and decentralized entities.</b>		
Period: 2007-2013		
Coverage: Central government + Subnational level. All public sectors		
Data: Total Spending by levels of government, decentralized entities, funding sources and at some times at program level.		
Classification: Follows IMF classification but with some modification on education and Social Protection.		
<u>Health</u> : includes expenditure on services provided to individual persons and services provided on a collective basis		
<b>CA classification</b>	<b>IMF Classification</b>	
<b>Medical products, appliances and equipment</b>	7071	Medical products, appliances and equipment
<b>Outpatient services</b>	7072	Outpatient services
<b>Hospital services</b>	7073	Hospital services
<b>Public health services</b>	7074	Public health services
<b>R &amp; D Health</b>	7075	R & D Health
<b>Health n.e.c</b>	7076	Health n.e.c
<u>Education</u> : includes expenditure on services provided to individual pupils and students and expenditure on services provided on a collective basis. Breakdown of education is based upon the level categories of the 1997 International Standard Classification of Education (ISCED-97) of the United Nations Educational, Scientific and Cultural Organization (UNESCO).		
<b>CA classification</b>	<b>IMF Classification</b>	
<b>Pre-primary</b>	7091	Pre-primary and primary education
<b>Secondary</b>	7092	Secondary education
<b>Tertiary</b>	7093	Postsecondary nontertiary education
	7094	Tertiary education
<b>Other</b>	7095	Education not definable by level
	7096	Subsidiary services to education
	7097	R&D education
	7098	Education n.e.c
<i>Excludes: teacher's pensions. Includes: Scholarships</i>		
<i>Modifications: Excludes the amount spent on training institutions.</i>		
<u>Social Protection</u> : includes expenditure on services and transfers provided to individual persons and households and expenditure on services provided on a collective basis		
<b>CA classification</b>	<b>IMF Classification</b>	
<b>Sickness and disability</b>	7101	Sickness and disability
<b>Social Security</b>	7102	Old age
<b>Cash Transfers</b>	7104	Family and children

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<b>Other Social Assistance</b>	7107	Social exclusion n.e.c
	7108	R&D Social Protection
	7109	Social protection n.e.c
	7103	Survivors
<b>Active labor Market Programs</b>		Amount spent on training institution + labor affairs
<b>Subsidies</b>		Energy, gas, water.
<i>Modification: Excludes: 7105 Unemployment and 7106 Housing. Includes subsidies and Active labor Market spending.</i>		

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