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Sorting Out State Subsidies

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1. Introduction

Public sector subsidies (e.g. direct public financing of certain activities or sectors in the economy) are among the key interventions to accomplish public policy goals, including boosting social safety nets for vulnerable groups, empowering different sectors to become much more resilient to climatic shocks and competition, and enhancing the country's agricultural development and industrialization prospects.

The effectiveness of subsidies depend critically, not just on where they are deployed, but also how they are applied. Two sets of support programs—the Pantawid Pamilyang Pilipino Program (4Ps) for poor mothers and children and the various agricultural support programs and subsidies—offer useful insights in this regard. The 4Ps provides cash and other support to poor mothers and children in order to support human capital investments in the next generation. On the other hand, the agricultural sector has long been supported by various programs implemented by government agencies like the Department of Agriculture (DA), National Food Authority (NFA), Philippine Coconut Authority (PCA), and Sugar Regulatory Administration (SRA). All these agencies and their attached programs support these various agricultural sectors to improve their competitiveness and build resilience against climatic shocks.

How effective have these programs been?

In the case of the 4Ps, there is strong evidence showing where it works, and where it could still be improved. And as more children are able to reach and complete high school—the threshold level of education empirically linked to poverty reduction—there is evidence of strong returns. In the case of government support to agriculture, however, historically the impact appears far less clear.

In fact, at least PHP 300 billion in budgetary support during the period from 1984 to 2015 has been provided to the corn, rice, sugar and coconut industries through the DA (PHP 47 billion in 2010-2015), NFA (PHP 232 billion in 1984-2015), PCA (PHP 18 billion in 1984-2015) and SRA (PHP 4.8 billion in 1984-2015). Yet, there seems to be scant evidence of increases in productivity, or improvements in the price competitiveness of the final product. The testament to this is the growing concern over increased competition in agriculture due to ASEAN integration.

State support for the sector is only the tip of the proverbial iceberg. Based on the latest World Bank data on subsidies, in 2012 alone there were at least PHP 341 billion in direct

subsidies provided by the Philippine government to different programs and agencies.[1] The 4Ps that year represented a mere 10% of the total subsidies provided by government. And unlike the 4Ps, the bulk of those subsidies are not subject to rigorous monitoring and evaluation.

When one compares the support provided to these two "infants"—the children under 4Ps and the agricultural sector—it becomes clear that neither set of programs are perfect. However, the 4Ps through its rigorous monitoring and evaluation framework shows more discipline in its implementation and thus scope for improvement. That cannot be said for the other subsidies and programs.

2. 4Ps: Breaking inter-generational poverty

Introduced in 2008, the 4Ps seeks to break intergenerational poverty by enabling poor mothers and their infants and children access basic health and education services. Put simply, through better education and health, the next generation could be able to break from the poverty that their parents were stuck in. Contrary to the expectations of many, the 4Ps program does not directly address the poverty of the present generation—other government programs tasked with spurring investments and facilitating job creation address that more directly.

The basic rationale behind the 4Ps is that no amount of job creation could benefit citizens who are deprived of strong education and health investments—the first step must be to end the vicious cycle of human capital deprivation that prevents many young citizens from the competing in the labor market more effectively.

Presently, 4Ps beneficiaries include more than 4 million households with an accumulated budgetary support of more than PHP 245 billion pesos during the period from 2008-2015.[2] More than 300,000 4Ps children graduated from high school in 2015, after the 4Ps were extended to high school students starting June 2014.

The adjustment was informed by research showing that a high school diploma increases the earning capacity of workers. For instance, the income returns from a high school degree could be up to 18%-23% more than those attained by a worker with little to no schooling

[1] Included in the World Development Indicators (WDI) of World Bank is an estimate of total subsidies per country. Pooling data from the International Monetary Fund (IMF) and national governments' finance statistics, the estimate include (1) unrequited and nonrepayable transfers (i.e. subsidies, grants and social benefits) to private and public enterprises, (2) grants to foreign governments and international organizations, and (3) transfers considered as social security, social assistance and employer social benefits.

[2] The cumulative budgetary support to 4Ps from 2008-2015 is computed from the annual budget appropriated to the program as indicated in the various years of the General Appropriations Act.

(Paqueo, et al. 2013). Graduates of elementary school only attain 7%-13% more in income returns.

Furthermore, there is also evidence that high school graduates earn an average daily wage of PHP 246—higher by about 46% compared to the wage of a worker who only had some years in elementary (i.e. PHP 169) (Reyes, et al., 2013). Hence, a father and a mother with high school degrees and three children could earn more than the daily poverty threshold for a family of five (i.e. PHP 395)[3].

In addition, various international studies (often including the Philippines as one of the data sources) point to the high returns from investments in education and health. For example, Trostel, et al. (2002), in a study of 28 countries, find that the rate of return to every additional year of education for the country is an 11.3% increase in wages of men and 19.2 % in women.

Another study across 120 industrialized and developing countries finds evidence that increasing health spending by 1% of GDP can increase the per capita GDP growth rate by 0.5 % (in absolute value) and decrease initial poverty incidence by around 13%. Increasing education spending by the same amount can increase the per capita GDP growth rate by 1.4% and decrease initial poverty incidence by around 18% on average (Baldacci, et al., 2004). These are all very powerful empirical findings suggesting that investments in education and health in children yield very high returns not just at the household level (increases in wages and incomes), but also at the national level (increases in competitiveness and over-all economics growth rates).

Perhaps put very simply and illustratively, if up to 300,000 additional young people from poor families graduate from high school every year for the next decade (i.e. the number of graduates produced by the 4Ps program right now), then 4Ps could lift up to 1.5 million households (two high school graduates in each) out of poverty. This is almost half the number of poor households in the country today.

Transfer programs such as the 4Ps are seen by experts as among the most cost-effective strategies to fight extreme poverty[4]. Nevertheless it bears reiteration that monitoring and evaluation has played a key role in clarifying the areas for improvement, as well as our general

[3] Based from the 2012 annual per capita national poverty threshold of Php 18,935, we calculated for the equivalent daily wage in order for a family of five to be considered nonpoor. This is assuming that only one member earns for the whole family. Based from the calculations, he must earn above Php 395 a day in order for his family to be considered nonpoor.

[4] http://www.project-syndicate.org/commentary/best-ways-to-fight-extreme-poverty-by-bj-rn-lomborg-2015-07

expectations of what the program is supposed to do. These also help to clarify how the program could be continuously improved over time—something that does not seem to discipline the rest of the government's subsidies and support programs.

There is no better example of this improvement than the discussion of targeting and leakages in the 4Ps (see Table 1). Recently, concerns over the targeting of beneficiaries in the 4Ps have been raised.[5] The inclusion error refers to the proportion of beneficiary households that were not flagged as poor. This is an "error" because some beneficiaries are not technically poor. Based on our own analysis of government data, the inclusion error increased from 11.14% of total beneficiaries in 2011 to 14.99% in 2013, decreasing slightly to 14.88% in 2014.[6] This often referred to as the "leakage rate".

On the other hand the exclusion error refers to the proportion of poor households that were not counted among the roster of CCT beneficiary households. This is also called the "under-coverage rate". The results indicate that the exclusion error has been decreasing over time, from about 85% to about 64%.

The additional restrictions indicated in Table 1 exclude poor households that do NOT have any (a) children or grandchildren of the household head, (b) aged 0-14 (2011 and 2013) or 0-18 (2014), (c) who are currently enrolled in school. (These are conditions in the 4Ps program.) The exclusion rates with these additional restrictions are also decreasing over time.

Table 1. Summary of Inclusion and Exclusion Errors for 2011, 2013, and 2014

Type of Error – Poverty Threshold	2011	2013	2014
Inclusion Error - 1st and 2nd Quintiles	11.14%	14.99%	14.88%
Exclusion Error - 1st and 2nd Quintiles	85.82%	67.38%	64.00%
Exclusion Error - 1st and 2nd Quintiles w/ Restrictions	81.03%	55.78%	53.66%

Note: Households belonging to the first and second income quintiles are flagged as poor.
Sources: APIS 2011, APIS 2013, APIS 2014,

Furthermore, Table 2 summarizes the inclusion and exclusion error rates of selected social protection programs. This is further important evidence we can use to assess whether the 4Ps program is well managed when compared to other similar programs. The results indicate that

[5] http://www.philstar.com/headlines/2015/06/28/1470837/adb-clears-dswd-conditional-cash-grants
[6] In calculating this, we followed the convention that the bottom two income quintiles best approximate the number of poor households.

the 4Ps in 2011 had an exclusion error rate that was considerably higher than the exclusion error rates of several Latin American social protection programs in 2009-2010. The DSWD, however, appears to have succeeded in improving this, and bringing it on par with its Latin American counterparts. In addition, the inclusion error rates registered by the 4Ps are also substantially lower than those of several Latin American social protection programs. This might suggest that the program far more disciplined, when compared to other similar programs abroad.

Table 2. Inclusion and Exclusion Error Rates of Selected Social Protection Programs

	4Ps			Bolsa Familia	Solidario	Familias en Accion	Oportunidades
Country	Philippines			Brazil	Chile	Colombia	Mexico
Year Started	2008			2003	2002	2001	2002*
Year Assessed	2011	2013	2014	2009	2009	2010	2010
Exclusion Error	81%	56%	54%	45%	67%	47%	47%
Inclusion Error	11%	15%	15%	50%	87%	71%	61%

*Oportunidades was preceded by Progresa which began in 1997.

Sources: APIS 2011, APIS 2013, APIS 2014, Jaramillo and Miranti (2015)

3. Infants that never grow up?

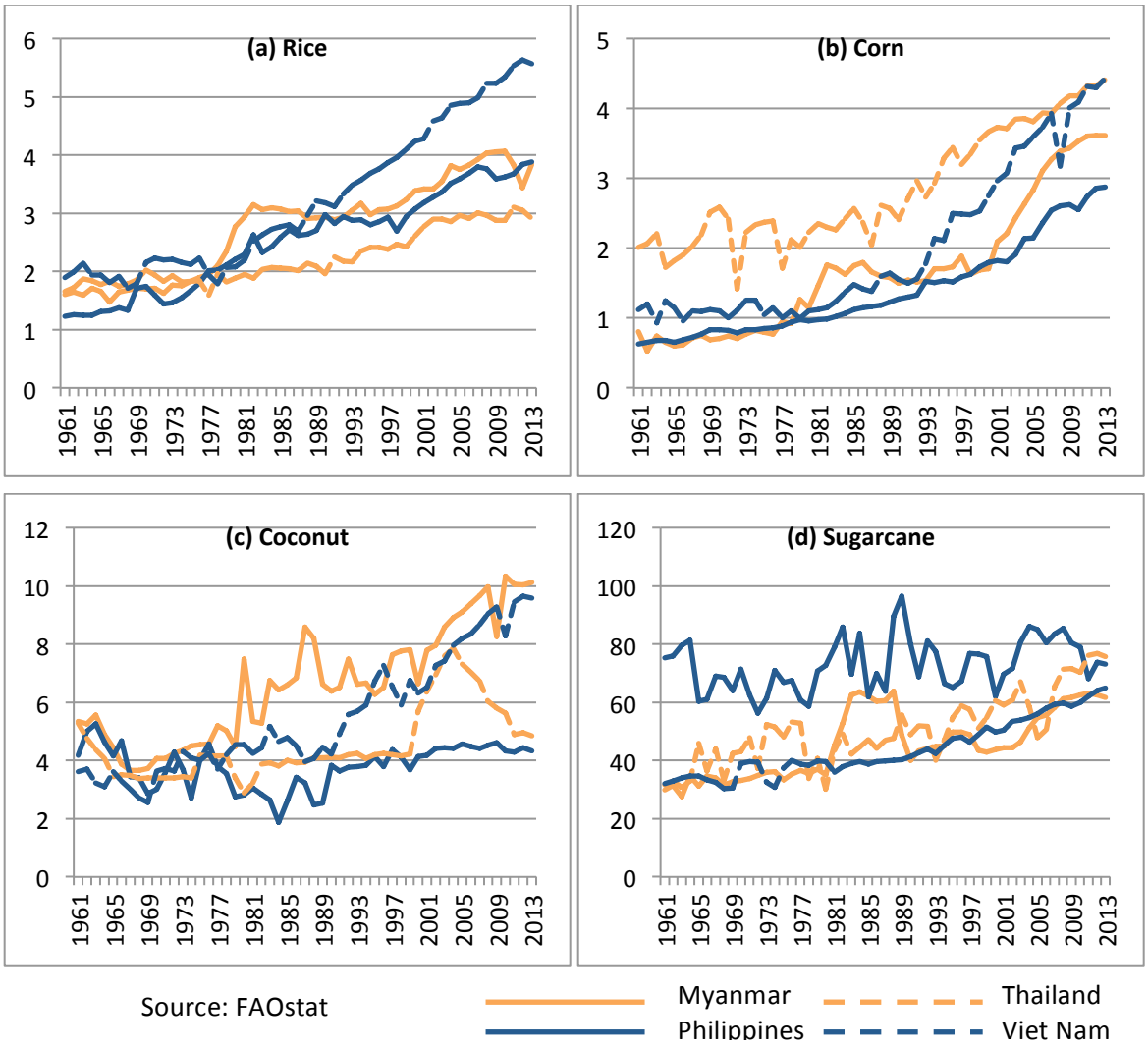
If state support to poor mothers and children offers some evidence of impact, prima facie evidence of high rates of return, and improvements in program targeting and implementation over time, then a similar assessment of state programs to support the country's agriculture sector appear far less clear as far as impact and effectiveness is concerned.

For instance, the sugar industry has historically benefitted from a high level of protection and support since its infancy starting with the preferential trade agreement with US in the early 20th century, all the way to the delayed reduction in tariffs in our country's latest trade agreements. However, in the many years of protection and support, productivity does not seem to have improved markedly since 1960s (Figure 1). The Philippines has lagged behind other

ASEAN sugar producers like Myanmar, Thailand and Vietnam in terms of yield; and fairly similar trends can be found for the rice, corn and coconut industries.

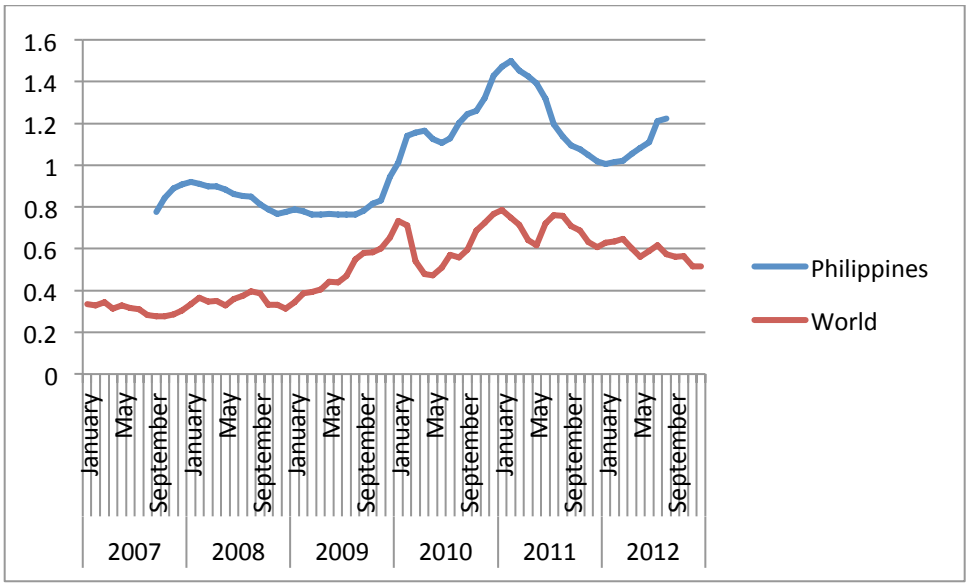
For the case of sugar competitiveness, the average domestic price of sugar is up to 93% (0.49 USD) higher than the average world price (Figure 2). Due in part to increasing competition from imports, the Aquino administration launched the Sugarcane Industry Development Act of 2015. It will trigger programs trying to improve the incomes of farmers and farm workers through improved productivity (notably by achieving more scale in production), product diversification, job generation and increased efficiency of sugar mills.[7] At least PHP 2 billion in public sector spending is expected to go into this effort.

Figure 1. Yield of Selected Agricultural Commodities (metric tons per hectare), 1961-2013



[7] http://www.philstar.com/business/2015/04/05/1440353/p-noy-signs-sugarcane-industry-development-act

Figure 2. Monthly Price of Refined Sugar (USD per Kilogram), Philippines (Metro Manila) versus World, 2007-2012



Sources:
Philippine Sugar Prices: Sugar Regulatory Administration (SRA); World Sugar Prices: United States Department of Agriculture - Economic Research Service (USDA – ERS)

Nevertheless, evidence appears scant on what the return from all these investments will be, and how the different stakeholders (including government agencies) will be held accountable to these targets. These are critical points because many of the activities stipulated in the new law appear very similar to those implemented in the past.

Between 1984 and 2015, up to PHP 300 billion was already poured into the agricultural sectors under consideration, yet poverty in sugar-producing areas like Negros Oriental (42.9 % in 2006 and 50.1 % in 2012) and coconut-producing areas like Eastern Samar (51.3% in 2006 and 63.7 % in 2012) barely improved in the last decade. And despite decades of state support and protection, it seems that the impact on boosting the industry's competitiveness has yet to be demonstrated. Clearly, we cannot keep on doing the same thing over and over again, without truthfully assessing what the main goal and expected output from these programs really are.

The few evaluations of agricultural sector support programs suggest very mixed results at best. NFA rice subsidies, for example, are characterized by implementation-related inefficiencies

such as high inclusion and exclusion errors as well as unclear rationing rules. Jha and Mehta (2008) found evidence that 68% of urban NFA rice consumers and 39% of rural consumers are nonpoor, translating to an average 48% leakage rate for the whole country. Compare this with the 11% to 15% leakage rate of the 4Ps.

As regards the under-coverage rate, up to 75% of the poor are actually not benefitting from the rice subsidies according to the same study. Compare this to the last estimate for the 4Ps of about 64%. These are sobering figures since over PHP 230 billion in budgetary support was provided to the NFA in 1984-2015.

In addition, compliance with the provisions on irrigation of the Agriculture and Fisheries Modernization Act (AFMA) of 1997 (RA 8435) has also been found to be weak (David, 2008). In particular, no sign of improvement was noted both in the national and communal irrigation system service areas. Despite the large amount of money devoted to the improvement of irrigation systems (PHP 5.5 billion per year), aggregate service area of irrigation systems increased by only 9,000 hectares per year from 1998-2004, whereas depreciation of existing systems is at 134,000 hectares per year.

However, as the World Bank (2009: 109) points out, there is "a lack of systematic data suitable for proper impact evaluation based on scientific standards." Thus, on the question of whether CARP has been inclusive, it can only offer an innocuous conclusion: "on the one hand, the actual impact of CARP on the rural poor might not have been as dramatic as its proponents would have liked to see, but … on the other hand, CARP has not been as ineffective as some of its most fierce critics have claimed either" (World Bank, 2009: 110). This lack of remarkable impact then leads us to ask whether the budgetary support to the Department of Agrarian Reform amounting to more than PHP 211 billion since 1984 until this year has been put towards its best use.

4. Evaluation and accountability

Clearly, the 4Ps is not perfect, and it can still be improved. However, it has already dramatically improved (notwithstanding the challenges of implementing such a large program with over 4 million beneficiaries); and the most recent empirical evidence suggests it is on track to produce the programmatic goal of building human capital and helping to break inter-generational poverty. Can we cannot say the same for the other "infants" receiving subsidies and state support.

The foregoing discussion does not suggest that we should discontinue support programs, notably to the most vulnerable sectors in our society. Yet we clearly need to sharpen the discipline behind their implementation and possible improvement. Perhaps part of the way forward lies in the recently launched National Evaluation Policy Framework, a collaboration spearheaded by NEDA and the Department of Budget and Management (DBM) which outlines plans for independent evaluations of government programs and projects.[8] Evaluation is envisioned as part of a comprehensive good governance agenda that complements reforms in planning and budgeting. More efficient resource allocation is underpinned by evidence of effectiveness and impact.

Perhaps monitoring and evaluation is the key ingredient that was missing in the past. Unlike the 4Ps program, most other programs of government just like those directed at the agricultural sector, have not been rigorously evaluated. Neither has continued investment in these programs been premised on measurable targets and timelines.

This is where the 4Ps, imperfect and subject to constant improvement as it may be, offers a viable model for the rest of the government to emulate. It has a very simple formula that could help align government programs and subsidies toward better outcomes.

- First, measurable targets should be identified, so one can hold both program beneficiaries and government agencies assigned to implement these programs more accountable.
- Second, it would be useful to develop a clear evaluation framework that engages various stakeholders, including civil society, legislators, media and the program beneficiaries themselves, to better understand the program and its impact.
- Finally, it would be critical to facilitate evidence-based discussion and debate on whether and to what extent the program should be continued (and perhaps adjusted).

Perhaps only this kind of focus and truthfulness (notably on the impact) can restore and foster united support for all of these government programs.

[8] http://www.neda.gov.ph/?p=6286

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