ECONOMIC AND FINANCIAL ANALYSIS

Philippines: Real Property Tax Reform Implementation Project

1. **Sector context and project rationale.** The proposed project is designed to improve the service delivery of local government units (LGUs) in the Philippines by strengthening their local revenue mobilization. The foundation for local governance in the Philippines is the 1991 Local Government Code (LGC), which was introduced to provide a formal basis for the local management of public resources and service delivery. Local service performance can only improve if some groundwork is laid, such as stepping up local revenue mobilization and improving the social contract between local government and citizens.[1]

2. A substantive review of the legal framework for intergovernmental fiscal relations, led by the Department of the Interior and Local Government (DILG), made recommendations on expenditure and revenue assignments and the conduct of fiscal transfers to LGUs. The review focused on increasing LGUs' own-source revenues (OSR) "to promote autonomy and to reduce their dependence on intergovernmental fiscal transfers. In this way, LGUs will have an incentive to allocate public funds and deliver services in an effective and efficient manner".[2]

3. Increasing their OSR gives LGUs greater autonomy in determining the appropriate amount of expenditure in accordance with their constituents' demands. If levying taxes on local residents imposes costs, LGUs will find doing so only attractive if the revenue raised can be used to provide benefits that more than offset the costs of taxation and make residents better off. Currently, most LGU funding comes from the internal revenue allotment (IRA) transfer from central to local government, creating a vertical fiscal imbalance. From 2012–2016, more than two-thirds of total local revenues came from the IRA. The reliance of LGUs on grants from the national government creates several problems.

4. LGUs have little incentive to raise extra revenue. Their overreliance on the fiscal transfers, along with the administrative burdens, inhibited the development of local tax. Local sources of revenue, as a percentage of LGU operating income, rose steadily from 31.4% in 2009 to 36% in 2012, but then fell continuously to 33% in 2016 and 29% in 2018. Reforms to local OSR mobilization have been difficult to implement because local revenue collection practices are fragmented, the capacity of assessment and collection officers is low, and local elites influence tax policy and property assessments to minimize tax liabilities, which reduces the impact of new tools and systems.

5. **Property tax reform.** Under the 1991 LGC, LGUs can impose a tax on real property based on the assessed value of the property. LGUs also exercise significant control over rate and base setting. The Philippine Development Plan, 2017–2022 calls on LGUs to increase OSR by maximizing the revenue-raising powers through real property and idle land tax.

Table 1: Property Tax Revenue

Share of:	2009	2010	2011	2012	2013	2014	2015	2016
GDP	0.39%	0.37%	0.37%	0.37%	0.36%	0.36%	0.36%	0.35%
LGU local tax revenue	46.5%	46.5%	44.4%	42.3%	42.8%	42.0%	40.5%	39.6%
LGU current operating income	10.1%	9.8%	9.8%	10.7%	10.6%	10.5%	9.6%	9.2%

GDP = gross domestic product, LGU = local government unit.
Source: Bureau of Local Government Finance.

[1] The economic analysis follows ADB. 2017. *Guidelines for the Economic Analysis of Projects*. Manila.
[2] Department of Interior and Local Government. 2015. *Review of the 1991 Local Government Code: Summary Report.* Manila.

6. As shown in Table 1, property tax revenue (PTR) as a proportion of gross domestic product (GDP) has fallen steadily since 2009, and dramatically so as a share of overall local tax revenue. As a proportion of LGU operating income, PTR is in decline since 2012.

7. The World Bank found the administration of the property tax in the Philippines to be deficient on a number of dimensions:

(i) The schedule of market values (SMV), which is used to levy the RPT, is updated only irregularly. Significant differences arise between recorded values and market prices across different uses and types of users, or valuation rolls are not updated regularly or frequently (i.e., more often than every 5 years).
(ii) The data that assessors use to determine the market value is based on values that the property owners submit to the assessor's office, which are understated to avoid paying the appropriate taxes.
(iii) The exemptions to land or property taxes are not always based on equity or efficiency grounds and are not always applied in a transparent manner.
(iv) Between 30% and 50% of property holders liable for land or property tax are not listed on the tax roll, undermining the collection of tax.
(v) Only 50%–70% of assessed property taxes are collected. A National Tax Research Center study found that LGUs collected on average just 59% of the RPT due.

8. Although LGUs are meant to revise their SMV every 3 years, most do not, and the proportion of outdated schedules is growing. In 2013, the average age of SMVs was 7.05 years for provinces and 9.5 years for cities. One LGU had not updated its SMV for 28 years. The above issues mean that the estimated fair market value underestimates the true market value significantly and lowers the assessment ratio. The granting of exemptions lowers the average assessment level. The failure to enforce liability and payment with rigor reduces the collection efficiency. And the problems have gotten worse. Both the dependence on the IRA as well as local electoral politics and the sway of politically influential elites with large land holdings result in less than rigorous collection of the RPT.

9. **Efficiency effects of the property tax.** To the extent that the RPT falls on land and land is in inelastic supply, it is borne by the landowner and has no efficiency effects. Land cannot move to escape the tax. Tax payments will be capitalized into the land price, i.e., the tax will reduce land prices by the present value of the flow of expected RPT payments. The tax on non-land property—such as structures—will tend to be passed on to users (renters or owner-occupiers), because they tend to be in elastic supply (and often inelastic demand).

10. The property tax is a tax on wealth. As the value of property is the present value of future net incomes generated, the property tax is equivalent to a tax on the flow of capital income. The implicit tax rate on capital income is much higher than the effective RPT rate. For example, if a property worth $100,000 pays an effective property tax rate of 1%, or $1,000 a year, and the rate of return on capital is 10%, then capital income is $10,000 and the property tax of 1% imposes a 10% tax on capital income. If rental income is expected to grow over time, then the tax is an even greater proportion of cash flows (as part of the return on capital accrues as capital gains). For example, if cash flows were $5,000 a year and expected to grow at 5% per year, the value of the property would be $100,000. It would grow to $105,000 next year, giving a total income of $1,000 and a return of 10%. A property tax of 1% would be 10% of capital income but 20% of cash flow. Expected higher future cash flows increase property values and taxes rise relative to cash flow, which creates problems for owners who are asset rich but income poor (such as retired people), or who receive nonpecuniary income from their assets (such as owner-occupiers of housing).

11. If the RPT were levied at the same rate on all real property, it would be equivalent to a general factor tax levied on capital. It would be borne by capital owners if capital is in inelastic supply. To the extent that it is not, the tax is passed on, e.g., to workers and consumers. Further, with less capital, land rents will fall, and landowners will bear some of the tax levied on capital.

12. While capital is often immobile (especially structures on land), new investment will respond to taxes on the return to capital and migrate to regions and sectors with relatively low effective tax rates. Investment is re-allocated from jurisdictions with above average tax rates to those with below average. The stock of capital will decline in high tax areas and increase in low tax areas. This will reduce the return to factors of production in regions which the capital left, imposing part of the burden on the owners of labor and land, and increase the prices of locally produced goods, putting some of the tax burden on consumers. Disparities in effective tax rates distort capital allocation (away from higher-taxed regions and sectors) and create an efficiency cost. Further, different effective rates caused by differences in assessment ratios and collection efficiency are inequitable. Residents with the same wealth can pay vastly different amounts of tax depending on how their assets are assessed and whether the assessment is enforced.

13. The link between property tax paid and services received under the current administrative arrangements is tenuous. Effective rates vary greatly between residents receiving the same service levels because of different assessment ratios, different assessment levels, and different enforcement. Businesses face higher assessment levels, but they are unlikely to receive greater benefits than residential properties. Moreover, business capital tends to be more mobile than residential capital, so efficiency considerations dictate that they receive a lower rate.

14. **Project scope**. The proposed project will help develop a policy and implement local property tax reforms to strengthen the capacity of LGUs for property administration and to increase local revenue raising. The project will promote: (i) institutional development and policy formulation for property valuation; (ii) national standards and methods of valuation; (iii) tax base identification, valuation, and assessment; (iv) more effective property tax systems for billing, collection, and enforcement procedures; and (v) the professionalization of local assessors and their intensive training in the use of the reformed valuation process.

15. The bill for a real property valuation and assessment reform act (RPVARA), submitted to Congress and supported under the government's Comprehensive Tax Reform Program, helps address the problems with the RPT discussed in paras 1–4. The RPVARA will recentralize the approval of SMVs under the Department of Finance to prevent the valuation of real properties being driven by political considerations. The Bureau of Local Government Finance (BLGF) will prescribe valuation standards, licensure and testing for appraisers and assessors, and will develop an up-to-date electronic database of real property transactions. LGUs will also lose their authority to collect taxes if they do not update their SMVs regularly. The outputs of the proposed project are designed to result in: (i) stronger institutional development and policy support for property valuation; (ii) the implementation of a property tax valuation database and information systems; (iii) enhanced RPT in selected LGUs; and (iv) the professionalization of local assessors and stronger capacity of LGUs.[3] The project is budgeted to cost $31.49 million (₱1.60 billion) over 4 years.[4]

16. **Extra revenue estimates.** The objective of the project is to increase the assessment ratio and collection efficiency to increase RPT revenue and make it a significant, stable, and ongoing

[3] A full discussion of these outputs can be found in Project Administration Manual (accessible from the list of linked documents in Appendix 2 of the report and recommendation of the President).

[4] Exchange rate as of 16 March 2020.

OSR for LGUs. The World Bank suggests that RPT reform could increase revenue by 30%–50%. The BLGF assumes that a market-based revision of SMVs would yield a 27% increase in RPT collections, based on the Naga City experience under the Land Administration and Management Project (LAMP2) project.[5]

17. In a 2009 study undertaken under the LAMP2, the values were based on 1995 market prices, making the SMV almost 14 years old. Property values increased significantly after the revision. In the case of residential lands, increases ranged from 150% to 900%. For commercial lands, the increases were 16%–171%, while agricultural lands had increases of 42%–209%.[6] SMV revisions in other cities resulted in large average increases in the property valuations. For example, in Mandaue City (where the SMV was based on 1989 market values), the increases were more than a twentyfold for residential lands and fifteenfold for commercial lands.

18. Such large increases in valuations would result in an enormous increase in effective tax rates, so the BLGF contemplates possible mitigating actions to avoid exorbitant increases in tax due, such as (i) a phased implementation of new values, or (ii) adjustments to the assessment level or tax rate. The BLGF estimates the increment in revenue in 2018 from increasing collection efficiency to be 100%, and a market-based revision of the SMV for those LGUs due for revision (i.e., more than 3 years since the last revision) to be ₱30,456 million.

Table 2: Increment to Revenue, 2019

(₱ million)

Year	Revenue increment	Revenue grows at 6% per year
2020	0	0
2021	7,614	9,068
2022	15,228	19,225
2023	22,842	30,568
2024	30,456	43,202
2025	30,456	45,794
2026	30,456	48,542
2027	30,456	51,455
2028	30,456	54,542
2029	30,456	57,814

Source: Bureau of Local Government Finance.

19. Table 2 shows the assumed increment to RPT revenue from the project, accounting for the increase in market values over time and for the fact that the reforms start in 2020 and are spread out over 4 years. The second column assumes that the reforms will eventually increase revenue to ₱30,456 million, but that the full increment will occur only after the project is finished in 2024. Until then, the project is assumed to increase revenue linearly until the full increment is reached. That is, revenue increases by a quarter of the full increment each year, starting in 2021 (after the reforms have been in operation for a year).

20. This analysis understates the revenue increment if the effective RPT tax rates were to continue to fall over time. For example, if the assessment ratio were to fall further in the absence of reform (i.e., the gap between market and assessed values continues to rise), then the revenue increment from instituting market valuations would be even greater. It is assumed that market values grow at the same rate as real GDP, which averaged 6% annual growth during 2009–2018. The final column gives the estimated revenue increment from the reforms, assuming that GDP and market values grow at 6% per year. These estimates will be used in the cost–benefit analysis.

[5] World Bank. 2005. *Second Land Administration and Management Project (LAMP2)*. Manila.
[6] F. Eleazar et al. 2013. *Improving Land Sector Governance in the Philippines*. Washington, DC: World Bank. p. 82.

21. How long do the revenue increments from the reforms last? The analysis will cover the 10-year period of 2020–2029. It also considers the benefits if the additional revenue increments go on forever, which would be the case if the project established a stable, growing revenue stream for local governments, which would not have happened without the investment under the project.

22. **Economic cost–benefit analysis**. An economic cost–benefit analysis of the project is undertaken to assess its economic viability. The analysis attempts to quantify the expected future costs and benefits from the reforms. As the project is not yet implemented, the estimates are for potential benefits if the project achieves its objectives. The quantified costs and benefits are expressed in the national currency, the Philippine peso, at constant 2019 prices. The exchange rate used is $1 = ₱52.315 (as of 5 February 2019).

23. **Benefits.** The project will increase subnational OSR generation and improve the governance of LGUs. The extra revenue comes from increased effective tax rates. The tax revenue raised is not a net benefit but a transfer from the taxpayer to the government and does not increase the amount of resources available to the country as a whole. The benefit from the project depends on what is done with the extra revenue (compared with what would have happened in the absence of the reforms). The possibilities are that the extra RPT revenue is used:

(i) to increase LGU spending on productive investments and public services;
(ii) to strengthen the quality of local spending and improve alignment with local preferences—matching the "pain" of local taxation with the "pleasure" of local spending;
(iii) to reduce the reliance on inefficient and distortionary taxes and nontax sources of revenue (such as fees) that constrain local economic development; and
(iv) other benefits, such as more efficient allocation of capital and development of non-productive land assets.

24. **Increased local government spending**. The extra tax revenue is a cost to the taxpayers but benefits the recipients of the spending supported by the additional tax revenue. Thus, there will be a net benefit if the value of the spending is greater than the cost to taxpayers, which is greater than the amount raised as taxes change behavior and distort decisions.

25. There will be a net benefit here if the return on extra spending exceeds the deadweight imposed from higher RPT collections. This requires the opportunity for projects, investments, and services with good returns that LGUs could undertake, i.e., the assumption is that LGU spending is currently too low and gains will materialize from increasing it. The World Bank supports this view: "Higher and more efficient public spending, underpinned by increased revenue mobilization, is needed to raise physical and human capital and sustain inclusive growth. A high-case scenario calls for spending (relative to 2010) an additional 2.5 ppt of GDP in infrastructure and an additional 5.5 ppt of GDP in social services, for a total of 8 ppt of GDP over the next decade."[7]

26. **Improving the consistency of local spending with local preferences and needs**. The reform of property taxation is part of an overall reform of local government, of which significant increases in OSR are a key component. One justification for the RPT reform is that LGUs have little incentive to raise their own revenue when they receive most of their funding from centralized grants. In other words, they enjoy the pleasure of local spending without the pain of local taxation.

27. The decentralization of taxes can increase the efficiency of spending and increase participation in decision making by local constituents. If people have mobility between sectors,

[7] World Bank. 2016. *Philippine Economic Update – Moving Full Speed Ahead: Accelerating Reforms to Create More and Better Jobs*. Report No. 104611-PHI. p. 35.

they reveal their preferences by their choice of where to live. People can "vote with their feet" and leave communities whose policies they do not like and join communities that offer a better match of local public goods with their preferences. The resulting competition between local governments increases accountability. Further, diversity and competition between jurisdictions can promote experimentation and innovation in policy.

28. RPT is a highly visible tax that makes taxpayers aware of the costs of local public services and enhances accountability. Financing services with PTR can promote efficient public decisions since taxpayers will support those measures for which the benefits exceed the taxes. Moreover, governments that provide quality services will be rewarded as land values increase, in turn increasing PTR. Further, by linking tax paid to services received, political opposition to RPT increases will be reduced.

29. **Reducing reliance on inefficient and distortionary revenue sources that discourage local economic development**. An economic gain results if the tax reforms lead to more revenue being raised from property taxes and less from inefficient taxes and nontax sources (such as fees). An RPT is a relatively efficient tax, especially to the extent that it taxes land. If its marginal deadweight loss (the distortive effect any tax has on supply and demand of a good, service or product) is 10%, for example, the last dollar of revenue imposes a cost of $1.10 on taxpayers. If the extra RPT revenue were used to reduce revenue raised from more distorting taxes—e.g., taxes with a marginal deadweight loss of 35%—then every dollar of revenue raised would give a net social benefit of 35¢ – 10¢ = 25¢. A 2010 tax review by the Australian Treasury found that land taxes had a marginal deadweight loss of 8%, while that for stamp duties was 35%.[8] Additionally, many LGUs in the Philippines suffer from a proliferation of nontax fees and fines that constrain private investment and local economic development. Access to a productive, efficient tax like the RPT, along with reforms being undertaken to rationalize these inefficient revenue sources, is expected to reduce the cost of doing business and increase local investment.

30. **Net Benefits**. The benefits from this policy depend on how much revenue is raised, what is done with it, and what the benefit from that use is. The approach taken is to indicate what the numbers will be under various assumptions of efficiency gains discussed above: (i) increasing LGU spending to produce economic benefits from investments and service delivery; (ii) improving the quality of local spending by better matching the pain of local taxation with the pleasure of local spending in line with local needs and preferences; (iii) reducing reliance on distortionary nontax revenues, including fees and fines; and (iv) promoting a more efficient allocation of capital and development of unused land. A baseline assumption of 5% efficiency gains from these four channels is used as a conservative estimate of gains on additional revenue collected by LGUs. The numbers use the revenue figures from Table 3, column 3 (derived from the BLGF 2018 revenue increment estimates) for the case where market property values grow with GDP over time (keeping the ratio of market value to GDP constant). The project cost of $31.49 million is spread over 4 years and the full revenue increment is not realized until all reforms are complete.

31. **Sensitivity analysis.** To assess the possibility that efficiency gains are generated through only one or two of the channels above, a lower efficiency assumption of 2% gains is also tested. For comparison purposes, a more optimistic assumption of 10% efficiency gains is tested as well.

32. Table 3 shows the gains when the benefit from each dollar of revenue raised is 2%, 5%, or 10%. That is, the gain from increased spending, cuts to other taxes, better decentralized decisions, or improved equity is 2%, 5%, or 10% higher than the efficiency cost of the property

[8] Australian Treasury. 2010. *Australia's Future Tax System: Final Report.* Sydney.

tax. Both the present value of the benefits and costs over a 10-year period and where the revenue increment lasts forever is given, using a 9% real discount rate**.**

Table 3: Economic Present Value of Benefits and Costs under Different Assumptions

(₱ million)

		Efficiency Gain from Use of Revenue		
Year	**Costs**	**2%**	**5%**	**10%**
2020	(405)	–	–	–
2021	(405)	181	453	907
2022	(405)	384	961	1,922
2023	(405)	611	1,528	3,057
2024		864	2,160	4,320
2025		916	2,290	4,579
2026		971	2,427	4,854
2027		1,029	2,573	5,145
2028		1,091	2,727	5,454
2029		1,156	2,891	5,781
PV over 10 years	(1,311)	4,029	10,071	20,143
PV forever	(1,311)	20,310	50,774	101,548

( ) = negative, – = not applicable, PV = present value.
Source: Author calculations.

33. **Financial analysis and sustainability**. Table 4 presents a basic breakdown of financial flows under two separate assumptions used for the economic analysis: a baseline case where revenue growth is strictly derived from updates to the schedule of market values and reform implementations; and a comparison case where additional revenue is derived from economic growth (assumed to be 6%). Either scenario generates significant additional revenues. The costs will be financed from two sources—ADB will provide a project loan of $26.53 million from its ordinary capital resources to finance capital costs and some recurrent costs of the project, and the government will cover some capital costs and recurring costs (totaling $4.96 million) during the implementation of the project. Additional recurrent costs to maintain the new RPT administration are forecast with the assumption of 3% cost growth per year (revenue administration costs are expected to grow more slowly as improvements in taxpayer services create efficiencies). It is important to note that for the purposes of calculating economic benefits, revenues are treated as a transfer between the private sector and the government and are thus excluded from the calculation of economic benefits and from financial sustainability calculations. Additionally, Table 4 compares the operating costs of the project after the loan closes, to be borne by the BLGF. Two scenarios are considered: one where the BLGF budget grows at a normal, linear rate; and another where the expected passage of the RPVARA as a national program creates a separate budget line item for the Real Property Valuation Service. Under the expected budget increase for BLGF in relation to the passage of the RPVARA, there is ample fiscal space to absorb the operating costs of the program. Even under a static budget for BLGF, the fiscal space available because of utilization rates of less than 100% suggests that project costs can be reasonably borne. As such, the project is financially viable and sustainable.

34. **Overall assessment**. The economic rationale for the project is strong. Tax reform is a national priority for the Government of the Philippines, as is empowering local governments to deliver better services and encourage local economic development. Access to productive tax bases such as the RPT is a critical ingredient for reforms. The reforms envisaged are expected to significantly increase local OSR for LGUs. The project is economically viable and financially sustainable. Even in the most conservative estimates of efficiency gains and revenue growth relative to the baseline, the project has a positive estimated net present value after applying ADB's hurdle discount rate of 9%.

Table 4: Cash Flows and Financial Sustainability

(₱ million)

Details	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Project investment					(404.5)	(404.5)	(404.5)	(404.5)	-	-	-	-	-	-
Operating costs									(78.0)	(80.3)	(82.8)	(85.2)	(87.8)	(90.4)
BLGF Budget (static)	243.79	284.78	305.13	341.67	382.60	428.43	479.75	537.21	601.56	673.61	754.30	844.65	945.83	1,059.12
BLGF Budget utilization	220.00	259.78	293.78	317.76	355.82	398.44	446.16	499.61	559.45	626.46	701.50	785.53	879.62	984.98
Utilization rate	90%	91%	96%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%
Balance	23.80	25.00	11.35	23.92	26.78	29.99	33.58	37.60	42.11	47.15	52.80	59.13	66.21	74.14
Operating costs (share of total expenditure)	92%	91%	89%	91%	91%	91%	91%	91%	91%	91%	91%	91%	91%	91%
BLGF Budget (VRA passed - +10%)					420.86	471.27	527.72	590.93	661.71	740.98	829.73	929.12	1,040.41	1,165.03
Revenue generation (no growth)					-	7,614.0	15,228.0	22,842.0	30,455.9	30,455.9	30,455.9	30,455.9	30,455.9	30,455.9
Revenue generation (growth in line with GDP)					-	9,068.4	19,225.0	30,567.7	43,202.3	45,794.5	48,542.1	51,454.7	54,541.9	57,814.5
Projected operating costs excluding project					347.61	389.24	435.87	488.08	546.54	612.00	685.31	767.40	859.32	962.25
Projected operating costs including project					347.61	389.24	435.87	488.08	624.54	692.34	768.06	852.63	947.11	1,052.67
Total operating costs as share of budget (static)					**91%**	**91%**	**91%**	**91%**	**104%**	**103%**	**102%**	**101%**	**100%**	**99%**
Total operating costs as share of budget (VRA passed)					83%	83%	83%	83%	94%	93%	93%	92%	91%	90%
Net financial flow (no growth)					(404.5)	7,209.5	14,823.4	22,437.4	30,455.9	30,455.9	30,455.9	30,455.9	30,455.9	30,455.9
Net financial flow (growth)					(404.5)	8,663.9	18,820.4	30,163.2	43,202.3	45,794.5	48,542.1	51,454.7	54,541.9	57,814.5

*operating costs expected to grow slower than GDP as tax administration becomes more efficient over time (improved taxpayer services, e-filing and payment and compliance management)

BLGF Budget growth rate (averaged)	1.119782
BLGF average budget utilization rate	0.93
BLGF average operating costs as share of total budget	0.91