PROGRAM IMPACT ASSESSMENT

I. Introduction

1. This Program Impact Assessment (PIA) describes the benefits and costs of the Improving Public Expenditure Quality (IPEQ) Program, Subprogram 1 (IPEQ, SP1) on the quality of public expenditure and fiscal management (PEFM) in Viet Nam. The first section highlights the sources of poor PEFM performance in Viet Nam including weaknesses in government budgetary operations, planning, project evaluation and management, high levels of off-budget expenditure, unaccountable use of government guarantees, and poor incentives facing provincial governments. The second section provides a description of the reforms targeted under IPEQ SP1 including the reform actions to be taken by government and their objectives. This section also identifies the channels through which the impact of the reforms will be transmitted and as well as the likely benefits of the reforms. The final section quantifies, to the extent possible, the costs and benefits from the reforms to determine the scale of net benefits. The fiscal effects of reforms on the budget are also estimated.

II. Summary

2. The net benefits of IPEQ SP1, once fully implemented, are estimated to be just over $1 billion per year. The net present value of these benefits today, assuming a real discount rate of 10%, is $4.7 billion. This estimate assumes that current levels of infrastructure investment and loan guarantees continue for the next ten years.

III. Development Problem and Constraints

3. Viet Nam spent an average of 11% of GDP per year on public infrastructure between 2010 and 2015, among the highest level of investment in South East Asia. In 2016, the Government's plans to spend (on budget) $20.2 billion on infrastructure, a 50% increase in real terms since 2014.[1] Similarly, combined nominal recurrent expenditure on health and education grew 98% between 2011 and 2015, increasing its share of the total state budget from 18% to 24%. Yet, higher government expenditure has not always been directly associated with improved outcomes.

4. Progress against the objectives of the Government's Socio-Economic Development Strategy (SEDS), 2011–2020 has been slower than expected. Poor quality infrastructure represents a significant drag on Viet Nam's regional competitiveness. According to the Global Competitiveness Index, Viet Nam ranked 81st out of 144 countries in 2015 for the quality of its infrastructure, well behind its regional competitors. Viet Nam's overall ranking is dragged down in particular by transport, where it ranks 99th –this despite the fact that nearly half of total state budget capital expenditure was devoted to the sector between 2011 and 2015. Similarly, results from a Public Administration Performance Index (PAPI) survey revealed that by 2015 user satisfaction with the quality of public hospitals had fallen to their lowest level since the survey began in 2011. These outcomes highlight persistent weaknesses in the ability of Viet Nam's PEFM systems to efficiently allocate and implement scarce budgetary resources into improved infrastructure and public services.

5. The McKinsey Global Institute finds improved productivity within sectors accounted for only one-third of Viet Nam's GDP growth from 2005 to 2010, with two-thirds coming from an expanding labor pool and the structural shift away from agriculture.[2] With further growth

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[1] Ministry of Finance, 2016, *Summary of Indicative Public Debt Borrowing And Repayment Plan For Period 2016 – 2020*. Extract from Official Correspondence No. 111/BTC-NSNN, dated February 19, 2016, Table 9 (State Budget Expenditure) capital and maintenance expenditure, which give figures in Vietnamese dong. An exchange rate of $1 = 22,310 Vietnamese Dong is used through this document.

[2] McKinsey Global Institute, 2012, *Sustaining Vietnam's growth: The productivity challenge.* New York.

from these sources unlikely Viet Nam will need to improve its productivity performance to maintain high growth rates.

6. Investment in infrastructure can expand a nation's productive capacity, allowing it to achieve strong, sustainable growth, and provide direct benefits to residents. Yet high levels of infrastructure investment do not guarantee economic development. The efficiency of the investment – the benefits produced from the investment relative to the costs – matters. The rate of return on the investment compares the annual net benefits (benefits less costs) relative to the amount invested over the life of the project. A negative return would mean the investment benefit does not cover costs and over the long-run can lead to lower levels of productive capacity and service delivery in the economy. Although Viet Nam's growth performance over recent years has been impressive, a growing consensus has been emerging that low rates of investment return on the government's high spending have been eroding the net benefits of expansionary fiscal policies.[3] For example, a survey of Vietnamese government officials conducted in 2015 concluded that the primary cause of poor infrastructure investment performance was the lack of institutional capacity of the government, followed by a lack of transparency and accountability in infrastructure development.[4]

7. External assessments provide corroborating evidence. Viet Nam's incremental capital output ratio (ICOR), a common measure of investment efficiency, is high at 5.2 in 2014. This means that $5.2 spent on investment produces only $1.00 of income compared with Malaysia's ICOR at 4.6, Thailand at 4.5, the Philippines at 3.7, and India at 4.9 (Table 1). As Viet Nam maintains one of the highest investments rates in the region, at 28.3% in 2014, and with public expenditure comprising roughly 60% of this investment, improving the efficiency and effectiveness of PEFM will be vital to lifting the growth impact of future capital investment.

Table 1: Average of Incremental Capital Output Ratio and Investment Rate in Viet Nam and Selected Countries

Country	ICOR	Investment Rate
Viet Nam	5.2	28.3%
Indonesia	6.2	25.4%
Malaysia	4.6	23.7%
Philippines	3.7	19.7%
Thailand	4.5	25.9%
India	4.9	30.9%
Turkey	3.9	21.9%

ICOR = incremental capital output ratio.
Source: The World Development Indicators database.

8. **Binding constraints**. Recent government and development partner diagnostics highlight four main binding constraints to effective public expenditure and fiscal management PEFM in Viet Nam. These include: (i) inefficient allocation of public resources with limited consideration of the future recurrent costs of maintaining and operating assets created as a result of investment decisions, ii) poor identification, management, and mitigation of fiscal risks, leading to unexpected fiscal costs, iii) weak oversight and evaluation of budget implementation which leads to limited accountability for results by budget managers to the National Assembly and the general public, and iv) inadequate domestic resource mobilization which limits funds available for public expenditure. These constraints compromise the delivery of quality infrastructure and service delivery thereby slowing

[3] Ministry of Planning and Investment 2014, *Development Finance for Sustainable Development Goals in Middle-Income Viet Nam. Ha Noi.*

[4] Dang, Giang and Low Sui Phen, 2015, *Infrastructure Investments in Developing Economies: The Case of Viet Nam, Springer Press. U.K.*

poverty reduction and progress against the Government's Socio-Economic Development Strategy (SEDS), 2011–2020.

9. Viet Nam faces substantial **inefficiencies in the allocation of public resources**. The major weaknesses in public investment management systems are inefficient project appraisal and approval, absence of life cycle costings that include future recurrent costings, and poor project monitoring systems. Fiscal resources are allocated annually subject to a one-year time horizon. As a result, multi-year projects are often commenced without sufficient funds to complete them and the budget often provides little assurances about future funding availability. This hampers strategic investment planning and undermines advance project preparation. In addition, assets created as a result of public investment are often not optimized due to unclear ownership responsibilities and the lack of quality asset information systems that integrate life-cycle asset and operational management. Over the past two decades, Viet Nam has progressively devolved responsibilities to its subnational governments. More than half of the state budget is now spent by subnational government. Yet, many of Viet Nam's 63 provinces are too small to capably plan and conduct infrastructure investment, leading to the proliferation of unneeded airports, deep-sea ports and industrial parks. Revenue and expenditure assignments between the bottom three levels of government are not clearly defined. While recent reforms have introduced new concepts such as gender responsive budgeting, the extent to which this is translated into better designed government projects remains limited due to lack of adequate resource allocation and a shortage of expertise.[5]

10. **Inadequate systems for identifying and managing fiscal risks** remains a major issue with large deviations between approved and actual expenditure out-turns as a significant proportion of government expenditure is not integrated into central budgeting systems. There are currently more than 30 off-budget funds, at national or local levels, each established under a different law and government decision. While off-budget expenditure is approved by the National Assembly and under the supervision of Ministry of Finance, there is no consolidated data on the revenue and expenditure of these funds. This limits the ability of the bureaucracy and other stakeholders to adequately monitor the implementation and effectiveness of these funds, and lowers the overall reliability of budgetary reporting. Further, weak government controls over the management of the use of government guarantees and official development assistance create challenges for budget reliability. Government guarantees accounted for over 18% of the total public debt, or 11.4% of GDP at end-2015. Many projects guaranteed by the government are risky, particularly those issued to state enterprises with opaque balance sheets and untested capacity to service debt. This lack of disclosure by the borrowing entities makes judging how this risk affects the management of public liabilities difficult –yet these very entities are often issued government guarantees with no associated costs.

11. Viet Nam faces a range of barriers to **effective monitoring and evaluation of its public investment**. Formal appraisal mechanisms are often not independent, with responsible agencies subordinate to authorities who are ultimately the project owners. Performance measurement systems based on results or outcomes have not been deployed, and information systems used to monitor progress against public investment plan performance targets are weak. The level of budgetary resources allocated to monitor and evaluate the public programs and projects managed by the central government are insufficient. For example, the state audit agency can only cover 50–60% of all the government units at different levels. This issue has been exacerbated by poor public

[5] Laing (2015) cites a World Bank Public Investment Survey which comes to the same conclusions. The report highlights that a major weaknesses in public investment management systems are inefficient project appraisal and approval, absence of life-cycle costings that include future recurrent costings, and poor project monitoring systems.

disclosure of audit results, especially for enterprises with significant state holdings. Ongoing decentralization of project appraisal functions to lower government levels is also presenting impediments. Local governments are often in a better position to judge the success of projects. However, they are often lack the staff capacity and systems to effectively undertake the review and reporting functions. A lack of transparency and accountability also increases the risks of corruption, and cost and time overrun, which in turn result in bad investment decisions, poor quality of infrastructure and low economic returns. Specific problems include a lack of transparency and competitiveness the bidding and award process, the discretionary power of individual bureaucrats involved in award of contracts (often based on subjective assessments), a complicated and bureaucratic administrative system in infrastructure development, and poor enforcement of the existing legislation (the Construction Law 2003 and Tendering Law 2005).

12. **Weaknesses in domestic resource mobilization** are creating growing pressures for fiscal consolidation. While Viet Nam's tax administration performs relatively well to its peers, the country has seen a significant downward trend in revenue as a share of GDP over the last 5 years. Viet Nam has eroded its tax base with a series of tax and tariff reductions and exemptions to favored firms and for new foreign direct investment. Corporate income tax was also reduced from 25% to 22%. Reversing the decline in the revenue to GDP ratio will be vital to stem recent build-up in public debt, and to restore fiscal policy to a more sustainable path. In 2016, the deficit is projected to be around 4%–5% of GDP, with lower revenue more than offsetting expenditure restraint. To address this situation, significant new tax measures will be required. Improved administration will also be needed to reduce tax evasion and arrears, identify incidents of tax fraud, and streamline VAT refund procedures.

13. **The institutional capacity of the government is low** and leads to inadequate coordination in infrastructure planning, and poorly executed decision-making. For example, there is a mismatch between budget allocation and investment plans. Infrastructure is often built without any provision for ensuring adequate funding for future maintenance. Institutional weaknesses in planning include: i) poor communication between the planning agency and the day-to-day decision-making machinery of government, ii) lack of inter-ministerial and inter-sectorial coordination, iii) lack of interaction between political leaders and planners with non-governmental actors, iv) incompetent and unqualified civil servants, and v) a complicated and bureaucratic administrative system.

14. **The budget cycle exhibits a number of weaknesses** and limits the Government's ability to track and mitigate risks. No forward estimates of fiscal aggregates are prepared in the context of formulating each successive year's annual budget. Moreover, there is limited coordination in considering the future recurrent costs of maintaining and operating the assets created as a result of specific investment decisions. Consolidated financial statements for the whole of the government do not yet conform to International Financial Reporting Standards. As a result, investment evaluation and selection is poor and has led to an inefficient allocation of public resources. In particular a lack of multi-year budget commitments reduces predictability and makes medium-term investment planning difficult.[6] For example, when a project is approved without accounting for future maintenance expenditure, one of two things will happen. The maintenance expenditure will not be provided which will reduce the life of the asset and reduce the rate of return on the investment. Alternatively, the maintenance expenditure will be provided which will increase costs relative to the initial investment decision and reduce the expected returns. In either case, the net benefits from the project are less than expected when the project was approved, and may even be negative.

[6] The purpose of the budget is twofold. First, it imposes a discipline which motivates careful evaluation of individual projects and programs and of the trade-offs among them. Second, it limits total expenditures to a level consistent with tax and borrowing policy.

15. **Large off-budget expenditure and loan guarantees** also contribute to fiscal risks and inefficient investment decisions. In 2012, 13.6% of government expenditure was off-budget, which represented over 5% of GDP. Moreover, off-budget expenditure has increased by 38% in real terms from 2008 to 2012 (the most recent available data). In 2015, government guaranteed debt represented over 11% of GDP. This failure to control financial incentives within the budgetary process is a serious problem. Although guarantees do not involve immediate cash spending, they are costly because they commit the government to future (contingent) cash outlays. The implicit subsidy is proportional to the amount guaranteed and to the probability that default will make payment necessary. When off-budget outlays (such as loan guarantee payments) cause large unplanned expenditures, the planning functions of government as well as the effectiveness of macroeconomic policies may be seriously impaired.

16. Since government budgets usually focus on control of current cash expenditures, financial guarantees often bypass budgetary control. They are egregious off-budget expenditure as the amount to be spent is hidden and difficult to calculate. If a default occurs, the incremental expenditure is likely to be large relative to the amount budgeted to cover it. The result is a large 'shock' to the budget, disrupting planning and potentially creating problems with the enforcement of budgetary ceilings after the default occurs. If the payments are subtracted from the budget, then planning is distorted since program initiatives will be subject to large random shocks. On the other hand, if large guarantee losses are not brought within the budget cap, they will escape budget discipline.

17. **Low levels of transparency further amplify fiscal risks**. A loan guarantee involves a large implicit subsidy, and a corresponding liability on the government, yet there remains a low level of transparency for the granting of government guarantees. This makes it difficult to monitor the implicit liabilities that the government is accruing. Weak management of the risks associated with loan guarantees can create very large unplanned fiscal liabilities and reduces room for priority investment, and even a budget crisis, which would result in arbitrary investment reductions, decreasing the efficiency of investment. Furthermore, defaults on previously-granted guarantees expose the budget to large random shocks that may disrupt its planning function. The opaque and conditional nature of the implicit subsidies given out by loan guarantees makes them a poor way to achieve public purpose objectives and they may fail to achieve the purpose for which they were designed.[7]

18. **Challenges are created by ongoing fiscal decentralization**. Since the mid-1990s Viet Nam has progressively devolved responsibilities to its subnational governments (provinces, districts and communes). Local authorities in Viet Nam are now responsible for around 55% of general government spending –they account for over 75% of total capital spending, and substantial amounts of key social service delivery areas such as education (90%), economic services (80%) and a growing share of health (from 72% of recurrent spending in 2006 to 88% in 2011).[8] In 2013 they accounted for 55% of state investment. Decentralization offers a number of potential advantages, bringing decision making closer to the communities it serves and encouraging competition among provinces in the provision of goods and services. However, devolution in Viet Nam has encountered capacity deficits at the sub-national level. Many of Viet Nam's 63 provinces are too small to capable planning of infrastructure, leading to the proliferation of unneeded airports, deep-sea ports and industrial

[7] Baldwin, C. Lessard, D. and Mason, S. 1983, *Budgetary Time Bombs: Controlling Government Loan Guarantees*, Journal of *Canadian Public Policy.* Montreal.

[8] World Bank 2015, *Making The Whole Greater Than The Sum Of The Parts: A Review of Fiscal* Decentralization in Vietnam. Ha Noi.

parks. In recent years, too many projects have been commenced without available funds to complete them.[9]

19. **Transparency and accountability across levels of Government needs to be improved**. Revenue and expenditure assignments between the bottom three levels of government are not clearly defined. There is a lack of clarity in the responsibilities between national and provincial governments. The budgets for these three levels of government are included within a single budget framework. In practice, many spending responsibilities are not supported by adequate budgetary resources and it is sometimes unclear which level of government is responsible for what. Financial management capacity is often severely lacking in local government, resulting in poor fiscal discipline and inadequate reporting. Current arrangements for provincial government access to Official Development Assistance (ODA) place insufficient responsibility on loan repayment for fund users, making default more likely and increasing the incentive to take out a loan, even for projects with low benefits. This has often led to a cycle of over-investment in public infrastructure and made it difficult for Ministry of Finance to judge the varying demands of the provinces.

20. **Local spending plans lack reliability** when compared to actual outturns. This is particularly the case for capital spending, which is often more than 50% of what was budgeted and well above good practice guidelines of maintaining spending within 5% of budget.[10] Recent government surveys have also revealed that the relatively vertical structure of the government inhibits coordination between ministries and between local governments, resulting in a poor harmonization of investments across regions. These concerns suggest that there is a pressing need for better planning and running of infrastructure development across sectors and government levels, including a process to integrate budget decisions with investment decisions made by ministries and local governments and that projects are approved with corresponding plans for budget allocations.[11]

21. **<u>The government's public financial management strategy</u>**. The Government's Finance Development Strategy, (FDS 2011–2020) lays out a comprehensive reform plan to improve the impact of public expenditure on poverty reduction and sustainable growth. The FDS aims to reduce financial waste, enhance the accountability and transparency of budget operations and empower subnational governments to provide services more directly to the public. In line with the FDS, the government has approved a number of recent landmark reforms to PEFM. This includes the passage of the Public Investment Law (PIL) in 2014 and State Budget Law (SBL) in 2015. Following the passage of these reforms, the government is now faced with significant implementation challenges. Numerous decrees are needed to clarify how the principles of the PIL and SBL will be implemented. Significant capacity development is required at national and provincial government levels to ensure officials can implement these enhanced PEFM requirements. While reforms are focused on PEFM processes, it is envisaged that these will be a catalyst for incremental institutional reforms over the medium-term. Therefore, to ensure that reforms have a sustainable impact, support is needed to ensure these institutional changes are undertaken as planned.

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[9] World Bank (2011) concluded that while devolving infrastructure development to the Provinces had unleashed tremendous competitive energy, it also made it almost impossible to link investments to the strategic needs of the country or the market. As a result, the report highlights that Viet Nam has more than 20 airports, 24 deep-sea ports, 18 economic zones and 260 industrial parks which, in many cases, are located too close to each other and without regard to demand, resulting in low utilization rates.

[10] World Bank 2015, *Making The Whole Greater Than The Sum Of The Parts: A Review of Fiscal Decentralization in Vietnam* p.18.

[11] Dang, G. and Sui Phen, L. 2015, *Infrastructure Investments in Developing Economies: The Case of Vietnam,* Springer Press, U.K.

IV. The Reform Program

22. The IPEQ program impact will target improvements in the provision of infrastructure and service delivery to lift living standards and reduce poverty. IPEQ is structured around three policy outputs: a more productive allocation of public resources; identification and management of fiscal risks strengthened; and improving the oversight and monitoring and evaluation of budget implementation.

23. **Public financial resources more productively allocated**. This output will strengthen the systems that guide the allocation and disbursement of public funds and the efficient management of assets created by this expenditure. In subprogram 1, IPEQ will support the introduction of 5-year medium-term expenditure frameworks and 5-year public investment plans that will allow for more strategic and disciplined expenditure planning. The reforms will also strengthen the alignment of these plans with the priorities of the SEDP, 2016–2020 by ensuring actual spending remains within the government's fiscal envelope. By introducing new requirements for all revenues and expenditures managed through the state budget process to be recorded in annual budget documentation, reforms will help to reduce wasteful off-budget spending. At the same time, provincial governments will be provided with increased flexibility to run fiscal deficits subject to predetermined conditions. This will increase their responsibility and accountability for both mobilizing and repaying external funding sources. Although both concepts are relatively new to Viet Nam, subprogram 1 will also support the introduction of gender equality and performance-based budgeting as principles of state budget management. Finally, to ensure that investments are sustainable and well managed, subprogram 1 will introduce more stringent, life cycle, public asset management systems –with a focus on establishing transparent information systems for improved metro, rail and road asset management.

24. **Identification and management of fiscal risks strengthened.** This output will strengthen the government's management of fiscal risks, improve transparency of those risks and give more responsibility for repayment of liabilities to the users of the funds which create incentives for more efficient utilization of borrowed funds. Subprogram 1 will strengthen controls over the provision and management of government guarantees by reducing the maximum size of available guarantees – from 100% to below 80% of total investment capital – and holding state-owned enterprise parent companies directly responsible for guaranteed debts in the event of subsidiary default.[12] To open up new market-based sources of capital, subprogram 1 will complete a detailed assessment of the implications arising from allowing provincial governments to mobilize capital from commercial banks, and introducing onlending procedures that give increased responsibility for loan repayment to provinces based on their own-source revenue raising ability. Subprogram 1 will also enhance transparency and accountability by requiring state policy banks[13] to publicly disclose their financial status when issuing government guaranteed bonds, and the total capital mobilized through issuing government guaranteed bonds.[14]

25. **Oversight and monitoring and evaluation of budget implementation improved**. This output will strengthen systems for evaluating public investment, enhance the legal framework for preventing misuse of public funds, and support more transparent expenditure liquidation. Subprogram 1 will upgrade the State Audit Law to require state audit of all enterprises in which the state holds more than 50% of charter capital (previously not mandatory). This reform will also require state audit of all agencies mobilizing and managing

[12] In 2015 domestically guaranteed debt by the central government was equal to $9.2 billion or 4.9% of GDP.
[13] This includes two banks: Viet Nam Development Bank (VDB) and Viet Nam Bank for Social Policies (VBSP). As at end-2015, these banks comprised approximately 7% of total financial system assets; VDB (5%) and VBSP (2%).
[14] In 2015 government guaranteed debt of social policy banks was equal to $1.5 billion or 0.9% of GDP.

public debts and public disclosure of all state audit reports, except for those considered to be state secrets, along with public disclosure of an annual report on consolidated audit results given by State Audit of Viet Nam to the National Assembly. The government will establish a legal framework to strengthen supervision of public investment by requiring all budget entities to carry out formal supervision and evaluation activities on an annual basis and to provide a compulsory allocation of funding to cover the costs of these activities. Accompanying these reforms, the government will establish a framework for results-based monitoring and evaluation of public investment along with evaluation criteria to provide systematic and uniform evaluation criteria conducive to effective data management. Subprogram1 will also strengthen budget oversight by the National Assembly. Reforms will provide for a mandatory review of 5-year financial and public debt repayment plans, appraisal of annual supplementary appropriations over realized revenues, and will increase the National Assembly's budget screening review period from 45 to 55 days.

V. Estimating the Costs and Benefits of the Reforms

26. Table 1 summarizes the main features of the reforms that the staff identified for IPEQ. These benefits are not exhaustive, but provide an indication of the key impacts.

Table 1: Summary of economic impacts of IPEQ SP1 reforms

Reform measure	Policy actions	Summary of economic impact
More productive allocation of public financial resources		
The Government strengthened control over the allocation and disbursement of public funds by introducing medium-term budgeting practices, reducing the amount of public funds expended through off-budget transactions, and granting increased responsibility to subnational governments	Preparation of 5-year medium-term fiscal frameworks; integrating off-budget funds into consolidated revenue and expenditure accounts; giving provincial governments increased autonomy to run fiscal deficits; and introducing gender equality and performance-based budgeting as principles of state budget management	Increased scrutiny of spending commitments which strengthens quality of expenditure allocations, reduces waste and corruption and allows resources to be consistently allocated toward government objectives Clarifies the responsibilities between different levels of government and gives greater decision making power and incentives to those with better information on the costs and benefits of actions
	Introduction of 5-year investment planning and enhanced[15] public disclosure of capital development expenditure, equivalent to 21% of total planned state budget spending in 2016	More strategic allocation of investment funds and better alignment of investment plan with national Socio-Economic Development Plan Increased accountability
	The Government strengthened public investment efficiency by providing detailed guidance on annual and medium-term investment planning	More disciplined investment planning Improved match between budget allocation and investment plans

[15] In addition to the publication of 5-year public investment plans, the government will require heads of related agencies to publically disclosure information on i) mid-term or annual plans for the allotment of budget capital towards public investment activities, disaggregated by each capital source; ii) analysis and reports on the outcomes of investment plans, programs and projects; and iii) progress reports of project execution and disbursement of project funds.

Reform measure	Policy actions	Summary of economic impact
More productive allocation of public financial resources		
The Government increased efficiency in infrastructure asset management by introducing competition, improving management information systems and increasing transparency.	Allowing the participation of private entities in railway operation and improving transparency by requiring the reporting of real asset values and the physical status of assets to Ministry of Finance on an annual basis	Enhanced rail and metro asset management increases net economic returns Increased competition creates pressure for lower costs and user prices
	Developing a road asset management database containing the current status and changes of road asset conditions under central and local government management	More efficient road maintenance lowers life-cycle costs and allows more efficient use of asset
	Completing detailed regulations on road transport asset depreciation and maintenance	Road asset management better incorporates the full social costs of road provision and encourages adopting the lowest cost options
Identification and management of fiscal risks strengthened		
The Government reduced fiscal risks and improved efficiency by implementing a more comprehensive risk-based public debt and ODA management system that encourages more disciplined and economical capital mobilization, including at the sub-national level.	Strengthening controls over the management of government guarantees by reducing guaranteed amount of total investment capital to below 80%; requiring an increased equity contribution for programs/projects;[16] and holding parent companies responsible for guaranteed debts in the event of subsidiary default[17]	Better identification and management of fiscal risks reducing the chances of unplanned fiscal liabilities Improved incentives for borrowers to avoid default and improve project selection
	Ministry of Finance completed a risk assessment of the potential implications arising from mobilizing capital from commercial banks	Introduction of market discipline to subnational loan mobilization which improves incentives for better project evaluation and monitoring by provincial governments and reduces the burden on taxpayers
	State policy banks[18] to publicly disclose the information on total capital mobilized through issuing government guaranteed bonds, and disclosing their financial status when issuing theses government guaranteed bonds[19]	Higher standards of transparency and accountability that reduces fiscal risks and the chance of a financial crisis
	Introducing principles for risk-sharing of	Enhanced ODA management

[16] Exceptional programs/projects are those needed to be implemented on urgent basis as approved by the Prime Minister. They were guaranteed by the Government with equity contributions of less than 20% of total respective program/project investment capital as required for normal programs/projects.

[17] In 2015 domestically guaranteed debt by central government was equal to $9.2 billion, 4.9% GDP.

[18] This includes Viet Nam Development Bank (VDB) and Viet Nam Bank for Social Policies (VBSP). As at end-2015, these banks comprised 7% of financial system assets; VDB (5%) and VBSP (2%).

[19] In 2015 government guaranteed debt of social policy banks was $1.5 billion or 0.9% of GDP.

Reform measure	Policy actions	Summary of economic impact
More productive allocation of public financial resources		
	ODA loan repayment between Ministry of Finance and executing agencies; and requiring counterpart funding to be fully secured for preparation and implementation of programs and projects using ODA and concessional loans	systems which increase accountability from repaying funds, encouraging better investment decisions
	Provincial governments' increasing their responsibility for loan repayment[20] for ODA and less concessional fund utilization	Increased fiscal discipline of provincial governments leading to more efficient investment planning and fund allocation
Oversight and monitoring and evaluation of budget implementation improved		
The Government enhanced budget oversight and the provision of reliable performance monitoring reports to reduce budget waste and prevent corruption in the use of public financial assets	State audit of all enterprises in which the state holds more than 50% of charter capital (previously not mandatory), and enterprises in which state owns less or equal to 50% of charter capital whenever deemed necessary; along with enhanced public disclosure of all state audit reports (except for those considered to be state secrets)	Improved budget accountability improving incentives to manage assets and invest capital efficiently, reducing waste and corruption
	All budget entities to carry out formal supervision and evaluation activities on an annual basis and compulsory allocation of funding to cover the costs of monitoring and evaluation activities in all submissions for public investment projects and programs	Enhanced public investment supervision, increased enforcement of current laws and greater accountability of budget managers for results which improves public asset management and reduces unplanned expenditures
	National Assembly enhanced its review of budget and public debt plans, required budget committee review of all unplanned revenues prior to their reallocation, and increased budget screening periods to 55 days (from 45 days)	Strengthened budget oversight which increases accountability improving incentives for efficiency
	Establishment of evaluation criteria and a rating system for systematically assessing the efficiency and effectiveness of public investment	Strengthened capacity to evaluate public investment improves the allocation of investment and project management

A. The benefits of IPEQ, SP1

27. **The base case against which IPEQ, SP1 is assessed**. The impacts of IPEQ, SP1 are assessed against the institutional architecture and policy settings before IPEQ, SP1

[20] In 2015 outstanding ODA and concessional loans amounted to $37.6 billion; comprising 93.1% of the external debt stock, and 32.3% of total public debt.

commenced — that is, as of November 2014. These represent the base case against which the impacts of IPEQ are measured. As shown in Table 1 efficiency gains from IPEQ, SP1 arise in three main ways.

28. A more productive allocation of public financial resources. The Government strengthened control over the allocation and disbursement of public funds by introducing medium-term budgeting practices, reducing the amount of public funds expended through off-budget transactions, and granting increased responsibility to subnational governments**.** The Government also increased efficiency in infrastructure asset management by introducing competition, improving management information systems and increasing transparency.

29. Identification and management of fiscal risks strengthened. The Government reduced fiscal risks and improved fiscal efficiency by implementing a more comprehensive risk-based public debt and ODA management system that encourages more disciplined and economical capital mobilization, including at the subnational level.

30. Improving the oversight and monitoring and evaluation of budget implementation. The Government enhanced budget oversight and the provision of reliable performance monitoring reports to reduce budget waste and prevent corruption in the use of public.

31. A major problem with quantifying the impact of reforms in dollar terms is a lack of data. Indeed, one objective of the reforms is to collect more data so that programs can be better evaluated. But it would take years to collect the data necessary to evaluate the effect of reforms on long term infrastructure investment. Little work has been done in quantifying the impact of improved public investment management.[21] For this reason the identification of numerical figures is undertaken at a relatively high, output level, rather than for each specific reform target. This approach seeks to balance the needs for identifying the scale of reform impacts, with being able to generate reliable metrics for impact measurement.

32. **A number of experts predict large gains from improved public investment management and evaluation.** The International Monetary Fund (IMF) has developed a Public Investment Management Assessment (PIMA) Framework to evaluate the level of a country's public investment efficiency.[22] Using cross country regressions, the IMF establishes that the strength of public investment management institutions is correlated with more productive public investments. They conclude that the average country faces an efficiency gap of 27%, and could close 66% of the distance from the efficiency frontier by adopting PIM practices of the best performer, with the largest payoffs in emerging markets and low income developing countries. That is, moving to the frontier of public investment management practices would give an average efficiency gain of 18% of the value of project impacts.

33. Laing (2014) uses the PIMA framework to conclude that around 31% of Viet Nam's infrastructure investment funds are wasted on an annual basis as a result of inefficient public investment practices and that the overall cost of inefficient fiscal and public investment management systems could be around $3 trillion over a decade. Following from this, the report finds that if expenditure reforms were successful to enable upgrading of Viet Nam's Public Expenditure and Financial Accountability (PEFA) scores to A's across the board, inefficiencies could be reduced to only 8% of budget expenditure, delivering the equivalent of an additional 22% in more revenue.

[21] See, for example, Petrie, Murray 2010, *Promoting Public Investment Efficiency A Synthesis of Country Experience* p.1, International Monetary Fund 2015, *Making Public Investment More Efficient* p.17.

[22] International Monetary Fund (IMF) 2015, *Making Public Investment More Efficient.*

34. The medium-term reforms adopted under IPEQ aim to achieve a significantly more modest set of PEFA outcomes than across the board A rankings and are unlikely to produce the drastic improvement the IMF and Laing say is needed to produce large efficiency gains of around 20% The IPEQ reforms are more akin to a second option outlined by Laing (2015) whereby the governments promotes a stronger culture of medium term investment planning and supervision and evaluation, which he describes as a “moderate-impact, high-risk, low-cost option”, unlikely to achieve huge gains, but likely to produce a net benefit.

35. The major objective of the reforms is to increase the efficiency of the allocation of infrastructure investment: to improve the quality of government spending. That is, to make it less likely that the government will adopt inefficient projects (whose costs exceed their benefits) and more likely to invest in efficient projects (where benefits exceed costs) and to choose the projects with the highest rates of return.

36. A seminal empirical paper on the benefits of improved project appraisal is by two pioneers of cost benefit analysis of development projects, Little and Mirrlees (a Nobel prize winner).[23] Little and Mirrlees (1990) estimate the benefits from cost benefit appraisal of projects. The benefits accrue as a result of the reduction of error – not adopting so many inefficient projects and not rejecting beneficial projects. They use a data set on nearly 2,000 World Bank projects approved in the period 1968–80 and that were subsequently evaluated. For half the projects there was an original estimate of the economic rate of return and a re-estimated return from project completion reports, data on original and completed costs, and gestation periods. They develop a methodology for measuring the benefit of project evaluation and find that “a simple rule of thumb for judging the benefit of a system of project appraisal is (at least) 10% of the standard deviation of the errors removed by appraisal, multiplied by the ratio of that standard deviation to the standard deviation of errors not removed.” The authors also find that “the variation in observed rates of return is very great. It is not implausible to suppose that the standard deviation of errors removed by appraisal is at least a quarter of the mean net value of projects. With good appraisal it ought to be much more. On that basis, one can claim that appraisal is worth at least 2% of the mean net value of projects appraised.”

37. **Estimated benefits of Outputs 1 and 3.** The IPEQ reforms use a suite of measures to improve the quality of public investment and to enhance project evaluation and accountability for fund usage. In 2016, the Vietnamese Government plans to invest approximately $11.4 billion in on-budget capital expenditure. If implementation of the reforms improves project selection and project appraisal, by 2.5% of the project’s value, then the benefit would be $286 million from improved project evaluation in 2016 alone. Ultimately the benefits may be expected to be larger – because $237 million is 2.5% of the investment costs, and we would expect the project benefits to be greater than their costs.

38. The potential gains from reform are large because the amount invested in infrastructure in Viet Nam is large. Inefficiency in infrastructure investment is an expensive problem and the gains from making incremental efficiency savings are significant. This highlights the point that is worth investing in measures that improve the efficiency of infrastructure investment. Viet Nam’s economic development is more likely to be served if infrastructure investments are evaluated and prioritized on whether they improve efficiency. The benefits from better project evaluation will grow or shrink with the amount invested in infrastructure each year and and will accrue over the lives of the projects. Further, they will not be reaped unless and until the reforms are fully implemented.

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[23] Little, I. and J. Mirrlees, 1990. *The costs and benefits of analysis: Project appraisal and planning twenty years on.* World Bank. Washington D.C.

39. Reforms targeted under output 1 also ensure that the majority of government funding sources and expenditure items are allocated and reported through the consolidated budget process. In 2012 (the most recent figures available) off-budget government expenditure was equal to $7.275 billion (in 2016 dollars). The benefit of transferring the majority of these funds to on-budget accounts is not the amount transferred but rather the higher levels of accountability and more consistent processes for fund allocation that the monies are subjected to through the budget scrutiny process. Again, assuming a 2.5% efficiency gain from better project selection would give a benefit of $182 million.

40. **Estimated benefits of Output 2.** Direct budgetary savings will also be accrued as a result of a tightening of requirements on the use of government guarantees. The implicit subsidy the recipients of loan guarantees receive depends on the probability of default, when default occurs and how much of the loan is repaid before default. For example, the simplest case is where the borrower has a probability of 100% of defaulting in the full loan in one year. The implicit subsidy is then 100% cent of the amount lent. The adoption of a new fiscal rule limiting the amount of guaranteed loan amounts to 80% of the loan, therefore immediately reduces any implicit subsidy being offered by the government by 20%. Further, as requiring enterprises and other state actors to leverage their own capital guaranteed debts will become less attractive, reduce the demand for guarantees and reduce the government's contingent liabilities even further.

41. The total stock of Government guaranteed debt in 2015 was equal to $22.8 billion, equivalent to 11.1% of GDP.[24] In October 2013, Moody's estimated that 15% of the Government's outstanding loans were non-performing. If we assume therefore a 15% default rate on government guarantees, the implicit subsidy being provided by government through its stock of guarantees is equal to $3.2 billion. If the new requirements of IPEQ had applied to the current stock of guarantees, the government would have been liable for a maximum 80% of the amount lent, leading to a minimum level of direct budgetary savings of approximately $624 million per annum. In reality this reduction in fiscal liabilities would have been greater, given the greater incentives that are created for more responsible debt mobilization as a result of requiring entities to draw upon their own balance sheets, and the due diligence effects that this will create for the bank lenders. The new laws raise the price of borrowing under guarantee and will tend to reduce the amount borrowed (compared with what it would have been) and (by discouraging risky borrowers) reduce the default rate.

42. As the new laws reducing the guarantee to 80% of the loan amount apply only to new loans, the reduction in the Government's contingent liability is the difference between the expected payout under the old laws and the expected payout under the new laws. The savings would increase as loans with an 80% guarantee become a bigger share of the stock of loans. If the amount of loans guarantees stay at current levels and default rate stays at 15%, then the reduction in expected government payments is at least 3% of the amount guaranteed (which is 20% of 15%). When the entire stock of loans receives the 80% level the reduction in subsidy would be $624 million per year. We assume this takes 5 years. To the extent the new rules reduce the stock of guaranteed loans below what it would have been without the changes, the benefit would be greater. The benefits from this reform are large because the hidden subsidy given out by loan guarantees is also very large. Guaranteed debt has also been steadily growing (doubling in the last 5 years), and so the savings from the new rules could be greater in the long term.

43. This reduction in the implicit subsidy given out by the Government is not the benefit from the reform. That comes from the improved incentives for project selection –with borrowers being faced with more of the consequences of their decisions, fewer loser projects

[24] Ministry of Finance. 2016. *Summary Of Indicative Public Debt Borrowing And Repayment Plan For Period 2016–2020*, Unpublished, Ha Noi.

are undertaken and the overall return on investment increases. This benefit was not included in the estimate of the benefits from the reforms, which were from central government investment only, not state owned enterprise investment.

44. The reduction in the implicit subsidy is a benefit to taxpayers and a cost to those who would have received it. To that is, people who receive a smaller, or no, guarantee lose the benefit of a government subsidy. To the extent they would have dissipated that benefit in rent-seeking behavior (e.g. lobbying to get the guarantee), then the reduction in the subsidy is a gain to society.

Table 2: Summary of program benefits (once implemented)

<table>
<tr><th>Output</th><th>Broad policy measures</th><th>Benefits</th></tr>
<tr><td>Output 3. Oversight and monitoring and evaluation of budget implementation improved.</td><td>Enhanced project evaluation and monitoring systems</td><td rowspan="2">Improved investment efficiency savings of roughly $237 million per annum.</td></tr>
<tr><td rowspan="2">Output 1. Public financial resources productively allocated</td><td>Better Government investment planning, budget management, and public asset management</td></tr>
<tr><td>Transferring extra-budgetary accounts into consolidated revenue and expenditure</td><td>Improved investment efficiency savings of approximately $182 million per annum.</td></tr>
<tr><td>Output 2. Identification and management of fiscal risks strengthened</td><td>Tightening controls on and reducing overall guaranteed loan amounts</td><td>Budgetary savings of approximately $624 million per annum</td></tr>
<tr><td>Total benefits</td><td></td><td>$1.043 billion per annum</td></tr>
</table>

B. Estimated costs of IPEQ-SP1

45. There are no major economic adjustment costs identified by the reform program. The program is not expected to lead to any direct impact on employment. The overall costs of implementing the reform program will include administrative items including the costs of training and hiring staff to implement new regulations and of changes to information technology and other management systems. It is expected however that these will be primarily met by ongoing government recurrent expenditure allocations.

C. Estimated net present value

46. Table 1 calculates the net present value of the reforms, assuming a 10% discount rate and that the reforms are fully implemented after 5 years (and achieve 20% more of the benefits each year as they are phased in). The benefit is 2.5% of infrastructure spending, and assumes annual infrastructure investment stays at planned 2016 levels, the stock of loan guarantees stays at 2015 levels, and that the lifespan of the project is ten years.

47. An underlying assumption of these calculations is that infrastructure investment remains high after ten years of heavy investment. Further, it cannot be assumed that the relevant comparison is with no reform after ten years. That is, in ten years there is likely to be new reforms (perhaps building on these) and would be change even in the absence of today's reforms.

48. The net present value of the reforms is estimated at around $4.7 billion. This is an indicative value, assuming the reforms are fully implemented in five years. The benefits should be further discounted by the chance they will not succeed or not be fully implemented. Nevertheless, because the reforms have a low financial cost, and the potential benefits are so large, they are still likely to have a positive expected net present value. Even if the reforms had a 1% chance of success, expected net benefits would be positive.

Table 3: Net present value of indicative benefits, $ million

	Program benefits			
Year	Improved capital investment	Moving off budget expenditure on budget	Reducing loan guarantees	Total benefit
2016	47	36	125	209
2017	95	73	250	417
2018	142	109	374	626
2019	190	146	499	834
2020	237	182	624	1,043
2021	237	182	624	1,043
2022	237	182	624	1,043
2023	237	182	624	1,043
2024	237	182	624	1,043
2024	237	182	624	1,043
Net present value	1,063	816	2,798	4,677

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